

Shaping Policy for the Sharing Economy

Introduction

The terms ‘sharing economy’, ‘collaborative consumption’, and ‘peer-to-peer economy’ entered popular usage only in the last few years. Sharing economy companies had given a new spin to age-old activities, allowing large numbers of individuals or groups of individuals to rent underused assets, exchange services, or recirculate used goods. Their platforms quickly expanded into a wide range of activities, from ride-sharing and car-sharing, peer-to-peer loans, borrowing of unused assets, hiring for odd-jobs and delivery services etc.

The likes of Uber and Airbnb were seen as the standard bearers for this emerging and fiercely competitive industry. The sharing economy companies had shaken up traditional market players, and helped to address market inefficiencies and resource under-utilisation. At the same time, they were at odds with existing regulatory frameworks that had lagged behind evolving market structures and new technologies.

This case study discusses the development of sharing economy in a for-profit context in Singapore, how policymakers in Singapore have approached the sharing economy, and the policy considerations. The case study focuses particularly on ride-sharing and home-sharing which were more prevalent in Singapore, and have a greater impact on public policy.

Overview of sharing economy

A key concept of the sharing economy was shared access over ownership and asset utilisation. The emerging sharing economy platforms were highly technology-driven, and provided supply ‘on demand’, that is, immediately, or at least very promptly. The platforms enabled peer-to-peer transactions to take place at an unprecedented scale and speed, shrinking transactions costs in the process. Despite the ‘sharing’ label, the transactions were often commercial in nature, and sharing economy companies positioned themselves as brokers facilitating such transactions and exchanges, and extracted commissions. The business model of sharing economy companies was usually an asset-light one; they leveraged the assets of individuals shared through their platforms to meet demand. In transport for example, one could book a ride from a private-hire car driver via a ride-sharing platform like Uber, or rent a car from a car owner through iCarsClub.

At the same time, the sharing economy platforms gave users more choices, and often at lower prices. Individuals dealt directly with other individuals through such platforms and reaped a greater share of value, while the dominance of traditional intermediaries was eroded. While price was a key attraction, many sharing economy platforms also promoted ethical, social or environmental credentials. For instance, the opportunity to build social networks had been touted as a key benefit of participating in the sharing economy.

Proponents of the sharing economy were optimistic about its prospects. Consulting firm PwC projected that global revenues from the top five sharing economy activities, including peer-to-peer accommodation (home-

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sharing) and car-sharing (ride-sharing), would jump from US\$15 billion in 2014 to US\$335 billion in 2025.¹ Some had even labelled the sharing economy a ‘social revolution’ that allowed individuals to balance self-interest with the greater good of the larger community.² Major sharing economy firms attracted large amounts of capital funding. At the top of the fund raising food chain was Uber which had raised US\$4.8 billion in 2015, while Airbnb clocked in US\$1.5 billion.³

As traditional business models were disrupted, and established players faced stiff competition, sharing economy firms encountered increasing scrutiny from authorities and vocal opposition from traditional players such as taxi drivers and hotel owners. The demarcations between so-called sharing economy activities and more conventional commercial activities were also blurring. For example, Uber had ventured into booking services for regular taxis. In many jurisdictions, sharing economy platforms operated in a legal grey area, or faced outright bans. Uber’s operations had been partially restricted or banned in places from Germany to Rio de Janeiro, India and Bali. More recently, after violent protests by taxi drivers in Jakarta, the Indonesian authorities cited 2009 regulations and ruled that Uber and Grab had to partner local public transport businesses such as a registered taxi operator or car rental company – instead of contracting private car owners directly – and register their cars by the end of May 2016, or faced a ban.⁴

On the other hand, some cities such as Seoul, London and Amsterdam had taken a more welcoming stance to the sharing economy. The Seoul Metropolitan Government, for instance, had declared the Seoul a ‘sharing city’. It had enacted local legislation in 2012 to facilitate the sharing economy, and launched a ‘Share Hub’ to act as a clearinghouse and information portal for sharing economy services. Yet even in Seoul, Uber’s private-hire car business had encountered setbacks. While taxi-booking apps were permitted in Korea, existing legislation restricted chauffeured services to specific groups, such as foreigners and people with special needs. Uber had met with fierce resistance from the local taxi industry, and was clamped down by the Seoul municipal government, although it was reportedly staging a comeback.⁵

In many respects, Singapore with its dense population and enthusiastic use of mobile technology, seemed an ideal environment for sharing economy platforms to take off. The sharing economy had only started to take off in recent years, but had already shaken up certain sectors, with the likes of Uber, Grab and Airbnb making the biggest splash. Not surprisingly, there had been intense debate on how they should be treated by regulators. Other regional and local sharing economy start-ups included Ryde (carpooling), iCarsClub (car-sharing), PandaBed (accommodation), and Rent Tycoons (renting or exchange of unused items).

To promote this emerging business model, some sharing economy firms, including Airbnb, although not Uber, had banded together to form the Sharing Economy Association of Singapore (SEAS). Some firms also set up their own policy and government liaison teams to engage governments in Singapore and the region. On the

¹ PwC. “Five key sharing economy sectors could generate £9 billion of UK revenues by 2025.” August 15, 2014. http://pwc.blogs.com/press_room/2014/08/five-key-sharing-economy-sectors-could-generate-9-billion-of-uk-revenues-by-2025.html (accessed February 5, 2016)

² Botsman, Rachel and Rogers, Roo. “What’s Mine is Yours – The Rise of Collaborative Consumption.” HarperCollins, 2010.

³ “The top 10 sharing economy fundraisings of 2015.” Vator News, December 25, 2015. <http://vator.tv/n/4249> (accessed February 5, 2016)

⁴ “Uber and Grab must get local partners, says Indonesia after protests.” The Straits Times, March 26, 2016; “Indonesia threatens to ban ride-hailing apps.” Financial Times, March 31, 2016

⁵ “After getting forced out of South Korea, Uber prepares to fight back.” TechinAsia, December 3, 2015.

policy front, the Singapore government signalled a willingness to keep an open mind and not be too hasty to block private sector innovations, at least on the transport front.⁶

The development, impacts and issues involving two prominent sharing economy business sectors in Singapore – ride-sharing and home-sharing – are discussed in the sections below.

Ride-sharing in Singapore

Ride-sharing through private-hire car rides, where a passenger shared a one-time use of a vehicle with a driver, gained much ground in Singapore in the last few years. Uber and Grab⁷ were two of the most recognisable examples. The ride-sharing platforms excelled in developing technology to match demand from commuters with supply from private-hire cars and taxis. For commuters, the ride-sharing platforms offered a range of price points and services that could be conveniently booked using proprietary mobile applications (apps) installed in ubiquitous mobile devices. More importantly, the platforms helped to meet the demand gaps left by existing taxi industry.

Founded in San Francisco in 2008, Uber had already established its presence in the US, Europe and Australia, before launching its UberExec service using premium cars in Singapore in early 2013. It subsequently introduced UberX service with mid-range cars, as well as a taxi-booking service. Grab started out in Malaysia as a taxi-booking app, before it entered the Singapore market in late 2013 with a taxi booking app, and later extended its platform to private-hire cars. Other sharing economy platforms for the transport sector included iCarsClub which provided car-sharing⁸ services, and Ryde which offered car-pooling.

