

Occupational Hazards for Drivers in Colombia's Illegal Ride-hailing Economy

Employment on the edge of criminality and informality

MASTER INTERNATIONAL RELATIONS THESIS



Twan Leo Jan Hol

Master Thesis

MA International Relations (2018/2019)

Leiden University

Supervisor: Dr. H.A.S. Solheim

Wordcount: 16.474 (max. 13.500-16.500)

02-07-2020

Table of contents

INTRODUCTION: THE RISKS OF RIDE-HAILING IN BOGOTÁ	3
1. MITIGATION OF RISK IN THE RIDE-HAILING SECTOR: A THEORETIC APPROACH	6
1.1 RIDE-HAILING AS A COMBINATION OF OLD IDEAS AND NEW TECHNOLOGY	6
1.2 CHOICE-MAKING: A THIN LINE BETWEEN ACCEPTED RISKS AND AVAILABLE ALTERNATIVES	9
1.2.1 VARYING PRACTICES OF DETERRENCE.....	11
1.3 OCCUPATIONAL RISKS IN ILLEGAL SECTORS.....	12
2. THE RAPID EXPANSION OF RIDE-HAILING IN LATIN AMERICA (2013-PRESENT).....	17
2.1 LATIN AMERICA AS A FERTILE GROUND FOR RIDE-HAILING COMPANIES	17
2.2 RIDE-HAILING AND REGULATION, FROM RELIEF TO THREAT	19
2.3 UBER AS A SHACKLE IN THE COLOMBIAN CHAIN OF INFORMALITY	22
3. RIDE-HAILING IN BOGOTA: AN ANALYTICAL APPROACH	26
3.1 PERCEPTION OF RISKS BY DRIVERS.....	26
3.2 AVOIDANCE TECHNIQUES AND PASSENGER INTERACTION IN PRACTICE	29
3.3 FUTURE FOR RIDE-HAILING IN COLOMBIA.....	31
CONCLUSION	35
BIBLIOGRAPHY	38
LIST OF INTERVIEWEES	45

Introduction: The risks of ride-hailing in Bogotá

Ride-hailing multinational Uber withdrew their operations from Colombia on the 31st of January 2020 after turbulent years of rapid growth and a fierce public debate (Eltiempo.com, 2020). While some applauded the exit of the 'disruptive' platform, others, depending on the platform as a way to generate income, mourned the retreat of the platform, that was preceded by a strong campaign against the new practice of ride-hailing (Revista Semana, 2019; NotiPress, 2020; Morales, 2020).

The rise of innovative online marketplaces and technologies during the past decade has transformed various sectors of the economy globally. Meanwhile, small, innovative start-ups have grown to become multinationals. The global ride-hailing platform Uber, expanded rapidly by matching demand and supply for transport in private passenger cars through its platform that can be accessed through any smartphone with an internet connection (Oviedo, Granada, & Perez-Jaramillo, 2020; Uber Estimator, 2020). It's plain business model made expansion easy and generated a stream of protests among agents that call it disruptive for traditional transport systems, leading to confrontations between taxi- and ride-hailing drivers (Moed, 2018b; Revista Semana, 2019; Pulzo, 2017).

In many parts of Latin America and the world, regulation or prohibition of ride-hailing has been put into place after pressure from protests, including roadblocks and violence against suspected ride-hailing drivers, reportedly by taxi drivers (CBS News, 2015; Charbell, 2019; Colprensa, 2020; Conn, 2018; Ruvolo, 2015). Taxi drivers, supported by academic research, argue that Uber's arrival to Colombia, has decreased their income due to unfair competition, as taxi drivers have financial obligations that are non-existent in the platform industry (Berger, Chen, & Frey, 2018; Revista Semana, 2019).

While indicating a concern for the lack of protection for workers in new forms of employment created by digitalization, Behrendt et al. underwrite the effects of the existence of these new forms of employment, such as the undermining of fair competition for enterprises. They argue that the problems and circumstances of these workers overlap with the larger challenge of informality (2019, pp. 19, 15). Likewise, one of the motives for lawmakers to combat informal economies derives from the idea that illegal or informal activities damage businesses that adhere to law, creating price distortions and causing non-optimal investments for these businesses (Zelekha, 2011, p. 194)

While other countries have attempted to control the ride-hailing sector through regulation, the government of Colombian president Iván Duque started a campaign against illegality in the transporting sector in 2018, in an attempt to desist the drivers of ride-hailing platforms (Ministerio de Transporte, 2018a; Ministerio de Transporte, 2018b). In the span of approximately two years, the Bogota police registered more than 20.000 penalizations to drivers of illegal platforms, while the number of drivers using the two biggest ride-hailing platforms, Uber and Beat, was estimated to be respectively 88.000 and 50.000 around the country (Castilla, 2019; Secretaría Distrital de Movilidad,

2018). The fine is set at the worth of a minimum wage (828.100 Colombian Pesos), next to a suspension of the drivers' license for six months (dinero.com, 2019; Castilla, 2019; El Mundo, 2019).

It appears that these efforts, in combination with the reported aggressions from taxi drivers, have made driving for ride-hailing platforms a rather risky occupation in Colombia, leaving the question as to why and how workers continue driving for ride-hailing platforms. A relevant question, as the goal of the Colombian government is to desist the illegal drivers. An investigation into their motives and decision-making process may provide insights into how and why drivers end up working for illegal ridesharing platforms and may provide an opportunity to map underlying structures and factors leading to their decision. These insights might be applicable to more sectors within the informal, illegal and platform economy by lawmakers.

Academics, such as Viscusi and Tremblay & Pare, have aimed to explain the decision-making process of workers in illegal activities by comparing it to the decision-making process of workers in hazardous environments, building on the economic model of crime (1986; 2003). Here, the decision making process is seen as an equation of, on the one hand, profits from crime and on the other hand the perceived risk of an activity (Becker, 1968; Allen, 2005). Following on this, avoidance techniques, or restrictive deterrence, appear in research as tactics that criminals or workers in hazardous environments apply to mitigate risk, enabling workers to continue their activities (Jacobs, 1996, p. 83).

This thesis will research the perceived occupational hazards of ride-hailing platforms' drivers. It is expected that the research will fill the existent gap in the literature regarding the weak understanding of occupational hazards for informal workers and to contribute to the growing academic interest among international organizations and scholars into the working conditions of workers in new forms of employment (Loewenson, 2002, p. 329; Behrendt, 2019; ILO I. L., 2018).

The research question that forms the starting point of this thesis is formulated as follows:

„How do ride-hailing platform drivers in Bogotá apply risk-avoidance techniques in their decision-making process regarding (non) desistance from their activities?“

The research of this thesis is executed through semi-structured interviews with 9 ride-hailing drivers, in order to be able to gather qualitative information on the matter. These drivers have been selected in the field, by ordering a ride through the platform of Uber (6) and Beat (3) in Bogota. Insights deriving from the interviews have been complemented by observations in the field to be able to construct an anthropological analysis. Next to research in the field, the method consists of a discourse analysis regarding risks and desistance of drivers in Bogota and Colombia.

The semi-structured interviews have been conducted in an informal setting and have been structured to address, first, the risks that the drivers perceive, followed by strategies the drivers apply to mitigate these risks and lastly by touching upon the importance of their occupation, taking into

account their socio-economic circumstances. The informal semi-structured character of the interviews allows for collecting other relevant information on the daily practices of the work in order to place the avoidance techniques into their right context and collecting information that has not been anticipated before. The discourse analysis is used to triangulate insights deriving from the interviews and observations in the field.

First, a chapter will be dedicated to theory regarding the research subject. The first part evaluates the concept of ride-hailing, followed by a section that sets forth the economic model of crime, while the last section provides a taxonomy of occupational risks. The second chapter is aimed at providing a regional context. It addresses the rise of ride-hailing platforms in Latin America, different regional approaches to regulation of the phenomenon and concludes with a brief overview of sectors and platforms that share similarities with the ride-hailing industry in Bogota. The analysis is structured in a way that it first addresses the socio-economic environment of respondents and its impact on their motives for (non)desistance, followed by an analysis of the observed application of avoidance techniques. Lastly, a discourse analysis provides insight into desistance of drivers in the absence of Uber in Colombia. As usual, this work is concluded by a discussion and conclusion.

1. Mitigation of risk in the ride-hailing sector: a theoretic approach

In this chapter, a theoretical framework is built in order to provide the remainder of the thesis with relevant concepts, theories and earlier academic work related to the research question of this thesis. Furthermore, this chapter gives an opportunity to establish which theoretic perspective to follow and which terminology of important concepts is used in the remainder of this thesis, next to stating the state of the art within the academic field.

The chapter is divided into three sections. First of all, the concept of ride-hailing will be discussed within the larger picture of the platform economy, addressing the emerging body of academic literature that has been written regarding these concepts. Consequently, the economic model of crime and theories surrounding deterrence from crime and avoidance will be explained. The third section consists of a short taxonomy of occupational hazards and its occurrence in different academic fields. This chapter will be concluded by addressing some insights deriving from the theory and by formulating some hypothesis regarding the research question and literature.

1.1 Ride-hailing as a combination of old ideas and new technology

In 1975 Martin Wohl made the case for taxicabs as the most efficient form of public transport, establishing that the taxi industry, despite of heavy limitations and regulations concerning fares, licensing and operations, was the only branch of public transport that could operate without public funding, while creating vast employment opportunities for lower skilled workers. Wohl envisioned that the future of solutions to public transport problems would lie in offering transport outside of designed routes and schedules, providing transport by cabs that could be hailed on demand in every street segment in cities and suburbs at any time. A reality that was put into practice over 30 years later by online platforms that match labour and demand within a geographical location in the form of ride. This practice is also known as ride-hailing or ride-sharing (Wohl, 1975, pp. 150, 151; Contreras & Paz, 2018, p. 65; Feeney, 2015).

Ride-hailing is a label for work on demand applications that deliver transportation (Behrendt, 2019, p. 18; Chen, 2018, p. 2691. 2692). In a more practical definition, the Associated Press Stylebook defines ride-hailing services as services that “let people use smartphone apps to book and pay for a car service or, in some cases, a taxi” (APStylebook, 2018). What, according to Rayle et al., sets ride-hailing apart from similar and, in some cases, older forms of transport, such as app-based taxi hailing and app-enabled carpooling, is the combination of GPS-enabled smartphone technology and the absence of traditional taxi-regulations (2016, p. 169). However, what exactly entails ride-hailing and how it should be conceptualized, is still subject of discussion, especially with regard to terminology. While some scholars use the term ride-sharing and place the concept within the framework of the sharing economy, others resist this term, stating it is merely a term invented by the companies out of marketing concerns, which misleads the public perception, as the practice of ride-hailing does not

necessarily require two passengers or more and often includes just one passenger, while ride-sharing, a term that was initially used in academic papers, implies that vehicles used for a trip are in theory shared by two or more passengers (Henao & Marshall, 2019, p. 2175). Other terms that have been used to refer to ride-hailing (companies) include Transportation Network Companies (TNCs), ride-hailing, ridesourcing, ride-booking, ridematching, on-demand-rides, and app-based rides.

According to Henao and Marshall, not all these terms are to be used interchangeably. The term TNC is mostly used by lawmakers to refer to the companies, while ridesourcing is a merely academic term (Henao & Marshall, 2019, p. 2175; Dias, et al., 2017, p. 1308). The debate concerning the terminology of the phenomenon has not been limited to the domain of scholars. Correspondingly, journalists and The Associated Press Stylebook have engaged in the discussion and prescribe that the accurate term for the practice should either be ride-hailing or ride-booking services, meanwhile discouraging the use of the word ride-sharing, which implies a general consensus on the non-use of the latter (Warzel, 2015). To join this consensus and incorporate the term that has recently been more prominently used in news outlets and academic works, this thesis will qualify the in this section described practice as “ride-hailing” for the remainder of this work.

Ride-hailing, however, is not a lonely wolf in itself within the academic field. De Stefano categorizes ride-hailing as a sub-category of platform work, a generic term for multiple services that make use of an online platform (De Stefano, 2016, pp. 2, 3). Numerous differences can be identified between the existent platforms, based on its purpose and, for example, the way in which people work. The two main categories can be defined on the basis of the kind of labour they provide. The first category is made up of online labour platforms that provide crowdwork. Crowdwork mostly consists of work that can be done online and from distance, such as the moderation, translation and transcription of online content and sometimes involves transferring work that traditionally has been done offline, but is done now online. The second category consist of work on demand platforms. Here, work demand and supply are arranged through online applications, while the labour is delivered physically, mostly in a geographically predetermined area. Ride-hailing apps are examples of such a labour platform, while work on demand platforms include apps that provide different kinds of labour, such as meal delivery (De Stefano, 2016, pp. 2,3; ILO, 2018, p. 1). As Scholz argues throughout his book ‘Uberworked and underpaid’, ride-hailing workers often face uncertain customer demand and low earnings, while it is often seen as an opportunity to earn money for people with limited access to formal labour markets. The rise of these forms of labour in economies with a large share of informality in the economy, is often linked to bigger problems of informality that exist within society (Scholz, 2017; Behrendt, 2019, p. 21). While Ticona & Mateescu agree with Scholz that platform work in some sectors, such as transport, cause the informalization of labour, they disagree that platform work in any sector

entails this effect. In sectors where already a large part of the workforce is employed informally, it could even have the opposite effect, it is argued (Ticona & Mateescu, 2018, pp. 2691-2693).

