



A Study of the Competition in the Personalised Point-to-point Car Transport Service Market

**28 November 2017** 





## **Study Background**

- Public transport services account for over 90% (around 12.59 million) of the total passenger trips per day in 2016, which is the highest in the world
- Taxi provides a "personalised, point-to-point" and more comfortable public transport service with a higher fare, yet its service quality has been a public concern

2016	Number of passengers per day**	Complaints and suggestions***
Taxi service	~0.93 million	10,357
% share in total public transport	~7.4%	~46.4%

 Hire car provides another type of personalised point-to-point car transport service but small in scale

Source: \*Public Transport Strategy Study Report (2017)

\*\*Transport Department



<sup>\*\*\*</sup>Transport Complaints Unit of the Transport Advisory Committee





## **Sharing Economy and Rise of E-hailing Service**

- Since 2010, ideas of "collaboration" and "sharing" of resources emerged e.g. house-swapping/private car park sharing
- Technological development facilitates the concept of "sharing economy" and new business models found in different industries
- E-hailing companies defined themselves as "transportation network" companies, providing matching service for passengers and "ride-sharing" drivers through online platforms
- Starting from 2014, E-hailing companies (e.g. Uber) made use of mobile application to provide personalised point-to-point service and grew quickly in Hong Kong

Different countries/markets have different attitudes and regulatory policies towards E-hailing service





## **Market Developments in Hong Kong**

- Legality of Uber's operation was questionable and some of its "partner drivers" were arrested
- In 2016, the Hong Kong Taxi Council launched a taxi app to provide E-hailing taxi service. A public consultation is being conducted on proposed reform measures
- In the 2017 Policy Address, the Government stated that it is making preparation for launching "franchised taxis" with "E-hailing" features to address the demand
- According to Uber and media report, there were over 300,000 riders using Uber in the first quarter of 2017 and there were more than 30,000 "partner" drivers signed in
- At the same time, number of registered private cars increases in recent years, from around 490,000 in 2012 to over 590,000 in 2017. This implies that some views the services quality problems of taxis result in:
  - Consumers having private vehicles to satisfy the demand in point-to-point car transport service
  - The increase in supply of E-hailing vehicles







#### **Study Objectives**

- 1. Analyse the competition environment in the personalised point-to-point car transport market\*
  - 2. Investigate the limitations of competition on service quality
    - 3. Review the regulatory approaches adopted in other jurisdictions
  - 4. Assess the effectiveness of the Government's proposed franchised taxis
- 5. Recommend the development approach and regulatory model for Hong Kong



<sup>\*</sup>Including taxi, hire car and E-hailing vehicle

## Market Situation and Consumer Opinions



## Regulated Personalised Point-to-point Car Transport Service in Hong Kong

	Taxi	Hire car		
Regulations	Under the Road Traffic Ordinance (Cap. 374) (Ordinance) and its subsidiary legislations			
Nature	Public transport service	Private transport service		
Quantity	Held by over 9,000 licence holders	Number of hire car permits: Private hire car service: 648 (1,500)* Hotel hire car service: 162 (400) Tour hire car service: 116 (400)		
Licence	Permanent - the Government neither can add new licence conditions nor revoke licence based on service quality issues	Time limited - private car owners have to apply hire car permit in order to operate		
Operation mode	Pick up passengers at street or at taxi stands, or provide pre-booked services	Provide pre-booked services only, cannot provide street hailing services		
Fare	Taximeter: regulated  "Hire-as-a-whole service": agreed between the parties involved	Not regulated  *( ): Statutory maximum number		





#### Statutory Requirements to Taxi Drivers' Behaviours

- Road Traffic (Public Service Vehicles) Regulations (Cap. 374D) stipulates a taxi driver shall not contravene without reasonable excuse:
  - a) wilfully refuse or neglect to accept a hire from a hirer whether the intention of such hirer is indicated expressly or by implication;
  - b) refuse or neglect to drive the taxi to any place indicated by a hirer;
  - c) refuse or neglect to carry such number of passengers as required by the hirer, not exceeding the number specified in the vehicle licence in respect of the taxi;
  - d) when hired to drive to a specified destination, drive to such destination other than by the most direct practicable route;
  - e) when his taxi is hired, permit any person other than the hirer to enter the taxi without the consent of the hirer; and
  - f) refuse or neglect, after payment has been made by any person of any fare for the hiring of a taxi, to issue on demand by that person made at any time before the taxi is hired by any other person a receipt complying with the requirements in respect of such payment

