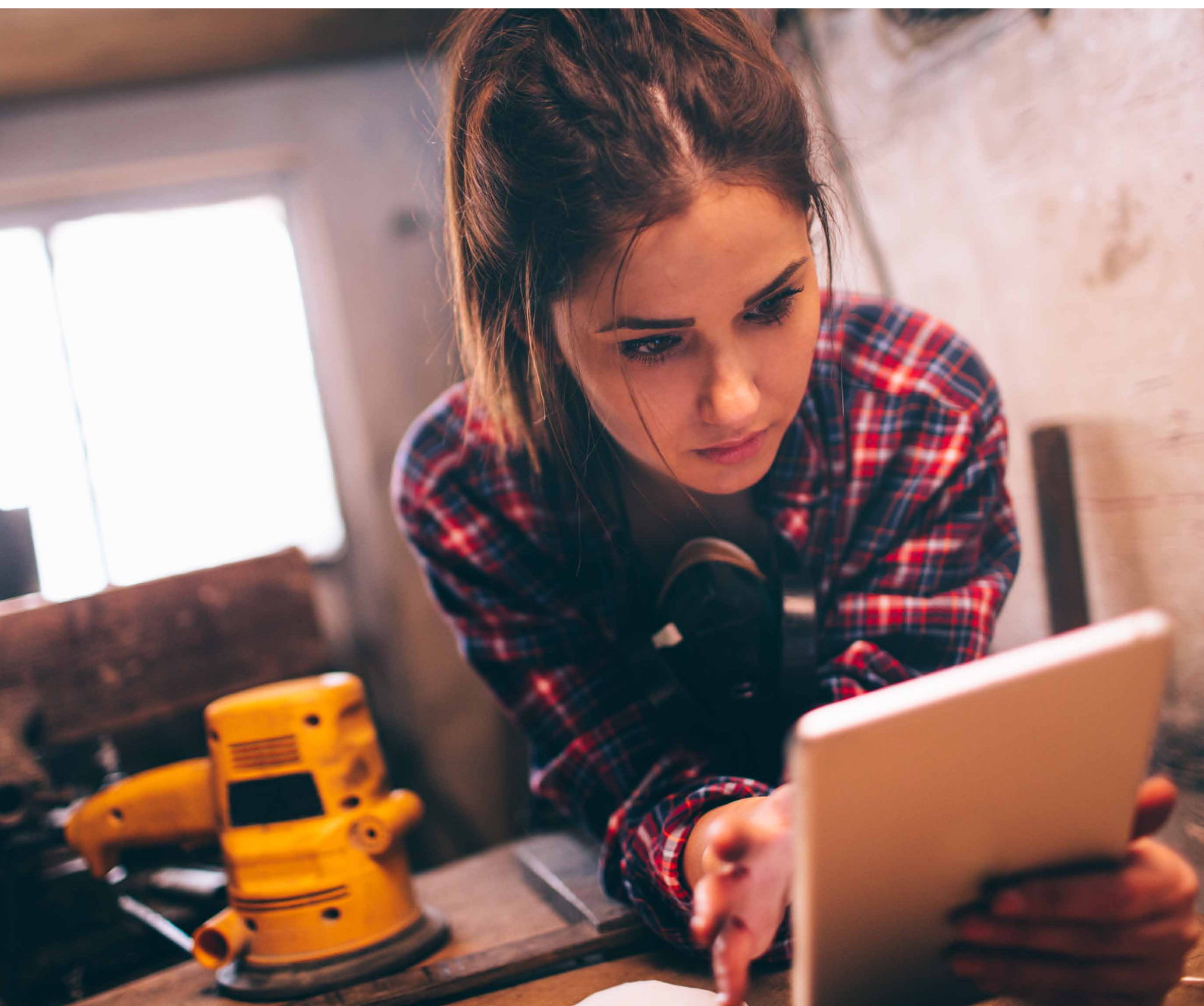


A fair share

Safeguarding public interests
in the sharing and gig economy



A fair share

Safeguarding public interests in the sharing and gig economy

Koen Frenken, Arnoud van Waes, Magda Smink & Rinie van Est

Board of the Rathenau Instituut

Ms. G.A. Verbeet (chair)

Professor E.H.L. Aarts

Professor W.E. Bijker

Professor R. Cools

J.H.M. Dröge

E.J.F.B. van Huis

Professor P.P.C.C. Verbeek

Professor M.C. van der Wende

M.M.C.G. Peters (secretary)

A fair share

Safeguarding public interests in the sharing and gig economy

Koen Frenken, Arnoud van Waes, Magda Smink & Rinie van Est

Rathenau Instituut
Anna van Saksenlaan 51
Correspondence address: P. O. Box 95366
2509 CJ The Hague
Telephone: 070-342 15 42
E-mail: info@rathenau.nl
Website: www.rathenau.nl
Publisher: Rathenau Instituut

Editors: Claartje Doorenbos and Frank Steverink

Preferred citation:

Frenken, K., A. van Waes, M. Smink & R. van Est, *A fair share – Safeguarding public interests in the sharing and gig economy*. The Hague, Rathenau Instituut, 2017.

The Rathenau Instituut has an Open Access policy. Its reports, background studies, research articles and software are all open access publications. Research data are made available pursuant to statutory provisions and ethical research standards concerning the rights of third parties, privacy and copyright.

© Rathenau Instituut 2017.

This work or parts of it may be reproduced and/or published for creative, personal or educational purposes, provided that no copies are made or used for commercial objectives, and subject to the condition that copies always give the full attribution above. In all other cases, no part of this publication may be reproduced and/or published by means of print, photocopy, or any other medium without prior written consent.

Foreword

Just a few years ago no one had even heard of the sharing or gig economy. Now scarcely a day goes by without an article appearing in the newspaper about Airbnb and how that platform is transforming Amsterdam's city centre or about the impact Uber is having on the taxi market. What is less well known is the growing number of people who are finding work through online mediation, as in the case of cleaning jobs via the Helping app. Online platforms (including platforms for second-hand goods) have grown explosively in recent years: 6% of the Dutch population used these platforms in 2013, while in 2016 almost a quarter did. These services meet a need and force traditional markets to innovate, but newspaper headlines show that the growth of the sharing and gig economy is also raising new questions in relation to public interests. Who is responsible for fire safety and public order when a person lets their home via Airbnb? What is the legal status of cleaners who work via the Helping platform: are they self-employed or employees?

For this study the Rathenau Instituut has reviewed the academic literature in order to describe the phenomenon of the sharing and gig economy. The empirical basis for the report is formed by five case studies of popular platforms on which consumers arrange transactions with assets and personal services. We show that the new practices arising from the sharing and gig economy are having both a positive and a negative impact on some public interests. Sharing and gig platforms have positive effects in terms of wealth, employment, entrepreneurship, social cohesion and the environment. Public interests that are threatened by them include a level playing field, taxation, consumer protection, prevention of discrimination, public order, platform-independence, preventing the forming of monopolies and protection of privacy and autonomy.

The Rathenau Instituut's intention with this report is to provide guidelines for the political debate and policy formulation on the issue. The government can both *stimulate* the positive impacts and *limit* the negative impacts of the new practices. The government should give sharing platforms the room to grow in the initial stages. At the same time, the rapid growth of these platforms is putting pressure on public values. In view of the tendency of platforms to grow into monopolies, the government must adopt policies to prevent public values from being undermined. In the first place, the government should clarify the legal status of sharing and gig platforms. The government could also appoint a trusted third party to regulate a platform in such a way as to safeguard the privacy of its participants. Finally, it should promote the establishment of a system that ensures that reviews posted on platforms are reliable and that users can carry their reputation data with them to other platforms.

In 2016 the Rathenau Instituut published a report on innovation and regulation, which discussed the role of regulation in relation to emerging technologies and innovation. In March 2017, the institute published the report *Urgent upgrade: protect public values in our digitized society* in which it discussed ways of guaranteeing fundamental rights in the digital age. This study, which is a joint publication of the Rathenau Instituut and Utrecht University, follows up that report by exploring how to properly manage the opportunities created by the process of digitisation.

Dr. ir. Melanie Peters

Director, Rathenau Instituut

Summary

People have always shared. We are accustomed to lending things to one another or performing odd jobs for people we know, such as family and friends. With the rise of online sharing platforms, it is now possible to bring together people who do not know each other and connect strangers on a basis of trust. These online platforms (including platforms for second-hand assets) have enjoyed enormous growth in recent years: 23% of the Dutch population participated in the sharing economy in 2016, compared with 6% in 2013.

The sudden rise and explosive growth of sharing and gig platforms raise a great many questions in relation to public interests. Should consumers who rent out their home meet the same requirements as hotels? Should incidental income earned in the gig economy be taxed? Is there a real possibility that platforms will come to form global monopolies? Is the sharing economy sustainable? Who will profit most from the sharing and gig economy?

Governments at the local, national and European level recognise the opportunities that the sharing economy creates, but they also see new challenges in terms of safeguarding public interests. An important question is to what extent existing legislation, which was adopted for the traditional economy, is also reasonable, applicable and enforceable with respect to the online platforms on which the sharing and gig economy is based. The European Commission has identified four responses a government can make to digital platforms: 1. Strict enforcement of existing rules; 2. Deregulation; 3. Ad hoc regulation; and 4. No intervention, or toleration.

The central question addressed in this study is how public interests that are affected by new practices arising from the sharing and gig economy can be safeguarded. That question is broken down into three separate questions:

1. What do we mean by the sharing and gig economy and what specific form does it take in practice?
2. What public interests are affected by the sharing and gig economy?
3. How can these public interests be safeguarded, how will those safeguards be established and what are the roles of public authorities and the platforms in particular in that process?

The report is divided into three parts. Part I provides a definition of the sharing and gig economy based on the academic literature, and discusses its economic, social and environmental impact. Part II presents case studies of five platforms: Helpling (cleaning services), UberPop (taxi), Airdnd (home restaurants), Airbnb (accommodation) and SnappCar (cars). These cases encompass both sharing platforms (on which consumers share assets) and gig platforms (on which people offer personal services to one another). The cases selected also embrace a very diverse economic and institutional range and thus illustrate a wide spectrum of new issues that arise in connection with public interests. For each case study, the authors conducted semi-structured interviews with representatives of the platform, the government and, in some cases, the regular, or traditional, sector. Sources that reflect the political and public debate about the sharing economy, such as media and policy reports, were also consulted. Chapter 9 presents an analysis of the public interests affected in the five case studies,

how they can be safeguarded and how those safeguards are, or are not, being put in place. Part III presents twenty recommendations for the effective governance of the sharing and gig economy.

Part I: Literature

In this report the sharing economy is defined as “consumers granting each other access to under-utilised physical assets (“idle capacity”), possibly for money”. This definition has three elements. First and foremost, these are transactions between consumers themselves (“consumer-to-consumer”, also referred to as “peer-to-peer”). Secondly, the transactions involve “temporary access” to an asset and not the permanent transfer of ownership. Thirdly, they involve assets that are not being used and not services. In contrast, in the gig economy, consumers provide services for one another rather than providing access to goods. In other words, those transactions do not involve renting out a car or lending a saucepan, but providing a taxi journey or a cooked meal as a “service”.

Although there is still very little empirical research into the full economic, social and environmental impact of the sharing and gig economy, it is possible to express a number of expectations on the basis of theoretical ideas and a small number of studies. First, the economic benefits are considerable, as evidenced by the rapidly expanding practices of lending, swapping and renting via platforms. It is generally cheaper to borrow or rent from a private individual than to rent or buy from a company. However, the distribution of the revenues will be skewed and they will mainly accrue to people with assets and the platforms themselves. Further expansion of sharing and gig platforms could therefore lead a further increase in economic inequality. The social impact is unclear because, in addition to the numerous new contacts established between strangers who meet on the platforms, there are also negative effects such as discrimination and the economisation of private life. There are likely to be positive environmental effects, particularly from car sharing and carpooling, but those effects might ultimately be smaller than anticipated because the economic benefits of sharing and gig platforms mean that people will save money, much of which will be spent on other forms of consumption, which will always cause a certain degree of pollution (“rebound effect”).

Part II: Case studies

Chapter 4 describes the impact of Helpling, the largest platform for cleaning services in the world, on the labour position of cleaners. Chapter 5 looks at the case of UberPop (which was part of Uber, the largest taxi platform in the world), which has since been banned in the Netherlands. Chapter 6 discusses Airdnd, the largest home restaurant platform in the Netherlands, and describes how the platform, the professional hotel, restaurant and café industry and the government engage in a dialogue on how to safeguard public interests. Chapter 7 is devoted to Airbnb, the world’s largest accommodation sharing platform and describes the evolution of the policies adopted by the Municipality of Amsterdam in response to it. Finally, Chapter 8 reviews car sharing, with specific reference to SnappCar (the largest car-sharing platform in the Netherlands), how it can be stimulated and what the associated challenges will be.

These five case studies reveal five public interests that could be positively affected (wealth, employment, entrepreneurship, social cohesion and the environment), as well as eight public interests (level playing field, taxation, consumer protection, prevention of discrimination, public order, platform-independence, preventing monopolies and protection of privacy and autonomy) that could be negatively affected by the sharing or gig platforms.

The case studies also provide some insights into the attitudes of the platforms and public authorities towards the protection of public interests. First, the ambitions of platforms and their attitudes towards governments vary greatly. Whereas Airdnd consciously tries to keep the scale of its activities small, UberPop's aim was to create a whole new form of mobility. Second, some platforms try to create scope for their new practices within the existing regulatory frameworks (Helping) and policy objectives (SnappCar), while others challenge the existing frameworks by dismissing them as outdated (UberPop and Airdnd) or by suggesting that they are not applicable to them (Airbnb). Platforms also challenge existing legal classifications, thus creating uncertainty about rights, duties and responsibilities. UberPop, for example, portrays itself as a technology company rather than a taxi company and Airbnb describes itself as an online trading platform rather than an accommodation broker. Third, it is noteworthy that all of the platforms said in the interviews that they consider it to be the government's responsibility to enforce rules and protect public interests. The problem with that position is that public authorities are often unable to enforce rules effectively without data about users and their use of the platforms, while the platforms are unwilling to share the necessary data with them (at least without a *quid pro quo*).

The case studies reveal that public authorities have adopted a range of strategies in their dealings with platforms. UberPop has now been banned in the Netherlands as a result of the government's enforcement of the rules in the Taxi Act. Airdnd and Helping are in a sense tolerated, but for Airdnd a process to formulate goal-oriented legislation (a "Right to Challenge" process) has been started to determine how public interests can be safeguarded. For Airbnb, the Municipality of Amsterdam employs a system of ad-hoc regulation, the most important measure being the capping of the period for which property owners can let their properties to 60 days a year. The city recently delegated enforcement of this rule to Airbnb itself. In the case of car sharing, policy interventions focus more on positive incentives than on restrictions. An example is the government's participation in the Green Deal on Car Sharing.

Part III: Recommendations

On the basis of the case studies and literature, the Rathenau Instituut has formulated twenty recommendations that provide guidelines for the public and political debate and policy-making process in relation to the sharing and gig economy (see box below). Because of the diverse nature of the platforms, the sharing and gig economy calls for smart, tailored measures. Therefore, in order to properly manage the sharing and gig economy the Rathenau Instituut recommends *promoting* the positive effects of new practices and *mitigating* the negative effects. As far as the positive effects are concerned, the government should give sharing platforms the scope to grow in the early stages. At the same time, the rapid growth of platforms puts a strain on existing public values. Because of the tendency of platforms to evolve into monopolies, the government must formulate policies designed to prevent public values from being threatened. First, the government should clarify the legal status of sharing and gig platforms. The government could also appoint a trusted third party to exercise supervision over a platform in such a way as to safeguard the privacy of its participants. Finally, steps should be taken to enhance the reliability of reviews on platforms and to allow users to take their reputation data with them to other platforms.

Twenty recommendations relating to the safeguarding of public interests affected by the sharing and gig economy

Clarification and dialogue

1. Prevent negative effects and promote positive effects in relation to the sharing and gig economy
2. Encourage research into and a dialogue about the effects of the sharing and gig economy on public interests and how those interests can be safeguarded
3. Clarify the legal status of sharing and gig platforms

Promoting positive effects

4. Guarantee the reliability of reviews on platforms
5. Ensure that the users of platforms can carry their accumulated reputation data to another platform
6. Reform tax system to stimulate the use of platforms with significant environmental benefits
7. Help low-income groups in society to profit from the sharing and gig economy
8. Keep down barriers to entry for new platforms
9. Encourage not-for-profit platforms and platform cooperatives

Mitigating negative effects

10. Communicate clearly regarding the existing rules for the sharing and gig economy
11. Consider banning a platform if major public interests would justify doing so
12. In the event of a ban, encourage a dialogue about the future of the relevant platform innovation and regulation
13. Identify the public interests that will be positively or negatively affected by deregulation
14. Employ maximising on an ad hoc basis in order to define the playing field for sharing and gig platforms and to contain social problems
15. Tolerate platforms in the early days in order to learn about a platform's effects
16. Experiment with goal-oriented legislation and Right to Challenge

Enforcement

17. Consider government monitoring of enforcement by platforms via a trusted third party
18. Employ privacy-friendly methods of collaboration with platforms for the purposes of enforcement
19. Prevent enforcement by platforms from raising barriers to entry for new platforms too far
20. In goal-oriented legislation and Right to Challenge processes, the importance of innovation should outweigh the costs of evaluation and supervision

Contents

Foreword	6
Summary	7
1.	13
1.1	14
1.2	15
1.3	16
1.4	19
Part I The sharing and gig economy: a literature review	22
2.	23
2.1	23
2.2	24
2.3	27
2.4	29
2.5	31
3.	33
3.1	33
3.2	36
3.3	39
3.4	41
Part II The sharing and gig economy in practice	42
4.	44
4.1	44
4.2	45
4.3	48
4.4	51
5.	53
5.1	53
5.2	55
5.3	57
5.4	60
6.	62
6.1	62
6.2	63
6.3	67
6.4	69
7.	70
7.1	70
7.2	71
7.3	72
7.4	77

8.	Towards 100,000 shared cars in the Netherlands	79
8.1	Car sharing in the Netherlands	79
8.2	Car sharing as a public goal	82
8.3	Policy process: stimulating car sharing in the Netherlands	86
8.4	Conclusion	88
9.	Analysis of the five case studies	89
9.1	Public interests and their safeguards	89
9.2	Interaction between platforms and governments	97
Part III The sharing and gig economy from a public policy perspective		99
10.	Twenty recommendations for debate and policy making	100
10.1	Clarification and dialogue	101
10.2	Promoting positive effects	102
10.3	Mitigating negative effects	106
10.4	Enforcement	111
10.5	The recommendations summed-up	114
Bibliography		116
Appendices		127
Appendix 1. List of sharing and gig platforms in the Netherlands		127
(source: http://www.deeleconomieinnederland.nl/)		127
Appendix 2. Definitions of the sharing economy		129
Appendix 3: Interviewees + interview protocol		131
Interview protocol		133
Credits and acknowledgements		134
About the authors		135

1. The emerging sharing and gig economy

A growing number of people rent out or lend goods to one another via online platforms like SnappCar for cars, Airbnb for accommodation and Peerby for goods. This is what we mean by the 'sharing economy', which is in fact an extension of online second-hand marketplaces such as Marktplaats, on which consumers buy and sell goods or give them away. Just as we buy and sell goods online, we are now also increasingly renting or lending goods to one another.

Online platforms play an important role in the sharing economy. They match supply and demand in a transparent manner and often also handle payments. Furthermore, online platforms create the trust that is required if people are to share their goods with strangers, for example by adding ratings to the profiles of the users of the platform and by offering insurance. They also have the right to deny access to the platform to participants who are found to be abusing it.

A similar trend is evident in the gig economy. There are a growing number of platforms that bring people offering a service in touch with customers for tasks ranging from cleaning or painting to giving a lift in a car or providing private tuition for students. Consequently, a growing proportion of the population is performing freelance or temporary work.

The sudden emergence and explosive growth of sharing and gig platforms raise a great many questions in relation to public interests. Should consumers who rent out their homes have to meet the same requirements as hotels? Should incidental freelance income earned in the gig economy be taxed? Is there a real possibility of platforms becoming global monopolies? Is the sharing economy genuinely sustainable? Who profits most from the sharing economy and the gig economy? These are just a few of the questions that have been raised in the current public debate.

This report explores how public interests that are affected by new practices in the sharing and gig economy can be safeguarded. What does or does not constitute a relevant public interest is the subject of constant debate in democratic societies and is repeatedly redefined in the public and political debate. In the Netherlands we look mainly to the government to represent public interests, but platforms and their users also have responsibilities and a role to play. In light of the central question formulated above, this report has three objectives: the first is to try and describe what the sharing and gig economy is and what role the digital platforms play in it. An important question is to what extent the sharing and gig economy differs from the 'traditional' economy that arose in the 19th century and evolved in the course of the 20th century. Secondly, we want to understand the social significance of the sharing and gig economy and the public interests connected with its growth. Public interests that could be affected by digitisation in general, and digital platforms in particular, include a level playing field, public order, taxation, sustainability, employment, safety and privacy. Thirdly, we investigate how public interests can be safeguarded in the sharing and gig economy and how such safeguards are being created, or not. The Rathenau Instituut's study *Urgent upgrade: protect public values in our digitized society* (Kool et al., 2017) showed that the extensive digitisation of society raises fundamental ethical and social issues that government, regulatory bodies, the business community

and the public are for the most part not yet adequately equipped to address. This report looks more specifically at how public interests can be safeguarded in the sharing and gig economy, what policy options there are and what roles the platforms, users and the public authorities can play.

1.1 The rise of the sharing and gig economy

The rise in the number of sharing and gig platforms and participants in them has been accompanied by a concomitant increase in the turnover of the sharing and gig economy. PricewaterhouseCoopers (PwC, 2015) has forecast that the total turnover in the United States of important segments of the sharing economy, such as car sharing and travel, will be roughly twenty times greater in 2025 than it was in 2013.¹ In that case, a substantial share of some sectors will have been taken over by consumers renting out their own assets. PwC (2015) expects, for example, that car sharing will account for 23% of the car rental market in 2025 and accommodation sharing for almost a third of the hotel market. The Netherlands is no exception in that regard. Kaleidos (2016) reported in December 2016 that 23% of the Dutch population participated in the sharing economy, compared with only 6% in 2013.² Airbnb in particular has quickly become a major player in the letting of accommodation to tourists. In Amsterdam alone, more than 18,000 properties were let via Airbnb in 2015, an increase of 33% compared with the previous year (Municipality of Amsterdam, 2016a).³ In the Netherlands as a whole, approximately 31,000 properties were rented out via Airbnb in 2016 (Airbnb, 2017). Car sharing between consumers is also on the increase. Approximately 19,000 car owners rented out their cars to other consumers in the spring of 2016, almost twice as many as in 2015 (Crow-KpVV, 2016).

New possibilities for people to rent goods and hire services from each other via online platforms are emerging all the time.⁴ In the Netherlands alone there are more than 150 initiatives in the sharing and gig economy,⁵ ranging from Werkspot (odd jobs), Helping (cleaning services) and Thuisafgehaald (meals) to Barqo (boats), Airbnb (accommodation) and Peerby (various goods, from ladders to standing tables to delivery bikes) to SnappCar (for cars), Camptoo or Goboony (for campers) and MotoShare (for motorbikes). Appendix 1 contains a list of the most important sharing platforms in the Netherlands.

The number of participants in the sharing economy is also expected to grow. According to ING (2015), around 555,000 Dutch households (8%) acquired or rented something for payment in the sharing economy in 2014. A quarter of the Dutch population would be willing to pay for the use of a product in the future. The number of people who are willing to lend is even greater at one in three. The greatest willingness to participate in the sharing economy is among people under the age of 35 and people with a higher education. On the basis of these figures, ING (2015) forecast that the sharing economy would continue to expand rapidly in the coming years.

¹ PwC surveyed 1,000 American consumers and estimated the growth on the basis of the current turnover figures in the following economic sectors: travel, peer-to-peer finance, car sharing, online personnel and music.

² Kaleidos in fact also treats Marktplaats, the platform for second-hand goods, as part of the 'sharing economy'. See <http://kaleidosresearch.nl/publication/25681/>.

³ See for an animation of the explosive growth of Airbnb in Amsterdam: <http://www.dwarshuis.com/various/airbnb/amsterdam/>

⁴ The question of whether offering services via platforms should actually be regarded as part of the sharing economy is discussed in chapter 2.

⁵ Source: <http://www.deeleconomiein nederland.nl/>. The definition of the 'sharing economy' on this website is in fact quite broad.

1.2 The debate on public interests

The rise of the sharing platforms is clearly raising objections in the public debate. The larger platforms such as Airbnb and Uber are particularly controversial. 'Deeleconomie = steeconomie' [Sharing economy = theft economy] was the headline on an article in NRC.Next on 3 September 2014 in response to the ban imposed on UberPop in Germany. According to the author, platforms such as Uber and Airbnb like to portray themselves as idealists offering a better solution, while in reality they are solely concerned with making big profits by creating a platform that monopolises the market for taxi services and overnight stays, respectively. A recurring subject in the newspapers is the effect Airbnb is having on cities, where the sharing of apartments can sometimes have a major impact on the quality of life in a neighbourhood and can cause a nuisance. Neighbours can suffer annoyance ('partying, shouting, mess in the corridor')⁶ if an apartment is regularly let to tourists. Since August 2016, local residents have been able to report nuisance via the platform. In the United States, the subject of discrimination has also entered the debate. Non-white users of Airbnb in that country have complained of being refused a room or a home (Hond, 2016). It is not only the major platforms that are the subject of discussion. Newcomers in the sharing economy, such as the home restaurant platform Airdnd, are also causing uproar. Professional restaurateurs are unhappy and feel that home restaurants should have to pay tax and comply with the rules like any regular restaurant.⁷

The social impact of online platforms in general – which encompass the sharing and gig economy, but also social media, search engines and e-commerce (sites such as Facebook, Google and Amazon) – go beyond just nuisance and unfair competition (Kool et al., 2017). Platforms are not only marketplaces that match supply and demand. They allow the companies behind them to track the choices and behaviour of large groups of consumers and store the resulting data ('datafication') and then to convert that data into commercial goods and services primarily through targeted advertising ('commodification') and to give particular subjects, persons or offers priority over others ('selection'), generally for payment (Van Dijck et al., 2016, p. 38). Platforms are therefore new business models based on the three aforementioned 'platform mechanisms' *and* new social institutions that structure behaviour and remuneration of individuals. Accordingly, online platforms have a growing influence on the substance and organisation of social transactions and on the social status and economic income that individuals and organisations can acquire through platforms.

It is clear from the public debate that the sharing and gig economy affects numerous public interests and that those interests could be undermined by the growth of online sharing and gig platforms. Consumers who offer services to others might cause a nuisance and make others feel unsafe, might sometimes discriminate in their choice of supplier or client and often pay no tax. As long as the scale of the practice remains small, many people might see the effects on those public interests as negligible. But with the sustained spectacular growth of these platforms, the question arises of how important public interests such as peace and quiet, liveability, safety, non-discrimination and taxation can be safeguarded and what the impact is on society as a whole.

⁶ Source: <https://www.nrc.nl/nieuws/2016/08/28/soms-wel-8-toeristen-in-het-kamertje-4014075-a1518348>

⁷ Source: <http://www.volkskrant.nl/economie/restaurantje-spelen-in-eigen-huis~a4179276/>

1.3 Role of government

Digitisation in general, and the platform economy in particular, presents the government with a series of new challenges with respect to privacy, taxation, monopoly power, social rights and safety (Kool et al., 2017; Van Dijck et al., 2016). Governments are responsible for protecting public interests, which they accomplish with laws and regulations and through subsidies and taxes. The question that arises is how governments can continue to safeguard public interests in the face of the growth of the sharing and gig economy, one of the rapid advances occurring in the platform economy. How will public interests be protected in the 'new' economy, and by whom? What policy options are available to governments to regulate platforms? Public authorities at the local, national and European levels generally recognise the opportunities created by the sharing economy, but also see new challenges relating to the safeguarding of public interests. An important question is to what extent existing laws and regulations that are appropriate for the offline economy are also reasonable, applicable and enforceable for the online sharing and gig economy, in which digital platforms play such a key role.

Local

Many of the opportunities and challenges arising by the sharing and gig economy manifest themselves at the local level. The municipality of Amsterdam promotes itself as a pioneer of the sharing economy in the Netherlands, and even worldwide. For example, since 2015 Amsterdam has promoted itself as Europe's first 'sharing city' (ShareNL, 2015c) by facilitating opportunities the sharing economy can create for the city. The city set out its vision of the sharing economy in a 'Sharing Economy Action Plan' (Municipality of Amsterdam, 2016a). One of the measures adopted by the city to allow the wider public to benefit from the sharing economy in Amsterdam (rather than predominantly the better educated as at present, according to the municipality) has been to link sharing-economy platforms to the *Stadspas*, a card that offers discounts on access to cultural and social events for less advantaged residents of the city. At the same time, the municipality is aware of potential challenges such as the absence of a level playing field, a sense of public insecurity, new sources of inequality and the need to monitor safety and nuisance. Amsterdam also has a reputation as the first city to draw up rules for Airbnb. At the beginning of 2014, the city decided that residents of Amsterdam could only let their homes for a maximum of 60 days a year and to a maximum of four guests at a time.

National

The Dutch government's aim is to facilitate initiatives in the sharing economy as far as possible rather than immediately prescribing new rules (Ministry of Economic Affairs, 2015a). According to the government, the sharing economy offers many possibilities to promote more sustainable consumption and production and can thus contribute to achieving sustainable economic growth. The sharing economy also provides a low-threshold pathway to becoming economically active. The Ministry of Economic Affairs promotes initiatives in the sharing economy because they contribute to innovation, economic development and social cohesion. According to the ministry, they lead to new business models and new commercial activity and can strengthen social cohesion in neighbourhoods and reduce social isolation.

At the same time, the government is aware of the challenges created by the sharing economy with respect to laws and regulations and the public interests threatened by the platforms. According to the Ministry of Economic Affairs, the question of whether public interests such as liveability and a level

playing field are still adequately safeguarded has to be assessed on a case-by-case basis (Ministry of Economic Affairs, 2015a). To respond to changing circumstances and innovations, such as digital platforms that might conflict with existing rules, the government is trying to build flexibility into the policy formulation process. In that context, the general principle is that new laws should be assessed for potentially negative effects on future innovation (Camps, 2015). On the other hand, the ministry also feels that with future innovations it should first be determined whether existing legislation is sufficient, since it is often found that even major changes can be accommodated in existing legislation, for example by reinterpreting laws in light of the new situation. With regard to digital platforms, the government has introduced two policy instruments designed to make legislation future-proof: *goal-oriented legislation* and *Right to Challenge* (see box 1.1 and table 1.1).

Box 1.1: Two policy instruments to make legislation future-proof

Goal-oriented legislation

With goal-oriented legislation “laws and regulations contain clearly defined targets and specifies to whom the rules are directed. How those targets are to be met is left open. Regulations are not set out in more detail than is required to safeguard public interests effectively and responsibility for proper compliance is delegated to the company or professional. (...) On the other hand, goal-oriented legislation is undesirable if the objective is difficult to objectify or measure or if the increased supervision costs and uncertainty (the extent to which it is certain that an alternative also meets the statutory requirements) do not outweigh the increased scope for innovation” (Ministry of Economic Affairs, 2015a, p. 8). An example of this is technology-neutral regulations that do not prescribe what technology has to be used to provide a particular functionality and is therefore more future-proof in terms of the introduction of new technologies. That could mean, for example, that the taxi meter and on-board computer could disappear from taxis if the government can generate the same information with the same degree of reliability via the platform.

Right to Challenge

Another instrument now being considered by the government is the Right to Challenge (RTC), or the principle of equivalence. According to the Ministry of Economic Affairs (2016, p. 5), the Right to Challenge gives “citizens and companies the legal possibility to accomplish the goal of a legal rule as they see fit, without having to comply with every statutory rule. A Right to Challenge process can be used in addition to regulations prescribing the means to be used. It offers those affected by the policy the possibility of achieving the objective of those rules in an alternative manner. Those for whom the statutory rules apply can choose whether they will take the ‘safe route’ of the prescribed instrument or an innovative route.” The distinction compared with goal-oriented legislation is that with RTC there are prescribed instruments, but they can be departed from (see also table 1.1). The ministry also notes that the opportunities for innovation provided by RTC must outweigh the additional costs of supervision. The equivalence of solutions must also be clearly demonstrated. A further principle that applies in the case of RTC is that alternatives that are accepted will be published so that others can also make use of them.

Table 1.1 Policy instruments

	Means	Goal
Traditional	Prescribed	Prescribed
Goal-oriented legislation	Not prescribed	Prescribed
Right to Challenge	Prescribed, derogations permitted	Prescribed

Rathenau Instituut

New digital platforms and initiatives in the sharing and gig economy sometimes create uncertainty about whether particular laws and regulations are applicable, which regularly leads to questions in the House of Representatives. Kees Verhoeven (D66) wondered whether a person who opens a home restaurant is a hobby chef or a professional (KST 2015Z21185). Another question concerned a platform for domestic cleaners: is a person offering to work as a domestic cleaner via a digital platform an employee of the platform or a self-employed person? (Ministry of Social Affairs and Employment, 2014a)

European

The new possibilities of the sharing and gig economy are also being embraced in Europe. At the same time, the European Commission wants to ensure that public interests such as fair working conditions and adequate and permanent protection of consumers and social security remain guaranteed. The European Commission therefore published the 'European agenda for the sharing economy', in which it addressed legislative issues with which market actors and governments will be confronted (European Commission, 2016). These are issues relating to the applicability of existing legislative and regulatory frameworks, something that is often unclear and which could hamper the development of the sharing economy. Initiatives involving the sharing economy and digital platforms could blur the existing boundaries between consumer and supplier, employee and self-employed person and professional and non-professional services and that could create uncertainty about the applicability of particular rules.

The regulation of digital sharing platforms is a subject that concerns the European Commission because its goal is to promote the internal European market, competition, digitisation and innovation. However, the fact is that most sharing platforms organise local markets, so the positive and negative effects of sharing are felt locally. It is therefore not yet clear whether the European Commission should take the lead in formulating policy, or whether national or local authorities should formulate their own policies in accordance with the principle of subsidiarity (Hatzopoulos & Roma 2017, p. 94).

The European Commission mentions four ways in which governments can deal with digital platforms: 1. strict enforcement of existing rules; 2. deregulation; 3. ad-hoc regulation; and 4. no intervention, or toleration (see box 1.2).

Box 1.2: Four policy options for governments

1. *Strict enforcement of existing rules*

In practice, strict enforcement will often mean that a platform has to cease its activities. This first policy option therefore *de facto* leads to the banning of a particular platform. The European Commission regards this as undesirable, saying that a ban should only be used as a last resort.

2. *Deregulation*

This option involves relaxing the general requirements for suppliers in light of innovations. Platforms are therefore legal and it becomes possible for citizens to provide a particular service legally.

3. *Ad hoc regulation*

This involves formulating new, specific rules, which often lead to a legal distinction being made between non-professional suppliers who occasionally provide a service (consumers) and professional suppliers who operate permanently (companies). This could be a relatively simple way of creating a more level playing field.

4. *No intervention / toleration*

This option involves tolerating platforms and means that rules will be neither revised nor enforced.⁸ The degree to which public interests will then still be protected will depend on self-regulation by the platforms and participants.

1.4 Approach and structure

The central question in this study is how public interests that are affected by new practices arising from the sharing and gig economy can be safeguarded. This main question is broken down into three separate questions:

1. What do we mean by the sharing and gig economy and what specific form does it take in relation to individual practices?
2. What public interests are affected by the sharing and gig economy?
3. How can these public interests be safeguarded, how will those safeguards be established and what are the roles of governments and the platforms in particular in that process?

This report consists of three parts.

Part I: The sharing and gig economy in the literature

Part I describes the new phenomenon of the sharing and gig economy. In chapter 2 we define the terms 'sharing economy' and 'gig economy' and discuss their various characteristics. We describe the sharing and gig economy particularly as part of the digital platform economy. In chapter 3 we look at various social aspects of the sharing and gig economy. From a public perspective, we consider the significance of the sharing and gig economy for society, the environment and the economy. This part

⁸ The Netherlands has a political tradition of toleration, for instance with regard to soft drugs. In this particular case it means that the sale of soft drugs in coffee shops is a criminal offence but the Public Prosecution Service does not prosecute coffee shops for this offence. Source: <https://www.government.nl/topics/drugs/toleration-policy-regarding-soft-drugs-and-coffee-shops>. Last accessed: September 4, 2017.

of the report is based on a review of the academic literature. However, literature on the subject is still in its infancy so we felt it was necessary to conduct our own empirical research into trends in the sharing and gig economy in the Netherlands. That research is the subject of the second part of the report.

Part II: The sharing and gig economy in practice

Part II presents five case studies: UberPop, Airbnb, Airdnd, Helpling and SnappCar. These are all either sharing platforms on which consumers share goods or gig platforms on which people offer personal services. In other words, our discussion does not encompass platforms on which professional suppliers operate, such as licence holders (UberX, for example) or businesses registered with the Chamber of Commerce (such as Werkspot), nor platforms on which goods or services are offered free of charge.⁹ The cases selected also cover a range of platforms operating in sectors with diverse economic and institutional characteristics, thus highlighting a wide range of new issues that arise in relation to public interests.

For each case study we conducted semi-structured interviews with representatives of the platform, the government and, in some cases, the regular, or traditional, sector. For a list of the individuals who were interviewed and the subjects covered in the interviews, see appendix 3. Sources that reflect the political and public debate on the sharing economy, such as media reports and policy papers, were also consulted.

Chapter 4 describes what Helpling, the largest platform for cleaning services in the world, means for the position of cleaners on the labour market. Chapter 5 considers the case of UberPop (which was part of Uber, the world's largest taxi platform), which has since been banned in the Netherlands. Chapter 6 discusses Airdnd, the largest home restaurant platform in the Netherlands and shows how the platform, the professional hotel, restaurant and café sector and the government are discussing ways of safeguarding public interests. Chapter 7 looks at Airbnb, the largest accommodation sharing platform in the world, and reviews the evolution of the policies adopted by the municipality of Amsterdam. Finally, chapter 8 looks at car sharing in general, and more specifically at SnappCar (the largest car sharing platform in the Netherlands), how the practice can be promoted and what the challenges will be.

We start each case study with a description of the practice in the 'traditional' or offline economy, the relevant public interests and how they have been safeguarded. We then look at the sharing and gig economy and the 'new' practices that symbolise the 'new' or online platform economy. In each case study we discuss how the new practices affect public interests and existing legislation. We also reflect on the current debate about how those interests should be protected and the policy process for protecting them.

Part 2 concludes with an analysis of the five case studies in chapter 9. We start by outlining the public interests that are affected by the sharing and gig economy and then discuss how measures to safeguard public interests are being put in place, or not, through interaction between the various platforms and the public authorities.

