ERASMUS UNIVERSITY ROTTERDAM

Erasmus school of Economics

**Why online shopping is prevailing nowadays in China?**

**An analysis of its presence from a Micro-economic perspective**

Bachelor Thesis

Chong GUO (326072)

Supervised by Dr. B.S.Y. Crutzen

Contents

[Abstract 2](#_Toc362824691)

[1 Introduction 4](#_Toc362824692)

[2 Background 5](#_Toc362824693)

[2.1 The presence of the online shopping market in China 5](#_Toc362824694)

[2.2 The advantages of online shopping in China 7](#_Toc362824695)

[2.2.1 Value of time-saving 7](#_Toc362824696)

[2.2.2 Value of lower prices 7](#_Toc362824697)

[2.2.3 Value of availability at 24/7 8](#_Toc362824698)

[2.2.4 Value of wide range to select 9](#_Toc362824699)

[2.2.5 Value of fast and reliable delivery 10](#_Toc362824700)

[2.2.6 Value of free return 11](#_Toc362824701)

[2.3 The experience goods 11](#_Toc362824702)

[3 Methodology 12](#_Toc362824703)

[4 Analysis 14](#_Toc362824704)

[4.1 Effect of time-saving 15](#_Toc362824705)

[4.2 Effect of lower prices 16](#_Toc362824706)

[4.3 Effect of availability at 24/7 17](#_Toc362824707)

[4.4 Effect of wide range to select 17](#_Toc362824708)

[4.5 Effect of fast and reliable delivery 18](#_Toc362824709)

[4.6 Effect of free return 19](#_Toc362824710)

[4.7 Summary Table of Effect 20](#_Toc362824711)

[5 Conclusion 20](#_Toc362824712)

[Bibliography 21](#_Toc362824713)

# Abstract

Over the past several decades, China has experienced great economic progress, within which, net export and governmental investment have acted prominent roles. However, with the coming bottleneck of the two engines, domestic consumption is seen as the major source to continue pushing forward the giant economy. Besides the traditional way of spending money, online shopping has stands in the front of the new trend, by which another amazing achievement has been created. Now millions of deals are made via online stores every day, and billions of revenue is generated, compelling China’s online shopping market to soar and become the world’s largest one in terms of the scale. What is the reason behind the sudden popularization of online shopping? In this these, factors are proposed and their effects are analyzed to obtain a primary insight.

# 1 Introduction

Over the past several decades, China has made huge progress in catching up to the level of industrialization in other major economies in this world. The key character of this stride has been a massive wave of investment and an unprecedented migration from rural areas to urban districts in support of export-led manufacturing. Recently, the marginal returns generated by this strategy have been diminishing, though it will continue impelling China’s economy to grow for some time. The main reason for the decreasing marginal returns is that China has been gradually losing its comparative advantage from the low labor costs, as the minimum wage has been dramatically lifted and the labor laws as well as the relevant regulations have been step by step established. To maintain the steady growth, the urgent call in the next stage will prominently focus on optimizing the domestic productivity and stimulating the domestic consumption as the primary driver for this current world’s second largest economy. Surprisingly, the call for this decisive turning pivot has now coincidentally met the arrival of the Internet revolution in China.

With the super-rapid development of Information Technology (IT), large investments are spreading on Internet infrastructure and its equipment. The expansion enables hundreds of millions of consumers to bring their enthusiasm onto online shopping, which is the new way to induce them to purchase all kinds of products and services they have dreamed from a few years ago. This is particularly the case for consumers living on the edge and outside of large cities, where traditional brick-and-mortar retail stores are still under-developed and cannot meet the demand. The development of online shopping shows its great potential in fulfilling the gap, pushing China to reach the second largest online shopping market in the world at a sudden. Now millions of deals everyday are made via online stores, generating billion-level revenue for the market. Meanwhile, millionaires and even billionaires are created by running online stores, which is considered as a new way of earning a living and acquiring wealth in this world’s largest developing country.

The sudden popularization of online shopping has brought high interests in the public and to researchers. In this thesis, the main question that “Why online shopping is prevailing nowadays in China?” will trying to be answered by analyses based on the presence of online shopping in China and the explanation and mechanism elaborated from a Micro-economic perspective. The thesis consists of five sections. Firstly, an introduction is there as you are reading now. Secondly, the concerned background will be presented. Next, Methodology and Analysis are going to be down in Section Three and Four respectively. Finally, in Section Five a conclusion will be draw.