Except general driving requirements, no specific provisions to regulate the behaviour of hire car drivers







## **Market Supply: Mainly by Taxi Service**

- Hire car service is limited in supply and small in market share, passengers mainly rely on taxi service for personalised point-to-point car transport service
- Adequate taxi supply: passengers' waiting times for taxi service are quite stable in recent years\*
  - Average waiting time for urban taxi at roadside was around 1 minute, for New Territories taxi was around 4 minutes
  - Around 5% of passengers have to wait for an urban taxi for more than 10 minutes at taxi stands at peak





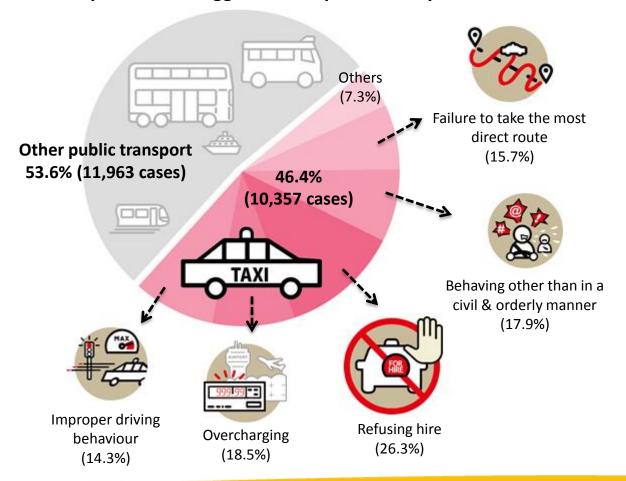
<sup>\*</sup> Source: 2016 Survey findings of the Transport Department





## Passengers Are Dissatisfied with the Taxi Service Quality

Complaints and suggestions of public transport services in 2016\*



- "Refusing hire",
   "overcharging" and
   "behaving other than in a civil & orderly manner"
   were the major
   complaint issues on taxi
   service
- In 2012 2016, only 8.1% of the 8,728 cases referred to the Police were summonsed

<sup>\*</sup>Source: Transport Complaints Unit of the Transport Advisory Committee







#### **Consumer Opinions**

Consumers opt for more choices in personalised point-to-point transport service market (including taxi service)

The Government's survey results on public views of the "Franchised Taxi Service" \* (May 2016)

Among some 2,000 respondents:

- over 60% would consider using franchised taxi service
- expected good attitude of drivers, no refusal to hire and cherry-picking of passengers
- over 70% considered franchised taxis charging a higher fare is reasonable
- about 60% would use the franchised taxi service at least once a month

Uber's public polling results on "HK's Transportation Services"\* (June 2017)

Among 540 respondents, over 75% thought that:

- there should be more choices for point-to-point transport services;
- introduction of Uber can help enhance point-to-point transport services;
- the Government is not doing enough to support innovations;
- the Government should provide a legal framework to regulate Uber

Hong Kong Taxi Council's quarterly survey results on "Taxi Service Quality"\*\*
(3rd Quarter of 2017)

#### Among 1,216 respondents:

- about 60% were "satisfied" with taxi service
- over 50% agreed:
  - clean taxi compartment
  - taxi drivers familiar with passenger destinations and traffic conditions
  - · taxi driver takes efficient route
- less than 30% agreed:
  - taxi facilities are sufficient (e.g. wireless network and e-payment)
  - wheelchair users friendly taxis are sufficient



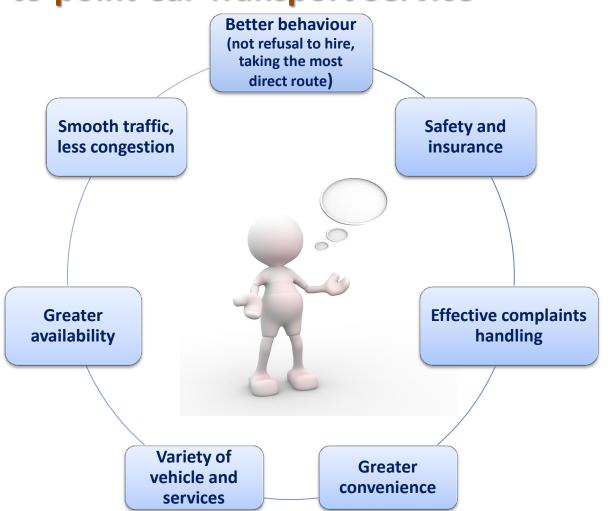
<sup>\*</sup> Through telephone interviews