⁹ This choice is in no way intended to deny the *importance* of platforms for professional suppliers or non-monetary platforms.

Part III: Insights for debate, policy and politics

In part III we answer the main question posed in this study. In chapter 10 we discuss how public interests that are affected by new practices arising from the sharing and gig economy can be safeguarded. We present a list of twenty recommendations designed to stimulate public and political debate about the sharing and gig economy and to shape the process of formulating policies to safeguard public interests.

Part I

The sharing and gig economy: a literature review

This part of the report describes the sharing and gig economy on the basis of academic insights. In chapter 2 we define the concepts of the sharing economy and the gig economy and discuss some of their characteristics. We describe the sharing and gig economy mainly in terms of its position in the digital platform economy. Chapter 3 contains a discussion of the social aspects of the sharing and gig economy, reviewing from a public perspective the significance of the sharing and gig economy for society, the environment and the economy on the basis of the academic literature. In part II we then analyse the growth of the sharing and gig economy in the Netherlands on the basis of five case studies.

2. The sharing and gig economy as part of the platform economy

The emergence of online platforms that consumers use to sell goods and services to each other has created a ‘new’ economy in which people form ‘peer-to-peer’ economic relationships with one another. The first platforms of this type appeared at the end of the 1990s with the establishment of websites for second-hand goods, house swapping and sharing computer files. The platform economy received a further boost with the arrival of rapidly growing platforms like Airbnb for accommodation sharing in 2008 and Uber for taxi rides in 2009. Numerous other platforms quickly appeared in the wake of their success, ranging from websites where people could share cars, boats, parking spaces, books and clothing to websites where people could order a meal, a home chef, a babysitter, a teacher to give private tuition, a hairdresser or a cleaner.

Since recently these platforms have been referred to in the popular media as the ‘sharing economy’,¹⁰ a term that has been used in the many articles that have been written about this new Internet phenomenon since 2013. There is still no generally accepted definition of the term, but that is not necessarily a problem for the public debate; however, given the variety of platforms, it seems useful to make a classification. That does require a definition for analytical purposes so that the sharing economy can be distinguished from the gig economy and from other types of digital platform. The focus of this study is on sharing economy platforms, on which assets are shared, and gig economy platforms, on which services are offered. The emergence of such platforms regularly gives rise to new practices and new controversies relating to public interests.

The rise of the sharing economy is part of a wider trend in which digital platforms are having an impact on practically every social domain, including finance, journalism, music, television, education, science, care and so on (Derksen, 2013; Kreijveld et al., 2014; Van Dijck et al., 2016). Online platforms can be defined as “technological, economic and socio-cultural infrastructure for facilitating and organising online social and economic transactions between users and suppliers, with user data as fuel” (Van Dijck et al., 2016, p. 11). In this chapter we first give a definition of the sharing economy and then position other forms of platform economy in relation to that definition.

2.1 Definition of the sharing economy

The most important source of confusion in the debate about the sharing economy is the word “sharing”, which has a number of meanings and for many people also has a positive normative connotation (as something that is inherently good). Here we interpret sharing as meaning “sharing in use”, in the sense of renting out or lending your own home, car, parking space, boat, drill, item of clothing, book, racing bike, etc. A thing is shared if it is used not only by its owner but also by other consumers (for payment or otherwise). The precise definition of the sharing economy is taken from

¹⁰ Another English term used for this phenomenon is the *collaborative economy*.

Meelen and Frenken (2015), who defined it as “consumers granting each other access to under-utilised physical assets (*‘idle capacity’*), possibly for money”.¹¹

According to this definition, there are three elements to transactions in the sharing economy. First, the asset is shared between *consumers* (“consumer-to-consumer”, or “peer-to-peer”). Second, the access granted to the asset is *temporary* and thus there is no permanent transfer of ownership. Third, the transaction involves under-utilised *goods*, not services.

The adjective “under-utilised” is important because what we are talking about are goods that are owned and used by consumers who lend or rent them out at times when they are not using them. In theory, therefore, consumers can share all of their possessions since nothing is constantly in use. Assets that are lent are usually goods of relatively low value such as books, tools and clothing, while consumers are more likely to rent out assets with a high value such as houses, cars, parking spaces and boats. The criterion that the sharing economy involves under-utilised assets allow a distinction to be made, for example, between individuals who reside permanently in a house and rent it out when they are on holiday and individuals who own two houses and permanently rent out one of them for short periods. In the former case, the consumer is making better use of an idle asset by temporarily renting it out, while in the latter case the person is acting as the provider of a hotel *service* by using the house solely as a capital asset (Frenken et al., 2015).¹²

2.2 The sharing and gig economy as part of the platform economy

With the three defining elements cited by Meelen and Frenken (2015), a sharp distinction can be between the sharing and gig economy and other forms of platform economy. Figure 2.1 shows four types of “platform economy”, with the sharing economy in the centre. The three adjacent types of economy, including the gig economy, are similar to the sharing economy – they meet two of the three criteria – but differ fundamentally from our definition of a sharing economy in one respect. In these cases we refer to a quasi-sharing economy.

¹¹ Meelen and Frenken's (2015) definition differs very little from the influential definition of Botsman and Rogers (2010). The difference lies in the fact that, in addition to the sharing of assets, the latter regard the sharing of knowledge also as part of the sharing economy. In Meelen and Frenken's definition, sharing knowledge can be regarded as part of the sharing economy if the knowledge is stored in a physical object, for example on a DVD or in a book, but not if the knowledge is transferred in a non-physical manner, in which case it constitutes a personal service since the person transferring the knowledge has to invest time in the activity.

¹² The main bone of contention in discussions about the definition of the sharing economy is whether it involves (a) exclusively the lending or exchange of consumer goods without payment (as with Peerby), which some associate with ‘genuine’ sharing, (b) exclusively the renting out of consumer goods for payment (as with Airbnb), which some associate with ‘genuine’ economics (ING 2015), or (c) both, as reflected in Meelen and Frenken's (2015) definition with the words “possibly for money”. Some also equate the sharing economy with an online sharing platform and therefore date the birth of the sharing economy to the creation of these platforms. An even more restrictive definition proposes that sharing platforms are only part of the sharing economy if the profits and/or control of the platform are shared with the participants. All of these questions of definition are addressed in Appendix 2.

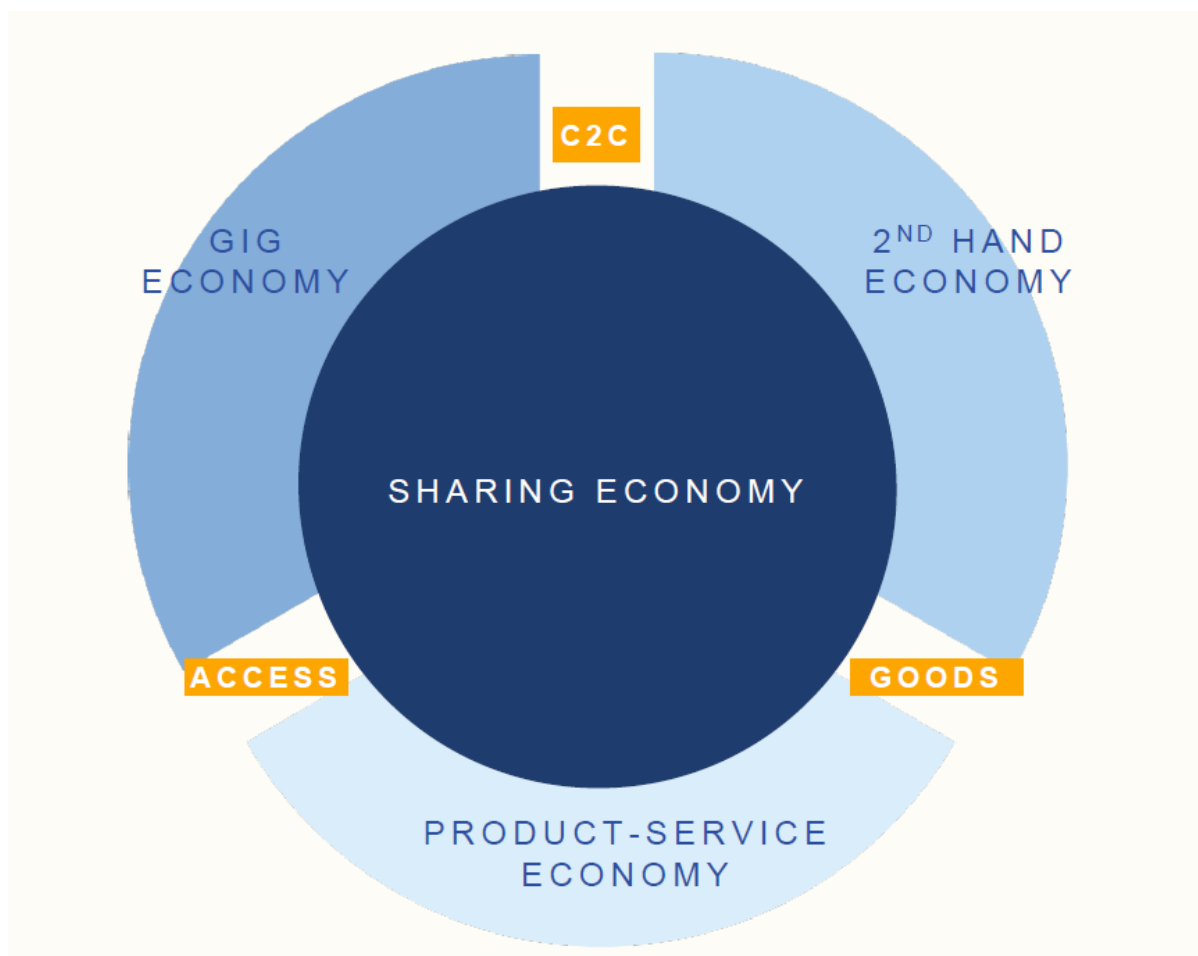


Figure 2.1. The sharing economy and related forms of platform economy (Frenken et al., 2015; Frenken and Schor, 2017)

The gig economy¹³

In the gig economy, consumers provide services for one another rather than access to goods. In other words, they do not rent out a car or lend a saucepan, but provide a taxi ride or a cooked meal as a *service*. Providing consumer-to-consumer services appears similar to sharing assets because assets are generally used in providing the service and are therefore better utilised. For example, most UberPop drivers use their own car, and home cooks use their own cooking equipment. But the difference is that in the gig economy people use their own time to provide a service for somebody else. Whenever a person orders a taxi ride or a meal *extra* capacity is generated and there is no question of making better use of capacity that would otherwise be idle. For that reason, UberPop is not part of the sharing economy, but the ride-sharing service BlaBlaCar is, because only in the latter case would the supplier have made the journey in any case and can the empty seats be regarded as idle capacity (Meelen and Frenken, 2015).¹⁴ Examples of the gig economy are the Internet platforms for taxi rides, meals, cleaning and household tasks. Digital services (such as translation, graphic

¹³ Previously also known as the *op afroep economie* (Frenken et al., 2015), referring to the English term 'on demand economy' (The Economist, 2015).

¹⁴ Since January 2015, for example, the Associated Press Stylebook in the United States has reserved the term 'ridesharing' for hitchhiking and carpooling and the term 'ridehailing' for taxi apps like Uber and Lyft: "Ridehailing services such as Uber and Lyft let people use smartphone apps to book and pay for a private car service or in some cases, a taxi. They may also be called ridebooking services. Do not use ridesharing." (Warzel 2015).

design, software development, online teaching, etc.) also fall into the category of the gig economy.¹⁵ As with the sharing economy, the gig economy has recently been experiencing rapid growth, particularly through taxi platforms like Uber, Lyft and Didi and more generic platforms such as TaskRabbit and Werkspot.

The product-service economy

The service consists of granting the consumer temporary access to a product, while the company retains possession of it. It is therefore a business-to-consumer (B2C) concept, such as car rental via Greenwheels or Car2Go, rather than a consumer-to-consumer interaction (C2C). The scale of this economy is difficult to estimate because product-service combinations come in so many different forms (hotels, cars, bicycles, boats, tools) and the number is rapidly expanding due to a wide variety of letting and lease contracts.

The second-hand economy

This refers to the practice of consumers selling or giving away assets to each other, as in the case of online platforms such as Marktplaats (part of eBay). They are therefore not granting temporary access to an asset as in the case of lending or renting. The turnover generated by private individuals on Marktplaats.nl alone comes to more than eight billion euros (nu.nl, 16 May 2014). There are also websites specialising in particular products such as cars or books that generate substantial turnover. Then there are initiatives organised on existing platforms such as Facebook where members of the groups give away items for free.

The sharing economy, and the associated types of quasi-sharing economy, are all forms of sustainable consumption because they offer an alternative to purchasing new items (Frenken et al., 2015). A consumer who needs a specific physical asset, such as a drill, has a choice of four possible platforms: to buy a drill from an individual (second-hand economy), to hire a drill from a business (product-service economy), to hire a person to drill the hole in the wall (gig economy) or to ask a private individual to lend or rent you a drill (sharing economy). In each case the consumer avoids purchasing a new drill, but only the final option is, strictly speaking, an example of the sharing economy –consumers temporarily granting other consumers access to their under-utilised assets. The same applies for mobility: rather than buying a new car, a consumer can travel from A to B by buying a used car (second-hand economy), hiring a car from a business (product-service economy), hiring a taxi driver (gig economy) or borrowing or renting a car from another consumer (sharing economy).

The diagram that distinguishes the sharing economy from other types of platform economy can also be used to define three more general types of economy, which then intersect at the sharing economy (Frenken, 2017).

For example, the common feature of the second-hand economy, the sharing economy and the gig economy is that they all involve peer-to-peer transactions between equals. Accordingly, these three types of economy can be regarded as falling under the peer-to-peer (P2P) economy, which also encompasses other forms of economic activity, such as the formation of ad hoc teams of self-

¹⁵ This form of service is disregarded in this report. These markets are often international because the service can be provided remotely and is therefore largely exempt from national regulation at the moment.

employed persons, the establishment of so-called Broodfonds by groups of self-employed professionals for insurance purposes, flexible office space, Wikipedia and file-sharing systems. The P2P economy contrasts with the traditional economic model in which consumers do business with companies and there is no question of a relationship of equals. The rapid growth of the P2P economy is closely connected with the rise of platforms that use algorithms to minimise the transaction costs between individuals (see chapter 3).

By making a distinction between renting and buying, we can distinguish the product-service economy, the sharing economy and the gig economy from the second-hand economy, since it is only in the latter that the consumer purchases an asset and becomes its owner, while the other models involve a temporary rental agreement (if the asset is paid for, at least). The development of platforms on which goods or services can be rented as an alternative to purchasing them is regarded as a transition from ownership to access, i.e., the 'access economy'. In this case, ownership of an asset is far less important provided one can make use of that asset when and where one needs it.

Finally, in relation to physical goods we can distinguish the second-hand economy, the sharing economy and the product-service economy from the gig economy. A relevant term here is the 'circular economy', which is generally used to refer to processes in which products and materials are repeatedly used. That is the case in the second-hand economy because a little-used product is sold to a person to whom it is more important, and also in the sharing and product-service economies because in both cases a single asset is used by multiple consumers. The circular economy is broader than the three forms just mentioned, however. Numerous recycling systems also fall under this term, as do biological systems for treating water, for example.

2.3 Platforms reduce transaction costs and increase trust

The definition of sharing economy used here as "the phenomenon of consumers granting each other access to under-utilised physical assets ('idle capacity'), possibly for money" immediately makes it clear that the sharing economy is not new. After all, people were lending each other goods long before online sharing platforms came into existence, sometimes for payment, but often not. People lent mainly to friends and family because they were only willing to entrust their possessions to people in their own social network (Schor, 2014). In other words, the sharing economy has always existed, but the practice was never known by that name. The gig economy has also existed forever. People already performed favours for one another before the arrival of online platforms. There is also a long history of people performing odd jobs (such as babysitting, painting or moving home) for cash.

The emergence of online sharing platforms has brought about a significant change, however. The digital sharing platforms have made it more attractive for people to offer their goods and services to complete strangers ('stranger sharing') (Schor, 2014). And that is precisely the most important function of online sharing and gig platforms: bringing together and creating trust among strangers. In that sense, sharing platforms are new institutions. Unlike physical market places where supply and demand meet, these platforms are online market places that not only connect supply and demand digitally, but also a place where suggestions are often made via algorithms, reviews can be left, insurance can be arranged, online payments can be made and delivery services can be hired. This is all due to the technological development of the Internet and related advances in database management, search algorithms, online payment systems and the wide distribution of the

smartphone. Some sharing platforms also use so-called application programming interfaces (APIs), with which they have controlled access to user data from other platforms, such as Google or Facebook (Van Dijck et al., 2016).

The economic logic of online sharing and gig platforms is easier to understand on the basis of transaction cost theory (Williamson, 1981). Transaction costs include all costs connected with completing a transaction. It is the sum of the *search costs* to discover from whom and at what price an item can be bought, *contract costs* associated with drawing up a contract and *monitoring costs* that arise from investigating whether a person is complying with the agreements, and possibly legal costs that might ensue from a breach of contract. Note that there are also transaction costs in the case of borrowing, since then the person who is borrowing has to find a person who owns the asset, and there are costs associated with verifying that a person is complying with the legal conditions for the loan (such as the requirement that the borrower handles the borrowed object with care). There could even be litigation if the borrower will not pay damages for careless use of the object or fails to return the item as required (Koolhoven, 2015).

Before the arrival of the Internet, these transaction costs were very high. It was difficult for a consumer who wanted to rent or borrow a particular item to discover who possessed one and whether that person would be willing to rent it out and for what price and subject to what conditions. In the case of hiring a person to perform an incidental service, it was difficult for consumers to estimate how expert and reliable a supplier would be. The contract costs and potential legal costs were disproportionate to the modest amount involved in concluding such a rental agreement. For that reason transactions in the sharing economy were largely confined to informal agreements between friends, neighbours and family because the transaction costs then remained low, since the search, contract and legal costs are negligible when renting from an acquaintance because the parties will not generally draw up a contract or take a dispute to court.

Digital platforms have drastically reduced transaction costs and this has led to the emergence of new markets for the hiring of goods and services between strangers. Minimising the transaction costs is of crucial importance for the platform because lower transaction costs lead to more participants and more transactions and to a corresponding increase in revenues for the platform. After all, most platforms earn from each transaction via a fee or a percentage of the value, or from each visitor via advertising income, or from each supplier via a subscription. A platform's technology is often designed precisely to keep the transaction costs to a minimum. The online search costs are far lower than with offline sharing practices because digital platforms use algorithms that show a visitor a number of suppliers that have been selected on the basis of particular characteristics (location, time, reputation rating, product features, for example). Contract costs are also low because transactions are concluded automatically in accordance with standard contracts. The highest transaction costs on sharing platforms are still the costs of a possible breach of contract. If you rent something out to a stranger, there is always a possibility that the item will be returned late or damaged. Strangers therefore must have a certain degree of trust in each other.¹⁶

¹⁶ Rachel Botsman emphasises the importance of trust in the sharing economy with her assertion that "trust is the currency of the new economy"
https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust

Sharing platforms have found a variety of ways of containing or insuring the risks and so increasing the trust between consumers (Einev et al., 2015). Risks are limited by allowing people to review each other. In this way, people can establish a reputation, which reduces the costs of future transactions. *Reputations* have a direct economic value, since individuals with a good reputation can rent out their assets at a higher price and rent assets from others at a lower price. Individuals with a poor reputation, in contrast, will only be able to rent out their assets at a low price and rent assets from others for a high price. A strong reputation is not only an indication that a person has honoured the agreements in previous transactions, the economic value of a reputation means that a high reputation rating is also an incentive to continue being reliable in the future. Some platforms also perform 'checks' to certify suppliers or assets. In the Netherlands, for example, Uber only used drivers with a Certificate of Conduct and whose cars were recent models with a roadworthiness certificate. Airbnb tries to verify the identity of suppliers and applicants before they are allowed to participate on the platform. Increasingly, sharing platforms also *insure* the shared assets. For example, the risks of car sharing are covered by a micro-insurance policy that applies for just one rental period and Airbnb offers free liability insurance to protect property owners against claims for damages (Bouma, 2015a).

2.4 Spectacular growth

The online sharing and gig economies are growing rapidly,¹⁷ primarily because supply is based on assets that consumers already own and the time that people are willing to invest. The platform itself therefore has to make relatively little investment other than developing the platform software and organising marketing campaigns. Once the platform is a success, recognition grows through word of mouth and publicity in the media.

Accommodation sharing generates the vast bulk of the turnover in the sharing economy, which is not surprising as houses are also by far a person's most valuable asset. More than two million property owners worldwide are signed up to Airbnb and at peak times, such as New Year's Eve, more than a million properties are let worldwide (Airbnb, 2015). There are also other parties that facilitate accommodation sharing, including Wimdu, which was founded in Germany in March 2011 and is a direct competitor of Airbnb: it now offers more than 300,000 properties in 140 countries (including the Netherlands) (Wimdu, 2017).

In Amsterdam alone, more than 18,000 properties were rented out at least once via Airbnb in 2015, an increase of 33% compared with the previous year (Municipality of Amsterdam, 2016a). The municipality estimates the total number of overnight stays arranged annually via online platforms at 600,000, which represents roughly 5% of the hotel market (Municipality of Amsterdam, 2016a). In the whole of the Netherlands, approximately 31,000 properties were rented via Airbnb in 2016. Each property was rented out to an average of 2.5 guests for an average period of 3.5 nights (Airbnb, 2017).

Car sharing between consumers is also growing. Roughly 19,000 car owners rented out their cars to other consumers in the spring of 2016, almost twice as many as in 2015 (Crow-KpVV, 2016). Market leader SnappCar recently reported that it had signed up its 200,000th participant (SnappCar 2016).

¹⁷ See also the list of active sharing economy initiatives in the Netherlands in appendix 1.

And since December 2016 the ride-sharing platform BlaBlaCar has had more than 40 million members worldwide (BlaBlaCar, 2017). BlaBlaCar also operates in the Netherlands, but only on a relatively small scale because hitchhiking is mainly used for long-distance journeys or between places which are less accessible by public transport.

Another well-known platform is Peerby, a platform created in the Netherlands in 2011 that consumers use to lend goods to each other. Peerby was being used by 200,000 people worldwide in January 2017 (Peerby, 2017). In 2015 Peerby also launched Peerby Go, a service with which you can borrow goods from neighbours for payment. It is not known to what extent this service has taken off.

Like sharing platforms, gig platforms are expanding rapidly. The number of Uber drivers is estimated at 400,000 worldwide, the majority of whom drive according to the UberPop model, without a permit to carry passengers (JRC, 2016b). That is a spectacular rate of growth, given that Uber has only been operating in most countries for a few years. Taskrabbit, an American platform established in 2008 on which people can be hired to perform manual tasks and cleaning now has around 40,000 service providers (Codagnone et al., 2016). The Dutch equivalent, Werkspot, is even larger in relative terms with 7,500 trades people signed up in the Netherlands (Marketing Tribune, 2016). Another successful Dutch platform is Thuisafgehaald, where people can collect a meal from a home chef in their neighbourhood for a small fee. There are now around 10,000 home chefs attached to this platform (Zeijlstra and Visscher, 2016).

There are no accurate figures for the growth of sharing and gig platforms because statistical offices do not have access to data about transactions and the platforms themselves provide only summary reports on their growth, which are not necessarily accurate (and might be consciously over-optimistic). However, the figures that are known demonstrate spectacular growth. The platforms mentioned here have only existed for five to 10 years and already have a great many users. Kaleidos Research (2016) has mapped this growth by repeating a survey conducted three years ago. This survey did indeed reveal rapid growth in the number of users: 23% of Dutch people participated in the sharing economy in 2016, compared with just 6% in 2013. However, Kaleidos' definition of the sharing economy was quite broad and included online platforms for second-hand goods such as Marktplaats. The sharing economy is particularly popular among young people (under-35s), 29% of whom engage in sharing, compared with 20% in older age groups. The growth of the sharing economy between 2013 and 2016 is particularly noticeable among young people who share accommodation via Airbnb (from less than 1% to 7%) and share cars via SnappCar (from less than 1% to 2%).

This rapid growth coincided with the post-2008 economic crisis in the United States and Europe, but that does not mean that the sharing economy emerged as a reaction to the crisis. Although the best known platforms – Airbnb and Uber – date from this period, online platforms had already existed for some time; eBay was founded 1995 and Marktplaats followed in the Netherlands in 1999. Some sharing platforms, in the narrow sense of the term, such as accommodation sharing websites that date from before 2000, were founded long before the crisis. But the crisis may have reinforced the growth of the sharing and gig economy because many people suddenly saw their income fall and were consequently forced to rent out their goods and homes and offer their labour via platforms. However, it is unlikely that the sharing economy will shrink when the economy grows again. That would only be the case if consumers regarded renting goods as inferior to buying them, since people who now rent assets via a sharing platform would then start buying those assets again when their

income rises.¹⁸ But that is unlikely to happen because the cost savings could be so great that even with a rising income people will be unwilling to swap access for ownership, and because sharing is preferable to owning for many people. For example, a person's car is not always in the same place as the person is and is therefore not accessible at those times, and a shared car, in the business-to-consumer variant, has its own parking space. Some people also prefer home sharing to a hotel because of the possibilities to experience local life and to cook for oneself (Guttentag, 2013). Finally, many participants in the sharing economy are motivated to share by the social contact and the environmental benefits (Böcker and Meelen, 2016).

The growth of the sharing economy is therefore expected to continue because the platforms are generally able to create a cheaper alternative in existing markets, offering greater freedom of choice and more convenience than traditional alternatives in the process. Furthermore, the lower prices will prompt a further increase in the size of the market. For that reason, it is entirely possible that large markets such as car hire, tool hire, boat hire, parking and hotels will be organised to a significant extent via platforms in the future (PwC, 2015).

2.5 Relationship with technological and social trends

The further development of sharing and gig platforms will depend not only on new laws and regulations, which is the central issue addressed in this report, but also on future technological developments. Regulation and technology evolve together. For example, the government can respond to technological developments with new laws and regulations. On the other hand, the platforms might react to new regulation and revise their algorithms, data policy or business model in response to new rules. A notable development in this respect is that the government increasingly acts reflexively, and when formulating new regulations asks itself whether they are future-proof in the context of possible technological developments in the future (see Chapter 10).

The development of the sharing and gig platforms can be described in the context of a number of technological developments, such as robotisation and the Internet of Things, and social trends, such as the increase in freelance work. New policies have to take account of these developments, which we discuss in more detail below.

Robotisation

The rise of sharing and gig platforms can be seen as a form of robotisation (Van Est and Kool, 2015). After all, decisions underlying the matching of supply and demand that used to be made by humans are increasingly being made by algorithms. Accordingly, a larger proportion of social interaction is generated automatically and the algorithms increasingly determine who will contact whom and what information will be shown or concealed (Van Dijck et al., 2016). In some cases, as with UberPop, the price also changes constantly to reflect variations in demand on the basis of an algorithm. By raising prices when demand is greater than usual, the platform attracts more drivers with the higher prices.

One of the important consequences of robotisation is that some jobs that have traditionally mediated between supply and demand will disappear, such as taxi call centres, second-hand shops, budget

¹⁸ In economic science one refers to a good or service as inferior if it will be consumed less as incomes rise. Eating potatoes is the best-known example.

hotels and perhaps car rental firms. But as with all processes of robotisation, work will not only disappear, new jobs will also be created.

The Internet of Things

The further growth of sharing and gig platforms could stimulate further innovations in the future. For example, some people who rent out their car or their home will need smart locks so that they can allow the renter to gain access to the car or the property without having to make an appointment for the old-fashioned hand-over of the key. Devices could also indicate themselves when they are available to be shared, so that the owner no longer has to perform these actions. Sharing would then in fact be largely automated and the practice of sharing could be scaled up even more rapidly (Morozov, 2014).

Smart locks that can be opened remotely are part of the Internet of Things, the trend whereby more and more devices are connected to the Internet and are able to share data. The Internet of Things will create new possibilities for the sharing economy. For example, the risk of goods being abused is smaller if devices can communicate the fact that they are being used improperly or are being damaged or stolen. Insurance costs might also decline, because damage, fault and payments could be dealt with largely automatically (using algorithms).

More self-employed persons

Although there is uncertainty about the impact platforms will have on the volume of work, the arrival of platforms will change the nature of a lot of work (Van Est & Kool, 2015). In the first place, it is expected that more people with a job will supplement their income with incidental earnings via sharing and gig platforms. Platforms will possibly also lead to more people being employed on a self-employed basis at the expense of people with a permanent contract. Possible examples are the hotel, restaurant and café, cleaning and taxi sectors, in which companies could fail and be forced to dismiss people because of the rise in the number of self-employed offering hospitality and taxi services. A similar development could occur in occupations such as home care, labour mediation, journalism and education. Whereas work was formerly organised mainly in private companies and public organisations with hierarchical planning, management and control, the reduction of transaction costs means that more and more organisations of this type can be replaced by platforms using algorithms to plan, manage and control work. In this way, platforms could reinforce the current upward trend in the self-employed population.

3. Economic, social and environmental effects of the sharing and gig economy

In this chapter we look at the potential economic, social and environmental impacts of the sharing economy. We focus first on the sharing economy as defined in chapter 2: consumers who share goods with each other. The gig economy is also considered, particularly when we look at the implications of platforms for labour relations and taxation. The reasoning we use to explain the effects discussed is generally theoretical because of the paucity of empirical research into the impact of the sharing economy. This chapter is therefore an introduction to part II of this report, in which the social aspects and public interests connected with a particular platform are discussed in the individual case studies – Helping, UberPop, Airdnd, Airbnb and car-sharing platforms. In chapter 9 (part III), finally, we provide a more comprehensive overview of the public interests affected by the digital sharing economy on the basis of the theoretical review in this chapter and the five case studies.

3.1 Economic effects

When people rent out their possessions, there are economic benefits for both the owner and the renter. It is generally cheaper for the renter to rent an asset from another consumer than from a company, while the owner earns additional income by renting out an asset that is not being used anyway to someone else. ING (2015) estimates that most wealth gains in the sharing economy will accrue from sharing houses, which is not surprising since people's houses are their most expensive asset. For example, according to the Municipality of Amsterdam (2016a, p. 9), in 2014 around 600,000 overnight stays were arranged via accommodation sharing platforms in that city alone. Based on a price of 130 euros per night (see ING, 2016), the turnover of the accommodation sharing market in Amsterdam was almost 80 million euros. In the car-sharing market, approximately 19,000 cars were being offered in the spring of 2016. With an average income of 250 euros per car from seven rental periods per year¹⁹, the turnover in the P2P car-sharing market would be around 5 million euros.

These sums are still relatively small in relation to the Dutch economy as a whole, which comes to roughly 900 billion euros. Nevertheless, the current size of the sharing economy cannot be derived solely from the turnover of sharing platforms. Assets (including houses and cars) are also often rented outside platforms. In addition, people generate wealth by borrowing rather than renting goods (and by acquiring services without paying for them). House swapping, for example, allows people to save the expense of a hotel room, which means they can spend the money saved for other things.

The economic effects of platforms in the gig economy will probably become apparent more slowly than the effects of the sharing economy, because gig platforms organise existing markets for personal services (such as taxi rides, renovation, cleaning, babysitting, private tuition, etc.) in a new way. In

¹⁹ As mentioned by co-founder of SnappCar Victor van Tol at the symposium on car sharing on 3 June 2015 in Utrecht.

theory, these platforms can help to reduce prices, improve access and create more jobs by enabling markets to operate more efficiently. Suppliers will also be compelled to specialise more, which will enhance the quality of service.

Although the sharing and gig platforms are not so large at the moment, they are expected to grow explosively. On the basis of a consumer survey and growth figures, PricewaterhouseCoopers (PwC, 2015), for example, forecasts that by 2025 the sharing and gig economy will be more than 20 times its size in 2013. There are three factors underlying this growth. First, with the lower prices and progressive specialisation of goods and services the total size of markets will increase (ING, 2015). Second, more and more people who were previously unaware of the phenomenon will start participating in the sharing economy (ING, 2015). Third, platforms will continue to innovate, making the sharing economy more accessible and more appealing. New technological applications, such as smart locks, could make sharing even easier.

It should be noted here that there will also be welfare losses. In the gig economy there is the risk of increased competition leading to lower wages, but precisely what the effect will be is still uncertain. There are also sectors whose turnover will decline as the sharing economy grows. This will only occur to a limited extent because sharing economy platforms often penetrate new market segments rather than substituting directly for existing goods and services. For example, properties are rented out via sharing platforms for an average of 3.5 nights (Airbnb, 2017), while hotel guests stay only 1.8 nights on average (CBS, 2013). Accordingly, platforms do not compete on a one-to-one basis with existing hotels. Furthermore, there are people who are upset by the sharing economy, particularly neighbours of properties that are rented out regularly via Airbnb. Although this is a relatively small group, the welfare losses can be substantial (they could in theory be measured by asking these people how much it would be worth to them for the municipality to prohibit accommodation sharing).

An important reservation that needs to be made about the expected increase in wealth is that its distribution will be quite skewed (Frenken, 2015; ING, 2015). The greatest concern in that context is the power that platforms could acquire as monopolies. A platform is defined as an intermediary between two or more types of user. What distinguishes it from other intermediaries is the existence of cross-side network effects: the platform becomes more attractive to users of one type as the number of users of the other type increases, and *vice versa* (Rysman, 2009; Kreijveld et al., 2014). Most participants will therefore go to the same website because it offers the greatest chance of finding a match and a low price. It is also often easier to judge one another's trustworthiness on such platforms because participants will already have received a lot of reviews. For these reasons, many markets in the sharing economy are likely to start displaying monopolistic tendencies. This is already apparent with accommodation sharing, where Airbnb is by far the largest player, but also in car sharing, where SnappCar is dominant. Monopoly-forming essentially means that the welfare gains generated by platforms will largely accrue to the owners of the platform rather than its users. After all, the platform will be able to demand large margins for every transaction, which would not necessarily be in proportion to the added value they provide.²⁰

²⁰ The expectation that the markets will develop into monopolies is already evident in the enormous valuations of companies like Airbnb (US \$ 25 billion in the summer of 2015).

Platforms also possess information about their users which they can convert into Big Data and use for commercial purposes or sell on to other companies (Van Dijck et al., 2016). With these data companies can make a better estimate of the maximum price a particular customer is willing to pay, according to the location, time and quality, and adjust the price upwards accordingly. Information about the behaviour of suppliers can also be sold to platforms in other sectors, which can then use it for recruitment or screening purposes. Even data about a person's emotional state can be used for marketing purposes, for example to estimate when a person will be most likely to make an impulse purchase (Schnitzler, 2015). The greater the ability of platforms to estimate preferences and desires, the better able they are to estimate the maximum price a person is willing to pay – the principle of price discrimination. This means the platform can make steadily bigger profits, which is at the expense of the consumer surplus (the difference between the amount a person is willing to pay and the actual price).

The concentration of profits and data in the hands of a small number of platforms raises the question of whether such concentrations of power are politically desirable (Van Dijck et al., 2016). In time, essential services such as transport and housing, and the data relating them, will be steered less by political decision-making than by internationally operating platforms, whose primary goal is to maximise their profits. A growing number of commentators are therefore calling for alternative platforms like those that are currently being organised as not-for-profit organisations, cooperatives or government agencies (Scholz, 2014; Van Dijck et al., 2016).

A second source of growing economic inequality in the sharing economy lies in the simple fact that only those who possess assets can rent them out. The highest returns are gained by renting out a person's most expensive asset, their home. So only home owners can earn really substantial additional income in the sharing economy by employing their house as a capital asset to generate temporary income from renting it out. According to figures from Airbnb (2017), the average property owner in the Netherlands who rented the property out earned approximately 3,000 euros at an average price of just over 100 euros per night in 2016. The sums will have been higher in Amsterdam because there is more demand for properties in that city. A simple calculation shows that a resident of Amsterdam who complies with the rule that a property may not be rented out for more than 60 days in a year and earns 150 euros a night, can easily earn 9,000 euros in a year. Even after deduction of tax, that represents a decent net gain.

The growth of accommodation sharing can also drive up house prices and private-sector rents (ING, 2016). After all, if revenues from home ownership increase with the possibilities offered by renting via Airbnb, house buyers will also be willing to pay a higher price. This could lead to growing social segregation in cities because people with lower incomes or first-time buyers will have to move to less popular districts.

A third potential source of inequality is that some service providers will see their income decline because of the rise of gig platforms. After all, platforms make the market more transparent and that benefits consumers in the main in the form of lower prices, greater reliability and better quality. Meanwhile, although suppliers can extend their market reach, they will also face greater competition from others. In some cases this will lead to a fall in prices and a decline in income from labour. In both the Netherlands and the United States, for example, there are signs that Uber drivers earn less per

hour than the minimum wage, particularly because they have to provide their own car and maintain it and arrange their own insurance (Bouma, 2015b; Davidson, 2016)

A fourth form of inequality is connected with skills and reputation. People who can present themselves well receive good ratings, which create trust for subsequent transactions. In principle, that increases the efficiency of the market. But personal characteristics such as race, appearance, skills (such as spelling) and behaviour (socially desirable behaviour, for example) also play a role. This reputation capital translates into an economic benefit because it means that people can demand a steadily higher price when renting out an asset and a steadily lower price as a renter. Others who promote themselves less well within the sharing economy will earn steadily less from and have to pay steadily more for a particular asset or service. Reviews will become increasingly unreliable. It is even possible that people with few reviews will be willing to offer a discount in exchange for a good review in order to build up a good reputation (Frenken and Straathof, 2015). And because personal details are often sold to other parties or can be seen by them, banks and insurance companies can discover reputation scores with a simple search and adjust their products and prices accordingly.

3.2 Social effects

Initially the social effects of the growth in the sharing economy seem positive. After all, the sharing economy leads to the establishment of new social contacts because people form direct economic relationships with strangers (Parigi et al., 2013; Frenken and Schor, 2017). Sharing was formerly confined to a person's own family and friends, but now new social relationships can be formed through sharing.

In particular, the sharing economy can help to create wider social contact within a neighbourhood because most assets will obviously be shared with people living within a small radius. In this way, the sharing economy can contribute to a district's social cohesion. For the socially disadvantaged and the lonely, provided they are digitally literate and can use the Internet, sharing platforms could represent an easy way of expanding their social network and thus strengthening their social safety net. It is interesting to note here that sharing and gig platforms will actually bring people from different social circles or classes into contact with one another. After all, owners of assets (cars, boats, houses) are often older and wealthier than individuals who only wish to use them occasionally. In other words, the sharing economy might not only help to expand social relationships in general, but might also foster relatively unique relationships between groups that would otherwise have little contact with each other (Frenken and Schor, 2017). As yet there has been no empirical research to support that assertion, however.

The opposite also applies. The existing "social capital" in a neighbourhood could also promote participation in sharing and gig platforms. As the trust between people in a neighbourhood grows, they will also share more. An initial indication in support of that hypothesis was found by Corten et al. (2015). They showed that people in neighbourhoods with a higher level of social capital also responded more often to requests for the loan of a product on Peerby and concluded that precisely because users of Peerby do not review one another the existing social capital in a district promotes sharing.

