

SECTION 3: U.S. ACCESS TO CHINA'S CONSUMER MARKET

Key Findings

- China's rebalancing to a more consumption-driven growth model should present opportunities for U.S. companies in the e-commerce, logistics, and financial services sectors. However, U.S. companies operating in China do not have a level playing field and continue to face significant market access challenges, including informal bans on entry, caps on foreign equity, licensing delays, and data localization policies.
- China is the largest e-commerce market in the world, with e-commerce sales reaching \$787 billion in 2016. According to the U.S. Department of Commerce, by 2019 an estimated one out of every three retail dollars in China will be spent online, the highest percentage in the world. Although China has traditionally provided the world with its manufactured goods, its e-commerce boom should offer increased opportunities for U.S. retailers and brands, with more and more Chinese consumers purchasing foreign goods. Demand is strong in areas where the United States excels, such as high-quality foods and supplements, beauty products, and healthcare-related goods.
- Although China's e-commerce market offers opportunities for U.S. retailers and brands, it is not without its challenges and risks. While the Chinese government has made some improvements in enforcing intellectual property rights, intellectual property issues remain a key challenge for U.S. companies operating in China. In particular, the prevalence of counterfeit goods on Chinese e-commerce platforms continues to hurt U.S. retailers and brands.
- E-commerce has been a key driver of improvements to China's \$2.2-trillion-dollar logistics sector. Yet, China's domestic logistics industry remains underdeveloped, due to the country's historical focus on improving export logistics at the expense of domestic logistics infrastructure. This has caused logistics to become a major bottleneck for China's e-commerce sector. China's efforts to develop and modernize its express delivery industry could offer U.S. logistics firms like FedEx and UPS opportunities to expand their China operations.
- Financial services have been a major driver of growth within China's services sector, increasing 11 percent annually from 2012 to 2016. However, Chinese consumers' access to financial services remains inadequate, and most Chinese consumers lack

formal credit histories. Improving their access to financial services will be critical for raising domestic consumption levels. In addition, China has made limited progress in implementing reforms to improve the market orientation and efficiency of its financial sector.

- Financial services are a mainstay of the U.S. economy and a major services export to China. While China has taken some steps to expand foreign firms' access to its financial markets since joining the World Trade Organization, U.S. financial services companies continue to face significant market access barriers in China. These include informal and formal bans on entry, equity caps, licensing restrictions, and data localization requirements. China's new cybersecurity law poses additional challenges for U.S. financial institutions operating in China. As a result, U.S. firms' market share in China's financial sector has been stagnant or declining in recent years.
- China has become a global leader in financial technology. China's Internet giants have emerged as significant players not only in e-commerce and logistics, but also in China's financial services sector, particularly in payments and lending.

Recommendations

The Commission recommends:

- Congress direct the Office of the U.S. Trade Representative to develop criteria for the Notorious Markets List to ensure listed companies can be held accountable for engaging in or facilitating copyright piracy and trademark counterfeiting.
- Congress require the Office of the U.S. Trade Representative to expand the National Trade Estimate's coverage of China's digital trade barriers to include an assessment of their impact on U.S. industries and whether they comply with China's World Trade Organization commitments.

Introduction

Rising incomes in China are expanding a massive new class of consumers. According to management consulting firm McKinsey & Company, in 2016 there were 116 million middle-class and affluent households in China, compared with just 2 million such households in 2000.* Chinese consumption is projected to increase by about half—to \$6.5 trillion—by 2020, and a growing amount of domestic consumption is being driven by purchases

*McKinsey defines China's middle-class and affluent households as having annual disposable income of at least \$21,000. The income threshold for this broad category is significantly higher than China's per capita disposable income, which reached \$3,520 (RMB 23,821) in 2016. In comparison, U.S. national per capita disposable income was \$43,914 in 2016. The number of high net worth individuals in China has also risen dramatically in recent years. According to the 2017 China Private Wealth Report by Bain & Company and China Merchants Bank, Chinese individuals with at least \$1.47 million (RMB 10 million) in investable assets reached 1.6 million in 2016, up from 180,000 in 2006. U.S. Department of Commerce, Bureau of Economic Analysis, "Personal Income and Its Disposition," July 28, 2017; *Newsweek*, "China Has Nine Times More Millionaires than a Decade Ago: Survey," June 20, 2017; Jonathan Woetzel et al., "Capturing China's \$5 Trillion Productivity Opportunity," *McKinsey Global Institute*, June 2016; *China Daily*, "China's Personal Income Rises 6.3 Percent in 2016," January 20, 2017.

made online.* China's stated plans to rebalance to a more consumption-driven economy should present opportunities for U.S. companies operating in the e-commerce, logistics, and financial services sectors.

However, U.S. service industries operating in and exporting to China face an uneven playing field and continue to contend with significant market access challenges, including informal bans on entry, caps on foreign equity, licensing delays, and data localization policies (see Addendum I).¹ U.S. services companies have also struggled to acquire market share in China's consumer market due to tough competition from local firms, which had an advantage by entering the market first and continue to benefit from state support. As a result, it may be increasingly difficult for U.S. companies to be significant players.

This section analyzes recent developments in China's e-commerce, logistics, and financial services sectors and identifies opportunities and challenges for U.S. companies. It examines how China's major technology companies are driving innovation in the country's consumer market, particularly in the e-commerce and financial services sectors. The section draws from the Commission's June 2017 hearing on U.S. access to China's consumer market, consultations with industry experts, and open source research.

E-Commerce

Overview of China's E-Commerce Sector

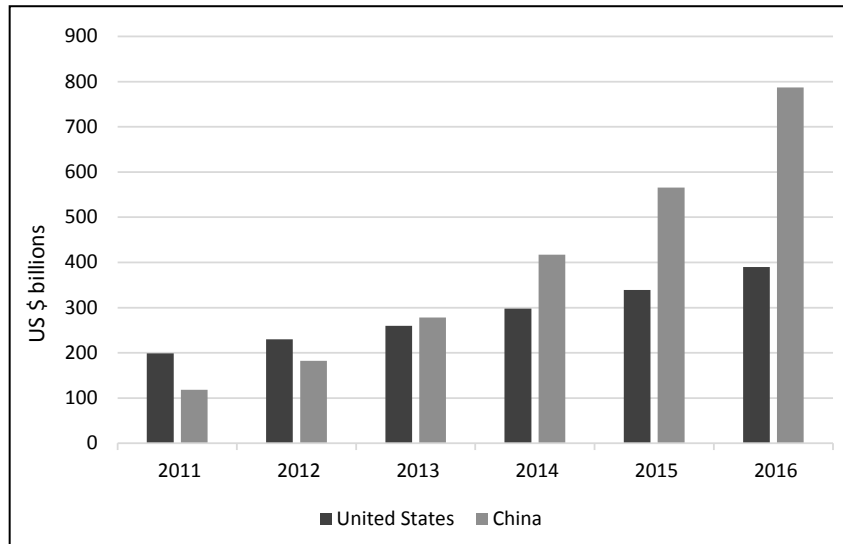
One of the most dramatic changes in China's consumer economy has been the remarkable growth of e-commerce—the buying and selling of goods and services over the Internet. China is the largest e-commerce market in the world, with e-commerce sales reaching \$787 billion (renminbi [RMB] 5.3 trillion)[†] in 2016, a 39 percent increase from 2015 (see Figure 1).[‡] By 2019, an estimated one out of every three retail dollars in China will be spent online, the highest share in the world.[§]²

*Online transactions made up a mere 3 percent of total private consumption in 2010; by 2015, e-commerce accounted for 15.9 percent of all retail sales. Private online consumption in China is projected to grow by 20 percent annually through 2020 (compared with 6 percent annual growth in offline retail sales), reaching \$1.6 trillion annually, or 24 percent of private consumption. U.S. Department of Commerce, International Trade Administration, *China eCommerce Overview*, 2016; Yuchi Kuo, "3 Great Forces Changing China's Consumer Market," *World Economic Forum*, January 4, 2016.

[†]Unless noted otherwise, this section uses the following exchange rate throughout: \$1 = RMB 6.77.

[‡]In comparison, online retail sales in the United States reached \$390 billion in 2016. China overtook the United States to become the world's largest e-commerce market in 2013, with \$278 billion in online retail sales, compared to \$260 billion in the United States. China E-Business Research Center via CEIC database; U.S. Census Bureau, *Quarterly Retail E-Commerce Sales*, May 16, 2017.

[§]In 2016, e-commerce sales in China accounted for 16 percent of total retail sales, compared to 8 percent of all retail sales in the United States. China E-Business Research Center via CEIC database; *China Daily*, "China Retail Sales Grow 9.6 Percent in 2016," January 20, 2017; U.S. Census Bureau, *Quarterly Retail E-Commerce Sales, 4th Quarter 2016*, February 17, 2017.

Figure 1: Online Retail Sales, China vs. United States, 2011–2016

Source: China E-Business Research Center via CEIC database; U.S. Census Bureau, *Quarterly Retail E-Commerce Sales*, May 16, 2017.

What Is E-Commerce?

The Organization for Economic Cooperation and Development (OECD) defines e-commerce as “the sale or purchase of goods and services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online.”³ E-commerce can involve physical goods, services purchased online but delivered in person, and digital goods and services. The three main types of e-commerce transactions are:⁴

- **Business-to-business (B2B):** B2B e-commerce involves electronic transactions of goods and services conducted between companies. B2B transactions account for the dominant share of e-commerce sales globally.
- **Business-to-consumer (B2C):** B2C e-commerce involves sales by e-commerce companies, or traditional brick-and-mortar retail and manufacturing firms with online sales channels, to consumers. Businesses reach consumers through social networks, dedicated e-commerce websites, crowdfunding platforms, and mobile applications (e.g., Amazon or Alibaba’s Tmall).
- **Consumer-to-consumer (C2C):** C2C e-commerce involves electronic transactions of goods and services conducted between consumers. These transactions are generally conducted through a third-party platform (e.g., eBay or Alibaba’s Taobao).

