Integration in Chinese E-Commerce and Public Policy Concerns: An Analysis of Alibaba Group

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ABSTRACT

Established in 1999, Alibaba's market value reached 231 billion USD in 2004. Taobao.com, including Tmall.com, is Alibaba's consumer-to-consumer portal. In March 2013, the combined gross merchandise volume (GMV) of Taobao and Tmall exceeded 1 trillion CNY. Alibaba Group has developed its own third party payment – Alipay, based on big data analysis - to ensure a safe and clear payment environment for the privacy concerning customers. The logistics industry bonds with online sales tightly. A number of logistics companies seize the opportunity and gain benefits from the booming sales volume. This paper aims to explore the integration of e-commerce, third party payment, and the logistics industry. However, besides the prodigious development of those industries, they have their own This paper analyzes the limitations. limitation Taobao.com, Alipay, and the logistics industry as well as the dilemma they are facing. Important public policy concerns are discussed accordingly.

Keywords: Adaptation, Innovation, Technological Change and Government Policy

JEL Classification: O31, O33, O38

1. Introduction

The economic transformation in China never lack vivid cases since the first five-year Plan initiated decades ago till the New Normal, which was proposed by the new generation of leaders. Among abundant innovative cases, there is no doubt that the establishment of Alibaba Group with its development trajectory is one of the most outstanding cases in the flow of powerful transformation trend.

The Alibaba Group mainly focuses on the e-commerce sector and has successfully established a complete platform for online sales. In the past 10 years, Alibaba Group and its subsidiary corporations actively participated in the e-commerce in China from scratch, and now it pervades in the Chinese daily life.

TaoBao.com, a subsidiary corporation of Alibaba Group, acts as a consumer-to-consumer web portal. It shares the same features as eBay.com, listing hundreds of million products on an online platform. On Taobao.com, millions of sellers and buyers are actively participating in the business activities. Those players, including sellers and buyers, are the basic two parties of the online sales industry.

In addition, Alibaba Group has developed a third party payment – Alipay, based on big data analysis – to ensure a safe and clear payment environment for the privacy concerning customers. As the scale of the transaction on Taobao.com becomes larger and larger, the registered users of the website are eager to have a secure payment method to ensure the security of their payment. Alipay was designed to fulfill the needs of the registered users.

The remarkable increase in online sales also leads to the development of other industries. The logistics industry is bonded tightly with online sales. For most cases, the performance of logistics directly influences the customer

loyalty to the online sales company. A number of logistics companies seize the opportunity and gain benefits from the booming sales volume. The logistic companies have become the fourth party which integrate in the "melting pot" of online sales.

Notwithstanding the outstanding growth trajectory, the platform, the third party payment method, and the logistic company have their own limitations. Although Alibaba's gross merchandise volume is astonishing, its platform in terms of market mainly remain domestic. The situation is similar for Alipay and logistic industry as well. All the business activities are limited in mainland China. Participants from Hong Kong or Taiwan are rare, let alone the rest of the world. The saturated domestic market leads to an even fiercer competition. Despite competition being favored by free market, excessive competition is not. The excessive competition over Taobao.com squeezes the living space of small, individual sellers, and it has a negative spillover to the logistic industry, squeezing the profit out as well.

This paper analyzes the limitation of Taobao.com, Alipay, and the logistic industry as well as the dilemma they are facing. Moreover, the dramatic change in Chinese ecommerce attracts many researchers' attention. However, few papers are dedicated to explore the integration of ecommerce, third party payment, and the logistics industry. Thus, this paper aims to explore the integration of those different sectors and discusses public policy concerns in the industry.

2. Background Review and Conceptual Framework

Established in 1999, Alibaba's market value reached 231 billion USD in 2004. The success of Alibaba seems to indicate the bright future of e-commerce in China. The

business-to-business, business-to-consumer, and consumerto-consumer sales services via web portal provided by Alibaba contribute to the Chinese economic transformation in a significant way.

According to Chen, Seong and Woetzel (2015), Taobao.com has 750 million of product listings and has become one of the 20 most-visited websites globally. In March 2013, the combined gross merchandise volume (GMV) of Taobao and Tmall exceeded 1 trillion CNY¹. The goods and services listed on Taobao.com are very diversified, ranging from physical commodity to virtual services. Different sellers compete on the same platform.

Although the sale figure on Taobao.com is phenomenal, Taobao.com is more enthusiastic in building a platform for small, individual sellers than for wholesale giants. The policy imposed by the platform is called "little and beautiful" by the CEO Jack Ma. Alibaba Group is always more into cultivating a "wonderland" for small, individual sellers. This could explain why the entry conditions for the sellers on Taobao.com is relatively low compared to other online sales platforms. The low entry conditions certainly attract small entrepreneurs to invest and get involved. As increasing number of small entrepreneurs see and seize the opportunity, the competition turns fierce or even cut-throat.

