U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin

March 4, 2016

Highlights of this Month's Edition*

- **Bilateral trade:** U.S. exports struggle with a strong dollar and weak global growth; China remains the largest U.S. trading partner in goods.
- **Bilateral policy issues:** Chinese companies spend more on acquisitions of U.S. firms in January and February than in all of 2015.
- **Policy trends in China's economy:** China lowers RRR, opens bond markets to foreigners to counter capital outflows; Chinese public increases travel and consumer spending during the 2016 Lunar New Year; New Chinese online content restrictions create uncertainty for U.S. tech and media companies.
- **Sector focus – GMOs:** ChemChina makes $43 billion bid to acquire agriculture giant Syngenta; China seeks to boost agriculture productivity by increasing GMO crop production.

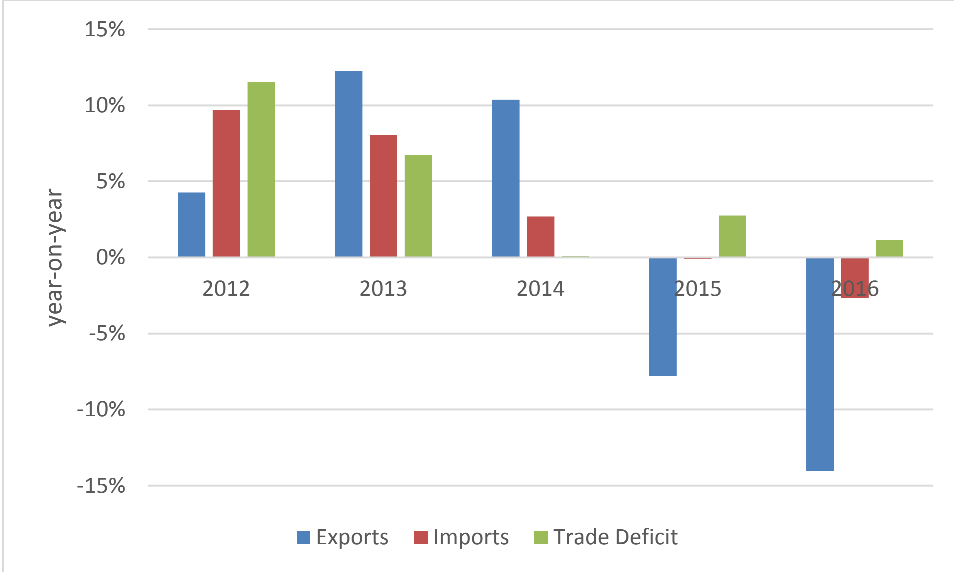
Bilateral Goods Trade

U.S. Exports Falter

In January, the U.S. trade deficit in goods with China totaled $28.9 billion, a 3.7 percent increase over December 2015 and a 1.1 percent increase year-on-year (see Figure 1). After growing 12.2 percent and 10.4 percent year-on-year in January 2013 and 2014, respectively, U.S. exports to China fell 14 percent year-on-year in January 2016. U.S. global exports in January declined from a high of $128.5 billion in 2014 to $116.4 billion in 2016 due to a strong U.S. dollar and weak global growth. U.S. imports to China also declined, falling 2.7 percent year-on-year in January 2016, though not enough to offset the double-digit drop in U.S. exports.

* Note: This bulletin was reposted on March 7, 2016. The original version stated incorrectly on page 9 that ChemChina's acquisition of Syngenta would exempt Syngenta from China's GMO import regulations. This statement has been removed.

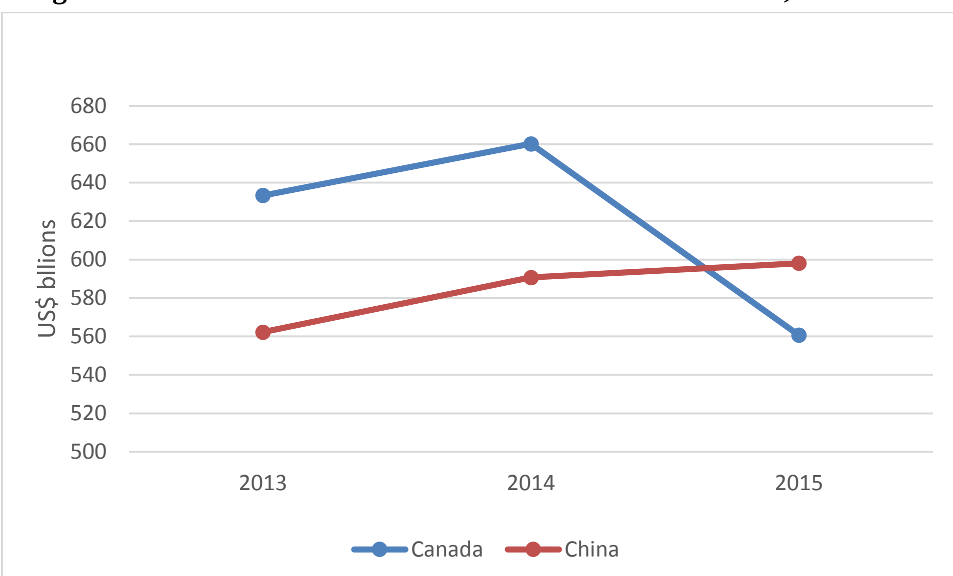
Figure 1: Change in U.S. Exports, Imports, and the Trade Deficit with China in January, 2012–2016



Source: U.S. Census Bureau, NAICS database (Washington, DC: U.S. Department of Commerce, Foreign Trade Division, March 2016). *http://www.census.gov/foreign-trade/balance/c5700.html*.