<sup>\*\*</sup> Through face-to-face interviews





## **Consumer Expectations of the Personalised Point-to-point Car Transport Service**



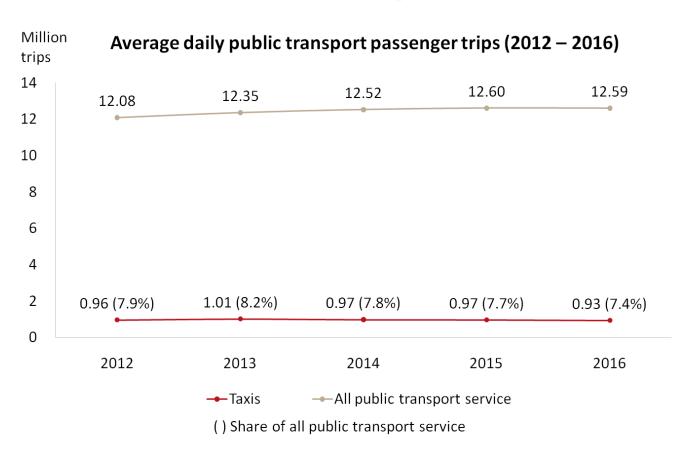


## Review on Current Demand and Future Needs





## Increase in Total Public Transport Patronage but Decrease in Taxi Patronage\*



<sup>\*</sup>Source: Transport Department

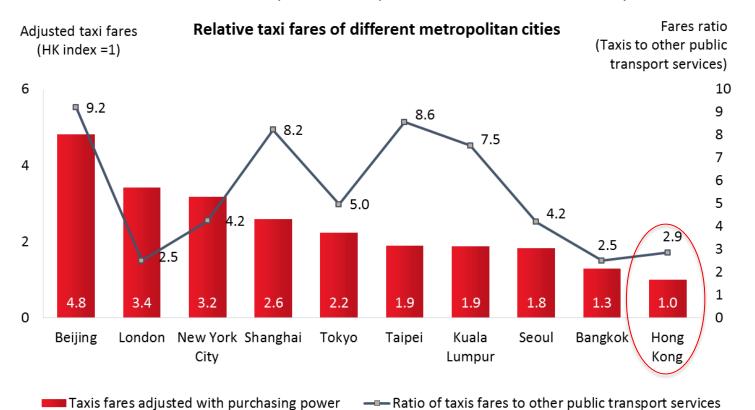






## Taxi Fare in Hong Kong Was Not the Cause of Its Stagnated Demand

 Compare to other jurisdictions, Hong Kong taxi fare is the lowest and the difference in taxi fare ratio to that of other public transport services is also relatively low\*



<sup>\*</sup> Source: UBS Prices and Earnings 2015 Report









## **Factors Affecting Taxi Demand\***

**Basic demand factors** 

City size measured by population

Senior and disable population

Ride to airport service

Substitution between personalised point-to-point car transport services and other transport modes

Number of households owning private vehicles

**Transit ridership** 

Competition with other personalised point-to-point car transport services

Competition between service providers

**Service quality** 



<sup>\*</sup> Reference: Schaller, Bruce 2005 《 A Regression Model of the Number of Taxicabs in U.S. Cities 》

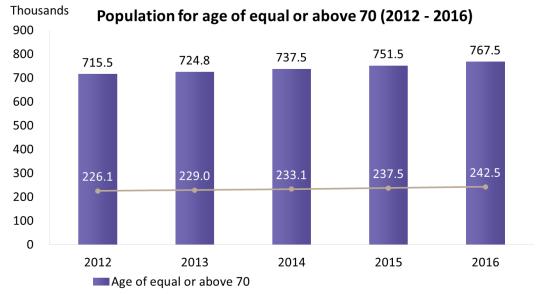




#### **City Size Measured by Population**

Increase in population, senior (aged equal or above 70) and disable population
 → drive the demand in personalised point-to-point transport services

	Senior population (Total population)*	Share of senior to total population	Market share of taxi* (average daily public transport patronage)
2016	~0.77million (~7.35 million)	~10.5%	~7.4% (~0.93 million)
2031	~1.57million( ~8.01 million)	~19.6%	~8.0% (~1.10 million)