The principal exploratory academic works and researches on ride-hailing services have mainly focused on the traits of ride-hailing services in respect to the service of taxicabs or demographic data regarding its users, finding that users of ride-hailing apps are, in comparison to taxi-users, higher educated, younger males that come from house-holds without car ownership. It is theorized that this is mainly due to the fact that young individuals are more aware about technological developments and more open to use new technologies and services in comparison to their older peers, while they also have the ability to make use of them. At the same time, Dias et al. expect ageing populations to be increasingly prone to use these new services as their ability to drive deteriorates (Rayle, et al., 2016, p. 172; Dias, et al., 2017, pp. 1310, 1315). Furthermore, Rayle et al. suggest that, while sharing a large part of its user base, the services of taxis and ride-hailing apps do not overlap as much as popular media make it seem. Indeed, competition between the two kind of services exists, but, according to these scholars, a large part of the user base of ride-hailing apps would not have made the same ride by taxi, which suggests that ride-hailing and taxi services do not completely serve the same market demand (2016, 176, 177).

Dias et al. have, like Henao & Marshall, investigated the way in which the availability of ride-hailing services has, if it all, substituted already existing means of transport and the way it has influenced car-ownership among urban citizens (Dias, et al., 2017; Henao & Marshall, 2019). In both studies it is found that people without car ownership may substitute public transport, walking or biking by using ride-hailing apps. Dias et al. implicate that ride-hailing therefore might be contra-productive in avoiding congestion in densely populated areas. Henao & Marshall, on the other hand, theorize that the implications of these finding are to be put into a long-term context: non-car owners may have decided not to own a car partly due to the availability of ride-hailing services (2019, p. 2192). Rayle et al. have investigated the rationale of users of ride-hailing services to use those services, finding that convenience (ease of payment, waiting time and travel time) is one of the most common reasons to use ride-hailing platforms, followed by practical issues, such as people not wanting to look for a parking lot or not wanting to drink and drive. While it can be established that there is a clear picture of why users (passengers) engage into ride-hailing-services, the motivation and reasons of drivers to engage in the practice have been mostly ignored as a subject of study in recent literature. Unsurprisingly, the effects of ride-hailing on drivers' behaviour as a future topic of discussion has been put forward (2016, 177).

Meanwhile, the amount of academic work on the implications of ride-hailing services on various aspects of daily life, other than public transportation, has increased. Berger theorizes that ride-hailing services like Uber may transform medical emergency transportation, as far as they have not

done so yet, as people may make use of, often faster and cheaper, ride-hailing services instead of an ambulance in situations of medical emergency (Berger E. , 2017, pp. 15-17). Another important aspect of the academic body regarding ride-hailing services and the broader issue of platform economy addresses labour regulatory challenges when it comes to the nature of the contract between people delivering the ride-hailing services and the platforms connecting them with costumers (Zou, 2017).

1.2 Choice-making: a thin line between accepted risks and available alternatives

One of the most used concepts in relation to policies that aim to prevent individuals in society to commit a crime or partake in illegal activities is deterrence. The traditional view on deterrence has been one that links deterrence closely to punishment. In this theory, punishment is aimed at criminals, or perpetrators of illegal acts, to deter them from repeating a certain crime or illegal act, as well as preventing others to commit similar acts (Law & Martin, 2009). Gary Becker is one of the founders of the rational-choice theory of crime or economic model of crime and has further developed the ideas surrounding the concept of deterrence (1968). Becker focused on an economic analysis of the levels of punishment and allocation of government resources into policies to combat illegal behaviour. He interprets the optimal decision that criminals make to partake in illegal activities as being a consideration that minimizes the risk of losing capital during illegal activities. Those losses could, for example, be seen in the form of the risk of material damage, the possibility to be apprehended and the related cost of conviction, including carrying out the related punishment (Becker, 1968, p. 207). This model would indicate that higher punishment increases crime risks and thus would make crime less attractive, leading to a lower crime rate, while the higher the expected payoff, the bigger the probability of participation in crime (Rauhut & Junker, 2009, pp. 1,2; Harbaugh, Mocan, & Visser, 2013, pp. 389, 390).

According to Allen, however, the economic model of crime and the decision-making of potential criminals include, apart from an economic view, more factors, such as 'human capital skills, the availability of legitimate activity, preferences for risk, the potential sanction and the probability of detection', while he also mentions the social content of crime that forms part of this model. He theorizes that people living in a culture that encourages crime might be more likely to engage into crime, whereas in other societies there might be a higher social cost attached for people to engage in crime or being openly linked to certain forms of illegal activity (Allen, 2005, pp. 494, 495). Also, Viscusi recognizes the availability of a legitimate job alternative as a factor within the economic decision-making process of potential criminals (1986, p. 319):

"The primary matter of concern to the potential criminal is not the crime risk per se but whether the frontier of criminal rewards-crime risks offers a crime option that is superior to his legitimate job alternative." (Viscusi, 1986, p. 319)

Sometimes this legitimate job alternative might not be existent. Research embedded in the economic model of crime suggests that circumstances as high unemployment rates, poverty and problems in the labour market prompts illegal activity and crime, as the illegal activity delivers more reward than the legal, unemployed, alternative (Garcia, Rodriguez, & Parra, 2011, p. 113). Thus, one could argue that a legal alternative income could be a deterring factor for people to commit illegal acts.

Mocan & Unel have further developed the economic model of crime in relation to legal labour market opportunities, taking into account income inequality and changes in wage versus crime rates. While the empirical difficulty to establish causal relations between (the height or absence of) wages and crime participation, because of the questionable exogeneity and the existence of other lesser apparent factors that might partly determine a perpetrators likelihood to participate in illegal activities, has impaired evidence of the correlation between wages and criminal activity, Mocan & Unel have conducted research that connects the impact of unskilled workers' wages on crime, based on the economic model of crime (2017, pp. 3-6). Their research suggests that the impact of wages, thus variations on and availability of wages in legal labour markets, have a greater impact on criminal activity than recognized before. Their results imply that variations and legal alternatives to work should be of public policy concern when it comes to crime control and desistance of illegal activities and provide a foundation for future research on this topic (Mocan & Unel, 2017, p. 43).

Still, the above-mentioned findings give room for theories that reverse the causal relation between crime and legal market opportunities. As argued by Albrecht, Navarro and Vroman, disqualifications for participation in the legal labour market, as a consequence of labour market policies, oblige workers, with for instance physical disabilities or a criminal record, to take part in the informal or illegal sector. Leaving individuals with no other choice than executing activities outside of the formal sector (Albrecht, Navarro, & Vroman, 2009, p. 1106; Thoene, 2015, p. 21).

A poor future perspective in the labour market could thus be the consequence of, as well as the cause for, undertaking criminal activities. The theory put forward in this work is that for some individuals, the decision to participate in illegal activities is only to a certain extent a matter of choice, as they are excluded from most of the legal labour market. One of the determining factors that can lead to an individual to be excluded from legal alternatives is an individual's level of human capital, based on the relative productivity of a worker (Mondragon Velez & Peña Vargas, 2008, p. 4) As a consequence, Albrecht, Navarro & Vroman theorize, higher skilled workers are found in the formal sector and unskilled workers are mostly present in the informal or illegal economy (2009, p. 1106).

Extending the importance of providing legal labour alternatives outside of the domain of crime control, Thoene theorizes that the mechanisms that exclude workers from formal employment have more implications than solely depriving these people of decent income and insurance against life risks. Ignoring the skills and capacities of parts of societies, mostly the more deprived sectors, undermines

the formation of democratic political structures. Those structures are used to advance citizenship rights and economic opportunities in a more inclusive way for society (2015, p. 13).

Labour markets are, thus, one of the principal components to create an inclusive and participatory society in which people enjoy more inclusive rights, aimed at socio-economic equality. In order to be able to contribute to a reduction in poverty, labour markets should be providing not only more formal jobs, but also of better quality, so that social rights are guaranteed and the jobs will be a suitable alternative for unregulated jobs (Thoene, 2015, p. 14).

1.2.1 Varying practices of deterrence

Within the same framework of the economic model of crime, scholars have theorized on the possible ways that criminals deter from illegal activities. They take into account the same equation which makes up the assessment and possible decision to deter from crime, with on one side the perceived chance of being apprehended multiplied by the perceived scale of punishment and on the other end the expected gains deriving from illegal activities. The outcome of this equation, however, is not limited to two outcomes (deter or not deter), but may develop gradually (Jacobs, 1996, pp. 361, 362; Paternoster, 1987, p. 174).

Before we explore these different forms of deterrence, first of all, we need to understand why offenders might come to different outcomes when making up this equation. One of the explanations can be found in the work of Paternoster and Piquero (1995). According to them, (potential) offenders create a perception on the probability of being apprehended. This use of perception implies that criminals value risks differently. In theory, there exist two distinctive ways of perceiving apprehension and punishment risks. One is called general deterrence, which is caused through circulating reports or other accounts of people being apprehended for a certain illegal activity. The other one is called specific deterrence, depicting the perceived probability of being apprehended and the consequences thereof by means of one's own experience (Paternoster & Piquero, 1995, pp. 251, 252).

According to Jacobs, the shortcoming of this division is, amongst others, the fact that for this theory to hold, a punishment must have had taken place in order for deterrence to take place. Related to this, Jacobs argues that there are mechanisms in place in which the opposite holds. Subjects that succeed repeatedly in their efforts to execute illegal activities may lower their perceived chances of apprehension and of those who hear about these 'successes' and might even increase them (Jacobs, 1996, p. 362).

As stated before, some offenders may decide to not completely deter, nor continue their activities as they have done before, acting in accordance to a principle called restrictive deterrence. While multiple definitions of this concept are in use, Jacobs' qualification may be most useful. He divides restrictive deterrence into two categories, of which one, probabilistic deterrence, has already been mentioned in 1975 by Gibbs. He stated that some violators may restrict their illegal activities in

the belief that repeating them will eventually lead to apprehension, which implies that the perpetrator perceives their activity as risky (Gibbs, 1975, p. 33; Jacobs, 1996, p. 372).

This is just one side of restrictive deterrence Jacobs suggests. While probabilistic restrictive deterrence, is, thus, based on reducing the frequency of a violation, particularistic deterrence entails “a reduction in offense frequencies based on tactical skills used by offenders to make their crimes less detectable and reducing their chances for apprehension” (Jacobs, 1996, p. 376).

When it comes to these tactics, Jacobs further makes distinctions in reactive (RRD) and anticipatory restrictive deterrence (ARD) (1996, p. 377; Moeller, Copes, & Hochstetler, 2016, p. 83). The former meaning that perpetrators develop strategies or techniques to identify officials or people they suspect to be officials and how to avoid apprehension in the case they come into contact with them. Anticipatory tactics are aimed at avoiding contact with agents, by making decisions regarding the area wherein and the hours in which they commit illegal acts. Another example of ARP is trying to blend into the public by obeying to traffic laws, thus not catching the attention of officers. The above mentioned tactics are also known as ‘avoidance techniques’ (Jacobs, 1996, p. 83; Moeller, Copes, & Hochstetler, 2016, pp. 86-87).

1.3 Occupational risks in illegal sectors

In the previous section, theories and concepts have been discussed in order to understand the considerations and mechanisms surrounding deterrence and the ways in which deterrence takes place, based on the equation of risks versus gains. So far, theories regarding sources of risk attributed to the execution of illegal activities, have remained mostly unaddressed. This thesis will explain these risks from the perspective of occupational hazards.

According to the taxonomy of occupational hazard by Cabeças, an occupational hazard, also labelled ‘occupational risk’, needs to involve two elements; first, a hazard or risk factor needs to be present. In this sense, a hazard is understood by a ‘source or situation with a potential for harm in terms of death, ill health or injury, or a combination of these’ (Cabeças, 2015, p. 703). Thus, a hazard does not necessarily take place, but merely presents the probability of an incident happening. Secondly, a relation between the hazard and the occupation of the subject or group of subjects who are at risk needs to be established. According to Cabeças, this is not necessarily a causal relation. Regarding, for example, the classification for occupational hazards related to diseases, he identifies three different categories, differentiated by the nature of the relation between an occupation and hazards. The first category consist of so-called occupational diseases, which have a direct and recognized causal relation to the occupation of an individual. Secondly, work-related diseases, are diseases which do not have one single cause and which origin may involve other risks outside of the occupational domain. Lastly, diseases affecting working populations, are diseases that are not caused

within the occupational domain, but diseases which symptoms are aggravated by hazards present within the working environment of individuals (Cabeças, 2015, p. 703).

As put forward, however, occupational hazards are not limited to diseases only. For example, other possible hazards, as apparent in the taxonomy of Cabeças, consist of the potential for a work-related accident to happen, leading to an occupational injury, and 'emerging occupational hazards', a heterogenous group of newly discovered hazards that may affect not only people, but property as well. The European Agency for Safety and Health at Work, requires emerging hazards, next to being newly discovered, to be increasing in probability of occurrence (Cabeças, 2015, p. 704).

As pointed out, occupational hazards have traditionally been interpreted as mostly a physical phenomenon, in the form of work-related illnesses, accidents and deaths (Webster Dictionary, 2019; Giuffrida, 2002, p. 235). More recently, occupational hazards as a concept has been taken out of solely the field of occupational health and into other fields, amongst which are environmental studies and economics. This, subsequently, broadened the view of what can be regarded an occupational hazard. Any personal damage that could be inflicted into someone which originates from someone's profession could be considered an occupational risk or hazard. This results in including within the concept of occupational hazards instances of, for example, mental health issues and sexual harassment in working environments, next to traditional medical conditions (Giuffrida, 2002, pp. 235-237).