Unfortunately, the social character of the sharing economy also means that prejudices and discrimination can play an important role. In that sense, the sharing economy can cause a deterioration in existing relations between groups within society. For example, a study by Edelman and Luca (2014) showed that Afro-American landlords in the US receive 12% less rent than other Americans for the same type of house in a similar location. And a follow-up survey by Edelman et al. (2015) showed that people with a typically Afro-American first name had 16% less chance of being accepted as a renter than a person with similar characteristics but a first name typically associated with a white person. Similar effects had already been demonstrated on second-hand online marketplaces, where members of minority groups receive prices up to 20% lower than a person from a majority group (List, 2004). A study into Uber and Lyft in the United States also showed that passengers with Afro-American names had to wait longer and were refused more often (Ge et al., 2016). Another form of discrimination occurs on the basis of skills. Schor et al. (2016) report that people who make spelling mistakes in their communication are regarded as less reliable. Discrimination then leads to people withdrawing even more into their own group in terms of ethnicity, income or education, even online. It is also worth noting here that discrimination seems to be less prevalent in business-to-consumer relationships that are typical of the 'old economy', because regular hotels make no distinction in their pricing between people of different ethnic backgrounds. This equality in access to (or pricing of) goods and services is largely safeguarded in the offline economy by the anonymity of economic behaviour in public platforms, while in the digital sharing economy it is often no longer possible to operate anonymously (ShareNL, 2015a).

Sharing could also have consequences for existing social contacts and friendships. The fact that sharing used to be confined to family and friends means that sharing with strangers could be at the expense of sharing with family and friends. That seems to be occurring in the case of accommodation sharing (Schor, 2015). Whereas in the past people would often lend their home to family or friends for free when they went on holidays, they are now more likely to rent out their property to a stranger because of the large amount they can earn. After all, every time people leave their home for any length of time, they are losing actual income by not renting it out. A similar trend could also emerge in the gig economy. For example, the perception of free time could change with the realisation that every free hour can be used to earn extra money via an online platform. In other words, the rise of sharing and gig platforms could lead to greater economisation of private lives and consequently to a diminution of social cohesion and peace of mind (Thomas, 2016; Van Est and Kool, 2015).

Finally, the sharing economy started as a sort of bottom-up social movement with the focus on social contact, but more recently we have seen that sharing transactions are becoming more anonymous. One reason why there is not necessarily any contact between people who share is that people with a great many good reviews have established such a good reputation and are so evidently trustworthy that others do not feel the need to contact them in advance (by Skype or otherwise) before reaching an agreement (Parigi and State, 2014). Furthermore, it is also increasingly common for a commercial intermediary to 'arrange' things for the owner and the renter. Van de Glind (2015) refers to an evolution from consumer-to-consumer (C2C) to consumer-to-business-to-consumer (C2B2C) – in other words, a trend whereby the platform or other intermediaries assume more and more tasks to facilitate the transaction between two consumers. The existence of this trend is supported by the findings of a survey by Kaleidos (2016), which reported that in 2016 one in three respondents had said they were willing to share items without knowing the other party, while only one in 10 people had agreed with that proposition in 2013. With Airbnb, for example, one does not necessarily come in

contact with the owner of the property if he or she hires a third party to handle the transaction and transfer. There are also new forms of car sharing, such as ParkFlyRent, where people drive their car to the airport and it is then rented out during their holiday. In those cases the owner and the renter do not meet. What the owner is actually doing is making a capital asset, his or her car, available to the platform, which then rents it out as it sees fit. The trend from C2C to C2B2C could be reinforced as more and more devices are given a smart lock and an IP address, so that a house, a car or a boat can be opened by the renter with a PIN code issued by the owner via the platform. It will then no longer be necessary to meet in person to hand over the keys.

It should be noted that the trend from C2C to C2B2C outlined here does not necessarily apply for every form of sharing. For example, with the sharing of goods of minor value, as in the case of Peerby, social motives could continue to play a dominant role. After all, the economic motive remains of secondary importance in those contexts.²¹ There will also be major differences between platforms in the gig economy. The social contact during a taxi ride or when a person is performing a chore in a house is usually limited because the contact is generally one-off and is regarded simply as work. With home cooking services (Thuisafgehaald, Airdnd) or knowledge transfer (Konnektid), however, the social aspect is key, because in these cases the interaction is more meaningful and the people involved more often come from similar social groups. Thuisafgehaald is an interesting example of a platform with a positive social impact. In addition to its regular service where people can order a meal via Thuisafgehaald, the platform has introduced a new service called Bijzonder Thuisafgehaald for people with special needs. The platform brings these people into contact with home cooks who are willing to do a little bit extra, for example cooking on a particular day every week or delivering meals to people who are not very mobile (Thuisafgehaald, 2016).²²

The rise of the online gig economy – such as platforms for odd jobs, taxi rides and cleaning work – could have significant consequences for jobs and working conditions. For some service providers, the emergence of the platforms is a positive development. After all, anyone who can secure orders via a platform can organise their own time and the number of hours they work each week (provided there is sufficient demand). There are many who welcome this flexibility. However, there are also service providers who would prefer to remain in salaried employment because of the job security, the contact with colleagues and the social security.

Another potentially positive consequence of service platforms is that a lot of work that used to be performed without being declared – and without any protection of the worker's rights – might be performed legally more often. After all, the transaction costs are now so low that work performed and declared by self-employed persons has become competitive. This development is evident with Helping, an online platform where people can offer cleaning services. This platform ensures that people are not paid less than the minimum wage. In addition, it is easier for the Tax Administration to discover the identity of individuals who are working as a service provider and whether they are paying tax. This does require close cooperation between the service platforms and the Tax Administration,

²¹ For this reason, Peerby has difficulty with the business model. Peerby in fact recently launched a second service (PeerbyGo) where consumers can rent from each other.

²² <https://www.thuisafgehaald.nl/bijzonder-thuisafgehaald/item142613>

something that has previously been arranged in relation to VAT with second-hand platforms like Marktplaats.nl²³, and between the Municipality of Amsterdam and Airbnb with respect to tourist tax.²⁴

In short, just as the Tax Administration expects companies to withhold their employees' wage tax, platforms could in future be used to collect taxes and monitor compliance with other legislation in an efficient manner. Platforms could, for example, also offer a form of social security by making it easier and cheaper for self-employed persons to organise around common interests where formerly they operated independently and therefore tended not to be well organised.

The more fundamental discussion currently raging (in the United States and the United Kingdom in particular) is whether self-employed persons who depend heavily on a platform for their work should not actually be regarded as employees of the platform. In the American legal context, this question is mainly connected with the extent to which the platform prescribes how the self-employed person must perform specific tasks and the price to be charged. If the platform solely matches supply and demand and leaves it to the individuals concerned to decide whether the transaction will go ahead and, if so, at what price and under what conditions, it is merely an intermediary (as is the case with Werkspot). Nevertheless, according to some it is already questionable whether some such platforms do not already perform the role of employer because they not only bring together supply and demand, but also facilitate (and sometimes also moderate) the reviews and therefore exert influence on the independent contractor and his or her chances of securing further work. Moreover, most platforms do not accept every supplier and suppliers are sometimes banished from platforms for "misconduct", a concept that is often neither formally described nor open to challenge.²⁵

3.3 Environmental effects

The sharing economy is often mentioned in the same breath as sustainability. After all, in the sharing economy goods are used more often and by more people and therefore the total production (and destruction) of objects and buildings can be reduced, leading to savings in energy consumption and reduction of CO₂ emissions. This reasoning does not apply for the gig economy, however, since it does not lead to better utilisation of idle capacity but to the creation of new capacity on demand. For example, the ride sharing service BlaBlaCar, which does fall into the sharing economy, can yield energy savings and lower CO₂ emissions because empty seats are being used to give lifts to passengers who would otherwise perhaps have made the journey by public transport or plane. UberPop, on the other hand, does not necessarily generate savings in terms of energy consumption and CO₂ emissions if it were to lead to a great many extra taxi journeys. In that case, fewer cars and parking spaces might be needed, but it could be at the expense of fewer people walking, cycling or using public transport.

²³ See RTL Nieuws, 8 October 2014, <http://www.rtlnieuws.nl/economie/home/marktplaats-deelt-informatie-met-fiscus>.

²⁴ Belgium's parliament recently decided that income from services that are offered via a platform will be taxed at a special low rate of 10% up to a maximum of 5,000 euros a year (De Croo, 2016). The platforms will collect the tax in order to prevent avoidance. Belgium is a pioneer in Europe with this regulation. A possible criticism of the special low tax rate is that a higher tax rate applies for the same service that is offered not via a platform but in the traditional offline manner (Bauwens, 2016).

²⁵ Recent legal proceedings in the United States on the issue of whether suppliers on job platforms such as Uber are employees have been settled. There has been a recent ruling in the United Kingdom, in which the court found that such freelancers should be regarded as employees because the platform functions too much as an employer (Osborne, 2016).

With the sharing economy in general (thus including the three forms of quasi-sharing economies, see figure 2.1), we can speak of sustainable consumption in the sense that it offers four alternatives to the purchase of new goods (Frenken et al., 2015). As mentioned in the previous chapter, a consumer who needs an item such as a drill has four platforms to choose from: buying a drill from a private individual (on Marktplaats, for example); renting a drill from a company (Bo-rent, for example); hiring someone to drill the hole in the wall (via Werkspot); or asking someone else to lend or rent them a drill (on Peerby, for example). In each case the consumer avoids buying a new drill, but only the final instance is, strictly speaking, an example of the sharing economy, since only then do consumers grant each other temporary access to an under-utilised asset. The same applies with a car. You can buy a second-hand car on a website like Marktplaats, you can rent one from a car hire company (Avis, Greenwheels, Car2Go, etc.), you can hire a person to drive you (UberPop) or you can rent a car from a private individual (SnappCar).

However, the environmental impact of the sharing economy is far more complex than just the avoidance of the purchase of new products. The first question is whether the environmental benefits are actually substantial. This was recently investigated for car sharing by the Netherlands Environmental Assessment Agency (PBL, 2015; Nijland and Van Meerkerk, 2017), whose study covered car sharing in the strict sense (C2C) and car sharing via a company (B2C). It reported that car sharing yields energy and environmental savings in the order of 30% fewer cars and 10% fewer CO₂ emissions. Roughly half of these reductions are attributable to less use of cars and the other half to less ownership of cars. With other products, the reduction of CO₂ emissions would be far smaller in absolute terms (ShareNL, 2015b).

At present, to identify the environmental effects of other platforms we have to rely on reports by the platforms themselves. The ride sharing platform BlaBlaCar, for example, has reported that in two years hitchhikers around the world together saved a million tonnes of CO₂, which roughly corresponds with the annual emissions from 250,000 cars (BlaBlaCar, 2015). These savings largely attributable to the higher occupancy rate of the cars that take hitchhikers compared with other cars (2.8 versus 1.7 passengers per car). Airbnb also published an environmental impact report in which it stated that Airbnb guests use between 63% and 78% less energy and between 12% and 48% less water and cause between 61% and 89% lower greenhouse-gas emissions than the average hotel guest (Airbnb 2014). These figures suggest that ride sharing and accommodation sharing have substantial positive effects for the environment. However, neither report makes it clear what methods and assumptions were used to calculate the environmental benefits.

A second question concerns the scale of the so-called “rebound effects” of sharing (Frenken and Schor, 2017). The most important effect of sharing is that we can rent many assets from one another at a lower price than from a company. Consequently, some consumers no longer buy certain products because owning them is more expensive than renting them temporarily. Disposable income will therefore rise with the sharing economy. The money saved will be spent on other things that also use energy. This is an example of the rebound effect and would include people for whom it is cheaper to dispose of their car and participate in C2C car sharing instead. They can save hundreds of euros a year and use the money to buy an extra plane ticket. On balance, sharing clothing might also have negative environmental effects because the clothes might then be washed and dry cleaned more frequently, and will also have to be packed and transported (ShareNL, 2015b). Furthermore, some people who rent out goods will have bought the items in the knowledge that they could recoup some

of the costs by renting them out. A person in a large city, for example, can recoup some of the costs of a car or an apartment by temporarily renting it out. That is also money that can be spent again.

The sharing economy could still make a major contribution to a better environment if sharing platforms come to function as a springboard to the product-service economy. Sharing platforms that have started by facilitating interactions between consumers could also later allow companies to sell their goods to consumers, thus creating a hybrid platform that facilitates both the sharing economy and the product-service economy (as MyWheels does at present). Companies will then have a far greater incentive to redesign their products as sustainable items that can be shared frequently and will not easily break. And since the company retains ownership of the item, it will have the incentive to recycle as many of the parts as possible when the product is no longer technically adequate or can be replaced by an improved version.

3.4 Conclusion

Although there has been little empirical research into the economic, social and environmental effects of the sharing economy, a number of likely developments can be predicted on the basis of theory and the small number of studies that have been carried out. First, there will be substantial economic benefits, as evidenced by the rapidly growing practices of lending, swapping and renting via platforms. In most cases, the benefits arise from the fact that lending or renting from a private individual is cheaper than renting or buying from a company. However, the earnings will be skewed and will accrue mainly to those who are already well off, so economic inequality could widen further with the growth of sharing platforms. The social effects are uncertain because, as well as the many new contacts that are automatically created when strangers meet on platforms, there will be negative side-effects such as discrimination and the economisation of private life. Finally, positive environmental effects are to be expected from car sharing and carpooling in particular, but the ultimate environmental impact might be smaller than anticipated because the economic benefits of sharing platforms mean that people will save money and a large portion of the money saved will be spent again on other forms of consumption which always cause some degree of pollution (the “rebound effect”).

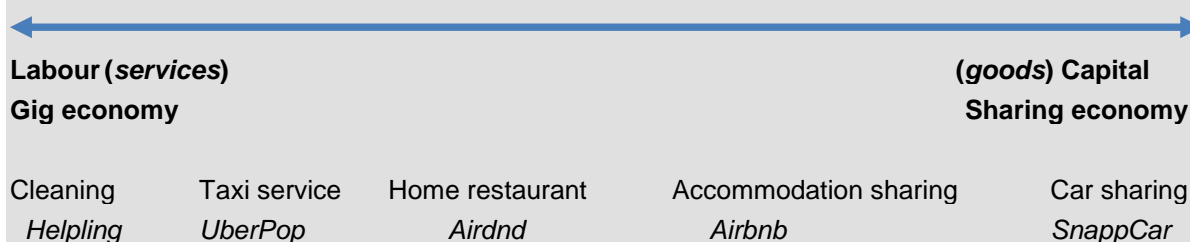
Part II

The sharing and gig economy in practice

In part I we defined the sharing and gig economy and discussed what the academic literature has to say about its implications for people, the environment and the economy. In part II we review how the sharing and gig economy has grown in the Netherlands in practice. We consider five specific digital platforms: the largest platform for cleaning services in the Netherlands (Helping), the UberPop service of Uber (the largest taxi platform in the world), the largest home restaurant platform in the Netherlands (Airdnd), the world's largest accommodation sharing platform (Airbnb), and the largest car sharing platform in the Netherlands (SnappCar). These five case studies were chosen mainly because of the differences in the extent to which they represent the provision of services or the sharing of assets (see box II.1).

Box II.1: Five case studies from the perspective of labour and capital

The five cases – Helping, UberPop, Airdnd, Airbnb and SnappCar – can be positioned on the labour-capital axis (see below). These five platforms were selected because they differ in the extent to which they facilitate the provision of services or the sharing of assets. We can distinguish the degree of labour (provision of services) and capital (sharing of assets) by examining the extent to which a supplier uses his or her time and his or her own assets.



In the case of cleaning services, clients pay mainly for labour. Helping clearly falls into the category of the gig economy. With taxi services, we can also speak of providing a physical service because the supplier has to be present for the entire journey. However, there is also an element of making better use of a consumer good (the driver's own car), although it might also have been purchased solely to provide a taxi service. This is not *necessarily* the case, as is clear from the experience with Uber in America, where many drivers lease a car rather than buying one. Home restaurants are an interesting borderline case because the service providers make better use of their own homes by admitting guests but also use their own time to cook. Since the key aspect of home restaurants is the meal that is consumed, it should be seen more as providing a service than sharing assets. With accommodation sharing, consumers pay mainly for the use of a physical capital good (the house), but the host will

also provide some services such as tidying and cleaning, which are themselves sometimes outsourced, and sometimes information services (such as tips for tourists). There is scarcely any service provision in the case of car sharing because the owner allows the person renting the car to use it but does not invest his or her own time or knowledge. The owner will have to place an advertisement and keep it up to date, communicate with potential renters, hand over the keys and perhaps explain some aspects of the operation of the car, but the car remains the owner's personal consumer good.

The cases selected also encompass platforms in a range of different sectors. Helping, UberPop, Airdnd, Airbnb and SnappCar are active in the cleaning sector, the taxi sector, the hotel, restaurant and café sector and the domain of automobility, respectively. These are economically and institutionally very different sectors of the Dutch economy and the emergence of platforms therefore raises a variety of new issues in relation to public interests in each of the sectors. The chosen sectors also give a more comprehensive impression of the broad spectrum of public interests that are affected by the rise of the sharing and gig economy and of the new challenges facing policymakers.

The five case studies give the reader an insight into the specific question of how the sharing and gig economy has taken shape in response to particular practices. We start our analysis of each of the five case studies with a description of the practice in the 'old' or offline economy, the public interests that were at stake and how they were safeguarded. We then look at how the relevant online platforms are leading to new practices and how those practices are affecting public interests in a negative or a positive sense. Finally, we review the interaction between public authorities and platforms in terms of endeavouring to safeguard those public interests.

Chapter 4 is devoted to Helping, the largest digital platform for cleaning services in the Netherlands, and its significance for the position of cleaners in the labour market. Chapter 5 describes how the UberPop service (provided by the largest taxi platform in the world) was banned in the Netherlands. In the next chapter we discuss Airdnd, the largest home restaurant platform in the Netherlands, and examine the dialogue taking place between the various stakeholders on how to address the relevant public interests, such as public order and competition. The fourth case study concerns Airbnb (the largest accommodation sharing platform in the world) and describes the evolution of the Municipality of Amsterdam's policy towards it. Finally, in chapter 8 we look at car sharing, with specific reference to SnappCar, the largest peer-to-peer car sharing platform in the Netherlands, and how the practice can be stimulated and what the challenges are.

Part II concludes with chapter 9 in which we discuss the second and third questions formulated in section 1.4. We begin by setting out the public interests that are affected by the practices of the sharing and gig economy in the Netherlands as identified in the five case studies and then discuss how various stakeholders endeavour to safeguard the various interests and how the interaction between the government and the different platforms is or is not creating those safeguards.

4. Cleaning via a platform: employee or entrepreneur?

This chapter considers the case of Helpling, a digital platform for domestic cleaning services. The key public interest addressed in this case study is the occupational status and legal position of the cleaner. The chapter starts with an introduction to Helpling. The existing cleaning market and how public interests are safeguarded in it are described in section 4.2, where we show that the legislative and regulatory framework for the sector has been under discussion for some time. Section 4.3 reviews the legal position of the domestic cleaner and the status of Helpling. Should Helpling be seen as an intermediary or an employer? And how can the legal position of domestic cleaners be safeguarded? The chapter concludes with an overview of the issues relating to public interests in the domestic cleaning market and the possibilities for strengthening the safeguards.

4.1 Helpling

Helpling is a newcomer in the cleaning industry. The digital platform was founded in Germany in 2014 and operates in the domestic cleaning market. Helpling's founder secured an investment from Rocket Internet²⁶ and shortly afterwards expanded the business into other countries, including the Netherlands.

Helpling mediates between private cleaners and private households via its website, with the cleaner being hired by the household. There is an app with which a person can hire and communicate with a cleaner and pay for the cleaning service with just a few clicks. Helpling charges a fee of 20% of the hourly rate for its service. At the beginning of 2016 there were approximately 700 cleaners in the Netherlands registered on Helpling's platform and it was operating in between 40 and 50 cities. The number of bookings is between 250 and 300 a day. According to Helpling, 87% of the households that use the platform had not previously hired a domestic cleaner (interview with Helpling). Helpling's ambition is to become the principal platform for all household chores. In addition to cleaning, it wants to expand into every other household task, such as gardening, babysitting and assembling items of furniture, all tasks for which no certificate or diploma is required (interview with Helpling, 2016).

Applicants for work as cleaners via Helpling are screened before being admitted to the platform. The admission procedure consists of an intake interview to discuss the individual's motivation, CV, references and work experience and a test of the applicant's understanding of what cleaning involves. The prospective cleaner also has to submit a Certificate of Conduct (interview with Helpling).

Helpling uses a ratings system. Households rate the quality of service (was the cleaning good?), reliability (was the cleaner on time?) and sociability (was the cleaner friendly?) on a scale of 1 to 5. The reviews can help the cleaners to build up a reputation, which they can then use to show regular cleaning companies that they would be a good employee. This is something that Helpling

²⁶ This German investor is also behind the clothing website Zalando and the meal delivery service Hello Fresh.

encourages. The household pays €14.90 euros an hour for a single cleaning job. The rate for a weekly or fortnightly service is €13.90 (Helpling, 2016). Helpling receives 20% of the fee. By comparison, a cleaner working for a cleaning company costs around €25-28 an hour. The amount earned by the cleaner with Helpling is €11 or €12 an hour for a regular cleaning job.²⁷ This is higher than the minimum wage.²⁸ The hourly remuneration is calculated on the basis of the average absenteeism rate, holiday allowance and other expenses²⁹ (interview with Helpling, 2016).

Helpling claims that the platform can help people to find regular work in a market where the majority of the work is undeclared and in which there is little government oversight. For the moment, the Helpling cleaner is responsible for the payment of tax. Helpling says that in addition to creating a cleaning market in which the income from the work is declared, it could also create 144,000 jobs (based on 20 hours a week) (Sprout, 2016). By creating a balance between the number of cleaners and the number of jobs on the platform, the platform can also offer its cleaners sufficient jobs for a full working week. The scale of the platform enables Helpling to fill the schedules of cleaners relatively quickly, thus allowing them to generate a full income.³⁰ Working via Helpling can also be a stepping stone to another job.

4.2 Public interests

Helpling operates in the 'domestic' cleaning market,³¹ a market in which cleaning services are generally provided by individual cleaners for private households. The private cleaner works for a private employer: the household. Contact between the parties is often established through word-of-mouth, recommendations by an acquaintance or by means of a message posted on the bulletin board in the local supermarket. It is widely known that cleaners in this market generally do not declare their income to the Tax Administration. The domestic market exists alongside the commercial market, where schools, offices and business premises are cleaned by individuals employed by cleaning companies. Helpling therefore does not see itself as a competitor of those companies.³²

Various public interests are affected in the domain of domestic cleaning, including employment, the legal position of workers and consumer protection. This chapter focuses mainly on the legal position of the cleaner and how it is (or is not) protected. At present there are two relevant statutory and regulatory instruments: the Regulation on Domestic Services (*Regeling Dienstverlening aan huis*) and ILO Convention No. 189. The legal position of the domestic worker (cleaner) and the effectiveness of

²⁷ €13.90 less the 20% fee.

²⁸ Employees from the age of 23 are entitled to the statutory minimum wage. In 2017 the minimum hourly wage for a full working week is €8.96. Helpling consciously pays more than the minimum wage. According to Helpling, this is partly because there is no need for the platform to sit below it and because to do so would be a risk in political and PR terms (interview with Helpling, 2016). Questions were already asked in the House of Representatives about the minimum wage shortly after Helpling was launched (Ministry of Social Affairs and Employment, 2014a). According to Helpling, there is a risk that a potential competitor would pay less than the minimum wage.

²⁹ On this basis, Helpling comes out at €10.15 as a sort of virtual minimum wage (interview with Helpling).

³⁰ According to Helpling, the guarantee of jobs is an important reason why cleaners do not bypass the platform and arrange work with the same household for themselves. The relationship with a cleaner who steals a customer is terminated and he/she can no longer use the platform. The cleaners have little incentive to do this since they would then lose access to a steady stream of new clients.

³¹ Just over 13% of Dutch households make use of a domestic service provider (Committee on Domestic Services, 2014). The most important form of domestic service is cleaning, but the term also covers child care.

³² Helpling does have a competitor in the domestic cleaning market in the Netherlands. Book a Tiger is a German company that does the same thing as Helpling, with the difference that it hires cleaners on the basis of zero-hour contracts. The starting rate for cleaners with Book a Tiger is € 16.90 per hour. The minimum period of a booking is 2½ hours (<https://www.bookatiger.com/nl-nl/faq>).

the Regulation on Domestic Services and the ILO Convention have been the subject of debate for years.

Regulation on Domestic Services

Since January 2007 the legal position of cleaners has been protected by the Regulation on Domestic Services. The regulation extends to private employers who hire a person to perform work in and around the house for up to three days a week. Agreements can be documented in a model contract between the employer and the worker. The terms of employment in the contract specify that the private employer shall provide a safe and healthy working environment, pay at least the statutory minimum wage plus 8% holiday allowance, continue to pay the cleaner during holidays (four times the number of working hours per week) and continue to pay the cleaner during periods of illness (for up to six weeks). Because domestic services generally involve lighter chores, the private employer is not obliged to pay wage tax or withhold social insurance contributions for the employee. Cleaners have to file their own tax returns.

An independent cleaner has fewer rights and enjoys less protection under the Regulation on Domestic Services than cleaners with a regular employment contract in the commercial cleaning market. Employers in the commercial market are obliged to pay wage tax, withhold employees' social insurance contributions and continue paying the employee's salary for up to two years when he or she is sick. Cleaners are not insured against illness, incapacity for work or unemployment under the regulation, but they can take out voluntary insurance with the employee insurance agency UWV.³³ Cleaners falling under the regulation are not covered by the collective labour agreement for the cleaning and window washing sector, which contains provisions relating to wages, allowances, payment for overtime, working hours, probation periods, notice periods, dismissal, holidays or pension, training and education, child care and benefits in the event of incapacity for work (for a maximum of two years).³⁴ They are also not covered by the protocol to the collective labour agreement containing requirements relating to the working conditions in the cleaning sector.

According to the Cleaning and Corporate Services Industry Association (OSB), which represents the majority of companies in the commercial cleaning market,³⁵ in practice the regulation is ineffective (interview with the OSB). One reason for this is that private cleaners and private employers are unaware of it. Cleaners are also personally responsible for filing tax returns, which they seldom do in practice. As a result, the income earned in the market is undeclared. Non-compliance with their obligations under the scheme (such as continued payment of wages in the event of sickness and during holidays) is also common among employers (Committee on Domestic Services, 2014).

³³ See the UWV website: <http://www.uwv.nl/particulieren/verzekeren/>.

³⁴ The Inspectorate of the Ministry of Social Affairs and Employment is the regulatory body that monitors compliance with the legislation in the cleaning sector (the inspectorate performs this role for all the sectors within the remit of the Ministry of Social Affairs and Employment). The inspectors exercise supervision, investigate fraud, labour exploitation and crime, and promote fair, healthy and safe working conditions. The Inspectorate established a Cleaning Industry Intervention Team in 2014.

³⁵ There are roughly 120,000 people employed by around 13,000 enterprises in this market; 96% of these companies have 20 or fewer employees (Rabobank, 2015). Cleaning services in schools, offices and business premises are provided mainly by cleaning companies. The five largest cleaning companies in the Netherlands are Hago (turnover in 2014: 340.7 million euros), CSU (257 million euros), Asito (222 million euros), Gom Schoonhouden (209.3 million euros) and EW Facility Services (75.3 million euros) (Servicemanagement, 2015). In addition to these large companies, the market also includes a great many smaller enterprises.

ILO Convention No. 189

In addition to the national statutory framework, Convention No. 189 concerning decent work for domestic workers of the United Nations' International Labour Organisation is also relevant. The Netherlands signed Convention No. 189 in 2011, but has not yet ratified it. The convention states that the rights of domestic workers in terms of social security must not be less favourable than those of other employees. It also provides that domestic workers are entitled to a minimum wage, regulation of their working hours, access to social security and protection against discrimination and abuse.

In response to the signing of ILO Convention No. 189, in 2014 the government, employers' organisations and trade unions established the Committee on Domestic Services (chaired by E. Kalsbeek) with the mandate to provide advice about the position of domestic workers and the potential consequences of ratifying the ILO Convention in relation to the existing legal framework in the Netherlands, the Regulation on Domestic Services. The committee's most important conclusion was that the Regulation and the ILO Convention were mutually inconsistent because the legal position of workers was different under each of them.

The committee recommended suspending the operation of the regulation for publicly financed cleaning services. It found that abolishing the regulation would have little relevance in the private (domestic) market because the regulation was ineffective in that market. According to the committee, subsidies could be used to improve the legal position of employees in that sector and it estimated the necessary budget at a billion euros (Committee on Domestic Services, 2014).

Actors and their positions

The government decided to maintain the Regulation on Domestic Services for the time being, because abolishing it without also introducing a subsidy scheme would not actually improve the position of workers. The government took the view that subsidising a private market is undesirable. In the first place, the costs of a subsidy scheme (a tax break for private individuals or service vouchers as in Belgium) for the private market would be high. The government felt that such a scheme would also be susceptible to fraud in light of the impossibility of verifying how many hours had been worked and what work had been performed. Instead the government is preparing supplementary measures, such as lowering the wage costs at the lower end of the labour market, reconsidering the three-day criterion, improving compliance and informing service providers of their rights (Ministry of Social Affairs and Employment, 2014b).

In response to the advice of the Committee on Domestic Services a number of parties, including the OSB and the FNV trade union federation, called for repeal of the regulation and for ratification of Convention No. 189. The FNV was disappointed that the government wished to retain the regulation and had failed to propose any structural improvement in the disadvantaged legal position of domestic workers (FNV, 2014). The OSB and FNV jointly lobbied for ratification of ILO Convention No. 189 and repeal of the regulation (interview with OSB, 2016). The FNV's objective is to improve the legal position of cleaners, while the OSB would like to gain access to the domestic cleaning market. The regulation stands in the way of that because it allows private individuals to hire domestic workers cheaply (interview with OSB, 2016). The commercial cleaning companies are in favour of a system of

subsidies.³⁶ Since 2014, Belgium has employed a system of service cheques with which private households can buy domestic services at a favourable rate.³⁷ In practice, however, the system seems susceptible to fraud.³⁸

4.3 Legal position of cleaners and the status of the platform

Helping's responsibilities with respect to the legal position of cleaners depend on whether Helping is seen as an intermediary or an employer. As an intermediary, Helping has no employment relationship with the cleaners and has few obligations towards them. The cleaners' employment relationship is with the private household, which means the cleaning work falls within the scope of the regulation.

However, if Helping is considered to be an employer, the platform has to comply with all of the obligations imposed on employers in the commercial cleaning market. The cleaners are its employees. And like the regular cleaning companies, Helping has to pay wage tax, withhold employee insurance contributions and continue paying their employees' salaries for up to two years when they are ill. Helping would also have to adopt the commercial market's higher hourly wage of around €25-28. Since those rates are far higher than the rates in the domestic market, Helping would only be able to clean offices and its impact on the domestic cleaning market would disappear. According to the platform, domestic cleaning work might revert to being undeclared work because households would be unwilling to pay the higher rate. According to Helping, becoming an employer is only possible if it is subsidised because its wage costs would then be far higher than on the black market.³⁹

Helping does not regard itself as an employer and has no wish to be one. Helping sees the cleaners that use its platform as independent contractors who are, like self-employed persons, personally responsible for declaring their income for tax purposes. Helping does help its cleaners with their tax returns, for example by providing them with a statement of their earnings and explaining how the tax returns should be completed. The cleaners are insured via Helping for damage they cause in households. According to Helping, the problem for individuals or self-employed persons is that they cannot buy collective fringe benefits (interview with Helping). Helping is in a position to procure benefits for groups of workers, but may not do so because it is not an employer.

Helping consciously tries to avoid being classified as an employer by undertaking the fewest possible activities as a platform. Helping says that is what distinguishes it from companies like Uber, which controls and issues instructions to individuals and can even deny them access to the platform. Helping has also occasionally terminated a relationship, for example because a person has bypassed the platform in making bookings, but the platform says this does not occur often (interview with Helping). Helping is consciously careful in this regard and stresses that it neither exercises control over nor issues instructions to the cleaners. No one has ever brought a legal action against Helping.

³⁶ The OSB has made attempts to enter the domestic cleaning market in the past, for example with the project 'De witte werkster', which was partly subsidised by the Ministry of Social Affairs and Employment.

³⁷ A service cheque is an instrument subsidised by the government which can be used to hire domestic help at a favourable rate (source: <http://www.dienstencheques-vlaanderen.be/>).

³⁸ For example, a cheque could be given to an acquaintance for cleaning work that he or she had never in fact done.

³⁹ The *Commissie Dienstverlening aan Huis* (2014, p. 51) investigated this.

All Helping can do is terminate the relationship with a cleaner if it doesn't work out. Helping insists that this does not make it an employer. The question of whether platforms are employers is also an issue in the United States (see box 4.1).

Box 4.1: The platform as employer

There has been a lot of debate in the United States about the nature of work performed via platforms and the subject has even led to litigation. Two former cleaners with Handy, a platform for cleaning services, brought a legal action against the company. According to the complainants, Handy was breaking the law by wrongly classifying cleaners as independent contractors (self-employed) when in fact they were employees. The complainants argued that Handy issued instructions on how the work should be done (*Handy was exercising 'extensive control' over how cleaners performed their jobs*) and was therefore treating them as employees. For example, the company asked the cleaners to follow a training course and the cleaners were issued with a checklist of instructions about cleaning agents, how to dress and how to deal with clients (Griswold, 2015). Similar legal actions have been brought against Uber and Lyft in the last few years (Griswold, 2015).

Questions have also been raised in the House of Representatives in the Netherlands about Helping's status. In 2014, the Minister of Social Affairs and Employment replied that the issue was whether there was a labour contract between two individuals or a labour contract between Helping and the cleaner, for example because Helping was performing the role of an employment agency. It is for the courts and the Tax Administration to define the legal nature of a labour relationship in each individual case (Ministry of Social Affairs and Employment 2014a).

The European Commission (2016) defines an 'employee' on the basis of three criteria: subordination (the actions of the service provider must be directed by the sharing platform and the platform must determine the activities, remuneration and working conditions), the nature of the work (the service provider must perform an activity with economic value) and remuneration (a service provider who does not receive remuneration or only receives compensation for expenses is a volunteer, not an employee). According to this definition, the key question is whether the platform in fact controls the cleaners.

The professional cleaning sector (the OSB) argues that although people find new work via Helping, it is work with a weaker legal position (a different rate, few certainties, little protection, no training and possibly worse working conditions). In that sense Helping helps to undermine the legal position of cleaners, according to the OSB, which stresses that self-employed persons are often unaware that they have to arrange their own social security benefits (in the event of incapacity for work, for instance).

According to the OSB, the playing field is not level because regular employers have to comply with a great many rules, while at the same time many new initiatives are emerging (such as Helping) by which the rules can be avoided. In the OSB's view, businesses are bound hand and foot by all the rules and that gives Helping a competitive advantage and constitutes unfair competition.

Working via a platform

Helping follows the existing institutional framework and would also like the laws and regulations to be updated to encompass the labour relationships arising from digital platforms. The same discussion is taking place in the United States (see box 4.2). Helping says it could provide work for more job seekers via the platform but that is not possible at the moment because working via a platform is not a recognised form of work. In Helping's view, working via a platform is a new form of work that differs from the two forms currently permitted by law: the labour contract and the freelance contract. Helping would therefore like to see a third form of work recognised in law which accepts and facilitates working via a platform. In association with the Employee Insurance Agency (UWV),⁴⁰ it would then be able to allow job seekers and benefit claimants to register with the platform.⁴¹

Box 4.2: Working via a platform as a non-self-employed person

There is a similar discussion in the US about a new form of work for people who work via a platform. As in the Netherlands, working persons in the US largely fall into two categories: people with a labour contract, who are protected by labour legislation (a minimum wage, for example) and self-employed persons, who enjoy less protection. According to a number of American legal scholars, a third category is needed to cover people who work via platforms such as Uber or Handy (cleaning services, similar to Helping) (Weber, 2015). These workers, who depend on the platform for work, are free to determine their own working hours but have no control over their payment and salary, for example. These workers would therefore need better protection, something that could be helped with a third category of worker, the 'dependent contractor'.

The Ministry of Social Affairs and Employment says that it will have an impact if more people start working outside the traditional employment relationship via a platform (interview with Ministry of Social Affairs and Employment, 2016). For example, if there is no more salary administration and more and more people are working as self-employed persons, it will be very difficult to verify the hours that are worked or the taxes that have to be paid. The regulatory and supervisory system are not geared to that situation, but are based on the employment relationships that currently apply for 80% of all working persons. If more people start working outside a regular employment relationship, the laws and regulations and their supervision will have to adapt to that trend (interview with Ministry of Social Affairs and Employment, 2016).

With its platform function Helping can also keep up-to-date records of the work performed by cleaners and their income. That information could help the government to levy and verify tax payments, for example. The government would therefore have a clearer picture of this black market

⁴⁰ The UWV is a Dutch government agency (falling under the Ministry of Social Affairs and Employment). It implements employee insurance schemes in the Netherlands, such as unemployment benefit, disability benefits and sickness benefits. The UWV also provides services and data relating to the labour market.

⁴¹ The Ministry of Social Affairs and Employment also sees opportunities for people on benefits who are looking for work. But it is not an ideal solution, according to the ministry. With work based on the Regulation on Domestic Services the hours worked will be set off against the benefit (such as unemployment benefit). In that case, an hour's benefit payment will be deducted for every hour that is worked. The result is that the income from cleaning work is lower than the income from the benefit, so the cleaner will lose income. If the cleaner is employed by an employer (and the regulation does not apply), the income will be set off instead of the hours worked because this is a case of income from an insured employment relationship. That is beneficial for the cleaner (interview with Ministry of Social Affairs and Employment, 2016).

and so make it legal. Helpling is willing to engage in a dialogue with the government about sharing data and levying tax.⁴²

4.4 Conclusion

The key public interest in this case study is the legal position of the cleaner. The domestic cleaning market has been the subject of discussion for years. The regulatory framework, the Regulation on Domestic Services, which is intended to protect the cleaner's legal status and allow households to hire a private cleaner, is ineffective in practice. Many people are not even aware of the regulation's existence. In practice, income from domestic cleaning work is usually not declared. Accordingly, cleaners often have minimal protection in the event of sickness or incapacity for work. It appears that this market could be professionalised (by cleaning companies) with the help of subsidies, as has happened in Belgium, but the Dutch government is opposed to this because of the high costs and the risk of fraud.

Making use of the Regulation on Domestic Services, Helpling has started offering cleaning services in the Netherlands. Helpling claims that it can get the regulation to function properly, serve the domestic market and help to provide cleaners with a full working week. But that is not the full story. As already mentioned, the regulation is not effective. Trade unions and the OSB both call for improvement in the legal status of cleaners on the basis of ILO Convention No. 189. There is also the question of whether Helpling should be regarded as an employer or as an intermediary.