In January 2016, China remained the largest U.S. trading partner in goods, after supplanting Canada in 2015 (see Figure 2). This shift is partially attributed to low oil prices; Canada is an important source of U.S. crude oil imports.[1] Canada's share of total U.S. trade in goods was 14.2 percent in January 2016 versus China's share of 15.4 percent in the same month.

Figure 2: U.S. Total Trade in Goods with China and Canada, 2013–2015



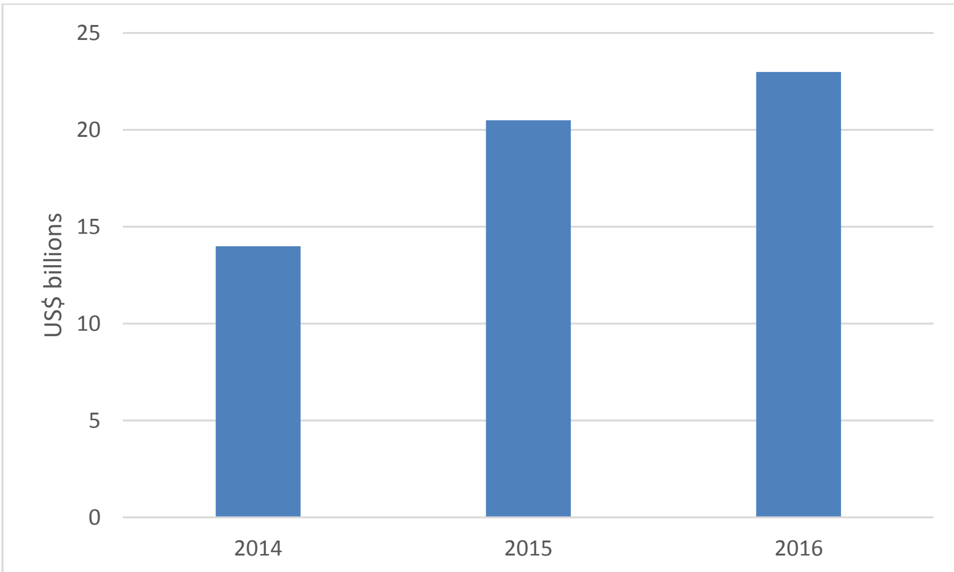
Source: U.S. Census Bureau, NAICS database (Washington, DC: U.S. Department of Commerce, Foreign Trade Division, March 2016). *http://www.census.gov/foreign-trade/balance/c5700.html*.

Bilateral Policy Issues

Chinese Acquisition of U.S. Companies Hits Record Levels

In the first two months of 2016 Chinese corporations spent a record amount on acquisitions in the United States. According to the financial software provider Dealogic, Chinese companies purchased at least $23 billion worth of U.S. companies in January and February of 2016, 15 percent more than the $20.5 billion spent in all of 2015 (see Figure 3).[2]

Figure 3: Chinese Acquisitions of U.S. Companies by Deal Value



Source: Dealogic. *http://www.dealogic.com/media/market-insights/ma-statshot/*.
Note: 2016 data run through February 18.

As shown in Table 1, Chinese acquisitions in 2016 have featured several multibillion-dollar deals for U.S. companies. The average value of Chinese acquisitions of U.S. companies is so far much higher in 2016: $958 million per deal compared to $178 million in 2015.[3]

Table 1: Notable 2016 Chinese Bids and Acquisitions of U.S. Companies

Chinese Buyer	U.S. Target	Price (US$ billions)	Sale or Bid
Haier Group	General Electric appliance unit	$5.4	Sale
Dalian Wanda	Legendary Entertainment	$3.5	Sale
Zoomlion	Terex	$3.2	Bid
Chongqing Casin Enterprise Group	Chicago Stock Exchange	$0.1	Sale
Tianjin Tianhai	Ingram Micro	$6.0	Sale

Source: Various.[4]

The deals in the United States are a paradigmatic example of an overall dramatic increase in foreign acquisitions by Chinese companies. 2016 features the largest prospective Chinese acquisition to date—a $43 billion offer for Swiss biotechnology firm Syngenta.[5] (For more details on this deal, see "Sector Focus" in this Trade Bulletin.) Global Chinese foreign acquisitions so far this year stand at $82 billion compared to $112 billion for all of 2015.[6]

In many cases this year, Chinese companies paid a premium to acquire U.S. companies. Haier Group's $5.4 billion bid for General Electric's appliance unit was significantly higher than bids offered by competing firms, according to Bloomberg, and Dalian Wanda's $3.5 billion purchase of Legendary Entertainment was also deemed too high by some industry analysts.[7] Dalian Wanda previously acquired U.S. cinema chain AMC in 2012 for $2.6 billion, and appears to be expanding its presence in the U.S. entertainment sector.[8] A report by Bloomberg indicates an undisclosed Chinese company is reportedly offering an 80 percent premium for U.S. electronics firm Synaptics, the highest premium offered for any technology company valued at more than $1 billion in the past year.[9] Synaptics creates human-computer interface technology such as touchpads and fingerprint readers.[10] According to Dan Clivner, an expert at international business law firm Sidley Austin, Chinese businesses may be willing to pay large premiums for U.S. companies as they can more easily plug U.S. expertise and company assets into the Chinese domestic market.[11]