What Is E-Commerce?—Continued

E-commerce can be difficult to measure due to varying definitions, the speed of its growth, and the fact that many companies conduct both e-commerce and traditional commerce concurrently.⁵ A 2016 UN Conference on Trade and Development (UNCTAD) report notes, “In general, there is scant information on cross-border e-commerce. Most estimates of e-commerce do not make a clear distinction between whether it is domestic or international. What official statistics that exist are typically derived from either enterprise surveys or consumer surveys. The former can capture B2C and B2B e-commerce, while consumer surveys capture B2C and C2C transactions.”⁶

E-commerce’s impressive growth in China is largely due to an underdeveloped and fragmented traditional retail market, rapid Internet penetration, a large and expanding middle class, and government support for the sector.⁷ E-commerce provides consumers, particularly those in lower-tier cities and rural areas, with an abundance of choice and accessibility.⁸ China’s rapidly growing Internet penetration, driven primarily by increasing smartphone adoption, is also contributing to e-commerce growth. At the end of 2016, China had 731 million Internet users, or 53.2 percent of the population; 95 percent of China’s Internet users had mobile access to the Internet.⁹ Mobile e-commerce sales made up half of all online sales in China in 2015—compared with a global average of 35 percent—and are projected to account for 74 percent of all online sales in 2020.¹⁰ China’s middle class—largely urban, well-educated, and tech savvy—is fueling demand for foreign-made goods and high-quality products.*¹¹ Finally, the Chinese government has prioritized e-commerce development as an important element of China’s “Internet Plus” strategy, which seeks to upgrade China’s economy by integrating the Internet with traditional industries.[†]¹²

China’s e-commerce ecosystem consists of online marketplaces and third-party service providers that support companies with payment fulfillment, logistics, information technology support, and other areas.¹³ This ecosystem has a number of key features:

- *China’s e-commerce landscape is dominated by the marketplace model.* Around 90 percent of Chinese e-commerce takes place on online marketplaces—platforms where products are listed by manufacturers, retailers, and individuals, and the transactions are facilitated and processed by the marketplace operator.¹⁴ Alibaba’s Tmall and Taobao are well-known Chinese online marketplaces; their counterparts in the United States include Amazon and eBay.¹⁵ In contrast, most online shoppers in North America and Europe buy from the online stores of brick-and-mortar re-

*Key e-commerce product categories in China include apparel, consumer electronics, cosmetics, food and beverage, and infant care. Mark Ray, “An Introduction to E-Commerce in China,” *Sovereign Group*, 2016, 9.

†For more on China’s “Internet Plus” strategy, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 3, “13th Five-Year Plan,” in *2016 Annual Report to Congress*, November 2016, 150.

tailers (e.g., Best Buy, Walmart, and Nike) or online merchants that manage their own websites, payments, and logistics (e.g., Amazon).¹⁶ JD.com, China's second-largest e-commerce company after Alibaba, employs an Amazon-style direct sales model, where the company sources products from brands and suppliers and sells them directly to customers through its website.* By selling direct to customers, JD.com is responsible for delivering items to customers.†

- *E-commerce is tightly integrated with social media.* Unlike in the United States, where consumers use separate websites for specific purposes (e.g., Amazon for shopping, Facebook for social functions), Chinese e-commerce companies have integrated social media functions into their platforms (see Figure 2).¹⁷ In testimony to the Commission, Michael Zakkour, vice president at global consulting firm Tompkins International, described China as having “many of the most robust social media platforms in the world.”¹⁸ For example, Alibaba's Taobao platform functions as a hybrid of Facebook and Amazon, offering users the ability to interact with their peers and other shoppers. JD.com teamed up with Chinese Internet giant Tencent to launch a shopping channel on Tencent's WeChat, China's top social media app.¹⁹ According to a 2016 survey from McKinsey & Company, half of Chinese digital consumers use social media for researching products and making purchases.‡²⁰
- *Cross-border e-commerce is a fast-growing part of China's e-commerce market.* Cross-border e-commerce purchases reached \$40 billion in 2015—6 percent of China's total e-commerce market—and are expected to triple to 15 percent of the total market by 2020.²¹ The United States, followed by Japan and South Korea, are the most popular countries of origin for Chinese cross-border e-commerce purchases.²² Rapid growth in China's cross-border e-commerce market has been spurred by middle- and upper-middle-class consumers looking to buy higher-quality goods, generally in niche offerings like infant milk formula, health supplements, and cosmetics.²³ Favorable government policies, such as lower tariff rates on products purchased through cross-border e-commerce, have also contributed to its growth.²⁴

*JD.com also offers an online marketplace for third-party sellers to sell their products to customers, but it accounts for just 6 percent of its revenue; most of JD.com's revenue comes from direct sales. *Business Insider*, “JD.com Is Gaining Ground on Alibaba,” *Business Insider*, March 6, 2017; JD.com, “How to Partner with JD.com.” <http://corporate.jd.com/forPartners>.

†In contrast, Alibaba and other e-commerce companies that operate under the marketplace model are not responsible for delivering items to customers. Alibaba, for example, allows customers to select third-party delivery services that are part of its logistics network, Cainiao.

‡A 2015 Deloitte report found that 47 percent of U.S. millennial consumers (defined as consumers between 18 and 34 years old) use social media to inform their shopping purchases, compared to 19 percent of non-millennial consumers. Kasey Lobaugh, Jeff Simpson, and Lokesh Ohri, “Navigating the New Digital Divide: Capitalizing on Digital Influence in Retail,” *Deloitte*, 2015, 7.

Figure 2: A Day in the Life of a Chinese Consumer



Source: Adapted from Hannu Verkasalo, "Why the Mobile Industry Needs to Watch China's Unique Ecosystem," *Verto Analytics*, May 24, 2016.

U.S. Access to China's E-Commerce Market

Market Access for U.S. E-Commerce Companies

China's digital ecosystem is extremely integrated—social media, search, e-commerce, and payments are all linked together through major online platforms (see Table 1).^{*} Success in one segment facilitates success in the other. Although foreign companies can operate e-commerce platforms, they face restrictions in other segments of China's digital ecosystem, putting them at a decided disadvantage.

Nonetheless, China's regulatory framework for foreign investment in the e-commerce sector has undergone significant liberalization over the last two years. In China, e-commerce falls under the value-added telecommunications services subcategory of "online data processing and transaction processing business."²⁶ In June 2015, the Ministry of Industry and Information Technology (MIIT) lifted foreign ownership restrictions in e-commerce businesses, allowing foreign investors to establish wholly foreign-owned e-commerce entities in China.²⁷ Previously, foreign investors were limited to joint ventures with equity ownership capped at 50 percent.[†] The change means the process for setting up an e-commerce entity in China is the same for domestic and foreign companies: a company has to first obtain a business license from China's Ministry of Commerce and then obtain a value-added telecommu-

^{*}The Boston Consulting Group explains, "As consumers move seamlessly through its various sites, Alibaba collects information on their shopping habits, digital media consumption, logistics needs, payment and credit history, search preferences, social networks, and Internet interests to better understand their behaviors and needs—using a 'unified ID' to link consumer data across different sites." Chris Biggs et al., "What China Reveals about the Future of Shopping," *Boston Consulting Group*, May 4, 2017.

[†]In China, e-commerce business is divided into two categories: (1) retailing e-commerce, where a company sells its own merchandise on a website, and (2) platform e-commerce, where the company operates an online platform for merchandise distributors and retailers. Since 2010, foreign investors have been allowed to operate wholly-owned online trading websites; this entails filing for an Internet content provider (ICP) registration with MIIT. Platform e-commerce, however, required a value-added telecommunications services permit for online data and transaction processing; prior to June 2015, foreign investors were restricted to joint ventures with shareholding capped at 50 percent. Jack Cai, "China Removes VATS Cap for Foreign-Owned Businesses," *Everheds Sutherland*, August 23, 2016; Ian Lewis and Frank Wang, "Wal-Mart Acquisition Shows China E-Commerce Is Opening Up," *Law 360*, September 17, 2015.

Table 1: China's Digital Ecosystem Is Highly Integrated

	E-Commerce	Payments	Social Media	Search
Alibaba or Alibaba-invested service	<p>Taobao China's largest mobile commerce platform, with integrated entertainment and social features</p> <p>Tmall China's largest third-party platform for brands and retailers</p> <p>80% market share Gross merchandise value (GMV), 2016: \$556 billion (RMB 3,767 billion)</p>	<p>Alipay China's largest online third-party payment system, with more than 450 million active users, compared with about 12 million for Apple Pay</p> <p>55% market share Total payment volume, 2016: \$1.7 trillion (RMB 11.5 trillion)</p>	<p>Sina Weibo China's biggest social media platform (Twitter-like microblog)</p> <p>310 million monthly users</p>	<p>Shenma Mobile search engine</p> <p>6% market share</p>
Tencent or Tencent-invested service	<p>JD.com Direct sales e-commerce platform (similar to Amazon)</p> <p>15% market share GMV, 2016: \$97.2 billion (RMB 658.2 billion)</p>	<p>TenPay Payments integrated into popular messaging app</p> <p>37% market share Total payment volume, 2016: \$1.2 trillion (RMB 8.5 trillion)</p>	<p>WeChat Messaging app with integrated shopping features</p> <p>890 million monthly users</p> <p>QQ Popular messaging app with a focus on integrated games and blogging</p> <p>870 million monthly users</p>	<p>Sogou Search engine</p> <p>3% market share</p>
Baidu		<p>Baidu Wallet Payment system from largest search engine</p> <p><1% market share</p>		<p>Baidu China's largest search engine</p> <p>80% market share</p>
Services independent of Alibaba, Tencent, and Baidu	<p>Suning, Vipshop, Gome</p> <p>~5% market share</p>	<p>Iqianbao, Union Mobile Financial, LianLian Pay, UnionPay, Yeepay, 99Bill</p> <p>7% market share</p>		

Source: Various.²⁵

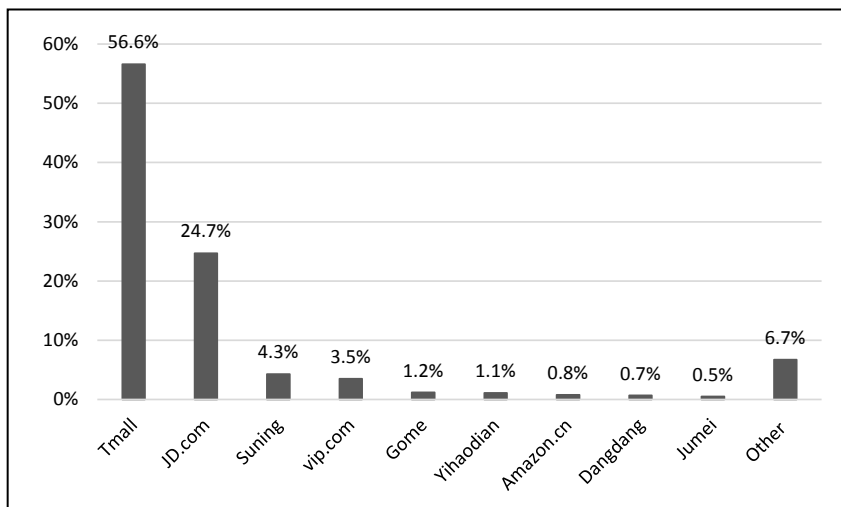
nications services permit for online data processing and transaction processing business from MIIT.²⁸

Walmart was among the first to take advantage of this liberalization, acquiring full ownership of its Chinese e-commerce venture Yihaodian in July 2015.²⁹ Walmart first invested in Yihaodian in 2012; the website developed a niche in grocery sales but has struggled to gain market share.³⁰ Yihaodian accounted for just 1.1 percent of China's retail e-commerce market sales in 2016, or \$8.7 billion.³¹ In June 2016, Walmart shifted gears with its China strategy, selling Yihaodian to JD.com for a 5 percent stake in JD.com.³² Under the deal, Walmart continues to operate the platform and stands to gain a significant amount of traffic from JD.com's massive customer base as well as access to its delivery network services.³³

However, foreign companies continue to face numerous legal and regulatory challenges. Value-added telecommunications services other than e-commerce, such as social network sites, search engines, and cloud computing, are still subject to the foreign shareholding cap of 50 percent.³⁴ In addition, many goods and services open to foreign investment still require other permits. For example, the online sale of pharmaceutical products requires a separate permit from China's Food and Drug Administration.³⁵

Ultimately, the recent liberalization of China's e-commerce sector may have come too late for foreign e-commerce companies. China's e-commerce market has become saturated, leaving little room for foreign or smaller local players to compete.³⁶ Alibaba dominates China's e-commerce market, accounting for 57 percent of the online B2C market with Tmall in 2016 (see Figure 3).³⁷ JD.com, Alibaba's main competitor, holds 25 percent market share, while other players—including Suning, VIPShop, Gome, Walmart-invested Yihaodian, and Amazon's China operation—have a combined 18 percent market share.³⁸

Figure 3: Market Share of Retail E-Commerce Players in China, 2016



Note: Total e-commerce sales in China reached \$787 billion in 2016.