Helpling positions itself as an intermediary between private individuals, making use of the regulation that provides that the household that hires the cleaner is the employer. In order to avoid being regarded as an employer, Helpling refrains from carrying out any controls and consciously issues no instructions to cleaners (as Uber and Handy have done in the US, resulting in a number of legal actions). Helpling uses a rating system and can deny cleaners access to the platform for poor performance or other reasons. There is therefore still no legal certainty about whether Helpling is in fact an employer. If it is, the situation changes entirely. Helpling would then be part of the commercial cleaning market. And as an employer Helpling would have far more legal obligations towards cleaners than it does at present, such as the requirement to pay wage tax, to withhold employee insurance contributions and to continue paying workers' salaries for up to two years in the event of their illness. The far higher commercial rate would then apply for cleaning work and households would probably once again revert to undeclared work and Helpling would then no longer have access to the private domestic cleaning market.

Helpling makes use of the existing dysfunctional legislation but argues that its platform function could enable the existing legislation to function better. The platform therefore explicitly follows the existing legislation and uses it as the point of departure for its advocacy of modernisation of the legislation. Helpling suggests that a third category of form of work should be recognised in law. In addition to a labour contract and a freelance contract, Helpling advocates a contract for people who work via a platform.

⁴² As stated during the NRC Live seminar on the Sharing Economy on 27 October 2016.

Helping not only promises to help job seekers find work, but would also consider providing the government with data about the activities and income of cleaners. The government would then be able to levy tax and would have an impression of activities that have formerly been undeclared. But Helping would have to provide that information. The company is willing to discuss with the government how this could be done. However, giving the platform a role in implementing policy would also enhance Helping's own role and legitimacy. It is in the interest of platforms to assume a role in the implementation of policies because they earn from this cleaning market. Another effect of this is that it erects a barrier to entry to the market for newcomers (new platforms) which do not have any role in implementing the policy.

5. ‘A bit naughty’ – the battle over UberPop⁴³

“If Uber calls itself an innovative company, I am curious how, within the existing legislation, it can bring about innovation. But it may not be innovation with a little naughtiness, because that is acting illegally,”⁴⁴ State Secretary Mansveld said at the presentation of a letter to parliament containing amendments to the Taxi Act. Whereupon Duco Douwstra, the former chairman of Stichting Taxibelangen, responded: “A bit naughty? Is this woman just leaving an SM club or something?”⁴⁵

These quotes illustrate two key aspects of the debate surrounding UberPop. First, the conflict between the government’s desire to promote innovation but only within the limits of existing laws and regulations, and second the fierce tone of the debate, which was not confined to robust remarks, but sometimes descended into violent incidents between regular taxi drivers and UberPop drivers. Few people will have failed to notice the emergence of Uber, and particularly UberPop. Uber contributed greatly to a shake-up of policies and legislation. The most important developments and discussions relating to public interests and legislation are discussed in four stages in this case study, starting with an explanation of precisely what Uber is. That is followed by a review of the existing legislation and activities in conflict with it. The contours of the debate about public interests in the context of UberPop will then be outlined, together with some reflections on possible future developments. The chapter concludes with a summary of the main public interests at stake in this case study and options for protecting them.

5.1 Uber and UberPop

The idea for Uber was reportedly born when the company’s founders, Travis Kalanick and Garrett Camp, had difficulty finding a taxi in Paris one night. “Why can’t you just press a button and order one?” they wondered. And then there was Uber – an app that directly connects drivers and customers who need a ride. The price of a journey is higher at really busy periods (*surge pricing*), but Uber generally seems to be cheaper than regular taxis. Drivers pay a commission of between 20% and 30% per journey for the use of the app.

With the help of investments from Silicon Valley, the app was officially launched in San Francisco in 2011. The service quickly spread throughout the US and later to the rest of the world. Uber was launched in the Netherlands in 2012. It is important to note here that Uber does not own any cars and that it offers different types of services, ranging from shared passenger transport to parcel delivery. Uber offers the following three services in the Netherlands:

⁴³ Dr. Peter Pelzer (Urban Future Studio, University of Utrecht). This case study is based on the working paper entitled “Just do it.” Institutional Entrepreneurship in the Sharing Economy’, which contains a more detailed explanation of the theory and methodology.

⁴⁴ Bouma (2015c).

⁴⁵ Kruyswijk (2015).

- *UberBlack* or *UberLux*: a luxury taxi service that is more expensive than a regular taxi; available in the Netherlands since 2012;⁴⁶
- *UberPop*: journeys in a private car by amateur chauffeurs without taxi license, cheaper than a regular taxi; available in the Netherlands between 2014 and 2015;
- *UberX*: a taxi service that is cheaper than a regular taxi driven by chauffeurs with a taxi permit; available in the Netherlands since 2015.

This case study concentrates mainly on UberPop because that service represented the biggest challenge to the existing regulations. Figure 5.1 shows the most important events and level of media coverage (in *Het Parool*) of Uber and UberPop in the period 2010-2015.

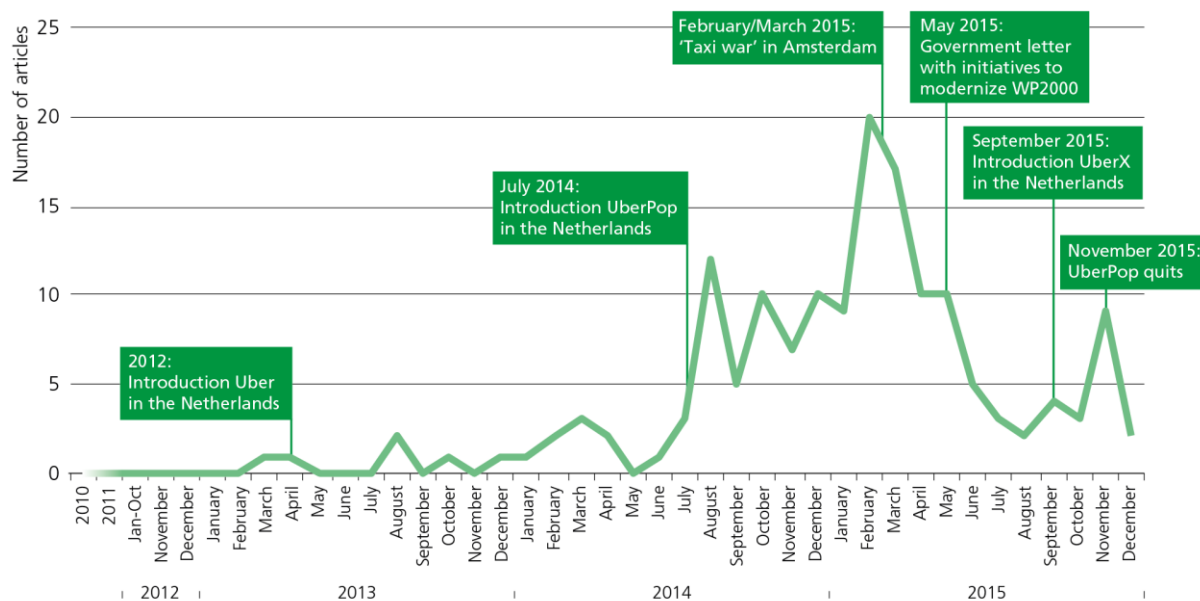


Figure 5.1. Number of articles in *Het Parool* with 'Uber' or 'UberPop' in the text and the most important events in the period 2010-2015 (via LexisNexis).

Uber first entered the Dutch market in 2012 with the luxury, and largely legal, taxi services UberBlack and UberLux. The response to these initiatives was almost universally positive, but in hindsight this was the calm before the storm. UberPop, the service that made use of amateur chauffeurs without a taxi license, was launched in Amsterdam in July 2014. The commercial taxi organisation, Taxicentrale Amsterdam (TCA), and the national taxi association KNV Taxi almost immediately protested at what they described as an illegal competitor. The situation became grim in February 2015, with a number of reports appearing in the media about UberPop drivers being chased, and even threatened, by regular taxi drivers. The launch of UberX, a follow-up version of UberPop driven only by chauffeurs with a taxi license, followed in September 2015. A few months later UberPop ceased its activities in the Netherlands and in most other European countries. Uber's director in the

⁴⁶ Uber stopped with UberLux in 2016, around the same time as it introduced UberVan.

Netherlands, Niek van Leeuwen said at the time: “UberPop is not a goal in itself. The goal is to create a new legal framework for ride-sharing services. In contrast to the US, that is not a realistic prospect in the Netherlands at the moment. But modernisation of the Taxi Act is and that is what we intend to focus on.” (Van Noort, 2015). What is the Taxi Act that Van Leeuwen was referring to and what was it based on?

5.2 Legislation: (amendments to) the Passenger Transport Act 2000

The Passenger Transport Act 2000 and its amendments

UberPop was (and is) illegal under the Taxi Act, which is part of the Passenger Transport Act 2000 (*Wet Personenvervoer 2000*), which entered into force on 1 January 2001. The explicit aim of the law was to liberalise the strictly regulated taxi market, thus increasing competition and so generating lower prices and better service for consumers. Taxi drivers were no longer required to buy an expensive licence to operate a taxi, but only had to meet a number of basic conditions. One of those conditions was that they had to be in possession of a blue licence plate, which has to be issued officially by the Dutch Road Transport Agency (RDW) on the basis of approval of the car to ensure that only safe vehicles could enter the market.

The liberalisation of the taxi business envisaged by the Passenger Transport Act 2000 led almost immediately to a ‘taxi war’, particularly in Amsterdam, when drivers who had previously bought an expensive operating licence tried to exclude new market entrants, often quite forcefully. The liberalisation of the taxi market was generally regarded as unsuccessful: fares did not fall and there were Wild West scenes at taxi ranks as drivers fought to secure customers. Consequently, a number of additional rules were inserted in the Passenger Transport Act 2000. The most notable changes came in 2011⁴⁷ with the establishment of the Registered Taxi Organisation (TTO), whereby municipalities were given the power to decide which taxis would be allowed to stand at taxi ranks (and prescribe associated quality standards), and the introduction of the requirement that all taxis had to be fitted with an on-board computer, a device to monitor journeys as well as the driver’s working hours and rest periods.

The taxi’s on-board computer was intended to safeguard three public interests (Central Government, 2016):

1. *A level playing field*, because it would be less easy to falsify information about journeys and the driver’s working hours and rest periods;
2. The *safety* of both the driver and the consumer, because it would be less easy for drivers to spend long periods behind the wheel;
3. *Consumer interests*, because clients would be able to see precisely what route the taxi was taking from the GPS coordinates.

⁴⁷ This is when the rules were changed; the actual implementation, especially in the case of the on-board computer, was much later.

The intention was that the system would also be far more efficient; taxi companies and regulatory bodies – such as the Tax Administration and the Inspectorate for the Living Environment and Transport (ILT) – would have to devote far less time to monitoring and enforcement. In a report written in 2008, a task force investigating the taxi market was optimistic about the impact of the on-board computer in taxis: ‘The introduction of the on-board computer reduces the risk of administrative errors and makes monitoring of compliance and enforcement easier’ (Poort & Weda, 2008. p.33). It was not quite like that in practice: the introduction of the on-board computer was (and still is) accompanied by many technical problems and proved expensive. Most taxis were fitted with an on-board computer by 2016, but the ILT only started issuing fines for not having one from 1 July 2016 (Pals, 2015a). In the meantime, the government has already spent around 35 million euros on subsidies and towards the costs of developing the on-board computer.

UberPop and the Passenger Transport Act 2000

In July 2014, UberPop entered the Dutch taxi market in Amsterdam. The Passenger Transport Act 2000 was applicable at the time, but UberPop did not fall under the municipal policy because it did not use taxi ranks (the so-called step-in market, which was only open to drivers who worked for a registered taxi organisation), but operated via an app. The Inspectorate for the Living Environment and Transport and the municipality of Amsterdam both said early on that UberPop drivers were operating illegally under the terms of the Passenger Transport Act 2000 because, among other things, they had no taxi license, their cars were not approved and had no taxi meter (Pals, 2014). The Inspectorate’s enforcement of the rules against UberPop started slowly, television station RTL reported after making a request for information under the Government Information (Public Access) Act (RTL, 2015). That again led to protests by taxi drivers who felt that their concerns about illegal competition were not being taken seriously. The Inspectorate finally started carrying out inspections and actively enforcing the rules against UberPop in 2015, which resulted in a total of €450,000 in fines and penalties before Uber stopped providing the UberPop service.⁴⁸

Meanwhile, Uber was campaigning for amendment of the Passenger Transport Act 2000 in both the media and the courts. Uber’s director in the Netherlands, Niek van Leeuwen, commented in various media that the Taxi Act was unclear and that UberPop did not fall under that law because it was not a taxi company, but a technology company that married supply and demand. Uber also instituted a number of legal actions, all of which it ultimately lost. Uber’s argument that it was not a taxi company but a technology company that serves as an intermediary was rejected. As the Industrial Appeals Tribunal said in a ruling on 8 December 2014:

“...contrary to what it has argued, Uber’s commercial activities in the context of UberPop do not exclusively involve providing technology and facilitating the matching of supply and demand at a particular location, but also the actual transport of persons for payment to the driver and to Uber.”⁴⁹

Everyone interviewed for this case study (Niek van Leeuwen was not one of them) said that the Passenger Transport Act 2000 is not unclear at all; UberPop is simply illegal. Van Leeuwen’s remark that the act is outdated in various respects resounded more strongly. For example, the Passenger

⁴⁸<http://www.parlementairemonitor.nl/9353000/1/j9vvij5epmj1ey0/vk2dp2d1zbxg>

⁴⁹ For the full judgement, see <http://deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:CBB:2014:450>

Transport Act 2000 requires that a printed receipt should be provided for a journey and that the taxi should have an on-board computer and the question is whether it would not be smarter to use online technology and apps. To speculate briefly, records of routes and working hours and rest periods could also be kept using an app that could be accessed by the relevant authorities such as the Tax Administration and the ILT. This could be done, for example, with a standardised plug-in that could be integrated in the Uber app, but also those of other suppliers such as Lyft or the TCA. Another option would be for the authorities (the ILT, Tax Administration) to develop their own app that functions separately from the supplier's app.

Former State Secretary Mansveld sent a letter to parliament in May 2015 concerning the evaluation of the Passenger Transport Act 2000 and containing some proposed amendments (Ministry of Infrastructure and the Environment, 2015a). In the letter Mansveld relaxed the rules for taxis: for example, a printed receipt would not always be necessary in future and taxi drivers would no longer have to comply with the requirement of professional competence. Despite the amendment, UberPop remained illegal mainly because of two requirements that taxis still had to meet and which UberPop did not meet: the car used had to be approved and have a blue licence plate and an on-board computer. In the letter Mansveld also created scope for experiments, which will be discussed below.

5.3 The debate about the legislation and public interests

Laws and regulations can be seen as an inflexible instrument for safeguarding public interests. When a new party like UberPop enters a market, both the relevant public interests and the legislation governing them can shift. Uber's stated aim in the Netherlands was to secure amendment of the Taxi Act, as the following quote in *De Volkskrant* in 2014 illustrates:

"This is the start of a lengthy legal battle," director Niek van Leeuwen announced. "The ultimate aim: to persuade politicians to amend the Taxi Act to the extent of making UberPop legal. (...) We can help in that, we already have the necessary experience with the amendment of the law in America" (Bouma, 2015c).

As had happened earlier in California, for example, where Uber drivers, operating as a Transportation Network Company (a company that connected private cars that offer rides via digital platforms), had a different status than regular taxi drivers. What were the main positions taken in this debate?⁵⁰

Level playing field

One argument that was very frequently put forward in the public debate about UberPop was that of a level playing field for suppliers of taxi services. While taxi drivers have to meet all sorts of requirements under the Passenger Transport Act 2000, such as acquiring the blue licence plate and the on-board computer, those requirements did not apply for UberPop. To bolster that argument it was often stressed that UberPop was illegal. Pieter Litjens, Amsterdam's alderman for transport, for example, said: "Unfair competition by an illegal service disrupts the level playing field" (KNV, 2015). Uber's response was not to deny the charge that the playing field was not level, but to stress that the Taxi Act was unclear (various legal actions were proceeding at the time). In the words of Van

⁵⁰ The public interest of the rights and earnings of Uber drivers has consciously not been considered here because it does not fall under the Passenger Transport Act 2000. This is a very similar problem to that of other self-employed persons in the platform economy. See also the case of Helping.

Leeuwen: “There is a lot of discussion in the Netherlands about how the act should be interpreted”.⁵¹ With hindsight, it can be concluded that the discussion Van Leeuwen was referring to was non-existent.

Consumer interests

As well as the interests of taxi drivers, there are also the consumer interests of safety, lower prices and better service. Rightly or wrongly, taxis in the Netherlands have quite a poor reputation in these respects. Due in part to the country’s cheap and extensive public transport system, the Netherlands does not have a ‘taxi culture’. Or as VVD MPs Barbara Visser and Betty de Boer put it: “Our country has everything needed to become world champion in taxi rides. But walk to a taxi rank and you will see that the dream and the reality are miles apart” (Visser & de Boer, 2015). Uber repeatedly stressed that it either offered a better service (UberBlack, UberLux) or was cheaper than regular taxis (UberPop). Minister of Economic Affairs Henk Kamp stressed this reasoning when he said in relation to Uber: “The consumer benefits from a larger supply and better quality”.⁵² Although there is no conclusive evidence, various journalists and a study – commissioned by Uber – by Accenture (Accenture 2014) concluded that consumers were relatively positive. Consumer interests have also been one of the guiding principles behind all of the amendments of the Passenger Transport Act since 2000. Although many users rated UberPop positively, they did not actively lobby for changes in the legislation. That contrasts with the situation in California, where both consumers and Uber drivers called for changes in the law (Shaheen 2015). The new legislation there was to a large extent the result of pressure from consumers who greatly appreciated the services of Uber and Lyft. In the Netherlands, prior to Mansveld’s letter in May 2015 a petition was launched calling for the updating of the Passenger Transport Act 2000 to the extent that UberPop would be able to continue,⁵³ which received more than 16,000 signatures. Although the letter did contain suggestions for modernising the Passenger Transport Act 2000, UberPop remained illegal.

Stimulating innovation

A third important public interest that was mentioned both in the interviews with stakeholders and in the media is the stimulation of innovation – after all, the enforcement of existing outdated rules can hamper innovation. Minister of Economic Affairs Henk Kamp commented positively on Uber’s innovative strength on various occasions. Stakeholders in the taxi sector stressed in the interviews that although Uber provided a high-tech solution, its so-called innovation was only possible because they were disrupting the level playing field by breaking the law. In June 2015, shortly after State Secretary Mansveld’s letter to parliament on the taxi policy, Kamp sent the policy document entitled ‘Room for modernisation through future-proof legislation’ to the House of Representatives (Ministry of Economic Affairs, 2015a), in which he explicitly discussed ways of expanding the legal scope for initiatives like Uber, which did not yet comply with the law but were important in terms of innovation. One of the suggestions made in the letter was to create room for experiments whereby parties would be allowed to derogate temporarily from existing legislation.

Mansveld also referred to room for experimentation in her letter on the taxi sector, although only in relation to rural areas. Following a motion from MPs Hoogland and Visser, the scope for experiments

⁵¹ NRC Handelsblad, 21 February 2015.

⁵² <http://www.joop.nl/nieuws/kamp-neemt-het-voor-uber-op-en-wil-nieuwe-wetgeving>

⁵³ <https://action.uber.org/UberPopnl/>

under the Passenger Transport Act was extended to urban contexts.⁵⁴ This room to experiment almost led to a service that amounted to a blend of UberPop and UberX starting in Eindhoven, but the objections of the existing taxi drivers ultimately proved too powerful (Pals, 2015b). In a later interview, the mayor of Eindhoven Van Gijssel at the time expressed regret that the experiment had not worked:

“I would like a city like Eindhoven – but also other cities – to have more room to experiment, outside the law (...) Take the taxi service Uber. It is illegal because the law prescribes that every taxi must have an on-board computer. But nowadays we all have an on-board computer in our pocket: our smartphone. A law dating from 1998, from before the age of digitisation, is therefore standing in the way of innovation”.⁵⁵

Privacy

Privacy played a minor role in the debate about UberPop in the Netherlands, in contrast to countries like the US, where it has been the subject of debate.⁵⁶ In that context, at least two developments are relevant for the future debate on the regulation of the taxi sector because they represent quite a radical break with the traditional taxi system. The first concerns the relationship between the passenger and the driver and their reviews of one another. It is no longer possible to call a taxi or to offer a ride anonymously. The change is particularly fraught for the client whose online profile is linked directly to their conduct in the taxi. Supporters of the system stress that people who behave correctly have nothing to fear, while opponents emphasise that anonymity should be a fundamental right. The second development touches on the question of who actually owns the data (the reviews, but also the records of movements). As with other apps (WhatsApp, Airbnb), the supplier of the app appears to own the data: ‘appears’ because the relevant legislation (including the provisions of the Passenger Transport Act 2000) is still in its infancy in this regard.

Mobility

Another aspect that has been largely absent from the debate about UberPop is mobility in the future. It is a topic that has recently become more important, for example in light of Uber’s experiment with self-driving cars in Pittsburgh (Uber, 2016). Niek van Leeuwen tried to initiate this discussion on several occasions, for example by referring to the pointlessness of owning a car, but his remarks failed to spark a wider public debate although this will be a crucial aspect for future legislation. Developments like Uber illustrate that the traditional distinctions between different types of transport are changing (Pelzer, 2016). Is UberPool (in which a number of people share a taxi) a form of public transport or a taxi service, for example? Sustainability will also become an increasingly important factor in policy-making and regulation relating to mobility. That raises questions such as whether growth of the taxi market should actually be encouraged. An argument in favour is that it would reduce the demand for cars, while the alternative argument is that it could lead to an increase in mobility by car (rather than by bicycle, for instance), particularly in cities. Legislation is an instrument for steering behaviour and how it is used depends in part on the desired scenarios for mobility in the future. The self-driving, shared and electric car, for example, are often seen as a panacea for various negative effects of mobility, such as local air pollution. That view is often based on an efficiency-

⁵⁴ See the video of the debate in the House of Representatives on the motion by Duco Hoogland and the reaction of former State Secretary Mansveld: <https://debatgemist.tweedekamer.nl/debatten/openbaar-vervoer-ov-chipkaart-and-taxi-0>

⁵⁵ De Volkskrant, 1 June 2016.

⁵⁶ <http://www.pcworld.com/article/3019981/security/uber-to-pay-20000-in-settlement-on-privacy-issues-with-new-york-attorney-general.html>

driven view of mobility: how to get from A to B as quickly and as cheaply as possible. However, there are other scenarios in which the focus is on restricting mobility (due to high density, for example) promoting active modes of transport such as walking and cycling (Bertolini et al., 2015) or basing policy on public transport.

As this report went to press (in the spring of 2017), the debate about UberPop seemed to be taking a new twist after a turbulent period during which UberPop shook up the market and helped to bring about substantive changes in the Passenger Transport Act 2000. It ultimately did not gain a foothold in the Dutch taxi system, but the taxi market will undoubtedly face a new wave of disruption (possibly even without drivers, given Uber's recent experiments with self-driving taxis). And as the earlier quote by Rob van Gijzel showed, conditions such as having an on-board computer could be regarded as anachronistic, or even obsolete, in the age of apps and the Internet. According to this reasoning, the system of reviews adopted by platforms is perfectly capable of safeguarding public or consumer interests. The public interest of a level playing field is a valid one, but even the taxi sector itself acknowledges the inevitability of a new playing field emerging. History suggests that it is not illogical to assume that the government has a responsibility to arrange a 'soft landing', given that it has imposed a lot of (expensive) legislation on taxi drivers. At the same time, it is important to note that at present there is no workable digital alternative to the on-board computer available on the market. Local experiments will be an interesting way of monitoring innovations and scaling them up wherever possible as we move towards modernisation of the taxi market (Raven, 2016).

5.4 Conclusion

The taxi market was liberalised in the early 2000s with the aim of offering consumers lower prices and better service. However, the liberalisation process was felt not to have been a success: the promised benefits were not achieved and further rules were repeatedly introduced in the ensuing years. The mandatory on-board computer caused technical problems and high costs. It was against this background that UberPop entered the taxi market in the Netherlands in July 2014.

The launch of UberPop affected a number of public interests. Most of the discussion centred on the absence of a level playing field for UberPop drivers and taxi drivers. The Passenger Transport Act 2000 imposed various requirements on taxi drivers, which UberPop was able to smartly avoid. In terms of consumer interests, UberPop had the potential to offer a bigger supply and better quality. The final public interest in this case study is innovation, in pursuit of which the government started looking for room to experiment. There was remarkably little discussion of privacy issues and UberPop's potential to contribute to new forms of mobility.

UberPop was heavily fined for breaching the rules in the Passenger Transport Act, causing it to stop providing its services in the Netherlands. In this case study, therefore, the government's policy was to enforce existing legislation.

Another interesting aspect of this case was UberPop's attitude towards existing legislation. UberPop breached the provisions of the Passenger Transport Act and then argued in its own defence that the Taxi Act was unclear and outdated. After it terminated the service, Uber also asserted that UberPop was only intended as an instrument for creating a new statutory framework for ride-sharing services. Uber tried to achieve this goal through litigation and a media offensive. However, the courts found that

the Taxi Act was not unclear and declared UberPop to be illegal.⁵⁷ UberPop seems to have been consciously sowing doubt in order to secure a position for the platform. It also failed to secure the desired effect with the media offensive. In contrast to California, consumers in the Netherlands did not actively support Uber. In other words, the platform used fairly aggressive tactics in an attempt to bring about changes in Dutch legislation. The debate about UberPop was in fact one of the factors that prompted the Ministry of Economic Affairs to create more room for experiments with initiatives like Uber with a view to promoting innovation within the constraints of existing legislation.

⁵⁷ <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:CBB:2014:450>

6. Dining in a living room: private or professional?

If you don't feel like cooking you can go to a restaurant, send out for a take-away or visit friends. Or you can go to one of the increasingly popular home restaurants, where you can eat with others – friends or strangers – in a hobby chef's living room. The city of Amsterdam even advertises the practice: *'Do you want the comfort and domestic cheer of home, but without the bother of cooking, clearing and washing up? Why not eat at one of the many home restaurants in Amsterdam!*' is one of the tips presented on the city's marketing website, iamsterdam.com.

In this chapter we consider the case of Airdnd, a recent online platform for home restaurants in the Netherlands, which was established as recently as 2015. After describing the platform, we consider four public interests affected by home restaurants: food safety, responsible alcohol consumption, public order and safety, and taxation. We review how these interests are safeguarded in professional restaurants, what this means for home restaurants and Airdnd, and the discussions that these issues have led to. We show how the government, the platform and the stakeholders are exploring policy solutions together. The chapter concludes with an overview of the most important public interests in this case study and the search for ways of safeguarding them.

6.1 Airdnd

Airdnd⁵⁸ is a digital platform designed to introduce people to home restaurants. Airdnd connects people who would like to visit a home restaurant with hobby chefs. There are two ways of arranging a meal in a home restaurant: chefs can take the initiative by opening their home to guests or a group of people can ask a chef to cook for them on a particular evening. The guests pay the chef's expenses for the dinner via Airdnd,⁵⁹ which charges a fee of 10% of the costs. According to the website, the market comprises more than 1,000 home restaurants. By comparison, there were 15,067 professional restaurants in the Netherlands in 2015 (Datling, 2015). The platform's aim is to generate at least 100 bookings a week.⁶⁰

According to Airdnd, home restaurants do not compete with existing restaurants because eating in a stranger's living room is an entirely novel experience (interview with Airdnd). Airdnd argues that it is more like having dinner with friends in one of their homes. According to Airdnd, the platform responds to people's desire to share a passion for cooking while meeting new people. In the spring of 2017, the platform organised the 'home restaurant week' in Amsterdam as a promotional campaign. Another positive aspect of the platform is that it encourages professionalism and entrepreneurship. Via Airdnd, hobby chefs have discovered that they would enjoy working in the hospitality sector and a few have even started their own catering studio or delicatessen (interview with Airdnd).

⁵⁸ Airdnd stands for Air Drink 'n Dine, after Airbnb, the platform on which rooms, homes or apartments are shared. Airdnd sees home restaurants as part of the sharing economy because both the culinary arts and the living room are shared (interview with Airdnd, 2016).

⁵⁹ The average price of a meal is around € 30.

⁶⁰ In February 2017, the platform secured an investment from a venture capital fund to facilitate further growth in Europe.

How it works

Before they can use the Airdnd website, hobby chefs and guests have to register on the site, which makes them members of a cooking club. A guest is a member who can make a reservation via the website for a dinner in a home restaurant for himself and/or others and can leave a review afterwards (Airdnd, 2016). A hobby chef is defined as a person who opens his home to strangers, cooks for them for pleasure and cannot be regarded as an entrepreneur. Hobby chefs can offer diners a meal in their home restaurants on the website subject to a number of conditions. First, the dinners must be organised on a non-commercial basis; the price they charge guests can only cover the costs of the menu. Second, the home restaurants may not accept reservations more than once a week.⁶¹ The platform has established that ceiling in order to prevent hobby chefs from turning the activity into a professional (and full-time) business. Airdnd therefore refers to an activity that a person performs as a hobby at home. One person who wanted to organise several meals a week was eventually denied access to the website (interview with Airdnd). A third restriction imposed by Airdnd is that the maximum turnover that a hobby chef can generate in a year is €7,000. Fourthly, the chefs must comply with the normal rules of hygiene⁶² and use high-quality products.

6.2 Regulation of public interests in current practice

Home restaurants have an impact on a number of public interests, including food safety, alcohol consumption, public order, safety and taxation. In professional restaurants these public interests, are safeguarded and organised via laws and regulations that restaurateurs have to comply with. In this section we look at how these public interests are organised for professional restaurants and what that means for home restaurants.

Food safety

Food safety is guaranteed by legislation governing the safe handling of food. At European level, there is the EU Regulation laying down the general principles and requirements of food law (Regulation (EC) No. 178/2002), which defines 'food' and 'food business': a food business is '*any undertaking, whether for profit or not and whether public or private, carrying out any of the activities related to any stage of production, processing and distribution of food*'. In the Netherlands, the national legislation on food safety⁶³ is laid down in the Commodities Act, which sets out the requirements that foodstuffs and other products have to meet in order to avoid endangering the health or safety of consumers. The Commodities Act is supplemented by decrees and regulations governing aspects such as the hygienic preparation of food and the labelling of foodstuffs.⁶⁴ The priority in the rules on labelling is to inform consumers who could have an allergic reaction to particular ingredients (NVWA, 2016). The law also lays down specific requirements for businesses in the hotel, restaurant and café sector and for the kitchens of hospitals.

The Netherlands Food and Consumer Product Safety Authority (NVWA) is responsible for enforcing the EU Regulation and the Commodities Act. The NVWA supervises compliance with the rules on

⁶¹ In practice, home restaurants are open once a month on average.

⁶² The term 'normal' is not further explained.

⁶³ National standards of food safety are also laid down in the Agricultural Quality Act, the Pesticides Act and the Meat Inspection Act (Ministry of Health, Welfare and Sport, 2016a).

⁶⁴ The purpose of labelling is to provide consumers with accurate information about ingredients, how they should be used /prepared and their sell-by date.

food safety.⁶⁵ The NVWA can impose sanctions for breaches of the Commodities Act, such as issuing a warning or imposing a fine. According to the NVWA, home restaurants also have to comply with the requirements of the Commodities Act.⁶⁶ The NVWA determines whether an undertaking is a food business and monitors whether a home restaurant is complying with the rules on hygiene (Ministry of Economic Affairs, 2015c). But the status of a digital platform (such as Marktplaats or Airdnd) that is involved with food is not always clear (interview with NVWA, 2016), which raises the question of whether the authority can hold a digital platform accountable for meeting specific responsibilities.⁶⁷ Can Airdnd as a platform be held responsible for violations of hygiene rules in home restaurants? According to the NVWA, Airdnd as a platform can easily be held accountable for certain responsibilities and that helps to manage potential risks. Airdnd itself also feels a responsibility. According to the NVWA, the platform has a responsibility to help hobby chefs, for example by providing them with accurate information about hygiene and tips about what to look out for when preparing large quantities of food (interview with NVWA).

The NVWA considers the risks posed by home restaurants organised via Airdnd to be small because hobby chefs generally cook for a small group on a specific evening and buy in the precise quantities they need.⁶⁸ The risks of cooking for larger groups and on various days are greater. Airdnd therefore feels that some of the food safety requirements that apply for professional restaurants (such as labelling) do not always apply to home restaurants. According to Airdnd, home restaurants, which are open once a month and not more than once a week, cannot be compared with professional restaurants, where large quantities of food are prepared every day (interview with Airdnd). However, the Dutch trade association for the hotel, restaurant and café sector (*Koninklijke Horeca Nederland, KHN*)⁶⁹ argues that the same rules should apply for home restaurants as for professional restaurants (interview with KHN).

The NVWA says it has not yet received any complaints about Airdnd and has therefore not carried out any inspections. But it is also difficult for the NVWA to carry out inspections and enforce legislation in home restaurants because in principle its authority ends at the front door. In that respect, home restaurants balance on the borderline between private households (where the chef is doing something for family, neighbours and friends) and a commercial, professional activity (where the chef is doing something at cost price for a larger group). To evaluate the risks, it will be important to monitor the development of home restaurants. According to the NVWA, at the moment it is relatively easy to keep track of developments through indirect monitoring, for example by studying reviews on the Airdnd website and monitoring social media.

⁶⁵ In addition to food safety, the NVWA also monitors plant and animal health and animal welfare. The NVWA also enforces nature legislation. The NVWA protects public interests with three of its tasks: risk assessment (where are the risks?), enforcement and supervision (inspection and intervention) and communication about risks (public warnings in the event of incidents).

⁶⁶ A party that falls under the definition of a food business or food operator is covered by the Commodities Act and can be held accountable for compliance with the requirements of that law. According to the NVWA, this definition is broad: a party in this sense can range from the organiser of an annual street market to a restaurant with an extensive menu that is open seven days a week.

⁶⁷ A few years ago similar issues arose in relation to Thuisafgehaald (a community of people who share food with other people in their neighbourhood). At the time the NVWA gave the platform a number of tips and basic rules it had to comply with and which in principle every enterprise has to follow.

⁶⁸ Another reason why the NVWA has not yet started carrying out inspections at home restaurants is that the risks are greater at other operators and they should therefore receive more attention.

⁶⁹ The KHN has 20,600 members, including hotels, restaurants, cafés, cafeterias and discotheques, with a total of roughly 200,000 employees. There are approximately 46,000 organisations in the hospitality industry in the Netherlands.

Responsible alcohol consumption

To promote responsible alcohol consumption and prevent excessive drinking, enterprises in the hotel, restaurant and café sector are governed by the Alcohol Licensing and Catering Act (*Drank- en Horecawet*⁷⁰), which lays down requirements in relation to serving alcohol. For example, a hospitality business must have a licence from the municipality to serve alcohol, the premises must meet specific standards and staff members must be over the age of 16. Members of the bar staff who are below the age of 18 can sell alcohol but not drink it. There must always be a manager present who is at least 21 years of age and has a SVH diploma in social responsibility and possesses knowledge and insight into the influence of alcohol consumption. To acquire a licence to serve alcohol, a manager must not have been convicted of an offence against public morality or public decency in the preceding five years. Businesses in the hotel, restaurant and café sector can be fined for selling alcohol to minors.

The licensing authority and the competent authority for the enforcement of the Alcohol Licensing and Catering Act is the municipality.⁷¹ Quite apart from the trend in home restaurants, municipalities observe that there is a tension between current practice and the law. For instance, entrepreneurs such as retailers would like to be able to serve alcohol (an example might be the coffee bar that would like to serve a liqueur) and consumers are looking for a ‘total experience’ (VNG, 2015). Mixed forms of hospitality and retail like this (so-called ‘blurring’) was one of the subjects addressed in the evaluation of the Alcohol Licensing and Catering Act in 2016 (Ministry of Health, Welfare and Sport, 2016b).

In principle, a home restaurant that wishes to serve alcohol must apply for a licence from the municipality. In that case, the Alcohol Licensing and Catering Act also lays down requirements for the layout of the home restaurant (Ministry of Economic Affairs, 2015c). The municipality of Amsterdam received enquiries about this from the hotel, restaurant and café sector. The municipality felt it was inappropriate for a hobby chef to be able to say on the menu that a guest could buy a drink separately. In consultation with Airdnd, the municipality decided not to prohibit hobby chefs from serving alcohol, but also that they could not mention the sale of alcohol separately on the menu (interview with Airdnd, 2016).

Airdnd takes the view that it should be possible to serve alcohol in a home restaurant and refers to experiments in various municipalities⁷² where customers of an optician or a fashion store can be served a glass of wine. Airdnd assumes that hobby chefs will act responsibly in terms of alcohol consumption in their home restaurant and argues that the hobby chef also has no monetary interest in offering more alcohol to a person since the price of the menu is fixed in advance. Airdnd compares a home restaurant with a meal at a friend’s house, which is a private event and where you can drink as much as you like without any control.

⁷⁰ A hospitality business is defined in the act as an activity that in any case consists of serving alcoholic drinks for consumption on the premises commercially or otherwise than free of charge.

⁷¹ Since January 2013, municipalities have been responsible for supervising compliance with the Alcohol Licensing and Catering Act. Supervision was previously the task of the NVWA.

⁷² The Association of Netherlands Municipalities (VNG) launched this pilot project (in thirty municipalities) in the context of the modernising of the Alcohol Licensing and Catering Act (VNG, 2015).

In contrast, the KHN feels that new suppliers of hospitality activities, including home restaurants, should have to comply with all of the obligations that currently apply for professional restaurants, including the rules governing alcohol consumption. The KHN argues that offering a meal including alcoholic drinks should not be permitted because professional businesses are fined if they break the law (for example, by failing to ask for identification whether the guest is older or younger than 18).

Public order, liveability and safety

Professional hospitality businesses have to comply with various conditions designed to safeguard public order, liveability and safety.⁷³ A hotel, restaurant or café is sometimes required to have an operating licence from the municipality if customers are to be allowed to consume food and drink.⁷⁴ The licence contains conditions relating to public order: the type of business, the form of company, the opening hours and permission to serve customers outside. The premises must not constitute a threat to residents, the users or the surroundings. Accordingly, the proprietor has to take measures to make the building fire-proof in accordance with the Building Decree 2012.⁷⁵ The proprietor may also be required to have an environmental permit or issue a notification of the building's intended use.

The municipality is responsible for enforcing rules to prevent nuisance in public areas. In Amsterdam, for example, anyone who experiences hindrance or nuisance or considers that particular situations are in breach of the law can report the situation or request enforcement of the law (Municipality of Amsterdam, 2016b).

