

## The Definition of Payment Service Relevant Market Under the Perspective of Antimonopoly

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### Abstract

With the technological progress and development of payment requirements, payment services become more diversified. At present, China has basically established a multi-level payment service market, which has broken the monopolistic situation of banking payment services, gradually intensified competitions, and brought about challenges to antitrust enforcement agencies. In the face of payment service homogeneity, user lock-in effect and characteristics of bilateral market, the traditional definition of relevant market has been weakened and restricted. This article explores new paths to properly define payment service relevant market: in accordance with the business scope approved by financial supervision departments, we should reasonably define payment service market based on payment scale; meanwhile, pay attention to investigate payment service providers and rationally define the competitive market scope from a technical research and developmental perspective.

**Key words:** Payment service; Relevant market; Antimonopoly

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### INTRODUCTION

Today payment service has progressively developed to be a very important industry. The gradual diversification

and marketization of participatory bodies and the increasing opening of payment service market have led to an increasingly competitive market<sup>1</sup>, which is under the dual monitoring of financial supervision departments and anti-monopoly enforcement departments. A proper understanding of payment service and efficient segmentation of payment service market not only helps supervision departments effectively monitor the behaviors of payment service providers, but also help the anti-monopoly enforcement play a role of competition adjustment in the payment service market.

### 1. THE DEFINITION OF PAYMENT SERVICE MARKET PLAYERS

Briefly speaking, payment service means that the agencies authorized by the State provide monetary fund transfer services between the payer and Payee. With the consistent development of financial industry and progress of technology, the form of money is constantly evolving, from shells to metal coins, papery money and electronic money. No matter what form it is changed to be, its role of payment intermediary in financial transactions is not changed. As long as there is a need for fund transfer, payment service will come into being. As a very important financial activity, the participatory bodies can be briefly classified into two categories: one is the subject to provide payment service, the other is the receiver of the payment service.

#### 1.1 The Subject to Provide Payment Services

The subject to provide payment services refers to the financial institutions and non-financial institutions

<sup>1</sup> In August 2013, Unionpay intended to “incorporate” third-party payment services in order to prevent risks. Alipay as a third-party payment provider announced its offline POS payment system to entirely withdraw from the market. The competition of interests between the two parties has become increasingly intense.

authorized by the State in accordance with law, out of which financial institutions can be sub-classified into banking financial institutions and non-banking financial institutions. It is no doubt that since the establishment of bank, payment service exists as the missionary business of bank. Non-banking financial institutions refer to the financial institutions without the name of “bank”, which are mainly engaged in trust and investment, financial leasing, securities underwriting, brokerage, insurance and other non-banking financial services. That non-financial institutions have become providers of payment services are the result of the continuous development of Internet technology in recent years, and are also the product subject to the gradual expansion of payment service needs in the market. After the implementation of *Non-Financial Institution Payment Service Management Regulation* in 2010, non-financial institutions have become legal payment service providers. The newly emerged non-financial institutions entered the payment service market as payment service providers and used electronic means to provide foreground payment services or background operational services for market traders. People call these non-financial institutions as “third-party payment providers”.

## 1.2 The Receiver of Payment Services

The receiver of payment services refers to all kinds of legal persons, natural persons and other organizations who need funds transfer in the market economic activities, but this classification of civil legal bodies is of little significance to the understanding of the connotation of payment service receiver, and people should regard payment service receiver as financial consumer. At present, there are a lot of controversies on this issue. The denial view holds that clients of financial enterprises are not consumers but investors, and the legal protection on the two are essentially different, thus the concept of financial consumer does not exist (Liu, 2010). The affirmation view holds that financial consumer is a role evolution from investor to consumer under the trend of financial innovation and mixed operations (Chen, 2011), and some people tend to limit financial consumer as the general public participating in financial market except for legal persons (Wang & Wu, 2010). These differences render an uncertainty about the existence of the concept of financial consumer, leaving the connotation of the concept of financial consumer even more inconclusive. In fact, this situation helps the researchers of finance and law continue to explore and improve the existing legal norms based on the reality. Local resources not only exist in history, and a variety of informal institutions which have been formed or are in bud development in contemporary social practices are more important local resources (Su, 1995). Therefore, when we study the financial payment service market, we should put more focus on the existing social practices in our

country. The receiver of payment service is not limited to natural person consumer, any market player who does not have a financial payment license shall reply on a qualified payment service provider to complete its payment activities. Now the participants in payment service market are quite diversified, not only the traditional finance companies are involved, along with the continuous development of information technologies, many market players in Internet industry have also joined the team of payment services.

