



U.S.-TO-CHINA B2C E-COMMERCE: IMPROVING LOGISTICS TO GROW TRADE

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Executive Summary

The global e-commerce retail market continues to grow at a rapid pace.¹ Increasingly, e-commerce is taking place across borders as consumers become more interested in the global marketplace.² The U.S.-to-China business-to-consumer (B2C) e-commerce market, a large and expanding trade corridor, presents a sizable opportunity for U.S. merchants and logistics providers to expand their business. The Chinese government has encouraged the growth of B2C e-commerce imports as part of its efforts to move towards a consumption-based economy. The government has issued several policies targeted at reducing logistics frictions, streamlining customs clearance, and simplifying the related tax regulations. Among other things, the government initiatives have resulted in the establishment of dedicated cross-border e-commerce pilot zones and free trade zones, of which several Chinese online marketplaces, as well as many foreign merchants, have taken advantage.

Several other developments in recent years have helped streamline B2C imports into China. Key among them are the establishment of several Chinese cross-border online platforms, which are growing in popularity; advancements in local logistics networks; and the formation of cross-border logistics alliances. There is an opportunity for overseas merchants to take advantage of trading platforms and logistics networks to improve the efficiency of deliveries, contain costs, improve order visibility, streamline the returns process, and make the overall shopping experience more convenient for the customer.

China's growing cross-border e-commerce market provides an exciting opportunity for overseas merchants looking to expand their business. Ultimately, merchants who deploy logistics models that provide consumers with the global selection they desire and the ability to conveniently receive goods at the desired quality, time, and price point will be poised to spur the growth of sales from the United States to China, and in other important trade corridors.

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I. Introduction

Business-to-consumer cross-border e-commerce refers to the practice of consumers using the internet to purchase products directly from overseas merchants. This form of online shopping is becoming increasingly popular globally; one report estimates that by 2021 the global B2C cross-border e-commerce market will more than double to \$424 billion.³ According to a 2014 report, the worldwide leaders in B2C e-commerce exports were the United States (U.S.), the United Kingdom, Germany, the Nordic nations, the Netherlands, and France, while the top six countries in online retail imports were China, the United States, the United Kingdom, Germany, Brazil, and Australia.⁴

The rise of China to become the largest e-commerce importer can be attributed in part to growing health concerns, a rise in disposable income, as well as a growing appetite for overseas luxury and fashion items. In parallel, multiple developments, including government initiatives, the establishment of cross-border e-commerce platforms, and logistics improvements, especially within China, have made it easier for overseas merchants to connect and conduct business with Chinese consumers.

This paper focuses on B2C e-commerce from the United States to China – a huge trade corridor that has seen significant growth in the past few years. Despite major developments that have taken place in recent years that have made cross-border e-commerce much easier to conduct, multiple logistics challenges remain. This paper provides an overview of China's B2C e-commerce market landscape, with a specific focus on the U.S.-to-China trade corridor, discusses the Chinese government's policies to promote growth, examines continuing logistics frictions, and discusses logistics models aimed at reducing frictions. We provide recommendations for foreign merchants to address some of the main hurdles of selling to Chinese consumers, and also highlight some strategies that merchants and logistics providers may consider examining when entering other international markets.

II. Landscape of China B2C E-Commerce Imports

KEY HIGHLIGHTS

- China's cross-border e-commerce market has been rapidly expanding, driven by health concerns, growing wealth, changing tastes, wider product selection, and better online prices.
- Cross-border shopping has been most popular among younger middle-class Chinese consumers.
- Key sales channels include purchasing agents, overseas websites, and local e-commerce platforms.
- Cross-border e-commerce platforms, which provide overseas merchants easy access to China's market and provide Chinese consumers with easy access to a large variety of foreign goods, have been growing in popularity and are contributing to the fast growth of this market.

E-Commerce in China

China's e-commerce market has been expanding rapidly since the beginning of the decade. In 2015 China was the world's largest online retail market, with total sales reaching \$589.6 billion, including physical (\$493 billion) and virtual goods. This is an increase of 33.3 percent compared to online sales in 2014.⁵ In comparison, online sales in the United States were close to \$342 billion in 2015.⁶ China's e-commerce market is projected to reach a transaction value of \$1.56 trillion by 2018.⁷ This rapid growth is in line with the country's transition from an investment-heavy growth model toward a more consumption-driven model, and has been supported by several cultural trends, technological innovations, and improved logistics networks.

Culturally, China's large and growing middle class has been developing brand awareness, an increasing proclivity to purchase high quality and/or discretionary products, and growing brand loyalty. Many of the products they seek have often been easier and cheaper to find online. Social media platforms used for posting product reviews have become an additional driver of e-commerce activity,⁸ as has the prevalence of mobile devices, which Chinese consumers are comfortable using for online purchases. In parallel, the development of several e-commerce platforms, which provide consumers with easy access to a vast array of products, as

well as the availability of multiple digital payment platforms, have made shopping online a very easy and convenient experience. Moreover, investments in logistics, infrastructure, and warehousing capabilities have improved delivery times, further increasing demand and making it easier for rural customers to rely on the internet for the majority of their purchases.⁹

While at the beginning of the decade consumer-to-consumer (C2C) transactions accounted for close to three quarters of the value of all online shopping, by 2015 the share of B2C exceeded that of C2C, reaching 51.8 percent of the online shopping market.¹⁰ The B2C market is expected to continue to expand in the future, as quality of products and service become key factors influencing customers' shopping behavior.¹¹

Cross-Border E-Commerce in China

The trend of purchasing goods from overseas markets started in China a few years ago and has become especially popular among younger middle-class Chinese between 26-40 years old.¹² Many cross-border shoppers use their mobile devices to purchase goods. Popular shopping destinations include the United States, Hong Kong, Japan, the United Kingdom, and Australia.¹³ A 2015 Nielsen survey found that while Chinese online shoppers spend less overall on shopping abroad than they do domestically, average spending per order is higher for cross-border orders.¹⁴

Market Size and Expected Growth

The B2C cross-border e-commerce market in China has seen significant growth in the past few years.¹⁵ According to one report, in 2015 B2C cross-border e-commerce amounted to \$57 billion, which represented more than 4 percent of China's total retail e-commerce market. The market size was expected to grow to \$86 billion by the end of 2016.¹⁶ By 2020 China is expected to become the largest cross-border B2C market, with estimations of transaction volume of imported goods ranging from \$150 billion¹⁷ to \$245 billion.¹⁸

In another testament to the growing popularity of cross-border shopping, a recent PayPal report estimated that 35 percent of Chinese online shoppers bought cross-border products in 2015, compared with 26 percent in 2014.¹⁹

One of the key drivers for this massive growth in imports is health concerns. Plagued by food and health scandals, Chinese consumers have increasingly been turning abroad in order to avoid the risk of buying fake beauty products, contaminated milk powder, or counterfeit pharmaceuticals. Cross-border e-commerce has often also offered much better pricing than traditional imports. One of the reasons for the lower prices is that goods purchased via cross-border e-commerce have been subject to lower tax rates compared with ordinary imported goods; however this may change in the future as new regulations are likely to increase the tax burden on cross-border imports.²¹ Since 2012, new Chinese government policies aimed at promoting the development of cross-border e-commerce have also made such imports easier. Growing wealth, changing tastes, and a relaxation of customs rules are expected to further bring a boom in China's cross-border e-commerce in the next few years.²²

“

Local e-commerce businesses aren't able to meet the needs of China's consumers, who are increasingly buying from abroad.

”

–Masa Ren, Vice President, International E-Commerce Services, SF Express (China-based logistics company), 2015²⁰

“

The [Chinese] consumer came to us before we invested [in China], and they were really engaged.