<sup>---</sup> Age of equal or above 70 with restriction in body movement



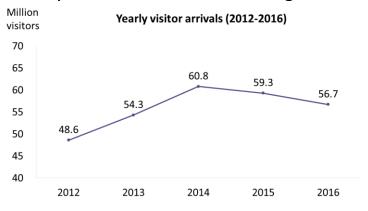
<sup>\*</sup>Source: Census and Statistics Department and Public Transport Strategy Study Report (2017) of the Transport and Housing Bureau

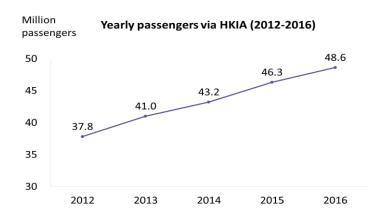




## **Visitor Arrivals and Airport Passengers**

• E-hailing is becoming more prevalent and popular around the world, many tourists have already used such kind of booking service





- A total increase of 8.1 million visitors\* and 10.8 million passengers to the Hong Kong International Airport in recent 5 years\*\*
- Introduction of a high-speed train connected to Hong Kong, the opening of Hong Kong Zhuhai Macau Bridge in 2018 and the threerunway system of the Hong Kong International Airport should attract more Mainland China visitors and increase the demand in personalised point-to-point car transport service

Source: \*Hong Kong Tourism Board



<sup>\*\*</sup>Airport Authority Hong Kong (exclude transit passengers)





## **Substitution by Other Transport Modes**

- Increase in number of private cars for households
  - Over the last 5 years, annual GDP per capita went up by cumulative 19.2%,
     and number of licensed private vehicles increased by 17.9%\*
  - When consumers are unsatisfied with the existing service market, they may purchase and drive private vehicles by themselves, substitute point-to-point car services
  - Worsen the traffic congestion problem
- Expansion of railway network
  - The Kwun Tong Line Extension and South Island Line (East) in 2016
  - The Shatin to Central Link in 2021, and the seven new railway projects in the planning horizon
  - Substitution effect of railway increases



<sup>\*</sup> Source: Census and Statistics Department and Transport Department

# Market Analysis: Market Service Types and Competition





## Personalised Point-to-point Car Transport Service: Three Service Market Segments

#### Stand market



They are close substitutes and interrelated
With proper regulations, service quality can be improved and
consumer behaviour pattern can be changed

**Hail market** 





**Pre-booked market** 

















## Personalised Point-to-point Car Transport Service: Stand Market and Hail Market

- Only taxi can provide the service
  - Passengers and taxis form queues
  - First-in-first-out
  - Passengers are difficult to choose vehicles or drivers

#### Stand market



#### **Hail market**



- Random matching of passengers and taxis
- Passengers seldom choose vehicles or drivers due to time constraints
- When demand is high, market power increases with potential abuse of power and detrimental to passengers' interests (e.g. charging a higher fare, cherry-picking)





## Personalised Point-to-point Car Transport Service: Pre-booked Market

Service provider	Quantity	Nature	Price	Booking method	Vehicle	Driver	Passenger redress
Taxi	18,163	Public transport service	• Charge by meter • hire-as-a-whole: negotiable	Call centre     Smartphone     application	Meter installed, regulated design	Age 21 or above, holding a driving licence for at least 3 years and passed relevant test	Transport Complaints Unit of the Transport Advisory Committee
Hire car	Private service	Private transport service	Negotiable (\$)	Telephone     Online     platform	No explicit requirements on vehicle design but display of hire car permit	No explicit requirements except holding the relevant driving licence	Online website or telephone hotline of the operator
E-hailing vehicle	No information	Pre booking service using smartphone application or online platform	Quotation in advance (cannot charge the fare now)	Smartphone application	General private vehicle, limousine, seven-seater, wheelchair accessible vehicle	Holding a driving licence only	Mobile application or online platform of the E-hailing service





## **Market Competition**

- 1. Lack of competition force in stand and hail market
  - Passengers treat the two markets as same service, cannot differentiate vehicles and drivers (no difference in color or characteristics)
  - No incentive and penalty mechanism, no motivation to compete
  - Drivers are difficult to build customer loyalty with passengers