Source: iResearch Consulting Group, "Retail E-Commerce Sales Share in China, by Site, 2016," February 21, 2017.

Meanwhile, Chinese Internet companies—in particular, Alibaba—are beginning to establish a presence in the United States. Since the failed debut of 11 Main in 2014—Alibaba’s online retail site catering to U.S. consumers—Alibaba’s e-commerce strategy has focused on encouraging U.S. companies to sell to Chinese consumers through its e-commerce platforms while making strategic investments in U.S. e-commerce companies to gain familiarity with the U.S. market.³⁹ Alibaba founder and executive chairman Jack Ma is seeking to cultivate ties with senior U.S. government officials. In a January 2017 meeting with then President-elect Donald Trump, Mr. Ma discussed Alibaba’s plans to bring one million U.S. small and medium-sized businesses to its platform over the next five years.⁴⁰ Alibaba followed this outreach by holding a conference in Detroit in June 2017 to educate U.S. small businesses and agricultural producers about the company and opportunities in China’s e-commerce market.⁴¹ In July 2017, Mr. Ma co-chaired a gathering of 20 leading business executives from the United States and China, attended by U.S. Secretary of Commerce Wilbur Ross, a day prior to the U.S.-China Comprehensive Economic Dialogue.⁴² In addition to e-commerce, Alibaba is pursuing ventures in cloud computing services and financial services in the U.S. market.⁴³

Sales Channels for U.S. Retailers and Brands

While China has traditionally provided the world with its manufactured goods, its e-commerce boom should offer increased opportunities for U.S. retailers and brands, with more and more Chinese consumers purchasing foreign goods.⁴⁴ According to estimates from research firm eMarketer, 15 percent of Chinese consumers bought foreign goods online in 2016; that share is expected to rise to 25 percent by 2020.⁴⁵ These consumers are typically younger and middle class.* Rising incomes and persistent quality and safety problems with domestic products are contributing to a growing demand for foreign products, particularly in areas where the United States excels, such as high-quality foods and supplements, beauty products, and healthcare-related goods.⁴⁶

U.S. retailers and brands can sell to Chinese consumers through several channels:

- *Direct sales from a website hosted outside of China.* In his testimony to the Commission, Richard Cant, Asia counsel at ADX Net Inc., noted this was the easiest way for foreign companies to sell products to Chinese consumers. This approach does not require the company to set up a legal entity in China.⁴⁷ The main drawback, however, is that Chinese consumers rarely purchase products on foreign websites, deterred by the language barrier, different payment methods, high shipping costs, and long delivery times.⁴⁸ Foreign websites also run the risk of being blocked by Chinese authorities, who maintain an extensive Internet censorship regime. (For more on China’s censorship regime, see

*For example, Alibaba reported 70 percent of customers on Tmall Global, its cross-border e-commerce platform, are between the ages of 24 and 32, live in first- and second-tier cities, and have an annual income of at least \$14,770. He Wei, “Survey Says More E-Shoppers to Buy Foreign Stuff by 2020,” *China Daily*, February 16, 2017; Adam Najberg, “Cross-Border Shopping Surged on Alibaba’s Tmall Global in 2016,” *Alizila*, December 22, 2016.

Chapter 3, Section 5, “China’s Domestic Information Controls, Global Media Influence, and Cyber Diplomacy.”)

- *Direct sales from a self-owned website hosted in China.* Companies can sell directly to Chinese consumers by setting up a local Chinese website with order processing capabilities.⁴⁹ To set up a website hosted in China, foreign companies are required to establish a legal entity in China; the legal presence could be a joint venture or a wholly foreign-owned enterprise.⁵⁰ The company then needs to apply for an Internet content provider (ICP) license.*
- *Sell through a Chinese third-party platform.* The most common approach for foreign brands is to establish a presence on a domestic third-party platform like Tmall and JD.com. This approach allows sellers to take advantage of a domestic platform’s customer base and traffic flow.⁵¹ However, Mr. Cant explained, these platforms encourage the presence of major international foreign brands and retailers, but not smaller foreign companies.⁵² Although Chinese law places no explicit restrictions on foreign companies selling through a domestic e-commerce platform, each platform has developed its own requirements for foreign businesses that represent “very high barriers to entry.”⁵³ Chinese platforms generally require sellers to have a local Chinese business license, locally registered trademarks, and tax registration documents before they are able to set up a store.⁵⁴ Foreign sellers also need to maintain local inventory, fulfilment, and customer support, which means they either need to establish a local Chinese entity or find a local partner to provide those services on the seller’s behalf.⁵⁵
- *Sell through cross-border pilot platforms.* China has established pilot cross-border e-commerce zones in 15 Chinese cities, which offer preferential tax policies and streamlined customs clearance procedures.† Chinese e-commerce companies have set up cross-border e-commerce platforms to meet growing demand for foreign products, with Alibaba launching Tmall Global in 2014 and JD.com launching JD Worldwide in 2015.⁵⁶ Foreign companies selling through these platforms can ship products directly from their own warehouse or through a bonded warehouse in China; this allows foreign companies to bypass the need to establish a legal entity in China or work through a local distributor.⁵⁷

*There are two types of ICP licenses: commercial and noncommercial. A commercial ICP license allows the company to engage in online sales and payment transaction, while a noncommercial ICP license allows the company to do just brand promotion and business development (i.e., information functions). In June 2015, MIIT announced that wholly foreign-owned enterprises can apply for a commercial ICP license; previously, wholly foreign-owned enterprises could only apply for noncommercial ICP licenses. Richard Hoffmann, “WFOE Can Apply for a Commercial ICP License for E-Commerce Business,” *Ecovis*, February 16, 2016.

†The 15 cities are Hangzhou (population: 9.2 million), Tianjin (15.6 million), Shanghai (24.2 million), Chongqing (30.5 million), Hefei (7.9 million), Zhengzhou (9.7 million), Guangzhou (14 million), Chengdu (16 million), Dalian (7 million), Ningbo (7.9 million), Qingdao (9.2 million), Shenzhen (12 million), Suzhou (10.6 million), Fuzhou (7.6 million), and Pingtan (431,000). China’s National Bureau of Statistics via CEIC database; China’s Ministry of Commerce, *MOFCOM Spokesman Comments on the General Supervision Arrangement after Transitional Period of Cross-border E-Commerce Retail Import*, March 19, 2017; Tom Brennan, “How Foreign Brands Can Find Fortune in China Right Now,” *Alizila*, April 5, 2016.

Challenges for Foreign Retailers and Brands

While the size of China's e-commerce market offers opportunities for foreign retailers and brands, it is not without its challenges and risks. Key challenges include uncertainty over the evolving regulatory framework for cross-border e-commerce, intellectual property rights enforcement, and data localization policies.

- *Changing regulatory environment for cross-border e-commerce.* Cross-border e-commerce's rapid growth in recent years has drawn the attention of Chinese regulators. Facing pressures from traditional retailers at home and the loss of tax revenue, in April 2016 the Chinese government announced several new tax policies targeting cross-border e-commerce.* The new policies would subject goods purchased through cross-border e-commerce platforms to tariffs, value-added tax, and consumption taxes, instead of the postal parcel tax previously applied.⁵⁸ In addition, China's Ministry of Finance announced it would create a "positive list" of foreign products allowed for purchase through cross-border e-commerce and some products on the list would have to obtain import licenses.⁵⁹ In response to concerns from cross-border e-commerce stakeholders, Chinese regulators suspended the policy for a one-year grace period, which has subsequently been extended to the end of 2018.⁶⁰
- *Intellectual property rights enforcement.* The sale of counterfeit and pirated goods on Chinese e-commerce platforms remains a challenge for U.S. retailers and brands.⁶¹ Mr. Zakkour noted in his testimony to the Commission, "While the Chinese government has ample laws regarding intellectual property on the books, enforcement efforts have at times been uneven."⁶² In 2016, the Office of the U.S. Trade Representative (USTR) added Alibaba's Taobao back to its list of "notorious markets" known for selling counterfeits, citing brand owners' complaints about the proliferation of fakes on the company's platform and hurdles to removing counterfeit items from the site.⁶³ According to the USTR report, Taobao "is an important concern due to the large volume of allegedly counterfeit and pirated goods available and the challenges right holders experience in removing and preventing illicit sales and offers of such goods."⁶⁴ Alibaba argues counterfeit goods are an industrywide problem in China and it has increased measures to remove fake goods from its e-commerce platforms.[†] While legal remedies for intellectual property infringement are improving and the Chinese government has increased enforcement efforts to crack down on online sellers of fraudulent goods, fake goods remain widespread.⁶⁵ According to Fortune Magazine, U.S. sneaker maker New Balance estimates as much as 90 percent of the company's listings on

* Previously, goods imported through cross-border e-commerce were exempt from certain import duties, consumption tax, and value-added tax, and were liable only for personal postal articles tax. Generally, personal postal article taxes were lower than taxes for the same item sold through conventional trade. Bloomberg News, "A \$60 Billion E-Commerce Loophole in China May Be Narrowing," May 18, 2017; Mark Ray, "An Introduction to E-Commerce in China," *Sovereign Group*, 2016, 25.