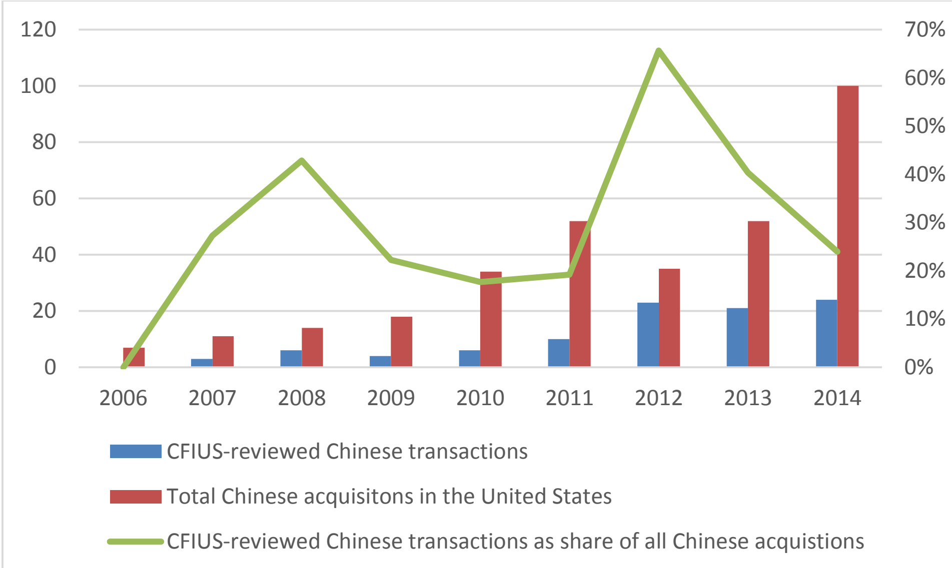
A few recent deals have sparked concern in Congress. In January, Chinese construction firm Zoomlion offered an unsolicited bid of $3.2 billion for Terex, a company that provides vehicles and port security equipment for the Department of Defense and holds contracts with other government agencies.[12] Terex was previously in merger talks with Finnish company Konecranes, but has put these talks on hold since receiving Zoomlion's offer.[13] Two four-star U.S. generals have anonymously raised concerns about Zoomlion's bid for Terex, citing Terex's government contracts and links between Zoomlion and the People's Liberation Army.[14] Terex currently has 97 contracts with U.S. agencies, including cargo handling and support vehicles for the U.S. Army and Marine Corps.[15] Four Republican members of Congress have also sent letters to Treasury Secretary Jack Lew highlighting national security concerns regarding Zoomlion's bid.[16]

Members of Congress have also expressed concern about Chinese firm Chongqing Casin's planned purchase of the Chicago Stock Exchange. In February, 46 members of Congress sent a letter urging the Committee on Foreign Investment in the United States (CFIUS) to thoroughly review the acquisition and determine if Chongqing Casin has close ties to the Chinese government.[17] The degree to which the Chinese government has an ownership stake or influence over Chongqing Casin is unclear. The company is owned by several parties and—according to Bloomberg—the CEO of the Chicago Stock Exchange said he "cannot publically identify who owns Chongqing Casin," and that at least one of the owners might be partially owned by the Chinese government.[18] The Congressional letter to CFIUS also noted it was unclear to what degree the company was linked to the Chinese government, and that it had originally been created to manage financial assets owned by the Chinese state.[19] Chongqing Casin appears interested in the exchange as a way to tap into U.S. investment, saying the deal would "develop Chinese financial markets in China over the longer term and bring exciting Chinese growth companies to U.S. investors."[20] The Chicago Stock Exchange is a small player, accounting for about 0.5 percent of U.S. equity trading last year.[21] The sale would be the first Chinese acquisition of a U.S. stock exchange.[22]

Chinese firms have been particularly active in bidding for U.S. technology assets. For example, Ingram Micro announced in February that it was being sold to Chinese Tianjin Tianhai Investment for $6 billion. Ingram is a technology distributer that sells electronics such as Apple and Cisco products wholesale.[23] While many analysts anticipate the sale will go forward without a CFIUS review, a few Chinese acquisitions of technology firms have recently come under the CFIUS review process.[24] In February, Western Digital's sale to China's Unisplendor fell apart after CFIUS announced it would review the deal, and the sale of the lighting section of Dutch electronics firm Royal Philips was purportedly blocked by CFIUS.[25] Fairchild Semiconductor, another electronics firm, rejected a bid from a Chinese buyer in February for fear the acquisition would trigger a CFIUS review.[26]

Though the number of Chines transactions under CFIUS review has grown in absolute terms, it has actually decreased as a share of all Chinese acquisitions. For example, in 2014, the latest year for which data are available, CFIUS reviewed 24 Chinese transactions—the most to date (Figure 4).[27] However, 2014 also saw at least 100 Chinese mergers and acquisitions in the United States—almost double the number in 2013.[28] As a ratio of total Chinese acquisition deals, the number of CFIUS-reviewed Chinese transactions has decreased every year since 2012.[29]

Figure 4: Chinese CFIUS-Reviewed Transactions and Total Chinese Acquisitions in the United States, 2006–2014



Source: Rhodium Group. *http://rhg.com/notes/dont-misread-old-tealeaves-chinese-investment-and-cfius.*

