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The Rise of Monopolistic Rideshare Companies in Asia: How Ride Hailing Companies' Market Control Impacts Drivers

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Keywords

gig economy, rideshare, ride hailing, two-sided markets, China, Singapore, competition, merger, monopoly, DiDi, Grab, insurance coverage, diversification, government regulation

Disciplines

Business | Business Administration, Management, and Operations | Insurance | International Business | Labor Economics | Technology and Innovation | Transportation

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Abstract
Having undergone mergers with Uber China and Uber Southeast Asia in the past few years, DiDi and Grab now hold over 90% and 80% of the market shares in China and Singapore. This market control has allowed them to dominate the rideshare industry in the two countries, and this paper examines the impact of Grab and DiDi's monopolistic power on rideshare drivers. Specifically, this research considers changes to both licensure requirements, pricing policies, commission rates, insurance coverage, and CSR programs as well as long-term corporate objectives and strategies following the merger. In order to understand the implications of DiDi and Grab's decrease in competition and greater market control, this research draws from existing scholarly research, DiDi and Grab's policies and terms of use, news articles, reports, government documents, and most importantly, qualitative interviews with employees at DiDi and Grab. The paper concludes that despite changes in pricing, insurance, and benefits, monopolistic ridesharing companies are able to leverage their resources and market power for diversification, which creates synergies, and greater social impact.

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Introduction

In the past decade, the world has witnessed the rapid rise of the gig economy, a market system based on temporary contract work as opposed to permanent employment. Because the gig economy affords workers a greater degree of flexibility and independence, people are increasingly choosing to take on gig work over traditional job arrangements. The ridesharing industry comprises an especially large segment of the growing gig economy. Since the founding of Uber in 2009, ride hailing businesses have taken off around the world, gaining an especially strong foothold in Asia with Didi Chuxing (DiDi) in China and Grab in Southeast Asia, among others.

While the U.S. rideshare industry remains divided between Uber and Lyft, companies like DiDi and Grab have acquired much greater market control in some of the markets that they operate in. DiDi and Grab merged with Uber China and Uber Southeast Asia in 2016 and 2018 respectively, and the two companies now exercise monopoly power in China and Singapore.[1, 2]

This research study seeks to examine how DiDi and Grab have taken advantage of the market control and lack of competition in these two markets to shape the landscape of the ridesharing industry in Asia. While news media and existing scholarly research are both relatively attuned to the rider experience and riders' demands and concerns, this research looks at the implications of the monopolistic market control of ride hailing companies for rideshare drivers. Specifically, this study aims to understand the changes that are brought about by the decrease in competition and greater market control following mergers in this industry as well as how drivers experience these changes. While monopolies are frequently viewed as socially nonoptimal and inefficient, this research explores how monopolies in the rideshare industry have used their monopoly power to improve the driver experience and engage in social impact. Beyond examining key changes in DiDi and Grab's licensure requirements, pricing policies, commission rates, insurance coverage, and CSR programs, this research also assesses long-term changes in corporate objectives and strategies. After providing some background information on these two companies and the ridesharing industry at large, this paper will dive into specific post-merger business decisions and strategies before closing with an analysis of the applicability of these lessons and findings to the ride hailing industry in the United States and beyond.

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[1] Savannah Dowling, "How Didi Partnered And Burned Its Way To Market Leadership In China," Crunchbase, last modified May 23, 2018, accessed May 23, 2020, https://news.crunchbase.com/news/how-didi-partnered-and-burned-its-way-to-market-leadership-in-china/.
[2] Jon Russell, "Grab's acquisition of Uber Southeast Asia drives into problems," TechCrunch, last modified April 25, 2018, accessed May 23, 2020, https://techcrunch.com/2018/04/24/grab-uber-deal-southeast-asia/.

Research Objectives

Although the ridesharing business model was unknown to the world just over a decade ago, the industry has rapidly developed, and decisions being made today at companies like Uber and Grab will undoubtedly leave a lasting legacy on the future of transportation. Researchers have spent the past few years understanding the economics and marketplace dynamics of the two-sided ridesharing market, but there remains much to be explored when it comes to the impact of varying market structures on the ride hailing industry. Furthermore, current research focuses overwhelmingly on the ridesharing industry in the United States, leaving notable gaps in knowledge when it comes to ride hailing in the rest of the world. Through conducting this research, I hope to uncover valuable insights regarding how monopoly power in the ride hailing markets in Asia enables companies to effectively leverage their control for the benefit of drivers and more successfully pursue profitability through achieving greater economies of scale and diversification.

This research project focuses on DiDi and Grab not only because they're two of the biggest ride hailing companies internationally but also because both have experienced the transition from a more competitive market to one where they hold the dominant position. Moreover, since both companies operate in Asia, they are faced with similar regulatory environments and cultural contexts, which play a huge role in informing corporate-level decisions. These shared characteristics coupled with the fact that the two companies have a longstanding partnership and vested interests in each other make DiDi and Grab the ideal companies to investigate and compare for this research study.[3] In fact, in 2017, DiDi and SoftBank Group Corp. collectively invested US$2 billion in Grab, solidifying the relationship between the two ride hailing giants.[4]

Despite the regional focus of this research, the findings of this study have broader implications for both ridesharing companies' policies and government regulations of ridesharing companies all around the world. With ride hailing also on the rise in Australia, the MENA region, and Latin America, gaining insight into the impact of monopolistic ride hailing companies like DiDi and Grab on drivers will be critical for understanding the potential for greater social impact in the ridesharing market. Even though rideshare companies are actively engaged in CSR programs and are committed to ensuring drivers' earnings and safety, it is nevertheless important to look at how rideshare companies can do a better job of guaranteeing insurance coverage, earning opportunities, stable incomes, medical leave, and future job opportunities, among other benefits

[3] Beijing Xiaoju Technology, "Milestones," DiDi, accessed June 1, 2020, https://www.didiglobal.com/about-special/milestone.
[4] Grab, "Grab Announces Didi Chuxing and SoftBank As Lead Investors for Current Round of Financing," Grab, last modified July 24, 2017, accessed June 4, 2020, https://www.grab.com/sg/press/business/grab-announces-didi-chuxing-softbank-lead-investors-current-round-financing/.

for their drivers. Additionally, this research study is relevant for government entities that may be considering whether or not they need to engage in greater regulation of the ride hailing market; this research suggests that in the interest of the drivers, government authorities should not break up monopolies in the rideshare industry but should actively work with them in certain areas in order to ensure that their market control is leveraged for social impact.

Lastly, by way of exploring the business decisions and social impact of rideshare companies that operate in a monopolistic market in Asia, this research seeks to forecast and understand the future of ride hailing in the U.S. Naturally, both Uber and Lyft have aspirations to capture the entirety of the ridesharing market in America and gain market control so that they can achieve stronger network effects and profitability.[5] While the two companies are still locked into a fierce price war, it's unclear if one player will eventually come to monopolize and dominate the American ride hailing market. If that does happen, DiDi and Grab could serve as useful projections for what that market might look like for drivers.

Research Methodology

In order to achieve this research goal, this study will look at the circumstances for rideshare drivers in China and Singapore before and after DiDi and Grab's mergers with Uber. As aforementioned, company policies regarding licensure requirements, insurance coverage, pricing, driver commissions, and CSR programs will serve as the basis for this research. While this research focuses on understanding the unique changes in the Chinese and Singaporean rideshare markets, it also looks at them in conjunction and draws conclusions from comparing and contrasting the two.

This research includes both primary and secondary sources and uses existing scholarly research on the rideshare industry and on DiDi and Grab in particular as a starting point for understanding the economics of monopolistic rideshare companies. This is supplemented by an in-depth examination of DiDi and Grab's policies and terms and conditions, which help provide insight into the nature of the contractual relationships drivers enter into when they begin working for rideshare companies. Additionally, I gathered information from news articles, reports by DiDi and Grab, and the News and Blog sections of their websites. In order to better understand the regulatory environments in China and Singapore, I also reviewed government documents that discuss the mergers and their consequences. The bulk of the research was done through qualitative interviews with employees at DiDi and Grab as well as labor union representatives, who added the perspective of rideshare drivers to the research study. While some of the

[5] Jeff Spross, "Uber is basically promising investors it will become a monopoly," The Week, last modified April 15, 2019, accessed August 8, 2020, https://theweek.com/articles/834836/uber-basically-promising-investors-become-monopoly.

interviewees were comfortable with having their names included in this research paper, most of the employees who were interviewed preferred to stay anonymous due to the nature of the topic and its relevance to their work and company. Information from these interviews have been anonymized and aggregated, and the insights acquired from these interviews are scattered throughout the paper.

While this research endeavors to provide a full picture of the nature of monopolistic rideshare markets through looking at DiDi in China and Grab in Singapore, there are several limitations that are worth mentioning. This research project was originally intended to be conducted in China and Singapore, where I would have had the chance to interview DiDi and Grab drivers and hear their opinions. Because of COVID-19, I was unable to travel and instead interviewed people online. This made it much more difficult to identify and interview drivers, so the perspective of drivers in this research study is limited to the information I gathered from speaking with labor union industrial relations officers who represent private hire car drivers and reading news articles that included driver interviews. One additional limitation to this research is that certain data and information about DiDi and Grab are not publicly available because both companies are currently privately held and have yet to IPO.