As the range of different occupational hazards identified by theory and research is not limited, but merely emerging, based on the nature of what can be considered risks, so is the concept occupational hazards not limited to solely occupations in the formal branches of the economy. The sex industry is one of the more unconventional industries that have been under the attention of scholars in the field of occupational health. Popoola and Izugbara, for example, investigated the occupational hazards of sex workers in Nigeria, where such work is illegal (Izugbara, 2005; Popoola, 2013). Their investigations provided relevant insights and grounds for future research regarding occupational hazards in illegal activities, by finding that, unlike concerns arising from governments, the public and earlier academic work, not diseases (STD's) were perceived as the biggest occupational hazard by the sex workers themselves, but police harassment, stigmatization and police/client violence were found to be the main hazard related to their occupation (Popoola, 2013, p. 145; Izugbara, 2005).

Popoola theorizes that this discrepancy might occur, because the latter incidents cause direct effects on their income and ability to continue their work. The findings imply that while government bodies are ought to put into place legislation to diminish occupational hazards and increase occupational health, legislation and policing might have an opposite effect. Therefore, it is argued that occupational hazards could be addressed by legislation aimed at the economic empowerment of people working in these branches of economy. This could be done by addressing broader structures in society and combatting the circumstances, such as poverty and under-education, that initially led

individuals to engage into illegal activities as the last-resort to be able to generate a viable source of income (UNAIDS, 2006; Popoola, 2013, p. 147).

Regarding illegal work, Viscusi identified parallels between crime risks, i.e. the risk that criminals get apprehended or experience any other kind of physical or economic damage while carrying out illegal activities, and occupational risks (Viscusi, 1986, pp. 317, 318). In this interpretation, executing illegal economic activity (crime) is seen as an occupation, hence its attributed risks are occupational. Tremblay and Pare have gone further to elaborate this theoretical line, discussing an occupational hazard-model of crime risk for heavy criminal offenders, using the death rate among criminals as an indicator. According to this model, offenders experience a higher mortality rate because of a higher exposure to conflicts. This exposure to conflicts is explained by stating that offenders form a prominent target, especially for other offenders, as they fight over the same scarce resources. Furthermore, they are targeted as incapacitation objectives by victims of their crimes and law enforcement officers (Tremblay & Pare, 2003, pp. 299-308).

An interesting finding, highlighted by Tremblay and Pare, is that offenders attempted to control their risks by adopting victimization and apprehension avoidance techniques. This suggestion is supported by the observation that young offenders, as their perception of risk is lower, increasingly engage into more risky activities, with higher returns and higher victimization hazards. Their death rate does, however, decrease over time, suggesting they apply techniques to avoid these crime-related occupational hazards as they get more experienced and aware of hazard attributed to their activities. The techniques applied by offenders in order to limit occupational hazards have been discussed in the previous section within the concept of restrictive deterrence (Tremblay & Pare, 2003, pp. 299, 307, 308). How people respond to hazards they face carrying out their activities may, however, differ depending on one's characteristics and conditions. People that already suffer from a disease may, for example, respond different to a certain hazard than their colleagues, when they consider the consequences of a hazard to be larger for them (Cabeças, 2015, p. 704). Other groups of workers might be incapable of coping with the hazards faced in their occupation and cope with this situation through endurance, accepting the hazards as normal consequences of their work, or apply other ineffective strategies as a response to perceived hazards (Popoola, 2013, p. 146).

In the same line Giuffrida et al. argue that poor working conditions in a current occupation and potential alternative jobs, in combination with the lack of social security and insurance, makes that workers may tolerate working conditions with a higher potential for occupational hazards to occur. The reason being, that those (illegal) workers experience the condition in which losing their job would mean losing their main, often only, source of income, while a safer working environment that could substitute their current occupation is not within their reach (2002, p. 236; Popoola, 2013, p. 140). As a

result, according to Giuffrida et al., occupational risks are likely bigger in small enterprises and economies with a low level of labour unions rights (2002, pp. 235-237).

Conclusion

This chapter has provided the theoretical foundation of this thesis. When it comes to ride-hailing, it is established that the first ideas regarding the concept were found in literature concerning taxicabs (Wohl, 1975). It is shown however, that ride-hailing serves a largely different public and its use includes implications that go beyond public transportation (Berger E. , 2017; Rayle, et al., 2016). In contrary to its users, little is known when it comes to the demography of its drivers and their motivations to work in the newly emerged ride-hailing industry, while it is argued that the problems surrounding their labour are closely linked to those of people working in the informal economy (Behrendt, 2019).

The economic model of crime, developed by Becker, suggests that criminals weigh out profits of crime versus its risks in order to decide whether to continue their activities (1968). These risks are addressed through the perspective of occupational hazards, as it is shown that the body of literature regarding occupational health has grown to include less conventional occupations and more hazards that are not solely physical (Giuffrida, 2002; Cabeças, 2015). As criminal's intent to decrease risks of apprehension, policing is regarded as an occupational health within illegal occupations (Popoola, 2013; Jacobs, 1996). Like workers in hazardous circumstances, criminals can partly deter, both concerning the frequency of their actions, but also in the way they operate (Gibbs, 1975). Literature in both occupational health and crime deterrence show, that when individuals cannot find a viable alternative they may continue their activities and sometimes apply ineffective techniques to improve their circumstances (Cabeças, 2015; Popoola, 2013). Furthermore individuals may perceive hazards on the basis of their own experience or on the basis of others' experience, while the way they process these hazards can differ based on ones characteristics and circumstances, such as health or pre-existing diseases (Cabeças, 2015; Popoola, 2013).

Based on the above we can expect that law enforcement will have a smaller effect on the occupational hazard perception within the decision-making process of the ride-hailing workers than might be expected. This, because a formal or legal alternative is, in theory, considered to be an important factor for both criminals and workers in hazardous occupations. At the same time, policing will probably be one of the most visible, direct, occupational hazards for ride-hailing workers, which is thus expected to be a hazard that requires avoidance techniques to overcome (Rauhut & Junker, 2009; Becker, 1968; Giuffrida, 2002; Popoola, 2013).

In short, whether ride-hailing workers will put into place techniques to avoid the risks attributed to their activities will depend on the way they perceive risks, the way in which these risks have been put in place and the socio-economic status of these workers. Their decision is influenced by possible viable alternatives that are at hand based on, amongst others, personal capital and

possibilities in the labour market. Therefore, in the next chapter, not only the rise of ride-hailing platforms in Latin America will be addressed, but also the way in which governments have formed regulations regarding ride-hailing and the state of the Colombian labour market will be analysed.

2. The rapid expansion of ride-hailing in Latin America (2013-present)

In the current chapter, the subject of this thesis will be contextualized. To achieve this end, the development of ride-hailing platforms in Latin America and Colombia will be viewed through a historical and economic perspective, taking into account (inter)national and regional situations. As established, ride-hailing is a relatively new phenomenon. Therefore, where necessary, the scope of this chapter is extended to Latin America. Not only to fill gaps of information that is not available solely on Bogotá nor Colombia, but also to give a broader perspective on the nature of the phenomenon and the responses it has received. Regarding the historical scope of this chapter, the investigation will be limited by taking the phenomenon of ride-hailing in Latin America into account from the year it was first introduced in the region.

The first part of this chapter will deal with a chronological account of the introduction, geographical development and emergence of new(er) ride-hailing platforms in Colombia and Latin America. Consequently, the reception of the phenomenon by lawmakers and other stakeholders in society is discussed. As stressed in the theoretical chapter, economic alternatives are an important factor within the economic model of crime and desistance. Therefore, it is relevant to, ultimately, contextualize the economic circumstances in which the ride-hailing industry is positioned in Colombia. Thus, the last part of this chapter will consist of a brief contextualization of the Colombian labour market and industries that are active in Colombia and share certain dynamics with the ride-hailing sector.

To sustain this chapter, next to academic literature, (government) reports and news articles will be used.

2.1 Latin America as a fertile ground for ride-hailing companies

The phenomenon of ride-hailing reached Latin America in 2013 when Uber first launched in Mexico, followed by Colombia in the same year. In 2014, Uber already expanded to Brazil, Peru and Chile, while opening up multiple different other markets in the years to follow (Moed, 2018b; Lustig, 2018). According to Oviedo, Granada & Perez-Jaramillo, Latin America has grown to be one of the core regions of operation for Uber. As of 2020, Uber was active in 173 cities across South America and the Caribbean, with an estimated 25 million monthly users in 15 countries (2020, pp. 1732, 1734; Salazar Castellanos, 2019). According to Uber Estimator, a website that tracks the countries and cities where Uber is active and gives an estimation of the local fares, the only countries in Latin or South America where Uber is not currently active are Venezuela, Nicaragua, Belize, Cuba and the three Guyanas (2020).

Uber managed to get a tight grip on Latin America. This was not only because of the relative proximity to Uber's headquarters in the United States, which allowed for a more effective support structure and efficient upscaling strategy, there might also be a cultural rationale. It is said that Latin

American consumers and American consumers share similar technological consumer preferences, while at the same time the high rate of access to smartphones plays a role (Amaral Haddad, et al., 2019, pp. 1-3; Moed, 2018b). Whether or not these theories hold, the fact that 2 out of the 5 countries that hold the most cities in which Uber offers its service are located in Latin America, shows the degree to which Uber has been able to geographically expand in the region compared to other world regions. In fact, Brazil (no. 2, 131 cities) and Mexico (nr. 3, 56 cities) allow only Uber's home country, the United States, a place before them on the ranking- and they rank even higher than a country like India (Uber Estimator, 2020). The latter could be explained by the fact that in some regions of the world, domestic ride-hailing platforms entered their respective markets before Uber could expand their operations to these regions. In this way, Uber operates in more cities in Mexico than India, where the domestic platform Ola has been able to obtain a significantly larger market share than in the US, Europe or Latin America, making Uber a less dominant player (Moed, 2018b; Salazar Castellanos, 2019).

In Latin America, however, Uber has not been the only player within the ride-hailing industry offering their service (Lustig, 2018). In Colombia, for example, Uber, while remaining the market leader, has been forced to share their market for over five years as new platforms emerged. In 2015, Cabify and Picap, a Colombian application for ride-hailing with motorcycles, entered the market. In 2018, Indriver, Fory and Beat started operations, while more recently, the Chinese platform Didi entered the Colombian ride-hailing market in 2019 (Patiño, El debate por la legalidad de Picap, la 'app' de mototaxismo, 2019; Leal Acosta, 2019). A director of Beat has stated that the growth rate of the amount of rides through his platform has been between 30% and 40% per month during the first half of 2019, while according to the CEO of Didi, the Chinese platform reached 16.000 subscriptions of new drivers in the first week after it started to operate in Colombia (Leal Acosta, 2019). While the absence of public statistics makes it difficult to verify these statements, it seems evident that new players in the Colombian ride-hailing sector have complacently been able to obtain a market share within the Colombian ride-hailing industry.

While academic articles that research the successful expansion of ride-hailing in Latin America are non-existent, Oviedo, Granada & Perez-Jaramillo do identify two main grounds for the success of the different ride-hailing platforms in the region. The first one being rooted in the perceived comparative advantage of platforms over traditional taxi services by the population. Not only the fact that the platforms deliver on time services that can be requested through a mobile phone are among these advantages. The fact that the app provides its users with the opportunity to rate drivers and users, as well as providing feedback for the improvement of its systems, are considered to be an advantage compared to traditional modes of public transport. At the same time, the conditions of the vehicles that are used by its drivers are often considered to be better than those of traditional taxis (2020, pp. 1732-1733).

Taking into account the large dependency the urban population in Latin America has developed on different forms of public transport, it is not surprising that this population has been keen to try new or improved forms of public transport (Lustig, 2018). Therefore, the conclusion of different media, which states that ride-hailing has thrived in the region through a popular demand for safe public transport alternatives to traditional public transport, seems plausible (Lustig, 2018; Moed, 2018b).

An open and liberal market for public transportation in Latin America, with many small private actors and limited regulation, could be one of the reasons that cause these systems to decay. Leading, in turn, to a severely damaged public image. The Peruvian game 'Crazy Combi', a game that ridicules the alleged reckless driving behaviour of drivers of combi buses, one of the most used modes of public transport in the Peruvian capital Lima, illustrates this image (Harden, 2019; Moed, 2018b; Tegel, 2018). Another example is the infamous 'millionaire rides', a number of infamous incidents in Colombia, in which taxi passengers, after hailing a taxi on the street, are robbed from their money and valuables by thieves, while often the taxi-driver is involved. In some cases, the victims are driven to an ATM to empty their bank account, or coerced into handing over digital passwords. This practice gained international attention in 2013, when an American DEA agent was killed in a millionaire ride, causing severe damage to the reputation of the Bogota taxi industry and generating a response by then-president Juan Manuel Santos (Moed, 2018b; Harden, 2019; Muse, 2013).

The success of ride-hailing, however, is not to be entirely attributed to the state and image of the taxi industry and other traditional modes of transport in the region. As put forward by Oviedo, Granada & Perez-Jaramillo, another cause for the success of ride-hailing platforms in Latin America, is to be sought in the economic environment of the region, combined to the adaptability of the platforms' business design, giving not only Uber, other local and international ride-hailing platforms as well, room to thrive. In addition to being helped by a fertile economic environment in the region which is favourable to entrepreneurs and start-ups, the platforms, aided by data-driven innovations, have been able to adapt its ways of operation to meet local requirements for operation (2020, p. 1733).