# 2 Background

## 2.1 The presence of the online shopping market in China

China’s outstanding economic gross has coincidentally met its revolution of the Internet, by which the transforming from the traditional retail concept to a modern landscape is undergoing. The nation’s online shopping market and the relevant sectors are swiftly expending, with the mixed power of innovation and entrepreneurship. The online shopping market in China has a scale topping at $120 billion (RMB 774 billion) in 2011,[[1]](#footnote-1) going beyond the sum of that in Japan ($107 billion), the United Kingdom ($56 billion), and Germany ($32 billion).[[2]](#footnote-2) In 2012, China’s online shopping market even reaches $210 billion (RMB 1.3 trillion), with an annual increase by 75% from 2011.[[3]](#footnote-3) The compound annual growth rate from 2003 to 2011 is more or less 120%, far exceeding those for other countries, such as 39% of Russia, 35% of France, 34% of Brazil, etc.[[4]](#footnote-4) China’s online shopping market currently occupies the world’s largest market in 2012, just surpassing the market in the US ($190 billion), and is expect to deepen the gap in the following years from 2013.[[5]](#footnote-5)

As Chinese consuming power continues to grow, the market is estimated to arrive at a super level of $420 billion – 650 billion (RMB 2.7 trillion – 4.2 trillion) by 2020.[[6]](#footnote-6) The booming posture and huge potential also has its important impact on the relevant sectors. China has about 536 million Internet users, more than double of that in the US (245 million).[[7]](#footnote-7) Meanwhile, the Internet penetration rate (% of population) of China (40.1%) is reversely more or less ½ of that of the US (78.1%), indicating still a great potential underlying the current development.[[8]](#footnote-8) Besides, the express delivery service industry is also undergoing a rapid expansion, dealing with 5.7 billion deliveries with an annual increase by 54.8%, and hitting a total of $16.3 billion (RMB 100 billion) in 2012 with an annual increase by 39.2%.[[9]](#footnote-9) The express delivery industry has been experiencing more than 27% year-to-year increase for consecutive 5 years, among which more than 50% is from online shopping.[[10]](#footnote-10)

The data mentioned above helps to look into China’s online shopping market at a glance from a Macro-economic level. While on the other hand, small and medium-sized enterprises (SMEs), from a Micro-economic viewpoint, are a prominent parts involved in the contemporary online shopping wave. “Taobao” and “Tmall”, which are created by Alibaba Group, have shared the majority of the online shopping market at this moment.[[11]](#footnote-11) These platforms enable SMEs to directly sell their products to individual Internet consumer, establishing a simple and fast, but rich and integrated C2C virtual marketplace. This mode, together with governmentally active promotion and less intervention, encourages SMEs and other micro-type entrepreneurs to actively build their online business to meet the tremendous demand from the online shopping market. Currently, more than 70% of this market is from C2C activity[[12]](#footnote-12), which is dramatically different from other major countries, where large B2C sites are clearly the leader or dominator.

## 2.2 The advantages of online shopping in China

### *2.2.1 Value of time-saving*

The first big advantage of online shopping over the traditional brick store shopping is the contribution to time-saving. Traditionally, when a consumer wants to buy a product, he needs to go to the store or mall to be present there, in order to select and pay. There are some stores lie next to the place where he lives, there are other stores located a bit far, sometimes even extremely far for the majority of consumers. For instance, IKEA and Lidl usually open their stores in the suburban area, which is considerably remote for most of consumers, especially those households who live in the downtown, meaning that it costs a lot of time for consumers on the way to the stores and it’s doubled because it’s a round trip. But online shopping is very different from a time perspective. A consumer merely needs to open the website or webpage where the online store is, and the product he buys will be delivered to his home, meaning that he does not need to spend any time on the way back and forth to the stores where he shops. This obviously saves the time for consumers, thus lowering the cost of consumption because of the value of time. This is particularly the case in China, for the fact that a town in China is usually very big in terms of its area so a consumer needs to travel for a long time to reach a specific store, especially when the store is located on one side but the consumer lives on the other side of the town, or the consumer lives in the suburban area while the store is at the downtown.