Background on the Ridesharing Market

This research focuses specifically on the nature of monopolistic rideshare markets. However, this paper will begin by providing some useful context regarding the economics of the ridesharing industry before diving into region-specific examples. Ride hailing platforms like Uber, DiDi, and Grab operate as two-sided markets that experience significant two-sided network effects, which means that the value for drivers and riders increases as the number of the other increases.[6] In order for a platform to achieve the strongest two-sided network effects, it must continually work to increase the number of drivers on the platform and then increase the number of riders, and so on, constantly balancing marketplace supply and demand. Consequently, rideshare companies tend to do better when they operate in a monopolistic market or when they compete with other companies but neither the drivers nor the riders engage in multihoming, which refers to the practice of switching between multiple platforms.[7] As such, theoretically monopolistic rideshare companies that are able to drive users to their platform and make the best use of these network effects will achieve the highest prices and greatest profits.[8] At the same time, however, these

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[6] Linyan Feng, "DiDi Loses Significant Money on its Rides," EqualOcean, last modified May 2, 2019, accessed June 10, 2020, https://equalocean.com/auto/20190502-didi-losses-significant-money-on-its-rides.
[7] Chunchun Liu et al., "Multihoming and oligopolistic platform competition" (unpublished manuscript, National University of Singapore, Singapore, Singapore, September 17, 2019), 2, accessed June 26, 2020, http://profile.nus.edu.sg/fass/ecsjkdw/multihoming%20and%20platform%20competition%20190917.pdf.
[8] Kevin A. Bryan and Joshua S. Gans, "A Theory of Multihoming in Rideshare Competition," *Journal of Economics & Management Strategy* 28, no. 1 (2019): 94, https://www.nber.org/papers/w24806.pdf.

monopolistic rideshare companies may be socially optimal in terms of minimizing wait times for riders and reducing idling for drivers.[9]

According to a model created by researchers at the National University of Singapore using real data on the ridesharing economy in the United States, the entrance of a new player into the ride hailing market leads to a reduction in both driver earnings and platform profit.[10] Additionally, an increase in multihoming also results in a decrease in platform profit, so rideshare companies are generally better off when they achieve monopoly control and maintain it by discouraging the entry of new players.[11]

Although being a monopoly in the rideshare industry naturally implies that the company dominates the ride hailing market in that country, the ridesharing industry also competes with other modes of transportation. For example, rideshare companies view both traditional taxi companies and public transportation, which operate in slightly different segments of the transportation industry, as competitors.[12] Regardless of how much market share a monopoly holds in the ride hailing market, the company will still have to provide their service for a low enough price such that riders won't opt for other means of transportation.

Independent Contractor vs. Employee Debate

By virtue of being a part of the gig economy, ride hailing companies classify their drivers as independent contractors and not employees. There is a longstanding debate about whether gig economy workers should be considered by law to be employees at the companies they work for, and this has become an increasingly contentious issue in the U.S. and especially in California.[13] Traditionally, this relationship is defined in terms of payment method, duration, type of work, and the amount of control the employer wields over the agent, among other factors.[14] Accordingly, rideshare drivers are considered independent contractors and not employees because they are paid per job instead of by salary and ride hailing companies have no direct supervision or control over them.[15]

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[9] Ibid, 95.
[10] Liu et al., "Multihoming and oligopolistic," 4.
[11] Ibid.
[12] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[13] Jay Peters and Andrew J. Hawkins, "Uber and Lyft ordered by California judge to classify drivers as employees," The Verge, last modified August 10, 2020, accessed August 15, 2020, https://www.theverge.com/2020/8/10/21362460/uber-lyft-drivers-employees-california-court-ruling.
[14] Ben Z. Steinberger, "Redefining 'Employee' in the Gig Economy: Shielding Workers from the Uber Model.," *Fordham Journal of Corporate & Financial Law* 23, no. 2 (2018): 581, https://search-ebscohost-com.proxy.library.upenn.edu/login.aspx?direct=true&db=bth&AN=129502056&site=ehost-live.
[15] Ibid, 584.

As the name suggests, independent contractors are afforded greater flexibility and autonomy than employees, but the other side of the coin is that they lack the security and benefits that are provided by companies for their employees.[16] Rideshare drivers must pay all of their costs (fuel costs, maintenance costs, not to mention costs associated with purchasing or renting a car) out of pocket, and they are not entitled to employee benefits like unemployment compensation, workers' compensation, health insurance, and employee retirement benefits.[17, 18]

Because these benefits are not guaranteed for independent contractors, this opens up the possibility for ride hailing companies to engage in social impact not only for their riders but also for their drivers. Rideshare companies like DiDi and Grab have taken important steps in recent years to provide insurance coverage for their drivers and offer drivers some sort of assurance for their earnings, safety, and future.[19] However, much more can be done in the way of protecting drivers and ensuring their wellbeing in the long term. Interestingly, the independent contractor versus employee debate is much less heated and disputed in Asia, and key stakeholders have for the most part shelved this debate so that they can focus on creating a collaborative and sustainable industry. In any case, this paper will continue to examine how DiDi and Grab, as rideshare companies with monopolistic market control, have stepped in to provide these benefits for their drivers as well as where they've fallen short of driver needs.

Didi Chuxing

Company Overview

DiDi was first launched in China in 2012 by founder Cheng Wei, although at the time it existed as two separate companies, DiDi Dache and Kuaidi Dache.[20] In 2015, DiDi Dache and Kuaidi Dache merged, with the combined company taking on the name Didi Chuxing; DiDi controlled 60% of the company due to its higher ride volume.[21] In August of the following year, DiDi

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[16] Stan Malos, Gretchen Vogelgesang Lester, and Meghna Virick, "Uber Drivers and Employment Status in the Gig Economy: Should Corporate Social Responsibility Tip the Scales?," *Employee Responsibilities and Rights Journal* 30, no. 4 (December 2018): 241, http://dx.doi.org.proxy.library.upenn.edu/10.1007/s10672-018-9325-9.
[17] Henry Ross, "Ridesharing's House of Cards: O'Connor v. Uber Technologies, Inc. and the Viability of Uber's Labor Model in Washington," *Washington Law Review* 90, no. 3 (October 2015): 1432, https://proxy.library.upenn.edu/login?url=https://search-proquest-com.proxy.library.upenn.edu/docview/1764374791?accountid=14707.
[18] Malos, Lester, and Virick, "Uber Drivers," 240.
[19] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[20] Beijing Xiaoju Technology, "Milestones," DiDi.
[21] Brad Stone and Lulu Yilun Chen, "Uber Slayer: How China's Didi Beat the Ride-Hailing Superpower," Bloomberg, last modified October 6, 2016, accessed June 26, 2020, https://www.bloomberg.com/features/2016-didi-cheng-wei/.

acquired Uber China, with Uber taking a 17.7% stake in the company and $1 billion in cash.[22] This merger resulted in a combined market share of around 95%, and DiDi continues to dominate the Chinese ride hailing market today, with over ten billion rides annually.[23, 24] Although this merger prompted an investigation by the Chinese Ministry of Commerce, DiDi has yet to receive a ruling four years after the initial merger.[25] At present, DiDi is one of the most highly valued startups in the world, and the company is backed by two of China's biggest tech companies, Alibaba and Tencent.[26] Besides China, DiDi now operates in eight international markets, but as aforementioned, this research focuses specifically on DiDi's operations and strategy in the Chinese market because of its monopolistic market control there.

Becoming a Driver

In the years since the merger with Uber, becoming a driver for DiDi has become slightly more difficult. This change was not a direct consequence of the merger but rather a side effect of DiDi focusing more on driver quality for the long term and the government imposing greater regulations on the monopoly. Ride hailing is almost always an undersupplied market, and in a country with close to 1.4 billion people, one of the primary challenges is maintaining a large enough supply of drivers to meet rider demand.[27] For that reason, being too selective with its driver supply or instituting too many licensure requirements would not serve DiDi well. However, as the priority has shifted from attracting drivers from competing platforms to guaranteeing driver quality, the requirements for becoming a driver for DiDi have also become more onerous to meet. This coupled with the fact that the Chinese government and local governments are tightening regulations on DiDi means that becoming a driver on the platform has gradually increased in difficulty.

To begin, there is a fairly high cost of compliance, as prospective drivers must study for and take an exam and register their vehicle as a commercial vehicle.[28] On top of existing maintenance and insurance fees, the cost that comes with acquiring a commercial car license may render driving

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[22] Ibid.
[23] Beijing Xiaoju Technology, "About Us," DiDi, accessed June 1, 2020, https://www.didiglobal.com/about-didi/about-us.
[24] Savannah Dowling, "How Didi Partnered And Burned Its Way To Market Leadership In China," Crunchbase, last modified May 23, 2018, accessed May 23, 2020, https://news.crunchbase.com/news/how-didi-partnered-and-burned-its-way-to-market-leadership-in-china/.
[25] Yujie Xie, "What Didi's Blackout Exposed About the Ride-Hailing Industry," Sixth Tone, last modified September 28, 2018, accessed June 9, 2020, https://www.sixthtone.com/news/1002992/what-didis-blackout-exposed-about-the-ride-hailing-industry.
[26] Stone and Chen, "Uber Slayer," Bloomberg.
[27] Xinyu Zhang, "How Didi Works," PingWest, last modified August 29, 2017, accessed August 15, 2020, https://en.pingwest.com/a/112.
[28] Rita Liao, "China's Didi adds driver training program to counter sharp decline in rides," TechCrunch, last modified November 28, 2018, accessed June 4, 2020, https://techcrunch.com/2018/11/28/didi-driver-program/.

