Summary of Articles about Chinese Dockless bike sharing companies

Since the end of last year numerous bike sharing start-ups have emerged in China all advertising that they do not require docking stations but that their bikes can be left anywhere. This causes numerous problems.

Chaos created by dockless bike sharing

Dockless bike creates chaos and *companies are aggressively competing for territory and investments*. Mobike is operative in 18 Chinese cities with more than a million new bikes (see here). In Shanghai, there are 12 bike sharing companies operating in Shanghai with 280,000 bikes in total, one company has 100,000 bikes but only 50 people to look after those bikes. Recently 4,000 bikes were seized for illegal parking (see here and here). This means that Shanghai has now one shared bike for every 16 people (see here).

Specific problems are *illegal parking, vandalism, theft and inaccuracy of GPS information*. The shared bikes are parked up by the hundred outside shopping malls and metro stations, often blocking the pavement; others, rendered useless by missing saddles, broken locks or scratched off QR codes, are simply dumped in flowerbeds and bushes, hung in trees, buried in construction sites or thrown into lakes and rivers. Tech-savvy thieves have even begun producing fake QR codes for and sticking them over the genuine codes. When users scan the bogus codes they end up, in some cases, transferring money to the scammers. Sometimes users search for a bike and it is not where their smartphone says it is – maybe it's broken or behind a locked gate in a residential compound (see here, here, here and here). Adding to these problems are too few maintenance workers to deal with these problems putting the burden on the local authorities. Another emerging problem are that deposit refunds are paid back late (see here).

Recently, 983 of bikes were inspected in six cities — Beijing, Shanghai, Guangzhou, Shenzhen, Wuhan and Chengdu — and it was found that 19 per cent were damaged, 15 per cent were unlocked, 12 per cent had been stolen for private use and 2 per cent were being ridden by children under the age of 12 (see here).

Global, especially European, expansion

Several of the Chinese dockless bike sharing companies have stated that they wish to penetrate the global market and *want to make bike ownership obsolete* (see here and here).

- In June mobike launched in *Manchester* (see here).
- Around the same time, ofo began trials in *Cambridge, Oxford* and the US as the company decided to aggressively enter countries outside of China (see here and here).
- In the summer several companies launched in *Amsterdam* without permission with thousands of bikes but the city banned them starting in September (see here and here)
- In June oBike launched in Zurich but people are not happy about it (see here and here
- In the beginning of August Mobike launched in in Italy in *Milan and Florence* (see here and here)
- At the end of August, of also launched 200 bikes in Vienna, Austria for a pilot project (see here).
- In August, oBike launched in Munich and people are already annoyed with the 7,000 bikes and consider it
 an invasion, but legally not much can be done to get rid of them (see here, <a href="
- In September, mobike launched in London joining oBike and of in the city (see here, here, here and here).

• oBike launched in Rotterdam but after issues stricter roles have been implemented such as geofencing to limit illegal parking (see here)

However, many local city officials and transportation advocates overseas have expressed rejection to the station-free bikes, for fear that the bikes would be parked disorderly or stolen, leading to congested sidewalks or obstructed streets and bringing new burdens to local transportation departments (see here and here and here). Another big concern for citizens and cities is what the companies will do with the data that they gather during the bike rides (see here).

And these *problems have already materialized*. Various city councils in London asked oBike to withdraw their bikes considering them a "yellow bike plague". Vandalism as well as illegal parking has been a big problem in Manchester with 20 reported incidents in the first 10 days (see here and here).

In the meantime, ofo is doing preliminary research in multiple European countries (see here). To reach its goal of operating 20 million bikes in 20 countries by the end of the year. Mobike wants to more than triple its coverage to 100 cities (see here).

Economic Problems

Despite numerous bike sharing companies emerging in China they often make no economic sense in the long-run as the business model *does not offer economies of scale* and they are very *capital intensive* (see here). Bike shares create constant costs, requiring more bikes as the user base grows, coupled with equipment damage that may not be easily punishable, is apt to force bike sharing companies to raise their prices and reduce their competitive edge. Compared to ride sharing services that allow individuals to use their own cars when driving customers, bike sharing *requires more ongoing capital investment*, especially as bikes only have a two to three year life span (see here).