### *2.2.2 Value of lower prices*

The second advantage of online shopping to a consumer is that the price of a product is usually lower when compared with the price of the same product purchased in the traditional store. Traditional stores needs to pay the fee for their stand and salary for the sales force, which is clearly a sizable amount of operational cost. Next, the security and inventory costs are also very high, especially in those downtown central business districts. Besides these faculty and facility costs, utility costs including electricity and water are the costs that cannot be neglect in calculating the costs of making a deal. The aforementioned costs are all the costs that will be considered when setting the price of a product in the traditional stores. Usually a mark-up is used based on the total costs including those incurred to run the stores. Contrary to this, online stores usually don’t have or just have limited amount of these costs, for the fact that online stores can be run by its own webpage system, sales are made by the consumer his own clicks, and the products do not need to be largely stored at the shopping place but can be kept in the warehouse even very far, where the cost of inventory is considerably low. The automation and maintenance costs are trivial compared with all the necessary costs incurred for a traditional brick store. Therefore, the price charge for a product sold online can be quite lower than the one for the traditional store. The lower price is the typical factor that large numbers of consumers take into account when they make their decisions for shopping. This is particularly true for middle or lower class of Chinese households, who have limited amount of income and budget to spend. By online shopping, they can save the difference on prices and dispose the savings on purchasing more to enrich their welfare, which can equivalently be seen as adding more value to them as consumers.

### *2.2.3 Value of availability at 24/7*

The third advantage of online shopping over the traditional method is the all-time availability. A traditional store has limited opening time, which is influenced by the daytime, the law, the weather, the calendar, and sometimes the unexpected incident and emergency. However, an online store is much more flexible in terms of being resistant to those factors and unforeseen circumstances because it is a virtual store. Typically, an online store opens 24 hours a day and 7 days a week, running in each day of the whole year. As long as there is a device (PC, tablet, mobile phone, etc.) linked to the Internet, the holder can surf the online shop and make his purchase anywhere anytime. Most of people in China are very busy in working and earning a living still, so that they do not have much spare time to leave the workplace to go to shopping mall during the opening time on workdays, and they sometimes would like to rest at home or do their housework at weekends. This means it is hard for them to be present at the shop in the regular time. But online stores changed this by their all-time opening character, enabling households to shop at home after-work at night and at weekends. This is particularly the evangel for people who have shifts in their work and people who work at night and need to sleep in the daytime. They can make their consumption during the middle night via online shop when those traditional ones are closed.

### *2.2.4 Value of wide range to select*

The fourth advantage of online shopping is that it offers a much wider range of products for consumers to select, compared with the range of products offered in the shelves in the traditional brick stores. A traditional store usually sells the products designed and manufactured particularly for the region where the store is located, with the consideration of costs on major local preference and transportation cost. A brick store typically has limited space or numbers of shelves to show and keep their products, therefore, the store need to target the main taste of the consumers in the area and meet the demand of the consumers who drive the most of the sales for the store. However, online stores can offer almost all kinds of products, which no matter can be found in the local or nearby stores or not. It is so convenient for consumers to make their consumption remotely, for example, a consumer living in the very south of China and going for a trip to the north Europe would like to buy a cold protective jacket, which cannot be found in his local store, can easily shop online and get his jacket delivered at home to be well prepared for his journey.

In fact, not only the products that cannot be found in the local or nearby brick stores, but also those products that are sold almost nowhere in any store, but can be found on online stores. The effect of long-tail associated with online shopping access right proves the rich selectivity of online stores. A considerable amount of online consumption comes from those sales on obscure products that are not available in the traditional brick stores but are still available online (will find a proof). A research done by Brynjolfsson, Hu, and Smith (2010) shows that, while most of the discussion about the value of online shopping to consumers focuses on the offered lower prices, consumer benefit from being access to increased variety in online book stores is ten times larger than their benefit from being access to lower prices online. This clearly indicates the value of a wider range to select for consumer when shopping online, which has shifted the gravity of a large number of consumers’ shopping behavior.