Ride-sharing platforms like Uber and Grab typically did not own fleets of passenger cars, and instead recruited individual car-owners and drivers as ‘partners’, rather than employees. These private-hire car drivers could only take bookings, and were not allowed to pick up passengers from the streets or taxi stands, which remained the preserve of taxis. Registering as a private-hire car driver with Uber or Grab was a relatively straightforward process, although drivers had to meet certain conditions such as being a Singapore citizen or permanent resident, holding valid driving licence for at least a year, and be of minimum age of 25.⁹ The drivers could use their own cars or rent one; Uber even set up an in-house car rental company to cater to its drivers in Singapore.

Fares were set by the ride-sharing platforms based on distance, location and demand, and in the case of Grab, were fixed upfront (*Exhibit 1*). The ride-sharing platforms offered a range of transport services (from 4-seater cars to larger vehicles) and price points for economy and premium services, although the UberX and GrabCar Economy services were most similar to taxis. In return, the ride-sharing firms took a 20 per cent commission of the fares charged. Drivers were also provided with monetary incentives, such as additional payments for meeting certain targets, to encourage them to accept bookings.

⁶ “Sharing economy in transition.” Moving News blog, October 2, 2015. <https://motsingapore.wordpress.com/2015/10/02/sharing-economy-in-transition/> (accessed February 10, 2016).

⁷ Previously known as GrabTaxi, the company rebranded to Grab on 28 January 2016.

⁸ Car-sharing referred to sharing the use of cars among individual car-owners and users.

⁹ Uber and Grab lowered the minimum age to 21 in April 2016.

	UberX	GrabCar Economy	Taxi (ComfortDelGro)
Base rate / Flag-down rate	\$3.50 (\$3.00)	\$3.50 (\$3.00)	\$3.20 - \$3.70
Rate per km	\$0.50 (\$0.45)	\$0.90 (\$0.80)	\$0.55 (up to 10 km) \$0.628 (after 10 km)
Rate per minute	\$0.25 (\$0.20)	Nil.	Nil
Others	Minimum fare \$3.50 (\$3.00). Surge pricing may apply.	Minimum fare \$8 (no minimum fare). Dynamic pricing may apply. Fare fixed upfront. Additional waiting time at \$5 for every 10 minutes.	Booking fee \$2.30 - \$3.30. Various time-based and area-based surcharges. \$0.22 every 45 seconds of waiting or less.

Exhibit 1: Fare schedules for UberX, GrabCar Economy and regular taxi

Note: Updated fares for UberX (after April 13, 2016) and GrabCar (after April 18, 2016) are indicated in brackets.

Source: Uber website (<https://www.uber.com/cities/singapore/>); Grab website (<https://www.grab.co/sg/car/>), ComfortDelGro website (https://www.cdgtaxi.com.sg/commuters_services_rates.mvn?cid=1906732) (accessed February 10, 2016 and April 19, 2016)

Uber and Grab were initially operating in Singapore largely unfettered. The ride-sharing companies tended to see themselves as technology firms first, rather than transport providers, and their business models did not fit neatly into the existing regulatory landscape. As Grab made its foray into Singapore with its taxi-booking platform in late 2013, the regulator, the Land Transport Authority (LTA), indicated at the time that third-party taxi-booking apps did not fall within its regulatory ambit, although it reminded taxi drivers to charge within the fare structure set by their taxi operators.¹⁰ Private-hire car drivers with Uber and Grab were not required to hold vocational licences at the time, but had to incorporate their own chauffeured or limousine services company to meet LTA's regulations that restricted private individuals from operating a chauffeured service. In effect, LTA had categorised them as akin to limousine drivers who, unlike taxi drivers, did not require vocational licences and could only take bookings.

As taxi-booking apps became more popular, the regulatory landscape saw a shift in November 2014. LTA announced that third-party taxi booking apps with at least 20 participating taxis would be subjected to a 'basic regulatory framework'.¹¹ Under the Third Party Taxi Booking Service Providers Act, third-party taxi booking apps were required to hold certificates of registration from LTA, and meet certain conditions relating to fares and charges, service standards, use of only licensed taxis etc. Although LTA acknowledged that the taxi-booking apps had improved demand and supply matching, particularly during commuting peak hours, a 'light-touch' regulatory framework was still needed to safeguard commuter safety and interests. The new regulatory framework came into effect from 1 September 2015.

On the other hand, the private-hire car business of these ride-sharing platforms – aside from being restricted to taking bookings – remained unregulated, and continued to expand. In particular, the low-cost private-hire car services introduced by Grab and Uber came to be seen by the taxi industry as competitors. While taxi drivers had benefited from the taxi booking apps rolled out by the ride-sharing firms, they claimed that the private-hire

¹⁰ "GrabTaxi to abolish tips for cabbies." MyPaper, December 30, 2013. Grab's taxi-booking platform initially allowed customers to offer taxi drivers a tip for picking them up.

¹¹ LTA. "New regulatory framework for third-party taxi booking services to protect the safety and interests of commuters." News release, November 21, 2014.

car business was unfair, as among other things, their drivers did not have to hold vocational licences, and were not subject to the various regulations, service standards, and fare structure that applied to taxis.¹²

In an acknowledgement that technology innovations had made chauffeured vehicle services more accessible to the public, LTA indicated in June 2015 that it was considering removing the current exemption for private-hire car drivers from obtaining a vocational licence.¹³ The new Transport Minister, Khaw Boon Wan¹⁴ commented that while he thought places which banned Uber had over-reacted, he felt that taxi drivers' demands for a 'level playing field' had merit.¹⁵

In order to forge 'a fair solution', an industry review led by Senior Minister of State for Transport, Ng Chee Meng started in October 2015. This included consultation with various parties, including commuters, taxi drivers, private-hire car drivers, taxi companies, car rental companies and ride-sharing platforms. The National Taxi Association (NTA) presented feedback from over 300 taxi driver members, and proposed principles for the review.¹⁶ Firstly, commuter safety should be protected by clearly identifying private-hire car drivers, requiring them to go through the same checks as regular taxi drivers, and having clear accountability in cases where liability claims or disputes arose. NTA also called for 'fair competition' between taxis and private-hire cars through clear fare structures, fees and charges, as well as consistent regulations and monitoring for both private-hire cars and taxi services.

Following the review, LTA announced in April 2016 new licensing requirements for private-hire car drivers and vehicles 'to better protect commuter interests, in particular safety'.¹⁷ The drivers were required to obtain a Private Hire Car Driver's Vocational Licence (PDVL), while the cars used for private hire had to be registered with LTA. The new regulations would take effect within the first six months of 2017.

Plugging the transport demand gap

The public transport systems in Singapore had been ranked highly in terms cost efficiency.¹⁸ Singapore had one of the highest number of taxis-to-population ratio – 5.3 taxis per 1,000 people – in the world. Some 28,000 taxis catered to 5.5 million in Singapore, and made just over 1 million passenger-trips daily in 2014. In comparison, Hong Kong had 2.5 taxi per 1,000 people for its 7.2 million population, while Tokyo's population of 13 million had 3.6 taxis per 1,000 people.¹⁹ Yet, one perennial bugbear of Singapore commuters was the difficulty of getting taxis during peak periods, in out-of-the-way areas, or during bad weather. Despite the government's efforts, the travel experience in Singapore was not quite a seamless one yet.

¹² "Third-party apps lead to calls to ensure 'level playing field' for taxi drivers." Channel NewsAsia, October 5, 2015.

¹³ LTA. "Ways to better safeguard commuters under study." June 9, 2015.

¹⁴ Khaw Boon Wan was appointed Minister for Transport on 1 October 2015, after the General Elections in September 2015.

¹⁵ "Sharing economy in transition." Moving News, October 2, 2015. <https://motsingapore.wordpress.com/2015/10/02/sharing-economy-in-transition/> (accessed February 10, 2016).