for DiDi unprofitable for some part time drivers on the platform.[29] After acquiring a vehicle registration license, drivers must also undergo a background check, which DiDi conducts in collaboration with the Criminal Investigation Department, the Chinese Ministry of Public Security, and the local police department.[30] Due to its two high profile murder cases in 2018, DiDi ramped up safety measures as well, requiring all drivers to participate in their Compulsory Online Driver Safety Training Program and take separate driver training modules.[31] Furthermore, drivers are required to complete additional identification checks like daily facial recognitions, further background checks, and vehicle and driver compliance checks.[32] Between the extra cost and heightened compliance standards, drivers may find it more and more difficult to not only qualify to drive for DiDi but also stay on the platform. DiDi's website writes that in 2017, the year after the merger with Uber, DiDi rejected, on average, 40,000 driver applications each day because the applicants did not meet the qualification and compliance requirements to become a driver.[33]

Beyond these standardized requirements, DiDi has also faced stricter local regulation with regards to driver onboarding in recent years. In 2016, the Chinese government legalized online ride hailing companies through the passage of its Interim Measures for the Administration of Online Car Hiring Business Operations and Services.[34] However, local governments have since passed their own versions of these measures, instituting new and different regulations for drivers in various cities. For example, in an effort to weed out so-called "black car" drivers (a term that refers to unlicensed drivers), many cities have added an additional license requirement for drivers to their local city laws.[35] In Beijing and Shanghai, drivers must have a *hukou*, a household registration in the city, in order to drive, in effect preventing anyone who traveled to the city for work from driving for DiDi.[36] This double license policy, which was formally

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[29] Rita Liao, "The end of China's ridesharing gig," TechCrunch, last modified January 1, 2019, accessed June 22, 2020, https://techcrunch.com/2019/01/01/end-of-chinas-ride-sharing-gig/.
[30] Beijing Xiaoju Technology, "DiDi Safety," DiDi, accessed June 1, 2020, https://www.didiglobal.com/science/security.
[31] Beijing Xiaoju Technology, "DiDi Resumes Late-Night Ride-Hailing with Enhanced Safety Measures," DiDi, last modified September 14, 2018, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=542&type=blog.
[32] Beijing Xiaoju Technology, "DiDi China Concludes Safety Revamp with Official Report Submitted to Ministry of Transport," DiDi, last modified October 24, 2019, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=791&type=blog.
[33] Beijing Xiaoju Technology, "DiDi Resumes," DiDi.
[34] Beijing Xiaoju Technology, "NDRC investigates implementation of local car-hailing policies and officials call for stricter review," DiDi, last modified December 17, 2017, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=337&type=blog.
[35] Julie Yujie Chen and Jack Linchuan Qiu, "Digital utility: Datafication, regulation, labor, and DiDi's platformization of urban transport in China," *Chinese Journal of Communication* 12, no. 3 (2019): 282, https://www.tandfonline.com/doi/full/10.1080/17544750.2019.1614964.
[36] Josh Horowitz, "One year after the Uber-Didi merger, it's only getting harder to hail a ride in China," Quartz, last modified August 3, 2017, accessed June 21, 2020, https://qz.com/1045268/one-year-after-the-uber-didi-merger-its-only-getting-harder-to-hail-a-ride-in-china/.

implemented on January 1st, 2019, mandates that all drivers hold both a commercial vehicle license and local residency permit in the city they are working.[37]

These regulations have made it significantly harder for aspiring drivers to start driving for DiDi and for drivers who are already on the platform to continue, especially if they were previously driving part time. The new requirements are varied in nature, but they make it both more costly and more time consuming to get certified as a driver on DiDi. The commercial vehicle license, test, and newfound safety requirements increase the barrier to driving, and the local adaptations to the national measures that legalized ride hailing across China have limited the potential driver pool to a smaller group of people who have residency permits and the money to acquire the commercial license. While these problems and hurdles to becoming a driver aren't unique to DiDi, they are in part brought about by DiDi's change in focus following the merger and the increase in government scrutiny that resulted from the exit of Uber from the market.

Insurance Coverage

As DiDi has diversified into financial and insurance services, coverage options for drivers have increased. Shortly after the double license regulation came into effect in 2019, DiDi moved into financial technology and insurance, and the company began providing both health and car insurance for its drivers in an effort to decrease the barrier of entry and compensate for the high compliance costs.[38]

In 2015, DiDi first partnered with Ping An Property Insurance to launch its DiDi General Accident Insurance Plan.[39] The general insurance plan automatically applied to all DiDi drivers and riders at no cost, and it allocated up to CNY 1.2 million per person in the case of injury, disability, or death resulting from accidents.[40] However, it's unclear if this plan still exists, as there is no documentation for it on DiDi's website besides the 2015 article in the News Center, and articles from 2019 write that DiDi was planning on working with Chinese insurance companies to launch an accident insurance plan that covers up to CNY 1.2 million.[41] While it is unclear whether DiDi provides general accident insurance for all of its drivers and riders at the

[37] Jon Russell, "Didi launches lending and insurance as new regulation threatens to lower driver numbers," TechCrunch, last modified January 2, 2019, accessed July 5, 2020, https://techcrunch.com/2019/01/01/didi-launches-lending-and-insurance/.
[38] Ibid.
[39] Beijing Xiaoju Technology, "DiDi pioneers general rideshare insurance program," DiDi, last modified October 26, 2015, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=298&type=news.
[40] Ibid.
[41] Reuters Staff, "China's Didi plans to relaunch Hitch service with new safety features," Reuters, last modified July 18, 2019, accessed August 16, 2020, https://cn.reuters.com/article/china-didi-chuxing/chinas-didi-plans-to-relaunch-hitch-service-with-new-safety-features-idUSL4N24J22I.

moment, DiDi’s website does state that the company offers assistance and aid in the case of injury or sudden death, though it does not specify a maximum amount.[42]

As for automobile insurance, DiDi drivers can purchase insurance for their vehicles directly in the app, which recommends different insurance policies based on drivers’ individual needs.[43] DiDi’s diversification into financial services following the merger has made it easier for drivers to purchase automobile insurance through the app, and this accessibility may be important for segments of the driver population that have lower financial literacy. However, besides car insurance, it is difficult to tell whether DiDi also provides commercial vehicle insurance and accident insurance for its drivers.

Driver Earnings

When DiDi and Uber China first merged in 2016, drivers worried that the exit of Uber from the market and the establishment of DiDi as the monopoly power in the region would have a strong negative bearing on their earnings. Many assumed that DiDi would lower fares and increase its commission rate in order to maximize profit, and drivers were especially concerned about DiDi cutting their incentives, which at the time made up a significant portion of their income. While there was a drastic drop in the incentives that were given out to drivers following the merger, the pricing structure and commission rate has stayed roughly the same. Drivers are also still able to make a living through driving on the platform because of the heightened demand on the platform.

Although DiDi does not disclose its pricing mechanism and fare structure because they constitute valuable intellectual property, DiDi does have upfront fares and dynamic pricing, which helps balance supply and demand in the market. As is the case for other ride hailing companies, DiDi operates using a commission model, where the company takes a percentage of the fare for each trip. Given that DiDi has wielded market control in China since 2016, the company could have theoretically hiked up its commission rate after Uber left the market. However, DiDi’s platform commission hasn’t increased dramatically and has actually remained very reasonable. For reference, in 2016, Uber took at least 25% of driver revenue through its platform commission.[44] Based on data from the fourth quarter of 2018, DiDi executive Chen Xi revealed that the

[42] Beijing Xiaoju Technology, "DiDi Safety," DiDi.
[43] Beijing Xiaoju Technology, "DiDi Car Insurance," DiDi, accessed August 16, 2020, https://www.didiglobal.com/financial-business/car-insure.
[44] Patricia Leighton, "Professional self-employment, new power and the sharing economy: Some cautionary tales from Uber," *Journal of Management and Organization* 22, no. 6 (November 2016): 864, http://dx.doi.org.proxy.library.upenn.edu/10.1017/jmo.2016.30.

platform was averaging a commission rate of around 19%.[45] Instead of using a steady commission rate that is applied consistently across rides, DiDi actually takes different percentage commissions on different rides. This commission ranges from below 15% to above 25%, with that middle section counting for around 60% of rides (20% of the time, the commission rate will be below 15% and another 20% of the time, the commission rate will be above 25%).[46] Surprisingly, the commission that DiDi gets from its rides is not even sufficient to cover all of its costs, and over a third of the commission ends up going back towards incentives and subsidies that benefit the drivers directly.[47] In fact, this 19% average commission comes short of completely covering DiDi's taxes, fees, operational costs, and driver incentives, so DiDi actually takes around a 2% loss on every drive.[48]

While it seems strange that a ride hailing company with over 90% market share cannot even break even with the revenue it gets from its platform commission, this reality actually highlights the issue of undersupply in the ride hailing market. Supply management lies at the core of DiDi's decision making when it comes to pricing and commissions, and the imbalance between supply and demand in the ridesharing market represents a severe constraint on the company. Even though DiDi acquired Uber and presently controls the market, it must sustain a large enough supply of drivers to meet market demand. As such, DiDi is unable to use its monopoly power to exploit its drivers and maximize profit, and the commission rates are generally low enough for drivers to continue to earn their livelihoods on the platform. In 2017, DiDi drivers earned an average of CNY 160 each day, and DiDi's Report on Job Creation in Restructuring Industries reported that over three quarters of DiDi drivers were able to make at least as much as they did during their previous job by driving on the platform.[49, 50] In addition, over 1.3 million DiDi drivers were the sole earners for their families.[51] While CNY 160 is by no means a lot of money, DiDi has taken care to maintain its fares and commission rates at a level that allows those who drive full time on the platform to make a living through the job. DiDi's platform commission remains fairly reasonable, and DiDi has chosen to pay for certain costs itself instead of raising its commission rates.