”

–Michael Mente, Cofounder and Co-CEO, Revolve (U.S.-based online fashion retailer), 2015²⁵

The following table, based on a 2015 iResearch report, shows the main reasons Chinese consumers engaged in cross-border online shopping.²³

Table 1 – Major Reasons for Cross-Border Online Shopping

REASON	PERCENTAGE
Assured product quality	67.8%
Cheaper	65.5%
Brand preference	53.0%
Products not available on domestic sites	52.0%
Diversified products	46.7%
Bought the same product when traveling overseas	39.6%
Other	0.4%

Source: iResearch, 2015

Given consumers' growing health concerns, it is not surprising that some of the most popular product categories among cross-border online shoppers have included cosmetics and beauty products, baby care products and milk powder, and food and health products. Other popular categories that reflect the growing affinity of Chinese consumers for luxury and fashion items that may be harder to find locally and may also be cheaper online include clothes, shoes and accessories, perfume, jewelry, and watches.²⁴

B2C E-commerce Platforms and Other Sales Channels

Chinese consumers who do not buy products abroad themselves or through friends have a number of options for ordering goods online. Purchasing agencies, or *daigou* agencies, buy products abroad on behalf of consumers for a fee, provide assistance on payment and delivery, and allow consumers to pay in Chinese Renminbi (RMB). However, the process may take a long time to complete, agencies may not be reliable, and they may import goods illegally. Chinese consumers may also buy products directly from overseas shopping websites. This is a more reliable and legal process, but consumers may face language barriers and need to settle payment in foreign currencies.²⁶

Both models described above are likely to avoid import taxes, since packages enter the country as personal items with low declared values, resulting in low or no tax liability. At the same time, consumers must also pay for international shipping and face long delivery times of up to 30 days. Furthermore, consumers may lack buyer protection²⁷ and may find it difficult to return items.

While many overseas merchants have made it easier for Chinese consumers to purchase goods online, a 2015 survey shows that only 29 percent of cross-border shoppers are buying directly from overseas websites. In contrast, 46 percent of shoppers are buying through B2C e-commerce platforms,²⁸ which are growing in popularity compared to other channels. These platforms allow overseas merchants to build and host a digital storefront, and provide consumers with easy access to a variety of goods. Almost all large Chinese e-commerce platforms have a B2C segment for overseas products. Major players include:

Tmall Global: A unit of Alibaba Group, Tmall Global serves as an online marketplace for selling imported items to Chinese shoppers. It only accepts foreign merchants, with a guarantee that products sold are 100 percent authentic.²⁹ Orders can be shipped directly from abroad, and payments may be settled in the preferred currency. The goods are sent directly to China by consolidated shipment or express mail delivery, and distributed through Tmall bonded warehouses located in one of China's cross-border e-commerce pilot zones (see discussion of cross-border e-commerce pilot zones in Section 3). Tmall's international cross-border drop-shipping specialists ensure delivery to consumers within 5-8 work days.³⁰

By January 2015, 5,400 retailers from 25 countries had opened stores on Tmall Global. In June 2015 the company announced that it would launch several country "pavilions," designed to provide Chinese consumers with a one-stop shop for popular products

from a particular country, as well as country-specific information.³¹ By July 2016, 12 such country pavilions had been launched.

JD Worldwide: Following the huge success of Tmall Global, JD.com, China's second biggest e-commerce company, launched its own global e-commerce platform, JD Worldwide, in April 2015. As with Tmall Global, foreign companies can set up shop on JD Worldwide without having a physical presence in China. They can ship from overseas or choose to store goods in a bonded warehouse in China. JD Worldwide provides access to the 100 million consumers who regularly shop on JD.com. At its launch the marketplace had 450 storefronts offering 150,000 products from 1,200 brands. In addition, JD.com partnered with eBay Inc. to create a special channel on JD Worldwide where eBay features items from U.S. sellers it deems reliable. JD.com also sells its own goods on its e-commerce sites, dominating the home, appliance, and consumer electronics categories.³³

Yihaodian: Yihaodian was China's largest online retailer of food and beverages in 2015,³⁴ stocking over 8 million stock keeping units (SKUs). It has been licensed to import food and beverage products directly from overseas. The company had been fully owned by U.S. retail giant Walmart since July 2015. In June 2016, as part of a strategic alliance between Walmart and JD.com, JD.com took ownership of the Yihaodian marketplace platform assets.³⁵

Additional players: Other Chinese online retailers, such as Vip.com (fashion and beauty), Mei.com (affordable luxury goods), and Xiu.com (luxury goods and fashion clothing), have also rolled out similar businesses selling foreign goods, as have Ymatou, Metao, Jumei Global, Sjgo365.com, Amazon Global, and eBay Overseas Selection.³⁶ While some marketplaces focus on a single category such as luxury goods or baby products, others offer multiple categories.

Some logistics companies also offer cross-border e-commerce platforms, such as SF HaiTao, launched by SF Express. Other marketplaces such as UnionPay Haigou have been set up by payment platforms.

Cross-border e-commerce marketplaces offer consumers a number of benefits including:

- **Easier shopping experience:** Marketplaces are more convenient compared to shopping directly from overseas websites because information is written in Chinese, customers can pay in RMB, and they have access to Chinese customer service.
- **After-sale service:** Marketplaces such as Tmall Global and JD Worldwide require merchants to provide a way to handle customer returns in China. They frequently assist merchants in setting up a returns service solution, often through a third-party solution provider.
- **Safer shopping experience:** Often times, e-commerce platforms will verify the identity of foreign merchants and the authenticity of the goods they offer for sale before accepting them as sellers on their site. Since counterfeit products are a serious problem in China, consumers value the ability to shop on a platform that promises genuine products.
- **Faster delivery:** Some e-commerce companies have storage spaces in China's bonded warehouses.³⁷ Customer orders fulfilled from these warehouses are delivered much faster compared to orders delivered from overseas.

Benefits to merchants include:

- **Easy entry point to China's market:** Risks and set-up costs are lower, since marketplaces provide merchants a way to sell to Chinese consumers without having a physical presence in China.

“
Today the internet can help small businesses sell things [a]cross the oceans, [a]cross the nations. And I hope that we can serve 2 billion consumers; we can help 10 million small businesses outside China.
”

–Jack Ma, Executive Chairman, Alibaba, 2015 ³²

- **Access to a large pool of potential customers:** Since e-commerce marketplaces are very popular in China, opening up a store on one of these sites provides merchants with access to a large customer base.
- **Access to bonded storage space:** Several cross-border e-commerce sites provide merchants with access to storage space in one of the country's bonded warehouses. This can result in a much more efficient logistics flow.

Given the popularity of e-marketplaces, over time it has become more challenging for overseas merchants to open a store on some of these platforms. For example, as of 2016 Tmall Global has been operating via an invitation-only policy, and had further restrictions on the types of companies they targeted.³⁸ These requirements, along with the initial deposit, annual fees, and commission fees collected by Tmall Global, means that this solution is only fit for companies with a certain scale of operations. JD Worldwide and other e-marketplaces have fewer requirements and restrictions. Still, merchants considering opening a storefront on a platform must assess the required investment compared with the expected sales and profit levels.

III. Government Policy

KEY HIGHLIGHTS

- The Chinese government has spearheaded multiple initiatives to tackle some of the bureaucracy, accessibility, and logistics issues associated with cross-border e-commerce. These include the establishment of cross-border e-commerce pilot zones and free trade zones, improvements to customs clearance processes and quarantine inspection requirements, reduction of tariffs and taxes, and improvements to China's domestic express delivery market. These initiatives had a significant impact on the growth of this market.
- Organisation for Economic Co-operation and Development (OECD) guidelines may have contributed to the level of comfort of Chinese consumers in buying online from merchants located in the United States and other OECD member countries.

The Chinese government is vigorously promoting the development of cross-border e-commerce, which is viewed as a way to address the country's slowing economic growth rate, move towards a consumption-based economy, and harness the power of China's massive middle class and their strong demand for imported goods.³⁹ In August 2013, the State Council issued a policy to support cross-border e-commerce, with concrete measures to facilitate processes including customs clearance, quarantine inspection, duties, and foreign exchange.⁴⁰ In 2015 the government further promised to streamline bureaucracy affecting cross-border e-commerce, and pledged to optimize customs clearance, cut tariffs and taxes, and make international e-payments easier.⁴¹ Below we discuss some of the initiatives developed by the Chinese government.