In recent year, an increased number of products are determined to have their debut via online shop by breaking the geographical barrier to broaden the number of consumers in the targeted group who may be interested in purchasing and trying the new products. This reinforces the level of selectivity and early as well as exclusive accessibility to products when shopping online from a consumer’s perspective, which is obviously highly valuable to many consumers.

### *2.2.5 Value of fast and reliable delivery*

The fifth advantage from online shopping is related to delivery service. A delivery service is defined as “satisfied” here when the delivery is accurately made to the correct house number on time, i.e. fast and reliable. A “satisfied” delivery service is de facto the foundation of and working together with the other advantages mentioned in the context. With the development of online shopping in China, the demand for fast and reliable delivery is ever sharper. No matter a consumer who wants to buy the product which cannot be found in the local brick store, or who is busy with his occupation having no time to be present in the brick store himself, or who simply would like to save the time and cost on the way back and forth to the stores, all demands their products purchased online to be delivered at the door of their home or office, sometimes even at a specific time on a specific day. Therefore, no matter how good experience in surfing and selecting the product in the web shops, online shopping is worth of no high value without an efficient delivery service. Reasonably, the establishment of decent delivery service becomes also a very important factor considered by Chinese consumers when shopping online, and the satisfied feedback on delivery services in return stimulates the online sales continuously.

Online shopping together with an efficient delivery service not only serves a consumer who shops and receives the product at his own place, but also serves the consumer to deliver the product he purchases online to his vested receiver, such as a family member, a friend, or any other one that named by the consumer, who is distant from the consumer himself. Obviously, the establishment of a fast and reliable delivery service saves time and cost for consumers, vitally contributing to an increase number of Chinese households consuming products online and their satisfaction towards online shopping.

### *2.2.6 Value of free return*

The last but not least advantage of online shopping presented in this thesis is the policy of free return. The most online stores in China employ the policy of free return that when the package is broken or the product is defective after unboxing, the consumer can refuse to receive the package and let it return freely to the sender (the online shop). This is huge benefit to online shoppers, protecting them from an irrefusable delivery in which the package is suspect to be broken or the product is defective when receiving the package.

This policy seems very necessary to online shopping that a consumer cannot try and touch the product before he makes his purchase and receives the product. What’s more, it is even more powerful for consumer to protect their rights and welfare when this policy is combined with or running under a secure payment system. The system works as an intermediate to hold the amount of money a consumer agrees to transfer to the online shop, meaning that the payment is not immediately transferred to the online shop but pending when the consumer makes a purchase. After the delivery is made, the consumer can check the package and product when the transfer is still pending. Only when the consumer confirms its agreement to transfer the payment to the online shop after the consumer proves the delivery, the package, and the product, can the money indeed be transferred and the online shop finally receive the payment. The secure payment system is said to be the greatest shield for online shopper to ensure the product they consume online is desirable as described in the online store. The combination of this system together with the free return policy enable online shoppers to be more flexible in receiving the delivery and to avoid trouble that worrying about how to deal with a broken package or defective product delivered.

## 2.3 The experience goods

The products purchased online can be viewed as so called “experience goods”. An experience good is a product whose quality cannot be fully determined before it is purchased (Nelson, 1970), where quality can refer to any valued attribute such as appearance, functionality, taste, efficiency, or durability. Most products, such as electronic devices, computer software, music albums, and most foods that cannot be fully evaluated without “consuming” them in our daily life, are then defined as experience goods according to Nelson’s description. Other products concerned with respect to their post-purchase reliability can durability such like automobile and air-conditioner are also are also experience goods. Besides, the service offered by doctors, lawyers, teachers, and consultants can be viewed as experience goods as well.

The definition of experience goods determines its nature of performance uncertainty, which means the products purchased online has a possibility to carry imperfect quality, whereas this imperfect quality cannot be detected unless the product is delivered and tried. The problem of performance uncertainty places a vital threat onto the attractiveness of online shopping market, so that it acts as a significant factor in the analysis later in this thesis.