† These measures include introducing a program to expedite the notice-takedown process for brands and taking legal action against sellers of counterfeit goods. Alibaba Group, "Alibaba Group

Taobao are counterfeit.⁶⁶ Alibaba said it removed 380 million infringing listings on Taobao in the first eight months of 2016.⁶⁷

- *Data localization.* China's draft e-commerce law, released in December 2016, mandates the local storage of Chinese consumer data.⁶⁸ Under the draft law, both foreign platforms that allow Chinese companies to sell on them (e.g., Amazon China) and companies operating outside of China but targeting Chinese consumers would be subject to the requirement.⁶⁹ China's new cybersecurity law may also mandate data localization for companies in the e-commerce sector, depending on whether e-commerce is deemed "critical information infrastructure."* (For more on China's cybersecurity law, see Chapter 1, Section 1, "Year in Review: Economics and Trade.") Data localization can increase costs for foreign companies, which would have to set up their own server or contract out to domestic suppliers to store data within China.⁷⁰ Foreign companies have reported de facto requirements to store data locally, but the cybersecurity law and pending e-commerce law are expected to formally codify these requirements.⁷¹

Logistics

Rising domestic consumption is fueling consumer demand for more efficient and reliable logistics services. The country's massive logistics sector is worth \$2.2 trillion, compared to the \$9 trillion global logistics market, according to logistics consultancy Armstrong & Associates.⁷² China's domestic logistics industry remains underdeveloped; historically, most of China's investments focused on improving export logistics infrastructure at the expense of domestic logistics infrastructure.⁷³ The World Bank's 2016 Logistics Performance Index puts China in 27th place out of 160 countries.⁷⁴ China's logistics costs are relatively high, at 15 percent of gross domestic product (GDP) in 2016, compared to the global average of 13 percent.⁷⁵ The industry is also extremely fragmented, with state-owned enterprises dominating logistics segments formerly or currently closed to private participation (e.g., Sinotrans in offshore shipping and China Post in domestic mail delivery), making it difficult for integrated service providers to emerge.⁷⁶

The Chinese government has prioritized logistics improvements as key for expanding domestic consumption.⁷⁷ China's 13th Five-Year Plan directed that support be provided to the domestic logistics

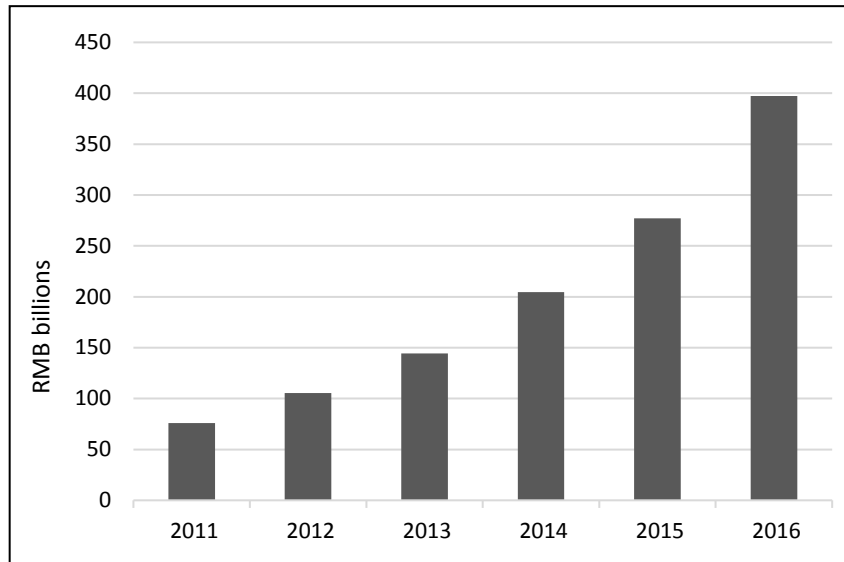
Platform Governance Annual Report 2016," May 2017, 5; Michael Zakkour, "Amazon and Alibaba Fight Fakes with a New Weapon: Lawyers," *Forbes*, January 12, 2017; Cao Li, "Alibaba Faces Growing Pressure over Counterfeit Goods," *New York Times*, December 22, 2016.

*The law identifies some sectors, including energy, finance, transportation, public information, and other sectors deemed important to national security as critical information infrastructure, but does not define the term, leaving that decision to the State Council. Draft regulations issued by the State Council in July 2017 suggest an expansive scope for what constitutes critical information infrastructure; it names a number of sectors—including cloud computing, big data, and other such large-scale public information network services—in addition to the sectors identified in the cybersecurity law. In addition, the draft regulation proposes a discretionary process for identifying critical information infrastructure, to be jointly managed by the MIIT, Ministry of Public Security, and Cyberspace Administration of China. Analysts believe e-commerce companies are likely to be deemed critical information infrastructure as they could fall under a number of sectors already identified; for example, as big data and cloud services providers. Paul Triolo, Roger Creemers, and Graham Webster, "China's Ambitious Rules to Secure 'Critical Information Infrastructure,'" *New America*, July 14, 2017; Hogan Lovells, "China Passes Controversial Cyber Security Law," November 2016, 1.

industry and outlined policies to lower taxes and reduce costs in the logistics sector.⁷⁸ Recent government policies have also emphasized greater industry consolidation and the international expansion of domestic firms.⁷⁹

The domestic express delivery* sector—the segment closest to Chinese consumers—owes much of its recent rapid growth to China’s e-commerce boom.⁸⁰ China is the world’s largest express delivery market, with total parcel volume reaching 31 billion parcels in 2016, about 1.5 times that of the United States.⁸¹ Online shopping accounted for 60 percent of China’s parcel volume.⁸² The express delivery sector generated \$59 billion (RMB 397 billion) in revenue in 2016 and grew at a compound annual rate of about 40 percent over the past five years (see Figure 4).⁸³

Figure 4: China Express Delivery Market, Annual Revenue, 2011–2016



Source: State Postal Bureau via CEIC database.

Despite its recent growth, China’s express delivery industry remains inefficient and highly fragmented, with an estimated 8,000 domestic competitors, mostly small and medium-sized firms.⁸⁴ In 2015, China’s top five express delivery companies—ZTO Express, YTO Express, STO Express, Yunda Express, and SF Express—held a combined 60 percent of total market share, with no single firm holding more than 15 percent market share.† State-owned China Post is another key player, although the company has been losing market share to private delivery companies.⁸⁵

*Express delivery logistics involves companies moving mail or package shipments on a time-definite basis.

†In contrast, in mature logistics markets such as the United States, Europe, and Japan, the express delivery industry is generally consolidated among a few market leaders. In the United States, for example, the top two players held 80 percent of market share by volume in 2015. U.S. Securities and Exchange Commission, *Form F-1 Registration Statement, ZTO Express*, September 30, 2016, 104.

The industry's fragmentation is due in part to local protectionism, whereby local governments require delivery firms to maintain local licenses and offices where they operate; the multiple levels of licensing and a lack of standardization in licensing requirements in different jurisdictions make it harder for firms to build up national networks.⁸⁶ Fierce competition in the sector has led to margin erosion: over the past decade, the average cost of delivering a package fell by almost 60 percent to \$1.90 (RMB 12.8) in 2016.⁸⁷ In the United States, the average cost per package is \$10.⁸⁸ Given these competitive dynamics, a growing number of express delivery companies are diversifying their businesses to cover other parts of the supply chain, such as warehousing services and logistics finance.⁸⁹ Over the last year, major private express delivery companies have gone public to raise capital for expanding and diversifying their businesses.*

In response to the country's lagging domestic logistics infrastructure, Chinese e-commerce companies are developing logistics capabilities.⁹⁰ Some companies, such as JD.com, Suning, and Vipshop, opted to develop self-owned and self-managed logistics networks.⁹¹ Alibaba took a different approach, launching Cainiao Network Technology, an alliance of express delivery firms and e-commerce companies, in 2013.⁹² Cainiao acts as a facilitator: its real-time information platform coordinates the shipping activities, warehouses, transport fleets, and distribution centers owned by its member companies.⁹³ Cainiao's network also includes major international logistics providers, such as DHL, the United States Postal Service, and Singapore Post.⁹⁴ Cainiao's partnerships with domestic and international logistics companies enable it to integrate massive logistics data flows for improved delivery tracking and user feedback.⁹⁵

U.S. Access to China's Logistics Market

As a country that is the world's largest exporter and is also rebalancing toward value-added services like express delivery, China presents an attractive market for foreign logistics companies. Foreign logistics firms have been operating in China since the 1980s through joint ventures or other local operations.⁹⁶ However, while established international express delivery operators like UPS, FedEx, and DHL dominate China's international express delivery market, they represent only a small fraction of the domestic express delivery market.⁹⁷

Domestic Express Delivery

Based on China's World Trade Organization (WTO) commitments, foreign express delivery companies have been able to establish foreign-owned subsidiaries in China since 2005.⁹⁸ Nevertheless, foreign companies are blocked from the document segment of China's domestic express delivery market, where China Post maintains a le-

*For example, ZTO Express listed on the New York Stock Exchange in October 2016. Over the past year, SF Express, STO Express, YTO Express, and Yunda Express went public in China through reverse merger takeovers (i.e., the acquisition of a public company by a private company so the private company can circumvent the long and complex process of going public. Winnie Lo, "Last Mile Delivery: A Pain Point of Online Shopping," *Fung Business Intelligence*, March 2017; Ryan McMorrow, "ZTO Express of China Has Largest U.S. I.P.O. This Year," *New York Times*, October 27, 2016.

gal monopoly.⁹⁹ In addition, the USTR's *2016 Report to Congress on China's WTO Compliance* notes, "Over the years, China has issued a variety of measures that have appeared to undermine market access for foreign companies and have raised questions in light of China's obligations."¹⁰⁰

Notably, China's 2009 Postal Law introduced a new permitting system that required private express delivery firms—both foreign and domestic—to reapply for licenses from the State Postal Bureau.¹⁰¹ However, according to the USTR, the State Post Bureau "severely delayed" the application approval process for foreign firms, "significantly hampering their ability to compete."¹⁰² Before the law went into effect, FedEx and UPS held 58 and 33 licenses, respectively, but they had to reapply for these licenses once the law went into effect.¹⁰³ It was not until 2012 that the two received new licenses, and it was only in 2014 that the companies returned to their 2009 license levels.¹⁰⁴ According to the USTR, during the same period the State Postal Bureau "continued to quickly approve permit requests from Chinese domestic delivery companies."¹⁰⁵ Foreign firms continue to face discriminatory treatment in receiving approval for domestic licenses.¹⁰⁶

China's domestic express market is of limited interest to foreign firms, due in part to regulatory complexity.¹⁰⁷ A more significant challenge, however, is how intense competition between domestic companies has driven prices down, making it difficult for foreign firms to turn profits.¹⁰⁸ As a result, foreign express delivery firms have not made significant inroads: in 2015, foreign companies held less than 1 percent of market share in the domestic express sector.¹⁰⁹ DHL withdrew from China's domestic delivery market in 2011, citing a lack of cost advantage.¹¹⁰