Cross-Border E-Commerce Pilot Zones

In 2014, seven cities – Shanghai, Hangzhou, Ningbo, Zhengzhou, Guangzhou, Shenzhen, and Chongqing – were designated import e-commerce pilot zones. In March 2015 China's State Council approved Hangzhou as the first national-level cross-border e-commerce pilot zone,⁴² and in January 2016 the establishment of new national-level comprehensive pilot zones in 12 more cities was announced.⁴³ Each of these zones has an online e-commerce platform operated by state-backed or licensed companies, through which all the cross-border transactions related to that zone take place.⁴⁴ Qualified e-commerce companies can set up a bonded warehouse within the e-commerce zone, where goods can temporarily be stored after shipping them in bulk from abroad. Tariff payments are only made after the goods are sold to consumers and leave the pilot zone. Alternatively, the foreign merchants can use a direct shipping approach, according to which products are stored in their home country, and shipped directly to Chinese consumers after they have placed their orders. In this case customs duties will be charged together with the price at the time of

ordering, and orders will be shipped to the customer directly from the foreign country, under the supervision of China Customs. Goods sold through the pilot zones go through an expedited customs process. A policy launched in May 2015 requires Customs clearance procedures to be completed within 24 hours once goods enter local Customs.⁴⁵

Most of the goods sold via online sites in the pilot zones tend to be from the food and beverage, electronics and appliances, baby care, cosmetic, and apparel and accessory categories. They are mainly imported from Japan, the United States, Netherlands, Korea, and Germany.⁴⁶ Several large companies including Tmall Global, JD.com, and others are operating bonded warehouses in these zones.

Operating through the pilot zones is very beneficial to all parties involved. A benefit for sellers is a much less rigorous screening and verification process for imported goods.⁴⁷ Benefits to consumers include:

- **Lower customs duties:** China Customs levies import duties on these orders at the rates applicable to personal items, which are usually lower than tax duties for general trade.
- **Better customer support:** Language challenges associated with shopping on a foreign website are eliminated. Merchants are also required to set up a customer service channel in China, with service in Chinese, to handle returns and customer complaints.
- **Payment in local currency:** Customers can pay in RMB, and third-party payment service providers (e.g., Alipay, Tenpay) will convert the money to foreign currencies.
- **Shorter delivery time:** When goods are delivered from the bonded areas, customers benefit from a shorter delivery time compared to shipments from abroad.

In summary, this model resolves consumer issues related to language barriers, after sales service, potential seizure by customs, shopping via a third party, and long delivery times. In return, it guarantees that Customs will collect import tax on products that might have otherwise been sent as personal parcels and avoided taxes. Consulting firm Roland Berger estimated in a 2014 report that transactions through bonded online shopping will grow to account for half of all e-commerce imports in China “in the near future.”⁴⁸

At the same time, one of the main challenges associated with the pilot zones is that storage space in bonded warehouses is becoming increasingly scarce. This is a general problem throughout China, not just in pilot zones, as the exponential growth of China’s e-commerce market has resulted in increasing demand for warehousing space. But land available for storage development is harder to find, especially since local authorities often prefer the jobs and taxes generated by factories, and may therefore be reluctant to allocate land for warehouse development.⁴⁹

Without a good relationship with the local government, local customs authorities, and local logistics partners, bonded warehouses have a risk of failure. Another issue with bonded warehouses is that many of the existing and upcoming platforms focus on selling high-demand products in order to generate traffic, even though such an approach can drive profits down. Companies not offering high-demand products may be better off keeping goods in their own country and shipping them to China customers based on actual orders.⁵⁰

In summary, despite the pledge made by the Chinese government to speed up expansion of pilot projects,⁵¹ and despite all their associated benefits, overseas merchants may determine that using a storage space in a pilot zone is not attainable, or the best solution for them.

Pilot Free Trade Zones

As part of the Chinese government’s effort to promote reform, boost trade, and facilitate investment, in September 2013 a pilot free trade zone (FTZ) was established in Shanghai. Three additional FTZs, in Guangdong, Fujian, and Tianjin, were launched in April 2015. While FTZs are not limited to e-commerce, they can also conduct cross-border e-commerce import business.⁵² In October 2013 the Shanghai FTZ launched a cross-border e-commerce platform called Kuajingtong, or buyeasi.com, which provides a platform for individual e-commerce stores to list their wares, and it charges a commission on each sale. Shanghai Customs is in charge of the customs declaration system connected to the website. All vendors on this platform have

conducted record filing with the customs authorities; therefore, customers can avoid the risk of buying fake products. Because the commodities offered on buyeasi.com are imported through bonded warehouses, the prices are often much lower (30-percent to 40-percent discount) than the prices of the same products selling in other places within Mainland China.⁵³ Foreign e-commerce operators can directly set up an online store on buyeasi.com via either one of the following methods:⁵⁴

- **FTZ model:** Enterprises must register in the Shanghai FTZ and obtain the proper customs code. Goods will first be delivered to the zone and then to customers in China.
- **Direct shipping model:** Enterprises may ship their products directly to customers in China. However, they still need to appoint an agent in China to provide after-sales service.

Improvements to China's Express Delivery Market

China's express delivery market is expected to see significant changes in the coming years, which is likely to have a positive impact on the volume and reach of the e-commerce market. According to a policy document released by China's State Council in October 2015, China aims to nearly quadruple the revenues of its express delivery market by 2020, in a move to boost consumption and services. The document acknowledges problems such as low efficiency, backward infrastructure, safety loopholes, and lack of global competitiveness. To address these issues, the country plans to build an efficient and safe express delivery system with nationwide coverage, advanced technology and services, and international connections, by 2020. The government will encourage delivery firms to use information technology such as the mobile internet, big data, and cloud computing to upgrade services and enhance efficiency. It also plans to simplify the licensing procedures for delivery firms, give preference to delivery infrastructure in land use planning, and subsidize the construction of infrastructure in rural and western regions.⁵⁵

New Cross-Border E-Commerce Tax Rules

While the initiatives discussed above are aimed to make cross-border e-commerce easier and cheaper to conduct, a new circular that came into effect on April 8, 2016, described a tax that may have a different impact on this market. The tax is expected to be a more fair competition mechanism for cross-border businesses and traditional retailers. In the past, tax burden on online retailers was relatively low,⁵⁶ creating an unfair tax burden for goods imported under the general trade model. The new policy will inevitably increase costs and the tax burden for some foreign exporters, but others could still enjoy substantial tax benefits compared to general customs duties levied on imported goods.⁵⁷ For some product categories, the new rules may even result in a lower tax rate.

Importantly, in May 2016, just one month after the new cross-border tax policy was announced, China's General Administration of Customs announced that it would postpone its rollout by a year in 10 e-commerce pilot zones amid fears of a slowdown in cross-border e-commerce.⁵⁸

Initiatives Taken by the United States

In March 2016, the Organization for Economic Cooperation and Development (OECD) issued revised guidelines for protecting consumers in e-commerce. The guidelines are designed to protect consumers and strengthen their trust in the expanding e-marketplace. The United States, one of the founding members of OECD, has welcomed the issuance of these guidelines.⁶⁰ These guidelines, as well as their original version published in 1999, may have contributed to the comfort level Chinese consumers feel buying directly from merchants located in the United States and other OECD member countries.

“
I don't think the change in the tax regulations will bring up the cost of the entire industry; instead, it's pushing us to make a major reconstruction of our product structures.
”

–Ren Xiaoyu, CEO, Fengqu.com (a cross-border e-commerce platform), 2016 ⁵⁹

IV. Logistics Frictions with U.S.-to-China Delivery

KEY HIGHLIGHTS

- From the customer's perspective, key challenges of cross-border e-commerce are counterfeits and low-quality goods, difficulty returning or exchanging items, high shipping costs and taxes, long delivery times, and insufficient customer support.
- Logistical challenges faced by shippers and logistics providers include customs bottlenecks, price uncertainty, growing geographic spread of Chinese online shoppers, and capacity and quality concerns of China's express delivery market.