Home restaurants can constitute an impairment of public order, liveability and safety, particularly for neighbouring residents. A home restaurant attracts people to neighbourhoods that are not primarily suited to receiving them. Local residents can suffer nuisance from noise or hindrance due to heavier traffic or more parked cars than usual because of home restaurants. In 2014, for example, a home restaurant in Zoetermeer (not on Airdnd) had to shut its doors because of complaints of nuisance from neighbours. The municipality then formulated rules and hobby chefs are now only allowed to cook once or twice a month between seven and eleven in the evening (Omroep West, 2014). According to the Ministry of Economic Affairs, fire safety is a public interest that plays a role when the home restaurant assumes a more professional and publicly accessible character, with the home chef cooking frequently and for larger numbers of guests, including strangers (for a fixed price or otherwise) (Ministry of Economic Affairs, 2015c).

At present, home restaurants are not inspected for fire safety, for example.⁷⁶ They are also not required to register with the municipality or apply for special licence. Airdnd is in fact opposed to the registration of home restaurants, but it is open to alternative measures that could be taken to guarantee fire safety and public order. Home restaurants could install fire alarms in the interests of fire safety. The platform could also learn from Airbnb, which allows neighbouring residents to file a complaint via the website if they are suffering nuisance.

⁷³ According to the KHN, traditional hospitality businesses help to maintain public order by collaborating with the competent authorities in preventing disturbances, keeping noise down, identifying illegal letting and combating illegal hotels.

⁷⁴ Source: <http://www.ondernemersplein.nl/regel/exploitatievergunning-horecabedrijf/>

⁷⁵ In the Building Decree 2012, the government lays down criteria that a building has to meet in terms of safety, health, use, energy efficiency and the environment. The rules are based on the principle that a building must not constitute a threat to residents, users or the environment (source: <https://www.rijksoverheid.nl/onderwerpen/bouwregelgeving/inhoud/bouwbesluit-2012>).

⁷⁶ A pilot project to provide smoke detectors to hobby chefs might be a solution. See also section 6.3.

Taxation

Every enterprise is in principle required to pay tax on its income, thus also home restaurants. The agency responsible for ensuring compliance is the Tax Administration (Ministry of Economic Affairs, 2015c). As a company, Airdnd pays tax on its income.

According to the platform, the situation is different for the hobby chefs and the home restaurants themselves and there is uncertainty about how much one is allowed to earn. According to Airdnd, a home restaurant is not an enterprise but a small-scale activity carried on as a hobby, the income from which is marginal and barely covers the costs and should therefore not be taxed. At the moment it is still unclear to Airdnd what is and is not permitted: how much a hobby chef can earn and how often a home restaurant can open (interview with Airdnd, 2016).

Once clear rules and limits have been formulated on these points, they will have to be monitored, with measures being taken where necessary. Airdnd is willing to consider allowing municipalities to inspect anonymised user data if clear rules are drawn up (about what is and is not permitted), provided the privacy of the users (the names and addresses of individuals) is protected. For the moment, municipalities should trust Airdnd to verify how often a hobby chef opens a home restaurant and to take action if the chef breaks the rules.⁷⁷ An external supervisory body could be established to ensure that it does (interview with Airdnd).

The Tax Administration recently drew up a number of rules for participants in the sharing economy. According to it, tax has to be paid if the revenues are higher than the costs and if the product or service is provided regularly.⁷⁸

6.3 Public debate about policy

Airdnd has been operating in the Netherlands since 2015 and has attracted the attention of the media (various newspapers and television) and politicians in this relatively short period. Shortly after the platform was launched, the KHN adopted the position that Airdnd represented unfair competition for professional restaurants. The KHN is positive towards innovative newcomers to supplement the traditional suppliers in the market, but feels that the playing field with new platforms like Airdnd is not level (interview with KHN, 2016). Hotrec, the trade association of hotels, restaurants and cafés in Europe, has called for further regulation of platforms like Airdnd (Hotrec, 2015). The KHN feels that if home restaurants are paid for the meals they provide, they must be subject to the same laws and regulations as professionals (KHN, 2015).⁷⁹ As we showed above, that includes legislation and licensing requirements relating to food safety, alcohol consumption, public order, safety and taxation. This means that existing rules should also be applied to and enforced against new players in the market such as home restaurants.

The KHN therefore calls for mandatory registration or notification of private individuals who provide hotel, restaurant and café services (interview with KHN). This would make it easier for the various agencies to perform their work and so restore the level playing field. A similar suggestion for the

⁷⁷ A municipality could carry out its own additional controls, for example by appointing an external regulator.

⁷⁸ http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/privewerk_en_inkomen/interneteconomie/interneteconomie-deeconomie

⁷⁹ The KHN shares this criticism of Airbnb.

introduction of mandatory registration of people who rent out their homes via sharing platforms, aimed specifically at Airbnb, was adopted by the House of Representatives on 7 July 2016. However, the authorities must have data to enforce the rules. In Airdnd's case, the data are the names and addresses of home restaurants, which can only be seen after a reservation has been made and are shielded to protect the privacy of the hobby chefs.⁸⁰

Airdnd disagrees with the professional sector and argues that the rules for professional restaurants should not always apply to home restaurants. The platform has sought contact with policymakers on the issue of regulation in various ways. On 11 November 2015, Kees Verhoeven (D66) asked questions in the House of Representatives about laws and regulations in relation to Airdnd and the status of participants in the platform: are they hobby chefs or professional chefs? In the reply the Ministry of Economic Affairs said home restaurants can be informal and small-scale or more professional and public venues where meals are cooked more frequently and for strangers, for payment or otherwise. In the latter case, public interests such as food safety, fire safety and public order in the neighbourhood play a greater role (Ministry of Economic Affairs, 2015c).

Minister of Economic Affairs Henk Kamp has also said he wants to encourage initiatives in the sharing economy because they contribute to innovation and economic and social dynamism. He does not want to respond reflexively with rules and has suggested reviewing on a case-by-case basis whether there are sufficient powers to safeguard public interests or whether additional rules or clarification of existing rules is needed (Ministry of Economic Affairs, 2015a). In the letter to parliament entitled 'Working on future-proof legislation: digital platforms and the sharing economy' that was published a short time later (Ministry of Economic Affairs, 2015b), the ministry said it was exploring specific methods or instruments that could be used to build more flexibility into legislation and so make it easier to respond to technological and social developments. One of those instruments is the concept of Right to Challenge, which gives 'citizens and companies the legal possibility to achieve the objectives of a statutory rule as they see fit, without having to comply with all of the statutory rules' (Ministry of Economic Affairs, 2016).

An initial, broad multilateral debate was held in June 2016, when the Ministry of Economic Affairs organised the first Right to Challenge workshop with the focus on Airdnd.⁸¹ During the workshop the founders of Airdnd engaged in a discussion with stakeholders including the Tax Administration, KHN, NVWA, the Ministries of Economic Affairs, Security & Justice and the Interior and Kingdom Relations and municipalities concerning a range of public interests. Among the subjects that were discussed was the existence or otherwise of a level playing field and the boundary between commercial practices and hobbies. One of the suggestions made was that Airdnd could take responsibility for safeguarding public interests, for example by providing smoke alarms to hobby chefs, informing users about rules of hygiene and being transparent towards public agencies. Airdnd appeared to have a

⁸⁰ The House of Representatives and the Municipality of Amsterdam want a similar duty of notification for persons letting a property via Airbnb in order to improve supervision of the market. Minister of Housing Stef Blok is opposed, however, because all the interests are adequately protected by the existing laws and regulations. Enforcement by the municipalities must be based on them (NOS 2016a). Airbnb will also not respond to the request by the Municipality of Amsterdam for details of individual property owners in order to prevent excesses. The platform takes action itself against owners who break the rules (NOS 2016b).

⁸¹ The Rathenau Institute attended this workshop, which will probably be followed up since the participants observed that the most important benefit of the workshop was that it brought all the stakeholders together.

problem with sharing user data with the agencies. Without this information a municipality cannot properly monitor and enforce compliance with the rules, but Airdnd does not want to share the user data for reasons of privacy. A possible solution for this situation would be to establish an independent third party to monitor whether users of a platform are operating within the rules (and perhaps even with powers of enforcement).

6.4 Conclusion

There are a number of different legal and regulatory frameworks designed to protect the public interests that are at stake in relation to restaurants. Those frameworks and their enforcement have always been geared to professional restaurants. The relevant public interests in relation to Airdnd are food safety, responsible consumption of alcohol, public order and taxation. The discussion about these public interests (with the exception of public order) arises from the fact that the platform lies at the boundary between a professional activity and a hobby. Koninklijke Horeca Nederland (KHN) regards home restaurants as commercial enterprises because they provide meals for payment and should therefore be subject to the existing regulatory frameworks. Airdnd does not consider home restaurants to be professional restaurants, but small-scale, private activities that are carried on as a hobby.⁸² The platform uses this argument during discussions to explain why the existing regulations concerning food safety, alcohol consumption and taxation should not apply to Airdnd.

Airdnd has established a number of restrictions to ensure that the scale of the activities remains small. Home restaurants may not open more than once a week, the activities may not be commercial in nature and the restaurant's annual turnover must not exceed €7,000. Airdnd has also drawn up rules on hygiene. The Ministry of Economic Affairs has said that policies towards digital platforms will be developed on a case-by-case basis. A dialogue has now commenced in which the government, the platform and stakeholders are together searching for ways of addressing public interests in relation to Airdnd. In the context of Right to Challenge, innovative methods of achieving the objectives of legislation are being sought, with some promising early proposals. In this case, therefore, we see that the focus of the interaction between the platform and the government is on constructive dialogue.

⁸² A home restaurant and a hobby chef are defined on the basis of frequency (the home restaurant may not be open more than once a week) and turnover (not more than €7,000 per annum). A hobby chef who exceeds these limits will be excluded from the platform and regarded as a professional.

7. A balancing act: Airbnb in Amsterdam

Airbnb is regarded by some as the flagship of the sharing economy. The platform has realised astounding growth since it was founded in the summer of 2008 and now offers more than two million accommodations worldwide. Amsterdam has, in consultation with Airbnb, among the first cities in the world to draw up rules to manage that growth. The most important restriction is that residents of Amsterdam may not rent out their homes to tourists for more than 60 days a year. Criticism of Airbnb and the policy adopted by the city has grown in the last few years. The 60-day rule is difficult to enforce because Airbnb has refused to share precise details in the interests of the privacy of the people who rent out accommodation. However, the annoyance caused to the neighbours of people who rent out accommodation via Airbnb is steadily escalating and some first-time buyers are no longer able to buy a property because of the rising house prices. Does the city still belong to the people of Amsterdam?

This chapter examines how Airbnb operates and the public interests affected by it, before going on to assess the policies that the Municipality of Amsterdam has adopted to mitigate the negative effects of accommodation sharing. The final section of this chapter presents some conclusions concerning the issue of public interests and measures to safeguard them.

7.1 Airbnb

Airbnb is a website on which people can offer accommodation for rent on a temporary basis. The property can be an entire home or a room in a house. The website was founded in the United States in August 2008, since when the number of properties on offer has grown to more than two million worldwide. Airbnb is a major player in the Netherlands, particularly in Amsterdam, where more than 18,000 properties were listed to let in 2015 – 20% of them rooms and 80% entire homes (Municipality of Amsterdam 2016a, p. 48). A night's accommodation in a property offered via Airbnb is generally cheaper than a hotel in the same location. Airbnb is therefore a good option for slightly longer stays, and particularly for groups. This is also apparent from the average duration of stays arranged via Airbnb. According to data provided by Airbnb for June 2013, the average number of nights booked via Airbnb in Amsterdam was 3.9, compared with an average of 1.9 nights in hotels (Airbnb, 2013). The accommodation on offer via Airbnb's website is not entirely new supply. A substantial proportion of the properties could already be rented via other websites or through other channels before 2008. In that sense, Airbnb has not only increased supply, but also aggregated existing supply (just as Booking.com has done with regular hotels). Around three-quarters of the private holiday lets in Amsterdam were offered via Airbnb in 2015 (Municipality of Amsterdam 2016a, p. 8).

The most important restriction the Municipality of Amsterdam has imposed on accommodation sharing via platforms like Airbnb is that a property may not be rented out to tourists for more than 60 days a year. Aggregated data supplied by Airbnb to the municipality showed, however, that more than 19% of the properties were rented out for longer than 60 days in 2015 (Municipality of Amsterdam, 2016a, p. 49). Another study showed that 25% of the properties that were available for rent in

Amsterdam did not have a permanent occupant (Inside Airbnb, 2016).⁸³ In other words, although Airbnb describes itself as part of the sharing economy, many of the properties on the site are permanently available to let. These properties represent *permanent* supply, and many constitute illegal hotels, which no longer represents an activity that falls under the definition of the sharing economy, since sharing involves temporary access to a person's own assets;⁸⁴ in other words, the temporary letting of a property in which the owner lives the rest of the year (Frenken et al., 2015).

7.2 Public interests

The renting out of accommodation to tourists via Airbnb, or a similar platform like Wimdu, affects a number of public interests. In the first place, some parties, including Koninklijke Horeca Nederland (KHN), refer to unfair competition (interview with KHN). By offering the use of their home as a hotel, private individuals are competing with hotels without having to comply with all of the same rules concerning safety. There is also reason to assume that many private letters do not report their income to the Tax Administration, partly because Airbnb is not obliged to pass on information to the Tax Administration. In practice, 70% of the rental income, less the costs incurred, should be reported to the Tax Administration (www.belastingdienst.nl). Tourist tax is paid via Airbnb's website, however.

A second public interest is consumer protection. People who rent accommodation via Airbnb face greater potential risks than in a hotel because most homes do not meet the same strict safety standards as hotels. The same applies for the food served if guests eat with their host. The municipality does refer property owners to the fire safety regulations prescribed by the fire brigade, but the rules are not enforced in practice.⁸⁵ Nor does the Netherlands Food and Consumer Product Safety Authority (NVWA) carry out inspections (interview with NVWA).

A third public interest is the prevention of nuisance. Neighbouring residents can suffer from the noise caused by temporary residents who are unaware of (written or unwritten) rules of conduct, or fail to observe them. Temporary letting can also cause neighbours to feel unsafe. The Municipality of Amsterdam has opened a hotline for complaints about nuisance, as has the political party GroenLinks.⁸⁶ Airbnb also launched a worldwide complaints hotline on its website on 31 May 2016 (Airbnb, 2016a).

A fourth public interest is combating discrimination. Private individuals who rent goods to each other benefit from trust. In the absence of trust, the price a person can demand to rent out an asset will be lower. Accordingly, members of minorities are unable to realise the same income per overnight stay as members of a majority, because minorities are often trusted less. For example, research by Edelman and Luca (2014) showed that the price that Afro-Americans in the US can ask for their property is 12% lower than the price other Americans can demand for the same type of house. In principle, this type of discrimination does not occur in the 'old' economy because regular hotels make no distinction in their pricing between people on the basis of the colour of their skin or other personal characteristics. Airbnb recently declared that it was making tackling discrimination a priority and the

⁸³ This is an estimate by Inside Airbnb based on an algorithmic analysis of reviews per property.

⁸⁴ See the definition formulated in part 1 of this report.

⁸⁵ See <https://www.amsterdam.nl/wonen-leefomgeving/wonen/bijzondere-situaties/vakantieverhuur/>

⁸⁶ See www.fairbnb.amsterdam.

company has already adopted a number of measures (Airbnb, 2016b). For example, property owners can now choose to accept applications directly and automatically, which will in itself prevent discrimination. Airbnb now also requires people who are letting a property to sign a declaration that they will treat everyone with respect and without judgement or prejudice, regardless of race, religion, nationality, ethnicity, handicap, gender, gender identity, sexual nature or age. Anyone who refuses to sign will no longer be allowed to let their accommodation via Airbnb. However, it is difficult to verify whether the owners are keeping their promise.

Finally, the growth of accommodation sharing could drive up house prices and rents in the private sector (ING, 2016), since if home owners can generate more income from their home through Airbnb, buyers will also be willing to pay more for the property. This could have the effect of intensifying social segregation in cities by forcing lower income groups or first-time buyers in the housing market to move to less popular neighbourhoods.

Offsetting these drawbacks of holiday letting via Airbnb are the substantial benefits arising from Airbnb and similar websites. In the first place, there are substantial economic benefits. In a recent report covering 2015, Airbnb (2016c) suggested that almost two million guests had spent a night in Amsterdam via its website. Based on a rough estimate of 100 euros per accommodation per night, that would represent a total market value of 200 million euros. Only part of that market is at the expense of the hotel market. Moreover, tourists spend money and that benefits the local economy. Other benefits generated by Airbnb, which are more difficult to quantify, are the social contact created between the owner of a property and the people who rent it and between the renters and residents. Finally, Airbnb could have a positive environmental impact. For example, Airbnb (2014) has reported that Airbnb guests consume far less water and energy than hotel guests. On the other hand, Airbnb has promoted global tourism by making it cheaper than it used to be, which indirectly causes additional pollution in the transport sector, particularly from aviation.

7.3 Policy

At the beginning of 2014, the Municipality of Amsterdam decided that residents of the city would no longer be able to rent out their homes for more than 60 days a year or to more than four persons at once. The city also prescribed other rules (see figure 7.1). With this policy innovation, Amsterdam was one of the first cities in the world to attempt to regulate the letting of a person's own home in a smart way. Other cities have formulated similar rules. An important distinction is that some cities only allow rooms to be let, rather than an entire home, while the maximum number of days that a person is allowed to let their home also varies substantially from one city to another, ranging from 30 days in New York and 90 days in San Francisco to 120 days in Paris.

Various cities around the world are trying to regulate home letting in such a way as to bring the practice into line with the definition of the sharing economy given earlier. Without that regulation Airbnb would mainly promote illegal hotels, since home owners would then be able to rent out their homes permanently with all the ensuing negative consequences. The 60-day rule is therefore a measure designed to make a distinction between accommodation sharing by private individuals and professionals who offer hotel accommodation on a permanent basis. In that sense, municipalities are not so much levelling the playing field for private individuals and professional suppliers, but actually creating two playing fields. Airbnb welcomes this system of separate regulation of accommodation

sharing because it is easier for private individuals to comply with the relatively simple rules for accommodation sharing than with the complex rules for hotels and other professional suppliers (interview with Airbnb).

The Municipality of Amsterdam has conducted intensive talks with Airbnb regarding enforcement of the rules.⁸⁷ The parties signed a 'memorandum of understanding' for a period of a year at the end of 2014 (Municipality of Amsterdam and Airbnb, 2016). This agreement, which was not initially published, included a stipulation that the municipality would be responsible for implementing the policy but that Airbnb would provide aggregated data about the letting of accommodation via the platform and would provide information to property owners and collect tourist tax. An interesting provision in the agreement is Article 1.6: 'Parties agree that they shall refer in positive terms to the cooperation (...) in their communication'. Article 1.1 further stated: 'Parties agree that during the evaluation period they shall not institute any legal or financial action against each other'. This clause explicitly brought peace in the conflict with Airbnb, but also partially deprived the city council of its ability to scrutinise municipal policy.

In practice, it has proved very difficult for the municipality to enforce the rules. The municipality does not know which properties are let for more than 60 days a year or to more than four persons at a time. Although Airbnb provides aggregated data to the municipalities, it has been unwilling to provide details of specific addresses that are let for more than 60 days even though that information is easy to retrieve from its database. The main argument Airbnb gives for its reluctance to provide personal data is protection of the privacy of the property owners (interview with Airbnb). Airbnb's attitude towards privacy could be described as ambiguous, since people who let their homes via Airbnb are obliged to provide a lot of personal details to Airbnb itself.

The municipality has reported that every company it has spoken to has said that enforcement is primarily a task of the government (Municipality of Amsterdam, 2016b, p. 30). That is also the position taken by Airbnb (interview with Airbnb). The company does not see it as being its task to remove properties that are let for more than 60 days from the platform because the properties also include addresses that are licensed to be rented out all year round. Airbnb fears that because it cannot make the distinction between legal and illegal letting it could face legal actions from owners who feel they have been wrongly removed from the platform (interview with Airbnb). Websites are only willing to remove specific accommodations from their websites after the competent authorities have taken enforcement measures.

⁸⁷ At the time, other websites were also approached by the municipality and asked to cooperate with regulation and enforcement, but only five of the 17 parties were willing to collaborate. Those that refused were "mainly companies that are based in America and which often have the same parent company. The companies were Craigslist, Flipkey, WaytoStay, Homeaway, Tripadvisor, Lovingapartments, Holidaylettings, Amsterdamstay, Expedia, Only apartments, Vive unique and Roomorama" (Municipality of Amsterdam 2016b, p. 30).

Holiday lets in Amsterdam

Renting one's home as a holiday let is only allowed if a set of guidelines applies. For example, only the principal occupier is permitted to rent out a property, and holiday rental must only happen occasionally – people can't rent out their home on a permanent, commercial basis. The guidelines are in place to ensure that holiday lets are conducted safely, honestly and without causing problems for neighbours and other residents. People renting out their home but failing to adhere to the regulations risk being fined, having to pay back outstanding tourist tax or even having to vacate their home.

Regulations for private holiday lets

Only the principal occupier is permitted to rent out the property

You are only permitted to rent out a property if you are the principal occupier and are registered as such in the [municipal personal records database](#).

Only occasional rentals are permitted

Renting out your home a few times a year, for example while you're on holiday yourself, is generally permitted, if all other guidelines are followed. The maximum of days for which a private holiday let is permitted is 60 per year. If you rent out your property for more than 60 days per year, you are regarded as engaging in commercial activity, and commercial rental of your home is not permitted.

Renting out part of your home for more than 60 days a year (thus letting it on a commercial basis) is only permitted if you are running a bed & breakfast. [Click here](#) for more information about the bed & breakfast industry (in Dutch).

Tourist tax

Like all accommodation providers in Amsterdam, you will be required to pay tourist tax on your income from holiday rental. The [City of Amsterdam](#) has more information (website in Dutch) and a [registration form](#) (in Dutch).

Permission from landlord or owner-occupiers' association

Holiday rental is only permitted if you own your property or if you have obtained permission from the landlord. Homeowners who are part of an owner-occupiers' association are advised to seek permission from the association in advance. It is worthwhile reaching agreements regarding the holiday rental in advance to avoid conflicts at a later stage.

No housing corporation rentals

Housing corporations do not allow the subletting of properties for any period of time and take a firm stand against people violating their rental agreements. The City of Amsterdam works closely with housing corporations to enforce the regulations. Failure to adhere to the regulations can result in having to vacate your home.

Compliance with fire safety regulations

To ensure the safety of your guests and neighbours, your property must comply with all applicable fire safety regulations. [See here](#) for more information by the fire brigade about taking fire safety precautions.

Four-guest maximum

You are not permitted to rent out your property to more than four guests at a time.

No nuisance caused by rentals

Guests staying in your property must not cause any form of nuisance to others living in the building or area. As principal occupier, to a certain extent you are responsible for the behaviour of your guests. It is important to be selective in choosing who you allow to stay in your home. Setting rules for your guests in advance is advisable. Also inform the neighbours, so that they are fully aware of the situation. Remember to leave a contact telephone number so that you (or someone acting on your behalf) can take action where necessary.

Reporting disturbances

Any disturbances caused by holiday rentals can be reported by calling 14 020, the city's central information number. If you suspect that a property is being used illegally as a hotel or guesthouse, you can report this with [this form](#) (in Dutch).

Figure 7.1. Information about holiday letting from the Municipality of Amsterdam. Source:

<https://www.iamsterdam.com/en/living/everyday-essentials/housing/holiday-rentals-in-amsterdam> (consulted on 25 August 2017).

There is no case law yet about the sanctions the municipality can impose if it discovers through other channels that a property owner is violating the 60-day rule. According to the Ministry of Housing (2016), municipalities have numerous possibilities to sanction offenders, and even to delegate management of the property to a third party. However, the Municipality of Amsterdam observes that in legal practice it is still unclear precisely what measures a municipality can take (Municipality of Amsterdam, 2016b). This was the main reason why the House of Representatives passed a motion on 7 July 2016 – which the KHN had been advocating for some time (interview with KHN) – calling for the introduction of mandatory registration of private holiday lets via sharing platforms. If someone violated the 60-day rule, the municipality would then be able to immediately impose a fine or adopt some other measure on the grounds that the overnight stays were not registered.

All in all, the municipality's conclusion is that "there is still a fundamental difference of opinion with Airbnb and other websites over the fact that supply that is contrary to the rules is not automatically refused" (Municipality of Amsterdam 2016b, p. 31). Amsterdam is now seeking cooperation with other cities, including New York, Paris and Barcelona, which face the same problems with Airbnb. These cities intend to hold regular talks in an attempt to formulate a common policy and strengthen their negotiating strength vis à vis Airbnb and other home-letting sites (NOS, 2016d). Meanwhile, the large cities in the Netherlands are discussing whether Amsterdam's rules should be applied nationwide (NOS, 2015) and the parties to *Agenda Stad* (a consortium of the national government, cities and stakeholders established to strengthen innovation and the quality of life in Dutch cities) are preparing a 'city deal' on the sharing economy with the major Dutch cities.⁸⁸

Airbnb does endeavour to promote good practices in accommodation sharing indirectly. For example, it expels property owners that it feels are undermining the platform. At the end of December 2015, for instance, it removed 170 addresses in Amsterdam from the website. However, it has to be noted that merely renting out a property for more than 60 days in a year is not in itself a reason for Airbnb to remove the property from the site (interview with Airbnb), since it is impossible for Airbnb itself to determine whether the owner has a special licence to let the accommodation for more than 60 days. Because it considers enforcement to be the municipality's task, Airbnb does not ask for evidence that such a licence has been issued. The cases in December 2015 were connected with other issues, such as nuisance or inappropriate behaviour. In its press release Airbnb said the reason for removing the addresses from the website was that the owners did not provide the "authentic travel experience" that Airbnb guests are looking for and that Airbnb had decided to remove them on the basis of "an accumulation of elements that are inconsistent with our rules", without making any reference to the Municipality of Amsterdam's rules. Nevertheless, a spokesman for the municipality said at the time that the apartments concerned "were obviously operating as illegal hotels in Airbnb's view" (Bouma, 2016a).

Airbnb also endeavours to contribute indirectly to good conduct. For example, on 31 March 2016 the company announced that in a pilot project with the municipality of Paris it would send letters from the municipality to property owners who exceeded the city's maximum letting period of 120 days (Airbnb, 2016c). In this way property owners would be made aware of the rules and the fact that they would be in breach of them if they rented out the accommodation any longer during that year. Finally, there are

⁸⁸ See twitter.com/share_NL/status/748505987938660352.

now also enterprises that help property owners to comply with the rules. One example is 60days, a company that handles the hand-over of the keys and the cleaning of the property, and in the process ensures that people do not rent out their property for more than 60 days a year (NOS, 2016d).

Nevertheless, there is growing public criticism of Airbnb's attitude in refusing to provide detailed information that would enable the municipality to enforce the rules, in particular the 60-day rule. The privacy argument is valid in light of the existing 'terms of service', but the company could in principle amend them to state that the address of any accommodation that is rented out for more than 60 days will be sent automatically to the municipality. Airbnb objects to that, arguing that it would create too much red tape for the company because the rules, definitions and licensing systems differ so greatly between cities, even within the same country (interview with Airbnb). Airbnb also points out that the European Commission has said that platforms cannot be forced to provide personal details to public authorities under the terms of the existing European e-commerce directive.⁸⁹ That then raises the further question in relation to accommodation-sharing platforms of whether they should be regarded primarily as providers of information society services or as property brokers in a specific local housing market.⁹⁰ If it is the latter, municipalities would perhaps be able to take legal action to demand personal data.

Nevertheless, the Municipality of Amsterdam and Airbnb concluded a new deal at the end of November 2016. The most important change agreed was that the advertisement of a property would be automatically removed from Airbnb's website after 60 days and only reactivated the following year. Individuals who have a special licence to let their properties for the entire year would have to notify Airbnb of the licence in order to prevent the address from being automatically removed after 60 days. A counter mechanism would also be installed on the property owner's page showing how many days the accommodation had already been let in that particular year. This agreement between Amsterdam and Airbnb will expire on 31 December 2018 and will then be evaluated (Municipality of Amsterdam & Airbnb, 2016).

In other words, Airbnb has taken further steps to help the municipality to enforce the 60-day rule. But despite Airbnb's greater efforts to prevent abuses, the municipality's problems with enforcement are not entirely resolved. For example, the owner of a property that has been rented out for 60 days could decide to create a new account for the property with a new description and new photos or let the accommodation on a different platform, such as Wimdu. In order to eliminate violations of the 60-day rule, other platforms will also have to demonstrate their good will by making similar agreements with the municipality.

The Municipality of Amsterdam is also exploring other avenues to monitor property owners. The city has established a centre of expertise known as DataLab, whose task is to analyse Airbnb and similar websites for possible abuses (Municipality of Amsterdam, 2016b, p. 25). Although the municipality

⁸⁹ An important factor is that under EU law member states may not impose a general obligation on sharing platforms, insofar as they provide "host" services, to monitor the information that they transmit or store or to actively seek facts or circumstances indicating illegal activity; footnote 27: as laid down in Article 15(1) of the e-commerce directive (European Commission, 2016, p. 9).

⁹⁰ The same issue arose earlier in relation to Uber. For instance, the Dutch courts have ruled that Uber does not provide information services but transport services, because it retains a margin on every journey (<http://deemlink.rechtspraak.nl/uitspraak?id=ECLI:NL:CBB:2014:450>). See also the chapter on the UberPop case study.

stresses that this so-called 'web scraping' will take place within the existing statutory framework, it is by no means a legal certainty that the city is not infringing the privacy of citizens (Mourscous, 2016).

Finally, there is a discussion about whether occupants of social housing owned by housing associations should be allowed to rent out the property via Airbnb. Amsterdam's mayor suggested this possibility at the beginning of 2016 and the housing association De Key has expressed support for it (Bouma, 2016b; Couzy, 2016). Airbnb is also positive (interview with Airbnb). This option would mean that the revenues from accommodation sharing would not only be earned exclusively by home owners who are generally well-off, but also by low-income earners. Another possible advantage is that holiday letting would be dispersed more widely across the city and the current strain on central locations would be eased. On the other hand, the larger supply of accommodation would push down prices, which might cause the total number of tourists to rise. The Ministry of Housing (2016) spoke out against this plan with the argument that tenants who already benefit from living in a subsidised home would then profit even more. That would indeed be the case if the occupant retained the entire rent. An alternative might be to divide the revenues from renting out the property between the tenant and the housing association. The housing association would also be able to monitor compliance with the municipal rules and ensure that the total annual revenues are reported to the Tax Administration.

7.4 Conclusion

Various public interests are affected by the letting of accommodation via Airbnb. In the first place, there is no level playing field in relation to hotels because private individuals rent out their homes without complying with all the safety regulations and without paying tax on the income. Secondly, consumer protection may be at risk, in relation to fire safety for instance. Thirdly, public order is threatened by guests who misbehave. Fourthly, house sharing via Airbnb can lead to discrimination. Finally, Airbnb drives up house prices and thus influences the affordability of housing. On the other hand, there are also positive effects in terms of the income of property owners and additional spending by tourists. The environmental effect of Airbnb is uncertain because the environmental benefits of accommodation sharing might be outweighed by the impact of the additional air traffic that is generated.

The Municipality of Amsterdam stipulated conditions for accommodation sharing in 2014: residents of Amsterdam may not rent out their home for more than 60 days a year or to more than four persons at once. These conditions create a distinction between individuals who rent out their home and professionals who supply accommodation on a permanent basis. The city has therefore chosen to create two separate playing fields.

Amsterdam has entered into a dialogue with Airbnb regarding enforcement. Central to the talks is the issue of the data about properties that are rented out that the municipality needs to enforce the 60-day rule. Airbnb does not wish to provide the municipality with the addresses of properties that are let for more than 60 days in the interests of the property owners' privacy. Airbnb argues that it is an electronic trading platform and therefore by virtue of the EU e-commerce directive it cannot be compelled to provide personal data.

Airbnb also considers enforcement to be a task of the government. However, since the end of 2016 Airbnb has removed advertisements for properties that have been let for more than 60 days. Persons with a licence to let their premises all year round must prove it to Airbnb.

In the meantime, the municipality is seeking to establish a firmer legal basis for imposing sanctions on property owners who violate the 60-day rule. Amsterdam is also investigating new methods of monitoring property owners. It has set up a special team with the task of analysing the home-letting sites and identifying abuses. Finally, Amsterdam is seeking cooperation with other cities around the world with a view to strengthening their negotiating position vis à vis Airbnb.

The active approach of the Municipality of Amsterdam demonstrates that politicians should not only facilitate these types of innovation, but can also help shape them (“co-creation”). With the choice of particular rules, in particular the maximum of 60 days a year for which a property can be rented out, politicians are steering the direction in which an innovation is being legitimately embedded in society (Frenken et al., 2015).

8. Towards 100,000 shared cars in the Netherlands

The Dutch government wants to promote car sharing and to that end it concluded the Car Sharing Green Deal with suppliers of shared cars, lease companies, insurance companies, municipalities, businesses and interest groups in June 2015. The aim of the Green Deal is to increase the number of shared cars to 100,000 by 2018. According to the Ministry of Infrastructure and the Environment, car sharing can make a substantial contribution to achieving the policy objectives for sustainability and mobility. The expectation is that car sharing can help to make the entire mobility system more robust. The government's intention therefore is to expand the opportunities and remove the obstacles for car sharing (Ministry of Infrastructure and the Environment, 2015b).

Anyone wishing to travel by car without owning one has a number of options. Broadly speaking, a distinction can be made between 'car sharing' and 'ride sharing'.⁹¹ For this case study we looked at car sharing, of which there are various forms. The focus in this chapter is on car sharing between consumers, where private owners rent out their car to other consumers. This form of car sharing is known as consumer-to-consumer (C2C) or peer-to-peer (P2P) car sharing and falls within the definition of the sharing economy as formulated in chapter 2.⁹² The market leader in the Netherlands is SnappCar. For comparative purposes, we also discuss traditional car sharing, a system whereby a company leaves cars at various locations around a city and rents them out to consumers. This model is known as business-to-consumer (B2C) car sharing and the best-known supplier is Greenwheels.

The chapter starts with a discussion of the different versions of car sharing and the growth of car sharing in the Netherlands. The relevant public interests and ways of promoting them are then described. The following section discusses the cooperation between the parties to the Green Deal and the issues they face. The concluding section gives an overview of the most important public interests and the connected issues in relation to car sharing.

8.1 Car sharing in the Netherlands

Car sharing can be organised between individuals, between companies and individuals and between companies. An important distinction that can be made between different car-sharing concepts relates to ownership. The shared car can be owned by an organisation (the company offering the car) or by a user (a private individual who offers the use of his car via a platform). Further distinctions can be made on the basis of where the car is located (central or local) and the business model (whether the car has to be returned to the original location or the possibility of making a one-way journey). These variants are discussed further in box 8.1.

⁹¹ For example, using a carpooling platform such as BlaBlaCar.

⁹² This chapter differs from the previous ones in the sense that the discussion is not concerned with regulating or imposing constraints on platforms, but rather about stimulating them. The subject is car sharing, how it can be stimulated and the challenges that have to be met.

Box 8.1: Different forms of car sharing

B2C car sharing

Companies that own a fleet of cars for the purpose of hiring or sharing them include Greenwheels and Car2go. These companies follow the classical business-to-consumer (B2C) model of car sharing. A further distinction can be made between companies that keep their cars at a central location and companies whose cars are permanently stationed at various locations around the city. The traditional car hire companies (members of Bovag such as Sixt, EuropCar and Hertz) generally keep their cars at a central location. Anyone wishing to rent a car from these companies has to collect it from a central location (in other words, both ownership and location of the cars are centralised). With a car-sharing company like Greenwheels the cars are located throughout the city and can be reserved 24 hours a day without having to visit a reservation desk (central ownership, local location). There is also another variant where the shared car is not kept at a permanent location. This model, so-called 'one-way car sharing', is offered by companies like Car2go in Amsterdam and Witkar in Rotterdam, where you can use a shared car for a one-way journey through the city. The driver can locate available cars with an app and park the car anywhere free of charge when he or she has finished with it.

C2C or P2P car sharing

A shared car can also be owned by a private individual who allows others to use it via a digital platform. This is known as consumer-to-consumer (or peer-to-peer) car sharing and is provided by companies such as SnappCar, WeGo and Mywheels. With this model, private individuals can rent out or hire a car from other individuals via a platform (the cars are dispersed throughout the city/locally and the individual is the owner). The car can also be shared without the intervention of a platform, for example with friends or acquaintances.

SnappCar

SnappCar is a platform for peer-to-peer car sharing. If you wish to use a car, you can see what cars are available for hire in the vicinity (the car is kept in the owner's parking space) on SnappCar's website. You can then submit a request to the car's owner to rent the car on specific dates. When the owner accepts the request, you can pay and collect the car. The car is insured via SnappCar against damage, liability, destruction and theft. This insurance is taken out for every transaction.⁹³ Cars can be offered for hire on SnappCar free of charge and owners can decide themselves when the car will be available, how much to charge and how often and to whom they will rent it out. The person renting out the car receives 70% of the rental income; the other 30% goes to SnappCar.⁹⁴ It is not the intention that people will operate a business via the SnappCar platform (interview with SnappCar, 2016). If the car sharing by a particular user/sharer begins to assume commercial tendencies, SnappCar bans the user from the platform. It takes the following aspects into account: different cars being rented out under the same name, the frequency with which a car is rented out and the sums of money involved.

⁹³ Renters have a standard excess that is based on the rental price of the car. People aged 25 or older can buy off the excess when reserving a car.

⁹⁴ This covers the insurance premium, the no-claim bonus protection, 24/7 break-down assistance and service. SnappCar's minimum rate is €8.75, plus a surcharge of €3.50 for persons under the age of 25.

Peer-to-peer car sharing is the fastest-growing form of car sharing and the growth is fastest in the four major cities: Amsterdam, Rotterdam, Utrecht and The Hague. More and more people are sharing their cars with other individuals, particularly in the cities. SnappCar has the largest share of the P2P car sharing market with 57% (Crow-KpVV, 2015a). The company, founded in 2011, is a social enterprise for which the social impact is more important than making a profit.⁹⁵ SnappCar feels that a new generation is growing up that sees a car less as a status object than simply a practical means of getting from A to B (interview with SnappCar, 2016).

Greenwheels

Greenwheels is the largest supplier of shared cars in the traditional B2C niche (Crow-KpVV, 2015a). The company was founded in 1995 and was acquired by Pon (an international trading and service organisation in the automotive and mobility sector) and Volkswagen in 2015.⁹⁶ Greenwheels' objective is to promote more efficient use of cars and the space in cities. Greenwheels' cars are parked in permanent spaces in cities and are available 24 hours a day. A shared car at a particular location can be reserved via the website and opened with a card (or the public transport chip card). Greenwheels currently has a fleet of 1,700 cars in the Netherlands.⁹⁷ The company does not publish exact figures for the number of users or the number of times the cars are hired. On average, each car serves 15 households (interview with Greenwheels, 2016) and 21 people use a Greenwheels car (Greenwheels, 2016). In contrast to P2P car sharing, the number of shared cars in the classic model has not been growing in the Netherlands in recent years (Crow-KpVV, 2015a).