In the payment service market formed by interactions among the above participants, like other financial products or financial services, payment service is a non-tangible product service provided by legally authorized institutions, which provide a convenient payment platform for smooth transactions of the whole society. Our country’s central banking payment system consists of seven payment systems (Yang, 2013, p.7). The inner system of banks is the channel for funds flowing and clearing. China UnionPay as a licensed clearing agency provides payment services in the range of interbank payment services. With the rise of e-commerce, non-financial institutions give a full play to their advantages of flexible mechanisms with the help of Internet, mobile communications and other newly emerging information technologies, and provide a rich variety of personalized payment products based on their strong customer adhesion, playing an increasingly important role in the small retail payment service market (Liu, 2013). Currently, our country’s traditional pattern of payment services dominated by banks has been broken, and payment methods are becoming increasingly rich and personalized. A multi-level payment service market has been basically formed.

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## 2. THE DIFFICULTIES THAT TRADITIONAL METHODS OF DEFINING THE RELEVANT MARKET HAVE IN PAYMENT SERVICE MARKET

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Payment service market is becoming more competitive. In recent years, many payment service providers have taken various measures to cope with market competitions. These actions not only draw attentions from the supervision authorities in the payment industry, but also receive concerns from anti-monopoly enforcement institutions. When defining the relevant market, demand substitution analysis can be performed. When a market scope is not clear to providers or when it is not easy to define, we can follow the analysis of “hypothetical monopolist test” to define the relevant market. However, these traditional methods of defining the relevant market in payment service market are faced with some difficulties.

## 2.1 Homogeneity and Lock-in Effect<sup>2</sup> of Payment Service Is Weakening the Efficiency of Demand Substitution Analysis

From the considerations of the characteristics of payment service, payment service itself does not have the characteristics of periodicity, seasonality and duration, thus it can be investigated from the aspects of the relevant product market and the relevant geographic market. The payment service of transferring monetary funds must obtain appropriate qualifications from the financial supervisory authorities, so the payment service market itself has a barrier for entry. Different payment service providers overlap their services. Third-party payment institutions, telecommunications providers, Internet companies are able to provide payment services to meet the demands of all types of financial consumers after obtaining payment service qualifications. Especially in the field of electronic payments, homogeneity is the most obvious. Due to the overlapping and interdependence of the main business of payment service providers, financial consumers cannot ascertain the scope of payment service relevant market because of the enhancement of alternatives, which instead lead to the blur of market boundaries.

The financial consumer who has accepted payment service has a certain dependence on the service provided by the service provider. This lock-in effect originates from the network external characteristics of payment service, which makes the service provider with a large number of users easier to have more potential users. The financial consumers who are accustomed to the services provided by certain financial institutions will definitely take a certain time and other transfer costs to convert to another payment service provider. The analysis of such concern will narrow the definition of payment service-related market.

On the other hand, the reality that financial consumers have accepted multiple services from different service providers does exist massively. In defining the relevant market, we cannot judge according to the use value of payment services, otherwise it will cause the same relevant market owned by all payment services, which will make the definition too broad. So how to find a balance point between the homogeneity and lock-in effect of payment service becomes very important, and only so the demand substitution analysis can work most efficiently.