Policy Trends in China's Economy

China Lowers RRR, Opens Bond Markets to Counter Capital Outflows

As capital continues to flee China* on fears of economic slowdown—driving down the value of the renminbi (RMB) in the process—government actors are stepping up efforts to inject money into the economy, attract capital inflows, and boost economic performance. The People's Bank of China (PBOC) spent almost $300 billion of its foreign-exchange reserves supporting the RMB's value over the last three months.[30]

At the end of February, PBOC cut the reserve requirement ratio (RRR), or the amount of customers' deposits banks must hold in reserve, by 0.5 percentage points, injecting an estimated $100 billion in the economy.[31] The cut, a first since last October, is aimed at supporting economic growth, though it also serves to offset the declines in China's foreign currency reserves and large capital outflows.[32]

Beijing took another step to counter capital exodus by granting foreign financial institutions broad access to its $7.5 trillion bond market, the world's third-largest.[33] In an announcement posted on its website, PBOC said certain types of foreign investors, including commercial banks, insurance and securities companies, and mutual, pension and charitable funds, will no longer require quotas to invest in the interbank bond market.[34] This marks the latest step in China's gradual opening up of its bond markets to foreign investment; for example, large sovereign investors such as central banks and sovereign-wealth funds were granted unrestricted access last year.[35]

Foreign investors have been slow to take advantage of this liberalization: Foreign ownership of Chinese government debt stands at paltry 2 percent.[36] Investors are deterred by lack of transparency, confusing regulations, government mismanagement, and the overall weakness in China's economy—all of which have been on display in the first months of this year during the latest bout of stock market volatility.[37]

Besides countering capital outflows, the Chinese government has other reasons to develop a robust domestic bond market. First, it wants to encourage Chinese companies to diversify credit risk by shifting away from their heavy reliance on bank lending and equity issuance for financing.[38] Second, China needs a robust, high-quality bond

* For an in-depth analysis of China's capital outflows, see U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, February 5, 2016. *http://origin.www.uscc.gov/sites/default/files/trade_bulletins/February%202016%20Trade%20Bulletin.pdf*.

market to encourage foreign investors to promote the RMB's international use; for example, the expansion of market access can facilitate the inclusion of Chinese RMB-denominated bonds in global indices.[39]

At the same time as it is widening access for foreign investors, the Chinese government is clamping down on outbound investment programs—another way of trying to stop capital outflows. The State Administration of Foreign Exchange (SAFE) closed the Qualified Domestic Limited Partner pilot, which allowed foreign asset managers in the Shanghai Free Trade Zone to work with domestic investors to buy foreign securities.[40] SAFE also stopped issuing new quotas for the Qualified Domestic Institutional Investor license, which allows local companies to invest abroad.[41]

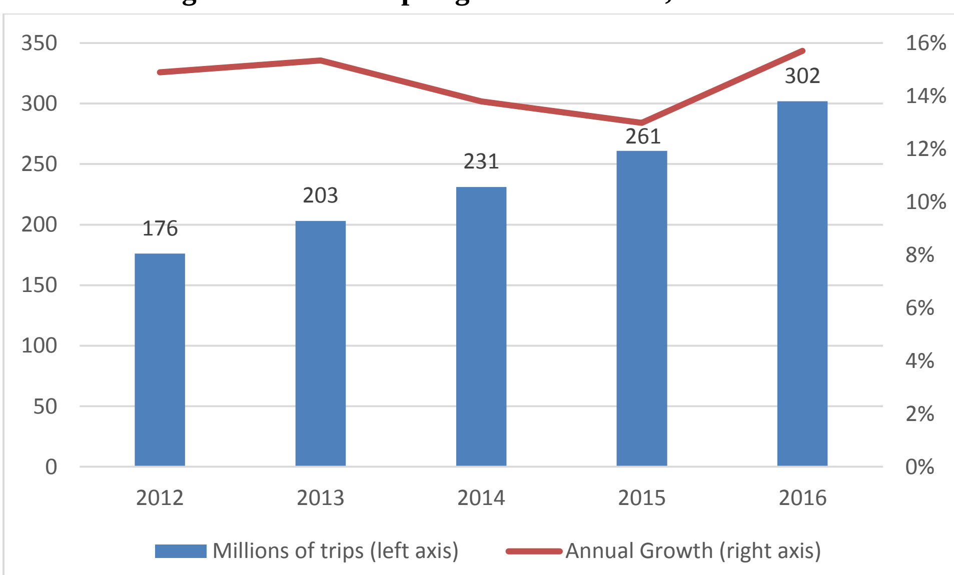
2016 Spring Festival Trends: Travel and Domestic Consumption Increase

The Spring Festival, or Lunar New Year, is a major Chinese national holiday and one of the largest annual migrations anywhere in the world as people travel for family reunions. Similar to Christmas in the United States, Spring Festival spending is highly seasonal; traditionally, individuals buy gifts for family members and friends, host dinner parties, and stock up on household items.[42] The 2016 Spring Festival, which ran from February 7 to 13, saw a significant rise in travel and household spending.