At the same time, the high unemployment rates in the region, aggravated by an economic downturn in 2018, made that there is a large, unemployed workforce available, willing to supply the increasing demand of ride-hailing rides (Rapoza, 2019; Moed, 2018b; Defossez, 2017, p. 2).

2.2 Ride-hailing and regulation, from relief to threat

As demonstrated, Uber and other ride-hailing companies are active on nearly the entire region of Latin America. Still, the vast majority of its one million daily users in the region make use of the platforms illegally. For example, of all the countries in which it is active, Uber has only been legalized in Mexico and Brazil, leading to different degrees of success (Haldevang, 2015; Benkoe, 2018; Moed, 2018b).

While countries in Latin America have attracted vast amounts of investments from ride-hailing platforms, governments on different scales have been increasingly careworn about the position of the

platforms and their disruptiveness regarding existing mobility systems. Indeed, the expansion of Uber's businesses in Latin America has not been without its proper setbacks and difficulties. Since its arrival to Latin America, protests have arisen, leading in nearly all countries to violent attacks of ride-hailing drivers by taxi drivers, such as in Mexico, Colombia, Argentina and Brazil (Pulzo, 2017; Ruvolo, 2015; Conn, 2018; CBS News, 2015). These attacks have mostly been executed by actors from the traditional taxi industry and have even taken place in locations where the service is (partly) legalized (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1733; Moed, 2018b). Different stakeholders in society pressured local and national governments to revise and define the legal conditions of the platforms and the legal protection of their workers in court. According to critics, there should be a better understanding of the economic, social and environmental effects of the platforms' operation before allowing them to operate. Those alleged effects are, amongst others, the level of congestion in urban areas, an alteration of the travel behaviour and mode choice pattern of passengers next to possible negative effects on the financial sustainability of existing mobility systems. Additionally, as we have seen in the previous chapter, effects on the size, composition and use of the local car fleet are named as possible consequences of the arrival of ride-hailing platforms' services (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1733).

Thus, while the ride-hailing platform has not been legalized or formalized in many countries, there are few countries in which Uber did not manage to enter at all. As mentioned before, Nicaragua is one of the countries where Uber is not active, however, Uber did intend to enter the market of the Central American country. According to reports, Uber undertook several attempts in 2017 and 2019, however, those attempts were met with a gulf of violent protests, again driven by taxi drivers (Nicaragua Investiga, 2020; Tijerino, 2019). Still, various similar ride-hailing services are being offered in Nicaragua. These platforms claim to obey the law by controlling and registering their drivers. The government, together with representatives from the taxi industry, stressed that all use of digital ride-hailing platforms is prohibited, arguing that they are unsafe for users and cause unemployment (River, 2019; Nicaragua Investiga, 2020).

In 2015, the government of Mexico City became the first authority in Latin America to legalize the service of Uber and other ride-hailing services like Cabify (Semana, 2015). The legalization included three main measures undertaken. First of all, a new legal form of public transport was created, labelled as "Servicios de transporte privado solicitados a través de plataformas tecnológicas" ('private transport services requested through technological platforms'). A tax of 1,5% has been implemented on the revenue of those services. These taxes are deposited in a fund that is established to be able to make investments in the Mexican road network and investments in the Mexican taxi industry. A second measure is that cars can only be considered under the new category of public transport if they meet certain requirements, including a minimum new purchase price and the presence of an airbag, safety

belts and minimum four doors. Ultimately, the drivers of this category are not allowed to receive cash money (Semana, 2015). While all parties - ride-hailing platforms, the governments, and the taxi industry - had to do some concessions, the regulation did not please all parties. The new regulations were met with severe protests by taxi drivers that paralysed the complete infrastructure of Mexico City. According to a representative of the taxi drivers, their discontent lies mostly with the fact that taxi drivers still pay a higher tax rate than their counterparts working for ride-hailing platforms (Semana, 2015). In relation to the discontent of taxi drivers, reports of aggressive actions from taxi drivers directed at Uber drivers have, regardless of the renewed legal status of ride-hailing, appeared in the media (Charbell, 2019; CBS News, 2015)

Also in Brazil, ride-hailing has been regulated in some of its mayor cities, more specifically in Sao Paulo and Brasilia, on the basis of local regulations. The initiative for the local regulations was undertaken by former president Dilma Rousseff in 2015 out of reservations that mostly included labour concerns (Defossez, 2017, pp. 17, 18). The way in which these regulations have been shaped, however, vary largely. While it was initially agreed that ride-hailing in Rio de Janeiro, Brasilia and Sao Paulo would be prohibited, the mayors of Sao Paulo and Brasilia vetoed its prohibition, looking for alternatives to enable Uber to continue their services. In Sao Paulo, similar to Mexico City, a new legal category for public transport was created, labelling ride-hailing companies as 'Operator of Technology of Transport Accredited' (OTTC). The new requirements did not put a heavy burden on platforms, as the regulations were designed to meet the practice of the platforms. It requests the platforms, amongst others, to enable users to rate drivers, to deliver receipts and verify the identity of drivers, which they already did. The new regulations, however, did put additional requirements to the drivers. They are required, for example, to possess insurance for their passengers, subscribe as a taxi driver and drive a car that is under 5 years old (Defossez, 2017, p. 19).

The authorities in Brasilia, however, added a large range of additional, rather restrictive, requirements, ranging from regulation that exclude drivers with a criminal record or debts and public servants to be able to drive for ride-hailing platforms, to vehicle requirements prescribing leather car clothing, air conditioning and visible signs of the platform it is driving for, along with a range of other prohibitions (Defossez, 2017, pp. 19, 20):

“With the most absurd being the prohibition for the driver to stop, in order to allow a client to drop in, on parking spots, streets or close to big buildings where there are commercial activities, service providers, sports, leisure, tourism or cultural activities as well as places with a high flow of persons.” (Defossez, 2017, p. 20)

Thus, while regulations in Sao Paulo have most likely managed to integrate a part of the illegal workforce into the formal economy, ride-hailing in Brasilia went from an non-regulated alternative job opportunity for the unemployed part of the population to an industry that is even heavier regulated than the traditional taxi-industry. In this way, the ride-hailing sector in Brasilia contains similar exclusion mechanisms to legal labour as formal labour markets, as put forward in the theoretical framework of this thesis (Albrecht, Navarro, & Vroman, 2009, p. 1106; Thoene, 2015, p. 21). Thus, it seems that while the approach in Brasilia might have desisted a large part of workers from continuing their work as driver for ride-hailing platforms, it is unlikely this approach has caused workers to desist from employment in the informal or illegal economy.

In more recent years, however, Uber, and with them other ride-hailing platforms, have had more success in Brazil, as in the first decision before a high court regarding the labour concerns that ignited the regulations in the country, it was ruled that Uber drivers ought to be considered to be independent contractors making use of the platform rather than employees (Brito & Boadle, 2019).

2.3 Uber as a shackle in the Colombian chain of informality

Now that the way in which ride-hailing has positioned itself within the economy of Latin America has been addressed, and legal issues regarding recognition of the platform has been reviewed, it is relevant to discuss the position that ride-hailing occupies within the Colombian economy. As positioned in the previous chapter, the alternative to work is an important factor within the choice-making process of people working in hazardous environments and those who are operational in illegal activities. Therefore, in this section, first the labour market in urban zones of the country will be explored, followed by some forms of labour that can be considered to be similar to the labour carried out by drivers for ride-hailing platforms.

In January 2019, Colombia's Departamento Administrativo Nacional de Estadística (DANE) published its data regarding Colombia's unemployment rate over 2018 (Departamento Administrativo Nacional de Estadística, 2019a). The agency concluded that at the end of 2018 nearly 10 percent of the country's labour force was unemployed, a growth of over one percentage point compared to a year before. According to the agency, the average unemployment rate in the 13 big cities was even bigger (Departamento Administrativo Nacional de Estadística, 2019a). Colombia's biggest city, Bogotá, however shared an unemployment rate exactly at the same rate as the country's average: 9,7% (El Tiempo, 2019). While its unemployment rate is not as high as in most other cities, ranking only 17th out of the country's 23 biggest cities, the 9,7% still accounted for more than 450.000 jobless people, therefore the city was home to the largest amount of unemployed workers in the country (Departamento Administrativo Nacional de Estadística, 2019b, pp. 3-4).

As Bogotá is a lot larger than other cities in the country, the figures might be more relevant when they are compared to other years, rather than compared to other cities within the country. Bogotá has not

seen such a high unemployment rate since 2010 (Departamento Administrativo Nacional de Estadística, 2019b, p. 5). The unemployment rate, however, is only half of the cities concern about the employment. Of course, not all people who are employed enjoy safe, sustainable and/or legal jobs. According to DANE, 42% of the employed workforce in Bogota is employed in the informal sector, while this figure was brought down by 0,5 percentage point since the year before (2019b, p. 14b).

The linkages between non-standard forms of employment, such as ride-hailing, and the informal sector regarding the challenges for society have been mentioned before in this thesis and have been highlighted in reports and literature. This is a consequence of the fact that non-standard work can often be qualified as informal work and vice versa. Both concepts are different umbrella-concepts of employment types that at times overlap (ILO, 2016, pp. 15-18; Behrendt, 2019, p. 25). Various attempts in Latin America to provide for formal alternatives to informal work have been undertaken. Many governments have, however, failed to decrease informal employment on the one hand, and increasing formal employment on the other hand, as these attempts fell short of “incorporating social rights in the status of citizenship and thus creating a universal right to real income which is not proportionate to the market value of the claimant” (Thoene, 2015, p. 13; Marshall, 1997, p. 323). According to Thoene, to raise one’s real income above one’s market value seems to be a reasonable measure as we watch the current market value of many workers in the lower segment of society, who do not have access to decent employment. Next to the lack of social rights to all, Latin American labour markets have failed to create sufficient decent jobs on itself, thus failed to provide decent alternatives for informal employment (Thoene, 2015, p. 14).

Looking at the different modes of public transport in Bogotá, it is clear that ride-hailing drivers are not the only actors within the informal segment of this industry, nor when it comes to issues regarding attempts to legalization. Bicitaxis (bicycle taxis), for example, already deliver their services for over 15 years in the Colombian capital. As a step in the process to be able to legalize these vehicles, which are mostly used by passengers to cover the last miles of a trip travelled by public transport, the local government conducted a research to characterize this type of public transport and its drivers (Altamar, 2019; Portafolio, 2019).

It was found that as much as 5.535 persons are in some way related to the services of bicitaxis, either as owner or driver of a bicycle taxi, while this was only 3.054 in 2013, the last year this sector was investigated, suggesting this type of illegal transport had grown over 40% during the last six years. Others, however, suggest the number of workers in the sector in 2020 could be as much as 15.000 (Altamar, 2019). According to Alba Mery Carillo, interviewed by the Colombian newspaper *El Espectador*, many owners and drivers of bicycle taxis did not let themselves to be included in the local authorities’ survey out of fear and mistrust. Carillo stated that the operators fear to engage into commitment with the authorities, as they might include requisites that they cannot fulfil as a driver.

Among them are the need to obtain a driver's license, requirements regarding the drive of the bikes (pedal support, motor or solely pedals) next to the implementation of a social security system and a digital platform where users can hail rides (Altamar, 2019). Similar efforts and objections might exist among drivers of ride-hailing platforms. Regardless of the exact number, it appears that ride-hailing services were not the only sector of illegal transport that has grown heavily during the last years. And it does not seem a coincidence that, as earlier established, the unemployment rate has surged correspondingly.

Other results of the investigation indicate that the workforce related to bicitaxis is made up of people that are considered socially vulnerable, with difficulties to enter into the formal labour market. Among them are elderly people (23%), Venezuelan migrants (27%) and people with a certain form of labour incapacity (5%). The survey found that most workers in this sector earned as little as 20.000 COP average per day (Portafolio, 2019; Giraldo, 2019).

While drivers for ride-hailing platforms share traits with drivers of bicitaxis, as they are both informally or illegally active in public transports, other groups of workers have joined Bogota's informal workforce along with the rise of different work-on-demand platforms. These include meal-delivery platforms, such as Rappi, domicilios.com and Uber's delivery version, called Uber Eats. Likewise, these platforms are considered a way for people with a lower income to create an income. The income they create, however, is not evenly distributed, as the gross revenue of their work is allocated to the developers of the applications (Noticias UN, 2019). Just as ride-hailing platforms, these platforms create a new type of employment, with ill-defined labour relations between the delivery driver and the platform. Therefore, also regarding these industries, voices have risen that call for regulation regarding these services. On the other hand, a problem is the use of public space. While debates regarding the illegal use of public space formerly considered mostly street vendors, now platforms workers occupy parts of the public space without being regulated. This illustrates one of the problems of the platform economy that is largely overlapping with the bigger problem of informality as has been put forward in the theoretical chapter (Noticias UN, 2019; Behrendt, 2019, p. 21).

Conclusion

As set out in this chapter, ride-hailing platforms have, since 2013, quickly gained a large presence in most of Latin American countries. Partly because of the fruitful economic environments, partly because of the needs of the population, that is largely active on internet and in possession of smartphones, while heavily reliant on public transportation. Other reasons include the state of traditional public transport, which suffers from a worsened public perception when it comes to quality and safety for passengers. Ride-hailing platforms have provided the passengers a suitable alternative. The last identified factor is the large unemployed workforce that is willing to drive for the ride-hailing platforms in Latin America. In Mexico, through regulation, a large part of this workforce has managed

to enter the legal workforce as ride-hailing drivers, at the cost of having to handover part of their revenues to the state, making the occupation slightly less attractive in an economic sense, but taking away the risk of penalization, while attacks from taxi drivers persist. In Brazil, regulations have not always caused better working environments for workers. Regulation in Sao Paulo did come at the cost of higher occupational expenses, but in Brasilia, regulation have not only created unfavourable economic requirements, but also created disqualifying mechanisms to the drivers.