# 3 Methodology

If the quality of a product cannot be determined prior to consumption, why should a consumer believe the stated quality of the product? Telser (1980) proposed an idea about self-enforcing agreements, which states a consumer can rationally believe the high-quality product will be supplied as long as the price paid from the consumer is above the marginal cost for the seller, and the purchase action is repeated as long as the high-quality product continues to be supplied. Based on this concept, Klein and Leffler (1981) developed an alleged now-standing solution that when price is higher than the cost, an online seller then is willing to provide high-quality product, and consumers will boycott and seller who is discovered cheating on quality. Nevertheless, no matter how artificial effort is put in ensuring the quality of product, technical imperfection can hardly be dissolved. It is always difficult to have a perfect control over the quality of a product purchased online, might resulting in that a consumer receives a defective product to some extent.

In this thesis, inspired by the aforementioned ideas from previous researcher, a simplified model is used for the coming analysis. The model has the following assumptions:

VE is the expected value of shopping online;

VT is the expected value of shopping in the traditional brick stores;

VG is the consumer value of a product being “good”;

VB is the consumer value of a product being “bad” (VB < VG).

Obviously, the product purchased online has the probability g of being “good” (0 < g < 1), and therefore, probability 1 – g of being “bad”. Therefore, the expected value of a product shopping online can be calculated as follows:

VE = VG·g + VB (1 – g) (1)

Another important assumption made for the purpose of simplicity is that a consumer can always detect the quality of a product when he shops in the traditional stores by trial and experience at the time and spot he consumes. So the expected value of shopping in a traditional brick store is:

VT = VG·1 = VG (2)

This means a product purchased from a traditional store can always be “good”.

In order to answer the main question, a comparison between the expected value VE of shopping online and the expected value VT of shopping in a traditional store needs to be made.

When VE < VT, consuming a product online has a lower expected value to a consumer, compared with consuming in the traditional brick-and-mortar store. Therefore, shopping in the traditional store is preferred by consumers in this condition.

Conversely, when VE > VT, a consumer will be more beneficial to shopping online since the product purchased online contains a higher expected value than that in the traditional stores. In this case, consumers are in favor of shopping online over the traditional stores.

Additionally, when VE = VT, expected values adhered from shopping online and in the traditional stores are equal, driving a consumer to be indifferent between purchase the target product online and in a traditional store.

# 4 Analysis

From the previous section, the expected value VE of shopping online and the expected value VT of shopping in a traditional brick-and-mortar store are determined by equation (1) and (2). For the purpose of making a comparison, subtraction is used by taking the difference between VE and VT. This can be illustrated in the following way:

VE – VT = VG·g + VB (1 – g) – VT (3)

As VT = VG, the equation is equivalent to

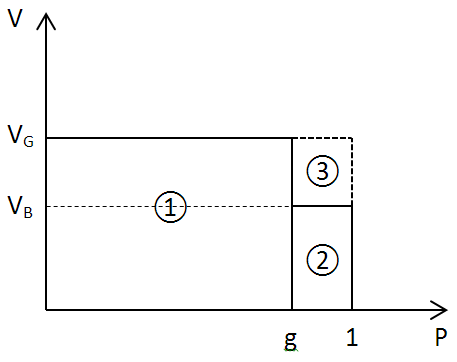
VE – VT = VG·g – VG + VB (1 – g) (4)

This boils down to

VE – VT = (VB – VG) (1 – g) (5)

As (VB – VG) < 0 and (1 – g) > 0, the equation is always negative. This means theoretically, without considering other additional factors, the expected value of a product consumed from the traditional brick stores is usually higher than that from an online store.

This can also be illustrated by the drawing the following Figure 1, where VE = VG·g + VB (1 – g), which is area ① + ②, while VT = VG = VG·1, which is area ① + ② + ③. So the area ③ represents the difference between VE and VT, which means the difference between the expected value of shopping online and the expected value of shopping in a traditional brick store.

Figure

However, this may not always hold, since those advantages aforementioned in Section 2 (Background) as changing factors are effectively influencing the result of the comparison. The influences as well as the possible corresponding results are discussed one by one here in this section.