International Express Delivery

China's international express delivery market was opened to foreign companies beginning in the early 1980s; at the time, China's state-owned players had limited capacity for international delivery.¹¹¹ Foreign logistics firms continue to focus their China strategy on international delivery, mainly for multinational clients, but increasingly for Chinese companies in industries driving consumption growth in China.¹¹² The big four global carriers (FedEx, UPS, DHL, and TNT) account for about 80 percent of China's international express market, due to their advanced freight solutions and global reach.¹¹³

Unlike the shipment of goods to Chinese consumers (discussed in the previous section, "Domestic Express Delivery"), foreign firms see growing opportunities in China's international express delivery market, particularly with the rise of cross-border e-commerce.¹¹⁴ Over the past two years, Amazon has expanded its cross-border logistics offerings in China. Amazon obtained an ocean freight forwarding license in 2016, allowing it to handle the shipment of goods from Chinese sellers on its site to its warehouses in the United States, and the company is currently developing an air cargo service for Chinese customers.¹¹⁵ In May 2017, UPS announced a joint venture with SF Holding, the parent company of China's largest domestic express company SF

Express, to provide international delivery services from China to the United States.¹¹⁶ The partnership will enable SF Express to leverage UPS's extensive global network and UPS to tap into SF Express's vast network within China.¹¹⁷

Warehousing

China suffers from a dearth of modern warehouses. According to industry experts, less than 20 percent of China's warehouses are categorized as modern, with fully computerized tracking systems and advanced retail technology.¹¹⁸ To put this in perspective, China's stock of modern warehouses is about that of Southern California.¹¹⁹ Industry analysts estimate as much as \$2.5 trillion may be needed over the next decade for land and warehouse construction to cope with growing warehousing needs driven by China's e-commerce boom.¹²⁰ As a result, China's warehouse sector has drawn investments from major international warehouse companies like Prologis and Global Logistics Properties as well as global private equity firms like Blackstone and Carlyle Group.¹²¹

Financial Services

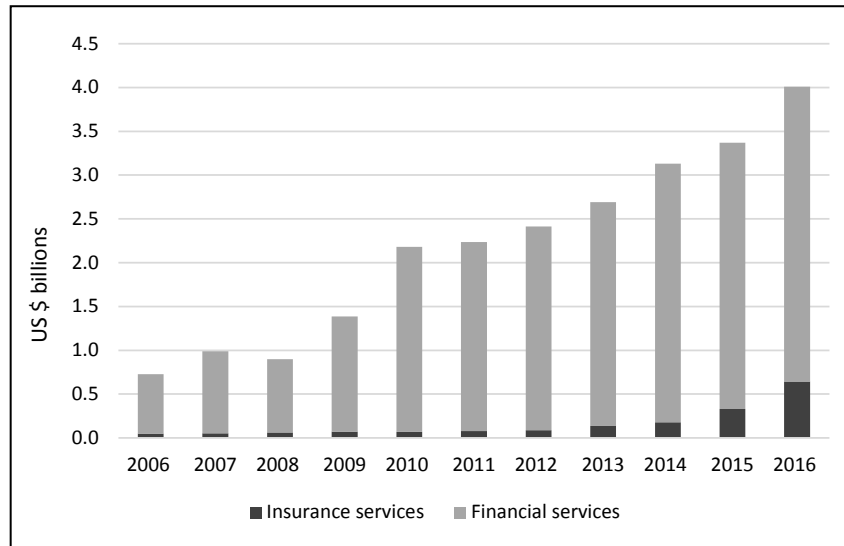
Financial services have been a major driver of growth for China's services sector, increasing about 11 percent annually from 2012 to 2016.¹²² However, China has made limited progress in implementing reforms to improve the market orientation and efficiency of its financial system. Moreover, Chinese consumers' access to financial services remains limited, and improved access will be critical for raising domestic consumption levels. While China's traditional financial services sector lags behind that of developed markets, China's mix of a large and underserved small- and medium-sized enterprise (SME) market, rapid online and mobile penetration, e-commerce development, and regulatory facilitation has driven innovation in financial services.¹²³ China's Internet giants have emerged as significant players in China's financial system, particularly in payments and lending.

Financial services are a mainstay of the U.S. economy and a leading services export to China. U.S. financial services exports to China have steadily grown over the last decade, from \$726 million in 2006 to \$4 billion in 2016 (see Figure 5).^{* 124} Despite the size of China's financial sector, however, U.S. financial services exports to China were just 3.5 percent of total U.S. financial services exports, which reached \$113 billion in 2016.^{† 125} Although China has taken some steps to expand foreign firms' access to its financial markets since joining the WTO in 2001, foreign firms remain marginal players due to formal and informal market access barriers imposed by the Chinese government.^{‡ 126}

*The U.S. Bureau of Economic Analysis maintains separate categories for financial services and insurance services in its international transactions data. In this report, U.S. financial services exports refers to both financial services and insurance services exports. U.S. Department of Commerce, Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, June 2014, 20–22.

†For comparison, in 2016, U.S. financial services exports to India, Japan, and the European Union were \$1 billion, \$5.5 billion, and \$34.2 billion, respectively. U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3. U.S. International Transactions, Expanded Detail by Area and Country*, June 20, 2017.

‡A 2016 U.S. International Trade Commission working paper on the economy-wide effects of reduced policy barriers to foreign investment in China's financial services sector found that a 50

Figure 5: U.S. Financial Services Exports to China, 2006–2016

Source: U.S. Department of Commerce, Bureau of Economic Analysis

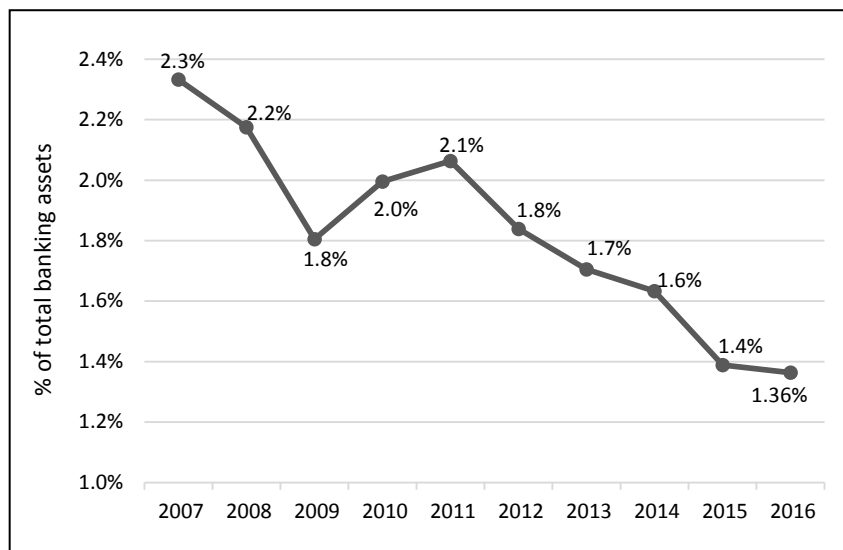
Banking

Foreign banks have helped China's banking sector develop by bringing in capital and expertise in corporate governance and risk management, but have struggled to build a presence in China.¹²⁷ While China has taken steps to gradually expand foreign firms' access to the banking sector since 2001, foreign banks continue to face ownership restrictions, licensing barriers, and restrictive technology policies.¹²⁸ As a result, foreign banks remain minor players in China's banking sector. According to data from the China Banking Regulatory Commission (CBRC), foreign banks' market share in China was just 1.36 percent at the end of 2016, compared to 2.3 percent in 2007 (see Figure 6).¹²⁹ This is far below the 20 percent market share foreign banks hold on average in OECD countries and the nearly 50 percent market share foreign banks hold in emerging markets and developing countries.¹³⁰

Profits at Chinese units of foreign banks have been declining: in 2015, the after-tax profit of foreign banks in China was \$2.3 billion (RMB 15.3 billion), a 22 percent decline year-on-year.¹³¹ Some foreign banks have even started to scale back their presence in China. In 2016, Citigroup sold its stake in China Guangfa Bank and Deutsche Bank sold its 20 percent stake in Hua Xia Bank.* Still, many foreign banks

percent reduction of investment barriers would increase foreign affiliate sales in China's financial services sector by 58 percent. Wen Jin Yuan, "The Effect of Reducing Investment Barriers in China's Construction and Financial Services Sectors on the Chinese Economy," *U.S. International Trade Commission Working Paper*, December 2016.

*Analysts argue that foreign banks have been scaling back in China in part because of their inability to gain traction with Chinese clients. Larger macroeconomic factors not specific to China may also have factored into their decision; for example, foreign banks' global revenue and profits have been suffering from a strong U.S. dollar and narrowing interest margins. Leng Cheng, "Still Minor Players, Foreign Banks Shift Focus," *Shanghai Daily*, April 26, 2017; Chu Daye, "Despite Lack of Success in China, Foreign Banks' Investments Still Pay Off," *Global Times*, January 9, 2017.

Figure 6: Foreign Banking Assets in China, 2011–2016

Source: China Banking Regulatory Commission via CEIC database.

are taking a long-term view in China and see their local offices as a platform to serve foreign clients in the country, while working to gain business with Chinese companies and wealthy individuals with overseas fundraising and wealth management needs.¹³² A 2015 report from Ernst & Young noted the firm “[does not] expect many new foreign banking entities ... to seek to enter the mainland China market over the next five years. The greater opportunity lies with Chinese banking customers expanding cross-border, where they can be served by foreign banks with global networks.”¹³³

Market Access for Foreign Banks

In China, foreign banks can operate either as subsidiaries (which can be wholly foreign-owned or joint venture banks) or branches.¹³⁴ China continues to limit foreign investment in its banking sector. Foreign equity holdings in domestic commercial banks are capped at 20 percent for a single foreign investor and 25 percent for total foreign ownership.*¹³⁵ Foreign equity stakes in domestic securities and asset management companies are restricted to 49 percent.†¹³⁶

*Under its WTO General Agreement on Trade in Services commitments, China agreed to allow foreign financial institutions to provide foreign currency services in China without client or geographic restrictions immediately upon accession. Within five years after accession, “any existing non-prudential measures restricting ownership, operation, and juridical form of foreign financial institutions, including on internal branching and licenses [would] be eliminated.” China maintains its restrictions on foreign equity in existing domestic banks are consistent with its WTO commitments, arguing “what China had committed in its services schedule was to allow qualified foreign financial institutions to establish Chinese-foreign joint-venture banks without any limitation on the equity share. ... However, the issue of foreign equity participation in China’s domestic banks [is] an issue of cross-border merger and acquisitions, which [is] beyond the scope of China’s WTO accession commitments.” World Trade Organization, *Report of the Meeting Held on 27 November 2006*, November 30, 2006; World Trade Organization, *Report of the Working Party on the Accession of China, Part II – Schedule of Specific Commitments on Services*, November 10, 2001.