Peer-to-peer car sharing is growing strongly (see figure 8.1). In the spring of 2016, around 19,000 car owners rented out their cars to other consumers, almost twice as many as in 2015 (Crow-KpVV 2016). The vast majority of shared cars are made available via the SnappCar platform. The number of shared cars being offered with the traditional business-to-consumer model is far smaller and is stagnating (see figure 8.1), although those cars are rented out far more frequently than cars shared under a P2P model. The number of people who share cars in the Netherlands is estimated at 90,000,⁹⁸ almost 1% of the total number of people in the country who possess a driving licence (PBL, 2015; Nijland and Van Meerkerk, 2017). Important reasons for people to share a car are the higher costs and the greater administration related to owning a car compared with sharing one (De Gier et al., 2014).

In June 2015, the government, suppliers of shared cars, lease companies, insurance companies, municipalities, businesses and interest groups joined forces to promote car sharing. The aim is to have a network of 100,000 shared cars by 2018. The parties have made agreements to raise awareness, collect and share knowledge and data and launch pilot projects in relation to car sharing. The Green Deal includes a list of the advantages of car sharing: more conscious use of cars leads to fewer kilometres driven by car (by increasing the use of the bicycle and public transport); fewer CO₂

⁹⁵ SnappCar has a 'B Corp certification', an international quality mark for sustainability and social impact.

⁹⁶ Apart from the fact that existing automotive companies are focusing on car sharing, there are also relatively new players that have made car sharing part of their business model. Car manufacturer Tesla announced in July 2016 that owners of a Tesla could allow others to use their car with the help of an app. Most motorists only use the car for just 5-10% of the day. You can therefore earn money when you are at work or on holiday and are not using the car. It is also a way of drastically reducing the costs of the Tesla (Musk, 2016).

⁹⁷ The company has been market leader since it was founded. Greenwheels has 250 shared cars in Germany since it acquired the car-sharing company Quicar.

⁹⁸ This estimate does not include people who share a car with friends, neighbours or family.

emissions and better air quality; better and more efficient use of the existing infrastructure and less traffic congestion; enhanced liveability (less space needed for parking, fewer parking spaces).⁹⁹

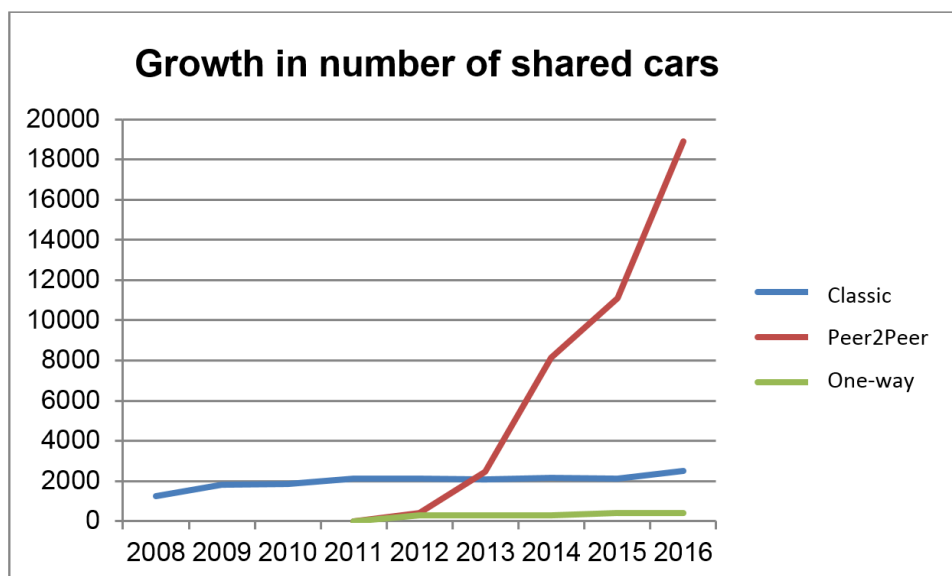


Figure 8.1: Development of car sharing in the Netherlands. Peer2peer car sharing refers to consumers who rent out their own car. With other forms of car sharing, a company rents cars to consumers (Source: Crow-KpVV, 2016)

8.2 Car sharing as a public goal

Car sharing can serve various public interests, such as promoting sustainability or saving space. In this section we discuss these interests and look at the prospects for the growth of car sharing and possible obstacles to its further growth.

Sustainability and the environment

Car sharing could make a contribution to sustainability. In many municipalities, improving air quality is a priority.¹⁰⁰ According to the car-sharing companies, the most important effects of car sharing in terms of sustainability are the production of fewer cars and lower CO₂ emissions.

The Netherlands Environmental Assessment Agency (PBL, 2015) has conducted research into the impact of car sharing on mobility and the environment. It assessed¹⁰¹ peer-to-peer and business-to-consumer (classic) car sharing. The survey showed that a shared car often replaces an extra car: car sharers now possess over 30% fewer cars than before they started car sharing. In particular people who adopted the 'classic' model of car sharing disposed of a car. A shared car has substituted for a

⁹⁹ The plans to stimulate car sharing originated in the Social and Economic Council's Energy Agreement for Sustainable Growth (SER 2013), which contained targets for substantial energy savings and reduction of CO₂ emissions in the transport and mobility sector by 2020. Shared cars would contribute to meeting those objectives.

¹⁰⁰ The municipality of Amsterdam, for example, is the first municipality in Europe to declare the ambition of being as near to emission-free as possible by 2025 (source: <https://www.amsterdameconomicboard.com/nieuws/the-lucht-in-amsterdam-wordt-schoner-and-gezonder>).

¹⁰¹ Based on a survey conducted among a representative sample of car sharers. The survey did not cover people who share a car with acquaintances without mediation by an organisation. The car rental sector and sharing with services such as Uber or Blablacar also fell outside the scope of the survey.

household's second or third car. Car sharers now also drive 15-20% fewer kilometres – particularly those who have disposed of a car drive a lot less. On average, car sharers drove approximately 9,100 kilometres a year before they started sharing a car and subsequently drove around 1,600 fewer kilometres. Due to the reduced ownership and use of cars per capita per annum, car sharers caused between 8% and 13% fewer CO₂ emissions (PBL, 2015). In terms of using a car, car sharing is therefore generally more sustainable than owning a car. There has not yet been any research into which form of car sharing, peer-to-peer or classical, has the greatest positive impact on the environment.

The environmental impact of car sharing also depends in any case on the type of car that is shared. Sharing a small eco-friendly car with low emissions is more sustainable than sharing a second-hand diesel car. The car-sharing concepts differ in this respect. A variety of cars can be shared via SnappCar's platform. At this stage, SnappCar consciously chooses to facilitate the sharing of every type of car. At the same time it promotes the sharing of cleaner cars, for example by highlighting eco-friendly cars on the platform or rewarding people who use those types of car. SnappCar realises that it would be better for eco-friendly cars to be shared as soon and as frequently as possible on the platform, but it does not want to refuse access to the platform for particular polluting cars at the moment because the platform is still in the broad adoption phase and wants to attract more users to the platform. This is not an issue for car-sharing companies like Greenwheels and Car2go,¹⁰² whose relatively new cars are cleaner than the average Dutch car (and SnappCar's shared cars). According to Greenwheels, the classic shared cars in the B2C model therefore make a relatively greater contribution to improving air quality than shared cars in the P2P model.¹⁰³

Spatial impact

As well as the benefits in terms of sustainability, the Green Deal stresses that car sharing leads to more effective use of the spatial environment. Shared cars can contribute to more efficient use of cars, thus reducing the demand for parking spaces. Saving space is an important priority for cities like Amsterdam, Utrecht and Groningen, which are considering car sharing in that context. Even in other cities, such as Eindhoven, where a shortage of public space is not such an urgent issue and parking is not a serious problem, the city council is also positive towards car sharing (interview with Greenwheels, 2016).

As already mentioned, the study by the Netherlands Environmental Assessment Agency showed that car sharers own over 30% fewer cars than before they started car sharing, while 37% of the respondents¹⁰⁴ who already owned a car said they would have bought an additional car if they had not started car sharing. Eight percent of the respondents who did not own a car said they would have bought one if they had not started car sharing (PBL, 2015; Nijland and Van Meerkerk, 2017).¹⁰⁵ Both SnappCar and Greenwheels observe that they reduce the pressure on public space and parking

¹⁰² For example, Car2go uses electric Smart cars in Amsterdam.

¹⁰³ Another positive effect of car sharing, according to Greenwheels, is its contribution to public health. According to the company, users of a shared car also regularly use public transport and people who travel in public transport or a shared car often have to walk or cycle to the station or the location where the shared car is parked.

¹⁰⁴ There were 165 respondents in all.

¹⁰⁵ Greenwheels would like to investigate the behaviour of people who dispose of their cars over a longer period: what happens and what is the effect? Will people buy a car or keep it for longer in order to rent it out? Does that effect exist and how do people feel about it? The findings of the PBL study (2015) were based on what respondents said they intended to do (interview with Greenwheels, 2016).

facilities. Greenwheels uses permanent parking spaces, but does reduce the number of cars and hence the number of parking spaces needed in the city. Greenwheels claims that between three and five cars disappear for every shared car (interview with Greenwheels, 2016). Growth in the number of classic shared cars does mean, however, that space has to be reserved in the city for parking spaces for them.

Social cohesion

According to the Ministry of Economic Affairs (2015b), one of the reasons to support initiatives in the sharing economy is that they can strengthen social cohesion in neighbourhoods. Stimulating social cohesion is an important positive effect of peer-to-peer car sharing, according to SnappCar. The company itself has conducted a small-scale study into the effects of car sharing on social cohesion in districts and neighbourhoods. Its research (conducted in association with Avance, a research firm specialising in impact assessment for social enterprises) showed that peer-to-peer car sharing promotes social cohesion and expands the social network of participants. Some car sharers remain in touch with each other even after the initial contact at the hand-over of the car keys (SnappCar, 2015). According to SnappCar, this social impact receives too little attention: policies towards car sharing in cities such as Amsterdam and Utrecht focus mainly on saving space and making the air cleaner.

SnappCar wants to safeguard the positive effect in terms of social cohesion. New technological developments, such as the smart lock (which allows a car to be opened with a smartphone), could make personal contact (the hand-over of the car keys) redundant in peer-to-peer car sharing. According to SnappCar, many users share a car frequently with the same people in the neighbourhood. In those situations, being able to share the car remotely, in other words without having to physically hand over the keys, can be handy. But, the company says, many users find it important to retain the personal interaction. That is partly connected with the fact that the car is a valuable asset and people therefore like to see who they are lending the car to. These are some of the reasons why the platform is unwilling to employ the smart lock for the moment. SnappCar feels that the social contact must continue to be guaranteed before it will adopt these technologies (interview with SnappCar, 2016).

Level playing field

Car sharing is widely encouraged, as is evident from the wide variety of car-sharing initiatives and the range of parties that have signed up to the Green Deal. But there is some discussion about whether some parties are being stimulated more than others. According to SnappCar, the playing field for car-sharing initiatives is not level at the moment. It feels, for example, that Greenwheels is in a privileged position because it receives support (subsidies) from some municipalities in acquiring parking spaces for its shared cars. According to Greenwheels, however, the two initiatives cannot be compared because their needs are different. For example, SnappCar does not have to deal with municipalities and parking permits and the associated costs because it uses the services of people who use their own car and have parking permits that they have paid for themselves.¹⁰⁶ Greenwheels uses permanent parking spaces and has to apply for parking permits from 80 different municipalities, all

¹⁰⁶ A parking permit for individuals in Amsterdam Centre costs €267.50 for six months. In the city's East district a permit costs €132.50 for the same period. In Utrecht, a parking permit in the centre costs €66.45 per quarter.

with their own rules and licensing structures.¹⁰⁷ Greenwheels would like to see coordination between municipalities and the national government in that respect.

The classic model of car sharing can also cost a municipality money because of the costs associated with the parking spaces. Municipalities that wish to facilitate classic car sharing must therefore be willing to make those parking spaces available. According to Greenwheels, municipalities charge different rates for a parking space depending on their view of car sharing. Those rates range from zero to €1,800 a year per parking space in Almere. Some municipalities that are working hard to relieve the pressure on public space and promote sustainability in the city (such as Amsterdam, Utrecht and Groningen) consider car sharing to be a positive development. When it applies for a parking permit Greenwheels has to provide the municipality with user data. For example, the company has to explain in advance why it needs a particular parking space and how many journeys it expects. Greenwheels then also has to provide figures about the use of its service afterwards. Greenwheels in fact feels it is right that some municipalities help the company by providing permanent parking spaces because its shared cars are generally cleaner than those of SnappCar and are also used on a daily basis¹⁰⁸ (interview with Greenwheels, 2016).

Fiscal aspects and taxes

The owner of a car rented out via SnappCar can quickly earn €50. As a rule, tax has to be paid on income. According to SnappCar, there is still a great deal of uncertainty surrounding the income of users in the sharing economy. It says it would be helpful if there was clarity about where the threshold lies in terms of what a person is allowed to earn tax-free in the sharing economy. The average income generated by a car sharer via SnappCar is approximately €1,500 a year. According to SnappCar, for the time being this is not yet a sum that people should have to pay tax on. SnappCar feels the threshold should be around €5,000 and that users should not have to pay income tax up to that amount. But SnappCar understands perfectly that government would want to levy tax as soon as it becomes a business and people start earning more. SnappCar objects to the initial income that people earn being immediately taxed because that will be a deterrent to regular car sharers. The Ministry of Infrastructure and the Environment also feels that the tax aspects need to be clarified, especially if car sharing becomes an integral component of mobility policy.¹⁰⁹ Car sharing could be encouraged by establishing an income threshold (depending on the type of car) below which no tax has to be paid.¹¹⁰

Another question is who is responsible for reporting income and who will verify the information. SnappCar does not want to collect the tax itself and argues that users themselves are responsible for the tax returns. However, the company is willing to share data with public agencies, for example in connection with tax-related or other measures designed to encourage car sharing. It could provide users with information for the tax return. A new challenge will arise in terms of monitoring and enforcement if rules are adopted with regard to how often a car can be rented out and how much can

¹⁰⁷ Municipalities formulate their own parking policies.

¹⁰⁸ 'The use is different, and the vehicles are different. Ours are cleaner. When you provide a polluting car that is not used, you cannot expect to get the same as the person who provides the cleanest possible car which is used every day' (interview with Greenwheels, 2016).

¹⁰⁹ Although the income is so small at the moment that it is questionable whether you would want the Tax Administration to implement a formal policy for it.

¹¹⁰ One factor in relation to car sharing is that the use of the car, and thus renting it out, costs money (depreciation costs). As long as the amount charged is a payment for those costs no tax has to be paid on it, according to the ministry.

be earned from doing so. The platform would then have to share user information with agencies so that they can monitor compliance with the rules. In addition, a car sharer can be active on different platforms. Rules for the maximum amount that can be earned would then have to apply to all of the platforms on which a car sharer is active and those rules would have to be monitored and enforced on all the platforms.

8.3 Policy process: stimulating car sharing in the Netherlands

Collaboration within the Green Deal on Car Sharing

With the Car Sharing Green Deal, the national government, suppliers of shared cars, lease companies, insurance companies, municipalities, businesses and interest groups are working together to create a market with 100,000 shared cars by 2018.¹¹¹ The Green Deal has a steering group and the members have formed a number of working groups to address specific themes (such as knowledge sharing and municipalities). According to Greenwheels, the collaboration within the Green Deal has improved the communication between public authorities and suppliers (interview with Greenwheels, 2016). Municipalities are also able to share their experiences and learn from each other's policies. A conscious decision was made to embrace every form of car sharing in the Green Deal (interview with the Ministry of Infrastructure and the Environment, 2016), firstly because the various models are likely to encounter many of the same issues, and secondly, according to the Ministry of Infrastructure and the Environment, to exploit the possibilities for cross-pollination between the various concepts. Parties that operate in the consumer market (such as SnappCar) and parties engaged in commercial car sharing (such as the lease companies and large employers represented in the Dutch Sustainable Business Association (*Groene Zaak*)) would be able to learn from one another. They are in principle two different worlds in which the participants face different types of problems, for example in relation to tax rules,¹¹² but, the ministry feels, it is still worth their while conversing as it can lead to interesting new developments. For example, the consumer platform WeGo is now also available to the business market.

According to the ministry, the failure to share data is an obstacle to effective cooperation within the Green Deal on Car Sharing (and to achieving its objectives). Parties are unwilling to share commercial information. Many parties appear to have difficulty abandoning their own business model and providing full disclosure. Collaboration and sharing data would be very useful in helping researchers and policymakers to learn more about what does and does not work. What are triggers? What are our common experiences (interview with the Ministry of Infrastructure and the Environment, 2016)? In the United Kingdom data is shared via an independent third party, Carplus,¹¹³ an organisation that campaigns for sustainable mobility and is the accreditation body for car-sharing suppliers (interview with Greenwheels, 2016). A car-sharing company in London has to be accredited

¹¹¹ Greenwheels is critical of this objective because it feels the goal should actually be to serve as many people as possible with the fewest possible cars.

¹¹² An important point in relation to the tax rules, according to the Ministry of Infrastructure and the Environment, is that it will be easier to share a car in the business market, where lease cars are used. A lease car currently has to be registered in the name of a single person and cannot be registered in more than one person's name. This is connected with the tax levied on the private use of the lease car. That is a direct relationship between the employer and a specific employee. It cannot be broken up to allow the lease car to be shared with other employees (interview with the Ministry of Infrastructure and the Environment 2016).

¹¹³ <http://www.carplus.org.uk/about/>

by Carplus and to receive accreditation it has to meet certain criteria, deliver monthly data and take part in an annual user survey designed to gather data about the number of kilometres driven and the types, number and sustainability of the cars used.

Stimulation measures

Car sharing could be stimulated in numerous ways in the Netherlands. Municipalities could provide more and cheaper parking spaces for car sharers, for example. Public authorities could publicise the practice, subsidise the use of shared cars if they do not yet cover their costs, but also use shared cars themselves (Crow-KpVV, 2015b). Provinces and regions could work with municipalities to create good links with public transport.

According to SnappCar, a lot could be achieved by raising public awareness of car sharing. Only a very small proportion of the population is familiar with car sharing. There are also neighbourhoods where the demand for cars is greater than the supply (there could be more cars in Amsterdam, according to the platform), while in other districts people complain that they cannot rent out their cars. The government could publicise car sharing, for example with a government campaign (“Postbus 51”). Municipalities could install road signs indicating the parking spaces for shared cars and so bring car sharing to the attention of a wider public. The parties to the Green Deal are also endeavouring to increase awareness of car sharing.

At central government level, tax measures (such as favourable VAT rates) might encourage car sharing. Greenwheels finds it regrettable that politicians and public administrators have difficulty adopting measures that encourage people to use their cars less.¹¹⁴ Positive incentives might include discounts on motor vehicle tax and making the costs of car sharing tax deductible. A measure that could be taken at national or European level is the adoption of rules for cleaner cars. At municipal level, higher parking rates (to make car ownership more expensive) or issuing fewer parking permits would help. Cities could promote car sharing by offering sharers a discount on the cost of a parking permit or priority in the issuing of permits.¹¹⁵ SnappCar is willing to share data to expedite these types of measures.

SnappCar is unhappy that different forms of car sharing (peer-to-peer and business-to-consumer) are all lumped together. It believes that public authorities underestimate the scale and potential of peer-to-peer car sharing. SnappCar considers it important for the government to recognise the strength of peer-to-peer car sharing, since that model could grow more strongly than the classic model and because as well as saving space and yielding environmental benefits, it also enhances social cohesion. SnappCar also contends that it suffers from the fact that the platform is sometimes seen as a commercial business that is earning a lot of money, in contrast to other suppliers that operate as a cooperative (such as MyWheels) or have a far stronger good-for-the-environment image (such as GreenWheels).¹¹⁶ According to SnappCar, some local authorities are consequently unwilling to be associated with SnappCar, although they have cooperated with Greenwheels for years. SnappCar

¹¹⁴ Politicians and aldermen sometimes stress that they do not want to bully motorists (interview with Greenwheels 2016).

¹¹⁵ At the same time, that is susceptible to fraud. For example, people could register with SnappCar in order to secure a parking permit sooner.

¹¹⁶ More generally, SnappCar says that the debate about the sharing economy is dominated mainly by discussions about Airbnb and Uber (which are not part of the sharing economy, according to SnappCar). This fails to do justice to the sharing economy, something that SnappCar also suffers from (interview with SnappCar, 2016).

wants the government to be slightly more nuanced in its approach to car sharing. According to SnappCar, the city of Amsterdam sets the right example because it engages in a dialogue with P2P car-sharing platforms in the realisation that those platforms are growing rapidly. More generally, SnappCar argues that social enterprises in the sharing economy (including SnappCar itself) should receive more support. SnappCar would like the government to recognise the companies that are working on a new economy as an official type of business and support them with separate regulation.

8.4 Conclusion

The government's aim is to have 100,000 shared cars by 2018. That target is set out in a Green Deal with suppliers of shared cars, lease companies, insurance companies, municipalities, businesses and interest groups. Car sharing is desirable because it yields environmental benefits and eases the pressure on infrastructure and public space. Peer-to-peer car sharing also appears to have a positive effect on social cohesion. Business-to-consumer car sharing, as in the case of Greenwheels, has existed for 20 years. Peer-to-peer car sharing (exemplified by SnappCar) has only emerged in the last few years, but is likely to grow rapidly in the coming years because it uses car owners. Accordingly, P2P platforms do not have to own their own fleet of cars and are not dependent on municipal parking policy. The P2P model can therefore be scaled up quickly.

It is unclear how much car owners can earn tax-free from sharing their car. Some parties call for a clear threshold, but that would mean that information about the car sharer's use of the system would have to be shared with the government or the Tax Administration so that the limit could be enforced. Companies are not willing to simply share data with the authorities; they want something in return, such as measures to stimulate the practice of car sharing. The sharing of data between the parties to the Car Sharing Green Deal is also proving difficult. A possible solution might be the appointment of an independent third party like the one in the United Kingdom.

A number of measures could help to generate strong growth in the number of shared cars by 2018. First, the government could organise publicity campaigns to increase public awareness of car sharing. In relation to taxation, car ownership could be made more expensive and car sharing more attractive. Municipalities could encourage car sharing by making parking spaces available to car sharers and raising the cost of parking permits for residents.

9. Analysis of the five case studies

On the basis of the case studies in part II, this chapter answers two of the questions formulated in chapter 1: What public interests play a role in the sharing and gig economy? How are those public interests safeguarded and what are the roles of governments and platforms in particular in that process? Section 9.1 summarises the public interests that are affected by the sharing and gig economy and reviews how the various parties endeavour to safeguard those interests in the context of the new practices. Section 9.2 then discusses the interaction between the platforms and the public authorities in creating the safeguards.

9.1 Public interests and their safeguards

This section provides an overview of the public interests that are affected by the new practices that have arisen with the emergence of Helpling, UberPop, Airdnd, Airbnb and SnappCar and an appraisal of the negative and the positive effects of sharing and gig platforms.

Negative effects

Table 9.1 contains a list of eight public interests that could be negatively affected by one or more of the sharing and gig platforms: level playing field, taxation, consumer protection, prevention of discrimination, public order, platform-independence, prevention of monopolies and protection of privacy and autonomy. This section explores the issues relating to these public interests and describes how governments and platforms try to safeguard the relevant interests. Table 9.2 presents a concise overview of the actions taken by governments and platforms.

Uneven playing field

A major problem with online sharing and gig platforms is that they can cause unfair competition to arise between consumers who sell goods or services via platforms and professional companies operating in the same market. Platforms enable private individuals to enter existing markets where often only licence holders are allowed to operate and income tax has to be paid. With the UberPop app, for example, Uber enabled drivers to operate without a licence and hobby chefs with Airdnd serve alcohol, also without a licence. With Helpling, Airbnb and SnappCar, the playing field is also unequal for professional competitors.

This issue has prompted varying reactions. UberPop was banned by the Ministry of Infrastructure and the Environment. Airdnd consciously avoids competing with the hotel, restaurant and café sector and has established a ceiling of one meal a week and annual turnover of €7,000 to prevent hobby chefs from being regarded as professionals. The government has also entered into a dialogue with Airdnd and Helpling regarding these issues. The Municipality of Amsterdam has tried to create a separate playing field for Airbnb by capping the renting out of accommodation (60 days a year, 4 persons at a time). In response, Airbnb removes advertisements for properties that have been rented out for 60 days in a particular year. Furthermore, tourist tax has to be paid and the municipality is investing in its capacity to investigate violations and so fine offenders. The House of Representatives has passed a motion calling for mandatory registration of accommodation sharing.

Table 9.2 Negative effects of sharing and gig platforms

Negative effects	Helping	UberPop	Airdnd	Airbnb	SnappCar
Uneven playing field	X	X	X	X	X
Loss of tax revenue	X	X		X	
Limited consumer protection	X	X	X	X	X
Discrimination		X		X	
Breach of public order			X	X	
Platform-dependence	X	X			
Monopolisation		X		X	X
Curtailment of privacy and autonomy		X		X	

Rathenau Instituut

Loss of tax revenue

In addition to the uneven playing field there is the problem of taxation, a problem the Tax Administration is very aware of (NOS, 2016c). It is questionable whether drivers for UberPop, cleaners with Helping and people who rent out their homes via Airbnb pay tax on the income. Not everyone will take their tax obligations seriously in the knowledge that platforms, in the interests of the suppliers' privacy, do not share data with the Tax Administration. The income of home restaurants and people who rent out their own car is often incidental and so little that it can be

regarded as payment of expenses.¹¹⁷ Occasionally, however, there is recurring income and the prices charged greatly exceed the costs incurred, in which case tax has to be paid on the income.

There are various ways in which the payment of tax is facilitated. Airbnb, for example, collects tourist tax automatically via the reservation system. Helping informs cleaners of their annual income to make it easier for them to file a tax return. The Tax Administration has a special site with more information about activities on which tax has to be paid.

Restriction of consumer protection

Consumer protection is another public interest that is affected in each of the five case studies. For example, hotels are bound by safety regulations and restaurants by rules governing food safety and responsible alcohol consumption. The cars operated by taxi and car rental companies must always have a roadworthiness certificate. Although such guarantees also apply for private individuals who let their home, provide a dinner or a taxi ride or rent out a car, there is practically no supervision of their compliance with the rules. There are also other rules that companies have to observe, such as delivery deadlines and complaints schemes.

An important mechanism by which platforms can safeguard consumer protection is the system of reviews. Rating systems are seen by some as an alternative to rules and these people argue that public interests that are protected by regulations can also be protected by reviews. Good reviews generate more customers and higher prices for suppliers, while bad reviews have the opposite effect. Suppliers who deliver quality are therefore automatically rewarded, while those that do not are punished. Some platforms even resort to removing suppliers that in their view fail to meet the necessary standards. It is questionable, however, whether reviews genuinely reflect aspects such as product safety or the quality of service provided.

The platforms all give instructions on issues such as fire safety and hygiene. On the government side, the Municipality of Amsterdam has prescribed that fire alarms are mandatory in accommodation that is being shared via Airbnb. The Food and Consumer Product Safety Authority has delegated responsibility for food safety to Airdnd, but has not yet taken any action. SnappCar and Helping offer insurance to protect users and Airbnb offers free liability insurance to persons who rent out their homes.

Discrimination

A specific form of legal protection that is lacking is protection against discrimination. Afro-Americans who rent out accommodation in the United States can demand relatively less rent (Edelman and Luca, 2014) and have to wait longer for a taxi with Uber (Ge et al., 2016). There is also evidence that people who make spelling mistakes in their online communication are less likely to be selected as a supplier (Schor et al., 2016). Airbnb recently made tackling discrimination a priority and has already adopted a number of measures (Airbnb, 2016b). For example, people now have the option of accepting applications directly and automatically. Airbnb now also obliges people letting a

¹¹⁷ http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/privewerk_en_inkomen/internetecconomie/internetecconomie-deeleconomie

property to sign an agreement that they will treat everyone with respect and without prejudice or bias, regardless of race, religion, nationality, ethnicity, handicap, gender, gender identity, sexual nature or age. Verifying whether property owners keep that promise is difficult, however.

Breaches of public order

There can also be negative externalities associated with transactions conducted via sharing platforms; in other words, third parties can suffer nuisance from a transaction between two other parties. This is mainly a factor with accommodation sharing and home restaurants, because neighbouring residents can be troubled by noise, have more difficulty finding a parking space or feel unsafe. The tourism boom in certain neighbourhoods in Amsterdam's inner city as a result of accommodation sharing has led to considerable protests. Some local politicians have responded by calling for a more restrictive policy. Local residents can file a complaint with Airbnb about nuisance. The Municipality of Amsterdam has opened a hotline for complaints and only allows apartments to be rented out if a complex's association of owners (VvE) agrees. Airbnb prevents nuisance by prescribing that home restaurants may not open more than once a week.

Platform-dependence

It is not only consumers whose protection on platforms is limited – suppliers can also suffer from ineffective protection of their rights. This is mainly an issue with service platforms like UberPop and Helping, where suppliers formally operate as freelancers and determine their own working hours, but are not free to set their own price. In a more fundamental sense, suppliers are in a position of dependence in relation to the owner of the platform because the latter has the power to deny suppliers access to the platform on the basis of reviews or for other unspecified reasons. One could therefore speak of an employer-employee relationship. Helping follows the Regulation on Domestic Service in order to avoid being regarded as an employer. The last word has clearly not been spoken on this issue in light of the ongoing legal actions in the United States. In fact, the asset-sharing platforms also have the right to deny suppliers access to the platform if they feel they have cause to do so, as Airbnb has indeed done on occasion.

Monopolisation

If a monopoly is formed, a large share of the wealth gains generated by platforms will accrue to the owners of the platform rather than to its users, although – ironically enough – it is the users that actually add the most value by supplying assets and posting reviews. The case studies contain no examples of instances where the interests of platform users are being better safeguarded in this respect.

Curtailement of privacy and autonomy

All five platforms covered in this study collect data about users, with UberPop and Airbnb going furthest in that regard. Airbnb uses personal data for commercial purposes. At the same time, platforms actively shield these data from the public authorities. No specific actions by governments in relation to privacy were discovered in the case studies.

Table 9.2 Specific actions taken by the five platforms and governments to mitigate negative effects

Negative effects	Action by platform	Action by government
Uneven playing field	Airdnd has established its own cap of once a week to prevent hobby chefs from being regarded as professionals. Airbnb has announced that it will remove advertisements for properties when they have been let for 60 days.	The Ministry of Infrastructure and the Environment has banned UberPop from providing taxi rides. The Municipality of Amsterdam has capped the letting of properties via Airbnb (60 days a year, 4 persons at once). Tourist tax has to be paid. The municipality is investing in capacity to investigate and fine violators. The House of Representatives has passed a motion calling for mandatory registration of accommodation sharing. The government is engaged in talks with Helping and Airdnd and other stakeholders.
Loss of tax revenue	Tourist tax is paid automatically via Airbnb. Helping informs cleaners about their annual income to make it easier for them to file a tax return.	The Tax Administration has created a special website with additional information about activities that are liable for tax.
Curtailement of consumer protection	All of the platforms provide instructions on issues such as fire safety, hygiene, etc. Snappcar and Helping offer insurance. Airbnb has established a guarantee fund. All of the platforms have a system by which participants can leave reviews and in some cases refuse access to undesirable participants.	The Dutch Food and Consumer Products Safety Authority (NVWA) regards food safety in home restaurants booked via Airdnd as the platform's responsibility, but has not yet taken any action. The Municipality of Amsterdam has made a fire alarm obligatory for homes that are shared via Airbnb.
Discrimination	Airbnb has taken a number of measures to prevent discrimination.	None
Violation of public order	Platforms endeavour to promote good behaviour with the help of reviews. Platforms such as Airbnb allow people to file a complaint about nuisance. Airdnd has instituted a ceiling of once a week.	The Municipality of Amsterdam has opened a hotline for complaints about Airbnb by local residents. The Municipality only approves accommodation sharing in apartment buildings if the property owner has the consent of the Association of Owners.
Platform-dependence of supplier	Helping follows the Regulation on Domestic Service to avoid being regarded as an employer.	None
Monopolisation	None	None
Curtailement of privacy and autonomy	Platforms actively protect the privacy of personal data vis à vis the government. Airbnb uses personal data for commercial purposes.	None

Positive effects

The positive effects of sharing and gig platforms are discussed here on the basis of the five case studies. Table 9.3 shows five public interests that are (or can be) positively influenced by some sharing and gig platforms: wealth, employment, entrepreneurship, social cohesion and environmental benefits. This section explores the issues surrounding these public interests in more detail and describes how governments and platforms try to promote them. Table 9.4 presents a brief overview of the actions taken by governments and platforms.

Table 9.3 Positive effects of sharing and gig platforms

Positive effects	Helping	UberPop	Airdnd	Airbnb	SnappCar
Wealth	X	X	X	X	X
Employment	X	X			
Entrepreneurship	X	X	X	X	
Social cohesion			X	X	X
Environmental benefits					X

Rathenau Instituut

Wealth

The most important positive effect of the sharing and gig economy is lower prices. Consumers can rent more and more goods and services more cheaply via a platform than from a company. The savings are mainly the result of the lower transaction costs for platform participants, but sometimes also arise from the avoidance of tax, social security contributions and formal quality standards. The platform enables large numbers of participants on the supply side and the demand side to establish contact quickly and in good faith. This leads to lower prices and customer-friendly service.

Employment

The greater efficiency of services provided via a platform also contributes to economic growth and creates new work for freelancers. Lower prices will lead to greater demand for certain services and so more work will be created in the relevant sectors. The positive effect on employment will then be concentrated in the gig economy and platforms like Helping and UberPop. The disposable income

of consumers will also rise, with the money saved being spent on other things, which will also indirectly create more work. With the wider use of platforms, as a result of robotisation and automation, people who used to broker supply and demand will be replaced by algorithms. Jobs could therefore also be lost. Regular jobs are also going to disappear at companies that face competition from consumers engaging in the sharing economy (hotels and car rental companies, for example). The big question is whether the wealth increase and the new jobs that are created will compensate for the loss of jobs. That has hitherto always been the case with processes of automation, digitisation and robotisation, but since 2010 economists have been debating whether it will also apply in the future (Van Est and Kool, 2015).

Entrepreneurship

Platforms could provide an infrastructure that allows people to move in new directions. An example might be people who start a meal delivery service via Thuisafgehaald or Airdnd and later open their own restaurant or start working as a chef in an existing restaurant. Platforms like UberPop and Helping have also enabled people to earn extra income.

Social cohesion

Platforms can also promote social cohesion by making it easier for strangers to come into contact with one another. The encounters can then lead to valuable social relationships, especially if the people involved live in the same neighbourhood and meet repeatedly (as with SnappCar). The extent to which social cohesion is promoted will differ from one platform to another. For example, taxi journeys (UberPop) are generally short and impersonal, while people who are sharing a long-distance ride can get to know each other better. And while home letting (Airbnb) is becoming increasingly impersonal, the whole point of home restaurants (Airdnd) is to create a domestic setting. Airbnb and SnappCar promote social cohesion by organising events at which suppliers can meet one another and it is also an important element in the marketing of these platforms. For its part, the Municipality of Amsterdam tries to introduce more people to the sharing economy via the *Stadspas*.

Environmental benefits

Platforms can generate environmental benefits, as in the case of car sharing (SnappCar) and carpooling/ride sharing (BlaBlaCar). With these sharing practices, fewer cars are needed, fewer kilometres are driven per capita and better use is made of the capacity of cars. It remains to be seen whether accommodation sharing (Airbnb) and taxi services (UberPop) will actually make a positive environmental contribution. Unfortunately, there have not yet been any independent empirical studies into the environmental impact of these platforms. Airbnb could lead to fewer hotels being built and hence to savings in energy consumption and the use of materials, for example, but the lower prices for trips abroad will also lead to extra pollution because of the additional air traffic. The effects of the taxi services are also ambiguous. The massive use of taxis might lead to a drastic reduction in car ownership in cities, but could also drive up the total number of kilometres driven at the expense of the use of bicycles and public transport.

Airbnb and SnappCar both stress environmental benefits in their marketing. The government promotes the practice of car sharing through the Car Sharing Green Deal. For example, income (in

the form of expenses) is tax-free and various municipalities provide information about car sharing to new inhabitants.

Table 9.4 Specific actions taken by the five platforms and the government to promote positive effects

Positive effects	Action of platform	Action of government
Wealth	All five platforms generate lower prices and customer-friendly service.	None
Entrepreneurship	None	None
Employment	None	None
Social cohesion	Some platforms (Airbnb, SnappCar) organise events at which suppliers can meet each other. SnappCar and Airdnd stress social cohesion in their marketing.	The Municipality of Amsterdam tries to introduce more people to sharing economy initiatives by linking those initiatives to the <i>Stadspas</i> .
Environmental benefits	SnappCar and Airbnb stress environmental benefits in their marketing.	The government stimulates P2P car sharing with the Green Deal on Car Sharing; revenues (as expenses) are tax-free; various municipalities provide information to new inhabitants about P2P car sharing.

9.2 Interaction between platforms and governments

This section describes the interaction between the platforms and public authorities with regard to the public interests affected by sharing and gig platforms. The question is how these public interests can be safeguarded and who is responsible for safeguarding them: the public authorities, the platforms or other actors. We start by considering the attitude of the platforms.

Attitude of the platforms

The case studies show a wide disparity in the ambitions of the platforms and their attitudes towards public authorities. Whereas Airdnd consciously endeavours to keep the scale of its activities small, UberPop's ultimate aim was to create a new form of mobility. And whereas Airdnd engages in a dialogue with the government, UberPop chose to try to change the taxi market by means of a legal battle and through the media. Only a wealthy company can permit itself that attitude.

Platforms use various methods to gain public and legal legitimacy. Helpling uses the possibilities afforded by the existing Regulation of Domestic Service. The effectiveness of this regulatory framework has been debated for years. Helpling claims that the platform can make this framework effective. UberPop legitimised its services and its avoidance of the provisions of the Taxi Act by asserting that the law was outdated. When Airdnd was informed that it was not complying with the legislation governing the hotel, restaurant and café sector, for example the rules relating to serving alcohol, the platform referred to 'blurring', the trend among hairdressers and fashion stores of offering customers a glass of wine. Airbnb says that the rules governing the hotel sector do not apply to it because it is an online platform. SnappCar positions itself as a platform that will enable various policy objectives to be achieved. In short, platforms try to create room for their new practices by adhering to existing regulatory frameworks (Helpling) and policy objectives (SnappCar), by challenging the existing frameworks as outdated (UberPop & Airdnd) or by arguing that the frameworks do not apply (Airbnb).