As Taobao.com facilitates every aspect of life, the increasing GMV urgently requires a safe and transparent payment method for users. In its initial years after Taobao.com was first established, the payment methods between sellers and buyers were determined by themselves. This was not perpetually feasible. Sometimes, however, the payment method was decided arbitrary by the seller part and it might potentially lead to the inequity to the buyers.

¹ As of 24th May 2017, 1 USD is approximately 6.9 CNY.

In order to cope with the problem, Alibaba launched a third party payment which was Alipay in 2004. Similar with PayPal, Alipay focused on constructing a trustworthy third party payment platform for the registered users on Taobao.com (Li & Liu, 2007). After Alipay was launched, it became the only officially accepted payment method if consumers wanted to shop on Taobao.com. Alipay then extends its service to other fields, especially the financial sector, and really dominates the online payment market of China (Lu et al., 2011).

Alipay surely offers a relatively safe payment environment to the users, but the transparency issue and potential risk requires follow up. In 2013, as a pioneer, Alibaba introduced big data analysis into the system. The company has built a fraud risk management and monitoring system based on real-time big data analysis (Chen et al., 2015). The system can analyze the consumer behavior and monitor all the transactions then rate the user safety level. Buyers and sellers can check the safety level of each other before engaging in business.

In addition to a safe and transparent system, consumers also ask for a safe, prompt parcel delivery since the majority transactions on Taobao.com are physical commodity trades. The website accounted for over 60% of the parcels delivered in China by March 2013.² Due to the high GMV, the performance of logistic industry will certainly influence the customer satisfactory and their loyalty (Ramanathan, 2010).

The logistic company is facing excessive competition as well. Similarly, because of the low entry condition and low initial investment of this industry, many logistic companies are forced to lower the cost to attract customers. Although the

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² Berkeley, J. (2013, March). The Alibaba Phenomenon. *The Economist*. Retrieved from www.economist.com

amount of parcels generated by online sales is increasing, the marginal profit of logistic companies is decreasing (Ying & Dayong, 2005).

Competition is known as the "best method of allocating resources in a free market". Competition certainly has many virtues such as lower costs and prices for goods and services, better quality with innovation, greater productivity, and so on and so forth (Aghion et al., 2001). Stucke (2013) indicates that the competition itself, however, is no blessing, especially when the regulations are lacking. In this case, too much of competition on Taobao.com and logistic industry squeezes the living space and marginal benefit of the existing players, while low degree of competition facing by Alipay might potentially leads to monopolization. Considering the immaturity of this new market, the government has not imposed strict regulation yet. Thus, lack of regulation counteracts the market, worsening the situation surrounding existing all concerned parties.

3. Case Analysis

3.1.Taobao.com (Tmall.com inclusive)

Taobao.com was originally launched by Alibaba to provide consumer-to-consumer business to small, individual buyers and sellers. Tmall.com, on the other hand, is the business-to-consumer complement to Taobao.com. Tmall.com establishes itself as the marketplace for quality brand name goods for consumers.

Every registered user can open her or his own online store on Taobao.com for free. The low or no entrance requirement quickly attracts plenty of small entrepreneurs to invest on the virgin land. While on Tmall.com, most of the players are companies and groups including multinational companies such as Apple, P&G, and local Chinese brand; i.e. Haier and Gree Electric. The GMV of Taobao.com and Tmall.com kept increasing exponentially, especially in the recent years.

From the Wall Street Journal news released on November 11th, 2015, the gross merchandise volume rocketed on every Singles' Day, which is on 11th November, of the year and the scale of daily gross merchandise volume rocketed as well. Singles' Day (or Bachelor Day) is an antivalentine joke widespread in the internet. However, Alibaba quickly perceives the Singles' Day as an opportunity and sets the November 11th as the biggest shopping festival on Taobao.com and Tmall.com. On Singles' Day, almost all shops listed on Taobao.com and Tmall.com offer huge discounts or coupons to attract consumers to shop online. The scale of Singles' Day is now larger than Cyber Monday in United States (Lin & Li, 2005).

The huge volume in sales indicates that Chinese consumers have adopted to the lifestyle of online shopping. In the past consumers might still concern about the quality of the goods and services online because they are not able to physically examine their quality. But as more and more consumers realized the fact that the quality of goods purchased online is the same as those purchased in the supermarket while the price for goods listed online could be lower, the market structure changed.