#### Stand market

TAXI STAND 的士站



## Pre-booked market has not been fully developed to facilitate competition

- Abundant supply in stand and hail market reduce demand in pre-booked market
- Limited scale and supply (hire car and E-hailing)
- E-hailing is yet to be legal







#### **Pre-booked market**















## Development of Pre-booked Market is Restricted by Current Regulation and Policy

- Taxi call centres mainly serve the fleets
- Simple matching
- Limited matching effectiveness and problem of cherrypicking due to incomplete functionality of booking mobile apps

**Taxi** 

E-hailing vehicle





Hire car



- Number of permit is too little, small in scale
- Limited matching effectiveness due to its reliance on telephone booking

- Able to utilise information technology to understand consumers' behaviours and needs
- Able to control supply and collect passengers feedbacks for effective matching algorithm
- No regulatory framework is available yet



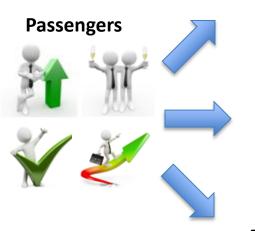






## Increase Competition Force to Improve Service Quality

- Increase choices
  - Flexibility in hailing
  - Punctuality in service
  - Vehicle types
  - Price
- Reduce search cost







#### Hail



#### **Pre-booked**











- Regulate E-hailing prebooked service to enhance competition
  - Increase E-hailing scale (Both taxi and hire car join the market)
  - Adjust supply to enhance matching effectiveness
  - Collect passengers' feedbacks effectively to monitor the service quality
  - Change the consumer behaviour pattern of passengers
    - Shift from stand and hail markets
- Drive taxi to improve service indirectly

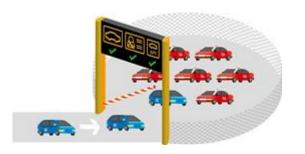
# Developments and Regulatory Approaches in Other Jurisdictions

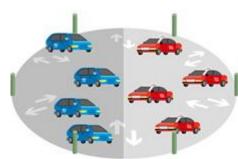




#### Different Policies to deal with E-hailing Service

- 1. Creating a Level Playing Field for E-hailing Service and Taxi Service
- 2. Minimal Regulatory Disruption in Personalised Point-to-Point Car Transport Service Markets
- 3. Protectionist Measures for Incumbent Taxi Service Providers







<u>Progressive approach or</u> <u>open market competition approach</u>

- New set of regulations to embrace E-hailing service
- An innovative transport service in which new regulations are necessary
- Compensation and transitional arrangement available to assist taxi trade

- Hire car market is mature in which E-hailing service can fit in
- E-hailing is a hire car service which compiles with the current regulations

Closed market approach

- Thriving taxi market and hidden hire car market development
- E-hailing is an illegal transport service and violates the current regulations
- Review and upgrade of taxi services





#### Different Policies to deal with E-hailing Service (Con't)

- Creating a Level Playing Field for E-hailing Service and Taxi Service (Progressive approach)
- 2. Minimal Regulatory Disruption in Personalised Point-to-Point Car Transport Service Markets (Open market competition approach)
- 3. Protectionist Measures for Incumbent Taxi Service Providers (Closed market approach)



Gradual implementation for monitoring the overall development

New requirements to

safeguard passengers

safety and improve service quality



Increase consumers' choices and market competition immediately



Mitigate the risks and potential problems arouse by E-hailing (e.g. no effect on taxi business, and collapse of taxi licence premium)

Cons

**Pros** 



Competition effect in the long run



Unlimited E-hailing vehicles cause traffic problems



Direct impact on the incumbent taxi owners



Lack of competition and incentives to improve service quality

 Substitutes of other transport (including "illegal" transport service) could affect the taxi industry eventually







## 1. Creating a Level Playing Field for E-hailing Service and Taxi Service (Progressive approach)

	Beijing	New South Wales	Singapore	Toronto
Introducing E-hailing service	Nov 2016: Introduced the national policy on network car hailing and specified the regulations for E-hailing platform companies, vehicles for transport services and drivers	Nov 2017: New regulatory framework for all point- to-point transport providers, including taxis, hire vehicles and rideshare services	Q3 2015: Stipulated that third-party taxi booking service providers are required to register  Mar 2017: All private hire car drivers are required to obtain a Private Hire Car Driver's Vocational Licence → indirectly regulate E-hailing service with use of hire cars	Jul 2016: Introduced a new legislation which required E-hailing service companies to register as private transportation companies, with clear guidelines on fare control, insurance coverage and vehicle requirements
Measures to taxi trade	No information	Compensation payments of AUD20,000 per ordinary and transferable licence, for up to two licences	Taxi drivers can drive both taxis and private hire cars	Relaxing training requirements for taxi drivers
No. of registered E-hailing operator	6 (around 6,000 E-hailing vehicles)	No information	Third-party taxi booking service providers: 11 (around 24,000 taxis and 42,000 chauffeured private hire cars)	4