Research in the field of a similar illegal public transport sector has shown that ride-hailing drivers are not the only group of drivers that has risen over the last years. Also, the amount of bicitaxi drivers has grown rapidly. This growth might be linked to the high level of unemployment that is apparent among the Colombian workforce, while another part of the employed Colombian workforce does not enjoy a viable source of income. Together with other work-on-demand platforms, ride-hailing platforms have created a new dynamic within their respective industries, while they seemed to have changed the perception of the informal economy, creating also in Colombia a need for new regulations. In the remainder of this thesis, it will be analysed how Colombian ride-hailing drivers respond to possible occupational hazards, working in the context of (non)regulation, high unemployment and rivalry from other actors in the transport sector.

3. Ride-hailing in Bogota: an analytical approach

Through the methodology presented in the introduction of this thesis, the research question will be addressed in the remainder of the current chapter. Supported by the theory and context as presented in the previous chapters, observations will be addressed regarding the perception of occupational hazards and the application of avoidance techniques by ride-hailing drivers in the Colombian practice. Through recent media reports, observations in the field by the author and, ultimately, through accounts of and interviews with (former) ride-hailing drivers, the findings will be sustained.

First of all, the different forms in which drivers perceive risks will be addressed, followed by an exploration of applied avoidance techniques in the second section. The last section will be addressing the present state of ride-hailing in Colombia and the reported implications that the latest developments in the ride-hailing industry have had on (non) desistance among ride-hailing drivers, based on a brief discourse analysis.

3.1 Perception of risks by drivers

As discussed in the previous chapter, Colombia is not among the few Latin American countries in which ride-hailing has been legalized or regulated. To the contrary, drivers who are caught 'delivering public transport with a regular vehicle', as the offense is labelled, will be fined with a minimum wage at the first offense and could be stripped of their driver's license for up to 25 years when it regards a second offense (CNN Español, 2018; Ministerio de Transporte, 2018a; Ministerio de Transporte, 2018b; Castilla, 2019; Policia Nacional de Colombia, 2019; dinero.com, 2019). Taking into account the beforementioned government efforts, it is no surprise that police harassment is one of the most-named risks attributed to the occupation of ride-hailing drivers, by the drivers that have been interviewed in the framework of this thesis, alongside other forms of harassment (by taxi drivers and passengers). It is interesting that the Colombian government has put forward an occupational hazard as the rationale for their efforts to police the drivers – the supposedly high rate of accidents in the informal transport sector (Ministerio de Transporte, 2018b).

Regarding the way occupational hazards are perceived, it seems that awareness regarding risks related to law enforcement is primarily derived from what is considered general deterrence, thus not by first-hand experiences, but rather through accounts of peers that have experienced an incident regarding these risks. Still, the way in which drivers perceive these risks cannot always entirely be categorized into the two categories of general and specific deterrence that were identified earlier in this thesis.

The abovementioned is exemplified by the response of respondent Edgar (2019)^{1,2}.,, I have seen them (the police, red.), organizing large controls on some main roads, asking with who and where you are going. Or seen them survey at the airport, but I have never been caught. I am sure they do (fine ride-hailing drivers, red.) though. You hear it on the news. And within our support group I have seen people saying they were caught.” He refers to a WhatsApp-group drivers have created to warn each other about risks or to ask for help when they indeed experience incidents, with up to 250 participants according to Edgar. Thus, it appears that these groups are not only an instrument for the spread of awareness through general deterrence, but part of an avoidance strategy as well.

While the respondent, in this case, has not personally experienced victimization by policing efforts, he has personally been a witness of policing efforts. This led to an increased perceived probability of being apprehended and the consequences thereof by means of his own experience and could therefore be identified as specific deterrence (Paternoster & Piquero, 1995, pp. 251, 252). Thus, in this case, general and specific deterrence might reinforce one another, which supports the idea that deterrence has a gradual rather than a binary character (Jacobs, 1996, pp. 361, 362; Paternoster, 1987, p. 174).

Indeed, it was established that most physical risks, such as robbery by passengers, assaults by taxi drivers and accidents reached the respondents through general deterrence. Fewer risks, among which are stress and harassment by obnoxious passengers, were perceived through specific deterrence. It was found that only one driver did not perceive any risk at all (German³). An interesting finding, as this driver was only active for one week as Uber driver, which seems to fit into the theory of Tremblay and Pare, who suggest that occupational risks are perceived to be less hazardous by perpetrators of illegal activities with little experience. Along with experience they create an awareness for the risks and apply avoidance techniques or forms of restrictive deterrence (2003, pp. 299, 307, 308).

The question remains whether the perceptions of risk among the other respondents resulted in actual deterrence. While this research, limited by the number of respondents and attributed issues concerning the representativeness of the research, cannot deliver hard numerical findings regarding this question, it has, however, found a number of narratives that expose the decision-making process among different respondents, through drivers with varying demographical which matched with the theory of Giuffrida and Popoola, which mentions that some people are more prone to accept certain risks in the execution of their occupation based on their individual (socio-economic) situation

¹ Interviewees are referenced to in accordance with their name as apparent on their ride-hailing platform’s profile.

² Edgar. (2019). Bogotá, Colombia, 13-07-2019.

³ German. (2019). Bogotá, Colombia, 28-06-2019.

(Giuffrida, 2002, p. 236; Popoola, 2013, p. 140). This applies in particular to the possibility of drivers applying probabilistic restrictive deterrence, that is desisting by a reduction of the frequency of the executed illegal activity, as will be made clear in the following paragraphs (Jacobs, 1996, p. 376).

There were four of such age groups identified among the respondents. Two of the respondents were students (22 and 23), three adults (32 to 43), three adults nearing retirement (57 to 61) and one pensioned adult (65 years old). As said, out of these groups it appeared that there was a common ground leading to their employment as ride-hailing driver as a result of being excluded from employment in the formal labour market, albeit in different ways.

The students, both studying at private universities in Bogotá, expressed the motive for their employment in the ride-hailing sector as a consequence of the inflexible labour market and both showed some kind of (planned) probabilistic restrictive deterrence. „ It is impossible to study and work at the same time in Colombia”, said Henry Alonso (23)⁴, driving his parents car. „ Employers expect you to come to work at least 5 or 6 days a week.” A statement confirmed by Iván (22)⁵:„ The only period of the year that I can really hold a job is during summer recess. But the rest of the year I want to go out and be able to spend some money too”. Are they not concerned about their safety during their ‘side-job’? Henry Alonso:„ I am quite concerned about the risks I face, but I want to drive enough to be able to buy my own car. I hope to find a formal job as soon as I am graduated anyway. So, I do not consider this to be a long-time job.” Iván, however, almost entirely desisted from ride-hailing.„ I had a bad experience with a drunk passenger that I drove in my parent’s car. Those experiences are not worth the pay. Now I only drive during the day and only when I really need the money for a planned activity. I drive maximum 5 days per months, more is not necessary.”

Also, among the group of adults, consisting of a woman, Natalia (38), and two men, Andres (32) and Albert (42), forms of probabilistic restrictive deterrence were found. Natalia ⁶ is the only respondent that declared to have a full-time occupation next to her work as ride-hailing driver, in a restaurant, to earn some extra money. „ As a single mom it has been proven difficult to make a good living wage. So, I am driving in my free hours to make some extra money to pay my bills in the morning, after they pick my daughter for school. ... When I work in the morning, I feel safe, in the night I think it would be more dangerous to do.” Andres⁷, on the other hand, also gave an interesting insight into the dynamics into him entering into the ride-hailing industry. Having recently moved from Venezuela to Colombia, he has not yet been able to find formal employment. „It has been tough to find a job. My uncle already lived in Colombia and fortunately has a colleague willing to rent me his car. There are

⁴ Henry Alonso. (2019). Bogotá, Colombia, 23-08-2019.

⁵ Iván. Bogotá, Colombia, 09-05-2019.

⁶ Natalia. Bogotá, Colombia, 08-03-2019.

⁷ Andres. (2019). Bogotá, Colombia, 10-08-2019.

long days, as I need to earn at least 60.000 COP per day to be able to pay the rent of the car. So, I really do not want to stop working before I earn 100.000 COP on a day, but especially on days with 'pico y placa' it is not possible. At least it (the hiring of the car, red.) has given me the possibility to do something." The interesting finding about this statement is that in the Colombian ride-hailing sector, mechanisms have risen to enable people without access to the opportunity of becoming a driver in the ride-hailing sector -as they do not possess a car- to receive access to this labour market. This mechanism, however, at the same time, causes the obligation for these drivers to maintain a high frequency of rides in order to be able to pay the rent, thus taking away the possibility of applying tactics of probabilistic restrictive deterrence.

When it comes to the older adults and the retired respondents, they shared one characteristic: all have received higher education and lost their job or business over the course of the past years. While not all respondents were very open regarding their labour history, it became clear they considered their status of employment to be a consequence of their age. German was forced to leave his formal job with only 5 years left toward his pension. „When they fired me I knew it would be hard on my age to find a job for just five years more. Luckily, my wife receives a pension, I will need to do this until I receive mine." It seems that these respondents are no exceptions, as it is reported that Colombians between 57 and 62 years old face an employment rate that is around 20%, double the rate of their younger peers (Carrera, 2019).

3.2 Avoidance techniques and passenger interaction in practice

While in the previous section it is established that many respondents employ a type of restrictive deterrence, the majority of the respondents are aware of risks and continue to, at least, a certain extent their activities. It is therefore interesting to investigate the way they employ deterrence while carrying out these activities, through anticipatory or reactive restrictive deterrence, also called avoidance techniques. Before we discuss the respondent's behaviour, it is explained how the use of ride-hailing platforms in itself could be seen as an avoidance technique.

When considering the safety of drivers and passengers using traditional taxi services and ride-hailing services, the latter seem to have a significant lower risk of violent incidents, based on the nature of contact between passengers and drivers. The fact that passengers are identifiable by their payment details and profile, while they often pay electronically, has heavily de-incentivized violent assaults on the drivers. With an increased apprehension risk and a lower possible cash loot, there is not much to win from robbing an Uber driver. At the same time, data deriving from research in the United States point at the high death rate of taxi-drivers, mostly caused by homicide, and the high rate of non-fatal injuries by violent assaults. While using data from the United States, it is reasonable to state that the reasons put forward in the theory of Feeney, which derive from the nature of the concepts of ride-hailing and taxis, seem to be universally applicable in every part of world (2015, pp. 2-4).

The question remains whether ride-hailing applications really are safer in their use in the Colombian practice. From the statement of respondent Edgar, it can be concluded that the safety measures of the platforms are not homogenous or fixed over time. „When Uber arrived we could only accept payments through credit cards. We never had to accept cash money. But as Beat arrived, and they accepted cash, it did not take long until Uber started to accept cash as well. Since then Uber does not feel that safe anymore. I feel more vulnerable after receiving a few rides in cash, including the change that I have to carry. But also, since people without credit cards order rides, it seems that it has attracted different groups of passengers. I drive more often to poorer neighbourhoods, where I did not travel before, and where I do not like to come.” The respondent explains that there are more policy changes from ride-hailing platforms that have limited the drivers’ abilities to make use of avoidance techniques. Such as the option to view the route before accepting or declining rides, which is instrumental when it comes to deterrence regarding rides to areas that are considered dangerous or which are known for a high presence of taxi-drivers or police surveillance. „Before I would decline these rides. Especially to the airport, but I guess everyone did, so it is not possible anymore (to decline rides, red.). With Beat and Didi it is possible. But they pay less than Uber, so I do not think it is worth to change to those platforms. In the end no ride is without risk and still I want to earn money.”

In avoidance to being policed or harassed by taxi drivers, drivers try to blend into the normal traffic as a form of anticipatory deterrence. Still, some respondents have found ways to be able to still carry out rides to high-risk areas, such as the bus terminal and the airport, by applying avoidance techniques based on anticipatory restrictive deterrence. „You always have to act like you drive around a friend or family that you are helping out”, affirmed Andres. „You sit next to them and when you meet, you never obviously show your phone. When the ride is almost over and they pay in cash, you make the transaction in the car while driving, at the traffic lights for example. Then the passengers can go out smoothly, without people noticing you offer them a paid service”. In the research period there are other practices observed that have been put into place to disguise the service. For example, in contrast to taxis, passengers take place in the car next to the driver instead of in the backseat, another example of anticipatory restrictive deterrence.

These are not the only anticipatory avoidance techniques employed by the drivers employed in interaction with the passengers. In some cases, the drivers go as far as to make arrangements with them, building on techniques of reactive restrictive deterrence. „Driving a tourist or dropping of someone at the airport is among the most dangerous rides. It is known that the police interrogate passengers, threatening them to make them lose their flight if they do not admit they used a platform and hand over the number of the registration plate”, affirms Edgar. „So you must talk with them during the trip, make sure they do not snitch you when the police pressures them”.

Another related avoidance technique employed by the drivers is to accompany their passengers to the check-in counter as if they are guests or family from the driver. Natalia, for example, explains she always drives her car in the parking lot of the airport and accompanies passengers inside. „First I only drove my car into the parking lot, as it was suspicious to quickly drop someone off at the entrance. But I heard more stories of police surveying the parking lot from the roof of the airport to see which cars only enter the parking lot for a couple of minutes. They signal their colleagues to go after these cars. So now I walk with the passengers to make it look like we are family.”