Taobao.com certainly facilitates consumers' daily life and they also change the market structure in a subtle way. Nevertheless, it is definitely not a wonderland for any new entrant wishing to avail the opportunity. In addition, the success of former players stimulates the public's nerve and the society gets Taobao's advocacy. Having faith in themselves that they can also generate high revenue, new players rush in the play field, causing the competition to become fiercer than ever.

The pioneers certainly gained huge profit from online sales by low physical investment at the first development stage when the platform was not mature. It was also because of the preoccupation of those former players, the living space of the new players became narrower. Majority of the new players cannot sustain themselves in the compressed space. There is an illusion that with the low access condition every player can play equally on the play field, but actually players are not equal.

The procedure of finding targeted goods on Taobao.com might be a reason as to why starters cannot sustain themselves. Consumers can search for goods and services by browsing different categories or searching by keywords. So, the automatic listing order that comes up after consumers type the key words and click on search becomes crucial. However, the fact related to the criteria used to determine the order of product listings show on the consumers' screen is unknown as the filter mechanism is not transparent to the public. Anyhow, it is certain that the newly opened store is rarely shown up on the first page. The limited chance of newly opened stores being visited online puts an end to the hope of new players- The "Taobao Dream" bursts.

Other than the burst of "Taobao Dream", Taobao.com faces with another limitation that the market is limited domestically. Although the former players gain huge benefit, the benefit comes from the domestic market instead of international market. It has been over a decade since Taobao.com was established, which also implies that the domestic market is somewhat saturated. In order to survive in the cut-throat competition, online sellers choose to lower the price so that they can increase their sales and competitiveness. The public has observed the unreasonable low price of goods and services online due to excessive competition. If this unhealthy and non-sustainable situation

lasts in a long run, the profit of all the sellers online might be compressed.

3.2.Alipay

As for the third party payment method introduced by Taobao.com, Alipay did not get much attention when it was first launched. In fact, a lot of Taobao registered users raised some safety concerns associated with this new payment method because in the traditional concept, bank is the most accountable agent when it comes to money transfer while Alipay was apparently not related to any bank.

The number of users increased exponentially after Alipay started to impose ID-based account establishment system. The system requires each Alipay account holder to match their account with a national ID. In this way, Alipay can minimize the risk in transaction by verifying the identity of users before any transactions take place. Moreover, it is much easier to execute regulations or prevent fraud when each account is identified. There is still a fraction of people who still worry about information leakage. This mindset changes as some users observe the safety level of Alipay to be relatively high, while others realize that the benefit of owning an account outweighs the risk.

In general, it can be said that the services provided by Alipay experience has shifted towards diversification. In its initial stage, it could be used only on Taobao.com. However, it has now extended its application to physical stores, top-up services, payment of utility bills, or calling an Uber. In addition, Alipay has its own financial services in which users can deposit money or apply for small amount of loan. The services offered by Alipay penetrate every aspect of residents' daily life.

After Alipay launched its mobile service, it dominated the market share of mobile payment in China in 2013. The market share remained almost the same for the year 2014 and 2015. Although the utilization of Alipay spreads all over China, according to a survey, 74% of the users worry about security and transaction risks when using it. The FinTech, however, is a relatively new concept to Chinese customers as they have not encountered with such situation or equivalent alternative choices before. Thus, it seems as if they have to use Alipay despite the fact that they are anxious of its security. In order to improve its safety level, Alibaba introduced big data analysis.

Big data analysis, proposed in 2011, is based on the technology which can synchronize and analyze any collection of data sets which are large, complex and unstructured. Relying on big data analysis, Alibaba has built a fraud risk monitoring and management system (Li et al., 2014). The main usage and implication is on the transactions via Alipay. The whole system is based on real-time data analysis of user behaviors using machine learning which can accurately predict potential fraud in transactions (Yang & Lang, 2014). The accountability of big data analysis utilized by Alibaba stands on the ground that Alibaba does not only have data from Taobao, Tmall, and Alipay, but also from partners such as Gaode Maps and other subsidiary corporations. The integration of big data generates a big web to ensure the accuracy of prediction.

It is plausible that the big data analysis is accountable in fraud prevention. However, many users still address their concern about the security of Alipay. Most users use it on mobile phone so the account seems to be insecure because individual mobile phone can be accessed or lost easily. On other hand, the utilization of Alipay is so widespread as users who worry about the security issue cannot give up the

convenience of Alipay. Thus, these users are facing the dilemma which they are not certain if big data analysis can be helpful or not. Until now, there is no news release about the frauds caused by Alipay, but there are fraudulent cases which utilize Alipay as a transaction method. The victims cannot blame Alipay. However, it is undeniable that the virtues of Alipay clearly facilitate the fraud.

4. Logistic Industry

The booming of online sales will certainly inject zeal into the logistic industry. It is easy to relate the logistic to online sales since the majority of online transactions are associated with trading of physical goods.