¹⁶ National Taxi Association (NTA). "NTA's Report to Ministry of Transport." November 16, 2015. <http://www.nta.org.sg/latest-news/84-nta-s-report-to-ministry-of-transport.html> (accessed February 10, 2016).

¹⁷ LTA. "New regulations for private hire car drivers and vehicles to better protect commuter interests." News Release, April 12, 2016. <http://www.lta.gov.sg/apps/news/page.aspx?c=2&id=59c466e2-8eff-46bc-8d60-f13bb00de4b2> (accessed April 13, 2016)

¹⁸ "Study: Singapore's public transport system one of world's most efficient." The Straits Times, June 2, 2014.

¹⁹ Teo, Josephine. "Creating a Car-Lite Society." Speech by Senior Minister of State for Transport at the Committee Of Supply Debate 2015, March 11, 2015.

From 2010 to 2014, the taxi population had hovered between 26,000 and 28,000 (*Exhibit 2*), although the actual number of taxis actively plying the roads was likely lower. The taxi industry comprised of six licenced taxi operators, and was dominated by one player, which ran two taxi operators that accounted for about 60 per cent of the total taxi fleet in Singapore. A more pressing issue was the persistent under-utilisation of taxis in Singapore. The share of one-shift taxis, which tended to clock less mileage compared to two-shift taxis, in the overall taxi fleet had risen over the years. Between 2006 and 2011, the proportion of one-shift taxis increased from 40 per cent to 48.6 per cent,²⁰ which in turn implied lower daily taxi utilisation rates (the proportion of total taxi mileage under hire per day).

Although taxi fares were deregulated in 1998 and new taxi operators were introduced in 2003, commuters remained dissatisfied with the taxi industry. In an attempt to ensure better matching of supply and demand, LTA imposed taxi availability standards on taxi operators since January 2013. Taxi operators had to ensure that certain percentages – ranging from 60 to 85 per cent – of their taxi fleets were on the roads during peak periods, and ran at least 250 km a day. The expansion of the taxi fleet was linked to the overall vehicle growth rates set by LTA to manage traffic congestion, as well as taxi operators’ performance under the taxi availability framework, and had been capped at 2 per cent a year in the past few years.

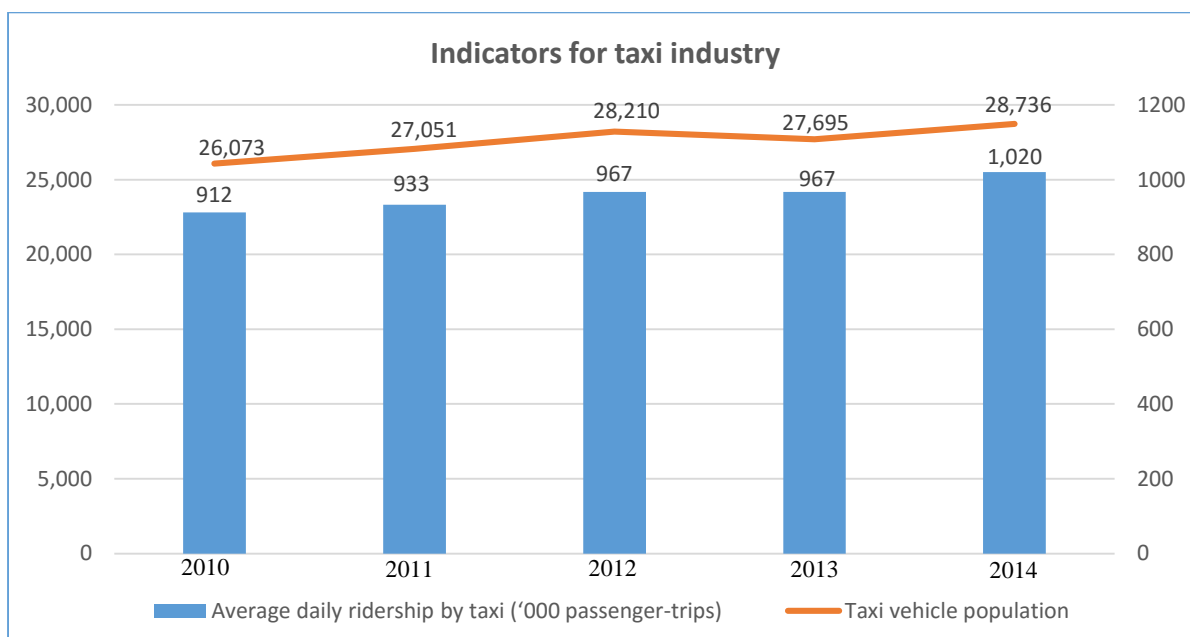


Exhibit 2: Indicators for Taxi Industry

Source: LTA, “Land Transport Statistics in Brief”, various years.

In late 2014, LTA also embarked on a trial of a taxi information system, which used heat sensor and camera technologies to detect the number of waiting passengers at selected taxi stands, and transmitted the information to taxi operators. LTA also came up with its own mobile app, Taxi-Taxi@SG which showed the location of available taxis, and allowed street hailing commuters to broadcast their locations to taxis, but stopped short of making taxi bookings. LTA also shared static and real-time data (such as taxi availability) publicly, with the aim of engaging the private sector and members of the public to co-create innovative transport solutions.²¹

²⁰ LTA. “Improving taxi availability to serve commuters better, and taxis taken out of the COE bidding process from August 2012” and “Fact sheet: Improving taxi availability.” News Release, July 27, 2012.

²¹ LTA. DataMall. <http://www.mytransport.sg/content/mytransport/home/dataMall.html>

The changes for the taxi industry resulted in some improvements. According to LTA, the percentage of taxis plying the roads during peak hours increased from 82 per cent in 2012 to 91 per cent for the first nine months of 2015.²² Over the same period, the proportion of taxis on two-shifts increased from 53 per cent of the taxi fleet in 2012 to 68 per cent in 2015, while the daily taxi utilisation rate improved slightly from about 65 per cent in 2013 to 66 per cent in the first nine months of 2015.

However despite the extensive efforts to improve the performance and availability of taxis, commuters' grievances had not been completely eased. Even as LTA reported improvements in taxi availability, only one taxi operator had consistently met the standards in 2015, while the other five operators had either partially or completely failed the taxi availability standards, and had been fined by LTA.²³

What ride-sharing platforms offered however, was an opportunity for a recalibration of the existing public transport framework comprising of rail, buses, and taxis. Ride-sharing platforms improved efficiency in resource allocation and reduced transaction costs for commuters, through their real-time matching of supply and demand. Private-hire car drivers acted like marginal suppliers, coming onto the roads when demand for point-to-point transfers spiked. For example, about 40 to 45 per cent of Uber drivers worked less than 10 hours a week, with many coming onto the roads to meet peak demand.²⁴ By the Ministry of Transport's (MOT) own estimation, private-hire car drivers facilitated by ride-sharing platforms had boosted point-to-point transport services by a third during peak commuting periods.²⁵ Given that ride-sharing platforms attracted drivers who used their own vehicles, this meant that otherwise idle assets were also being put to better use.

Similarly, the private-hire car drivers served commuters on the 'first-mile, last-mile' gap, a weak link within Singapore's public transport framework, as the density of the rail and bus networks still lagged behind that of similarly densely populated cities like Hong Kong. A significant proportion – about a quarter – of Uber's private-hire car trips started or ended at transport nodes like MRT stations.²⁶ On the other hand, ride-sharing could end up undermining the government's policy of nudging Singapore towards a 'car-lite' city, if demand for ride-sharing encouraged significantly more vehicles on the roads than before, especially during peak hours.