Among the respondents another practice is discovered as a reaction to police action. Albert⁸: „The police asks rides with their own account around the airport. As soon as you accept, they have your name and know what your car looks like. So, after I drop someone near the airport I switch of the application until I am far enough to again accept rides.” Dagoberto⁹ admits this is one of his main fears, but also reveals a reactive avoidance technique, i.e. a strategy or technique aimed at identifying officials or people they suspect to be officials and how to avoid apprehension in the case they come into contact with them (Jacobs, 1996, p. 83). „I stay alert the whole day on what appears in my WhatsApp. Because the police do not exclusively ask for rides at the airport. In the group they share profiles that are used by the police. As soon as I see a profile I recognize, I decline it.” In this case, thus, the reactive strategy applies to avoiding apprehension in the case a driver enters into digital contact with the police.

Some respondents have expressed their planned strategy in case they are apprehended. Néstor Alejandro¹⁰: „Receiving a penalty is the worst thing that could happen, because it is not only the fine. They take your car to Patios (a car depot, red.) and you have to pay for the crane, around 300.000COP, and every day you leave your car there costs you about 150.000COP more, I have heard. Then you end up without a license for 6 months”. While there are accounts in the media that Uber might cover some of those costs, Nestor Alejandro makes it clear that there is a high need to avoid penalization at any cost (El Mundo, 2019): „When I think about the possibility that it could happen, it makes me really anxious. If I ever come in that position, I will try everything. Depending on the officer, I will try to play on his compassion. Make it a big show, crying if necessary. Up to bribery. The fine, plus the suspension of my license will cost me a lot of money. So, I will be prepared to pay a lot to avoid it.”

3.3 Future for ride-hailing in Colombia

As stated in the introduction of this thesis, in the year 2020 the situation of Uber in Colombia has taken a swift turn. After years of litigations, Uber was forced to cease operations in the country due to the

⁸ Albert. (2019). Bogotá, Colombia, 11-08-2019.

⁹ Dagoberto. Bogotá, Colombia, 09-04-2019.

¹⁰ Néstor Alejandro. Bogotá, Colombia, 26-04-2019.

ruling of a regional court. It was the first country in Latin America where Uber was forced to cease operations. The exit of the platform, however, was temporary, as the platform showed its ability to adjust its operations to local and changing circumstances. After barely three weeks, the company returned with an adjusted model similar to the operations and services they delivered before, while circumventing the legal implications of the earlier verdict (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1734). The quick return of Colombia's biggest ride-hailing platform was not the only demonstration of Colombia's difficulty to control the ride-hailing platforms. While Uber was temporarily out of order, other platforms, such as Didi, Cabify and Beat remained unaffected by the court's ruling, thus, providing alternatives for users and drivers of Uber within the ride-hailing industry, making it doubtful whether the expulsion of Uber led to a significant and sustainable decrease in ride-hailing rides (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1734). While, of course, these developments happened very recently, and the consequences of them might not be fully clear in the future, the topic and research question of this thesis justify a preliminary and brief enquiry into the short-term consequences of this withdrawal regarding the desistance of ride-hailing drivers from their activities through analysing the discourse surrounding the (temporal) exit of the platform since it was announced.

As we have seen in the previous chapters, governments have attempted to expel ride-hailing platforms from their respective economies in attempts to shut down their activities. In the case of the withdrawal of Uber from Colombia, it was not long after the announcement of the platform's retreat, that media predicted that Uber's exit would only leave space for other ride-hailing companies to fill the market share that was given up by Uber, even providing users with instructions to access to alternatives (Colprensa, 2020; Roza Galán, 2020). If these predictions hold, it would imply that efforts to desist such companies are rather unproductive, as, effectively, it would reduce nor stop the practice of ride-hailing, but merely result in the exit of a brand in the sector, making the implications rather symbolic.

According to Jose Stalin Rojas, director of the Observatory for Logistics and Mobility of the Centre for Investigation and Development at the Universidad Nacional, it is clear which service providers in the Colombian transport industry will not profit from Uber's exit in the Colombian market: taxi drivers (El Tiempo, 2020a). He identifies that the market share of taxis within Bogota's transport sector, depicted as a percentage of the total daily journeys in Bogota of 15 minutes and longer, has been steady around 5% since 2011. Ride-hailing platforms, however, have steadily increased their market share, from 1% in 2011 to 3,3% in 2019 in Colombia's capital (Leal Acosta, 2019; Ahumada Rojas, 2020). Stalin Rojas suggests that these numbers show how ride-hailing platforms in Bogota have created their own demand instead of taking over demand from the taxi industry, implying that taxi drivers could only take over this demand when they apply a mode of labour comparable to the ride-

hailing industry (El Tiempo, 2020a). In this way, it is expected that the ride-hailing industry would not lose market share vis-à-vis the taxi industry because of Uber's exit from the country.

Several drivers of Uber confirmed to the media that, indeed, with the exit of Uber, they would lose an important, if not crucial, part of their income and they considered to drive for other applications until the situation surrounding Uber would be resolved (Morales, 2020). Seventeen days after Uber's exit from the country, indeed, it was confirmed by its competitors within the ride-hailing industry that Uber's exit led to a fierce increase of associated drivers and users, while not all these competitors acknowledge Uber's withdrawal as a cause (El Tiempo, 2020b; CanalRCN, 2020). It was reported that some of them implemented promotions and bonus tariffs to make use of the momentum and expand its market share (El Tiempo, 2020b; NotiPress, 2020). In this light, it is hard to believe the expansion of Beat's operation to two other cities (Pereira and Ibaguè) and the launch of a new service in Bogota, to be a coincidence, since the company initiated these developments only two days after Uber's exit (Espectador, 2020).

While the abovementioned suggests that most Uber drivers shifted their activities to other platforms, there have also been signs that not all drivers did so, at least, not in the days immediately after Uber's exit. It was, for example, reported that prices in other platforms, such as Didi and Cabify, soared after the exit of their rival, leaving passengers to pay prices as high as the double tariff they used to pay in various occasions (Noticias Caracol, 2020). This seems to be an effect of the flexibility the platforms have regarding the tariffs they impose. In occasions of high demand (or low supply) of rides it is relatively easy to elevate the prices in real time through algorithms in their digital systems. Also, the opposite is true. In the same report, a spokesperson of Cabify declared that there was a situation of high demand for rides, disturbing the balance of demand and supply (CanalRCN, 2020). The statement exemplifies the swift shift of passengers from Uber to other platforms. Whether this implies, however, that drivers desisted from ride-hailing, cannot be concluded, as it was only days after Uber ceased activities. Furthermore, the shift for drivers from one platform to another requests a more administrative process than that of passengers, while drivers stated to continue driving for Uber until the day it indeed would cease activities (Morales, 2020).

The exit of the platform, however, was temporarily, as the platform showed its ability to adjust its operations to local and changing circumstances. After barely three weeks, the company returned with an adjusted model similar to the operations and services they delivered before, while circumventing the legal implications of the earlier verdict (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1734). As implicated before, the de facto return of Colombia's biggest ride-hailing platform was not the only demonstration of Colombia's difficulty to control the ride-hailing platforms. While Uber was temporarily out of order, other platforms, such as Didi, Cabify and Beat remained unaffected by the courts ruling, providing alternatives for both users and drivers of Uber within the ride-hailing industry,

making it doubtful whether the expulsion of Uber led to a significant and sustainable decrease in ride-hailing rides, both from a supply and demand perspective (Oviedo, Granada, & Perez-Jaramillo, 2020, p. 1734). It can be stated, however, that the quick return of Uber in Colombia has provided new insights into the undoubtedly ongoing debate regarding restrictions and regulations for ride-hailing platforms and their future.

Conclusion

It has become clear that, as the theory suggested, desistance for many ride-hailing drivers in Bogota is not an easy decision, as for many respondents it means giving up their only source of income. However, the idea, presented by Albrecht, Navarro & Vroman, that the workforce within the informal or illegal economy is mostly made up of unskilled workers, is not likely to hold for the Colombian ride-hailing sector, as the majority of the respondents have received, or are receiving, a university education (2009, p. 1106). This is possibly due to the fact that in order to be able to work as a ride-hailing driver, one needs to possess a starting capital in the form of a car, while, at the same time, it is shown that there are already mechanisms in place that allow people without a car to operate in the business. The build-up of the labour force in the sector, however does represent a similarity regarding other informal workforces. Like bicitaxis, most people operating in ride-hailing are in conditions that limit their access to the labour market, whether it is because of seniority, the lack of part-time jobs or their citizenship status (Portafolio, 2019; Giraldo, 2019).

To overcome risks in the field and secure the possibility to receive an income from ride-hailing, drivers do apply avoidance techniques. Most of these avoidance techniques are anticipatory, implied to remain unrecognizable to taxi drivers and police. It has become clear for many tactics, that drivers are either dependent on the platform they use, passengers they drive and information of peers. Avoidance techniques, thus, are often not put into place individually but at times request some form of interaction.

When it comes to the effect of Uber's withdrawal on drivers' desistance, it seems that these effects are limited for two reasons. First, drivers seem to prefer driving for an alternative ride-hailing platform instead of desisting. Secondly, because the demand of passengers for ride-hailing does not, or does only to a smaller degree, shift from ride-hailing to other modes of transport, leaving market potential for Uber's competitors in the market.

Conclusion

After positioning the concept of ride-hailing and the attributed risks for its drivers into the right academic, historical and economic context, this thesis has analysed how drivers of the platforms have adopted forms of deterrence into their daily practice with the end to mitigate occupational hazards. It was shown that not only drivers, but also the platforms as a whole, have the necessity to react rapidly to changes in the ride-hailing sector. Whether it is because of regulatory changes, platforms' policy changes or changes in enforcements tactics, drivers possess a seemingly boundless ability to adopt itself to increasing risks. In regard to this effort, drivers do not only apply avoidance techniques independently, but also interact with peer-drivers and passengers.

One of the grounds of relevance for this thesis has been the ongoing efforts of the Colombian government to desist ride-hailing drivers and to expel the main platform in the industry, Uber. Theoretically, based on the economic theory of crime, ride-hailing drivers should be more prone to desist from their activities when the risks of their activities outweigh the (financial) benefits of their activities. Through the course of this thesis, however, it has become clear how challenging it is to achieve desistance of drivers, due to the complex socio-economic situation, on both a macro and micro level, many drivers find themselves in. Furthermore, within the theoretical framework, it is established that desistance is a multiform concept, while it is found that forms of desistance can intersect or occur gradually. This demonstrates the complexity of desistance and avoidance techniques among ride-hailing-drivers in daily practice.

Most drivers have expressed a high need for continuation of their activities. Because of economic hardship, due to levels of unemployment and exclusion mechanisms they encounter in the formal economy, they decide to tolerate certain levels of risk rather than desisting entirely.

Various drivers stated to have already experienced situations in which they face elevated levels of risk themselves, but mostly decide to apply avoidance techniques. This thesis found that most drivers, with the exception of one unexperienced driver, expressed to be aware of the risks attributed to the execution of their activities. The way in which they became familiar with these risks is through mechanisms that can be considered general deterrence, while it was demonstrated that general and specific deterrence are not binary concepts. In one occasion, a medium for general deterrence at the same time functioned as an avoidance technique, implicating that awareness of risk in itself can be considered a tactic to mitigate risk.

While drivers have found and implemented strategies to mitigate risks, awareness of risks, however, has not motivated the drivers to completely desist. Restrictive deterrence has allowed them to continue their activities. Although these avoidance techniques prove to be instrumental for the drivers in the continuation of their activities, avoidance techniques do not seem to be the most important factor for the continuation of the drivers' activities. As put forward by Mocan & Unel, the

alternative for employment might be a more relevant factor than is recognized in the classic economic theory of crime (Mocan & Unel, 2017, p. 43; Viscusi, 1986, p. 319; Garcia, Rodriguez, & Parra, 2011, p. 113). This thesis has found that, in this sense, risk avoidance techniques are not more than instrumental in allowing drivers to continue until this alternative to work is found.

Indeed, the (lack of) alternative employment is not only the principal aspect within the decision-making process of the interviewed drivers, it is also at the root of the success of ride-hailing platforms in Latin America, as it provides them with a workforce. This, together with the state of traditional public transport, a population that is highly digitally active and reliant on public transport, has enabled Latin America to become one of the core regions for ride-hailing worldwide.

Next to insights on a micro level, regarding occupational hazards, it is shown that on a macro level, Colombia's government efforts aimed at increased penalization and police enforcement, have not shown to be effective, as the platforms show a similar ability of adaptation to the circumstances as its respective drivers, while traditional public transport networks and regulations have shown to be more unwieldy when it comes to changes towards a more accessible, inclusive and safe transportation system. In the same way, the success rate of ride-hailing platforms is dependent on the popular demand for rides, which is influenced by customer satisfaction of the supply of formal modes of public transport.

It is important, however, to address some of the limitations of this research. As made clear earlier on in this thesis, no quantitative data has been collected to sustain the findings of this research. At least, this thesis has not aimed to construct arguments based on quantitative results, as the group of respondents might not be representative of the whole population of ride-hailing drivers. Not enough is known regarding the size and demographics of this group to make a well-founded group sample yet. Therefore, the qualitative results of this thesis serve a rather exploratory function when it comes to future research. Through an extensive survey in the field, a future quantitative research could provide useful insights when conducted taking into account the heterogenous character of ride-hailing platforms and the demography of the drivers, that may differ geographically throughout the city.