## 2.2 The Bilateral Market Characteristics of Payment Service Limits the Effectiveness of the Hypothetical Monopolist Test

The aforementioned payment service user lock-in effect

is the significant performance of the bilateral market characteristics of payment service. Bilateral market has network externalities, and if a payment service provider has more users, it has a greater value (Michael & Shapiro, 1985). In bank card market, the number that merchants use banking services depends not only on the number of the same type of merchants, but also on the number of bank card-holding consumers. Though merchants and consumers are both users accepting bank card services, the platform which provides bank card services sets different prices for them, namely, take the low-cost or even free strategy to the party with stronger externalities so as to attract more users to participate in the platform to trade.

As the party with stronger externalities, financial consumers are usually the object of free policies of payment service providers. Merchants in the third-party payment market cannot transfer the costs paid to the platform to consumers, and can only make a choice based on the charge level and charge structure of payment platforms (Rong, 2012). Problem occurs precisely on the price rise during the test, since the former hypothetical monopolist test was aimed at commodities in the traditional unilateral market. How to assume a price rise, is it a separate rise to users on one side or a rise to both sides, or is it a rise to one side while a lower price to the other side. Any test method of investigating the relevant market should not be contrary to the law of the market economy. If we simply increase the service charge by separating either side in service bilateral market, the test findings are not in line with the law of the bilateral market, so the hypothetical monopolist test will become meaningless.

## 3. THE EXPLORATIONS OF OVERCOMING DIFFICULTIES TO REASONABLY DEFINE THE RELEVANT MARKET OF PAYMENT SERVICE

Although the traditional definition methods are facing some difficulties in defining payment service market, they are not a complete denial of the traditional definition methods of relevant market in anti-monopoly law. What we need to resolve is to combine the characteristics of payment service market to appropriately apply the definition methods.

### 3.1 Appropriately Define Payment Service Market Based on Authorized Business Scope and Payment Size

Payment service market has the characteristics of bilateral market, and is at the same time strictly regulated by financial supervision authorities. Currently a multi-level payment system has been basically formed in China. After People's Bank issued *Non-Financial Institution Payment Service Management Regulation* in June 2010, a series

<sup>2</sup> User lock-in effect means that even the user knows the existence of a better or best technology or product, he won't give up the technology or product being used, because the best (better) technology (product)'s value for the user at this time is much smaller than the technology or product that he is using. If the user shifts to the former he needs to pay a large shifting cost.

of documents in terms of prepaid card standardization, excess reserves and Internet payment have also been issued successively. Payment institutions should be engaged in business activities in accordance with the approved business scope of *Payment Business License*. Non-financial institutions as the intermediary between payers and payees offer monetary fund transfer services including online payment, prepaid card issuance and acceptance, and bank card acceptance, etc. An institution which has not been authorized with a certain type of service qualification can easily be excluded from the relevant market by using the demand substitution analysis. Therefore, the first step to define relevant market of payment service is to associate with financial supervision authorities to conduct demand substitution analysis onto the authorized business scope of payment service providers.

For payment institutions with the same authorized business scope we should define their relevant market in combination with the specific market size. Demand substitution analysis is a qualitative analysis on the “quality” of payment services, while hypothetical monopolist test is a quantitative analysis on homogeneous payment services. The price test method is not so easy to grasp for antitrust enforcement institutions, because the previously mentioned payment service bilateral market characteristics limit its applications. How to solve this problem is certainly not the expertise of law enforcement institutions, which require the economic experts in this field to give a generally accepted conclusion. Thus, faced with the current market size of payment services, law enforcement institutions is able to investigate it more rationally if from the perspective of payment transaction size. It's not difficult to obtain the data of payment transaction size, because financial supervision authorities supervise the transactions at any time, therefore it's relatively easier to obtain the data. These data not only reveal the size of the relevant market transactions, but also provide the market share of different payment institutions. Thus it can be seen that with the fact of data, anti-monopoly enforcement institutions are able to determine the scope of payment-related service market more quickly.

### **3.2 Investigate Payment Institutions and Reasonably Define Payment-Related Service Market From a Perspective of Technological Research and Development**

Monopoly is just the result of technological innovation, and also the beginning of a new round of more intense competition in technological innovation (Jiang, 2008). The new technological revolution has brought about far-reaching impacts on electronic payment methods, while the continuous demands for financial services have led to continuous innovation and development of payment methods. The form of online payment has become more and more diversified. Recently, Alipay has opened a new

method of fingerprint payment. In the case of a high homogeneity of payment services, carefully dividing the relevant market of payment service from a technical point of view can help define the scope more clearly and accurately.