## 4.1 Effect of time-saving

A successful online shopping, meaning that the quality of the product purchased online turns out to be “good” and the delivery service is “satisfied”, will create additional benefits for consumer. The benefit is by means of saving time, which can be used to do other things. For instance, a mother can use the time saved by purchasing her dress online to pick up her daughter, which is not possible if she goes to a brick store and buys the dress. The additional benefits of shopping online created by saving time can top up or even surpass the expected value of one’s purchase, which can be attached onto the expected value of the product. This expected value with additional benefit added is higher than VG, which can be denoted as VG'. When other factors remain unchanged, the equation for the expected value of shopping online is now

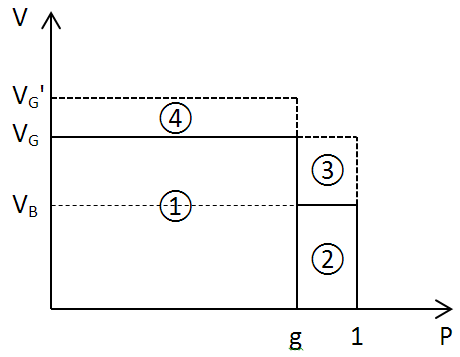
VE = VG'·g + VB (1 – g) (6)

and the difference between VE and VT is now

VE – VT = VG'·g – VG + VB (1 – g) (7)

Because VG' > VG, the difference represented by VE – VT will be smaller. The bigger VG' is, the smaller VE – VT will be. When VG' is big enough, VE – VT can even turn from negative to positive, making VE is reversely larger than VT, i.e. VE > VT. Thus, a consumer is more willing to shop online, since a larger expected value has been associated with online shopping. The consequence is that the number of consumers shopping online increases as the value balance has moved towards VE.

This can also be illustrated by the following Figure 2. As VG' > VG, an additional area ④ is created. When VG' is big enough, the area ④ will be larger than the area ③, which means VE will be larger than VT, i.e. VE > VT. The result is a shift of consumers from shopping in traditional stores to online stores.

Figure 2

## 4.2 Effect of lower prices

Prices of the product are highly concerned as the primary determinant to a lot of consumers, especially those middle or lower class with significantly limited budget. Lower prices from online shopping create a decisive momentum for consumers on making a purchase. The gain from a lower price for a consumer is so manifest by saving the money and then spending the saved money for other purchase. This actually increases the welfare of consumers, which can be seen as creating a higher expected value attached when shopping online. The higher expected value here can be denoted by VG', and the effect is pretty much similar to that from the analysis of time-saving (Section 4.1).

When VG' > VG, the difference between the expected value shopping online and in the brick store, which is represented by VE – VT, will be smaller. The bigger VG' is, the smaller VE – VT will be. When VG' is big enough, the result will be VE > VT. The corresponding consequence is that a consumer is more willing to shop online, since more welfare can be obtained. Because of this benefit, consumers shift from traditional shopping way to the online method.

## 4.3 Effect of availability at 24/7

A traditional brick-and-mortar store usually has limited opening time, mostly in the daytime, while an online store is always open there. The business in online stores is always functioning, being different from traditional stores affected by holidays and incidental disruptions. Large quantity of consumers including the middle class and the white-collar are too busy in working at daytime to have spare time slot for shopping at a brick store. Households who have children and the aged to care about are nearly impossible to go shopping as well. However, online stores offer the option to those consumers to buy things at night or even middle night when these consumers are free from daily routine. The 2012 report from Taobao.com reveals that there are in total 22 million consumers in China shopped online at Taobao.com at the range of 23:00 – 5:00.[[13]](#footnote-13)

To those consumers who like or have to shop at night or even midnight, traditional stores and the products sold inside make no sense for them to some extent. It is reasonable to say that VT = 0 in this sense, so that VE is apparently definitely higher than VT, i.e. VE > VT = 0. This overwhelming advantage of VE impels consumers to switch to the online shopping manner.

## 4.4 Effect of wide range to select

As mentioned in the previous context, traditional brick-and-mortar stores have limited number of shelves for product sales and restricted space for inventory to be held on spot. This limitation largely narrows down the range of products offered, compelling consumers to go back and forth between different stores. The time and energy on the way are so costly, and comparisons between products are difficult to make, seriously affecting the correctness and efficiency of purchasing decision process. However, shopping online is so powerfully advantageous that it cost nearly no time and toll to switch between online stores and products by just clicking on the corresponding buttons. Online stores are always free from the number of shelves and the space limitation for showing all kinds of products, enabling consumers to search for the most appropriate and highest expected value products beyond the constraint of traditional stores. Besides, unlike traditional stores with limited space, online stores will not be crowded in terms of the unit density of consumers, creating a quieter and cozier shopping environment.