Challenges for Customers

According to several surveys, some of the top concerns of Chinese cross-border online shoppers include receiving counterfeits or low-quality goods, difficulty of returning or exchanging goods, high shipping costs and taxes, and long delivery times. Insufficient customer support, as well as issues related to units of measurement and currency conversion, were also reported.^{61, 62}

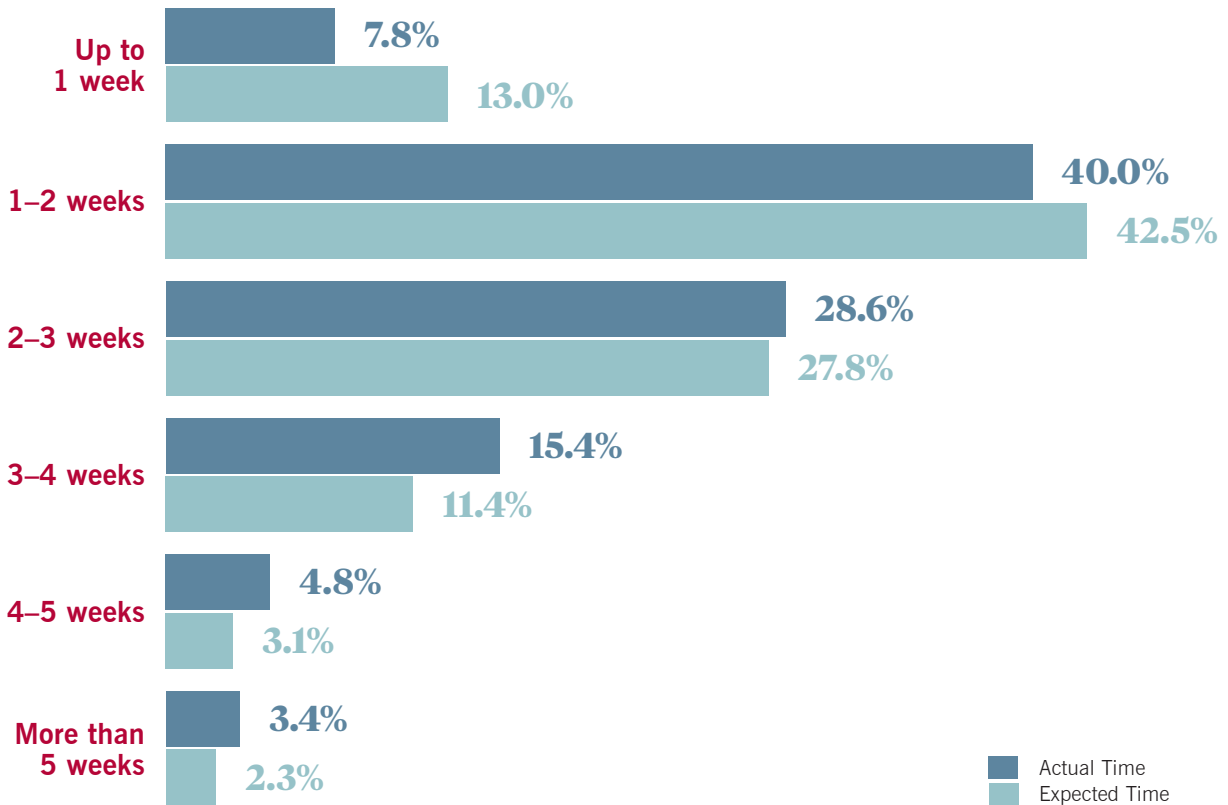
Counterfeits and quality issues: Avoiding the risk of counterfeits and assuring product quality has been one of the main reasons for Chinese consumers to engage in cross-border e-commerce. Still, ensuring product authenticity may be a challenge for cross-border shoppers, particularly those who don't shop directly from the website of a reputable brand name. A new counterfeit baby milk scandal that took place in China earlier in 2016⁶³ may put pressure on the Chinese authorities to tighten regulations on distribution channels, including e-commerce platforms, which in turn are likely to also have an impact on cross-border e-commerce.⁶⁴

Failure to return or exchange goods: Since customers cannot inspect or try on goods before ordering them from an overseas merchant, it is natural for them to want the option to return an unwanted item or exchange a damaged item. But the logistics costs, customs duties, required documentation, and complexity of managing returns prevent many e-commerce players from providing reverse logistics in cross-border situations.⁶⁵

Long delivery times: Consumers want shorter, more precise, and more reliable delivery windows for both domestic and cross-border purchases. But a December 2014 survey by iResearch revealed that not only were delivery times quite long for cross-border orders, but also they were longer than what customers expected (see Figure 1 on the next page).⁶⁶

Other delivery issues: Other issues experienced by some customers include limited transparency while goods are in transit, items lost or damaged in delivery, and limited ability to alter delivery times and location once items are already in transit.⁶⁷ All of these issues are at least partly related to insufficient tracking capabilities.

Figure 1 – Delivery Period of Buying Overseas Goods



Source: iResearch, 2015

Challenges for Merchants and Logistics Providers

Multiple logistics bottlenecks and other challenges for goods shipped from the United States to China include:

Customs bottlenecks and price uncertainty: At present, dissonant customs practices create significant scheduling uncertainty for shippers. Most goods ordered by Chinese online shoppers pass through customs without examination. But packages chosen for spot checks often face delivery delays, and may also be charged with a higher rate of customs duty compared with the rates usually applied to small orders of personal goods.⁶⁸ International shipping options may further be complicated by value-added tax (VAT) charges, resulting in uncertainty regarding the final landed cost of an item even after a shopper clicks “buy.”⁶⁹

In addition, China’s domestic express delivery market poses a number of challenges including:

Limited capacity: While it has grown significantly over the last few years, China’s domestic express delivery market is lagging the exponential growth of e-commerce, raising concerns about how well logistics players can handle ever-increasing volumes.⁷⁰

“
No brand can handle their end-to-end e-commerce on their own.
 ”

–Timothy Coghlan, Associate Director, Luxury Retail, Savills, 2015 ⁷⁵

Regional differences in logistics infrastructure: Logistics networks in China's eastern provinces are more developed compared with central and western provinces, making it more challenging to ship goods to some of these regions. However, these differences are shrinking; China's state council has given first priority to infrastructure upgrades in cities in the west and north, with improvements ranging from expressways and airports to seaports and express transshipment centers.⁷¹ According to a report by Alipay, while the top five provinces for online spending were still located along China's wealthy east coast in 2015, central and western provinces had the highest year-on-year growth by total volume.⁷²

Relative scarcity of high-quality logistics providers: China Post Express Mail Service (EMS), the state-run postal organization, is often viewed as a less attractive alternative to privately owned companies, due to its slower speed of delivery and lower quality of service.⁷³ E-commerce sites may therefore be forced to seek other alternatives for domestic distribution within China. However, finding a high-quality logistics provider at a competitive price can be a challenge, as many local logistics providers focus more on price rather than service.⁷⁴

Potential shipping delays for addresses in English: When the address listed on a package is vague, China Post will not deliver it until the sender provides accurate address information. Such issues can happen often when addresses listed in English are translated into Chinese.⁷⁶

V. Logistics Models

KEY HIGHLIGHTS

- The three main logistics models supporting direct delivery of goods from overseas to Chinese consumers are international express couriers (integrators), postal service providers, and shipping agents (consolidators). Each offers a different tradeoff between price and speed of delivery.
- An additional logistics model involves the shipments of goods in bulk to a bonded warehouse in one of China's pilot zones / Free Trade Zones, and fulfillment of customer orders from the bonded storage.
- China's domestic express delivery market is very crowded, with thousands of players that vary in their price, service offerings, and geographic reach. With so many options, finding the right partners can be a challenge.
- Recent advancements in China's logistics network include the development of private logistics networks; the establishment of Cainiao, a mega-logistics platform; and the formation of several cross-border logistics alliances.