China's National Tourism Administration estimated the number of domestic individual trips in 2016 increased 15.7 percent year-on-year to reach 302 million (see Figure 5).[43] Domestic travel during the Spring Festival has been growing in double-digits in since 2012.[44] Improvements in standards of living and tourist infrastructure are accelerating this trend. The total amount of transactions on highway, railway, and air tickets grew 42 percent year-on-year, with highway tickets growing the fastest at 98 percent.[45] In addition, tourism revenue grew 16.3 percent year-on-year to total RMB 365.1 billion ($55.7 billion).[46]

WeChat, one of the world's largest mobile text and message services, found 113 million of its domestic users and 1.6 million overseas users returned home, while 6.1 million users traveled abroad.[47] Ctrip[*] and the China Tourism Research Institute estimated overseas travel during the 2016 Spring Festival would reach between 5.7 and 6 million people, a 10 percent increase from last year. Based on Ctrip's analysis of its 250 million users, Thailand, Japan, South Korea, Hong Kong, and Taiwan were the top five overseas destinations for Chinese tourists.[48]

Figure 5: Chinese Spring Festival Travel, 2012–2016



Source: Henkuai, "2016 Chinese Spring Festival Public Travel Insights Report," February 2016. *WeChat* (blog), Staff translation. *http://www.weixin.com/thread-8763-1-1.html*.

[*] Ctrip is one of China's largest online travel agencies, controlling over 50 percent of online market share and ranking second among all Chinese travel companies in terms of revenue.

Beyond traveling, Chinese consumers are increasing also shifting toward a more e-commerce spending style. In 2016, WeChat users expanded the use of electronic *hongbao* or "red envelope"* gifts—a typical gift given by parents to their children—to 420 million users, transferring roughly eight times last year's amount.[49] Analysis of data from state-owned UnionPay,† China's largest payment processor, provides a snapshot of Chinese consumers' spending patterns‡ during the Spring Festival.[50] Despite the slowing Chinese economy, UnionPay found the volume of transactions increased 31 percent year-on-year to reach RMB 312.1 billion ($47.8 billion), and the number of transactions grew 15 percent year-on-year to total 307 million. Holiday shopping, dinner parties, and travel were the major areas of consumer spending. Spending on everyday household items made up around one-third of total purchases; supermarket, large household appliance, and department store purchases accounted for roughly half of household spending, growing year-on-year at 41 percent, 22 percent, and 13 percent, respectively. Spending on food was over RMB 5 billion ($763.4 million), or roughly 1.6 percent of total purchases.[51]

New Chinese Rules Restrict Foreign Companies from Online Content Market

New Chinese regulations have tightened access to China's multibillion-dollar online content market. On February 4, China's State Administration of Press, Publication, Film, Radio and Television (SAPPRFT) released the Administrative Provision on Network Publishing, which forbids foreign companies from distributing online original content in China except on a project basis with Chinese partners.[52] The measure comes amid efforts by the Chinese government to exercise tighter control over the press and media content. In February, Xi Jinping toured Chinese media outfits and directed them to focus on positive reporting, urging journalists to practice "strict adherence to Marxist journalistic values, the proper guidance of public opinion, and an emphasis on positive publicity."[53] In December 2015, official media and entertainment organizations signed a pledge to support the Communist Party and "socialist core values."[54]

The scope of the regulation is written broadly and applies to online distribution of games, video, books, newspapers, animations, pictures, articles, and other online content to be designated by SAPPRFT at a later date.[55] While the measure's sweep is far-reaching, China already tightly restricts foreign online activity within its borders, and it is not clear how much further these new regulations will restrict foreign access. Previously, U.S. companies could only distribute online content to Chinese consumers through licensed joint ventures with domestic Chinese companies.[56] Under the new rule, foreign companies are prohibited from all online content distribution, but can cooperate with Chinese companies on online content projects after seeking government approval.[57] Many analysts agree the impact of this change will depend heavily on how the measure is implemented.[58] The regulations go into effect March 10.[59]

China's online content market is one of the largest in the world and is closed to many U.S. businesses such as Facebook, Google, and YouTube.[60] As Figure 6 shows, in 2012 China had more than twice as many viewers of online videos as the United States, and the Chinese digital audience is projected to increase to 700 million people in 2016.[61] Total revenue from Chinese digital videos is predicted to reach $3.95 billion in 2016 (from $1.86 billion in 2013).[62]

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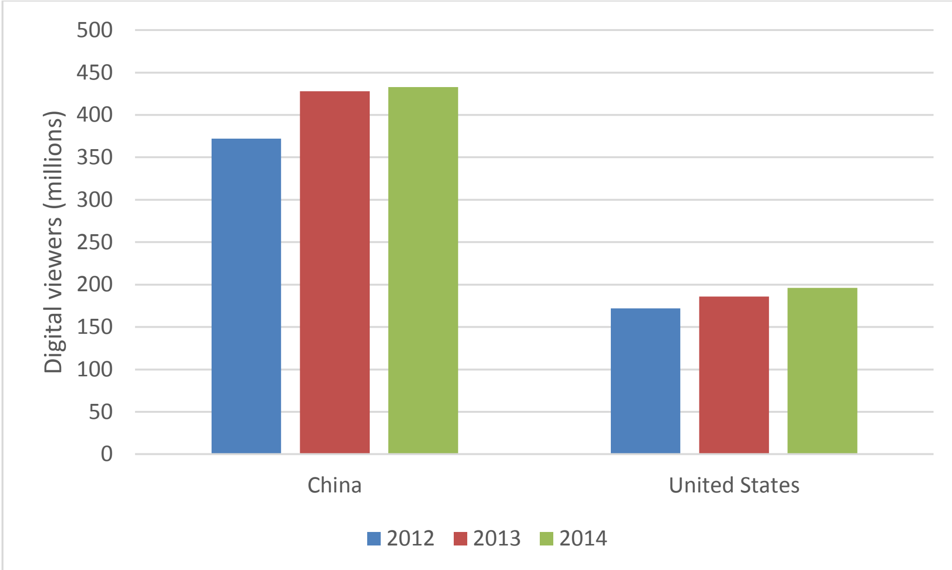
* For more information on the e-hongbao, see U.S.-China Economic and Security Review Commission, *Monthly Analysis of U.S.-China Trade Data*, March 6, 2015, 6–7. *http://1.usa.gov/1T6uRZ4*; for a discussion of 2015's e-hongbao Spring Festival campaign, see the U.S.-China Economic and Security Review Commission, *Chinese Media Digest*, Issue No. 6, "Digital 'Red Envelope' War Heats up during Chinese New Year," February 27, 2015. *http://1.usa.gov/1ASm01Y*.