Directly connected with that latter point, there are platforms that operate within a particular sector but portray themselves as organisations that do not fit within the existing framework for that sector because their identity does not match the categories, concepts, specifications, measures, requirements or conditions defined for that sector (see Maclaine Pont et al., 2010, p. 10). UberPop, for example, does not promote itself as a taxi company but as a technology company, and Airbnb claims to be an online trading platform rather than an accommodation broker. In Airbnb's case, that claim has consequences for whether it has an obligation to share data with the public authorities. Helpling does not wish to be regarded as an employer, although there are grounds for regarding the platform as such. As an employer Helpling would have far greater responsibilities towards the cleaners. Accordingly, various platforms challenge the existing legal categories. As long as the uncertainty remains about how particular platforms should be defined in legal terms, there will be questions about rights, obligations and responsibilities.

Thirdly, it is noteworthy that all of the platforms said in interviews that they regard the government as responsible for enforcing rules and protecting public interests. The problem with this position is that effective enforcement is often impossible for public authorities without data about users and the

use of platforms. However, the platforms are unwilling to share these data with the authorities. At least not without receiving something in return. Airdnd, for example, is willing to discuss sharing anonymised user data but in exchange it wants certainty about the rules: what is and is not permitted.

Attitude of public authorities

In Box 1.2 we present four possible options for the policy to be adopted towards digital platforms: strict enforcement, deregulation, ad-hoc regulation, no intervention (toleration). As the five case studies have shown, public authorities adopt varying strategies towards platforms. In the case of UberPop, the government enforced the rules in the Taxi Act and as a result Uber stopped its UberPop operations. Airdnd and Helping are tolerated as it were, but a Right to Challenge process might perhaps be followed for Airdnd. The Municipality of Amsterdam has adopted ad-hoc rules for Airbnb, the most important being that people who rent out their properties may not do so for more than 60 days a year. Enforcement of that rule has recently been largely delegated to Airbnb itself. The interventions chosen in relation to car sharing have been geared more to stimulation than regulation. For example, a Car Sharing Green Deal has been established in which the government participates.

Part III

The sharing and gig economy from a public policy perspective

In chapter 10 we address the principal question being examined in this study: how can public interests affected by the sharing and gig economy be safeguarded? We present a list of twenty recommendations intended to spark a public and political debate about the sharing and gig economy and to help shape the policy-making process.

10. Twenty recommendations for debate and policy making

The sharing and gig economy is growing rapidly, in terms of turnover, the possibilities it offers and the number of people participating in it. In the Netherlands alone, there are more than 150 online platforms that facilitate the use of under-utilised goods or services. According to ING (2015), 8% of Dutch households acquired or rented something for payment in the sharing economy in 2014. This trend could intensify further in the near future as platforms appear in an ever-expanding range of social domains and devices, homes, robots and people become integral components of the Internet of Things. PWC (2015) even forecasts that by 2035 the turnover in major sectors of the consumer-to-consumer sharing economy such as travel and car sharing will be similar to that of the traditional (producer-to-consumer) economy. Accommodation sharing would then account for 50% of the hotel market and shared cars for 50% of the total distance travelled in cars, for example.

The Rathenau Instituut's report *Urgent upgrade: protect public values in our digitized society* (Kool et al., 2017) showed that the extensive digitisation of society raises fundamental ethical and social issues that the government, regulators, the business community and the public are not yet adequately equipped to deal with. This study of sharing and gig platforms illustrates this general phenomenon. The platforms in the sharing and gig economy are innovations that create opportunities for job creation and lower prices, greater freedom of choice and the environment and social cohesion. At the same time, the way platforms and their users operate is inconsistent with the methods of existing market parties and the institutions that protect particular public interests. Politicians and policymakers therefore face difficult decisions because platforms promote some public interests, but undermine others. The opportunities and problems created by these platforms therefore confront the government with new issues. And while the calls for action from various sections of society are growing louder, the government's grasp on the impact that platforms have on a variety of public interests is still limited.

To understand that impact it is useful to compare digital platforms with other forms of innovation (Frenken, 2016). In areas such as new medicines, new aircraft, new food, new building methods and new toys, innovation is now strictly regulated. New medicines, for example, first have to be tested for years in clinical trials before they are allowed onto the market. But what we are now seeing with the rise of the sharing and gig economy is totally different: as numerous companies launch new platforms they simply ignore the existing rules and declare them to be outdated. If that were done with respect to medicines or cars it would be considered a total outrage. Just think of the scandal surrounding Volkswagen's diesel cars and the enormous fines it led to and the damage it caused to the company's reputation. Platforms have been able to grow rapidly often ignoring regulatory frameworks. Consequently, platform companies have created legitimacy in various ways: via a belief in technological progress, the appeal of entrepreneurship, new services, the convenience and benefits for users and the economic gains. Furthermore, as we saw in chapter 9, various platform companies actually challenge existing frameworks by dismissing them as outdated

or arguing that they do not apply to them. This conceptual and legal confusion creates uncertainty about rights, duties and responsibilities with respect to the protection of public interests.

In this concluding chapter we address the central question in this study: how can public interests that are affected by the sharing and gig economy be safeguarded? In this study we have looked at sharing and gig platforms that operate in various sectors and which differ greatly in both economic and institutional terms. Problems relating to regulation do not arise in every sector. Asset sharing (Peerby), car sharing (SnappCar) and carpooling (BlaBlaCar) are simply permitted because the income they generate is incidental and is regarded as payment of expenses. Job platforms like Werkspot also operate in accordance with the existing rules because they only use professional suppliers who are registered with the Chamber of Commerce and the platform does not adopt fixed prices. It is on the sharing and gig platforms on which private individuals permanently offer their assets and services that there is a conflict with the laws and regulations that apply for existing professional suppliers in a sector.

The diversity of platforms illustrates the complexity of the challenges facing policymakers and suggests that the logical approach is to formulate policy on a case-by-case basis.¹¹⁸ Nevertheless, on the basis of the five case studies and the review of the literature and earlier reports by the Rathenau Instituut, we are able to draw a number of general conclusions about how public interests affected by the sharing and gig economy can be safeguarded. This chapter does not propose any specific measures or amendment to the law, but presents twenty recommendations designed to help policymakers and advance the public and political debate. We have grouped the recommendations into four categories: clarification and dialogue (section 10.1), promotion of positive effects (section 10.2), mitigation of negative effects (section 10.3) and enforcement (section 10.4).

10.1 Clarification and dialogue

1. Prevent negative effects and promote positive effects in relation to the sharing and gig economy

In chapter 9 we discussed both the negative and positive effects of sharing and gig platforms. Public interests that are negatively affected are a level playing field, taxation, consumer protection, platform-independence, public order, prevention of monopolisation and protection of privacy and autonomy. Sharing and gig platforms can also have positive effects in terms of wealth, employment, entrepreneurship, social cohesion and environmental benefits. The actions of governments and platforms should be targeted at preventing the negative effects and promoting the positive effects.

¹¹⁸ Minister of Economic Affairs Henk Kamp says he will consider what scope there is to safeguard public interests in each individual case, whether additional rules are needed or whether existing rules need to be clarified (Ministry of Economic Affairs, 2015a).

2. Encourage research into and a dialogue about the effects of the sharing and gig economy on public interests and how those interests can be safeguarded

There has been little empirical research into the impact of the sharing and gig economy on various public interests. In addition to more academic research, wider discussion is needed.

There is still very little academic literature on the subject of the public interests affected by the rise of the sharing and gig economy and how those interests can be safeguarded in practice. Empirical research is needed to learn more about the positive and the negative effects. Public interests are experienced and reported by people who are involved with sharing and gig platforms or who personally suffer from their impact. Particularly with new developments, research and an early dialogue between the various stakeholders are essential to identify the public interests that are affected and find ways of protecting them. In that respect, research and dialogue can reinforce one another.

3. Clarify the legal status of sharing and gig platforms

Some platforms challenge existing legal categories. Legal uncertainty leads to a lack of transparency about how public interests should be safeguarded and by whom. It is therefore important to define the legal status of platforms.

In chapter 9 we saw that platforms create room for their new practices in two ways: by adapting to existing regulatory frameworks and by challenging the existing frameworks, in the latter case by dismissing the existing frameworks as outdated and therefore no longer applicable. Platforms operating in a particular sector can also argue that their identity does not correspond with the categories, concepts, specifications, measures, requirements or conditions defined in that sector (see Maclaine Pont et al. 2010, 10). The uncertainty about rights, duties and responsibilities will continue as long as it remains unclear how particular platforms should be legally classified. An important challenge for the government is to clarify the legal status of specific platforms, which could also mean that a new form of legal entity will have to be devised. In relation to consumer protection, transparency is also required in terms of the rights and duties of platforms, renters and owners in the event of damage, cancellation or fraud. For example, a survey by the Dutch Consumers' Association showed that consumers can sometimes make a claim on their cancellation, travel, liability or legal assistance insurance (Consumentengids, 2017).

10.2 Promoting positive effects

In this section we mention a number of ways in which the positive effects of platforms could be reinforced, starting with four recommendations concerning users and the use of platforms. It is crucial for the users that the reviews posted on platforms are reliable and that the users can take their reputation profile with them if they switch to a different platform. Participation in the activities of the sharing and gig economy that yield substantial environmental benefits could also be stimulated with changes in the tax regime. From the perspective of social justice, it is important that low-income members of society should also be able to profit from sharing platforms. We also mention two recommendations concerned with promoting competition and not-for-profit and cooperative platforms.

Users

4. Guarantee the reliability of reviews on platforms

The government could draw up specific guidelines on how platforms should deal with user ratings in order to prevent manipulation of reviews.

A problem with self-regulation by means of reciprocal reviews is that there is absolutely no guarantee that a review is reliable (Bijlsma et al., 2016). Some platforms alter reviews or choose not to post certain, usually negative, reviews. One explanation for these decisions by a platform is the fact that users judge the quality of a platform in part from the quality of the reviews and prefer not to join a platform carrying a relatively large number of negative reviews. It is also entirely possible that some positive reviews are only given because the reviewee has offered a discount to the reviewer in exchange for a good review or that a review was negative because the reviewee refused to give a discount. The existing legislation is not geared to guaranteeing the reliability of reviews (Bijlsma et al. 2016; Van Dijck et al., 2016), so the government will have to consider new policies designed to improve the reliability of reviews and reputation profiles and thus make this form of self-regulation fully effective.

The participants themselves are the most important link in the chain to protect public interests. The users of a platform post reviews that protect other consumers from other fraudulent, rude or otherwise unreliable users. Self-regulation can be effective because people who know they are being reviewed are inclined to be more cooperative and behave more socially. In principle, the rating system could be extended to third parties who might suffer nuisance, such as the neighbours of a property that is rented out via Airbnb. They would then also be able to post a review about their experiences as the neighbour of the property's temporary occupant. This would be a way of protecting the interests of persons other than the participants, particularly in terms of preventing nuisance for neighbours or causing them to feel unsafe. Finally, platforms themselves use the reviews in deciding whether they should deny a participant access to the site after repeated complaints (about nuisance, breach of contract, intimidation, violence or discrimination, for instance).

5. Ensure that the users of platforms can carry their accumulated reputation data to another platform

To curtail the market power of platforms, the government should formulate a policy that allows consumers to carry their reviews with them to another platform in order to make switching between platforms easier.

One problem is that users become locked into a platform on which they have already received a lot of positive reviews. After all, users who move to a different platform have to start collecting reviews again in order to establish a reputation. This impairs competition between platforms because it is a disincentive for users to switch between platforms. One way of countering that problem is to allow users to manage their own reviews and to make the reviews "portable" if a user decides to switch platforms, thus making it easier for users to switch between platforms. This data portability is similar to the right of consumers to retain their mobile phone number if they change telecom provider.

6. Reform the tax system to stimulate the use of platforms with significant environmental benefits

Review the extent to which taxation of ownership can be increased and taxation of use can be reduced, particularly for activities on platforms that yield substantial environmental benefits (car sharing, carpooling, ride sharing, sharing parking spaces).

The government could review a number of taxes. Raising taxes on ownership and reducing taxes on use would promote more effective use of idle capacity. Such a shift in the tax base will create an incentive for owners to share their assets and a disincentive for users to buy additional goods. Since the most significant positive environmental effects occur with car sharing and carpooling, taxes on car ownership could be raised. However, those taxes are already relatively high in the Netherlands and ideally such a measure should be adopted in consultation with other countries. An easier option is to increase the cost of a parking permit to the market price (De Groote et al., 2015). At the same time, car rental by private individuals could be made entirely tax-free by treating the income as expenses.

In contrast to car sharing, it seems reasonable that income from letting accommodation should be treated as income and taxed as such, as the Tax Administration already does. In this context, it might also be legitimate to use taxation to redress the growing inequality that arises from accommodation sharing. After all, home owners who share their property earn additional income, while tenants do not profit and even pay a higher rent in the private sector. Taxing income from property letting would reduce the net income for the owners of the properties and generate additional revenues for the government, which it could use to make a gesture to tenants or first-time buyers in the housing market. Under the current rules, property owners have to report 70% of the income they earn, less the costs incurred, in their tax return. In view of the social costs of nuisance and enforcement and the growing scarcity in the regular market for rooms and homes, a higher tax rate than previously could even be considered.

7. Help low-income groups in society to profit from the sharing and gig economy

Low-income groups profit little from the sharing and gig economy at the moment. Formulate social policy designed to familiarise the weaker groups in society with the possibilities and advantages sharing and gig platforms can offer them.

The greater involvement of lower-income groups in sharing platforms could be promoted with publicity campaigns. It is also important to highlight the possibilities of the sharing and gig economy in social policies. Our study contained a number of examples, such as the decision of the Municipality of Amsterdam to couple platforms to the *Stadspas*. Another way of helping lower-income groups to profit more from the sharing economy that is worth considering is to permit occupants of social housing to let their homes temporarily. In view of the fact that many of these homes are subsidised to some extent, the institution that owns the property could claim a substantial share of any income. The government might also consider allowing people on benefits to earn additional income via gig platforms, even if they do not operate strictly according to the rules at the moment. For many people, this type of work would be a way of gaining relevant work

experience (including reviews that codify it) and increasing their chances of finding regular employment.

Platforms

8. Keep down barriers to entry for new platforms

Consumers benefit both from monopolisation and from competition between sharing and gig platforms. By keeping the barriers to entry as low as possible for new platforms in its competition policy, the government can ensure that even a monopolistic platform faces competition from potential new entrants.

The government should investigate whether there is sufficient competition between sharing and gig platforms. Because of network effects, parties on the supply side and the demand side will be inclined to use the same platform. For example, the chance of finding a match is greatest on a monopolistic platform. This process leads to a “natural” monopoly (Bijlsma et al., 2016). Users will be reluctant to leave a platform if it means that the reputation profile they have built up will lose its value. In that type of market situation, a platform can charge high margins. Furthermore, a monopolistic platform leads to a concentration of valuable data, which can in time lead to the platform gaining too much political power, especially if the platform operates worldwide but does not necessarily have to comply with national or local legislation (Van Dijck et al., 2016). Paradoxically, the consumer benefits both from monopolisation (to maximise the network benefits) and from competition (to prevent the platform from demanding excessive margins). With platform services, the competition is *for* the (entire) market and not necessarily *in* the market. The government’s main task is therefore to keep barriers to entry for new platforms as low as possible so that even a monopolistic platform faces competition from potential new entrants (Bijlsma et al., 2016).

9. Encourage not-for-profit platforms and platform cooperatives

Most of the existing platforms are for-profit platforms. Given the uncertainty about the precise effects of platforms, it is undesirable that the information society should now already become locked into one specific type of platform. At this stage, the government’s task is to promote a wider variety of platforms, including not-for-profit platforms and platform cooperatives.

The sharing and gig platforms that are widely used at the moment are fairly homogeneous in terms of design, management and ownership. For example, most platforms are structured as for-profit vehicles for monetary transactions between identified individuals who have no control other than the possibility of rating one another. However, many other types of platforms are technically possible, such as platforms organised with a cooperative rather than a corporate structure, in which case the users not only share the use of the platform, but also ownership and control of it. This model has been adopted for some time in the case of car sharing, but a growing number of platform cooperatives are now also being set up in the gig economy (Scholz, 2014; Scholz & Schneider, 2016).¹¹⁹ There are also platforms on which people share goods or provide services without any

¹¹⁹ www.platformcoop.org

money changing hands. Alternatives are swap platforms, virtual currencies, block chain or pure altruism. Finally, there are platforms whose participants do not necessarily have to operate under their true identity, which guarantees accessibility and prevents discrimination (Peerby, for example).

The government could support these alternative platforms by means of subsidies, research, regulation, integration in social policy, etc.. And by taking account of the public values served by the platform when choosing which particular platform to use itself (Van Dijck et al., p. 140). Support of this kind would not necessarily have to be regarded as unfair competition with purely commercial initiatives, but could be seen as an aspect of the government's innovation policy, whereby, in light of the current uncertainty about the long-term effects of platform architectures, it wishes to avoid a premature and irreversible lock-in.

10.3 Mitigating negative effects

As described in chapter 1 (box 1.2), there are four policy options for mitigating the negative effects of platforms: 1) strict enforcement of existing rules, 2) deregulation, 3) ad-hoc regulation, and 4) no intervention / toleration (Codagnone et al., 2016). This section contains a number of recommendations relating to these four policy options.

Strict enforcement of existing rules / prohibition

10. Communicate clearly regarding the existing rules for the sharing and gig economy

Explain the rules of the sharing and gig economy simply and clearly to the participants in platforms. Wherever possible, simplify the rules.

A first step that parties could take is to explain the precise rules governing a platform to all the stakeholders in clear and simple terms. It emerged from our interviews that participants often act illegally simply because they do not know what the rules are. The Tax Administration¹²⁰ and the Municipality of Amsterdam¹²¹ have already taken steps in the right direction, as have many platforms. The existing rules governing incidental earnings are generally quite complex and it seems logical to simplify (but not necessarily relax) the rules in light of the rapid growth of platforms. This could be done for both paid and unpaid activities in the sharing and gig economy. Simpler rules will make communication with the participants on platforms easier. By increasing knowledge of the rules, for example, participants are more likely to pay their tax.

11. Major public interests can justify banning a platform

A ban might be justified if platforms cause legal problems.

¹²⁰ On the website of the Tax Administration there is an explanation of taxation in the 'internet economy and sharing economy'. See http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/privewerk_en_inkomen/internetecconomie/interneteconomie-deeleconomie

¹²¹ On the website of the Municipality of Amsterdam there are rules for holiday letting. See <https://www.amsterdam.nl/wonen-leefomgeving/wonen/bijzondere-situaties/vakantieverhuur/>

Banning a platform might be legitimate if it acts in breach of existing rules that are intended to safeguard specific public interests and which therefore have to be enforced by the government. The only platform that has been banned to date is the UberPop service. Given the direct competition between UberPop's unlicensed taxi drivers and regular taxi drivers with an operating licence, the minister found – like the courts – that the law should be enforced and that the UberPop service should be banned.

12. In the event of a ban, encourage a dialogue about the future of the relevant platform innovation and regulation

A ban is counter-productive if a similar activity is widely carried on illegally via alternative platforms or offline. A ban could also negate the positive effects of the platform innovation. In the event of a ban, it therefore makes sense to engage in a dialogue with the stakeholders in order to critically review the existing rules in light of the platform innovation.

Prohibiting a service also destroys opportunities for further innovation. Moreover, in practice an activity that has been banned might be so popular that it is continued “underground”, for example via new websites or by anonymous suppliers, or even offline. A ban could therefore also be accompanied by a dialogue to critically review the existing rules (with a view to perhaps relaxing or amending the rules at a later stage) so that the original platform might still be able to operate legally – possibly in modified form.

Deregulation

13. Identify the public interests that will be positively or negatively affected by deregulation

Deregulation affects how public interests are stimulated. The pros and cons of deregulation must be analysed before that course of action is chosen.

A second policy option is deregulation. Rather than amending the existing rules, they could be relaxed or, in some cases, even abolished. By imposing fewer requirements on the driver and the car that is used as a taxi, for example, the costs and complexity of licensing taxis would be reduced and the number of people offering their services as taxi drivers would automatically rise. There would therefore be more drivers engaged in the profession on a part-time basis, which could ease the shortage of capacity at peak times. There will also be a corresponding decline in prices and the profession will become a part-time occupation for a growing number of drivers. Consumers will then benefit, but it will affect the socio-economic position of the professional group. Deregulation is again not a solution that will protect all of the relevant public interests, but rather a political balancing of public interests.

Maximising (or capping, see finding 14) and deregulation will affect consumer interests in different ways. With a cap the rules for professional suppliers are maintained, while often being relaxed for occasional suppliers. The *de facto* effect is that consumers have a choice in the degree of institutional protection they would like. A professional supplier might then often be slightly more expensive, but will at the same time offer a higher degree of professionalism and consumer

protection. With deregulation, however, the rules are relaxed for everyone and the choice between a greater or lesser level of protection disappears. Depending on the rules that remain in place post-deregulation, every consumer enjoys the same level of protection. Because of higher prices and less freedom of choice, this could be seen as a wealth loss, but on the other hand deregulation restores the level playing field. Deregulation also means that the public interests protected by the surviving rules will be better protected because the rules apply to all suppliers.

A similar choice between a cap and deregulation applies to the position of employees. Capping a particular practice of a sharing or gig platform practice means that companies with salaried employees will have to tolerate competition from incidental suppliers whose prices will generally be lower. Deregulation would be fairer because every supplier would then fall under the same regime, but would not necessarily strengthen the position of companies and employees. After all, if deregulation leads to lower barriers to entry for new suppliers (in terms of training, licensing, quality standards and working hours, for example), a growing number of self-employed persons will offer their services via platforms in sectors (transport, cleaning, building, care, education, consultancy, etc.) that are currently still dominated by large, well-established organisations and their employees.

Ad-hoc regulation

14. With ad-hoc maximising the playing field for sharing and gig platforms can be defined and social problems contained

The government could establish a cap on participation in a platform in order to contain social problems. Capping is also a way for the government and platforms to delineate the playing field for incidental suppliers (in the sharing economy) from that of professional suppliers (in the classical economy).

The government could also choose to redesign the existing rules in light of platform innovations. This might mean adapting rules to the new practice that platforms have facilitated. Rules could also impose new demands on platforms, which would then have to adapt their design and business model to them. This model is chosen mainly to reduce the degree of unfair competition. To create a situation where private individuals can still share goods and services without having to comply with all the rules faced by companies, the most obvious rule is to limit participation in platforms (European Commission, 2016). The main question then is how to distinguish a professional supplier from a non-professional supplier. According to Petropoulos (2017), a supplier is more likely to be a professional if he offers a product or service frequently, makes the offer to generate income and the income earned is substantial. The political challenge then is to define the limit.

The rules relating to accommodation sharing are the most important example in this context: as long as a property is not rented out for more than 60 days a year or to more than four people at the same time, the owner of the property is not regarded as a professional service provider. Although the 60-day limit might be regarded as too long or too short, what counts is the philosophy behind the policy: by limiting the number of days people can only rent out their homes when they are temporarily not occupying them (the sharing economy) and cannot buy a house with the sole intention of renting it out permanently to tourists (non-sharing economy) (Frenken et al., 2015). This ad hoc construction has been further fleshed out and refined with the recent agreement between

the Municipality of Amsterdam and Airbnb that Airbnb itself will enforce the 60-day rule. In this way, the playing field for incidental, non-professional suppliers has been defined. At the same time, some of the nuisance that can always be caused by neighbourhood activities is eliminated. Measures to limit activities in terms of the number of days they can be carried on, the size of the turnover from them or the types of locations where they can be carried on could also be taken with respect to other platforms. The proposal that home chefs may not use their home as a restaurant more than once a week came from Airbnb itself, for example. And in Belgium a special low tax rate of 10% has been introduced for people who earn 5,000 euros a year or less via platforms.

Capping eases the problem of unfair competition between professional suppliers and occasional suppliers, but does not actually eliminate the “inequality”. The playing field is still not level, but the lines are clearly drawn. In other words, capping creates transparency about the inequalities that will be permitted in the playing field and so enables professional suppliers to respond better to the new reality. In some cases, this will even mean that parties can profit from one another by bundling services (an example might be a hotel that does the laundry for a property owner on Airbnb) or by operating jointly during peak periods (a hotel referring guests to private accommodation when major events are on).

Non-intervention / toleration

15. Tolerate platforms in the early stages to promote smart learning

Despite the social problems that platforms can cause, tolerating them might be justified in the early stages of a platform’s development or while the platform is still small. That phase should be used to learn together about public opportunities and problems.

Toleration can be justified in the early stages of a new development because it is then still very small in scale and it presents an opportunity to learn together about possible variants of the platform and the associated opportunities and problems. This is the attitude currently being adopted towards platforms like Airbnb and Helpling. There are limits to the toleration as sharing and gig platforms grow rapidly, since if an illegal practice becomes widespread the calls for government action from those prejudiced by it will grow steadily louder, and will be legitimate.

16. Experiment with goal-oriented legislation and Right to Challenge

The government can tolerate a platform if the platform can show that the way it operates does not harm any public interests. However, this form of conditioned self-regulation must be accompanied by periodic objective evaluation to verify that the platform is not in fact impairing any public interests. Experiments with this approach are currently underway in the Netherlands under the titles goal-oriented legislation and Right to Challenge.

Because more platforms are expected to appear in the future, the government is considering adopting a more general policy framework for dealing with platforms under the title “future-proof legislation” (Ministry of Economic Affairs, 2015a, 2015b, 2016). The general principle is that new laws and regulations should be evaluated for their possible negative impact on future innovation. At the same time, the ministry also feels that when innovations emerge in future, existing legislation should be critically appraised to determine its adequacy in responding to them. According to the

ministry, it is often apparent that even major changes can be accommodated by existing legislation if the laws are re-interpreted in light of the new situation. The ministry also proposes applying a number of specific principles based on technology-neutrality. Particularly when there are great uncertainties about future developments in IT, it is better to design policy without finalising the specific technological details (Bijlsma et al., 2016). The two key principles adopted by the Ministry of Economic Affairs (2015a, 2015b, 2016) are goal-oriented legislation and Right to Challenge.

According to the Ministry of Economic Affairs (2015a, p. 8), goal-oriented legislation ensures that “laws and regulations contain clearly defined targets and specifies to whom the rules are directed. How those targets are to be met is left open. Regulations are not set out in more detail than is required to safeguard public interests effectively and responsibility for proper compliance is delegated to the company or professional. (...) On the other hand, goal-oriented legislation is undesirable if the objective is difficult to objectify or measure or if the increased supervision costs and uncertainty (the extent to which it is certain that an alternative also meets the statutory requirements) do not outweigh the increased scope for innovation.” An example of this is technology-neutral legislation, which does not prescribe the technology to be used to achieve a certain functionality and hence is more future-proof in terms of the introduction of new technology in the future. This might mean, for example, that the taxi meter and on-board computer could disappear from taxis if the same information can be provided to the government with the same degree of reliability via the platform.

A second, more radical instrument now being considered by the government is the Right to Challenge (RTC), or equivalency principle. RTC “gives citizens and companies the legal possibility to accomplish the objective of a statutory rule as they see fit, without having to comply with every statutory rule. A Right to Challenge process can be used in addition to regulations prescribing the means to be used if one wishes to offer those affected by the policy the possibility of achieving the objective for which those rules are prescribed in an alternative manner. Such a form of regulation can best be described as conditioned self-regulation (interview with Mr. Mulder). Those for whom the statutory rules apply can decide for themselves whether they will adopt the ‘safe route’ of the prescribed instrument or their own innovative path (Ministry of Economic Affairs, 2016, p. 5). Put simply, the principle behind Right to Challenge is that citizens and companies do not have to comply with rules as long as they act in the spirit of those rules, i.e., provided their actions still help to achieve the public interests the original rules were intended to serve.

Although there is mention here of granting a right to citizens and companies, it is certainly not the case that citizens and companies that have developed an innovation can demand a Right to Challenge process. Whether a party will be granted the legal possibility to achieve the goal of a legal rule “in its own way without complying with all the statutory rules” is a political decision which must be based on a weighing up of the (potential) importance of an innovation and other public interests, including the risk that parties will later prove incapable of achieving the goals of existing legislation in their own way (KCWJ, 2016; interview with Mr. Mulder). Two other relevant public interests are the costs of evaluation and oversight ensuing from goal-oriented legislation or Right to Challenge processes and the possibility that such instruments will hamper the market entry of alternative platforms.

10.4 Enforcement

Enforcement is a key issue in relation to digital sharing and gig platforms. The pattern of growth in recent years and the intrinsic scalability of platform technology are forcing the government to reflect on whether existing enforcement methods are viable. A central question in that regard is to what extent enforcement agencies can gain access to the platforms' data.

In the previous section we discussed four general policy options previously identified by Codagnone et al. (2016): 1. enforcement of existing rules, 2. deregulation, 3. ad hoc regulation, and 4. toleration. The first three options are all based on the assumption that the government can exercise effective enforcement. Very strict enforcement of existing rules would often mean the prohibition of sharing and gig platforms. In the case of deregulation, some existing rules would be scrapped, but enforcement of the surviving rules would be as important as ever. Just as deregulation disrupts established interests and exposes existing actors to greater competition, the calls by established players for strict enforcement of the surviving rules will become louder, and be even more justified. The third option, ad hoc regulation, would mean formulating new rules specifically for sharing platforms. Those new rules can only have an impact and acquire legitimacy for all the stakeholders if they are enforced. Accordingly, in all three cases the government would retain its traditional role as enforcer of rules designed to protect public interests.

The philosophy behind a policy of toleration is totally different. The government would essentially abandon its enforcement task but expect – implicitly or explicitly – other parties to adopt forms of self-regulation that will protect public interests. Enforcement would sometimes still play a role in some respects because tolerating a practice does not mean that none of the relevant public interests have to be protected any longer. For example, the government tolerates home restaurants, but the NVWA has a mandate to carry out inspections in relation to food safety if it feels they are necessary and the police are still able to intervene if a home restaurant causes serious nuisance for its neighbours.

In the following section we first discuss the government's traditional methods of enforcement, in other words enforcement in relation to the first three policy options. Because the division of roles between the government and other stakeholders is so different in a construction involving a policy of toleration, we discuss that option separately.

Classic enforcement of laws and regulations

17. The government could monitor enforcement by a platform via a trusted third party

If the government delegates part of the task of enforcement to the platform, it could be important to establish a trusted third party to monitor the platform's performance of its executive task. In that way the government could exercise supervision without violating the privacy of the participants.

The issue of enforcement also extends to the problems currently facing the Tax Administration with respect to tax avoidance. It was clear from an internal report by the Tax Administration that there is

reason to believe that large numbers of taxpayers avoid their obligations, in the case of accommodation sharing, for example (NOS, 2016c). Consumers who engage in accommodation sharing are required to declare 70% of the income to the Tax Administration. In light of the fact that most of the money generated from house sharing is earned by private individuals and the rapid growth of the practice, it is no longer possible to ignore this problem. Taxation of the income from home sharing is all the more important because it is an ideal way of redistributing income between people who enjoy a sudden increase in the income from their capital, on the one hand, and people without capital who profit little from accommodation sharing, or even see their costs rise as tenants in the private sector, on the other.

An increasingly pressing question is whether the platforms should in future be required to play an active role both in enforcing the rules and collecting taxes (Sundararajan, 2016; Arets, 2016). Airbnb already collects tourist tax for the Municipality of Amsterdam. One way the collection of taxes via platforms could be made easier is to require users to log on to platforms with their DigiD (ShareNL, 2015a; Van Dijck et al., 2016). The government would then be able to tax each transaction and at the same time monitor compliance with any rules relating to a cap on the performance of an activity.

By assuming responsibility for implementing certain government rules, a platform can perform an intermediary role between the government and consumers. An example of this is collection of tourist tax by Airbnb, which it then pays to the Municipality of Amsterdam. Similarly, the platform could collect income tax. At present property owners have to report their income in their tax return and the Tax Administration suspects that few actually do so (NOS, 2016c). That problem could be resolved by having the platform collect the tax directly as a fixed percentage of the rental price (Schimmelpenninck and Van Wonderen, 2015).

Platforms could also help to enforce rules that impose a cap on participation in them. The platforms are able to discover how often a person is active on them and are therefore also able to deny access temporarily to participants who exceed the maximum level of activity permitted on the platform (as agreed by Airbnb and the Municipality of Amsterdam at the end of November 2016), or even impose fines that are then paid to the government. However, Airbnb refers to the European e-commerce directive, which currently provides that platforms cannot be forced to provide personal data to governments.

Although a platform could be a very effective executive body, it is questionable whether platforms will implement the rules and pass on all the data to the authorities correctly, particularly if those enforcement activities are contrary to the platform's own commercial interests. After all, the stricter the enforcement of the rules prescribing a ceiling on participation in a platform, the lower the platform's turnover (and profits) will be. Furthermore, a platform that enforces rules strictly will benefit competing platforms that apply the rules less strictly. The government would therefore have to monitor whether platforms are performing their role as executive bodies correctly, while it has no legal access to the data generated by the platforms. A trusted third party could provide a solution for this dilemma. At the same time, a platform could benefit if it were rewarded for correct behaviour with a quality label.

18. Employ privacy-friendly methods of cooperation with platforms for the purposes of enforcement

Platforms can be an important partner for the government in the performance of its existing enforcement tasks. In line with existing privacy legislation, such partnerships must not infringe the privacy of participants.

There are various ways in which platforms could help the government to enforce legislation in a way that does not infringe privacy. In the context of enforcing rules relating to caps on participation, for example, a platform could notify participants as soon as they are in breach of a rule. It would then be up to the participants themselves to draw the consequences. A second way in which platforms could enhance enforcement is by allowing users to promote themselves in advertisements with a quality label, which demonstrates that they are registered with the government if that is required, and that they otherwise operate in accordance with all the government's rules. A final way in which platforms could help the government without impairing the privacy of participants is by improving access to information that is public for investigative purposes. For example, platforms could make it easier, in both a practical and legal sense, for public authorities to search the reviews that can be read on the platform and which are already shared as information in the public domain. The authorities could then analyse those data in search of patterns in the complaints made by participants, which would make it easier to discover cases that constitute a source of problems.

19. Prevent enforcement by platforms from raising barriers to entry too far for new platforms

If the government delegates part of its task of enforcement to the platform, and so raises the barriers to entry for new platforms, it must weigh the public interests served by compliance with the rules against the public interest of allowing sufficient competition from potential entrants.

It is, finally, important to realise that every task delegated to platforms in helping the government to enforce rules will require additional investment by the platforms. That investment could actually be in the interests of existing (large) platforms because it will raise the barriers to entry to the market in question for new platforms. In that case, it might be necessary to weigh the public interests that are protected by particular rules against the public interest of ensuring sufficient competition from potential entrants ("contestable market"). Certainly in the early stages of development in which platform markets find themselves now, and in light of the desire for the greatest possible variety of platforms and platform architectures, the government should not necessarily want to delegate a major role to platforms in helping to enforce rules.

Enforcement in the case of toleration

20. In goal-oriented legislation and Right to Challenge processes, the importance of innovation should outweigh the costs of evaluation and supervision

When starting goal-oriented legislation or Right to Challenge processes, the government should weigh the importance of innovation and learning against the costs of evaluation and

extra supervision. An objective evaluation of platform innovations should be guaranteed by agreeing in advance what data (personal or otherwise) will be provided for the evaluation.

According to the Ministry of Economic Affairs (2015b), the possibilities for innovation created by the instrument of the Right to Challenge must outweigh the additional costs of supervision and the equivalence of solutions must be adequately demonstrated. An additional principle that applies for Right to Challenge is that alternatives that are accepted must be published so that other parties can make use of them. Although these principles could work well in certain contexts, it is questionable whether they are feasible with the existing online platforms because one of the requirements of both principles is that the goal must be clearly objectifiable and measurable. That requirement is inconsistent with the attitude taken by platforms up to now in focusing on protecting the privacy of users. The question therefore is whether the existing impasse surrounding access to data can be resolved.

If goal-oriented legislation and Right to Challenge are indeed only feasible if the platforms provide the data needed to make the impact objectifiable and measurable, a system of supervision will probably have to be established, possibly in the form of a trusted third party, to verify that the platform has provided correct, objective data. That then raises the question of whether the supervisory costs weigh up against the returns from the innovation. If one were to start a goal-oriented legislation or Right to Challenge process when a platform has only just started out and has not yet proved its success with users, the costs would be outweighed by the expected benefits. According to that reasoning, such a process should only start when the platform has already proved something of a hit with users.

10.5 The recommendations summed-up

In this chapter we have presented twenty recommendations that could help in safeguarding public interests that are affected by the rise of the sharing and gig economy. The recommendations fall into four categories: 1) clarification and dialogue; 2) stimulation of socially responsible growth of the use of sharing and gig platforms; 3) regulation of platforms from the perspective of public interests; and 4) enforcement. The twenty recommendations are summarised in the list in box 10.1.

Box 10.1 Twenty recommendations relating to the safeguarding of public interests affected by the sharing and gig economy

Clarification and dialogue

1. Prevent negative effects and promote positive effects in relation to the sharing and gig economy
2. Encourage research into and a dialogue about the effects of the sharing and gig economy on public interests and how those interests can be safeguarded
3. Clarify the legal status of sharing and gig platforms

Promoting positive effects

4. Guarantee the reliability of reviews on platforms
5. Ensure that the users of platforms can carry their accumulated reputation data to another platform
6. Reform tax system to stimulate the use of platforms with significant environmental benefits
7. Help low-income groups in society to profit from the sharing and gig economy
8. Keep down barriers to entry for new platforms
9. Encourage not-for-profit platforms and platform cooperatives

Mitigating negative effects

10. Communicate clearly regarding the existing rules for the sharing and gig economy
11. Consider banning a platform if major public interests would justify doing so
12. In the event of a ban, encourage a dialogue about the future of the relevant platform innovation and regulation
13. Identify the public interests that will be positively or negatively affected by deregulation
14. Employ maximising on an ad hoc basis in order to define the playing field for sharing and gig platforms and to contain social problems
15. Tolerate platforms in the early days in order to learn about a platform's effects
16. Experiment with goal-oriented legislation and Right to Challenge

Enforcement

17. Consider government monitoring of enforcement by platforms via a trusted third party
18. Employ privacy-friendly methods of collaboration with platforms for the purposes of enforcement
19. Prevent enforcement by platforms from raising barriers to entry for new platforms too far
20. In goal-oriented legislation and Right to Challenge processes, the importance of innovation should outweigh the costs of evaluation and supervision

Bibliography

- Accenture (2014). 'UberPop: pilot evaluatie'. <https://www.ovmagazine.nl/wp-content/uploads/2014/10/Accenture-Strategy-UberPop-pilot-evaluatie.pdf>
- Airbnb (2013). 'Economic impact Airbnb'. <http://blog.airbnb.com/economic-impact-airbnb/#amsterdam>
- Airbnb (2014). 'Environmental impacts of home sharing'. <http://blog.airbnb.com/environmental-impacts-of-home-sharing>
- Airbnb (2015). *Airbnb New Year's Eve Travel Report 2015*.
- Airbnb (2016a). 'New resource for neighbors'. <http://blog.airbnb.com/new-resource-for-neighbors/>
- Airbnb (2016b). 'Fighting discrimination and creating a world where anyone can belong anywhere'. <http://blog.airbnb.com/fighting-discrimination-and-creating-a-world-where-anyone-can-belong-anywhere>
- Airbnb (2016c). 'Paris and Airbnb pilot new measures to promote responsible home sharing'. <https://www.airbnbaction.com/paris-and-airbnb-pilot-new-measures-to-promote-responsible-home-sharing/>
- Airbnb (2017). 'Airbnb community: Netherlands'. <https://netherlands.airbnb.com/wp-content/uploads/sites/50/2017/02/The-Airbnb-Community-Netherlands.pdf>
- Airdnd (2016). 'Algemene voorwaarden'. <http://www.airdnd.nl/Voorwaarden>
- Arets, M. (2016). 'Platforms: de ultieme natte droom van iedere inspecteur'. <http://www.marketingfacts.nl/berichten/platforms-the-ultieme-natte-droom-van-iedere-inspecteur>
- Belk, R. (2014). 'Sharing versus pseudo-sharing in Web 2.0'. In: *Anthropologist* 18, pp. 7-23.
- Benkler, Y. (2004). 'Sharing Nicely: on shareable goods and the emergence of sharing as a modality of economic production'. In: *The Yale Law Journal* 114, pp. 273-358.
- Bertolini, L, M. te Brömmelstroet & P. Pelzer (2015). *Is het debat over toekomstige mobiliteit te beperkt? Een voorstel voor een multidimensionaal perspectief. Bijdrage aan het Colloquium Vervoersplanologisch Speurwerk, 19 and 20 November 2015, Antwerp.*
- Bijlsma, M., B. Overvest & B. Straathof. (2016). 'Marktordening bij new ICT-toepassingen', CPB Policy Brief 2016/09.