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[45] Xi Chen to UDache web forum, "Everyone Says DiDi's Commissions Are High, so Why Does DiDi Still Suffer Losses? (translated from Chinese)," April 22, 2019, accessed June 10, 2020, https://page.udache.com/public-biz/public-review/index.html#/articleQuestion?aid=72057594039559084&question=1&channel=.
[46] Ibid.
[47] Ibid.
[48] Ibid.
[49] Beijing Xiaoju Technology, "Didi Chuxing obtains operating license and national accreditation," DiDi, last modified March 1, 2017, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=228&type=news.
[50] Beijing Xiaoju Technology, "DiDi releases study on job creation for laid-off workers in heavy-industry provinces," DiDi, last modified July 20, 2016, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=267&type=news.
[51] Beijing Xiaoju Technology, "DiDi has created over 21 million jobs," DiDi, last modified March 24, 2018, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=329&type=news.

Incentives and Subsidies

Ride hailing companies in oligopolistic markets around the world spend large amounts of money on driver incentives in order to both attract drivers to the platform and keep them on the platform. Ride hailing companies that operate in markets without much competition do not avoid this problem entirely, but they can spend much less on driver incentives because they can employ other mechanisms to get drivers to sign up for their platform. Drivers saw a significant decrease in incentives following both the merger with Kuaidi Dache in 2015 and the merger with Uber in 2016, but driver earnings have since rebounded and stabilized given the overwhelming demand in the market. Although the initial decline in subsidies hurt driver earnings, the increase in demand on DiDi following the mergers in part compensated for this original decrease, and drivers have been able to achieve a steady income.

During its first two years, Didi Dache competed aggressively with Kuaidi Dache, and both companies gave out substantial subsidies to drivers to convince them to drive for their platform.[52] Because traditional taxis had already existed for a long time in the markets that ride hailing platforms were trying to break into, rideshare companies charged lower fares than traditional cabs so that people would choose to take Didi Dache or Kuaidi Dache over a taxi.[53] However, due to the two-sided nature of the market, rideshare companies also had to supplement driver earnings with incentives so that they could maintain an adequate supply for their demand. As such, Chinese ride hailing companies had always used an incentive pay system to convince drivers to drive, and these incentives became the primary way that rideshare platforms competed with each other for drivers and market share.[54]

When Uber first entered the Chinese market, Uber and DiDi engaged in a price war by pushing down and subsidizing fares for riders.[55] At the same time, they competed for the same driver pool by giving their drivers substantial incentives. During this time, the two companies were each spending over a billion dollars every year to get riders and drivers on their platform, and Uber suffered more than 2 billion dollars in losses.[56, 57] One type of subsidy that DiDi offered was an extra payment that was given to drivers who drove more than a set number of rides in a week-long period; at times, this subsidy amounted to more than the total fare that passengers

[52] Dowling, "How Didi," Crunchbase.
[53] Qingjun Wu et al., "Labor control in the gig economy: Evidence from Uber in China," *Journal of Industrial Relations* 61, no. 4 (August 20, 2019): 584, https://doi-org.proxy.library.upenn.edu/10.1177/0022185619854472.
[54] Ibid.
[55] James Crabtree, "Didi Chuxing took on Uber and won. Now it's taking on the world," Wired, last modified February 9, 2018, accessed June 9, 2020, https://www.wired.co.uk/article/didi-chuxing-china-startups-uber.
[56] Stone and Chen, "Uber Slayer," Bloomberg.
[57] Crabtree, "Didi Chuxing," Wired.

were paying for that ride.[58] Because of incentives like these, some drivers experienced a pronounced decrease in their earnings following the DiDi Uber merger. In 2015, some drivers were earning CNY 10,000 each month, but in April of 2018, drivers earnings were only around CNY 6,000 to CNY 7,000 yuan, a 30% to 40% decrease from before.[59] As a result, drivers were often working 16 to 17 hours a day to get more rides and increase their incomes.[60] Most recently, in 2018, DiDi competed with Meituan-backed Shouqi Yueche and spent around $1.7 billion on various subsidies and discounts.[61]

Even after its merger with Kuaidi in 2015, DiDi had only captured around 55% percent of the market share of the ride hailing industry in China.[62] As this percentage has risen to over 95%, the market has also experienced several rounds of price wars with different competitors. Although DiDi no longer spends as prodigiously on driver incentives and rider subsidies as during its days of competing with Kuaidi, Uber, and Shouqi Yueche, it has also not stopped giving drivers incentives altogether and is reported to spend around $4 billion annually on subsidies for riders and incentives for drivers combined.[63] While this spending alone is not enough to compensate for drivers' losses in incomes following the mergers and exits of different players from the market, the demand for DiDi has also increased dramatically with the market share. Given that DiDi is now the dominant player in the Chinese ride hailing market by a mile, almost all riders use DiDi. Over time, as riders have migrated from using other platforms to using DiDi, driver earnings have also restabilized. Although drivers from other platforms also switched to driving for DiDi, the amount by which demand has grown on DiDi far outstrips the amount by which supply has grown. Consequently, with the current level of incentives and the large amount of demand for the service, DiDi drivers' earnings have naturally reached a stable point.

KPI-Based Management

During the years that DiDi was competing with Uber, DiDi gave out incentives to drivers across the board because the goal was to enlarge the diver pool and outcompete Uber by getting any and

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[58] Jiaru Bai et al., "Coordinating Supply and Demand on an On-Demand Service Platform with Impatient Customers" (working paper, December 20, 2017), 30, http://dx.doi.org/10.2139/ssrn.2831794.
[59] Singapore Press Holdings, "Higher fares slammed after Uber exits China," The Straits Times, last modified April 1, 2018, accessed June 11, 2020, https://www.straitstimes.com/asia/east-asia/higher-fares-slammed-after-uber-exits-china.
[60] Hui Yu, "The Destiny of Web Platform Workers in China: Employees, Nothing or a 'Third Option'?," *Japan Labor Issues* 2, no. 8 (August/September 2018): 96, https://www.jil.go.jp/english/jli/documents/2018/008-12.pdf.
[61] Lulu Yilun Chen, "Beleaguered Didi Is Said to Lose $585 Million in Just Six Months," Bloomberg, last modified September 7, 2018, accessed June 22, 2020, https://www.bloomberg.com/news/articles/2018-09-07/beleaguered-didi-is-said-to-lose-585-million-in-just-six-months.
[62] Dowling, "How Didi," Crunchbase.
[63] Zhixuan Fang, Longbo Huang, and Adam Wierman, "Prices and subsidies in the sharing economy," *Performance Evaluation* 136 (December 2019): 2, https://doi.org/10.1016/j.peva.2019.102037.

all drivers onto the DiDi platform. However, with Uber exiting the market, DiDi was able to shift its attention toward driver quality and rider experience, and the company has since implemented a number of new KPI-based management tactics. Besides tightening the requirements for becoming a driver, DiDi has also grown more strict about driver ratings and cancellation ratings and will deactivate a driver's account if his/her average rating falls below 4.5 stars, if their cancellation rating jumps too high, or if the driver commits a serious traffic violation.[64] Furthermore, DiDi guarantees driver compliance with regulations by utilizing periodic checks by DiDi staff who pretend to be normal passengers; in cases where drivers fail this check, their accounts may also become deactivated.[65]

Beyond controlling for the quality of drivers who actively drive for the platform, in late 2016, DiDi also began assigning rides based on certain metrics. DiDi's intelligent ride-matching algorithm uses the company's Service Credit Score system in order to determine which drivers are assigned which rides, with drivers with higher scores receiving more favorable rides.[66] The Service Credit Scores are a comprehensive measure of a driver's service quality and take into account not only response time and pickup time but also in-trip services and post-ride services.[67] This ride-matching system allows DiDi to differentiate between its drivers and directly reward higher-performing drivers by giving them better rides that generate more income. As DiDi has gained more market share, the company has also begun prioritizing driver quality and brand image. Consequently, DiDi not only tracks key metrics (service quality, cancellation rating, driver rating, etc.) for its drivers but also makes decisions regarding account deactivation and ride assignment based off of them.

Social Impact and Corporate Social Responsibility

As a platform with such a large user base, DiDi has also used its position and resources for the social impact of its drivers and riders, as well as the community at large. To begin, over 5 million DiDi drivers came from Chinese industries that face overcapacity, and they've found a way to earn their livelihoods through driving for the platform.[68] DiDi has also rolled out several CSR initiatives, including the DiDi Driver Foundation, which provides financial aid to drivers' families in need, and the DiDi Cares Foundation, which works with research institutes and universities to conduct and publish research on driver health. Both of these foundations were

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[64] Yu, "The Destiny," 98.
[65] Ibid.
[66] Beijing Xiaoju Technology, "Didi rolls out a comprehensive 'Service Credit Scores' system aimed at connecting service quality with differentiated driver assignments and income," DiDi, last modified September 12, 2016, accessed June 3, 2020, https://www.didiglobal.com/news/newsDetail?id=253&type=news.
[67] Ibid.
[68] Beijing Xiaoju Technology, "Corporate Social Responsibility," DiDi, accessed June 1, 2020, https://www.didiglobal.com/about-didi/responsibility.

established in late 2016, and DiDi has continued to devote money and resources to them in the years after.[69] Although DiDi's focus during its first four years was primarily on defeating its competitors, with its position solidified in 2016, DiDi has fully dedicated itself to leveraging its platform and capabilities to improve not only operational efficiency and driver income but also social impact and safety.