## 2. Minimal Regulatory Disruption in Personalised Point-to-Point Car Transport Markets (Open market competition approach)

	London	New York	
Introducing E-hailing service	Since May 2012, E-hailing (Uber) was compliant with the Private Hire Vehicles Act 1998 and was granted a operating licence for 5 years  To control to growth in number of hire vehicles, the government stipulated that all private hire vehicles will be required to have "hire and reward" insurance and all E-hailing drivers had to meet the English language requirements  In Sep 2017, Uber was not granted another five-year period licence because the government considered that its approach may bring potential public safety and security implications	Uber has been operating since 2011  In Jul 2015, the Mayor commissioned a study found that Uber and other E-hailing services are not responsible for road congestion and halted his plan to cap the number of drivers  In Jun 2017, the New York State Department of Motor Vehicles (DMV) further announced approval for Uber and Lyft to offer ride sharing service in Upstate New York and on Long Island	
No. of contract	No specific licence for E-hailing operators		
No. of registered E-hailing operator	More than 2,400 private hire operators (around 88,000 private hire vehicles)	No information (around 102,000 For-Hire-Vehicles)	







## 3. Protectionist Measures for Incumbent Taxi Service Providers (Closed market approach)

	Barcelona	Copenhagen	Seoul
Ways to deal with E-hailing service	In Dec 2014, Uber was in violation of local regulations which amounted to unfair competition for taxi drivers  In May 2017, the European Union's Advocate General announced that Uber is primarily a transport company rather than an intermediary between passengers and drivers, and thus should apply appropriate licences	In Nov 2016, two Uber drivers were fined for violating taxi laws  In Feb 2017, the Danish parliament passed legislation amending the regulations on taxis, requiring all persons providing point to point transportation service with reward have to apply for a licence and fare meters should be installed for all hire car vehicles	<ul> <li>In Dec 2014, the Seoul Metropolitan Government arrested Uber drivers, deeming their ride-sharing service illegal</li> <li>In May 2015, the Government pointed out five problems of Uber's business:</li> <li>cannot guarantee passenger safety due to insufficient insurance coverage and lack of background check of the drivers</li> <li>may rip off passengers as it provides services at an unfixed rate</li> <li>its users' policy is disproportionately disadvantageous to users</li> <li>not assume any basic responsibility for its service</li> <li>undermines sharing economy</li> </ul>
Measures to taxi trade	N/A	N/A	In May 2015, the Government passed legislation banning unlicensed driver from providing taxi services and launched a premium taxi-hailing service







#### **Measures to Improve Taxi Service**

- While some jurisdictions have created a level playing field for E-hailing and taxi service, there are some initiatives to improve existing taxi service:
  - New South Wales: wheelchair accessible taxi drivers will be required to complete courses via registered training organisations to demonstrate a level of competence in the safe loading, restraint and unloading of a disabled passenger
  - Singapore: The authority stipulates drivers to complete 25-hour course (covering service quality, safety, rules and regulations of taxi or private hire car and route planning) in the Taxi Academy before driving a taxi
  - Toronto: Some taxi companies mandate its taxi drivers to complete 18-hour training course (covering English assessment, knowledge of roads of the area and customer service)



# The Council's Analysis and Recommendations



## Hong Kong Needs to Improve the Personalised Point-to-point Car Transport Service Market

- Lack of competitive force in the market results in poor service quality
- The rise of E-hailing service increases the market competition. Different jurisdictions have different ways to deal with it, with different pros and cons of the three approaches. A review of regime and amendment of regulations are unavoidable
- The Government's proposed franchised taxi service to respond to the demand for better quality personalised and point-to-point public transport services at higher fares in the community:
  - Three franchised companies with each of them operating 200 franchised taxis
  - Through franchise terms to clearly prescribe the service level and set service standards in respect of vehicle types, compartment facilities, limit on vehicle age, arrangement of mobile hailing applications, service quality of drivers
  - Approach close to those jurisdictions taking protectionist measures for incumbent taxi service providers