- BlaBlaCar (2015). 'BlaBlaCar contribution to climate change'.
<https://www.blablacar.in/blablalife/reinventing-travel/environment/blablacar-contribution-climate-change>
- BlaBlaCar (2017). 'About Us'. <https://www.blablacar.com/about-us>
- Böcker, L. & T. Meelen (2016). 'Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation'. In: *Environmental Innovation and Societal Transitions* (<http://dx.doi.org/10.1016/j.eist.2016.09.004>)
- Botsman, R. & R. Rogers (2010). *What's Mine is Yours. How collaborative consumption is changing the way we live*. Collins.
- Bouma, K. (2015a). 'Airbnb verzekert verhuurders voor aansprakelijkheid'.
<http://www.volkskrant.nl/economie/airbnb-verzekert-verhuurders-voor-aansprakelijkheid~a4168807/>
- Bouma, K. (2015b). 'UberPop chauffeur haalt vaak minimumloon niet'.
<http://www.volkskrant.nl/tech/uberpap-chauffeur-haalt-vaak-minimumloon-niet~a3823583/>
- Bouma, K. (2015c). 'Goed nieuws voor UberPop: taxiregels kunnen soepeler'.
<http://www.volkskrant.nl/binnenland/goed-nieuws-voor-UberPop-taxiregels-kunnen-soepeler~a4003009/>
- Bouma, K. (2016a). 'Airbnb schrapt huizen Amsterdam die te vaak worden verhuurd'.
<http://www.volkskrant.nl/economy/airbnb-schrapt-huizen-amsterdam-die-te-vaak-words-verhuurd~a4223391/>
- Bouma, K. (2016b). 'Woningbouwcorporatie De Key wil Airbnb verhuur toestaan'.
<http://www.volkskrant.nl/binnenland/woningbouwcorporatie-De-key-wil-airbnb-verhuur-toestaan~a4317262/>
- Bouwens, D. (2016). 'Onvrede over fiscaal gunstregime deeleconomie'.
<http://www.demorgen.be/binnenland/onvrede-over-fiscaal-gunstregime-deeleconomie-dit-stimuleert-ontduiking-b565b55d/>
- Camps, M. (2015). 'Kiezen voor kansen'. In: *Economic-Statistische Berichten* 100 (4701), pp. 6-10.
- CBS (2013). 'Ruim een op drie gasten in logiesaccomodaties komt uit het buitenland'.
<https://www.cbs.nl/nl-nl/nieuws/2013/49/ruim-ee-op-de-drie-gasten-in-logiesaccomodaties-komt-uit-het-buitenland>
- Central Government (2015). 'Over drie jaar honderdduizend deelautos in Nederland'.
<https://www.rijksoverheid.nl/actueel/nieuws/2015/06/03/over-drie-jaar-honderdduizend-deelautos-in-Nederland>

Central Government (2016). 'Boordcomputer voor registratie taxirit en arbeidstijden'.
<https://www.rijksoverheid.nl/onderwerpen/taxi/inhoud/taxirit-en-arbeidstijden-registreren-boordcomputer-taxi-bct>

Chen, T.D. & K.M. Kockelman (2015). *Carsharing's life-cycle impacts on energy use and greenhouse gas emissions. Paper presented at the 94th Annual Meeting of the Transportation Research Board.*

Codagnone, C., F. Biagi & F. Abadie (2016). *The passions and the interests. Unpacking the 'Sharing Economy'. JRC Science for policy report.* Institute for Prospective Technological Studies (EUR 27914 AND, doi:10.2791/474555).

Commissie Dienstverlening aan Huis (2014). *Service aan huis. Wie betaalt de rekening? Advies.*
<https://www.rijksoverheid.nl/documenten/rapporten/2014/03/28/dienstverlening-aan-huis-wie-betaalt-de-rekening>

Consumentengids (2017). 'Niet kopen, maar delen'. May 2017, pp. 66-67.

Corten, R., B. Völker & G. Mollenhorst (2015). *Neighborhood cohesion and generalized exchange in the sharing economy. Paper presented at the 1st International Workshop on the Sharing Economy.*

Couzy, M. (2016). 'Van der Laan: ook sociale huurwoning op airbnb'.
<http://www.parool.nl/amsterdam/of-der-laan-ook-sociale-huurwoning-op-airbnb~a4315799/>

Croo, A. the (2016). 'Kamer keurt nieuwe regeling deeleconomie goed'.
<http://decroo.belgium.be/nl/kamer-keurt-nieuwe-regeling-deeleconomie-goed>

Crow-KpVV (2015a). Dashboard duurzame en slimme mobility. 'Deelauto's in Nederland sterk gegroeid met 28'. <http://kpvvdashboard-4.blogspot.nl/2015/10/opnieuw-forse-groei-autodelen.html>

Crow-KpVV (2015b). Dashboard duurzame en slimme mobility. 'Autodelen stimuleren: eenvoudig en effectief'. <http://kpvvdashboard-4.blogspot.nl/2011/05/autodelen-stimuleren.html>

Crow-KpVV (2016). 'Dashboard Autodelen. <http://kpvvdashboard-4.blogspot.nl/>

Datling (2015). 'Daling aantal restaurants zet door'.
<http://www.missethoreca.nl/restaurant/nieuws/2015/4/daling-aantal-restaurants-zet-door-101197434>

Davidson, J. (2016). 'Uber reveals how much its drivers really earn ... sort of'.
<http://time.com/money/3678389/uber-drivers-wages/>

Derksen, M. (2013). 'De opkomst van de platformeconomie'. <https://koneksa-mondo.nl/2013/11/30/sharing-economy-netwerken/>

Dijck, J. van, T. Poell & M. de Waal, M. (2016). *The Platformensamenleving*. Amsterdam University Press.

Edelman, B.G., & M. Luca (2014). *Digital discrimination: the case of Airbnb.com*. Harvard Business School Working Paper, No. 14-054.

Edelman, B.G., M. Luca & D. Svirsky. (2015). *Racial Discrimination in the Sharing Economy. Evidence from a Field Experiment*. Harvard Business School Working Paper, No. 16-069.

Einev, L., C. Farronato & J. Levin (2015). 'Peer-to-peer markets'. www.nber.org/papers/w21496

Est, R. of & L. Kool. (red.) (2015). *Werken aan de Robotsamenleving*. The Hague: Rathenau Instituut.

European Parliament (2002). 'Regulation (EC) No. 178/2002 of the European Parliament and the Council to laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety' <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:031:0001:0024:NL:PDF>

European Commission (2016). 'A European agenda for the sharing economy'. <http://ec.europa.eu/transparency/regdoc/rep/1/2016/NL/1-2016-356-NL-F1-1.PDF>

FNV (2014). 'FNV-reactie op het standpunt van het kabinet over dienstverlening aan huis en ILO-verdrag 189'. https://www.fnv.nl/site/alle-sectoren/sectoren/flex/1049049/1049052/20141112_FNV_brief_reactie_kabinet_op_rapport_Kalsbeek.pdf

Frenken, K. (2015). 'Deeconomie leidt niet vanzelf tot meer gelijkheid'. <http://www.volkskrant.nl/opinie/deeconomie-leidt-niet-vanzelf-tot-meer-gelijkheid~a4127720/>

Frenken, K. (2016). 'Deeconomie onder één noemer: oration at University of Utrecht'. https://www.uu.nl/sites/default/files/20160211-uu_oratie-frenken.pdf

Frenken, K. (2017). 'Political economies and environmental futures of the sharing economy'. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 375 (2015).

Frenken, K., Meelen, T., Arets, M., Van de Glind, P. (2015). Smarter regulation for the sharing economy, *The Guardian*, 20 May <https://www.theguardian.com/science/political-science/2015/may/20/smarter-regulation-for-the-sharing-economy>

Frenken, K., & J. Schor. (2017). 'Putting the sharing economy into perspective'. In: *Environmental Innovation and Societal Transitions* 23, pp. 3-10.

Frenken, K., & B. Straathof. (2015). 'Onlineplatformen op (en in plaats van) de arbeidsmarkt'. In: Weel, B. ter (ed.). *De match tussen mens en machine*. Koninklijke Vereniging voor de Staathuishoudkunde, pp. 163-174.

Ge, Y. et al. (2016). 'Racial and gender discrimination in transportation network companies'. <http://www.nber.org/papers/w22776> (retrieved November 1, 2016)

Glind, P. van de (2015). 'The rise of the peer-to-business-to-peer marketplace'. collaborativeconsumption.com

Griswold, A. (2015). 'Dirty Work. Almost everything that startups get right- and horribly wrong- happened at home-cleaning service Handy'. http://www.slate.com/articles/business/moneybox/2015/07/handy_a_hot_startup_for_home_cleaning_has_a_big_mess_of_its_own.html

Groote, J. de., J. van Ommeren & H. Koster (2015). *Car Ownership and Residential Parking Subsidies. Evidence from Amsterdam*. Tinbergen Institute Discussion Paper 116.

Hatzopoulos, V. & S. Roma (2017). 'Caring for sharing? The on-demand economy under EU law'. In: *Common Market Law Review* 54, pp. 81–127.

Hond, B. den (2016). 'Airbnb: een kwestie van zwart of wit'. <http://www.trouw.nl/tr/nl/4496/Buitenland/article/detail/4357752/2016/08/15/AirBnB-een-kwestie-van-zwart-of-wit.dhtml>

Hotrec (2015). 'Levelling The Playing Field. Policy paper on the "Sharing" Economy'. http://www.hotrec.eu/Documents/Document/20151105143558-2015-11-05_Hotrec_Policy_paper.pdf

Huddlestone, T. (2014). 'New York Attorney General, Airbnb reach settlement over user records subpoena'. <http://fortune.com/2014/05/21/new-york-attorney-general-airbnb-reach-settlement-over-user-records-subpoena/>

ING (2015). 'Deeleconomie: ruim half miljoen huishoudens doen mee'. https://www.ing.nl/nieuws/nieuws_en_persberichten/2015/07/deeleconomie_ruim_half_miljoen_huishoudens_doen_mee.html

ING (2016). 'Airbnb heeft flink opwaarts effect op Amsterdamse huizenprijzen'. https://www.ing.nl/nieuws/nieuws_en_persberichten/2016/04/airbnb_heeft_flink_opwaarts_effect_op_amsterdamse_huizenprijzen.html

Inside Airbnb (2016). 'Insideairbnb'. www.insideairbnb.com/amsterdam

Kaleidos (2016). *Nederlanders & de wereld 2016*. <http://kaleidosresearch.nl/publication/25681/>

- KCWJ (2016). 'Handreiking Right To Challenge'.
https://www.kcwj.nl/sites/default/files/handreiking_right_to_challenge_24_oktober_2016.pdf
- KHN (2015). 'AirDnD OK maar zorg wel voor gelijk speelveld'.
<https://www.khn.nl/nieuwsberichten/2015/11/reactie-khn-op-nieuw-platform-airdnd>
- Koninklijk Nederlands Vervoer (KNV) (2015). 'Taxibranche eist daden tegen Uber'.
http://www.knv.nl/nieuws/2647/taxibranche_eist_daden_tegen_uber_
- Kool, L. et al. (2017). *Urgent upgrade: Protect public values in our digitized society*. The Hague: Rathenau Instituut.
- Koolhoven, R. (2015). 'Uitgeleende, gestolen fiets'.
<http://www.sharenl.nl/nieuws/2015/02/13/rkoolhoven/gestolen-uitgeleende-fiets>
- Kreijveld, M., J. Deuten & R. van Est (ed.) (2014). *De kracht van platforms. Nieuwe strategieën voor innoveren in een digitaliserende wereld*. The Hague: Rathenau Instituut
- Kruyswijk, M. 'Een beetje stout? Is dat echt alles?'. In: *Het Parool* 6 May 2015
- Lohuis, C. (2016). 'Interview Ilona Albers b2b: marketeer bij Werkspot'.
<http://www.marketingtribune.nl/b2b/nieuws/2016/05/interview-ilona-albers-b2b-marketeer-bij-werkspot/index.xml>
- Maclaine Pont, P., J. Deuten & R. van Est (2016). *Met beleid vormgeven aan socio-technische innovatie*. The Hague: Rathenau Instituut.
- Meelen, T., Frenken, K. (2015). Stop saying Uber is part of the sharing economy. *Fast Company*, 14 January,
<https://www.fastcompany.com/3040863/stop-saying-uber-is-part-of-the-sharing-economy>
- Ministry of Economic Affairs (2015a). *Ruimte for vernieuwing by toekomstbestendige wet- and regelgeving* (AEP / 15079841).
- Ministry of Economic Affairs (2015b). *Werken aan toekomstbestendige wetgeving: digitale platformen en de deeleconomie, waaronder particuliere verhuur aan toeristen (Airbnb)* (DGBI-R&I / 15166286).
- Ministry of Economic Affairs (2015c). 'Vragen van het lid Verhoeven (D66) aan de minister van Economische Zaken over het bericht «Restaurantje spelen in eigen huis» (ingezonden 11 november 2015): antwoord van minister Kamp (Economische Zaken), mede namens de minister van VWS'. *Schedule to Parliamentary Proceedings II*, 2015/2016, 871
- Ministry of Economic Affairs (2016). *Werken aan toekomstbestendige wetgeving en een toekomstbestendig wetgevingsproces* (DGBI-R&I / 16098216).

Ministry of Health, Welfare and Sport (2016a). 'Algemene levensmiddelenwetgeving'.
<http://www.row-minvws.nl/legislation/algemene-levensmiddelenwetgeving>

Ministry of Health, Welfare and Sport (2016b). *Commissiebrief inzake uitspraak Rechtbank Zwolle inzake Blurring*.

Ministry of Housing (2016). 'Vragen van de leden Van der Linde (VVD) en Van Vliet (Van Vliet) aan de minister voor Wonen en Rijksdienst over het artikel «De Key staat Airbnb toe in sociale huurhuizen» (ingezonden 16 juni 2016): antwoord van minister Blok (Wonen en Rijksdienst) (ontvangen 8 juli 2016)'. *Schedule to Parliamentary Proceedings II, 2015/2016, 3117*

Ministry of Infrastructure and the Environment (2015a). *Evaluatie taxibeleid (IenM/BSK-2015/63873)*.

Ministry of Infrastructure and the Environment (2015b). *Kansen en onzekerheden van autodelen*.

Ministry of Social Affairs and Employment (2014a). 'Vragen van leden Kerstens en Vermeij (beiden PvdA) aan de minister van Sociale Zaken en Werkgelegenheid over de app Helping voor de schoonmaakmarkt (ingezonden 17 november 2014): antwoord van minister Asscher van Sociale Zaken en Werkgelegenheid (ontvangen 10 december 2014)'. *Schedule to Parliamentary Proceedings II, 2014/2015, 779*

Ministry of Social Affairs and Employment (2014b). *Kabinetsreactie op het advies van de commissie 'Dienstverlening aan huis'*.

Morozov, E. (2014). 'Don't believe the hype. The 'sharing economy' masks a failing economy'.
<http://www.theguardian.com/commentisfree/2014/sep/28/sharing-economy-internet-hype-benefits-overstated-evgeny-morozov>

Mourscous, L. (2016). 'Enforcement anno 2016: Amsterdam gaat content Airbnb scrapen'.
<http://www.solv.nl/weblog/enforcement-anno-2016-amsterdam-gaat-content-airbnb-scrapen/20754>

Municipality of Amsterdam (2016a). *Evaluatie toeristische verhuur of woningen. Raadstuk raadsvergadering 1 June 2016, agendapunt 26*.

Municipality of Amsterdam (2016b). 'Handhaving en toezicht'. <https://www.amsterdam.nl/bestuur-organisatie/organisatie/dienstverlening/handhaving-toezicht/>

Municipality of Amsterdam & Airbnb (2014). 'Memorandum of Understanding Municipality of Amsterdam and Airbnb Ireland'.
https://www.amsterdam.nl/publish/pages/707219/2014_12_airbnb_ireland_amsterdam_mou.pdf

Municipality of Amsterdam & Airbnb (2016). 'Overeenkomst toeristische verhuur van woningen en woonboten'.

https://www.amsterdam.nl/publish/pages/707219/overeenkomst_gemeente_amsterdam_en_airbnb.pdf

Musk, E. (2016). 'Master Plan: Part Deux'. https://www.tesla.com/nl_NL/blog/master-plan-part-deux

Noort, W. van (2015). 'Uber: onze houding werkte niet constructief'. In: *NRC Handelsblad*, 21 November 2015

NOS (2015) 'Den Haag, Rotterdam en Utrecht praten met Airbnb over toeristenbelasting'. <http://nos.nl/op3/artikel/2076801-den-haag-rotterdam-en-utrecht-praten-met-airbnb-over-toeristenbelasting.html>

NOS (2016a). 'Kamer en Amsterdam willen meldplicht voor Airbnb-verhuur'. <http://nos.nl/artikel/2116289-kamer-en-amsterdam-willen-meldplicht-voor-airbnb-verhuur.html>

NOS (2016b). 'Airbnb wil niet ingaan op eisen Amsterdam'. <http://nos.nl/artikel/2117700-airbnb-wil-niet-ingaan-op-eisen-amsterdam.html>

NOS (2016c). 'Belastingdienst worstelt met Interneteconomie'. <https://nos.nl/artikel/2130175-belastingdienst-worstelt-met-interneteconomie.html>

NOS (2016d). 'Toeristische steden eisen inzage in data Airbnb'. <http://nos.nl/nieuwsuur/artikel/2107645-toeristische-steden-eisen-inzage-in-data-airbnb.html>

NVWA (2016). 'Etikettering van levensmiddelen' <https://www.nvwa.nl/onderwerpen/eten-drinken-roken/dossier/etikettering-van-levensmiddelen>

Odlyzko, A. (2004). 'Privacy, economics, and price discrimination on the Internet'. In: *Economics of Information Security*. Springer, pp. 187-211

Omroep West (2014). 'Hobbykoks mogen van de gemeente Zoetermeer een huiskamerrestaurant openen'. <http://www.omroepwest.nl/nieuws/2736297/Hobbykoks-mogen-van-de-gemeente-Zoetermeer-een-huiskamerrestaurant-openen>

Osborne, H. (2016). 'Uber loses right to classify UK drivers as self-employed'. <https://www.theguardian.com/technology/2016/oct/28/uber-uk-tribunal-self-employed-status>

Pals, B. (2014). 'Amsterdam waarschuwde Uber al in januari dat UberPop illegal is'. <http://www.taxipro.nl/straattaxi/2014/09/11/amsterdam-waarschuwde-uber-al-in-januari-dat-UberPop-illegal-is/>

Pals, B. (2015a). 'Vanaf najaar alleen waarschuwing alleen waarschuwing bij niet gebruiken Boordcomputer Taxi'. <http://www.taxipro.nl/ondernemen/2015/10/22/vanaf-najaar-toch-boete-bij-niet-gebruiken-boordcomputer-taxi/>

- Pals, B. (2015b). 'Municipality Eindhoven gaat toch niet experimenteren met Uber'. <http://www.taxipro.nl/straattaxi/2015/11/09/municipality-eindhoven-gaat-toch-niet-experimenteren-met-uber/>
- Parigi, P. et al. (2013). 'A Community of Strangers: The Dis-Embedding of Social Ties'. In: *PLoS ONE*, 8 (7), e67388.
- Parigi, P. & B. State (2014). 'Disenchanted the World: The Impact of Technology on Relationships'. In: *Social Informatics*, 8851, pp. 166-182
- PBL (2015). *Effecten van autodelen op mobiliteit en CO₂-uitstoot* (Publication number 1789).
- Peerby (2017). 'Internationale erkenning voor spullendeel-platform Peerby'. <http://pers.peerby.nl/141756-internationale-erkenning-voor-spullendeel-platform-peerby>
- Pelzer, P. (2016). 'Weg van Modaliteit'. <https://ruimtevolk.nl/2016/01/27/weg-van-modaliteit/>
- Petropoulos, G. (2017). 'An economic review of the on-demand economy'. Bruegel Policy Contribution no. 5
<http://bruegel.org/wp-content/uploads/2017/02/PC-05-2017.pdf>
- Pew Research Center (2016). *Gig Work, Online Selling and Home Sharing*.
<http://www.pewinternet.org/2016/11/17/gig-work-online-selling-and-home-sharing/>
- Piketty, T. (2013). *Capital in the Twenty-First Century*. Cambridge MA/London: Belknap Press.
- Poort, J. & J. Weda (2008). 'Toekomst voor de taxi. SEO economisch onderzoek'.
http://www.seo.nl/uploads/media/2008-38_Toekomst_voor_de_taxi.pdf
- PWC (2015). 'Consumer Intelligence Series: The Sharing Economy'.
<http://www.pwc.com/us/and/industry/entertainment-media/publications/consumer-intelligence-series/assets/pwc-cis-sharing-economy.pdf>
- Rabobank (2015). 'Rabobank Cijfers & Trends: schoonmaakbedrijven'.
<https://www.rabobankcijfersentrends.nl/index.cfm?action=branche&branche=Schoonmaakbedrijven>
- Raven, R. (2016). 'Transities in de experimentele stad: oratie'.
https://www.ris.uu.nl/ws/files/21223583/20160519_UU_Oratie_Raven.pdf.
- Central Government (2015). 'Over drie jaar honderdduizend deelautos in Nederland'.
<https://www.rijksoverheid.nl/actueel/nieuws/2015/06/03/over-drie-jaar-honderdduizend-deelautos-in-Nederland>

- Central Government (2016). 'Boordcomputer voor registratie taxirit en arbeidstijden'.
<https://www.rijksoverheid.nl/onderwerpen/taxi/inhoud/taxirit-en-arbeidstijden-registreren-boordcomputer-taxi-bct>
- RTL (2015). 'Paniekvoetbal' bij handhaving UberPop'.
<http://www.rtlnieuws.nl/economy/home/paniekvoetbal-bij-enforcement-UberPop> Rijksoverheid (2016).
- Rysman, M. (2009) The economics of two-sided markets. *Journal of Economic Perspectives* 23(3), pp. 125-143.
- Schimmelpenninck, S. & S. van Wonderen (2015). 'Welke Airbnb-lessen moet Amsterdam leren van Amerika?'.
<https://www.schimmelpenninck.nl/welke-airbnb-lessen-moet-amsterdam-leren-van-amerika/>
- Schnitzler, H. (2015) *Het Digitaal Proletariaat* (Amsterdam: De Bezige Bij).
- Scholz, T. & N. Schneider (eds.) (2016). *Ours to Hack and to Own. The Rise of Platform Cooperativism. A New Vision for the Future of Work and a Fairer Internet*. New York: OR Books.
- Scholz, T. (2014). 'Platform cooperativism vs. sharing economy'.
<https://medium.com/@trebors/platform-cooperativism-vs-the-sharing-economy-2ea737f1b5ad>
- Schor, J. (2014). 'Debating the sharing economy: Great Transition Initiative'.
<http://www.greattransition.org/publication/debating-the-sharing-economy>
- Schor, J. (2015). *The Sharing Economy: Reports from Stage One: unpublished paper*. Boston College
- Schor, J. et al. (2016). 'Paradoxes of openness and distinction in the sharing economy'. In: *Poetics*, 54, pp. 66-81.
- Servicemanagement (2015). 'Hago blijft grootste schoonmaakbedrijf van Nederland'.
<http://servicemanagement.nl/servicemanagementtemcofacilityapps/>
- ShareNL (2015a). 'Innoveren in de deeleconomie: rapport geschreven in opdracht van het Ministerie van Economische Zaken'. <http://www.slideshare.net/shareNL/sharenl-onderzoek-iiov-ez-innoveren-in-de-deeleconomie-18-12-2015>
- ShareNL (2015b). 'Milieu-impact en -kansen deeleconomie: rapport geschreven in opdracht van het Ministerie van Infrastructuur en Milieu'. <http://www.slideshare.net/shareNL/sharenl-onderzoek-iiov-ienm-milieuimpact-en-kansen-deeleconomie-18-12-2015>
- ShareNL (2015c). 'Amsterdam eerste sharing city van Europa'.
<http://www.sharenl.nl/nieuws/03/03/persbericht-amsterdam-sharing-city>

SnappCar (2015). 'Onze sociale impact als infographic: autodelen werkt!'.
<https://blog.snappcar.nl/2015/03/25/onze-social-impact-als-infographic-autodelen-werkt/>

SnappCar (2016). 'SnappCar verwelkomt 200.000^e deelnemer'. <http://press.snappcar.nl/135233-snappcar-verwelkomt-200-000e-deelnemer>

Sprout (2016). 'Zo haalt Helpling de bezem door zijn eigen platform'.
<http://www.sprout.nl/artikel/startups/zo-haalt-helpling-de-bezem-door-zijn-eigen-platform#close-popup>

Sundararajan, A. (2016). *The Sharing Economy. The end of employment and the rise of crowd-based capitalism*. Cambridge MA: The MIT Press

Thomas, C. (2016). 'Iedereen kapitalist'. <https://www.groene.nl/artikel/iedereen-kapitalist>

Uber (2016). 'Steel City's New Wheels'. <https://newsroom.uber.com/us-pennsylvania/new-wheels/>

Visser, B. & B. de Boer (2015). 'Nederlanders mijden de taxi vanwege Vadertje Staat'.
<http://politiek.tpo.nl/column/jammer-dat-nederlanders-de-taxi-mijden-zoals-de-kalkoen-kerst/>

VNG (2015). 'VNG start pilot mengvormen winkel/horeca'.
<https://vng.nl/onderwerpenindex/safety/drank-and-horecawet/nieuws/vng-start-pilot-mengvormen-winkelhoreca>

Warzel, C. (2015). 'Let's all join the AP Stylebook in killing the term ride-sharing'.
<https://www.buzzfeed.com/charliewarzel/lets-all-join-the-ap-stylebook-in-killing-the-term-ride-shar>
 (retrieved 6 January 2017)

Weber, L. (2015). 'What if There Were a New Type of Worker? Dependent Contractor: On-Demand Workers Need Job Protections, Some Argue'. <http://www.wsj.com/articles/what-if-there-were-a-new-type-of-worker-dependent-contractor-1422405831>

Weise, E. (2016). 'In shift: Airbnb agrees to San Francisco regs'.
<http://www.usatoday.com/story/tech/news/2016/11/14/shift-airbnb-agrees-san-francisco-regs/93805068/>

Williamson, O. E. (1981). 'The Economics of Organization: The Transaction Cost Approach'. In: *American Journal of Sociology* 87, pp. 548-577

Wimdu (2017). 'Press center'. <http://www.wimdu.com/press/>

Zeijlstra, M., & R. Visscher (2016). *Delen doe je zo. De deeleconomie in de praktijk*. Baarn: Forte.

Appendices

Appendix 1. List of sharing and gig platforms in the Netherlands

(source: <http://www.deeeconomieinnederland.nl/>)

Organisation	Type	Website
Airbnb	accommodation sharing	https://www.airbnb.nl/
Airdnd	home restaurants	www.airdnd.nl
ANWB Automaatje	taxi	www.anwb.nl/automaatje
Barqo	boat sharing	www.barqo.co
Bksy	book sharing	www.getbksy.com/
BlaBlaCar	ride sharing	www.blablacar.nl/
BoatBuzz	boat sharing	www.boatbuzz.nl
Buurtleren	knowledge sharing	www.buurtleren.nl/
Camptoox	camper sharing	www.camptoo.nl
Couchsurfing	accommodation sharing	www.couchsurfing.com/
Croqger	odd jobs	www.croqger.nl
GoBoat	boat sharing	www.goboat.nl/
Goboony	camper sharing	www.goboony.nl
Helping	cleaning service	www.helping.nl/
Huizenruil	house sharing	www.huizenruil.com
Konnektid	knowledge sharing	www.konnektid.com/
KrijgdeKleertjes	clothing sharing	www.krijgdekleertjes.nl
Mobypark	parking space sharing	www.mobypark.com
MyWheels	car sharing	www.mywheels.nl/

ParkFlyRent	car sharing	www.parkflyrent.nl
Parkyourcar	parking space sharing	www.Parkyourcar.com
Peerby	household item sharing	www.peerby.nl
PickThisUp	parcel delivery	www.pickthisup.nl
Rewear	clothing sharing	www.rewear.co
Seats2meet for locals	coworking	www.locals.seats2meet.com
Sijpit	parcel delivery	www.sijpit.nl
SnappCar	car sharing	www.snappcar.nl
Stichting deDeelkelder	household item sharing	www.dedeelkelder.nl
SuperBuddy	shopping service	www.superbuddy.nl/
Thuisafgehaald	meals	www.thuisafgehaald.nl
Toogethr	ride sharing	www.site.toogethr.com/
Tuintjedelen	garden sharing	www.tuintjedelen.nl/
Uber	taxi	www.uber.com/nl/
WeHelpen	care provision	www.wehelpen.nl/
Werkspot	odd jobs	www.werkspot.nl
Wimdu	house sharing	http://www.wimdu.com/
ZorgVoorElkaar	care provision	https://zorgvoorelkaar.com/

Appendix 2. Definitions of the sharing economy

Definition used in this report

We have taken our definition of the sharing economy from Frenken et al. (2015), who defined the sharing economy as “consumers granting each other temporary access to under-utilised physical assets (“idle capacity”), possibly for money”. There are other definitions, however, which we review below.

Monetary vs. non-monetary transactions

Belk (2014) feels that people who lend their property or make their home available to others are only participating in the sharing economy if there is no financial remuneration involved. If there is money involved, the sharing economy can simply be seen as economy. On the other hand, if people lend things for free, they are genuinely “sharing” their property with someone else without any consideration. In contrast, ING (2015) argues that a transaction is not part of the sharing economy if there is no money involved. One can only speak of economic behaviour in the case of monetary transactions (ING, 2015). In other words, Belk sees the sharing economy and the economy as two mutually exclusive concepts and places the emphasis on the word ‘sharing’ in the definition of the sharing economy, while ING sees the sharing economy as part of the overall economy and therefore emphasises the word ‘economy’ in the definition of the sharing economy. Both do define “economy” as encompassing all monetary transactions. In this report, however, we consider economy to be the sum of the production, distribution and consumption of scarce goods and services. Distribution does indeed often involve monetary transactions where the monetary value of an asset or service is expressed in the form of a price, but that is not necessarily the case. Assets are often given away or lent (and services are also often provided free of charge as a favour, voluntary work or informal care). These activities therefore also fall under the term economy. For that reason, our definition states that it relates to consumers who grant each other temporary access to their under-utilised assets, *possibly for money*.

Online vs. Offline

A second source of confusion is that the sharing economy is sometimes equated with online sharing platforms. From that perspective, the sharing economy is something entirely new because online sharing platforms could not exist before the Internet. Others, in contrast, define the sharing economy as a social practice that has existed far longer (perhaps ever since people possessed assets), and that is now organised more often via online platforms. The *term* sharing economy is indeed new and the coining of the term ‘sharing economy’ is undeniably linked to the rise of online platforms, but that does not mean that the sharing economy as a social practice is new. After all, people have always rented or lent their property to each other, albeit on a smaller scale than appears to be the case now. Before the emergence of online sharing platforms, people shared only with family, friends and acquaintances because with them they could be sure that the item would be returned on time and in good condition. The new aspect of online sharing platforms is that people have also started sharing their property with people they don’t know because the platforms have found ways of creating trust between strangers by means of reviews, micro-insurance or guarantee funds. Because the actual practice of sharing goes back a lot further than the development of online

marketplaces that facilitate sharing, in our view it is historically correct to encompass both offline and online forms of sharing under the concept of the sharing economy.

For-Profit vs. Not-for-Profit

Some of those who equate the sharing economy with online platforms on which forms of sharing take place also assert that you can only speak of the sharing economy if a platform does not have a hierarchical organisational structure and has no profit motive. With democratic, not-for-profit platforms the participants also “share” the profit and control. Definitions that are based on particular desired characteristics of platforms thus have a *normative* motivation with respect to a fair division of the wealth or participation (Schor, 2014). In this report, however, we have opted for an *analytical* definition.

Appendix 3: Interviewees + interview protocol

The case studies are based in part on interviews with the following individuals.

Chapter	Organisation	Interviewee	Position
4. Helping	Helping	Floyd Sijmons	CEO, Helping Netherlands
4. Helping	Ministry of Social Affairs and Employment	- Francoise Eijnwachter - Koen van Schie	- Directorate of Labour Relations - Directorate of Labour Market and Social Affairs
4. Helping	Cleaning and Corporate Services Industry Association (OSB)	- Jan Kerstens - Nico Koch	- Head of Working Conditions and Social Security - Policy adviser KAM and Economy
5. Uber	KNV Taxi	Jantine Vochteloo	Policy adviser
5. Uber	Ministry of Economic Affairs	- Thomas Faber - Niels van der Poel	- Competition and Consumer - General Economic Policy
5. Uber	Ministry of Infrastructure and the Environment	Wybe van Ommen	Policy adviser
5. Uber	Taxi Centrale Amsterdam	Richard van der Veen	Director
5. Uber	University of California, Berkeley	Susan Shaheen	Adjunct Professor
6. Airdnd	Airdnd	Floris Overheul	Co-founder
6. Airdnd 7. Airbnb	Koninklijke Horeca Nederland	Joost Lubbers	Policy adviser
6. Airdnd 7. Airbnb	Dutch Food and Consumer Product Safety Authority (NVWA)	- Ghislaine Mittendorff - Andries Oldenkamp	- Coordinating Specialist Inspector - Strategic adviser on enforcement, NVWA
7. Airbnb	Airbnb	Patrick Robinson	Director Public Policy (Europe, Middle East & Africa)
8. SnappCar	Greenwheels	Alicia Hobbel	Location Manager

8. SnappCar	Ministry of Infrastructure and the Environment	Arjen Kapteins	Senior policy advisor, mobility
8. SnappCar	SnappCar	Tessa Oostdam	Public Relations SnappCar
10. Policy	Regulator (consultancy)	Mindert Mulder	Founder

Rathenau Instituut

Interview protocol¹²²

Semi-structured interviews were conducted for the Helpling, Airdnd, Airbnb and SnappCar case studies. The common topics covered in all of the interviews were the following:

- Standard questions about the platform (or organisation)
- Public interests & social issues
- Safeguarding of public interests
- Interaction between government, platform and other stakeholders (policy process)
- Political and public debate
- Trends and developments

¹²² This protocol was followed for all of the interviewees, with the exception of Mr Mulder (Regulator), with whom we only discussed the policy options of goal-oriented legislation and Right to Challenge.

Credits and acknowledgements

The UberPop case study was compiled in association with Peter Pelzer, a researcher and lecturer at the Urban Futures Studio of Utrecht University.

The provisional results of this study were presented and discussed during the NRC Live event on 28 October 2016.

We would like to thank the following individuals for their critical commentary on (part of) an earlier draft of this report: Bas Straathof (Netherlands Bureau for Economic Policy Analysis), Iris Korthagen (Rathenau Instituut), Martijn Arets (platform expert, Crowd Expedition), Martijn de Waal (Amsterdam University of Applied Sciences), Thomas Poell (University of Amsterdam) and Rense Corten (Utrecht University).


About the authors

Professor Koen Frenken is Professor of Innovation Studies in the Copernicus Institute of Sustainable Development at Utrecht University. He specialises in economic geography, innovation economics and innovation policy. His latest research concerns breakthrough innovations and is financed by NWO (the VICI, Talent and Sustainable Business Models programmes) and the European Commission (Horizon 2020 programme).

Arnoud van Waes is a researcher into innovation with the Copernicus Institute of Sustainable Development at Utrecht University. His latest research is concerned with urban experiments, institutions, innovations in mobility and new business models. Until October 2016 he was a project manager and researcher with the Technology Assessment department of the Rathenau Instituut, where he was involved in projects concerning the circular economy, energy innovations, participation & energy transition and technology & labour. He studied Mechanical Engineering and Innovation Sciences at Eindhoven University of Technology. He has also served as a consultant to companies and has conducted research in Nicaragua and at the Aalborg University in Copenhagen.

Dr. Magda Smink is a researcher with the Rathenau Instituut. She is engaged with the theme of energy and sustainability. Magda's research focuses on the political and social debate about new and existing (energy) technologies and the possibilities of organising an effective dialogue on the issue with various parties. In 2015 she obtained her PhD from the Innovation Studies group at Utrecht University with a thesis on the role of established interests in the Dutch energy transition. Magda has a Bachelor's degree in International Organisations and International Relations (BA) from the University of Groningen and a Master's degree in Sustainable Development (MSc) from Utrecht University. During her Bachelor's course, she attended the Université Laval in Québec, Canada as an exchange student. After her PhD, she joined Stichting Natuur & Milieu as a member of the energy team.

Dr. Rinie van Est is research coordinator with the Rathenau Instituut. He is a physicist and political scientist and is engaged with the politics of new technology: from nanotechnology, robotics and persuasive technology to climate engineering and energy. He has spent more than twenty years exploring scientific and technological trends and designing and conducting studies and debates on their social and ethical significance. He also teaches at the School of Innovation Sciences at Eindhoven University of Technology.



The **Rathenau Instituut** stimulates public and political opinion forming on social aspects of science and technology. We perform research and organise debate relating to science, innovation and new technologies.

Rathenau Instituut

Research & dialogue | Science, technology and innovation