Grab

Company Overview

Grab was founded in Malaysia in June of 2012 by Anthony Tan and Tan Hooi Ling, and the company originated because the co-founders wanted to provide a safe mode of transportation for people in Southeast Asia.[70] Currently, Grab is headquartered in Singapore and operates in eight countries in the region, and it competes aggressively with Gojek in several of these markets, especially Indonesia. In 2018, Grab seized control of the Singaporean ride hailing market after acquiring Uber Southeast Asia; as a result of that deal, Uber took a 27.5% stake in Grab.[71]

Even though Grab exists in several different markets across the Southeast Asian region, the company takes a hyperlocal approach to each market and caters its product to the differing needs and dynamics of the markets.[72] Instead of making broad generalizations about Grab's strategy and operations in the region at large, this section of the paper looks solely at Grab's past and current situations in Singapore, a market where Grab is the dominant player. Although Gojek also operates in Singapore, it has a much smaller market share than Grab, and the Competition and Consumer Commission of Singapore (CCCS) estimates that post-merger, Grab holds between 80% and 90% market share in the ride hailing market in Singapore.[73] As a result, Grab does have, to a large degree, monopoly control over the Singaporean ridesharing industry.

As a small city-state, Singapore has an extraordinarily well-developed public transport system but is also uniquely suited for rideshare. For one, the high taxes, congestion charges, and Certificate of Entitlement (COE) make it tremendously expensive to own a car there.[74] The COE,

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[69] Ibid.
[70] Anonymous Grab employee #1, Zoom interview by author, July 5, 2020.
[71] Russell, "Grab's acquisition," TechCrunch.
[72] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[73] Competition and Consumer Commission of Singapore, *Notice of Infringement Decision: Sale of Uber's Southeast Asian business to Grab in consideration of a 27.5% stake in Grab*, 59, September 24, 2018, accessed August 17, 2020.
[74] Yoolim Lee, "The Cab Ride That Nearly Killed Me Changed How I Think About Ride-Hailing Apps," Bloomberg, last modified January 19, 2019, accessed May 23, 2020, https://www.bloomberg.com/news/features/2019-01-19/a-grab-ride-nearly-killed-me-ride-sharing-needs-to-get-safer .

an additional fee on top of the price of the vehicle, can cost up to S$50,000 and is subject to renewal after 10 years, at which point the car owner either sells or scraps the car.[75] This regulation makes rideshare a convenient alternative to buying and driving your own car and subsequently a highly demanded service.

Unlike DiDi, which never received a ruling regarding its merger with Uber China, Grab was fined after its merger with Uber's Southeast Asia business and has since been subject to regulations imposed by the CCCS, the competition watchdog in Singapore. When news of the Grab Uber deal first broke out, the CCCS expressed concerns about the acquisition violating Section 54 of Singapore's Competition Act.[76] The CCCS found that the merger led to a substantial decrease in competition in the ridesharing industry and that the combined market share of 80% to 90%, which is far greater than their threshold of 40%, constituted sufficient cause for intervention.[77] After the merger, the CCCS passed its Infringement Decision, and this decision stipulated, among other things, that Grab pay a S$13 million fine and end its exclusive arrangements with taxi companies, which previously gave Grab unique access to the fleets and drivers of Trans-Cab, Silver Cab, and Premier Taxis.[78, 79] Moreover, in keeping with the CCCS' objective of ensuring competition, the decision required that Grab maintain its prior pricing and commission rates and not change them from where they were before March 26, 2018, the date of the Grab Uber announcement.[80]

In response to the CCCS decision, the Head of Grab Singapore Lim Kell Jay stated that "Competition exists. This week, two companies have already come out to say that they are going to launch their ride-hailing apps in Singapore and elsewhere in the region. And that's just in ride-hailing. Passengers continue to have many other transport choices. They can book taxis via

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[75] Spencer Teng Chee Ang, Zoom interview by author, July 20, 2020.
[76] Russell, "Grab's acquisition," TechCrunch.
[77] CCCS Singapore, "Grab-Uber Merger: CCCS Imposes Directions on Parties to Restore Market Contestability and Penalties to Deter Anti-Competitive Mergers," Competition and Consumer Commission of Singapore, last modified September 24, 2018, accessed July 4, 2020, https://www.cccs.gov.sg/media-and-consultation/newsroom/media-releases/grab-uber-id-24-sept-18.
[78] Aradhana Aravindan, "Singapore fines Grab and Uber, imposes measures to open up market," Reuters, last modified September 23, 2018, accessed July 4, 2020, https://www.reuters.com/article/us-uber-grab-singapore/singapore-fines-grab-and-uber-imposes-measures-to-open-up-market-idUSKCN1M406J.
[79] Singapore Economic Development Board, "Grab pushes digital innovation to stay ahead of the game," Singapore Economic Development Board, last modified March 15, 2017, accessed July 3, 2020, https://www.edb.gov.sg/en/news-and-events/insights/innovation/grab-pushes-digital-innovation-to-stay-ahead-of-the-game.html.
[80] CCCS Singapore, "Uber/Grab merger: CCCS Issues Interim Measures Directions," Competition and Consumer Commission of Singapore, last modified April 13, 2018, accessed July 4, 2020, https://www.cccs.gov.sg/media-and-consultation/newsroom/media-releases/uber-grab-imd-13-april-18.

taxi apps, take street-hail taxis, car-pool, take public trains and buses, anything."[81] However, the CCCS noted that the entrance of a few small ride hailing apps into the market does not constitute significant competition because Grab still holds an overwhelming majority of the market share and that it's difficult to break into the rideshare industry because of the network effects and high barriers to entry.[82]

Becoming a Driver

Due to the litany of licensure requirements laid out by Singaporean law, the process for becoming a driver for Grab in Singapore is both time-consuming and expensive. While some drivers choose to drive for Grab with a rental car, other drivers will purchase their own car. Although the high costs and COE associated with buying a car in Singapore make rideshare a highly sought-after service in that market, they also mean that operating costs for drivers are enormously high. After acquiring or renting a car, drivers must study for and take a written exam as well as undergo a medical screening and a thorough background check.[83] Before 2018, a lot of the drivers who did not pass the background check for Grab ended up driving for either Gojek or Uber.[84] Following the merger, drivers from other platforms came back to Grab, but many drivers who did not meet the safety requirements for the background check the first time around were never onboarded onto the app because Grab had taken a strong stance regarding safety requirements and driver quality.[85]

Singaporean law further requires that rideshare drivers obtain either a Taxi Driver's Vocational Licence (TDVL) or a Private Hire Car Driver's Vocational Licence (PDVL), which drivers can apply for after they've held their driver's license for at least two years.[86] Beyond proving that they've had their driver's license for over two years, applicants must also provide their National Registration Identity Card (NRIC) and proof of commercial insurance for their vehicle.[87] Moreover, applicants must pay a S$100 fee to convert their vehicle to Z10/Z11 classification in accordance with the requirements laid out by the Land Transport Authority (LTA).[88]

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[81] Grab, "A message to all our passengers and drivers from Head of Grab Singapore," Grab, last modified March 29, 2018, accessed June 8, 2020, https://www.grab.com/sg/blog/pulse-of-singapore/a-message-to-all-our-drivers-and-passengers-from-head-of-grab-singapore/.
[82] CCCS Singapore, "Grab-Uber Merger," Competition and Consumer Commission of Singapore.
[83] Lee, "The Cab Ride," Bloomberg.
[84] Anonymous Grab employee #4, Zoom interview by author, July 30, 2020.
[85] Ibid.
[86] Grab, "Drive with Grab using your own car in 4 steps," Grab, accessed June 4, 2020, https://www.grab.com/sg/drive-with-grab-using-your-own-car/.
[87] Ibid.
[88] Ibid.

Given that this process is quite cumbersome, Grab has made an effort to facilitate the onboarding process and invested S$10 million in GrabCar in 2017 to cover the fees (application, medical exam, training, and test fees) for acquiring a PDVL.[89] Grab also partnered with the Singapore Taxi Academy (STA) to launch ExpressOne, which helps drivers obtain their PDVL by offering training sessions, free coaching, reimbursement for costs, and test registration for English language certification exams.[90] Evidently, a lot of these requirements for becoming a Grab driver are not determined by Grab but rather by the Singaporean government, so there are not many notable changes from before the merger to after the merger. However, it is interesting to note that following the merger, one of the biggest challenges that Grab encountered was actually moving drivers to the platform.[91] In Singapore, the government regulations made signing up to be a driver for Grab a tedious and time intensive process, so it took a lot of time to migrate drivers from Uber over to Grab.