†China’s Ministry of Finance announced in November 2016 it will gradually increase the 49 percent ownership cap for foreign investors, but did not specify a timetable. *Bloomberg News*,

Foreign banks have struggled to expand their branch networks due to restrictions on foreign bank branch openings.¹³⁷ According to CBRC data, at the end of 2016 there were 39 locally incorporated foreign banks and 1,031 branches of foreign banks operating in China, or about 0.4 percent of China's network of 228,000 branches.¹³⁸ In her testimony to the Commission, Anne Stevenson-Yang, research director at J Capital Research, explained, "Without branches, [foreign banks] cannot collect deposits, and without deposits, they cannot extend loans, because loans are strictly limited to a proportion of deposits."¹³⁹

In late 2014, China's State Council released amendments to the Foreign Bank Administrative Regulations relaxing restrictions on foreign bank branch openings and foreign banks engaging in RMB-denominated business.¹⁴⁰ Previously, the CBRC required foreign banks to operate a representative office in China for at least two years before setting up a branch in China, and foreign banks could apply for only one new branch at a time.¹⁴¹ The amendments lifted these requirements and shortened the required waiting period for foreign banks to apply for an RMB license from three years after establishing operations in China to one year.¹⁴²

China's technology policies pose additional challenges for foreign banks and other financial institutions operating in China. Under China's new cybersecurity law, critical information infrastructure providers—which includes the financial services sector—are required to store data collected during the course of their business operations within China, although China appears to have granted firms a grace period until 2018 to comply with some requirements.¹⁴³ The law also subjects critical information infrastructure operators to security reviews by Chinese authorities to ensure they use products that meet China's standards of "secure and controllable" technology, the exact parameters for which are unclear.¹⁴⁴ In his testimony to the Commission, Michael Hirson, Asia director at Eurasia Group, noted that depending on how China implements the law in practice, "this could result in anything from an irritation to a major business impediment."¹⁴⁵ According to Mr. Hirson, "The danger is that [foreign financial] firms will be unable to use significant parts of their global IT infrastructure in China, and be forced to use domestic substitutes," putting them at a significant disadvantage relative to domestic competitors.¹⁴⁶ (For more on China's cybersecurity law, see Chapter 1, Section 1, "Year in Review: Economics and Trade.")

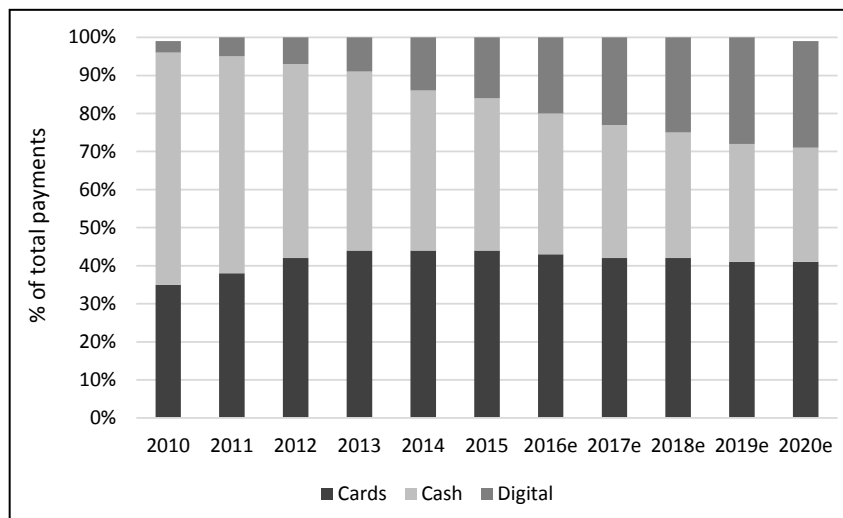
Payments

Over the last six years, Chinese consumers have quickly shifted from making payments with cash to cards and digital alternatives.¹⁴⁷ In 2010, 61 percent of China's retail consumption was transacted in cash; that share fell to an estimated 37 percent in 2016, according to data from financial research firm Kapronasia (see Figure 7).¹⁴⁸ In 2016, 43 percent of consumer retail spending in China was card based, up from 35 percent in 2010.¹⁴⁹ Most dramatically, digital (Internet and mobile) payments accounted for 20 percent

¹³⁷"China Pledges to Allow More Ownership of Brokerages," November 11, 2016.

of retail transaction volumes in 2016, up from 3 percent in 2010.¹⁵⁰ The rapid uptake and use of bank cards and digital payments is due in large part to China's e-commerce boom and government policies promoting noncash payments.¹⁵¹

Figure 7: China Retail Consumption by Payment Type, 2010–2020



Note: Data from 2016 to 2020 are estimates.

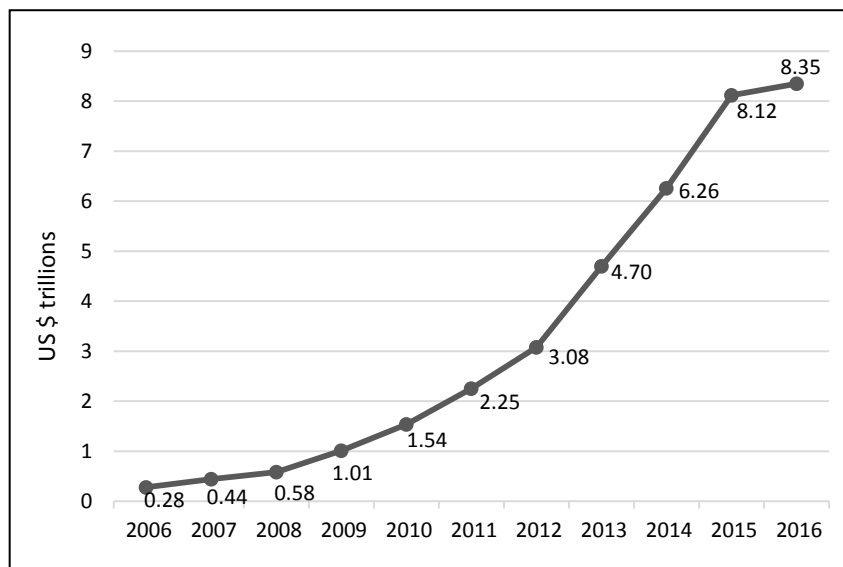
Source: U.S.-China Economic and Security Review Commission, *Hearing on U.S. Access to China's Consumer Market: E-Commerce, Logistics, and Financial Services*, written testimony of Zennon Kapron, June 22, 2017.

China's payments sector has long been dominated by UnionPay, the country's state-owned payment card clearing and settlement network. Owned by a consortium of Chinese state-owned banks and led by a succession of former People's Bank of China (PBOC) officials, UnionPay has held a near-monopoly over China's bank card market.¹⁵² Until 2015, UnionPay was the sole entity allowed to provide clearing services for RMB transactions.¹⁵³ According to PBOC data, Chinese bank card payment transactions reached \$8.4 trillion in 2016 (see Figure 8) and the market is projected to become the world's largest by 2020.¹⁵⁴ Debit cards dominate China's payment card market, accounting for 92 percent of the total number of bank cards in circulation in 2016.¹⁵⁵ Low credit card penetration stems partly from a lack of consumer credit ratings.¹⁵⁶ As of 2015, the PBOC had credit histories for 380 million Chinese citizens, less than one-third of China's adult population.*¹⁵⁷

Market Access for Foreign Payment Companies

The size of China's payments market offers opportunities for U.S. companies, but they face regulatory challenges and stiff competition from domestic incumbents. China committed to granting access to foreign payment companies as part of its accession to the WTO in

*In comparison, 89 percent of U.S. adults have credit scores. Zennon Kapron and Michelle Meertens, "Social Networks, e-Commerce Platforms, and the Growth of Digital Payment Ecosystems in China," *Better Than Cash Alliance*, 28.

Figure 8: Chinese Bank Card Payment Transactions, 2006–2016

Source: People's Bank of China via CEIC database.

2001, but did not honor that commitment, prompting a U.S. challenge.¹⁵⁸ A 2012 WTO ruling determined China's policies governing access to its domestic electronic payments market unfairly discriminated against foreign payment card companies.¹⁵⁹ In response to the WTO ruling, in 2015 the State Council announced it would allow qualified domestic and foreign companies to apply for licenses to clear domestic Chinese payments.¹⁶⁰ According to the PBOC, foreign companies can set up bank card clearing businesses by meeting the same requirements as domestic companies.* Previously, UnionPay was the only entity allowed to provide clearing services for RMB transactions.¹⁶¹

However, in November 2014 the PBOC announced a new technical standard that would raise the costs of market participation for foreign card companies.¹⁶² The new PBOC rules require bank cards issued in China to comply with a technical standard known as PBOC 3.0.¹⁶³ The PBOC 3.0 standard is only used by UnionPay and is incompatible with the global industry standard, EMV, because it uses different encryption methods.¹⁶⁴ Visa, MasterCard, and other foreign payment companies would have to redesign their cards, potentially at great cost, to meet the new payment standards.¹⁶⁵

As part of the initial outcomes of the 100-day action plan to address trade and investment issues between China and the United States, China agreed to issue guidelines to allow U.S.-owned suppliers of electronic payment services to "begin the licensing process."¹⁶⁶

*These requirements include that applicants hold at least RMB 1 billion (\$152 million) in registered capital and meet China's national and industry security standards. In addition, foreign bank card companies are required to set up a local entity and obtain a bank clearing permit. Roy Zou, Mark Parsons, and Andrew McGinty, "China Opens up the Domestic Bank Card Clearing Market to Foreign Competition," *Hogan Lovells*, May 12, 2015; Shu Zhang and Matthew Miller, "China Opens Its Markets to Foreign Bank Card Companies," *Reuters*, June 7, 2016.