† In 2013, UnionPay issued 78.2 percent of all China's debit cards, according to data analytics firm Datamonitor. Chris Russel, "Who'll Win? Visa and MasterCard versus UnionPay," *CKGSB Knowledge*, March 31, 2015. *http://knowledge.ckgsb.edu.cn/2015/03/31/finance-and-investment/wholl-win-visa-and-mastercard-versus-unionpay/*.

‡ Based on a 2013 survey by U.S. marketing consulting firm Nielsen, 71 percent of consumers in top-tier Chinese cities such as Beijing or Shanghai prefer to use cards, and 44 percent use two or more cards on a regular basis. Chris Russel, "Who'll Win? Visa and MasterCard versus UnionPay," *CKGSB Knowledge*, March 31, 2015. *http://knowledge.ckgsb.edu.cn/2015/03/31/finance-and-investment/wholl-win-visa-and-mastercard-versus-unionpay/*.

Figure 6: Chinese and U.S. Online Video Audiences, 2012–2014



Source: Statistica, "Number of Online Video Users in China." *http://www.statista.com/statistics/279537/number-of-online-video-users-in-china/;* Statistica, "Digital Video Viewers in the United States." *http://www.statista.com/statistics/271611/digital-video-viewers-in-the-united-states/.*

While many U.S. online content companies are already banned from China, those U.S. companies with operations in China may be affected by the new regulation.[63] In December 2015, Disney signed an agreement with Alibaba to offer DisneyLife—an online video streaming service—to Chinese Mainland consumers.[64] Apple currently runs a Chinese app store that provides games and software, and Microsoft offers Windows products online through a Chinese joint venture.[65] Vimeo and Amazon also run online distribution platforms in China, and may be affected.[66]

The new rule follows on the heels of a cybersecurity law passed last year and empowers Chinese authorities to remove material that does not promote "core socialist values."[67] All distributors of Chinese online content are required to store their data in mainland China under the regulation.[68] Similar data storage requirements were considered for an earlier cybersecurity law, but were dropped.[69]

A significant amount of uncertainty surrounds the legislation. The broad scope of the measure makes it difficult to predict which companies will be affected. As one analyst noted, it was unclear whether a company that "just had an instruction manual online" would be subject to these rules.[70] Another analyst has argued the measure may only apply to content created in China and thus may not affect foreign firms at all.[71] Chinese and foreign media organizations have sought clarification from SAPPRFT, but it has not provided guidance to date.[72]

Sector Focus: Syngenta Acquisition, GMO Regulations Signal Focus on Food Security

China National Chemical Corporation (ChemChina) bid $43 billion to acquire Syngenta AG, a Switzerland-based agribusiness and biotechnology company marks another step by the Chinese government to boost farm productivity and increase development of genetically modified crops, state-owned.[73] The deal has raised concerns among other foreign agriculture firms like Dow, DuPont, and Monsanto, which have lost billions of dollars as a result of the regulations limiting access to China's biotech market.[74] These firms fear the Syngenta acquisition will further limit foreign access to China's agriculture market, with Syngenta's genetically modified organism (GMO) products receiving exclusive regulatory approval from Beijing.[75] The U.S. agriculture industry has pushed for more access to China's biotech sector, with farm groups and grains traders calling for a "comprehensive framework agreement" on biotechnology approvals.[76] This framework would commit China to enforce its biotech approval laws, allowing foreign firms to gain access to China's agricultural sector.[77] Currently, the authorization procedures can take nearly a decade—if they ever get authorized at all.[78] The demand for a comprehensive framework agreement represents a change in strategy for U.S. companies, which previously tried to change the regulations around biotech crops to align them with U.S. laws, where agricultural GMOs are treated as non-GMO products unless they have undergone a significant structural or functional change that warrants approval.[79]

ChemChina Makes Bid to Acquire Syngenta

In February 2016, ChemChina submitted a $43 billion bid to buy Syngenta AG, one of the world's largest producers of crop protection products, including pesticides, fungicides, and genetically modified seeds.[80] The deal, if cleared, will boost China's farm productivity and increase China's competitiveness in seed and crop technologies.[81] After multiple failed bids by U.S. rival Monsanto to acquire Syngenta, including a $46.6 billion bid in August 2015, ChemChina's offer won the support of Syngenta's board of directors, who unanimously recommended the deal to shareholders.[82] According to the terms of the deal, Syngenta will retain its name and four of its existing board members, and will remain headquartered in Switzerland.[83] To finance the deal, ChemChina is seeking $30 billion in loans from state and global banks, with the final lending package set to be finalized in April.[84]

China's bid to acquire Syngenta is part of Beijing's large-scale mergers and acquisitions strategy, which it hopes will reduce overcapacity in key sectors, enhance the international competitiveness of its state-owned enterprises, and increase state control.[85] As part of this strategy, Chinese companies are ramping up their acquisitions of foreign assets in real estate, energy, and other key sectors, with the Syngenta deal representing the latest—and largest—Chinese foreign investment effort: The $43 billion bid for Syngenta is as large as the country's next four largest investments combined, and greater than China's total outward investment in 2007.[86] However, the Syngenta deal also serves a larger strategic purpose for Beijing as it looks to develop biotechnology industries and increase food production.