Commonly Used Cross-Border Logistics Models

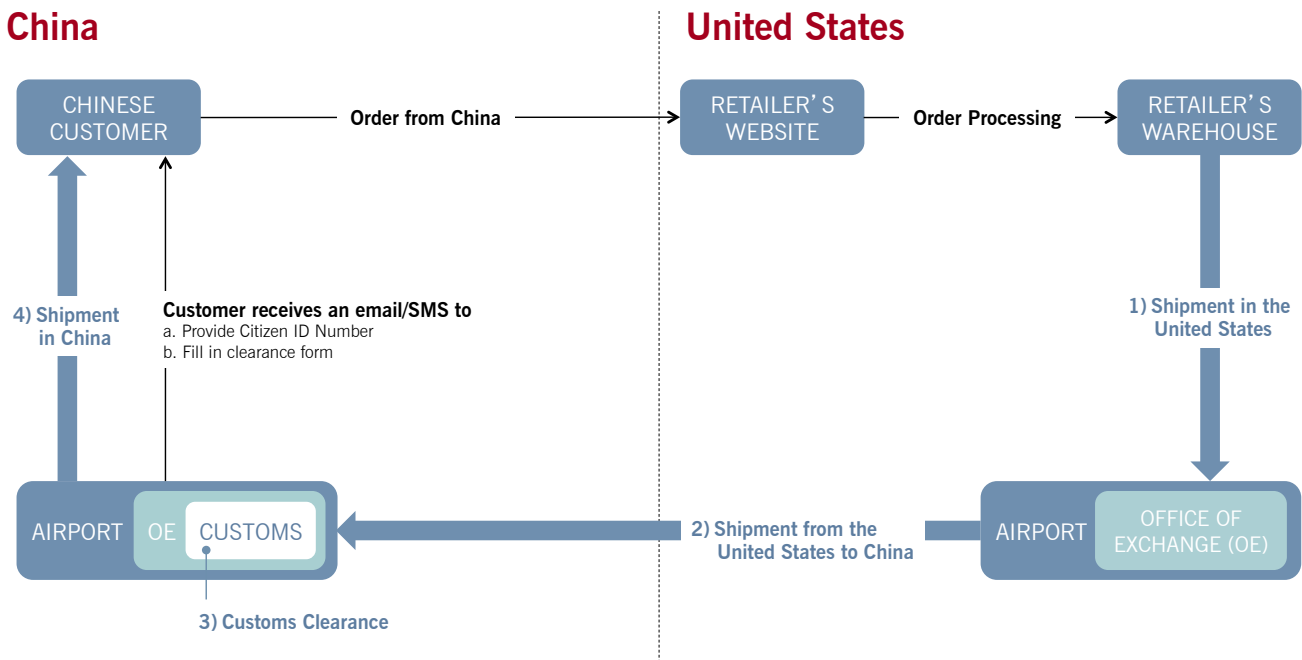
Three main logistics models support the direct delivery of goods from U.S.-based sellers to Chinese consumers: international express couriers, postal service providers, and shipping agents.

International Express Couriers (Integrators)

International express couriers, often referred to as integrators, include companies such as UPS, DHL, FedEx, and TNT. These companies usually provide an end-to-end logistics solution, which covers all the cross-border logistics issues. Their delivery services are usually very convenient and relatively fast. However, they are often the most expensive solution. For final delivery in China, integrators tend to use their own logistics systems. Collaboration with domestic express companies will take place only if their own network cannot reach the final destination.

Figure 2 shows a typical logistics process flow that integrators use in a cross-border transaction, based on service guides published by integrators such as UPS,⁷⁷ and China Post.⁷⁸ In this example, the integrator executes the entire logistics process, including domestic shipment from the retailer's warehouse to a U.S. airport; air shipment to a China airport; customs clearance in China (including collection of the required information from the Chinese customer); and shipment in China to the end customer.

Figure 2 – Commonly Used Logistics Process Flow for Integrators



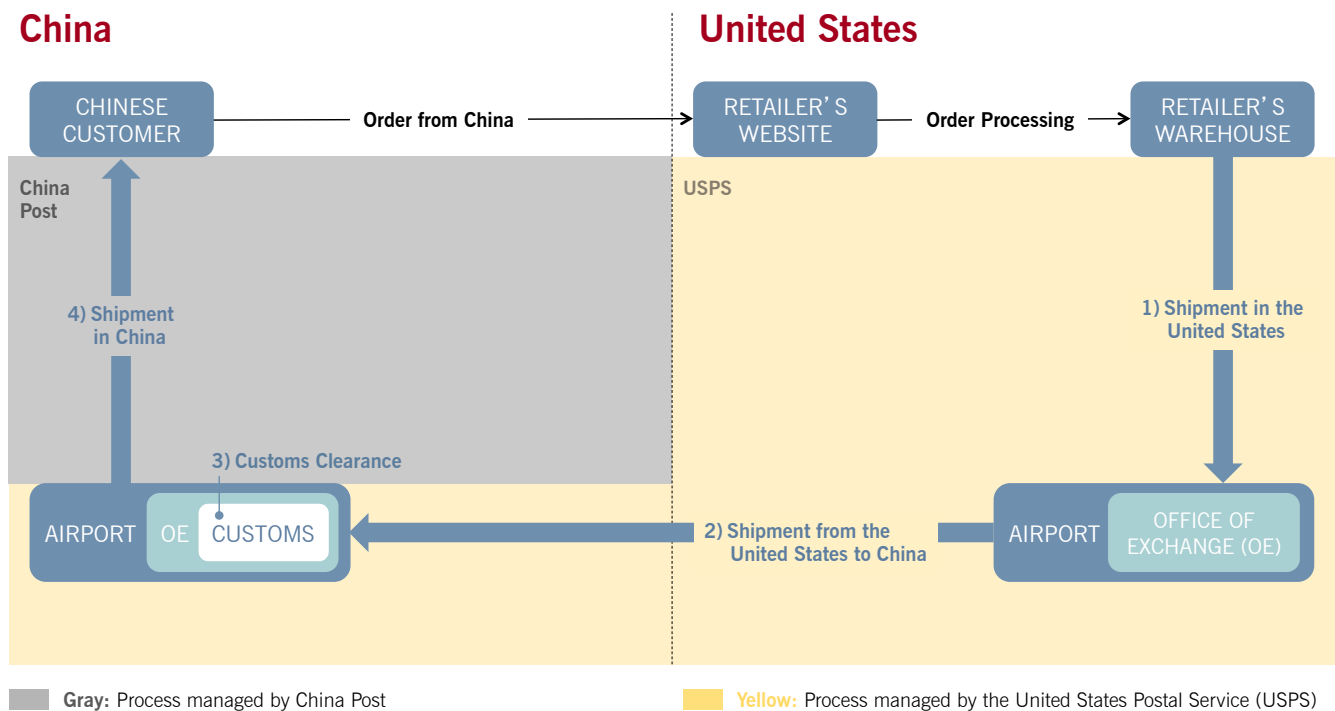
Source: Yiwen Chen, 2015

Postal Service Providers

Members of the Universal Postal Union (UPU), including the United States Postal Service (USPS) and China Post are considered postal service providers. Because of the UPU, cross-border packages delivered by USPS to China can go through a quick and inexpensive postal clearance in China Customs, in a process that does not require any information regarding the final recipient of the package. After customs clearance, China Post or China Post EMS take care of delivery to the end customer. Often times, smaller merchants will be more likely to use these UPU international delivery services.

Figure 3 shows a typical logistics process flow of postal service providers for a U.S.-to-China transaction, based on the UPU postal customs guide⁷⁹ and China Post service guide.⁸⁰ The logistics in the yellow area, including shipment within the United States and all the way to the China airport, are executed by USPS. Customs clearance and shipment in China, in the gray area, are executed by China Post.