Insurance Coverage

Because Grab was founded with the intention of guaranteeing safe transportation in Southeast Asia, insurance coverage has been a priority for the company since relatively early on. In fact, Grab was the first ride hailing company to provide its drivers and riders with insurance protection above the required commercial auto insurance.[92] In March of 2016, Grab first released its free Personal Accident Insurance policy, which covers all drivers and riders at no cost in the case of accidental death (within 12 months of the accident), permanent disability, or injury.[93] At the time, the maximum insurance coverage for drivers and riders from this policy was $250,000 per vehicle.[94] In cases where multiple vehicles were involved in the accident, the insurance could pay up to $2.5 million for a given accident.[95] Now, according to Grab's website, the Group Personal Accident Insurance that all drivers and riders get free of charge provides up to $13,500 of coverage for medical expenses, disability, and death that result from accidents that happen

[89] Grab, "Grab Announces $10 Million Investment in Singapore for GrabCar," Grab, last modified March 9, 2017, accessed July 3, 2020, https://www.grab.com/sg/press/consumers-drivers/grab-announces-10-million-investment-singapore-grabcar/.
[90] Grab, "Grab teams up with the Singapore Taxi Academy to help all drivers earn an income as licensed chauffeurs," Grab, last modified January 24, 2018, accessed June 5, 2020, https://www.grab.com/sg/press/consumers-drivers/grab-teams-up-with-the-singapore-taxi-academy-to-help-all-drivers-earn-an-income-as-licensed-chauffeurs/.
[91] Anonymous Grab employee #4, Zoom interview by author, July 30, 2020.
[92] Grab, "Trust & Safety," Grab, accessed June 4, 2020, https://www.grab.com/sg/safety/.
[93] Grab, "Grab Provides Free Personal Accident Insurance for Passengers and Drivers," Grab, last modified March 3, 2016, accessed June 4, 2020, https://www.grab.com/sg/press/social-impact-safety/grab-provides-free-personal-accident-insurance-for-passengers-and-drivers-2/.
[94] Ibid.
[95] Ibid.

during a Grab trip.[96] While this is still a large amount of money for Grab to be covering under its free accident insurance, this new maximum for insurance coverage under Grab's free accident insurance policy seems to be substantially less than what it was when the insurance was first rolled out. In early 2018, Grab, like DiDi, diversified and moved into the financial services industry, and this drop in coverage amount under the free accident insurance may very well be a move that encourages drivers and riders to purchase additional insurance plans on top of Grab's free one. For example, the Personal Accident Plus insurance covers all of the same circumstances (accidental death, permanent disability, burns, and medical expenses) as the Group Personal Accident Insurance, but it goes beyond to free policy to cover the user at all times so that he/she is protected even when he/she is not driving for Grab.[97] The plan operates on a monthly premium model, where users pay a set amount (ranging from $3.50 to $31) each month according to the plan that they've chosen.[98]

Besides Group Personal Accident Insurance (and Personal Accident Plus), Grab users also have access to Prolonged Medical Leave (and Prolonged Medical Leave Plus), Auto Excess, and Critical Illness Insurance. Prolonged Medical Leave is made available to all Grab drivers in the Emerald Circle, a tier-based program that drivers qualify for by accumulating enough points through driving and maintaining a high enough average driver rating.[99] The plan pays out a set percentage of the driver's earnings in the last 90 days to the driver during their medical leave or hospitalization and ensures that they still have a source of income during those times.[100] Like the Personal Accident Plus insurance, the Prolonged Medical Leave Plus insurance operates based on a monthly premium for drivers and covers not just earnings from Grab but also earnings from other income sources.[101] While the Personal Accident Insurance and Prolonged Medical Leave Insurance are both provided to drivers free of charge, drivers can also choose to purchase Auto Excess Insurance and Critical Illness: Pay Per Trip (CIPPT) Insurance, which work in similar ways through daily or per trip premiums.[102]

Evidently, Grab offers many more types of insurance to its drivers than is standard in the ride hailing industry, and it is able to do so in part because of the market control it wields and in part

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[96] Grab, "Personal Accident Plus," Grab, accessed July 3, 2020, https://www.grab.com/sg/driver/insure/personal-accident-plus/.
[97] Ibid.
[98] Ibid.
[99] Grab, "Prolonged Medical Leave Insurance," Grab, accessed July 4, 2020, https://www.grab.com/sg/driver/insure/prolonged-medical-leave-insurance/.
[100] Ibid.
[101] Ibid.
[102] Grab, "Grab and NTUC Income Launch Southeast Asia's First Micro-insurance for Critical Illness Protection exclusively for Grab Driver-Partners," Grab, last modified August 1, 2019, accessed June 5, 2020, https://www.grab.com/sg/press/consumers-drivers/grab-and-ntuc-income-launch-southeast-asias-first-micro-insurance-for-critical-illness-protection-exclusively-for-grab-driver-partners/.

because the company itself has expanded into the financial service industry in the last two years.[103] As a company with a large driver base, Grab is able to provide drivers with a cheap form of insurance because the insurance companies with whom it partners (Chubb, NTUC Income, etc.) give Grab preferential rates to access its driver pool. Moreover, given that these insurance companies give Grab much more reasonable insurance rates than the actual insurance market, Grab is then able to tailor these insurance policies to its drivers and launch programs like micro-insurance, which is a lot easier for drivers to purchase than insurance that require one-time payment.[104] When Grab set out to create these insurance programs for its drivers, it was because the company saw a gap in insurance protection and a pain point that they could help address. In fact, the Prolonged Medical Leave Insurance program was created through a partnership with the National Private Hire Vehicles Association (NPHVA), which illustrates Grab's attention to its drivers' demands and dedication to using its industry dominance for social good.[105]

As a whole, Grab operated at a large enough scale such that it could work with insurance partners to provide coverage for drivers at an equitable rate. Given that many drivers in the region are not well-versed when it comes to financial services and insurance and likely did not have accident insurance prior to Grab's Personal Accident Insurance, they would have encountered significant financial hardships if they had been in an accident. In the past few years, Grab has taken care to pay attention to drivers' needs and pain points, and with its market control and large driver base, Grab has had the ability to provide drivers with different types of insurance at a more cost effective rate.[106]

Driver Earnings

Because the CCCS fixed Grab's fare structure and commission rate to where it was prior to the merger, driver earnings in Singapore have for the most part stayed the same. Although Grab is currently unable to change its pricing structure due to government regulation, Head of Grab Singapore Lim Kell Jay remarked that Grab would not increase its fares even if the regulation did not exist.[107] Prior to the merger, Grab had made two significant changes to its fares, although the structure (pricing based on a base fare, per kilometer rate, and per minute rate) has stayed the same. In 2016, Grab adjusted its fares such that the base fare decreased by S$0.50 from S$3.50

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[103] Grab, "Grab and Chubb sign partnership to provide innovative in-app insurance solutions throughout Southeast Asia," Grab, last modified March 13, 2018, accessed June 5, 2020, https://www.grab.com/sg/press/others/grab-and-chubb-sign-partnership-to-provide-innovative-in-app-insurance-solutions-throughout-southeast-asia/.
[104] Anonymous Grab employee #5, Zoom interview by author, August 1, 2020.
[105] Jia Yi Chong, Zoom interview by author, July 20, 2020.
[106] Anonymous Grab employee #1, Zoom interview by author, July 5, 2020.
[107] Mediacorp, "Allow us to 'freely compete', Grab urges Government," Channel News Asia, last modified March 30, 2018, accessed July 3, 2020, https://www.channelnewsasia.com/news/singapore/allow-us-to-freely-compete-grab-urges-government-10090686.

to S$3.00 and the per kilometer rate decreased by S$0.10 from S$0.90 to S$0.80.[108] Even with this decrease in fares, in 2017, Grab drivers in Singapore earned an average hourly wage that was 10% higher than the average wage in the country.[109] In January of 2018, Grab again decreased its base fare by S$0.50, and the fares have since stayed the same at a base fare of $2.50, a per kilometer rate of S$0.50, and a per minute rate of S$0.16.[110] As of late 2018, Grab drivers could expect to earn an average wage of around S$25 per hour during non-peak hours and S$30 per hour during peak hours.[111] Throughout this time, the commission rate has stayed the same, with Grab taking at most a 20% commission from each ride.[112] This rate is consistent with the industry average in other rideshare markets around the world.

When Grab first decreased its fares in 2016, drivers expressed their dissatisfaction and complained that the lower fares made it more difficult for them to earn a living through driving. However, Grab's motivation for reducing fares at the time was so that it could increase demand and strike a better balance between marketplace supply and demand. Lim Kell Jay explained that "A top priority is our driver partners and we expect this fare revision to attract even more GrabCar passengers. This is part of a larger, holistic drivers' programme to increase their net incomes in a sustainable way."[113] In a two-sided market where customers want to pay lower fares for their rides while drivers want to earn more money per ride, the economics are much more focused on the long term than on a single ride. Although drivers were receiving less money from individual transactions following the decrease in fares, Grab was tapping into the two-sided network effects in the market by lowering prices so that more customers would use the service.[114] Each time Grab lowered its prices, it was in an effort to grow demand in a healthy way so that drivers benefit.[115] And if these changes succeeded in encouraging more riders not just to try Grab but to stay with it and use it consistently for the future, then driver earnings would gradually increase in the long run.

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[108] Grab, "Grab the Most Affordable Car Ride with New GrabCar Fares," Grab, last modified April 18, 2016, accessed June 4, 2020, https://www.grab.com/sg/press/tech-product/grab-the-most-affordable-car-ride-with-new-grabcar-fares/.

[109] *Grab's 5th Anniversary Special Report*, 15, accessed June 4, 2020, https://assets.grab.com/wp-content/uploads/media/grab_5th_year_report(2017).pdf

[110] Grab, "#AskGrab: Pricing," Grab, last modified December 6, 2018, accessed June 8, 2020, https://www.grab.com/sg/blog/news/askgrab-pricing/.

[111] Fasiha Nazren, "Grab driver in S'pore allegedly earned more than S$12,000 in 5 weeks, provides tips for other drivers," Mothership, last modified September 6, 2018, accessed August 17, 2020, https://mothership.sg/2018/09/grab-driver-singapore-earnings-s12000/.

[112] Grab, "FAQ's," Grab, accessed August 17, 2020, https://www.grab.com/sg/driver/transport/car/faq/.

[113] Grab, "Grab the Most," Grab.

[114] Anonymous Grab employee #5, Zoom interview by author, August 1, 2020.