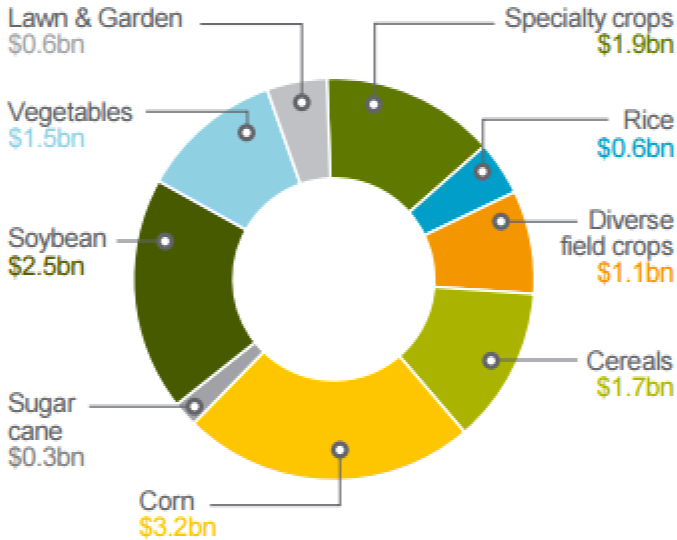
The Syngenta acquisition will allow Beijing to gain access to genetically modified crops and improve its biotech capabilities to boost crop yields.[87] Currently, Syngenta's activities in China—like all foreign companies' activities in the country—are limited by strict regulations of GMOs, often seeds designed to yield plants more resistant to drought, bugs, and other hazards.[88] Although there are no proven health or environmental risks to growing or consuming GMO products, China's State Council has insisted that strict import regulations for GMO products exist to safeguard citizens' health and safety and protect the ecological environment.[89] Many observers believe, however, that the real purpose of the regulations governing GMO imports, however, is to protect the domestic biotech industry by excluding foreign companies from entering the market.[90]

To export agricultural GMOs[*] to China, foreign companies must first be granted authorization by the local jurisdiction where the GMO products would be sent.[91] The foreign company must then apply through the Ministry of Agriculture to obtain GMO Safety Certificates, a process that can take up to seven years.[92] As of May 2015, 24 GMO products were waiting for approval from the Ministry of Agriculture to be imported into China.[93]

Syngenta is a top supplier of pesticides and other crop protection products—accounting for 20 percent of the global market—and the world's third-largest provider of seeds.[94] Syngenta's crop protection product and seed sales totaled $13.4 billion in 2015, led by corn and soybean sales, which together accounted for 42.5 percent of the company's total sales (see Figure 7).[95] Gaining access to these products is essential for China, which in recent years has become a net importer of soybeans, corn, and grain, among other products.[96] Soybean imports, for example, have grown from 20.7 million tons in 2003 to an estimated 79 million tons in 2015.[97] Because Syngenta's products will allow China to increase crop yields, the cost of food products in China will decline, including the cost of meats and dairy as grain, corn, and other components of animal feed become cheaper.[98] In addition, the deal would reduce China's reliance on foreign agriculture imports, improving the country's food security and domestic agriculture industries.[99]

[*] Agricultural GMOs are classified as any plant, animal, or microorganism whose genome constitution has been changed using genetic engineering technology. Library of Congress, *Restrictions on Genetically Modified Organisms: China*. *https://www.loc.gov/law/help/restrictions-on-gmos/china.php*.

Figure 7: Syngenta Global Sales by Crop, 2015



Source: Syngenta, "Our Performance," December 2015. *http://www.syngenta.com/global/corporate/SiteCollectionDocuments/pdf/presentations/investor/20160203-our-performance.pdf*.

The Syngenta deal will also allow Beijing to develop its domestic biotechnology industries and halt the country's recent declines in agricultural output.[100] Between 1960 and 2016, China increased its agricultural productivity by 300 percent, and currently produces around 17 percent of the global wheat supply and nearly 33 percent of the global supply of rice.[101] Yet the country is still struggling to feed itself: While China has 21 percent of the world's population, it has only 9 percent of the world's arable land.[102] In addition, years of poor environmental regulations and outdated farming practices have reduced the availability of China's already limited arable land. High pollution levels have damaged soil and contaminated water, leaving 40 percent of China's arable land suffering from degradation and resulting in a reduced yield capacity for crop harvests.[103] Other factors, including overuse of land, have left only 10 percent of China's farmland suitable for growing, making it essential that these areas are used as efficiently as possible.[104]

Syngenta will gain access to new markets and increase the company's profitability as a result of the acquisition. As a foreign company, Syngenta's activities in China have been limited, with the country's regulatory restrictions preventing Syngenta and other foreign companies from selling or developing genetically modified seeds in China.[105] Following the finalization of the acquisition, Syngenta will look to dramatically expand its share in China's agrochemical and seeds market, accessing untapped market potential that the company believes will soon be worth billions as China expands its GMO sector.[106] In addition, the acquisition would provide an opportunity for Syngenta to expand its role in the Asia Pacific region, where it currently supplies around 12 percent of the agriculture market, compared to nearly 20 percent globally.[107] Because of Syngenta's large presence in the United States—it employs around 1,200 people at its research facility in North Carolina—the deal will be subjected to the review by CFIUS.[108] Ultimately, however, the acquisition is expected to be approved by CFIUS.[109]