Commuters generally cheered the introduction of ride-sharing apps that plugged the demand gap left by taxis, especially during the morning and evening peak periods. Although data on ride-sharing in Singapore was scarce, the experience of other cities such as Portland suggested that while ride-sharing was competing with taxis in the city, but it also appeared to be meeting latent demand that had been underserved by the taxi industry.²⁷ Even the ride-sharing platforms' use of 'dynamic' or 'surge' pricing – where fares were raised in multiples of the normal rate during times of high demand – arguably helped by attracting more private-hire car drivers to take bookings. Commuters also benefited from the frequent promotions and discounts that ride-sharing platforms offered.

²² LTA. "Factsheet: More taxis plying the roads from commuters in 2015." News release, November 16, 2015. <http://www.lta.gov.sg/apps/news/page.aspx?c=2&id=766364af-eb2f-4d2a-9575-1499d862777f> (accessed March 1, 2016). It should also be noted that the method of calculation for taxi availability was adjusted from 1 January 2015, to be based on the taxi companies' hired-out fleet, rather than registered fleet.

²³ LTA. "Factsheet: More taxis plying the roads for commuters in 2015." News Releases, November 16, 2015. <http://www.lta.gov.sg/apps/news/page.aspx?c=2&id=766364af-eb2f-4d2a-9575-1499d862777f> (accessed March 1, 2016).

²⁴ Personal communication from Uber, March 4, 2016; Uber website. "3 Years in Singapore; and the ride ahead!" March 28, 2016. <https://newsroom.uber.com/singapore/3-years-in-singapore-and-the-ride-ahead/> (accessed April 1, 2016).

²⁵ Ministry of Transport (MOT). "Speech by Senior Minister of State Ng Chee Meng at the Committee of Supply Debate 2016, on Car Ownership and Taxi and Chauffeured Services." April 12, 2016.

²⁶ Personal communication from Uber, March 4, 2016.

²⁷ "Uber, Lyft now dominate Portland ride market." The Oregonian, October 19, 2015.

A YouGov survey conducted in October 2015 reflected the close substitutability between taxis and private-hire cars, as 29 per cent and 23 per cent respectively indicated that they would simply take whichever was the cheaper, or more available, option.²⁸ Although the use of ride-sharing apps had grown rapidly especially within the tech-savvy segment of the population, a majority of commuters in the survey appeared to still prefer street hailing taxis over private-hire car. More than half of the respondents (53 per cent) also felt that private ride-sharing should be regulated by the government, as opposed to 22 per cent who thought that the government should not intervene.

In this respect, private-hire car services could play a complementary and competitive role to the taxi industry. Like taxi operators, the ride-sharing platforms may have to be prepared to share real-time data with the authorities such as LTA, to facilitate comprehensive transport planning.

Safeguarding public interest, injecting competition

Regulations were usually designed to safeguard the public against the undesirable impacts of certain activities. These included maintaining public health and safety, protecting consumer interests, or safeguarding industry reputation etc. Taxi operators were licensed by LTA and had to meet certain performance standards. Taxi drivers were required to hold vocational licenses issued by LTA and undergo training. On the other hand, regulations could become barriers to entry, if conditions of entry such as requiring hefty upfront investments, were too onerous for aspiring entrants.²⁹ Regulators were often called upon to balance the differing needs of various stakeholders, while ensuring that the market remained competitive.

In the case of ride-sharing, comparisons were made with the taxi industry which was its closest competitor. In Singapore, safety, conduct of taxi drivers, and taxi booking services were regulated by LTA under the Road Traffic Act. Taxi operators were subjected to regular benchmarking exercises, such as monthly tracking of taxi availability (measured by percentage of taxis on the road during peak hours, minimum daily mileage per taxi), quality of service standards covering performance standards, safety and taxi drivers' conduct (such as at least 92 per cent of taxis should be matched to bookings, booked taxi should arrive within 10 minutes at least 95 per cent of the time, accident rates of not more than 0.02 per 100,000 km), as well as monthly public opinion surveys where the public would rate the taxi service. Taxi operators were also required to use vehicles that were not more than eight years old, and maintain their vehicles regularly. Thus far, only the taxi booking services of the ride-sharing platforms had been assessed in LTA's monthly public opinion survey. Their private-hire car services were not subject to any public standards or monitoring.

Taxi drivers had to apply for a taxi vocational licence from LTA. A prospective taxi driver had to be a Singapore citizen at least 30 years old, hold a valid driver's licence continuously for at least a year, speak and read basic English, pass a medical check-up, and undergo a training course – which cost \$335 and took 60 hours to complete – covering road safety, taxi regulations, routes, and service quality.

While no major incidents involving the users of Uber or Airbnb had been reported in Singapore, some raised safety concerns as the private-hire car service was unregulated, unlike the taxi industry. Uber and Grab pointed

²⁸ YouGov. "Singapore 3rd party taxi apps." October 20, 2015. <https://ap.yougov.com/en/news/2015/10/20/singapore-3rd-party-taxi-apps/> (accessed March 7, 2016). The survey, which was conducted from 8 to 11 October 2015 with a sample size of 1,929, asked respondents about their usage of taxi booking apps in September 2015.

²⁹ Theories of economic regulation discuss the possibility of regulatory capture, a situation where the regulator served the interests of the industry being regulated, rather than the interests of the public.

out that their private-hire car drivers were already put through in-house background checks and training. Service standards were maintained through their mandatory peer-to-peer rating system, which required both drivers and passengers to rate each other after each trip, while their apps provided safety features such as tracking of routes. Drivers who fell short of expected service standards could be suspended, or have his or her contract terminated by the company.

With the PDVL licensing requirements expected to come in effect in the first half of 2017, prospective private-hire car drivers would be subject to background and medical screening by LTA. They would also undergo 10 hours of training, and be tested on road and passenger safety, as well as the relevant regulations. Imposing the PDVL could help legitimise them vis-à-vis licenced taxi drivers. At the same time, LTA also simplified the vocational licensing requirements for taxi drivers, including a shorter 25-hour training course, incorporating newer technology such as Global Positioning System for navigation, as well as exemptions from refresher courses. These measures reflected a middle-of-the-road regulatory solution that acknowledged concerns about the standards of private-hire car drivers, while easing the licensing burden on taxi drivers.

There was also the question of where the burden of responsibility fell, and the scope for recourse, should things go wrong. In the case of road accidents, all vehicles were already required under the Motor Vehicle (Third-Party Risks and Compensation) Act to be insured against third-party liability risks, which allowed passengers to claim compensation from the driver and his or her insurer. Whereas private insurance typically restricted vehicle usage to social, domestic and pleasure purposes, Uber and Grab required their private-hire car drivers to have commercial insurance, similar to that for taxis, to cover situations where the car was on hire.³⁰ However the exact terms of insurance coverage was not standardised among private-hire cars and the exact level of coverage could differ from car to car. Without regulation, any recourse for incidents that fell outside the ambit of existing laws, was also largely limited to the discretion of the ride-sharing companies and drivers.

Price competition had also increased with the entry of ride-sharing platforms, with the fare structure becoming another bone of contention with the taxi industry. Taxi fares in Singapore had been deregulated since 1998, allowing taxi operators to prescribe their own fares. However, as taxi fares across operators became more complicated and confusing for commuters, LTA introduced new regulations effective in January 2016 to standardise the taxi fares by distance and by waiting times, while allowing for some price competition in the flag-down rates.