From this point of view, the wider range of selectivity, the considerable possibility to search out the highest expected value and the most proper product, and the saved cost and energy, are very likely to lift up the expected value of the product purchased online, which can be referred as VG'. The analysis follows the same method and steps as in the subsection 4.1. The outcome is that the expected value of the product purchased online will be beyond that from a traditional store, i.e. VE > VT, when VG' is high enough. The change in the market is that more and more consumers prefer online shopping to traditional shopping manner.

## 4.5 Effect of fast and reliable delivery

Online shopping has its all kinds of advantages within the product selection process, but no expected value will eventually be realized without the delivery service. A fast and reliable delivery service ensures the value vested from the purchase decision will be well conveyed to consumers. Online shops’ specialty that the supply chain is flexible to choose the location of warehouses ensure consumers live in different regions can gain the access to their nearest storehouse. Meanwhile, products from other warehouse can also be transferred easily and quickly between the warehouses in the chain to supplement when one storehouse is in shortage.

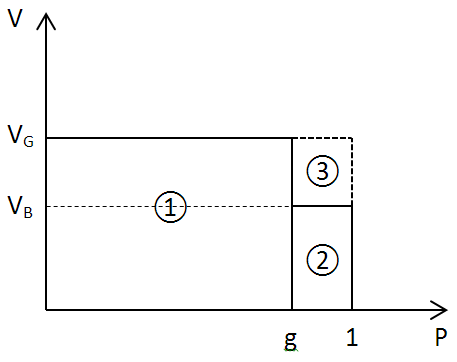
A fast and reliable delivery service will minimize the risk of damaging the product on the way, protecting the possibility g from going down. Although this factor seems ineffective in changing any of the parameter in the equation (3), (4), and (5), it is actually the basic foundation for other factors in the context to be effective and efficient. In this sense, this factor is the vital pivot on the connection between products purchase and expected value realization.

## 4.6 Effect of free return

Nowadays most online shopping stores in China employ the policy of free return that consumers can refuse to receive the package and let it return freely to the sender (the online shop) when the package is broken or the product is defective after unboxing. It helps consumers avoid additional costs and/or troubles when they deal with the mentioned unfavorable situation. Moreover, the combination between this policy and the secure payment system that an intermediate holds the payment until the product is proven and the transfer is confirmed by the consumer works in a way to raise the possibility g to a level towards 1. This then reduces the difference (i.e. area ③) to zero between VE and VT according to equation (5), making the potential deterioration from product performance uncertainty to consumers vanish away. This effect can also be illustrated by the following change from Figure 1 to Figure 3, where area ② and ③ disappear when g moves closely to 1, which means the realization of the expected value VE of a product shopping online is (eventually) VG, for

VE = VG·1 = VG (8)

From equation the comparison between equation (2) and (8), it is concluded that the (eventual) expected value of product from online shopping in this case does not suffer from product performance uncertainty, defending online shopping itself from the advantage of trial and check of shopping in traditional brick-and-mortar stores. (i.e. VE = VT). Therefore, more consumers can be favor of online shopping eventually.

Figure 1 Figure 3

## 4.7 Summary Table of Effect

So far six factors have been discussed in the previous context. Here is the summary table of their effects respectively. The results can be straightforwardly seen that nearly all of these factors have the effect of cultivating consumers to prefer online shopping over traditional shopping manner. The undoubted fact is that these factors actually work together to attract consumers to shop online. The increased number of consumers shopping online in return drives the development of those factors, which reinforce the expected value and better experience of shopping online. Thus, a benign cycle has been formed, resulting in an ever fierce booming in online shopping and the closely related industries such as logistics and online payment system.