Some bike sharing companies have already gone bankrupt. For example, Wukong Bikes lost 90% of its bikes within the first five months because it did not incorporate GPS systems into its bikes (see here). This shows that shared bikes are entering a stage where newcomers are being squeezed out of the market almost immediately. The shared bike industry is a process of *homogeneous competition* because customers know that there are no significant technical differences between brands. Thus, the competition lies in how quickly you can get your products and operations onto the market and its scale. This, in turn, has made shared bikes a *funding-intensive industry* that best serves the interests of big hitters (see here).

The scale at which China is deploying sharing companies, is leading to **overcapacities** in many sectors, especially in the biking sector. Right now, there is a high risk of excess capacity caused by blind investment and expansion of the supply chain. Bicycles and e-bike sales in the market are decreasing rapidly, further increasing the excess capacity. Mobike and Ofo have already launched 30 million bikes into market, however the related data shows that there was only 25 million bikes launched in the domestic market from China annual output before. In addition, too much investment is being pumped into this sector in relation to its relatively small market size (see here).

External Funding of Bike sharing companies

Since the end of last year investors from all around the world have been heavily funding these bike sharing companies leading to Mobike and Ofo raising a combined \$1.3 billion in new funding in June (see here).

Already in January this year, Mobike had received \$215 million in funding from big multinationals and entered into a strategic partnership with Foxconn (see here). In February this funding was increased to a total \$300 million with the help of Temasek Holdings (see here) and in June it had reached almost \$1 billion (see here). By June, ofo had reached funding of about \$700 million with the help of a consortium led by Alibaba and the company believes it can be profitable by the beginning of 2018 (see here).

One of the main reasons for others to invest into bike sharing companies is data mining, especially GPS and mobile payment data is of high interest for investors (see here and here).

Threats to the bicycle industry

Bike sharing companies are also directly threatening the bicycle industry by *disrupting supply chains, driving up the price of bike components*, making innovation and transformation in the industry difficult as well as *hindering brand awareness*. These effects can especially be felt for smaller bicycle manufacturers.

Some bike sharing companies produce their bikes with Chinese manufacturers, disrupting their supply chains and others like mobike have built their own production site that has an *annual production capacity of 36.5 million bikes, nearly the third of total global production* (see here).

Added to that is the effect that if a person can ride a bike without having to worry about where to park it, or whether it will be stolen, there is little desire to own a bike of one's own (see here and here and here). As a result the bicycle and e-bike sales in the Chinese domestic market are already decreasing, some bike stores have already closed down, for example Giant and Merida, and more Chinese companies are looking abroad to sell their products (see here).

Moreover, there are too many bike-sharing suppliers and many are not profitable but while bicycle factories with thin profit margins will go bankrupt if they cannot maintain sales, the *bike-sharing companies are operating more like technology companies, making big losses with the backing of deep-pocketed investors* (see here).

Regulatory Reaction

PEBSS, the EU Platform on bike sharing, warns about the spread of the Chinese dockless bike sharing companies and their *disruptive operating mode* as they do not want European cities to be swamped with cheap public bikes. Thus, the platform is giving specific recommendations to local governments (see here).

Also China realized that more rules are needed to bring order back into the streets. As a result, the country issued a new regulation at the beginning of August with *guidelines to regulate bicycle and traffic standards*, *punishing individuals* for illegal parking or vandalism, *require local governments to ensure an even distribution of bikes*, encourage companies to set up electronic fences and make sure that users are more than 12 years old (see here and here).

More stringent criteria exist in some cities where for example one maintenance worker is required for every 200 deployed bikes. Shanghai, Beijing, Shenzhen, Chengdu, Wuhan and Hanzou have banned new bike placements as many bikes are being seized for illegal parking creating a big burden for the local administration (see here, here, here and here). Also Shenzhen has added tougher rules by stopping the addition of new bikes and requiring companies to properly dispose of haphazardly parked bikes within 30 minutes. If companies fail to respond to misplaced bikes, these bikes will be confiscated. In addition, all bikes need to have smart locks installed and each bike must receive maintenance and repairs every two months (see here).