In contrast, the ride-sharing platforms had been free to set their own rates. The fare structures of UberX and GrabCar Economy were competing with, and in some cases undercutting, existing taxi fares. More controversially, Uber and Grab also employed a pricing tool, known as ‘surge’ pricing or ‘dynamic’ pricing, which had left some passengers unhappy as they felt they had been over-charged.³¹ Both Uber and Grab lowered their fares in quick succession, after the PDVL was made compulsory for private-car hire drivers (see *Exhibit I*).

³⁰ “Our drivers are covered with commercial insurance: Uber, GrabCar.” Channel NewsAsia, October 16, 2015. Grab also rolled out additional group personal accident insurance for GrabCar drivers and passengers at its own cost in March 2016. It also launched a pay-as-you-use commercial motor insurance policy for private-hire car drivers which charged part-time drivers lower premiums. See Grab, “Grab Provides Free Personal Accident Insurance for Passengers and Drivers.” March 3, 2016. <https://www.grab.com/sg/grab-provides-free-personal-accident-insurance-for-passengers-and-drivers-2/> (accessed April 19, 2016), and “New motor insurance for part-time Grab drivers.” The Straits Times, May 12, 2016.

³¹ See for example, “She pays \$169 for 27-minute Uber ride from Beach Road to Ayer Rajah.” The New Paper, November 11, 2015.

Ride-sharing platforms also displayed a propensity to continually innovate. For example, both Uber and Grab introduced other, less contentious, new services, such as carpooling to complement their existing transport services. Grab pushed out GrabHitch in November 2015, which matched drivers and riders for carpooling. Uber also announced plans to bring its carpooling service, UberPool to Singapore. Unlike private-hire car services, carpooling involved passengers sharing transport costs with drivers going the same way, rather than paying a commercial fare for a dedicated hire. To clarify the legality of carpooling, LTA introduced new regulations on carpooling in March 2015. Carpooling rides were limited to no more than two a day, and drivers could accept compensation from carpooling, which was not to exceed expenses incurred for the trip.

Impact on taxi and other industries

The taxi industry's opposition to private-hire cars paralleled the experience in many other cities where the ride-sharing platforms operated. Ride-sharing platforms had upended the traditional taxi business model as they could tap on large fleets of privately-owned vehicles and individual drivers on-demand, without costly upfront capital investments. However, the impacts on the taxi industry were uneven.

Taxi drivers benefited from the ride-sharing platforms' third-party taxi-booking apps. The availability of credible alternatives with Uber and Grab also arguably gave them greater bargaining power against taxi operators. Some had switched to become Uber or GrabCar drivers, where they enjoyed greater flexibility in working hours and lower vehicle rental rates. An estimated 30 to 40 per cent of drivers who signed up with GrabCar and Uber were former taxi-drivers.³² For those who remained taxi drivers however, there were complaints of unfair competition from the private-hire car businesses of Uber and Grab. The at times overly aggressive marketing tactics of the ride-sharing platforms also did little to assuage taxi drivers' perception of unfair competition.³³ The taxi driving profession was also ring-fenced for Singapore citizens, and had traditionally been viewed as an employment sponge for Singaporeans, especially in tough economic times. On the other hand, the PDVL was open to non-Singaporeans, provided they were employees of a limousine company.³⁴

Taxi operators could have been under greater pressure. They had invested in fleets of taxis which were rented out to taxi drivers, and could have seen their revenues affected in recent years if fewer taxis were hired out, and their commissions from taxi bookings using their proprietary systems were eroded.³⁵ A taxi could cost as much as \$150 a day to hire from a taxi operator, whereas a private-hire car driver could rent a car for as low as \$50 a day.³⁶ To stem the number of taxi drivers who were switching to ride-sharing platforms, and compete with the ride-sharing platforms directly, the taxi operators started to roll out their own private-hire car businesses. For example, the third-largest taxi operator, SMRT Corp, had reportedly ordered a fleet of more than 300 cars, while Prime was poised to add more cars to its existing private-hire fleet.³⁷

³² "Can't find cabs on the road? Try the yard." The Straits Times, October 10, 2015.

³³ "Taxi drivers cry foul over Uber's 'overly aggressive marketing efforts'." Today, November 12, 2015.

³⁴ The eligibility criteria of PDVL required individuals to be registered owners of chauffeured services business (applicable only Singapore citizens), or an employee of a limousine company (applicable to all).

³⁵ "Can't find cabs on the road? Try the yard." The Straits Times, October 10, 2015. The article estimated that as many as 2,000 taxis could have been left unhired.

³⁶ "New entrants turn the taxi industry on its head." Today, October 24, 2015.

³⁷ "More taxi firms eyeing Uber business model." The Straits Times, April 14, 2016.

One industry that enjoyed an unexpected positive spill-over from the ride-sharing economy, was the car rental industry. Given the high costs of car ownership in Singapore, which included a hefty upfront payment for a Certificate of Entitlement (COE),³⁸ it was likely that a significant proportion of drivers for the ride-sharing platforms was using rental cars. Another knock-on effect was the potential to push up bids for COEs and crowd out individual bidders, as ride-sharing companies like Uber could adopt a more aggressive approach in bidding for available COEs to support its car rental business. The taxi operators had a similar impact on COEs before LTA removed taxis from the bidding process in 2012, and required them to pay the Prevailing Quota Premiums – based on the previous three-month average of COE prices – for COEs drawn from the open category. Taxi operators which were expanding into the private-hire car business, could likewise raise demand for COEs.

Interests of private-hire car drivers

While much attention had been captured by the perceived threat to taxi drivers' livelihoods, the interests of private-hire car drivers who acted as independent contractors were also legitimate. This was reflected in the formation of a new National Private Hire Vehicles Association in May, initiated by a group of private-hire vehicle drivers to represent their interests.³⁹ There were an estimated 8,000 to 10,000 private-hire car drivers during peak hours.⁴⁰ The profile of drivers likely included a significant proportion of part-time private-hire car drivers, who had been attracted by the relative ease of entering the industry. They were also more likely to work during demand peaks when the earning potentials were highest, making the ride-sharing platforms more effective in meeting demand spikes.

The few studies on the sharing economy elsewhere seemed to indicate that earning from gigs enabled by sharing economy platforms were more likely to be supplementing incomes from full-time employment, and were correlated to negative income shocks from other sources, acting as a buffer against volatility in earnings.⁴¹ Costly licencing requirements could discourage some from offering their services on ride-sharing platforms.

Home-sharing in Singapore

Airbnb was started in 2008 in San Francisco to help homeowners rent out spare rooms or entire houses, when hotel rooms were in shortage. Its platform provided a marketplace for accommodation by connecting those with property to lease ('hosts' in Airbnb's terminology) with paying guests. Airbnb's reach was global; it claimed to have served more than 60 million guests, and had more than 2 million accommodation listings in over 34,000 cities worldwide.⁴² Given that the accommodation being let were typically private residences where the homeowner might be living onsite or temporarily away, the activity was labelled 'home-sharing' or 'peer-to-peer accommodation'.

In the Airbnb model, the nightly rate of the accommodation was set by the host. With Airbnb as an intermediary, a guest would pay Airbnb upon confirmation of booking, and Airbnb would release payment to the host 24 hours after the guest checked out of the accommodation. Airbnb made its revenue from charging guests a 'guest

³⁸ Under Singapore's Vehicle Quota System, vehicle owners have to obtain a Certificate of Entitlement (COE) allocated through an open bidding system, in order to register the vehicle. A COE represents a right to vehicle ownership and use of the road space for 10 years.

³⁹ "New group to represent private-hire drivers." *The Straits Times*, May 12, 2016.

⁴⁰ "Parliament: Uber, GrabCar drivers to have vocational licences; undergo background checks." *The Straits Times*, April 12, 2016.