A more important problem for future work regarding the desistance of ride-hailing drivers to address, however, is the fact that, to fully research desistance in a representative manner, it is needed to take into account populations of ride-hailing drivers that in fact have desisted. It will prove to be challenging to gather desisted respondents and to make their size insightful. It is therefore that this research lacks the perspectives of desisted drivers. While giving useful insights into the motives of current drivers, perspectives of desisted drivers will undoubtedly demonstrate to be valuable in complementing the current research.

Still, policy directions can be distilled from the findings of this work. When it comes to the Colombian situation, it has become insightful that, however elusive the suppliers in the Colombian

ride-hailing may be, the public has not ceased hailing rides digitally, as the demand for innovative, safe and accessible public transport has grown more than ever, evidenced by the number of users. It is all the more alarming that, since the rise of the concept of ride-hailing, the focus has not shifted away from the illegal character of activities towards the root of the problem, the poor state of public transport and the dire lack of accessible, valuable jobs in the Colombian economy. In the end, drivers in the ride-hailing sector form a vulnerable population within the labour force which, regardless of its efforts to impose avoidance techniques, suffers not only from the policing efforts that are aimed at tackling its only viable alternative to a decent income, but correspondingly suffers from the poor state of the Colombian labour market.

Bibliography

- Ahumada Rojas, O. G. (2020, January 15). 'Donde Uber ha querido, se ha regularizado': Mintransporte. *ElTiempo.com*. Retrieved on May 09, 2020, from <https://www.eltiempo.com/economia/sectores/salidas-para-uber-en-el-pais-segun-el-ministerio-de-transporte-451954>
- Albrecht, J., Navarro, L., & Vroman, S. (2009). The Effects of Labour Market Policies in an Economy with an Informal Sector. *Economic Journal*, 119(539), 1105-1129.
- Allen, W. (2005). Cultures of Illegality in the National Hockey League. *Southern Economic Journal*, 71(3), 494-513.
- Altamar, F. G. (2019, July 31). Bicitaxistas de Bogotá desconfían del proceso de formalización. *ElEspectador.com*. Retrieved on May 05, 2020, from <https://www.elespectador.com/noticias/bogota/bicitaxistas-de-bogota-desconfian-del-proceso-de-formalizacion-articulo-87375>
- Amaral Haddad, E., Schwambach Vieira, R., Stevanato Jacob, M., Waksberg Guerrini, A., Germani, E., Barreto, F., & Luiz Bucalem, M. a. (2019). A socioeconomic analysis of ride-hailing emergence and expansion in São Paulo, Brazil. *Transportation Research Interdisciplinary Perspectives*, 1, 1-12.
- APStylebook. (2018, July 17). Ride-hailing services such as Uber and Lyft let people use smartphone apps to book and pay for a car service or, in some cases, a taxi. They may also be called ride-booking services. (A. P. Stylebook, Red.) Retrieved on March 18, 2020, from <https://twitter.com/APStylebook/status/1019291603276652544>
- Becker, G. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 76(2), 169-217.
- Behrendt, C. N. (2019). Social protection systems and the future of work: Ensuring social security for digital platform workers. *International Social Security Review*, 72(3), 17-41. Retrieved on November 13, 2019, from <https://onlinelibrary.wiley.com/doi/epdf/10.1111/issr.12212>
- Benkoe, G. S. (2018, February 27). Uber CEO says Brazil investment hinges on regulations: paper. *Reuters.com*. Retrieved on June 17, 2020, from <https://www.reuters.com/article/us-uber-brazil/uber-ceo-says-brazil-investment-hinges-on-regulations-paper-idUSKCN1GB1KG>
- Berger, E. (2017). The "Ubulance" Ride Hailing's Role in EMS Transport. *Annals Of Emergency Medicine*, 70(5), 15A-17A.
- Berger, T., Chen, C., & Frey, C. (2018). Drivers of disruption? Estimating the Uber effect. *European Economic Review*(110), 197-210.
- Brito, R., & Boadle, A. (2019, September 5). Brazil court rules Uber drivers are freelancers, not employees. *Reuters.com*. Retrieved on May 13, 2020, from <https://www.reuters.com/article/us-uber-brazil/brazil-court-rules-uber-drivers-are-freelancers-not-employees-idUSKCN1VP315>
- Cabeças, J. (2015). Taxonomy to characterize occupational hazards (risk factors) at the workplace level. *Work (Reading, Mass.)*, 51(4), 703-713.

- CanalRCN. (2020, February 18). Cabify, Didi y Beat reportan aumento de descargas de las aplicaciones tras la salida de Uber. *Canalrcn.com*. Retrieved on February 18, 2020, from <https://www.canalrcn.com/tecnologia/articulo-nota/en-que-consiste-la-categoria-aficionados-de-smartfilms-2006>
- Carrera, F. (2019, August 10). Desempleo en población adulto mayor es del 20 %. *Conexion Capital*. Retrieved on June 6, 2020, from <https://conexioncapital.co/desempleo-en-poblacion-adulto-mayor-es-del-20/>
- Castilla, J. D. (2019, June 11). ¿Se puede sancionar a los usuarios y conductores de Uber o Cabify? *Asuntos Legales*. Retrieved on July 1, 2020, from <https://www.asuntoslegales.com.co/actualidad/se-puede-sancionar-a-los-usuarios-y-conductores-de-uber-o-cabify-2872333>
- CBS News. (2015, July 29). Mexico City Uber drivers attacked at taxi drivers' protest. Retrieved on May 13, 2020, from <https://www.cbsnews.com/news/mexico-city-uber-drivers-attacked-at-taxi-drivers-protest/>
- Charbell, L. (2019, October 28). Supuestos taxistas voltean unidad de Uber: VIDEO. *El Herald Mexico*. Retrieved on May 13, 2020, from <https://heraldodemexico.com.mx/estados/supuestos-taxistas-voltean-morelia-michoacan-unidad-de-uber-video/>
- Chen, J. (2018). Thrown under the bus and outrunning it! The logic of Didi and taxi drivers' labour and activism in the on-demand economy. *New Media & Society*, 20(8), 2691-2711.
- CNN Español. (2018, December 14). Conductores de empresas como Uber y Cabify en Colombia podrían perder su licencia hasta por 25 años. *cnnespanol.cnn*. Retrieved on October 25, 2019, from <https://cnnespanol.cnn.com/2018/12/14/conductores-de-empresas-como-uber-y-cabify-en-colombia-podrian-perder-su-licencia-hasta-por-25-anos/>
- Colprensa. (2020, January 16). Razones por las que 16 países prohibieron la operación de Uber. *La Opinión*. Retrieved on June 6, 2020, from <https://www.laopinion.com.co/economia/razones-por-las-que-16-paises-prohibieron-la-operacion-de-uber-190320#OP>
- Conn, E. (2018, October 1). Violence Against Uber Drivers in Buenos Aires is Escalating. *The Bubble*. Retrieved on May 13, 2020, from <https://www.thebubble.com/violence-against-uber-drivers-buenos-aires>
- Contreras, S., & Paz, A. (2018). The effects of ride-hailing companies on the taxicab industry in Las Vegas, Nevada. *Transportation Research Part A*(115), 63-70.
- De Stefano, V. (2016). The rise of the “just-in-time workforce”: On-demand work, crowdwork and labour protection in the “gig-economy”. *Conditions of Work and Employment Series No. 71*.
- Defossez, D. A. (2017). “The Regulation of a Project of the Deregulation: UBER in Brazil and the European Union.”. *Revista De Direito Setorial e Regulatório*, 3(1), 1-28.
- Dias, F., Lavieri, P., Garikapati, V., Astroza, S., Pendyala, R., & Bhat, C. (2017). A behavioral choice model of the use of car-sharing and ride-sourcing services. *Transportation*, 44(6), 1307-1323.
- dinero.com. (2019, October 22). Arrancó debate por aumento del mínimo: Anif propone 4,5% para 2020. *Dinero.com*. Retrieved on October 29, 2019, from <https://www.dinero.com/pais/articulo/salario-minimo-colombia-2020-por-que-anif-propone-alza-del-45-en-el-2020/278295>

- Ehrlich, I. (1973). Participation in Illegitimate Activities: A Theoretical and Empirical Investigation. *Journal of Political Economy*, 81(3), 521-565.
- El Mundo. (2019, January 16). Ojo conductores, las sanciones son serias. *Elmundo.com*. Retrieved on June 13, 2020, from <https://www.elmundo.com/noticia/Ojo-conductores-las-sanciones-son-serias/375489>
- El Tiempo. (2020a, January 15). En 8 años, taxis no han podido morderle mercado a Uber y otras 'apps'. *Eltiempo.com*. Retrieved on June 10, 2020, from <https://www.eltiempo.com/economia/sectores/participacion-de-mercado-de-taxis-frente-a-uber-y-otras-plataformas-452066>
- El Tiempo. (2020b, February 17). Descargas de aplicaciones han aumentado tras el adiós de Uber. *Eltiempo.com*. Retrieved on June 10, 2020, from <https://www.eltiempo.com/tecnosfera/novedades-tecnologia/en-que-va-el-tema-de-uber-en-colombia-463078>
- Eltiempo.com. (2020, January 10). *¿Por qué sale Uber de Colombia? Aquí se lo explicamos*. Retrieved on February 19, 2020, from El Tiempo: <https://www.eltiempo.com/tecnosfera/apps/por-que-sale-uber-de-colombia-explicacion-a-decision-de-sic-445624>
- Espectador, E. (2020, February 3). Beat llega a otras dos ciudades colombianas. *Elespectador.com*. Retrieved on June 10, 2020, from <https://www.elespectador.com/economia/beat-llega-otras-dos-ciudades-colombianas-articulo-902808/>
- Feeney, M. (2015). Is ridesharing safe? *Cato Institute Policy Analysis*(767), 1-15.
- Garcia, I., Rodriguez, L., & Parra, J. (2011). THE RELATIONSHIP BETWEEN POLICE EFFECTIVENESS AND CRIME RATES. In A. E. Hassel, *Crime : Causes, Types and Victims* (pp. 109-125). Hauppauge, N.Y.: Nova Science Publishers, Inc. Retrieved on October 30, 2019, from <http://search.ebscohost.com.ezproxy.leidenuniv.nl:2048/login.aspx?direct=true&db=nlebk&AN=540510&site=ehost-live>
- Gibbs, J. (1975). *Crime, punishment, and deterrence*. New York: Elsevier.
- Giraldo, M. (2019, July 25). Secretaría de Movilidad entrega resultados de caracterización del bicitaxismo. *Secretaría de Movilidad de Bogotá*. Retrieved on May 05, 2020, from <https://bogota.gov.co/mi-ciudad/movilidad/bicitaxismo-en-bogota>
- Giuffrida, A. I. (2002). Occupational risks in Latin America and the Caribbean: Economic and health dimensions. *Health Policy and Planning*, 17(3), 235-246.
- Gold, Dan. (2016, December 18). In the morning traffic [Photograph]. Bogota, Colombia. *Unsplash*. Retrieved on July 1, 2020, from <https://unsplash.com/photos/kARZuSYMfrA>
- Greenlund, L. (2011). ED violence: Occupational hazard? *Nursing Management (Springhouse)*, 42(7), 28-32.
- Haldevang, M. d. (2015, July 16). Mexico City unveils first regulation on Uber in Latin America. *Reuters*. Retrieved on June 17, 2020, from <https://www.reuters.com/article/us-mexico-uber/mexico-city-unveils-first-regulation-on-uber-in-latin-america-idUSKCNOPP2SU20150716>
- Harbaugh, W., Mocan, N., & Visser, M. (2013). Theft and Deterrence. *Journal of Labor Research*, 34(4), 389-407.