The PBOC released guidelines in June 2017 laying out a two-step licensing process; industry analysts believe the process could take two years or longer.¹⁶⁷ According to Ker Gibbs, chairman of the American Chamber of Commerce in Shanghai, “Opening the market for electronic payments is mainly symbolic... At this point the domestic players are well entrenched so foreign companies will have a hard time entering.”¹⁶⁸ Nonetheless, major U.S.-based payment companies, including MasterCard and Visa, have indicated they plan to apply for domestic payment licenses.¹⁶⁹

In order to operate in the Chinese market, U.S. payment networks like Visa and MasterCard partnered with Chinese banks to offer cobranded cards in China. Under this arrangement, foreign payment networks processed foreign currency payments for Chinese cardholders traveling abroad, while UnionPay processed domestic currency transactions.¹⁷⁰ However, in late 2016 the PBOC issued a notice instructing Chinese banks not to renew cobranded cards.¹⁷¹ With the phasing out of cobranded cards in China, U.S. payment companies are experiencing declines in their reported volumes for cobranded cards, and it is estimated this negative trend will continue, particularly as UnionPay gains wider acceptance in international markets.¹⁷²

Insurance

China’s insurance market—the third largest in the world at \$1.8 trillion (RMB 12 trillion) in 2015—has been growing at a robust pace due to the continued expansion of China’s middle class.¹⁷³ There is substantial room for China’s insurance sector to grow: international experience has shown that consumers in countries with relatively low but rapidly increasing wealth have a disproportionately increasing demand for insurance products.¹⁷⁴ According to estimates from global reinsurer Munich Re, China’s insurance penetration rate (defined as premium volume as a percentage of GDP) was 4.2 percent in 2016, below the global average of 6.2 percent.¹⁷⁵ Growth in China’s life insurance market has been particularly strong, expanding 30 percent year-on-year in 2016.¹⁷⁶ In August 2014, the State Council released *Several Opinions on Accelerating the Development of the Modern Insurance Service Industry*, which recognized that “accelerating the development of the modern insurance service industry is an important part of improving the modern financial system” in China and endorsed further liberalization of China’s insurance market.¹⁷⁷

Market Access for Foreign Insurers

Foreign insurers continue to face significant market access barriers, with regulations preventing most foreign insurers from owning more than half of a Chinese insurer.¹⁷⁸ Foreign insurers also face delays in license issuances and new product approvals.¹⁷⁹ In the life insurance sector, foreign insurers can only participate through Chinese-foreign joint ventures, with foreign equity capped at 50 percent.¹⁸⁰ The market share of foreign-invested insurers in China’s life insurance market reached 6.4 percent in 2016.¹⁸¹ China also caps foreign equity at 50 percent in the health insurance sector.¹⁸² China allows wholly foreign-owned subsidiaries in the nonlife insur-

ance sector (i.e., property and casualty insurance), but the market share of foreign insurers in the nonlife insurance sector is just 2 percent.¹⁸³

Financial Technology's Growing Influence on China's Financial Services Sector

Although parts of China's traditional financial services industry remain underdeveloped, China is quickly becoming a global leader in financial technology, or "fintech" (see the following textbox). China topped KPMG's ranking of global fintech companies in 2016, featuring four of the top five companies on the list.¹⁸⁴ Fintech's rapid growth in China is the result of several factors, including "the scale of unmet needs being addressed by dominant technology leaders, combined with regulatory facilitation and easy access to capital."¹⁸⁵ Long neglected by China's traditional financial institutions, Chinese consumers and SMEs are rapidly adopting fintech services such as online banking, payments, investments, and insurance.*

What Is Fintech?

The Financial Stability Board defines financial technology, or "fintech," as "technologically enabled innovation that could result in new business models, applications, products, or services with an associated material effect on financial markets and institutions and the provision of financial services."¹⁸⁶ Examples of fintech innovations include peer-to-peer lending, equity crowdfunding, distributed ledger technology, and artificial intelligence and machine learning.¹⁸⁷ Although people most commonly associate fintech companies with startups breaking into areas traditional financial institutions have dominated, fintech players include what PricewaterhouseCoopers has called the "As, Bs, Cs, and Ds":¹⁸⁸

- As are large, well-established financial institutions such as Bank of America, Chase, Wells Fargo, and Allstate.
- Bs are big technology companies that are active in the financial services space but not exclusively so, such as Apple, Google, Facebook, and Twitter.
- Cs are companies that provide infrastructure or technology that facilitates financial services transactions. This broad group includes companies like MasterCard, Fiserv, FirstData, various financial market utilities, and exchanges such as NASDAQ.
- Ds are disruptors: fast-moving companies, often startups, focused on a particular innovative technology or process. Companies include Stripe (mobile payments), Betterment (automated investing), Lending Club (peer-to-peer lending), Moven (retail banking), and Lemonade (insurance).

*According to a 2016 report from Ernst & Young and DBS Bank, 40 percent of Chinese consumers are using new payment methods, compared to 4 percent of consumers in Singapore. Thirty-five percent of Chinese consumers are using fintech insurance products, compared to 1–2 percent in many Southeast Asian markets. Sachin Mittal and James Lloyd, "The Rise of FinTech in China: Redefining Financial Services," *Ernst & Young and DBS Bank*, November 2016, 4.

Leading domestic Internet companies looking to serve Chinese consumers across the full spectrum of financial and nonfinancial activities underpin fintech's rise in China.¹⁸⁹ These firms are able to leverage big data from e-commerce, messaging, social media, and other Internet-based services to provide new financial products. Their entry into China's financial sector—long dominated by large, state-owned firms—has reshaped the industry. Starting off with payments, Chinese Internet companies have since moved into other financial segments, targeting individual consumers and SMEs with unmet financial needs.¹⁹⁰ “Digital payment platforms remain a critical part of the underlying fintech infrastructure in China but are also an important source of transaction and financial data that is increasingly being leveraged by the payment companies for new fintech platforms, products, and services,” notes Zennon Kapron, principal at Shanghai-based fintech consultancy Kapronasia.¹⁹¹

Chinese fintech players are directly challenging traditional financial institutions. Analysis from Ernst & Young and DBS Bank estimates that traditional banks lost \$22.8 billion in card fees to digital payments in 2015.¹⁹² Diverting payments from traditional banks also cuts incumbents off from important relationships with merchants and retail customers, which in turn cuts into other key business lines, such as loans, deposits, and investments.¹⁹³ In response to competition from fintech firms, Chinese commercial banks have worked on developing their own fintech capabilities and partnered with fintech firms to launch digital initiatives.¹⁹⁴

Digital Payments

Chinese consumers, accustomed to shopping online, have leaped from cash into digital payments, largely bypassing payment cards.¹⁹⁵ The transaction value of third-party mobile payments in China leapt from \$15 billion (RMB 100 billion) in 2011 to an estimated \$5.7 trillion (RMB 38.5 trillion) in 2016—more than 50 times the size of the U.S. mobile payments market (see Figure 9).¹⁹⁶

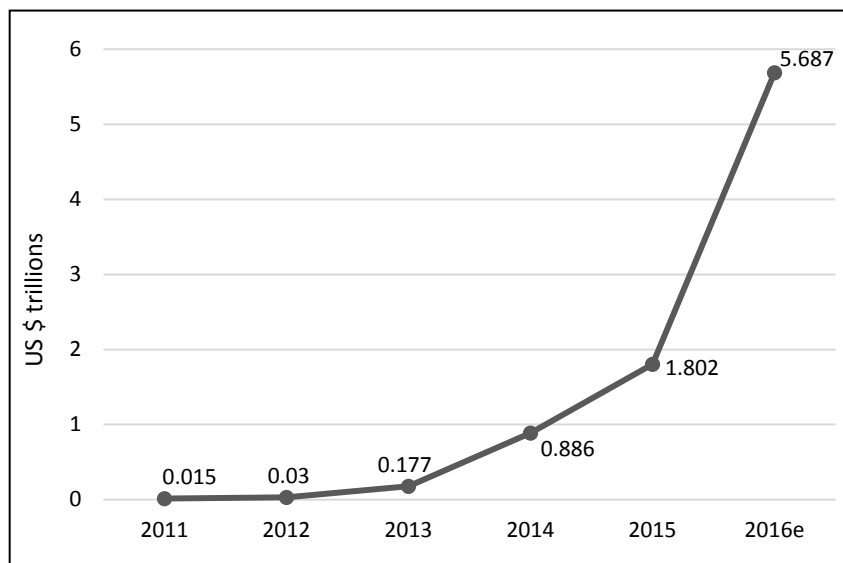
Alibaba's Alipay and Tencent's WeChat Pay dominate the market, accounting for 55 percent and 37 percent of market share, respectively, in the fourth quarter of 2016.¹⁹⁷ These platforms allow users to make payments in online shops—using their phone as wallets—and transfer money between friends all on one app, functions that are generally disaggregated in payment services available in the United States (e.g., in the United States, these functions are served, respectively, by PayPal, Apple Pay, and Venmo).¹⁹⁸ In addition, payment through QR codes* on online payment platforms is increasingly commonplace in Chinese restaurants and shops, where users can make payments by opening up Alipay or WeChat on their smartphones and having their QR codes scanned.¹⁹⁹

Peer-to-Peer Lending

Online peer-to-peer (P2P) lending is a rapidly growing part of China's fintech industry—and at \$120 billion (RMB 816 billion) in outstanding loans at the end of 2016, China is the largest P2P

*A Quick Response (QR) code is a type of barcode that can be read by a digital device and stores information. *Investopedia*, “Quick Response (QR) Code.”

Figure 9: Transaction Value of Chinese Third-Party Mobile Payments, 2011–2016



Note: Data for 2016 are estimates.

Source: iResearch Consulting Group, “GMV of China’s Third Party Mobile Payment, 2011–2019,” February 3, 2017.

lending market in the world.²⁰⁰ Major players in China include Yirendai, Dianrong, and Lufax.²⁰¹ The sector has been rife with defaults and fraud due to Beijing’s initial hands-off approach to regulating the sector. According to the CBRC, as of June 2016 almost half of China’s 4,127 P2P platforms were “problematic”—meaning they were involved in fraud or had defaulted.²⁰² Regulators have stepped in to clean up the online finance sector, introducing new rules in 2016 that bar online lenders from providing guarantees for investment principal or returns, cap the size of loans for individuals and companies, and require lenders to use custodian banks.²⁰³

Credit Rating

A major challenge for China’s financial sector has been the lack of accurate and complete credit information for consumers and businesses.²⁰⁴ The lack of capability to assess credit risk has been a key obstacle for Chinese banks to expand lending to small businesses and consumers.²⁰⁵ Chinese technology companies have started to fill this gap. In January 2015, the PBOC cleared eight private companies to develop consumer credit scoring services, including Alibaba and Tencent.²⁰⁶ Soon after receiving PBOC approval, Ant Financial launched its Sesame Credit product, which uses the company’s massive trove of user data to assess the creditworthiness of consumers and small businesses.²⁰⁷ Beijing is closely watching Sesame Credit and other private initiatives as it moves toward establishing a na-

tionwide social credit system.*²⁰⁸ (For more on China’s proposed national social credit system, see Chapter 3, Section 5, “China’s Domestic Information Controls, Global Media Influence, and Cyber Diplomacy.”)