[115] Anonymous Grab employee #2, Zoom interview by author, July 5, 2020.

Even though Grab's pricing structure and commission rate stayed the same after the merger, the CCCS declared that effective fares increased by between 10% and 15% after the deal.[116] Grab maintained that it did not increase its fares, but this discrepancy likely exists because the CCCS measures effective fares as the amount that riders pay after any subsidies or discounts while Grab considers its fares to be the amount before the discount.[117] In any case, Grab's pricing structure remained exactly the same after March 2018 as per the Infringement Decision released by the CCCS.

Incentives and Subsidies

Grab drivers responded to the Grab Uber merger in 2018 similarly to how DiDi drivers reacted to the DiDi Uber merger in 2016, as many drivers voiced their concerns about Grab reducing its incentives after acquiring Uber.[118] Drivers complained that the changes in incentive payouts following the merger made it difficult to accurately predict and gage their income levels, and drivers took to social media platforms like Facebook to express their worries.[119]

While there was a significant dip in incentives as Grab began to phase out of giving drivers so many incentives, the new demand that arrived on the platform after Uber exited the market made up for the reduction in incentives. After the merger, demand for Grab services far outstripped the supply, with the lengthy process for new drivers to get onboarded onto the platform exacerbating this imbalance.[120] As such, driver earnings were not as heavily impacted by the decrease in incentives as some drivers had anticipated simply because there were so many jobs for drivers to take.[121] In fact, driver utilization, which refers to the proportion of time a driver spends fulfilling rides out of all the time that they spend on the Grab app, soared to the highest it has ever been.[122] Because the supply side of the market is just as important if not more important than the demand side, Grab obviously does not want to see its driver earnings tank.[123] The company has to keep earnings at a certain level in order to ensure that drivers want to drive for the Grab platform. This meant that even though Grab was decreasing its incentives, it still rigorously tracked driver earnings so as to make sure that drivers were still making enough money through working on the platform.

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[116] Aravindan, "Singapore fines," Reuters.
[117] Ibid.
[118] Fann Sim, "Grab-Uber merger: Drivers worried about incentives, car rental contracts," Channel News Asia, last modified March 27, 2018, accessed July 4, 2020, https://www.channelnewsasia.com/news/singapore/grab-uber-merger-drivers-incentives-lion-city-rental-10078104.
[119] Joshua Lee, "Grab stingy with promo codes for riders, as drivers hit by fluctuating incentives," Mothership, last modified May 2, 2018, accessed July 13, 2020, https://mothership.sg/2018/05/grab-promo-code-incentives/.
[120] Anonymous Grab employee #4, Zoom interview by author, July 30, 2020.
[121] Ibid.
[122] Ibid.
[123] Arvind Swaminathan, Zoom interview by author, August 3, 2020.

When Grab was competing with Uber, it gave out driver incentives in an unsustainable way, and the company was quickly burning through investor money. Grab rolled out different incentive programs each week, and the incentive schemes were constantly changing based on the market because the company had to have enough supply to fulfill demand at all times.[124] At times, drivers would earn up to S$1,500 to S$2,000 a week purely from incentives, and the incentives would count for up to 40% to 50% of the drivers' income.[125]

After Grab acquired Uber and attained greater market control in the region, it focused its attention on achieving greater profitability, which meant phasing out of unsustainable incentive programs that were popular pre-merger and redesigning incentive structures for the future.[126] Since 2018, there has been a larger emphasis on guaranteeing that drivers' incomes are stable and encouraging drivers to work consistently on the platform.[127] For example, instead of giving out a lot of per trip incentives that benefit drivers for every ride they complete, Grab now has more streak-based incentives and average fare guarantees, which promise drivers a certain amount of money if they consistently drive for Grab or if they are able to complete a set number of rides.[128] One example is Grab's Super Steady Streak incentive, which rewards drivers who have driven over 200 trips per month over several consecutive months.[129] Moreover, if drivers are on Auto Accept, they will qualify for certain incentives.[130] In short, the incentive schemes have pivoted away from large, unsustainable subsidies for drivers and toward more carefully calculated benefits that encourage drivers to work consistently for Grab.

Two years after the merger first took place, the marketplace is well-balanced enough such that incentives only constitute a small portion of drivers' earnings and income.[131] Rather than depending on incentives to make a living on the platform, as was the case when Grab was competing with Uber, drivers are increasingly viewing incentives as more of an extra bonus that motivates them to take more trips or drive more frequently on the app. Lastly, despite the reduction in incentives since the merger with Uber, driver happiness has generally been improving, which suggests that Grab has done a good job of satisfying drivers' needs and ensuring their incomes in the years since.[132]

[124] Anonymous Grab employee #5, Zoom interview by author, August 1, 2020.
[125] Jia Yi Chong, Zoom interview by author, July 20, 2020.
[126] Anonymous Grab employee #5, Zoom interview by author, August 1, 2020.
[127] Ibid.
[128] Anonymous Grab employee #2, Zoom interview by author, July 5, 2020.
[129] Yoolim Lee, "Grab Reverses Plan to Cease Driver Incentives Amid Backlash," Bloomberg, last modified February 22, 2020, accessed May 23, 2020, https://www.bloomberg.com/news/articles/2020-02-22/grab-reverses-plan-to-cease-driver-incentives-amid-backlash.
[130] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[131] Alvin Wee, Zoom interview by author, July 28, 2020.
[132] Anonymous Grab employee #2, Zoom interview by author, July 5, 2020.

KPI-Based Management

Although Grab did not have the option of selectively giving out its incentives while it was competing with Uber, Grab now has a robust KPI-based system for rewarding drivers. This system has helped Grab pursue higher driver quality and rider safety in the past few years, and the platform has been able to motivate drivers to engage in certain positive behaviors (ie. not cancelling rides, cleaning up their car, treating their passengers kindly) using its incentives. Grab bases its incentives off of a driver's Acceptance Rating (AR), Driver Rating (DR), and Cancellation Rating (CR), and drivers with the highest acceptance and driver ratings and lowest cancellation rates qualify for the best incentives.[133] Furthermore, drivers get access to certain rebates based on their service ratings and the number of rides that they've fulfilled.[134]

Additionally, the existence of these ratings as well as other key metrics allows Grab to segment its driver pool and target specific groups of drivers with its incentives. For one, Grab is able to much more easily differentiate between its part-time and full-time drivers.[135] As a result, when Grab makes a decision about a new incentive scheme, it is in a position where it can decide whether the incentive should benefit all of the drivers or just the full-time drivers.[136] With Uber out of the market, Grab's motivation for giving drivers incentives is not to win a price war but rather to target and reward a segment of its drivers.[137] Specifically, many of these incentives are targeted for high-performing, full-time drivers because Grab wants to establish healthy long-term relationships with them, and it's a conscious decision for Grab to be rewarding the drivers who work longer hours and are more consistent on the app. However, as a result of these targeted incentive schemes, Grab has also seen its driver base churn, with some of the part-time drivers leaving the platform.[138]

This KPI-based system extends beyond incentives as well. In Singapore, Grab is very strict about driver quality because the company is looking to build long-term sustainability and its brand image. As such, if a driver's cancellation rating is too high or a driver's acceptance rating is too low, Grab will ban them from the platform.[139] This ability to heavily control for driver quality is a key difference between a market where there are other competitors and a market where Grab is the monopoly. [140] If Grab were still competing with other rideshare platforms, the company

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[133] Grab, "How to check incentive status," Grab, accessed June 5, 2020, https://help.grab.com/driver/en-sg/115008511927-How-to-check-incentive-status.
[134] Grab, "Grab the Most," Grab.
[135] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[136] Ibid.
[137] Anonymous Grab employee #5, Zoom interview by author, August 1, 2020.
[138] Ibid.
[139] Anonymous Grab employee #4, Zoom interview by author, July 30, 2020.
[140] Ibid.

would have neither the liberty to target incentives to certain segments of the driver population nor the privilege to ban drivers who do not meet its standards from the platform.

Social Impact and Corporate Social Responsibility

Corporate social responsibility (CSR) has always been at the core of Grab's mission, and the resources and capabilities that came with acquiring market control in Singapore have enabled Grab to better serve the country and its drivers. To date, Grab has hosted digital literacy clinics for over 3,000 senior citizens in Singapore.[141] Moreover, the company has provided safety training for over 1.4 million drivers across all of its markets, and 429,000 drivers have also been trained to report human trafficking.[142] During Covid-19, Grab worked with the Singaporean government to whitelist around 2,000 drivers to transport healthcare workers to and from hospitals and around 2,000 more drivers to transport people for Covid testing purposes.[143]

Besides engaging in social impact for the broader community, Grab has also launched programs that are designed to help Grab drivers. Within Grab, there is a driver experience team dedicated to improving driver earnings and increasing drivers' income sources beyond driving on the platform.[144] Furthermore, Grab as a whole pays a lot of attention to driver needs, and in Singapore, drivers can speak with Grab employees about their concerns and demands at a predetermined location every Thursday.[145] In addition, Grab works closely with labor unions like the National Private Hire Vehicles Association (NPHVA) to understand drivers' pain points; both the MediSave co-contribution program and Grab's Prolonged Medical Leave Insurance were created because of Grab's partnership with the NPHVA.[146]

Each time Grab gets rid of one of its incentive programs to rebalance marketplace supply and demand, it endeavors to make up for it by introducing some sort of benefit or program that would help the drivers in a different, nonmonetary way.[147] For instance, Grab has training programs that teach drivers the skills that they might need to move into a different industry.[148] As a company, Grab is easily able to reach out into its network and develop partnerships with training institutes, and Grab has stepped in to fill this need because it recognizes that drivers want to improve themselves and that it has the ability to help them. Throughout the years, Grab has also provided drivers with fuel discounts, subsidized mobile subscription plans, and education scholarships for

[141] Grab, "Grab for Good," Grab, accessed July 3, 2020, https://www.grab.com/sg/grab-for-good/.
[142] Ibid.
[143] Arvind Swaminathan, Zoom interview by author, August 3, 2020.
[144] Anonymous Grab employee #4, Zoom interview by author, July 30, 2020.
[145] Ibid.
[146] Jia Yi Chong, Zoom interview by author, July 20, 2020.
[147] Anonymous Grab employee #2, Zoom interview by author, July 5, 2020.
[148] Alvin Wee, Zoom interview by author, July 28, 2020.

drivers' children.[149] Although each one of these benefits goes beyond Grab's core business and responsibility as a ride hailing company, Grab has nevertheless chosen to help its drivers by investing its time, money, and resources into these services. This seems counterintuitive to a monopoly's profit-maximizing tendencies, but Grab has been firm in its commitment to helping its drivers, and the market power and influence that Grab now holds have enabled the company to fully pursue social impact on top of its daily operations.