⁴¹ *The Economist*. "The gig economy – Smooth operators." February 20, 2016.

⁴² Airbnb. "About us." <https://www.airbnb.com.sg/about/about-us> (accessed February 10, 2016).

service fee' of between 6 and 12 per cent of the price of the accommodation reservation before fees and taxes. It also took a 3 per cent 'host service fee' of the reservation subtotal from the host.

Like the ride-sharing platforms, mutual reviews of guests and hosts were a cornerstone of its business model, and allowed Airbnb to maintain services standards without high monitoring costs. To build trust among its users, Airbnb provided a verification process, such as requiring users to upload a government-issued identification. Guests and hosts could communicate with each other directly, as well as provide reviews and ratings through the its platform. Airbnb provided other safeguards, such as a 'host guarantee' insurance of up to \$1.2 million to protect hosts from property damage arising from its bookings. Hosts could also ask for a security deposit from guests to offset instances of wear and tear. A corresponding 'guest refund policy' was put in place to manage disputes brought up by guests, or in instances where hosts had failed to meet Airbnb's hospitality standards. When it came to local laws and regulations, Airbnb put the onus for compliance and payment of local taxes and fees, on the host.

Airbnb set up its Asia headquarters in Singapore in late 2012 to spearhead its expansion into the region. Singapore already had a significant tourism industry, with over 10 million visitors arriving each year. By then, Airbnb found itself competing with other start-ups such as Roomorama, TravelMob (now HomeWay) and PandaBed. The Airbnb platform was well-received in Singapore – over 1,000 listings were seen on its platform in 2014,⁴³ and this had expanded to over 5,800 listings by 2015.⁴⁴ The majority of listings involved private apartments in various parts of Singapore, with a wide range of accommodation options available. Prices ranged from less than \$20 a night for a bed in dormitory-style rooms, to over \$1,000 for a night's stay at a historical black-and-white colonial bungalow or a penthouse in Marina Bay. In-bound travellers to Singapore using Airbnb numbered over 150,000 in the last 12 months, registering year-on-year growth of 180 per cent.⁴⁵ Within Southeast Asia, travellers in Singapore were one of the most avid users of Airbnb's services for outbound travel.⁴⁶

In some cities such as New York, San Francisco and Tokyo, the push-backs against Airbnb and its kind emerged as home-sharing grew in popularity.⁴⁷ Even before the emergence of home-sharing platforms, most cities already had legislation that restricted short term rentals, and many listings on Airbnb were technically in breach of such regulations. Locals griped that the appearance of strangers staying in their areas were changing the ambience of their neighbourhoods, and making them unsafe. There were also worries about growing speculative property investments aimed at operating short-term rentals, which raised fears of housing bubbles and unaffordable homes. Wary that the likes of Airbnb could upend their business model, the hotel industry started lobbying lawmakers to clamp down on the new businesses.

In Singapore, the regulatory authorities for public flats and private residences were the Housing and Development Board (HDB) and the Urban Redevelopment Authority (URA) respectively. As short-term rentals facilitated by home-sharing platforms grew in popularity, HDB and URA publicly clarified an existing rule that

⁴³ "Two lose HDB flats for renting them to tourists." The New Paper, June 9, 2014.

⁴⁴ Personal communication from Airbnb, March 30, 2016.

⁴⁵ Personal communication from Airbnb, March 30, 2016.

⁴⁶ Bloomberg Business. "Singapore's Millennials Are Escaping Their Parents for a Night With Airbnb." July 16, 2015. <http://www.bloomberg.com/news/articles/2015-07-16/singapore-s-millennials-are-escaping-their-parents-for-a-night-with-airbnb> (accessed March 7, 2016).

⁴⁷ See for example, "A \$2,400 fine for an Airbnb host." The New York Times, May 21, 2013; "Fastest-growing Airbnb market under threat as Japan cracks down." The Straits Times, February 19, 2016.

only long-term leases of at least six months were permitted for residential properties.⁴⁸ Given the prevalence of high-density housing in Singapore, the rationale was that short-term stays would lead to high turnover of occupants and high human traffic, which could cause nuisance and safety concerns to neighbours. Touching on the issue in parliament, then Senior Minister of State for National Development, Lee Yi Shyan indicated that the sharing of resources in an economy was a positive trend, but could come at the ‘expense of existing regulations that tend to protect both consumers and service providers’.⁴⁹ Then-Minister for National Development, Khaw Boon Wan also weighed in on the issue, when he said in a blog post that short-term rentals were ‘not a good idea’, as the neighbours would not like to see their neighbourhood becoming a hotel district.⁵⁰

The concerns were not unfounded. Between 2013 and 2014, URA had received about 520 complaints about the rental of private condominiums for periods of less than six months.⁵¹ The complaints centred on privacy and security concerns associated with having transient guests, and their use of common facilities. The penalties for flouting the regulations could be stiff. For private housing, such arrangements could be considered an unauthorised change in the residential use of the premises, an offence under the Planning Act, and could result in a fine of up to \$200,000, and/or a jail term of up to a year.

In Singapore, the issue of short-term rentals was also complicated by the fact that a high proportion of the resident population – more than 80 per cent – lived in close to 970,000 public (HDB) flats, which were strictly regulated. The minimum subletting period for an entire HDB flat or a bedroom was set at six months, and flat owners were required to seek HDB’s approval to sublet. Only Singapore citizens were allowed to sublet their entire HDB unit, provided they met certain conditions such as fulfilling a minimum occupation period (of 3 or 5 years, depending on whether it was a new or resale flat).⁵² There were also additional rules, such as the eligibility of subtenants and caps on the number of subtenants depending on flat type. Between January 2013 to December 2014, HDB conducted over 13,000 flat inspections and took action against 24 flat owners for unauthorised subletting.⁵³ In extreme cases, HDB could even repossess the flat. Two HDB flat owners reportedly had their units repossessed by HDB in 2014 for renting them out to multiple short-term visitors for between \$25 and \$75 a night.⁵⁴

The government’s stand on short-term rentals seemed to put a damper on the budding home-sharing sector, at least as far as HDB flats were concerned. Private houses and apartments on the other hand, continued to be listed for short-term rentals on home-sharing platforms. Notwithstanding the existing regulations, URA launched a public feedback exercise in January 2015, seeking feedback on allowing short-term stays in private residences. The survey included questions on the concerns that residents would have if their neighbours rented out their premises; what would be a reasonable duration for short-term rentals; and how could URA increase its effectiveness in investigating infringement of regulations. The results of the feedback exercise, which closed on

⁴⁸ URA. HDB and URA’s reply, “Rules on short-term rentals.” September 25, 2013. <https://www.ura.gov.sg/uol/media-room/forum-replies/2013/sep/forum13-19.aspx> (accessed March 7, 2016)

⁴⁹ Singapore Parliament Debates (Hansard). “Short-term Rental Leases at Private Condominiums.” Parliament No:12; Session No:2; Volume No:92; Sitting No:12; September 8, 2014.

⁵⁰ “Housing Matters” Blog. “Some things are harder to share.” January 21, 2015. <https://mndsingapore.wordpress.com/2015/01/21/some-things-are-harder-to-share/> (accessed February 10, 2016)

⁵¹ Singapore Parliament Debates (Hansard). “Short-term rental leases at private condominiums.” Parliament No:12; Session No:2; Volume No:92; Sitting No:12; September 8, 2014.

⁵² Singapore Permanent Residents were barred in 2013 from subletting their entire units.