#### **Limitations of Franchised Taxi**

- Shortage of service supply, limited effect on consumer choice (at stand and hail market) and effectiveness of pre-booked services
- Franchised operators will need to commit financial sources in investing in vehicle assets, which may weaken financial investment in developing the most effective and consumer friendly online/mobile ordering system
- Restricted employer-employee relationship between franchised operators and drivers, lack of flexibility in supply and competition to increase service quality







## Council's Recommendations: Fully Improve the Personalised Point-to-point Car Transport Service Market

- Under a progressive approach, regulate and introduce E-hailing service to create a level playing field with taxi service
- Passenger safety and operational effectiveness should be the key regulatory focuses, to enable the Government imposes proper enforcement and traffic control
- Utilise information technology to control supply for effective matching service
- Optimise consumer choice to increase passenger satisfaction and protection
- Improve service quality and language level of taxi drivers through trainings







## Workable Regulatory Approaches towards E-hailing service

- Regulate E-hailing services through provisions of three permits:
  - Franchised permit for E-hailing platform



Permit for E-hailing vehicle



Permit for E-hailing "partner" drivers



 If the Government opts to regulate E-hailing operators only, E-hailing operators should also be responsible for monitoring E-hailing vehicles and drivers and meeting the licence conditions







## **Regulatory Conditions for E-hailing Operators**

- Set the maximum number of operators with reference to overseas experience
  - Other jurisdictions: range from 3 to 11, depending on economical benefits, market readiness and response
- Price transparency
  - List out the fare information (surcharge, route taken) to passengers prior to confirmation
- Customer personal safeguards
  - Conduct background security checks on drivers to qualify their competence and suitability
  - Protect passengers with the right driver/taxi owner insurance policy
  - Be responsible for record keeping (each trip, route taken, fare charged) to assist the Government in improving overall traffic
  - Systemically record customer feedback and resolve disputes between drivers and passengers. The feedbacks on specific drivers should also be available to other customers





## Regulatory Conditions for E-hailing Operators (Con't)

- Market segregation between taxi and E-hailing services
  - All journeys would have to be arranged through an E-hailing operator's platform network (i.e. the APP)
  - An E-hailing service provider would not be allowed to pick up passengers from a kerb or taxi stand
  - The quota of E-hailing service (i.e. 1,500 Hire Car Permits) does not apply to taxi
  - Taxis providing E-hailing service should still be charged by meters (except hire-asa-whole service)
- Safeguards against abuse of market power
  - If an E-hailing operator has substantial market power, the App must apply a nondiscriminatory means of allocating between drivers when the supply exceeds the demand







## **Regulatory Conditions for E-hailing Vehicles**

- Make use of the existing Hire Car Permits (Private Service) (648 issued out of 1,500) as the starting quota and as the market develops to increase the market supply effectively
- New hire car permits should last for 7 years
- Permits to vehicles operated by leasing companies to rent to drivers, or to drivers who wish to use their own vehicles

operating

- Hire cars have to be insured to carry passengers and in good condition (not older than 7 years old)
- Different types of vehicle and free pricing mechanism to meet different customer expectations e.g. budget or premium service with special facilities







## **Regulatory Conditions for Permitted Drivers**

- No limit on number of driver permits
- Fulfil background checks (e.g. no serious driving convictions or criminal convictions for violence)



- A minimum of 3 years' driving experience
- Meet language requirements and in good health condition









#### **Conclusion**

- Technological development facilitates industries to create new business models;
   popularity of E-hailing service brings direct impact to traditional taxi industry
- Different jurisdictions faced the challenge with different approaches, each with its own pros and cons, but a review of regime and amendment of regulations are unavoidable
  - Open market competition
  - Progressive approach to introduce competition
  - Protectionist Measures
- The Government proposed the franchised taxi pilot scheme to improve service quality in a protective way, yet the possibility of regulating E-hailing has not been ruled out
- If service quality cannot be improved as expected, the Government shall consider the Council's proposed model seriously and take decisive steps







## **Way Forward**

The market is changing and personalised point-to-point car transport service is a key part of the overall transportation system. It has to bring better consumer protection through innovation, and realise Hong Kong as a smart city in the world!



More Choices Better Service
A Study of the Competition in the
Personalised POINT TO POINT
Car Transport Service Market

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