Findings

Having described in-depth DiDi and Grab's respective policies towards and treatment of their drivers, this paper will next discuss several key findings regarding the nature of monopolistic rideshare companies. This section of the paper will first elaborate on four central findings before moving on to present recommendations for both rideshare companies and government entities.

To begin, contrary to drivers' assumptions that their incomes would decrease significantly following a merger or acquisition in the industry, the overwhelming demand in the market keeps their earnings at a relatively steady level. By nature, the ride hailing market is an undersupplied market because as long as people need to travel from one place to another, they will continue to demand ridesharing services. On the other hand, by virtue of rideshare being a part of the gig economy, the driver pool changes from hour to hour, day to day, and week to week. Even if drivers are consistent with the times that they are driving, they are rarely consistent with where they are picking up and dropping off rides, which creates even more variability in the supply. As a result, when all of the supply and demand exists on one singular platform, as is the case with a monopolistic rideshare market, drivers will have enough jobs to keep their earnings stable. When DiDi and Uber China merged in 2016 and Grab and Uber Southeast Asia merged in 2018, drivers in China and Singapore worried that their earnings would decrease when Uber exited the market and the price war ended. Although the two mergers did substantially reduce the amount of incentives that DiDi and Grab gave out to the drivers, driver incomes did not suffer dramatically following the mergers because all of the demand migrated so quickly to the platform.

Secondly, monopolistic rideshare companies are interested in retaining their drivers for the long run and will act to keep these drivers on their platform so that they can continue to make use of the two-sided network effects that are present in the market. As a result, even though many drivers expected not just incentives but also fares to decrease, prices actually remained relatively stable and commission rates did not change. In most cases, ride hailing companies decrease their fares because they want to balance supply and demand and there are not many other mechanisms

[149] Grab, "Grab and NTUC," Grab.

that they can use to do so. However, when a rideshare company has attained sufficient market share in a market, decreasing fares as a means of stabilizing marketplace economics becomes fairly ineffective, so there is no motivation for the company to continually change its pricing structure. At the same time, monopolies in the rideshare industry are hesitant to increase their commission rates because they do not want the large group of drivers they have finally gotten onto their platform to churn. Moreover, the ride hailing industry is interesting in that monopolies in the market still heavily compete with other modes of transportation, including traditional taxis and public transportation. Even though these competitors do not compete with companies like DiDi and Grab directly in the same market, they nevertheless constrain certain business decisions that ride hailing companies make. Most notably, ride hailing monopolies in markets with robust public transportation systems are unable to significantly increase their prices because they will lose most of their demand.

While the first two findings deal with how, contrary to existing assumptions and expectations, certain circumstances within the ride hailing market stay the same even after a merger, the next two findings consider how monopoly power in the rideshare industry changes corporate strategy in a way that benefits drivers. When a ride hailing company has obtained monopolistic market control of a market, that company is able to leverage its market position to engage in greater social impact and corporate social responsibility. During a price war with its competitors, ridesharing companies typically devote most of their resources to fighting the battle on the ground through large incentives and discounts that are subsidized by the company. This is not to say that these companies do not partake in CSR but rather that their resources to do so are limited. Once a company has undergone an M&A that gives it monopoly control over the market, the company is able to redivert a portion of its time and money toward programs that help benefit the drivers and the community. Although some would argue that monopolistic companies would not spend on social impact initiatives because they are not directly profitable, DiDi and Grab illustrate that it is in the best interest of the company to both establish a positive brand image in the market and engage in initiatives that will help its drivers and prevent churn. Furthermore, this market position enables these companies to establish more effective partnerships and programs for the sake of social impact.

Lastly, for DiDi and Grab, acquiring monopolistic market control in the rideshare industry helped kickstart and propel their diversification into other industries, which include food delivery, mobile e-payments, financial services, hotel reservations, and ticket booking.[150] This horizontal diversification strategy has proved instrumental in carrying both companies through

[150] Singapore Economic Development Board, "Ride-hailing apps race to grow in the region through Singapore," Singapore Economic Development Board, last modified June 1, 2019, accessed July 4, 2020, https://www.edb.gov.sg/en/news-and-events/insights/innovation/ride-hailing-apps-race-to-grow-in-the-region-through-singapore.html.

Covid-19, during which the transportation industry mostly came to a halt. With its core ride hailing business consolidated and solidified, monopolistic ridesharing companies are able to engage in greater diversification and make use of new synergies. Furthermore, given their hold on the ride hailing industry, monopolistic rideshare companies can utilize their scale and reach in the market to provide other key services that are demanded by their driver base. With DiDi and Grab both moving into the financial services industry, drivers had greater access to different insurance policies and coverage options at a price that was much lower than in the general market. However, it is possible that once rideshare companies start providing drivers with insurance coverage, they would begin to view insurance as less of a benefit that all drivers deserve and more of an avenue towards greater profitability, as illustrated by the decline in maximum coverage under Grab's Free Personal Accident Insurance. Regardless, this diversification creates new opportunities for drivers to earn their incomes through different ways. Rideshare companies are thus able to direct their energy and resources toward augmenting their ecosystem, allowing for new synergies between industries to emerge.

Although both DiDi and Grab have done a good job of taking care of their drivers, this research paper presents several recommendations for places upon which they can improve. Since the two companies have devoted so much time and money to launching initiatives like free accident insurance, training programs, critical illness micro-insurance, and financial aid for drivers' families, they should now direct their attention to increasing awareness of these programs so that more drivers can benefit from them. Some of these programs have grown popular among the drivers, but DiDi and Grab should consider bolstering their marketing efforts of these programs to their drivers so that they reach a larger segment of their target audience. In addition, given that it was both time-consuming and cumbersome for drivers to migrate to DiDi or Grab after Uber exited the market, DiDi and Grab may want to evaluate their current onboarding process and work with government officials to streamline the process. Naturally, licensure requirements for becoming a driver are largely dictated by the government, but it may nevertheless be worthwhile to conduct an assessment of the process. One final note is that while DiDi and Grab have helped provide certain forms of insurance for their drivers, this protection is still far from enough, especially in times of difficulty like Covid-19. In the past few months, the government has stepped in to protect drivers in these two countries. Since DiDi and Grab have both diversified into financial services and insurance, the two companies could further invest in their finance groups in an effort to expand their range of offerings for drivers.

The findings from this paper suggest that in the rideshare industry, monopolies may well be more responsible to its drivers and more socially optimal than duopolies or oligopolies. Because DiDi and Grab have become much more focused on brand image, sustainability, and supply management for the long run after their mergers, governments in countries with multiple competitors in the ride hailing market should not seek to block mergers and acquisitions that could potentially form monopolies in the industry. Instead, they should actively work with the players in the market so that in the case where a singular rideshare company becomes the monopoly, they will be able to collaborate for the benefit of the drivers and the community. This also suggests that in the U.S., rather than so strongly fighting Uber and Lyft, the government should begin building a more cooperative relationship with the two companies. If one of them eventually comes to take over the other and dominate the market, the government would be in a good position to partner with them to address driver needs and increase social impact initiatives. Even if that does not happen in the near future, it is nonetheless important to establish a solid relationship so that the government can increasingly point the companies towards greater social impact, in the same way that the Singaporean and Chinese governments have done so for Grab and DiDi.

Conclusion

In closing, the market structure of a ride hailing industry has a notable bearing on the companies that operate within it. In investigating both how DiDi and Grab have changed from before their mergers to now and how the two monopolistic rideshare companies differ from other ride hailing platforms around the world, it has become obvious that a M&A in the rideshare industry significantly impacts corporate strategy and decision making. These changes in pricing policies, insurance coverage, driver incentives, and CSR initiatives have a significant impact on the driver experience.

This paper looks at DiDi in China and Grab in Singapore as examples of ride hailing companies that have captured most of the market share in their countries and presently wield monopolistic market control over the industry. While this comparative study of the two is limited in scope, it nevertheless provides a starting point for gaining a better understanding of not just the rideshare industry outside of the U.S. but also the impact of different market structures in the industry on drivers. This research finds that in the cases of DiDi and Grab, monopolies in the ridesharing space may in fact be more efficient and socially optimal because they leverage available resources and market power for diversification as well as greater social impact. The ride hailing industry is one that is constantly evolving, and further research into how differing market structures impact the driver experience in markets beyond China and Singapore may be worth pursuing.

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