Figure 3 – Commonly Used Logistics Process Flow of Postal Service Providers



Source: Yiwen Chen, 2015

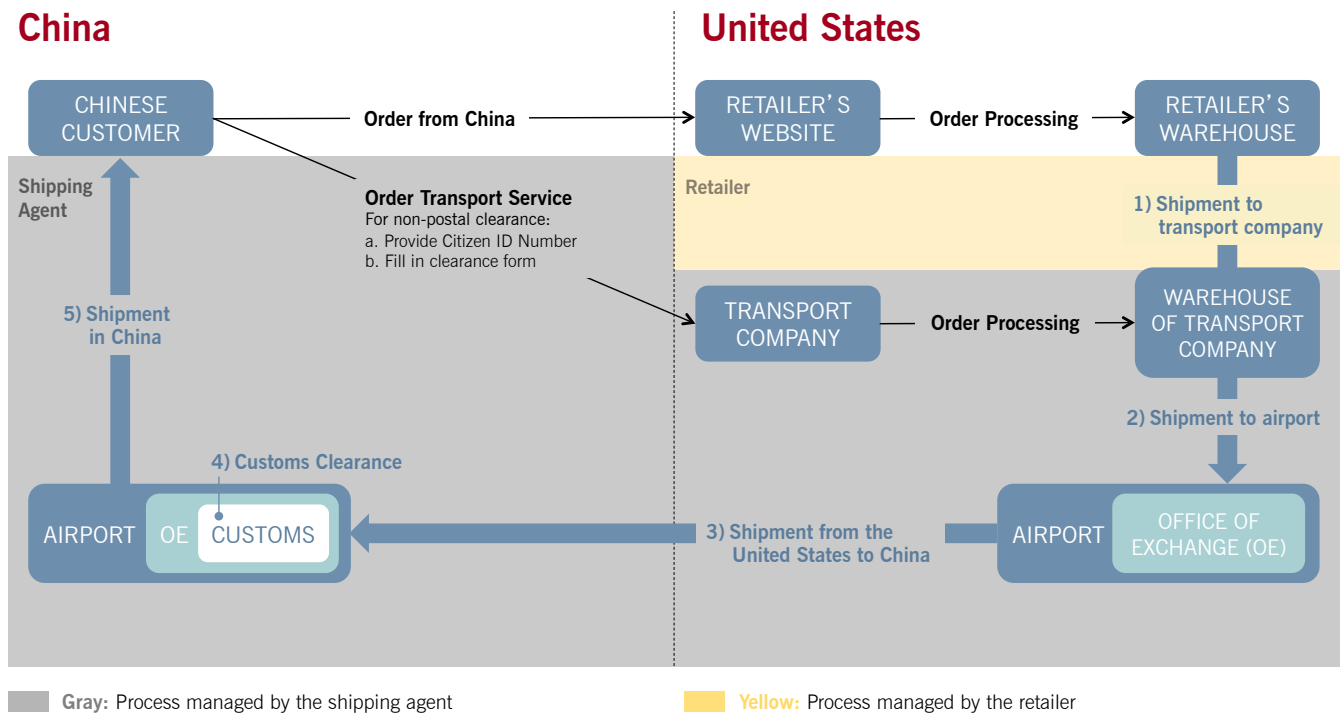
Shipping Agents (Consolidators and Freight Forwarders)

Shipping agents provide parcel consolidation and forwarding services, and usually aim for a larger shipment size compared to integrators and postal service providers. The large shipment size drives transportation costs down, but at the same time it slows the process down due to the need to aggregate shipments from multiple customers. Distinct from the integrators and postal services providers, most shipping agents do not ship goods themselves, but instead work with other logistics providers such as integrators and postal services providers for the actual transportation of goods.

A consolidator in this context may either be a third-party agent or the seller itself (usually a large B2C seller, such as Amazon). Third-party consolidators offer U.S. mailing addresses where sellers ship products. Consolidators then repack the items if necessary, and aggregate shipments. They then arrange for the goods to be shipped by air to China, and cooperate with local carriers for the last mile delivery.

Figure 4 shows a typical logistics flow involving a shipping agent who coordinates the delivery of goods from a U.S. merchant to a Chinese customer, based on the shipping agents service guide (e.g., USZCN,⁸¹ QQ-EX⁸²) and China Post service guide.⁸³ The merchant is in charge of the shipment (by USPS, UPS, or a similar firm) to a U.S.-based warehouse of the shipping agent. From the merchant's point of view, order processing is identical to processing domestic orders for U.S. customers. Then the shipping agent is in charge of coordinating the remaining logistics process (the gray area). While actual shipment may be executed by multiple logistics companies, shipping agents usually have partnerships with specific logistics companies. To lower costs, shipping agents usually use China Post/EMS or domestic express companies such as Shentong Express and S.F. Express for the domestic distribution in China.

Figure 4 – Commonly Used Logistics Process Flow of a Shipping Agent



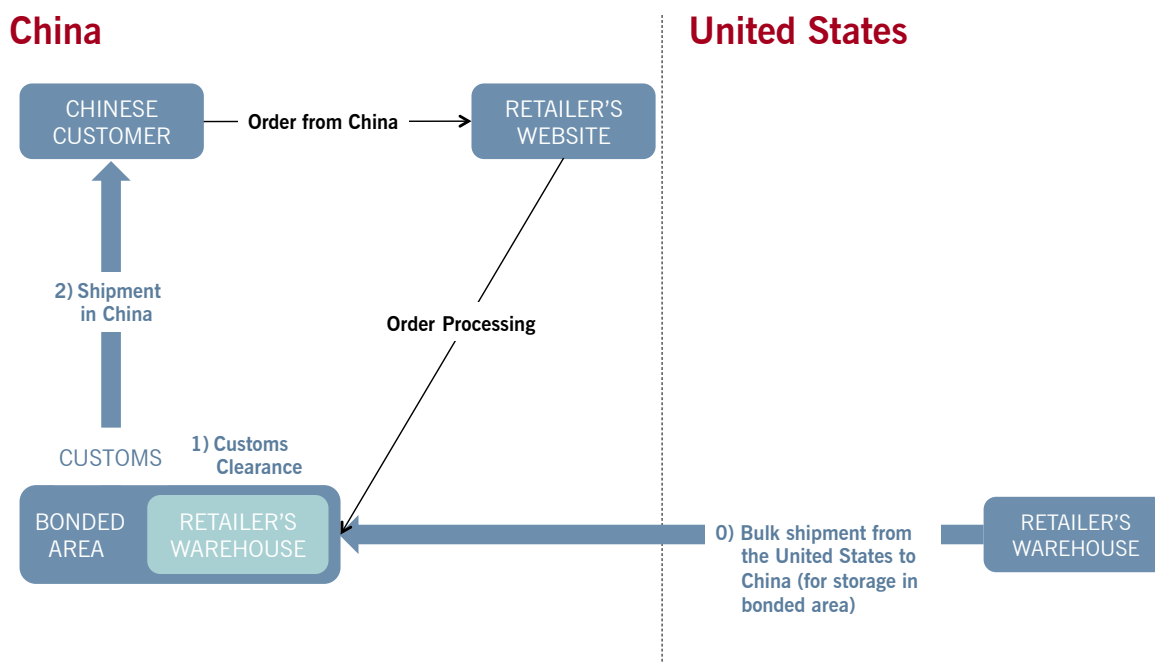
Source: Yiwen Chen, 2015

Order Fulfillment Through China's E-Commerce Pilot Zones

A few years ago the Chinese government established pilot zones in several cities to better meet the needs of domestic Chinese customers looking for imported goods, and to better organize the chaotic scene of cross-border e-commerce. Among other things, pilot zones allow goods to be imported through bonded warehouses, which reduce logistics costs as well as delivery times, since goods are shipped in bulk to the bonded warehouse.

Figure 5 shows a typical logistics flow using pilot zones, based on the Cainiao bonded service guide.⁸⁴ Under this model, goods are shipped in advance and in bulk from the United States to a bonded area inside one of the pilot zones (e.g., Cainiao warehouse in the bonded area).⁸⁵ Once customers place their orders, the orders are fulfilled from the bonded area in a process that is faster and cheaper compared with direct shipment from the United States. While some of the larger merchants may have their own storage space at a bonded warehouse, most others are likely to use the services of third-party providers.

Figure 5 – Commonly Used Logistics Process Flow of Pilot Zones



Source: Yiwen Chen, 2015

Express Delivery Market in China

Regardless of the logistics model that supports the cross-border transportation of goods from the United States to China, once the goods arrive in China, some form of express delivery service will be used to ship goods to end customers. Booming online sales, both local and cross-border, have resulted in a significant growth of the express delivery market in China. In 2014, China overtook the United States to become the leader in express delivery volumes, and the rapid growth continued in 2015.⁸⁶

Unlike the United States, where a few key players (e.g., FedEx, UPS) dominate the express shipping market, China's domestic express delivery market is very crowded, with seven major players in the mainland⁸⁷ (state-owned China Postal Express and six private companies). Some estimate that there are thousands of additional domestic competitors.⁸⁸ The rise of local private firms such as Shentong Express and S.F. Express threatens even China Post EMS, the largest Chinese firm in the domestic delivery market, which has seen its domestic market share by volume fall to 10 percent in 2015 from near 60 percent in 2007.⁸⁹ At the same time, the market share of private enterprises grew to 89.4 percent in 2015, while foreign enterprises captured less than 1 percent of the market share by volume in 2015.⁹⁰

Advancements in Logistics Networks

Both the logistics networks used for delivering goods into China and China's domestic networks have seen some considerable developments in recent years.