According to State Post Bureau - a governmental agency managing logistic companies in China - the number of packages delivered in China increased by 56.4% to 5.77 billion CNY in the first quarter of 2016, compared to 41.7% growth in the same quarter of 2015. Furthermore, around 80% of the packages delivered each day are generated from online orders according to the statistics from Alibaba. This can then be used to set the number of packages delivered as a key indicator of E-commerce growth. From the indicator, it can be seen that the growth of E-commerce is relatively robust.

Since large amount of packages are delivered domestically rather than internationally, there should be a significant difference between domestic and international shipping rates. For instance, for S.F. Express- the largest logistic company in China, the cost of domestic shipping starts at 17 CNY, which is around 2.46 USD. On the other hand, the cost of international shipping starts at 188 CNY (approximately 27.25 USD), which is higher than domestic rate by around 10 times. Due to the relatively high shipping

cost, many sellers on Taobao.com are not willing to ship overseas.

High international shipping cost limits the opportunity of online sales from expanding beyond its border. As it is mentioned earlier in the paper, Taobao.com focuses mainly on domestic market instead of international market. It is evident that the shipping rate might be one barrier for Taobao.com to extend to a global scale.

The bureau also states that the average shipping cost per parcel has declined by 8.8% to 13.4 CNY compared to 14.7 CNY in the same period last year. It is a favorable sign at the first glance. Unfortunately, the decline in cost might not imply the productivity of the whole industry has improved but the labor cost is compressed. The improvement of productivity will require longer time and much more effort than to reduce the labor cost of most companies. So, for most of the logistic companies, the excessive competition results in the reduction of labor welfare. The low labor welfare may generate further effects on low level logistic firms but the immediate effect is not evident yet.

Chinese government has introduced policies regarding the standard of delivery vehicle in Shenzhen because some vehicles used for delivery have potential safety hazards. The policy, however, is denied by some people as they think that the government want to limit the development of logistic industry in disguise of policy implementation. This misinterpretation reflects the situation of excessive competition in the logistic industry. Additionally, it implies that the industry really needs market supervision by an authority.

5. Conclusion and Public Policy Concerns

The booming of e-commerce in China certainly attracts many attentions. Alibaba Group plays an important role in it. Taobao.com and Tmall.com are two of the web portals operated by Alibaba Group, aiming to provide consumer-to-consumer and business-to-consumer services among Chinese consumers. Goods and services listed on the website are really diversified, which facilitate consumers' daily life. However, it is limited within the mainland China alone as its market still remains domestically instead of globally. Other than that, the excessive competition squeezes the profit out and chokes the new players.

Alipay, the third party payment method launched by Alibaba Group, was introduced initially as a transaction platform for Taobao users. Although it dominates the market share of mobile payment in China, users are still concerned about the security and safety issues for the nature of online payment. To cope with that problem, Alibaba Group introduced big data analysis to build a fraud prevention management system. Since big data analysis is a relatively new concept to Chinese customers, its effect is still not evident.

The booming of e-commerce benefits the logistic industry which is the fourth party participated in the field. As a key indicator of the growth of e-commerce, the amount of shipped parcel provides new opportunity for logistic industry but at the same time generates problems related to the welfare of employee which cannot be guaranteed. Moreover, it is also hard for international logistic companies to enter the market.

The government still considers the online sales industry as immature, but excessive competition and the problems it entails have attracted the authority's attention. The report issued by State Administration of Industry and Commerce (SAIC) indicated the defective rate of the goods on Taobao.com reached 62.75% in a recent sample survey. The report also implied that high defective rate was due to the low entry conditions, excessive competition, and lack of quality check or effective supervision from the platform. In response to this report, Taobao posted a letter on its homepage, stating SAIC was cheating in the sampling. The truth has not been clarified to the public yet. However, it is clear that free market with no regulation cannot be relied upon as the defective rate rings a bell, calling the authority to impose regulations on the market.

Although Alibaba Group has launched big data analysis, the users are still concerned about the security issue of Alipay. The users are facing a dilemma that they are not willing to give up the benefit brought about by Alipay, while the security issue seems to be unsolvable in the short run. It is also questionable whether the regulation imposed by government will be helpful or not. As for the short run, the clear and safe payment environment is contingent upon users' self-discipline.

As for the logistics industry, Chinese government tried to impose some regulations to standardize the whole industry. The regulations, however, are mainly executed by the local government instead of the central government. The public authority does not seem to express a wish to intervene the industry at the central government level.

In conclusion, behind the booming of online sales in China, there exist both risks and opportunities. The four major parties participated in the competition gain the bonus while facing many limitations. The government and related public agencies should catch up and impose regulations in order to ensure a healthy and sustainable environment.

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