- Harden, C. (2019). Combis and Chaos: Navigating Public Transport in Peru. *Institute for Study Abroad*. Retrieved on May 13, 2020, from <https://www.ifsabutler.org/student-story/combis-and-chaos-navigating-public-transport-in-peru/>
- Henao, A., & Marshall, W. (2019). The impact of ride-hailing on vehicle miles traveled. *Transportation*, 46(6), 2173-2194.
- ILO, I. L. (2018). *Job quality in the platform economy*. Prepared for the 2nd Meeting of the Global Commission on the Future of Work, 15-17 February 2018. Retrieved on November 2019, 12, from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_618167.pdf
- Izugbara, C. O. (2005). "Ashawo suppose shine her eyes": Female sex workers and sex work risks in Nigeria. *Health, Risk & Society*, 7(2), 141–159.
- Jacobs, B. A. (1996). Crack dealers' apprehension avoidance techniques: case of restrictive deterrence. *Justice Quarterly*, 13(3), 359-382.
- Law, J., & Martin, E. (2009). Deterrence. In J. Law, & E. Martin, *A Dictionary of Law*. Oxford University Press.
- Leal Acosta, A. C. (2019, June 6). 'Apps' de transporte urbano ya están en 15 ciudades del país. *Portafolio.co*. Retrieved on May 6, 2020, from <https://www.portafolio.co/negocios/apps-de-transporte-urbano-ya-estan-en-15-ciudades-del-pais-530355>
- Loewenson, R. (2002). Occupational hazards in the informal sector—A global perspective. In K. Isaksson, C. Hogstedt, C. Eriksson, & T. Theorell, *In Health effects of the new labour market* (pp. 329-342). Bosten, MA: Springer.
- Lustig, N. (2018, September 7). Latin America is the next stage in the race for dominance in the ride-hailing market. *TechCrunch.com*. Retrieved on May 13, 2020, from <https://techcrunch.com/2018/09/07/latin-america-is-the-next-stage-in-the-race-for-dominance-in-the-ride-hailing-market/>
- Ministerio de Transporte. (2018a, December 03). Gobierno lanza estrategia nacional contra la ilegalidad y la siniestralidad. Bogotá. Retrieved on July 01, 2020, from <https://www.mintransporte.gov.co/publicaciones/7086/gobierno-lanza-estrategia-nacional-contra-la-ilegalidad-y-la-siniestralidad/>
- Ministerio de Transporte. (2018b, December 13). Gobierno Nacional pone freno al transporte público ilegal de pasajeros. Cartagena. Retrieved on July 01, 2020, from <https://www.mintransporte.gov.co/publicaciones/7102/gobierno-nacional-pone-freno-al-transporte-publico-ilegal-de-pasajeros/>
- Mocan, N., & Unel, B. (2017). Skill-Biased Technological Change, Earnings of Unskilled Workers, and Crime. *Review of Law & Economics*, 13(3), 1-46.
- Moed, J. (2018, December 20). Uber's Wild Ride To Make Latin America Its Fastest Growing Region. *Forbes*. Retrieved on November 11, 2019, from <https://www.forbes.com/sites/jonathanmoed/2018/12/20/is-uber-operating-illegally-in-its-fastest-growing-region/#377d19311925>
- Moed, J. (2018a, November 15). Why Delivery Apps From UberEats To Rappi Are Taking Over Latin America. *Forbes*. Retrieved on May 10, 2020, from

<https://www.forbes.com/sites/jonathanmoed/2018/11/15/why-delivery-apps-from-ubereats-to-rappi-are-taking-over-latin-america/#39c8bdec7bf7>

- Moed, J. (2018b, December 20). Uber's Wild Ride To Make Latin America Its Fastest Growing Region. *Forbes*. Retrieved on November 11, 2019, from <https://www.forbes.com/sites/jonathanmoed/2018/12/20/is-uber-operating-illegally-in-its-fastest-growing-region/#377d19311925>
- Moeller, K., Copes, H., & Hochstetler, A. (2016). Advancing restrictive deterrence: A qualitative meta-synthesis. *Journal of Criminal Justice*, 46, 82-93.
- Mondragon Velez, C., & Peña Vargas, X. (2008). Business ownership and self-employment in developing economies: the Colombian case. *CEDE Working Paper*(03).
- Morales, J. D. (2020, January 29). ¿Qué planean hacer los conductores de Uber después del 1.º de febrero? *El Tiempo*. Retrieved on June 10, 2020, from <https://www.reuters.com/article/us-uber-colombia-idUSKBN20E2JE>
- Muse, T. (2013, June 26). The Danger of the Millionaire Ride. *Newsweek Magazine*. Retrieved on May 13, 2020, from <https://www.newsweek.com/2013/06/26/danger-millionaire-ride-237630.html>
- Nicaragua Investiga. (2020, February 13). Taxistas de Nicaraguas piden no usar aplicaciones digitales que ofrecen servicio de transporte. Retrieved on May 13, 2020, from <https://www.nicaraguainvestiga.com/taxistas-nicaragua-contra-aplicaciones-digitales/>
- Noticias Caracol. (2020, February 3). ¿Qué planean hacer los conductores de Uber después del 1.º de febrero? *Noticias.caracoltv.com*. Retrieved on June 10, 2020, from <https://noticias.caracoltv.com/colombia/tras-la-salida-de-uber-estan-aumentando-los-precios-las-otras-aplicaciones>
- Noticias UN. (2019, June 28). Plataformas digitales de servicios cambian uso del espacio público. *Agencia de Noticias UN*.
- NotiPress. (2020, February 02). DiDi, Beat y Cabify se benefician con prohibición de Uber en Colombia. *WildEntrepreneur*. Retrieved on June 10, 2020, from <https://wildentrepreneur.org/didi-beat-y-cabify-se-benefician-con-prohibicion-de-uber-en-colombia/>
- Oviedo, D., Granada, I., & Perez-Jaramillo, D. (2020). Ridesourcing and Travel Demand: Potential Effects of Transportation Network Companies in Bogotá. *Sustainability*, 12(5), 1732-1748.
- Paternoster, R. (1987). The deterrent effect of the perceived certainty and severity of punishment: A review of the evidence and issues. *Justice Quarterly*, 4(2), 173-217.
- Paternoster, R., & Piquero, A. (1995). Reconceptualizing Deterrence: An Empirical Test of Personal and Vicarious Experiences. *Journal of Research in Crime and Delinquency*, 32(3), 251-286.
- Patiño, L. (2018, March 16). 'Estamos abiertos a regulación': Uber. *El Tiempo*. Retrieved on October 25, 2019, from <https://www.eltiempo.com/tecnosfera/apps/entrevista-con-humberto-pacheco-gerente-general-de-uber-en-la-region-194566>
- Patiño, L. (2019, September 2). El debate por la legalidad de Picap, la 'app' de mototaxismo. *El Tiempo*. Retrieved on May 06, 2020, from <https://www.eltiempo.com/tecnosfera/apps/picap-la-app-de-mototaxismo-que-demando-el-mintransporte-337068>

- Policia Nacional de Colombia. (2019, April 14). Nuevo "Cuerpo especial para el control de la ilegalidad y siniestralidad". Bogotá. Retrieved on July 1, 2020, from <https://www.policia.gov.co/noticia/nuevo-cuerpo-especial-control-ilegalidad-y-siniestralidad>
- Popoola, B. (2013). Occupational Hazards and Coping Strategies of Sex Workers in Southwestern Nigeria. *Health Care for Women International*, 34(2), 139-149.
- Portafolio. (2019, July 2017). "En Bogotá Hay 51% Más Bicitaxis Que Hace Cinco Años.". *GDA/El Tiempo/Colombia*. Retrieved on May 05, 2020, from [https://www.westlaw.com/Document/lcdbba2d0b07111e98be8b1d74a5bc65f/View/FullText.html?transitionType=Default&contextData=\(sc.Default\)&VR=3.0&RS=cblt1.0](https://www.westlaw.com/Document/lcdbba2d0b07111e98be8b1d74a5bc65f/View/FullText.html?transitionType=Default&contextData=(sc.Default)&VR=3.0&RS=cblt1.0)
- Pulzo. (2017, July 21). Denuncian agresiones a supuestos conductores de Uber; esta vez en Bogotá y Medellín. Retrieved on October 23, 2019, from <https://www.pulzo.com/nacion/agresion-taxistas-conductores-uber-bogota-medellin-PP309603>
- Rapoza, K. (2019, March 27). Latin America's Economy Now Growing Faster Than Asia's. *Forbes.com*. Retrieved on May 13, 2020, from <https://www.forbes.com/sites/kenrapoza/2019/03/27/latin-america-economy-now-growing-faster-than-asias/#710107a91a76>
- Rauhut, H., & Junker, M. (2009). Punishment Deters Crime Because Humans Are Bounded in Their Strategic Decision-Making. *Journal of Artificial Societies and Social Simulation*, 12(3).
- Rayle, L., Dai, D., Chan, N., Cervero, R., & Shaheen, S. (2016). Just a better taxi? A survey-based comparison of taxis, transit, and ridesourcing services in San Francisco. *Transport Policy*, 45, 168-178.
- Revista Semana. (2015, March 14). Todos contra Uber. *semana.com*, p. 2015. Retrieved on October 25, 2019, from <https://www.semana.com/nacion/articulo/todos-contra-uber/420944-3>
- Revista Semana. (2019, October 7). Seis razones por las que marchan los taxistas en Bogotá. *Semana.com*. Retrieved on October 25, 2019, from <https://www.semana.com/nacion/articulo/razones-por-las-que-marchan-los-taxistas-en-bogota/622730>
- River. (2019, July 06). Aplicaciones similares a Uber en Nicaragua. *FromNicaragua.com*. Retrieved on July 2, 2020 from <http://fromnicaragua.com/aplicaciones-similares-a-uber-en-nicaragua/>
- Rozo Galán, K. (2020, October 1). ¡Se va Uber! Ahora, ¿cuál usar? *Caracol*. Retrieved on February 19, 2020, from Caracol: https://caracol.com.co/radio/2020/01/10/tecnologia/1578690255_683622.html
- Ruvolo, J. (2015, October 2). The Fight Against Uber Is Getting Violent In Brazil. *Techcrunch.com*. Retrieved on May 13, 2020, from <https://techcrunch.com/2015/10/01/the-fight-against-uber-is-getting-violent-in-brazil/>
- Salazar Castellanos, D. (2019, October 16). América, tierra fértil para Uber o DiDi pese a protestas y frágil regulación. *El Espectador*. Retrieved on June 17, 2020, from <https://www.elespectador.com/noticias/tecnologia/america-tierra-fertil-para-uber-o-didi-pese-a-protestas-y-fragil-regulacion/>
- Scholz, T. (2017). *Uberworked and underpaid : How workers are disrupting the digital economy*. Cambridge, UK: Polity Press.

- Secretaría Distrital de Movilidad. (2018, December 22). ADMINISTRACIÓN PEÑALOSA HA CANCELADO UN TOTAL DE 75 LICENCIAS DE CONDUCCIÓN POR 25 AÑOS DEBIDO A LA PRESTACIÓN DE SERVICIOS DE TRANSPORTE ILEGAL. *movilidadbogota.gov.co*. Retrieved on October 25, 2019, from https://www.movilidadbogota.gov.co/web/Noticia/administraci%C3%B3n_pe%C3%B1alosa_ha_cancelado_un_total_de_75_licencias_de_conducci%C3%B3n_por_25_a%C3%B1os
- Semana. (2015, May 08). ¿Cómo hizo México para regular a Uber? . *Semana*. Retrieved on May 13, 2020, from <https://www.semana.com/tecnologia/articulo/como-hizo-mexico-para-regular-uber/437532-3>
- Tegel, S. (2018, August 20). The Politics of Driving in Lima. *U.S. News*. Retrieved on May 13, 2020, from <https://www.usnews.com/news/world/articles/2018-08-20/critics-fault-mayor-for-limas-broken-public-transportation-system>
- Thoene, U. (2015). A Socio-Legal Exploration of the Linkages between Informal Employment, Social Protection and Labour Law in Latin America. *Revista De Estudios Sociales*, 54(54), 12-24.
- Ticona, J., & Mateescu, A. (2018). Trusted Strangers: Carework Platforms' Cultural Entrepreneurship in the On-demand Economy. *New Media & Society*, 20(11), 2691-2711.
- Tijerino, J. (2019, June 07). Por qué Uber no puede operar en Nicaragua. *El Nuevo Diario*. Retrieved on July 2, 2020 from <https://www.elnuevodiario.com.ni/nacionales/493946-uber-nicaragua-servicio-taxis-transpote/>
- Tremblay, P., & Pare, P.-P. (2003). Crime and destiny: Patterns in serious offenders' mortality rates. *Canadian Journal of Criminology and Criminal Justice*, 45(3), 299-326.
- Uber Estimator. (2020). *Uber cities*. Retrieved on May 10, 2020, from [Uberestimator.com: https://uberestimator.com/cities](https://uberestimator.com/cities)
- Ultima Hora. (2019, October 10). Violenta agresión de taxistas a conductor de Uber en Villa Elisa. Retrieved on October 23, 2019, from <https://www.ultimahora.com/violenta-agresion-taxistas-conductor-uber-villa-elisa-n2848532.html>
- UNAIDS. (2006). HIV and sexually transmitted infection prevention among sex workers in Eastern Europe and Central Asia. In UNAIDS, *UNAIDS Best Practice Collection*. Retrieved on 04 05, 2020, from http://data.unaids.org/publications/irc-pub07/jc1212-hivpreveasterneurcentrasia_en.pdf
- Viscusi, W. (1986). Deterrence., The Risks and Rewards of Criminal Activity: A Comprehensive Test of Criminal. *Journal of Labor Economics*, 4, pp. 317-340.
- Warzel, C. (2015, January 8). Let's All Join The AP Stylebook In Killing The Term "Ride-Sharing". *Buzzfeed News*. Retrieved on March 3, 2020, from <https://www.buzzfeednews.com/article/charliewarzel/lets-all-join-the-ap-stylebook-in-killing-the-term-ride-shar>
- Webster Dictionary. (2019, December 2019). *Occupational hazard*. Retrieved on July 01, 2020, from The Merriam-Webster.com Dictionary: <https://www.merriam-webster.com/dictionary/occupational%20hazard>
- Wohl, M. (1975). The taxi's role in urban America: Today and tomorrow. *Transportation*, 4(2), 143-158.

Zelekha, Y. (2011). THE MACRO ECONOMICS OF ILLEGAL ACTIVITY. In A. Hasselm, *Crime: Causes, Types and Victims* (pp. 193-200). Hauppauge, N.Y.: Nova Science Publishers, Inc.

Zou, M. (2017). The regulatory challenges of 'uberization' in China: Classifying ride-hailing drivers. *International Journal of Comparative Labour Law and Industrial Relations*, 33(2), 269-294.

List of interviewees

Natalia. (2019, March 2019). Bogotá, Colombia.

Dagoberto. (2019, April 9). Bogotá, Colombia.

Néstor Alejandro. (2019, April 26). Bogotá, Colombia.

Ivan. (2019, May 9). Bogotá, Colombia.

German. (2019, June 28). Bogotá, Colombia.

Edgar. (2019, July 13). Bogotá, Colombia.

Andres. (2019, August 10). Bogotá, Colombia.

Albert. (2019, August 11). Bogotá, Colombia.

Henry Alonso. (2019, August 23). Bogotá, Colombia.