Development of Retailer-Operated Logistics Networks in China

Several large e-commerce players have chosen to build their own internal logistics networks in China in order to ensure quality of delivery and avoid some of the logistics bottlenecks associated with third-party logistics centers and delivery teams. These networks often provide faster delivery and improved customer experience.⁹¹ Examples include:

JD.com: The company established its own express delivery operation, headquartered in Shanghai, in January 2009. JD.com now provides same- or next-day deliveries from seven distribution centers.⁹² Overseas merchants that sell their goods to Chinese customers through JD Worldwide can use JD's bonded warehouses in the pilot zones and JD's own logistics network for storage and delivery of the goods, thus providing customers fast and reliable delivery at a competitive price.⁹³

Amazon China: The company operates 17 distribution centers around China.⁹⁴ Unlike in the United States, Amazon China also employs workers who deliver the goods to consumers. Creating their own network of distribution centers helped Amazon China to ensure better service than outside carriers. Merchants that sell on the Amazon China marketplace also benefit from Amazon's logistics expertise.⁹⁵

Suning: One of the largest consumer electronic retail chains in China, Suning has invested heavily in its own logistics network, which as of August 2015 is comprised of warehouses covering 4.52 million square meters, 4 aviation hubs, 12 automated sorting centers, and 660 city distribution centers.⁹⁶

Cainiao: Formation of a Mega-Logistics Platform

Rather than develop its own logistics platform, China's e-commerce giant Alibaba opted to capitalize on China's existing assets. Early on, Alibaba invested in logistics companies such as Star Express (2010) and Best Logistics (2011), and collaborated with logistics partners to develop tailored solutions for product categories requiring special handling.

To further improve the reliability of deliveries, in May 2013 Alibaba formed a joint venture named "China Smart Logistics," or Cainiao, with five major express delivery companies in China, as well as some firms specializing in real estate development, in anticipation of the development of future logistics hubs.⁹⁷ Alibaba holds a 48 percent stake in Cainiao. The goal of this joint venture is to capitalize on the country's existing assets by assembling a collection of logistics companies, last-mile couriers, and other independent players to work together on parcel deliveries generated by Alibaba Group's giant online marketplaces.

Cainiao has developed a real-time information platform to coordinate the shipping activities, warehouses, truck fleets, and distribution centers owned by its co-investors and partners. In addition to the information network, Cainiao includes a vast network of delivery vehicles, warehouses, and distribution centers owned by thousands of independent delivery companies and 15 strategic logistics partners, as well as a network of more than 20,000 self pick-up spots that also provide last-mile delivery and other services to consumers.⁹⁸

Cainiao acts as a facilitator; it does not deliver any merchandise itself. As of May 2015 Cainiao's network facilitated the delivery of more than 30 million packages a day,⁹⁹ offering same-day delivery in 7 Chinese cities and next-day delivery in 90 more cities.¹⁰⁰ As of March 2016, Cainiao handled more than 70 percent of China's express packages.¹⁰¹

Cainiao also cooperates with multiple international logistics organizations, including integrators such as DHL and Shanghai YTO Express, and postal service providers such as Singapore Post and USPS.

Partnerships with both domestic and international logistics companies enable Cainiao to integrate logistics data for tracking. By linking together logistics partners in different countries, Cainiao increases visibility for both sellers and buyers to information on delivery status, order specifics, and user feedback. Such information also makes it easier for customers to seek redress in case they receive faulty products.

Overseas sellers on Tmall Global can take advantage of Cainiao's logistics network in multiple ways:

- Choose among different delivery options, and receive a special discount in delivery fees.
- Use Cainiao's consolidator service when fulfilling customer orders directly from overseas.
- Use Cainiao's warehouses in pilot zones. Typically, the seller will be in charge of shipment to the bonded warehouse, and Cainiao will be responsible for storing, sorting, customs clearance, and delivery to the end customer.
- Gain access to real-time information and metrics.

Additional moves made recently by Alibaba include an investment in May 2015 in Shanghai YTO Express, one of China's largest logistics service providers,¹⁰² and an investment of \$4.5 billion in August 2015 for a 20 percent stake in electronics retailer Suning, which gave Alibaba access to Suning's vast logistics network.¹⁰³ In March 2016 Cainiao completed its first round of external fundraising to support its expansion plans.¹⁰⁴

Cross-Border Logistics Alliances

In order to improve shipping services offered to cross-border online merchants and shoppers, several alliances have been formed in recent years between logistics providers in multiple countries. For example, in April 2014, Yamato Global Logistics Japan started a new shipping service for Japanese internet merchants selling to China, and the company has an alliance with China Post.¹⁰⁵ In July 2015, Singapore Post (SingPost) and Alibaba Group formed a joint venture to improve efficiency and integration in e-commerce logistics, and to build a leading e-commerce logistics platform to service businesses across Asia Pacific and beyond.¹⁰⁶ In September 2015, Cainiao and the USPS signed a Memorandum of Understanding (MoU) to develop new international shipping solutions and enhance the logistics-service experience for both sellers and buyers. They agreed to work together to speed delivery of merchandise sold through AliExpress to U.S. consumers, and would also collaborate to expand Alibaba's delivery networks worldwide, especially in South America.¹⁰⁷

Logistics Options — Customer's Perspective

Although new logistics models continue to proliferate, Chinese customers purchasing overseas goods from the United States usually see one or more of the following options: direct global shipping, domestic shipping only, and shipping from a China location.

Direct global shipping: The U.S. seller provides an international shipping service, and will be in charge of coordinating the entire delivery process from its U.S. warehouse to the customer in China. Some sellers may offer multiple shipping options, at different price points and with different speed of delivery.

Domestic shipping within the United States: The U.S. seller only provides domestic shipping service within the United States. In this case the Chinese customer has to seek help from a third-party consolidator/freight forwarder to ship the goods to China. The customer will provide to the U.S. seller the U.S. address of the shipping agent. Upon receipt of the goods, the shipping agent will coordinate the shipping of the goods to the customer in China.

Shipping from a China location: The U.S. seller has access to a storage space in a bonded warehouse located in one of China's pilot zones or free trade zones. As a result, order fulfillment time, as well as total shipping costs, will be lower compared with direct shipping from the United States. Sellers using the services of marketplaces such as Tmall Global and JD Worldwide are more likely to be able to offer this local shipping option.

VI. Recommendations

China's growing cross-border e-commerce market provides an exciting opportunity for overseas merchants looking to grow their business. Though the hurdles can be significant, there are several options to address them and potentially reduce their magnitude. The options below are mostly geared towards merchants. However, some are likely to require a joint effort with logistics providers.

Open a store in a cross-border e-commerce marketplace: Many online shoppers prefer to use local digital marketplaces rather than shop directly through overseas websites due to the easier and safer shopping experience they provide. Sellers should take advantage of the access such marketplaces provide to a large number of customers, especially since they provide an easy entry point to China's market without being required to have a physical presence there. These marketplaces may also carry with them logistical benefits including the merchant's ability to take advantage of the e-marketplace company's bonded warehouses and/or its distribution network. At the same time, given restrictions and fees posed by some of these marketplaces, merchants should weigh whether this solution is suitable for them.

Sell through a government-approved trading platform: Merchants could sell through one of the platforms set up in the designated cross-border e-commerce pilot zones, which offer multiple benefits to both merchants and consumers.

Offer multiple delivery options to customers, at different price points: Different customers value different attributes. Some may want the cheapest shipping option, regardless of delivery time; for others, speed may be the number one criterion; others may prioritize the ability to track their package. Furthermore, these preferences may change from order to order.