⁵³ HDB. “Subletting Regulations.” <http://www.hdb.gov.sg/cs/infoweb/residential/renting-out-a-flat-room/renting-out-your-flat/subletting-regulations?resolvetemplatefordevice=true> (accessed February 10, 2016).

⁵⁴ “Two lose HDB flats for renting them to tourists.” The New Paper, June 9, 2014.

23 February 2015, were however not made public. HDB did not announce any plans to solicit feedback on the issue.

The sharing economy's business association in Singapore, SEAS, released its own position paper in December 2014, on home-sharing in Singapore which highlighted its benefits, while Airbnb commissioned its own poll of 600 Singaporeans in early 2015.⁵⁵ Its survey concluded that 72 per cent believed that Singaporeans should be allowed to temporarily rent out their homes. Similarly, 74 per cent believed they should also be allowed rent out spare rooms within a home on a short-term basis when the owner was present. Slightly over half (52 per cent) agreed that hosting short-term renters helped people "pay their bills and afford to live in Singapore". The survey, however did not include questions on the potential adverse impacts of short-term rentals.

Means of monetising assets

For home-owners, Airbnb offered a convenient way of monetising their assets. This appealed to home-owners who preferred to let out space for short-term stays in their primary residence, rather than be locked into a long-term arrangement. Short-term rentals were also usually more profitable on a per day basis than a longer-term lease. For individuals and households, the supplementary income provided by home-sharing could serve as a buffer when main income sources fell short. For retirement households, it could also serve as an alternative source of retirement income to tap on when needed, in lieu of longer subletting leases. According to Airbnb, the median earnings for Airbnb hosts in Singapore was \$5,540 a year,⁵⁶ equivalent to 1.4 months of the median income from work for Singapore residents in 2015.⁵⁷ In Sydney, the yearly median earnings was about A\$4,500 (\$4,600), while that in New York City was about US\$7,500 (\$10,700).⁵⁸

The public housing policy objectives in Singapore had evolved over the years, from simply providing decent shelter, to encouraging home ownership to create a sense of belonging to the country, and in more recent years, offering home owners opportunities for investment gains. Although the government's stand was that HDB flats were primarily for owner-occupation, the subletting of rooms within a HDB flat had long been permitted, and the door was opened in 2003 to allow flat owners sublet their entire units. The rules were relaxed to allow HDB flat owners, who had lived in their flats for more than 15 years, to sublet an entire unit on a long lease. The stated aim at the time was to provide flat owners with a source of retirement income.⁵⁹ This was a sea change to a longstanding rule that HDB flats had to be occupied by the flat owners. Generally, about five per cent of all owned HDB flats were being sublet. At the end of March 2015, this involved 48,338 units.⁶⁰

Considering the high levels of home ownership in Singapore, and that for many, a residential property would be their single largest investment, additional avenues to monetise that asset should, in theory, be welcome. Where public policy and private enterprise diverged was on the duration and frequency of subletting. On the

⁵⁵ Airbnb. "New Poll: Singapore Supports Home Sharing." February 17, 2015. <http://publicpolicy.airbnb.com/wp-content/uploads/2015/02/DBR-Singapore-Survey-Research-Results-3.pdf>

⁵⁶ Personal communication from Airbnb, March 30, 2016.

⁵⁷ Ministry of Manpower (MOM). "Median Gross Monthly Income From Work (Including Employer CPF Contributions) of Full-Time Employed Residents." January 28, 2016. <http://stats.mom.gov.sg/Pages/Income-Summary-Table.aspx> (accessed April 15, 2016). The median gross monthly income for 2015 was \$3,949.

⁵⁸ "HDB on Airbnb? Co-founder hoping it's not a flat-out 'no'." Channel NewsAsia, October 7, 2015.

⁵⁹ Singapore Parliament Debates (Hansard). "Retuning of CPF." Parliament No:10; Session No:1; Volume No:76; Sitting No:19; August 29, 2003.

⁶⁰ HDB. Annual Report 2014/2015. <http://www20.hdb.gov.sg/fi10/fi10221p.nsf/client/hdb/ar2014-2015/index.html?opendocument#1> (accessed March 1, 2016).

other hand, questions had been raised about how the economic benefits of home-sharing were spread within a city. A study on Airbnb in London indicated that the demand for Airbnb listings – and by extension, economic benefits – tended to stay concentrated in desirable neighbourhoods that were already bustling, even when the supply of listings had expanded to other neighbourhoods.⁶¹

Managing dis-amenities and housing affordability

In Singapore, the public discourse had largely centred on the negative externalities that frequent short-term rentals could cause. HDB and URA saw frequent short-term rentals as a source of dis-amenities for neighbours, such as noise, over-crowding, privacy and safety concerns, that would erode the residential nature of a neighbourhood. The archetypal scenario was that of an absentee landlord running an overcrowded boarding house in his apartment, with tenants misusing or hogging common facilities. The authorities had frequently received complaints of private and public residential premises being illegally rented out, and enforcement appeared to be largely in response to such complaints. Allowing property-owners to have frequent short-term rentals would invariably raise the hackles of more neighbours.

In some cities, opposition to home-sharing platforms raised also the spectre of unaffordable housing. In particular, there were fears that commercial operators were muscling into the home-sharing business by buying up properties primarily to profit from frequent short-term rentals. By reducing the available housing stock, the argument was that housing prices would rise, pricing out genuine home-buyers. This had emerged as a point of contention in cities such as San Francisco, New York City and Paris, where Airbnb had enjoyed explosive growth, but had also seen increasing participation from commercial operators.⁶²

According to Airbnb, the majority (61 per cent) of listings in Singapore on its platform hosted fewer than 90 nights in a year, while rooms comprised 60 per cent of the listings.⁶³ This seemed to suggest that a majority of the hosts were listing their primary residences, rather than running a commercial operation that rented out multiple properties. If this were the case, such hosts were more likely to have fewer short-term rentals in a year, and have a greater stake in ensuring that dis-amenities and potential frictions with neighbours were minimised.

Unlike most cities where the housing market was largely commercially-driven, the housing market in Singapore was rather unique. The majority of the population lived in public flats developed by HDB, which sold flats directly to eligible home-buyers, as part of the government's policy of encouraging home ownership. As a statutory board, housing affordability was a key consideration in HDB's housing development programmes, and was closely monitored by the government. Flats were typically priced such that monthly housing instalments were pegged to about a quarter of average monthly incomes for target groups. This was below the 30 to 35 per cent used in some international housing affordability benchmarks. Allowing the use of individual funds set aside in the mandatory national social security system, the Central Provident Fund (CPF), to finance housing purchases provided additional financial buffer. Even in the resale (secondary) market for HDB flats, and the

⁶¹ Bliss, Laura. "A Novel Idea for Regulating Airbnb." CityLab, February 10, 2016. <http://www.citylab.com/cityfixer/2016/02/london-airbnb-sharing-rights/462162/> (accessed March 10, 2016)

⁶² See for example, "Protesters occupy Airbnb HQ ahead of housing affordability vote." The Guardian, November 2, 2015. <http://www.theguardian.com/us-news/2015/nov/02/airbnb-san-francisco-headquarters-occupied-housing-protesters> (accessed March 1, 2016); "Study: Professional Landlords Generate \$500 Million Per Year on Airbnb." Bloomberg Business, January 20, 2016. <http://www.bloomberg.com/news/articles/2016-01-20/study-professional-landlords-generate-500-million-per-year-on-airbnb> (accessed March 1, 2016); "Paris Confronts Airbnb's Rapid Growth." The Wall Street Journal, June 25, 2015. <http://www.wsj.com/articles/SB12147335600370333763904581058032330315292> (accessed March 1, 2016).