Opportunities and Challenges for U.S. Fintech Firms

Foreign entrants have experienced limited levels of success in a market dominated by strong domestic competitors and government restrictions on operations. Notably, Apple introduced its mobile payment service, Apple Pay, to China in February 2016 through a partnership with UnionPay, some of the country’s largest banks, and Chinese digital payment processors Lian Lian, PayEase, and YeePay.²⁰⁹ The partnership allows Apple to avoid the challenges foreign companies have encountered with obtaining payment licenses.²¹⁰ Third-party providers of payment services were only required to obtain a payment business license beginning in 2010, when the PBOC issued the first set of regulatory measures governing non-bank third-party payment providers.²¹¹ From May 2011—when the PBOC first started issuing third-party payment licenses—to August 2016—when the PBOC announced it would indefinitely halt issuing payment licenses to nonfinancial payment providers—only two foreign-invested companies, Edenred China and Sodexo Pass China, received payment licenses.²¹² Despite its partnership with UnionPay and Chinese banks, Apple Pay entered China at a point when the country’s mobile payment market is already highly consolidated, and as a result has struggled to gain traction with Chinese consumers.²¹³

Foreign companies will need to monitor the emerging regulatory environment for fintech. In July 2015, the PBOC, CBRC, China Insurance Regulatory Commission, China Securities Regulatory Commission, and MIIT jointly released China’s first comprehensive regulation on fintech, *Guiding Opinions on Promoting the Healthy Development of Internet Finance*.²¹⁴ The *Guiding Opinions* established basic rules on Internet payment, Internet insurance, online lending, crowdfunding, and the online sales of funds.²¹⁵ Over the last year, the PBOC has stepped up efforts to regulate the industry.²¹⁶ Most recently, in May 2017 the PBOC set up a committee to monitor fintech’s impact on financial markets, financial stability, monetary policy, and payment and clearing.²¹⁷ Chinese regulators are still in the process of working out how to protect consumers and control risk around these platforms while encouraging innovation in China’s financial industry.²¹⁸

*Media reports suggest Chinese regulators’ support for private credit scoring platforms may be waning; none of the eight firms that received initial approval from the PBOC to develop private credit scoring platforms have received licenses. Wan Cunzhi, director of the PBOC’s Credit Information System Bureau, said at an April 2017 conference on credit reporting that the eight firms have a “major conflict of interest” as “their corporate governance structure don’t have third party credit independence.” Unlike major U.S. consumer credit reporting agencies such as Equifax and TransUnion, these Chinese firms have existing businesses in e-commerce and financial services. Furthermore, Wan noted that credit reports generated by the firms are not reliable: “It is not uncommon to see companies give a high credit score to a certain consumer, while the central bank credit bureau found out [the consumer] is not creditworthy at all.” Cate Cadell and Shu Zhang, “No More Loan Rangers? Beijing’s Waning Support for Private Credit Scores,” Reuters, July 4, 2017; Zhang Yuzhe, Peng Qinqin, and Dong Tongjian, “China Gives Little Credit to Companies Handpicked to Develop Credit-Reporting Sector,” Caixin, May 14, 2017.

Chinese Financial Firms in the United States

Unlike China, the United States maintains a policy of national treatment* towards foreign investors in the financial services sector.²¹⁹ Chinese financial firms' presence in the United States highlights China's lack of reciprocity in financial services market access.

In the United States, Chinese banks have focused on providing financing to Chinese companies overseas and offering U.S. customers access to RMB-denominated deposits.²²⁰ China's "big four" state-owned commercial banks—the Industrial and Commercial Bank of China, Bank of China, China Construction Bank, and Agricultural Bank of China—all operate in the United States.²²¹ However, their presence has been limited due to the dominance of major U.S. banks like Bank of America, Citigroup, JP Morgan, and Wells Fargo, along with U.S. regulators' concerns about the adequacy of Chinese supervision of banks and Chinese banks' money-laundering controls.† U.S. regulators took enforcement actions against China Construction Bank and Agricultural Bank of China in July 2015 and September 2016, respectively, for deficiencies in their anti-money laundering controls.²²²

Over the past year, Chinese technology companies have also set their sights on the U.S. financial services sector. Ant Financial, an Alibaba affiliate company focused on financial services, entered the U.S. market through a deal with U.S. payment processor First Data and is attempting to acquire MoneyGram, the U.S.-based cross-border money transfer provider.²²³ Ant Financial's May 2017 deal with First Data allows its payment service, Alipay, to be used at the point of sale for First Data's four million business clients in the United States.²²⁴

Alibaba's bid for MoneyGram has drawn congressional scrutiny. In a February 2017 op-ed in the *Wall Street Journal*, U.S. Representatives Robert Pittenger and Chris Smith claimed that, due to the Chinese government's ownership stake in Ant Financial, the deal would give the Chinese government "significant access to, and information on, financial markets and specific international consumer money flows."[‡]²²⁵ A May 2017 letter from two U.S. senators to U.S. Treasury Secretary Steven Mnuchin called upon the Committee on Foreign Investments in the United States (CFIUS) to investigate the deal, citing national security concerns.²²⁶ The letter claimed the deal would give Ant Financial access to U.S. citizens' financial data.²²⁷ The letter said Ant Financial's acquisition

*The goal of national treatment is to accord foreign firms treatment that is no less favorable than that provided to domestic firms. National treatment clauses aim to prevent discrimination against foreign firms in favor of domestic firms. U.S. Department of the Treasury, *National Treatment under U.S. Laws and Regulations*, 1998; World Trade Organization, "Principles of the Trading System."

†The Foreign Bank Supervision Enhancement Act of 1991 requires the U.S. Federal Reserve to make a determination that a foreign bank seeking to acquire a U.S. bank is adequately supervised in their home country before approving the acquisition. In 2012, the Industrial and Commercial Bank of China gained approval from the Federal Reserve to acquire a U.S. subsidiary of Hong Kong's Bank of East Asia, the first time the Federal Reserve approved a Chinese financial institution to acquire a U.S. bank. Shahien Nasiripour, "First U.S. Approval for Chinese Bank Purchase," *Financial Times*, May 9, 2012; Sullivan & Cromwell LLP, "Federal Reserve Approves First Acquisition in the United States by a Chinese Bank," May 9, 2012.

‡In response to the op-ed, Douglas Feagin, president of Ant Financial International, wrote, "Ant Financial is a private sector company and while a handful of Chinese state-owned or -affiliated funds own non-controlling minority stakes, they do not participate in company management. Nor do they have board representation or any special rights." Douglas Feagin, "Ant Financial's MoneyGram Deal Is Clean," *Wall Street Journal*, February 28, 2017.

Chinese Financial Firms in the United States—Continued

of MoneyGram “should trigger no less concern than if a Chinese company were to take control of a large, well-known bank” and noted the deal “highlights the inequity between U.S. and Chinese companies when it comes to international acquisitions.... [T]here is virtually no chance that a U.S. financial services company would be permitted to acquire a Chinese [rival].”²²⁸ MoneyGram’s board voted to approve Ant Financial’s offer in May 2017.²²⁹ Both parties expect the deal will be completed in the second half of 2017, pending CFIUS approval.²³⁰

Implications for the United States

Services are the mainstay of the U.S. economy, accounting for 80 percent of private sector jobs.*²³¹ The United States maintains a sizable services trade surplus with China, which reached \$38 billion in 2016, up from \$438 million in 2006.²³² China’s strong income growth, expanding middle class, and government policies focused on rebalancing the economy towards consumption should further boost U.S. services trade with China. In particular, the rapid growth in China’s e-commerce, logistics, and financial services sectors could present opportunities for U.S. companies.

Despite the growth potential for U.S. companies, the playing field in China’s consumer market remains decidedly uneven and highlights the lack of reciprocity in market access for services. China maintains market access barriers that restrict U.S. services companies, including caps on foreign equity, discriminatory licensing requirements, and data localization policies. While China has gradually opened up its services sector to foreign participation, the pace has been slow and may have come too late to be meaningful for U.S. companies. For example, while China’s regulatory framework for foreign investment in the e-commerce sector has undergone significant liberalization over the last two years, China’s e-commerce market has already become highly saturated, with Alibaba and JD.com holding over 80 percent market share combined.²³³

China’s consumer market is being reshaped by the country’s major technology companies; armed with government support, capital reserves, and troves of consumer data, they have become dominant players by integrating social media, e-commerce, and financial services, and capturing the consumer experience. China’s restrictions on foreign participation in the country’s digital ecosystem limit the ability of U.S. companies to similarly leverage Chinese consumer data. In addition, state-owned enterprises remain major players in the services sector, particularly in banking, transportation, and telecommunications.²³⁴ U.S. firms cannot go toe-to-toe with China’s technology giants and state-owned enterprises, and in most consumer segments, are largely relegated to partnering with domestic firms. U.S. services trade with China will not reach its full potential as long as these barriers remain.

*In comparison, services account for 42 percent of all employment in China. World Bank, “Employment in Services (% of Total Employment).” <http://data.worldbank.org/indicator/SL.SRV.EMPL.ZS>.

**Addendum I: E-Commerce, Logistics, and Financial Services Market
Access Barriers**

E-Commerce	
<i>Barrier</i>	<i>Description</i>
Licensing	Although as of 2015, foreign investors are allowed to establish wholly foreign-owned e-commerce companies in China, to date only one foreign company has been awarded the value-added telecommunications services permit for online data processing and transaction processing business necessary to operate an e-commerce company.
Data localization	China's draft e-commerce law mandates local storage of Chinese consumer data. Under the draft law, foreign platforms allowing Chinese companies to sell on them and companies operating outside of China but targeting Chinese consumers would be subject to the requirement. China's new cybersecurity law may also mandate data localization for companies in the e-commerce sector if e-commerce is deemed "critical information infrastructure."
Logistics	
<i>Barrier</i>	<i>Description</i>
Ownership ban	Foreign companies are blocked from operating in the document segment of China's domestic express delivery market, where China Post maintains a monopoly.
Licensing	While both domestic and foreign firms have to apply for business licenses to operate in the express delivery sector, foreign companies experience longer waiting periods than domestic companies for getting their business licenses approved.
Financial Services	
<i>Barrier</i>	<i>Description</i>
Ownership caps	Foreign equity in domestic commercial banks is capped at 20 percent for a single investor and 25 percent for total foreign ownership. Foreign equity in domestic securities and asset management companies is capped at 49 percent. In the life insurance and health insurance sectors, foreign equity is capped at 50 percent.
Licensing	Foreign-invested banks and branches of foreign banks seeking to engage in RMB business are required to operate in China for a year before applying for a RMB license. While foreign companies are allowed to apply for licenses to clear domestic Chinese payments, to date only two foreign-invested companies have received payment licenses.
China-specific technical standard	PBOC rules released in November 2014 require bank cards issued in China to comply with a technical standard known as PBOC 3.0. The standard is only used by Union-Pay and is incompatible with the global industry standard, EMV. Foreign payment companies will have to redesign their cards to meet the new technical standard.

**Addendum I: E-Commerce, Logistics, and Financial Services Market
Access Barriers—Continued**

Data localization and security review	Under China's new cybersecurity law, critical information infrastructure providers—which includes the financial services sector—are required to store data collected during the course of their business operations within China. Critical information infrastructure operators are also subject to security reviews by Chinese authorities to ensure they use products that meet China's standards of "secure and controllable" technology.
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Sources: Various;²³⁵ compiled by Commission staff.

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