Offer customers tracking information: Some customers may not mind a long delivery time as long as they know where their package is and when they should expect to receive it. Merchants should therefore try to work with logistics providers with such tracking capabilities. Logistics providers that currently don't offer tracking should consider developing such tracking capabilities. Potential benefits include fewer complaints from customers regarding long delivery time, and a lower risk of items lost in transit. Merchants can also use the aggregated tracking information to study the delivery process, better understand key bottlenecks, and look for ways to eliminate or lower the magnitude of issues.

Offer sufficient customer support services: Merchants who sell through one of China's e-commerce platforms can usually offer such services as customer support, product information written in Chinese, and return services. Since Chinese consumers value these services, merchants who rely on their U.S.-based website for sales to China's market can consider offering consumers similar services including, for example, detailed product and shipping information and customer support (via email, chat, and/or phone) in Chinese.

Follow business guidelines as those set by OECD: One of the main concerns of online shoppers is the risk of buying counterfeits or encountering other types of fraud. By following established guidelines for e-businesses, such as the use of fair business and advertising practices; providing accurate, clear, and easily accessible information; providing an easy-to-use and secure payment method; and protecting consumer privacy, merchants can slowly build their reputation and gain the trust of customers.

Explore ways to take advantage of new logistics networks: As discussed earlier, in recent years several cross-border collaborations have been formed in China, and multiple private logistics networks, which are often more reliable and predictable, have been developed. One way for sellers to take advantage of these logistics networks is to open a store on an e-marketplace with its own network. Merchants who choose to use other sales channels should try to identify other ways to take advantage of these new logistics networks.

Enter a targeted geographic area in China: Given the regional differences in China's logistics infrastructure, merchants may want to consider limiting their target market, at least initially, to customers in certain geographic areas, mainly in developed coastal cities, in order to take advantage of the breadth of services and higher reliability offered by some of the regional logistics networks.

Investigate the feasibility of establishing a return process: Customer-friendly return policies address a major barrier for cross-border customers. Merchants – especially those who don't sell through one of China's e-commerce platforms – should

therefore consider establishing some form of a return process, and logistics providers should consider offering overseas merchants returns-handling services. Options to make the process more cost-effective include:

- Establish China-based return centers. They can be operated by a third party that will be in charge of processing the returns and reselling them, for example, via Taobao or other C2C channels. This is similar to U.S. models, where many returned goods purchased online do not go back to the retailers that originally sold them, but are rather collected at centralized return centers run by logistics companies and resold in bulk at deep discounts to liquidators and small businesses.¹⁰⁸ Alternatively, the returned goods can be consolidated at the return centers for bulk shipment back to the merchant's home country.
- Establish policies to reduce the risks associated with returns. For example, limit returns only to goods that are in “new” condition, limit the time window when purchased goods can be returned, or reimburse customers in store credit rather than in cash.
- Take proactive measures to minimize the number of returns by providing enough product information so that customers know exactly what they are buying and are less likely to be disappointed.

The following table contains these recommendations, along with the cross-border e-commerce logistics issues they are likely to address:

Table 2 – Options to Address Cross-Border E-Commerce Logistics Challenges

CROSS-BORDER E-COMMERCE LOGISTICS CHALLENGES							
POSSIBLE OPTIONS	Counterfeit and/or quality issues	Can't return/exchange goods	Long delivery time	Lost/damaged items	Customs bottlenecks	Higher geographic spread of online shoppers	Scarcity of high-quality, reliable LSPs in China
Open a store on an e-marketplace	✓	✓	✓	✓	✓	✓	✓
Sell through government-approved platform	✓	✓	✓		✓		
Offer multiple delivery options			✓	✓			
Offer/build tracking capabilities			✓	✓			
Take advantage of new logistics networks			✓	✓		✓	✓
Limit geographic reach			✓	✓		✓	✓
Establish a returns process		✓					

VII. Expanding into Other Markets

While China is a major cross-border importer, it is certainly not the only market for U.S. exports. Other countries that have significant imports and may offer opportunities to U.S. retailers include the United Kingdom, Germany, Brazil, and Australia.¹⁰⁹ Overall, consumers worldwide feel more comfortable making cross-border purchases. In a recent Nielsen online survey, 57 percent of the survey's global respondents reported that they purchased from an overseas e-tailer in the preceding six months.¹¹⁰ The exponential growth of cross-border online sales presents an exciting opportunity for U.S. merchants. But before merchants can capitalize on this growing trend, they must first become familiar with the unique characteristics of each cross-border market.

Merchants may want to consider the factors listed below and other factors when considering entry into other markets.

Type of products being purchased: While clothing is by far the most popular physical item consumers buy online, preferences vary depending on demographic and societal needs. While Chinese consumers value imported apparel and accessories, cosmetics and beauty products, baby care products, and food and health products, for most European countries, clothing is their number one cross-border shopping category, followed by electronics and books.¹¹¹ In Brazil, computer hardware and personal electronics are popular B2C import categories.¹¹²

Where consumers like to shop: Globally, the United States, China, and the United Kingdom are the top three exporters for online purchases, with the U.S. favored by 26 percent of global cross-border shoppers.¹¹³ But regional preferences and geographic proximity can also play a role in determining how popular specific destinations are for cross-border shopping. For example, in Hong Kong, 68 percent of consumers purchased goods from China in 2014.¹¹⁴ China has also been a main driver of growth in Russian e-commerce imports in recent years.¹¹⁵ In Australia the primary destinations for cross-border shoppers are the United States and the United Kingdom,¹¹⁶ while online shoppers in the European Union (EU) tend to buy more from other EU member states than from other locations around the world.¹¹⁷

Shoppers' concerns: A Forrester Research study shows that globally, consumers considering cross-border purchases are primarily concerned about high shipping costs (51 percent) and long delivery times (47 percent). But while North Americans are more concerned with shipping costs and delivery times, Latin Americans are more concerned with transaction security and receiving damaged products.¹¹⁸

Tools shoppers use to shop online: In general, cross-border shoppers prefer to buy goods from major multibrand online retailers or marketplaces, and are reluctant to shop directly with independent small and medium-sized sites.¹¹⁹ Brazilians are more comfortable shopping on foreign sites than consumers in Asia and Europe. According to Statista, 23 percent of Brazilian consumers shop on U.S.-based websites versus only 9 percent of European consumers.¹²⁰

Impact of government policy on cross-border markets: Local government regulations may also impact the ability for foreign merchants to sell to local consumers. For example, in Argentina the number of online shoppers purchasing from foreign websites doubled in 2013. But in an effort to reduce the amount of currency leaking out of the country's troubled economy, in January 2014 the country's authorities placed several regulatory restrictions on cross-border trade.¹²¹ Similarly, in an effort to stimulate the local retail, Russia's government put in place new regulations, which have severely restricted cross-border e-commerce since the end of 2013.¹²²

By contrast, cross-border B2C e-commerce in Europe is thriving, due in part to initiatives of lawmakers aimed at creating a single online retail infrastructure and regulation. More than a quarter of online shoppers in the EU have made purchases from other EU countries, with an even higher share in the Euro area.¹²³ One reason why cross-border e-commerce is so popular in Australia may be that imported products with a value under AU \$1,000 are exempt from customs, duties, and taxes.¹²⁴

While the market opportunity for U.S. merchants to sell abroad is clear, many elements must go into their strategic decisions.

VIII. Conclusion

The growth of U.S.-to-China B2C sales has been spurred both by deliberate government policy as well as innovation from e-commerce platforms and logistics providers both within and outside of China. Logistics models are continuing to evolve, with merchants leveraging free trade zones and cross-border e-commerce zones, as well as private logistics networks and

cross-border logistics alliances, to facilitate business. Following the rise of Cainiao and other retail-operated logistics networks, we may continue to see examples of merchants taking greater control of the end-to-end logistics process in new collaborative ways that leverage data analytics. Merchants should carefully design their logistics strategy to promote the greatest efficiency and profits while addressing customers' expectations and needs, based on factors such as their product mix, target geography, demographic segment, product price points, returns strategy, and more. Those who successfully navigate the logistics networks in the U.S.-to-China corridor stand to benefit from the growing opportunities in the China consumer economy.

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