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | Effect | Outcome | Result |
| 1 Time-saving | A higher VG' > VG | Possibly VE > VT | Online shopping preferred |
| 2 Lower prices | A higher VG' > VG | Possibly VE > VT | Online shopping preferred |
| 3 Availability at 24/7 | VG maintains 24/7 | VE > VT = 0 | Online shopping preferred |
| 4 Wide range to select | A higher VG' > VG | Possibly VE > VT | Online shopping preferred |
| 5 Decent delivery | Maintain g | - | - |
| 6 Free return | VG --> 1 | VE = VT | Online shopping preferred |

# 5 Conclusion

The great stride of China’s online shopping market has its own attributed factors influencing the movements of consumers towards online shopping. A simple model of expected value is introduced in this thesis to analyze the six proposed factors. These factors are time-saving, lower prices, availability at 24/7, wide range to select, fast and reliable delivery, and policy of free return. These different factors have their own characters and mechanisms shaping their effects on the analysis and the corresponding results. Almost all of the factors serve in the same direction where it stimulates consumers to be favor of shopping in online stores over shopping in traditional brick-and-mortar stores. In fact, these factors cannot be artificially separated from each other in the real business environment, where they actually work and cope together to create powerful synergy to impel China’s online shopping market to rapidly progress. The development of online shopping market in return demands not only the expansion and evolution of the relevant industries, but also the optimization of the current systems and processes. The consequence of the demand and the development of the online shopping market together form a benign cycle by which China’s online shopping market has been demonstrating the astonishing booming. Thus, the main question of this thesis has been answered through the analysis presented.

This thesis wishes to provide a new but simple way to start assessing China’s online shopping market and its relation to those relevant factors. While these proposed factors have been investigated, there is no doubt that other factors as a reason of the aforementioned transformation of China’s shopping market and Chinese shopping manner. Yet what are those other (Frank, 2009)factors and how they can be effective remains for future research and investigation.

# Bibliography

Brynjolfsson, E., Hu, Y., & Smith, M. D. (2006). From Niches to Riches: The Anatomy of the Long Tail. Sloan Management Review, Vol. 47(4), pp 67-71.

Bynjolfsson, E., Hu, Y., & Smith, M. D. (2010). The Longer Tail: The Changing Shape of Amazon’s Sales Distribution Curve. Sloan Management Review.

Dobbs, R., & Chen, Y. (2013). China's e-tail revolution: Online shopping as a catalyst for growth. Shanghai: McKinsey Global Institute.

Frank, R. H. (2009). Microeconomics and Behavior. New York, NY: McGraw-Hill.

Klein, B., & Leffler, K. (1981). The Role of Market Forces in Assuring Contractual Performance. Journal of Political Economy, Vol. 89, pp 615-641.

Nelson, P. (1970). Information and Consumer Bahavior. The journal of Political Economy, Vol. 78(2), pp 311-329.

Telser, L. (1980). A Theory of Self-Enforcing Agreements. Journal of Business, Vol. 53, pp 27-44.

1. Exchange rate 1 USD = 6.13 RMB in July 2013. [↑](#footnote-ref-1)
2. *China’s e-tail revolution: Online shopping as a catalyst for growth,* McKinsey Global Institute, March 2013. [↑](#footnote-ref-2)
3. *2012 China online retail market data monitoring report,* China Electronic Commerce Research Center, January 2013. [↑](#footnote-ref-3)
4. *China’s e-tail revolution: Online shopping as a catalyst for growth,* McKinsey Global Institute, March 2013. [↑](#footnote-ref-4)
5. *2012 China online retail market data monitoring report,* China Electronic Commerce Research Center, January 2013. [↑](#footnote-ref-5)
6. *2012 China online retail market data monitoring report,* China Electronic Commerce Research Center, January 2013. [↑](#footnote-ref-6)
7. Source: Internet World Stats. <http://www.internetworldstats.com/stats3.htm#asia> [↑](#footnote-ref-7)
8. Source: Internet World Stats. <http://www.internetworldstats.com/stats14.htm#north> [↑](#footnote-ref-8)
9. Source: Chinapost. <http://www.chinapost.gov.cn> [↑](#footnote-ref-9)
10. Source: Chinapost. <http://www.chinapost.gov.cn> [↑](#footnote-ref-10)
11. *China’s online shopping market investigation report,* iResearch, January 2013. [↑](#footnote-ref-11)
12. *China’s e-tail revolution: Online shopping as a catalyst for growth,* McKinsey Global Institute, March 2013. [↑](#footnote-ref-12)
13. *2012 Taobao report,* Taobao.com, January 2013. [↑](#footnote-ref-13)