⁶³ Personal communication from Airbnb, March 30, 2016.

private housing market, the government retained several fiscal and financial levers to moderate housing prices and stabilise the housing market, including various housing grants for the purchase of resale HDB flats, Additional Buyer's Stamp Duty, and limits on loan-to-value and total debt servicing ratio.

A compromise that enabled property-owners to boost their incomes, while minimising dis-amenities could be found for example, by setting clear rules restricting short-term rentals to primary residences, limiting the number of guests a residential property could be allowed to host, while relaxing the minimum duration and allowing a reasonable number of short-term rentals a year. This had been the approach in some cities. For example, in May 2015, London relaxed its housing laws that had been inconsistently enforced, and legalised short-term rentals for up to 90 days a year without property owners having to seek planning permission.⁶⁴ Home-sharing platforms could also take the initiative in establishing clear and impartial mechanisms to handle third-party complaints from neighbours and other affected parties.

Impact on tourism and hotel industry

Another potential benefit of home-sharing was the impact on tourism. Unlike ride-sharing, the demand for home-sharing which involved overseas demand, was less obvious. The listings on home-sharing platforms included more interesting accommodation types and locations, such as black-and-white colonial bungalows. Such home-sharing options could attract tourists looking for more unique experience and opportunities to interact with locals. Home-sharing could also help to absorb occasional surges in visitor numbers during major events, such as the Formula 1 Singapore Grand Prix. Visitors staying in Airbnb accommodation also appeared to have longer stays in Singapore, with an average of 5.8 nights, compared to the overall average tourist stay of 3.7 days in 2014.⁶⁵

There had been previous attempts to provide short term homestays for tourists in Singapore. For example, the Association of Management Corporations in Singapore launched a programme in 2004 with almost 1,000 rooms in various condominiums offering homestays to tourists at US\$30 a night.⁶⁶ The hosts reportedly ranged from retirees and families with children studying abroad, to investors with vacant properties. However, the programme fizzled out after a few years for various reasons, including homeowners opting for long term leases when rental rates spiked. Over the years, there had been similar proposals for HDB flats to be opened out for homestays to tourists wanting to experience a typical Singaporean lifestyle.⁶⁷ Even locals seemed keen on short-term stays or 'staycations' in space-squeezed Singapore.⁶⁸

Airbnb had, in effect, become one of the largest global providers of accommodation, without having to own a single hotel room. While the home-sharing platform had faced strident objections from the hotel industry

⁶⁴ "Airbnb to be legalised in London." The Guardian, February 10, 2015. <http://www.theguardian.com/travel/2015/feb/10/airbnb-to-be-legalised-in-london> (accessed March 10, 2016)

⁶⁵ STB. Annual Report 2014/2015. <http://www.stbannualreport.com.sg/> (accessed April 11, 2016)

⁶⁶ "Your home, their hotel; More than 100 households will open their doors to tourists." The Straits Times, December 21, 2003; "Homestay scheme draws 250 tourists." The Straits Times, August 28, 2004.

⁶⁷ "Chinese tourists to get a taste of HDB life." The Business Times, March 8, 2003.

⁶⁸ Bloomberg Business. "Singapore's millennials are escaping their parents for a night with Airbnb." July 16, 2015. <http://www.bloomberg.com/news/articles/2015-07-16/singapore-s-millennials-are-escaping-their-parents-for-a-night-with-airbnb> (accessed March 7, 2016).

elsewhere,⁶⁹ in Singapore at least, the objections from the hotel industry appeared muted. The hotel industry in Singapore seemed unlikely to see the home-sharing platforms as a serious threat, especially given the existing restrictions on short-term rentals. Compared to the almost 400 hotels offering close to 61,000 rooms in Singapore,⁷⁰ the home-sharing platforms' listings in Singapore probably numbered in the high hundreds to low thousands. The customer base associated with home-sharing platforms were more likely to be leisure travellers, whereas hotels tended to cater to business travellers. Similarly, the issue of hotel taxes – more specifically, that Airbnb and its hosts paid no hotel taxes – which had surfaced in other cities, was also non-starter in Singapore, since the cess rate had been reduced to zero in 2007.⁷¹

On the other hand, the home-sharing listings were more likely to compete with cheaper budget hotels and hostels. Indeed, budget hotels had started to list themselves on such platforms, which partly eroded the claims of home-sharing platforms to be helping individual home owners and building social capital through peer-to-peer interactions.

Considering the policy approach

In many respects, the sharing economy companies were putting a new spin on familiar economic activities. What had changed was that new technologies and business models had significantly reduced transaction costs for users by allowing activities to be scaled up exponentially, demand and supply matched in real time, and service delivery and standards monitored at low cost (to the firms). The sharing economy businesses did not fit neatly into existing regulatory categories. Today's UberX and GrabCar drivers were a different breed from the pirate taxis of the past. Airbnb hosts in Singapore were unlikely to be listing overcrowded boarding houses on its platform.

At the same time, the technology-driven platforms that formed the nerve centres of the sharing economy played well into Singapore's Smart Nation ambitions. Public sector agencies were already sharing extensive real-time data in the public domain in the hopes of generating innovative solutions. Mobile apps formed a crucial platform for public sector agencies to communicate with the public, and aggregate data to find new solutions to problems.

Given that the impact of sharing economy differed from sector to sector, it was clear that a sector approach was needed, rather than a one-size-fits-all policy. As the authorities contemplated how these emerging platforms should be managed, it would be pertinent to ask how ride-sharing and home-sharing fitted into the larger policy landscape for the transport and housing-retirement sectors.

Second, the ride-sharing and home-sharing platforms proved to be adroit at plugging market gaps, and regulators should recognise that existing regulatory approach would be a poor fit. A heavy-handed regulatory approach could do more harm than good, if these platforms were driven out of business. For regulators, this called for a nuanced policy approach and smart regulation to harness the benefits of the sharing economy, while minimising or managing the downsides. Just as established players in an industry could not expect to be constantly shielded

⁶⁹ See for example, "Rising angst over airbnb operations." Herald Sun, February 11, 2015. Australian tourism operators were reportedly seeking government intervention to halt the rise of Airbnb in the country, and force the company to abide by the same laws as the hotel industry.

⁷⁰ Singapore Tourism Board (STB). "Number of licensed rooms as at 31 December 2015." <https://www.stb.gov.sg/industries/hotels> (accessed Mar 7, 2016).

⁷¹ Cess was a tax imposed on certain types of hotel and food and beverage establishments to help fund tourism promotion in Singapore. Cess was still imposed on hotels during certain events such as during the Formula 1 races.

from new competition, emerging sharing economy platforms likewise had to learn to work with regulators while keeping their competitive edge. If and when sharing economy platforms grow to dominate markets, regulators would have to contemplate stepping in – as with any competitive market – to moderate excessive monopolistic power.

Third, while ride-sharing and home-sharing were not novel in themselves, the sharing economy created innovative business models and disrupted traditional ones. Disruptive technologies and business models are to be expected, and indeed usually desired. The rapid rise of ride-sharing and home-sharing activities pointed to economic opportunities that existing businesses had failed to satisfy. Uber and Grab could provide transport services rivalling the existing taxi industry, while distributing capital investment to individual drivers. In effect, the sharing economy was creating new markets. By being too hasty to clamp down on these new economic activities, cities stood to miss out on its benefits.

The sharing economy genie was out of the bottle, and would be here to stay. It was by no means certain that the sharing economy would live up to its hype, but as the regulatory dust settles, the question remains of how Singapore can make better use of the sharing economy. Sharing may not be for everyone, but more could certainly benefit.