In the implementation process of a new payment service method, technology plays a vital role. Mobile payment integrates terminal equipment, Internet, application providers and financial institutions to provide users with monetary payments, fee payments and other financial services. With the growing competition in the mobile payment industry, large-scale mobile payment providers conduct mergers, integrations and capital operations more frequently. Outstanding domestic mobile payment providers pay increasing attentions to the study of the industrial market. Therefore payment service competition is not a price competition in traditional market, but evolves to be a technological innovation competition. This means that a provider who has the ability to innovate a new type of payment method which meets the financial needs of consumers it will be able to quickly occupy the relevant market. The strength of technological innovation capability of enterprises relies heavily on the amount of capital investment in research and development. In general, if an enterprise invests more capital in research and development, it has stronger innovative abilities, has more advantages in product costs and functions, is easier to attract more users, and is even more likely to be in a dominant position in the competition (Ye, 2013). If some payment providers invest a lot of capital in the technological R&D of a similar payment method, we can classify these providers as a relevant market. Especially when the Internet industry companies enter payment service market, in order to survive in the fierce payment competition, they are stimulated by the high degree of homogeneity of services to carry out frequent technological innovation contests. Payment providers all own the intellectual properties of the technologies involved in their corresponding payment methods. At present, the domestic industry standards of mobile payment are not unified. If a payment provider grows rapidly and its technology becomes a key technology, then to clearly identify the payment providers which carry out similar technological researches to belong to the same relevant market is significant for anti-monopoly enforcement institutions to conduct an anti-monopoly investigation on the monopoly behavior related with this key technology in the future.

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## **CONCLUSION**

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Under the influence of technological progress, the methods of payment service become more diversified, and no matter what kind of advanced payment method people use, the essential attribute of financial settlement of

payment services remains unchanged. Although the fierce homogeneous competition in payment industry has broken the monopoly of banking payment services, in the case of future coexistence of a variety of payment methods the possibility of anti-monopoly behaviors still exists. Anti-monopoly enforcement institutions should define anti-monopoly behaviors by keeping up with the times, break the limitations which the traditional definition methods of relevant market may encounter in the new payment service market, combine with the characteristics of payment services under the strict supervision of financial supervision authorities to investigate market from a perspective of technological research and development, reasonably define the scope of relevant market, make the payment industry continue to grow and develop under the coordinated supervision of financial supervision authorities and anti-monopoly enforcement institutions, and improve the overall competitiveness of the payment industry in China.

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## REFERENCES

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- Chen, J. (2011). The role evolution from investor to financial consumer. *Law Studies*, (5).
- Chen, J. (2011). The role evolution from investor to financial consumer. *Law Studies*, (5).
- Jiang, Y. B. (2008). *A study on the anti-monopoly policies of network industry* (p.43). China Social Sciences Press.
- Liu, S. J. (2010, June 8). Clients are not consumers, their “protections” are essentially different. *Law Weekend*.
- Liu, S. Y. (2013). Innovation and supervision of internet payment. *China Finance*, (20).
- Michael, K., & Shapiro, C. (1985). Network externalities, competition and compatibility. *American Economic Review*, (2), 424-440.
- Rong, L. (2012). A study on third-party payment platform pricing strategy—Based on the perspective of bilateral market. *Financial Innovation*, (6).
- Su, L. (1995). Reform, legal construction and local resources. *Chinese and Foreign Law*, (5).
- Wang, W. G., & Wu, M. X. (2010). New expectations on the protection of consumers’ rights and interest. *China Focus*, (5).
- Yang, T. (Ed.). (2013). *China payment and settlement development report*. Social Sciences Academic Press.
- Ye, M. (2013). The identification difficulties and resolution of the internet industry market dominance. *Law and Business Studies*, (1).