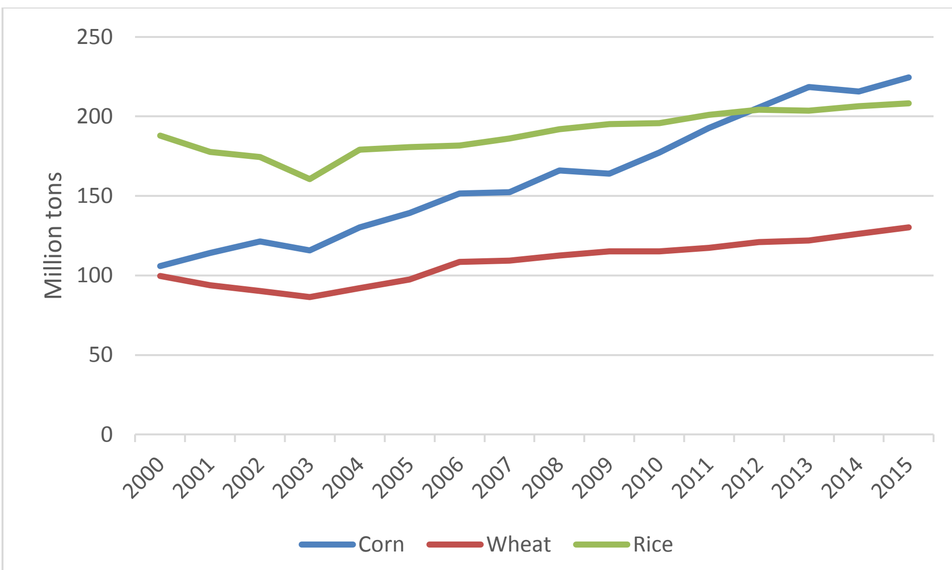
China Seeks to Expand GMO Market, Alleviate Degradation

China's 12th Five Year Plan (2011–2015) for the first time listed biotechnology—including enhanced agriculture—as one of the country's seven "Strategic Emerging Industries," marking a turning point in the debate around GMOs in the country.[110] Chinese regulators had long been wary of the health and safety concerns around modified agriculture products, but declining crop yields and increasing land degradation forced the government to adopt a new approach to food security focused on increasing the research and commercialization of GMOs.[111] A speech by President Xi in the fall of 2013 reiterated the emphasis on biotechnologies, stating that China must "boldly research and innovate, [and] dominate the high points of GMO techniques."[112] The Chinese government has followed through on its promise to promote biotech research, distributing more than $3 billion in recent years to local companies and organizations to develop bioengineered seeds.[113] Today, China is the sixth-largest producer of GMO crops in the world, with nearly ten million acres of farmland devoted to genetically engineered crops.* [114] However, China officially bans the commercial sale of nearly all GMO products,† permitting researchers to grow and test genetically modified crops but proscribing their sale for consumption.[115] Even with the prohibition, GMO crops are still ending up on tables around the country: A Greenpeace investigation in 2015 discovered that GMO products like corn and rice are already being sold in markets throughout China.[116]

Despite China's increasing production of agricultural GMOs, the results of China's crop yields remain mixed. China's cotton yields, for example, declined 9.3 percent year-on-year in 2015, even with four million acres of farmland devoted to biotech cotton crops.[117] According to China's state-run news media, lower cotton yields are the result of reduced growing areas, as water basins and other water sources needed for growing cotton dry up.[118] To maximize outputs of cotton and other crops, the Chinese government needs to expand the acreage of farms and better regulate farmlands. To that effect, the Ministry of Agriculture in May 2015 released a draft revision of its regulations governing biotechnology.[119] The revisions lay out plans to increase connected farmland—aiming for over 200,000 square miles of by 2020— that would allow farmers to better utilize modern irrigation technology to withstand draughts and flooding, as well as strengthen monitoring systems to protect farmlands and ensure farmers stable food production and incomes.[120]

Although GMO cotton yields remain low, grain yields are up more than 28 percent over the last decade.[121] Corn in particular has seen significant yield increases, rising 4 percent year-on-year in 2015 and 112 percent since 2000.[122] While GMO corn is still not approved for commercial cultivation in China, the Chinese government hopes to start selling GMO corn in commercial markets, and is currently revising its biotechnology regulatory system to push ahead with the commercialization of biotech corn.[123] Wheat and rice yields also increased year-on-year in 2015, rising 3.1 percent and 0.8 percent, respectively (see Figure 8).[124]

Figure 8: Total Farm Crop Yields, 2000–2015



Source: National Bureau of Statistics via CEIC database.

To continue to promote agricultural output and reduce its reliance on foreign crops, China is working to improve public perception of GMOs and reduce domestic regulations of GMO products. Since 1997, China has made significant strides in approving GMO products, issuing GMO Safety Certificates to seven domestically developed GMO crops, including varieties of tomato, cotton, and papaya.[125] The most recent approvals, however, occurred

* The United States is the largest producer of GMO crops, with 180.6 million acres of farmland for GMO crops. Statistica, "Leading Countries of Genetically Modified (GM) Crops Worldwide in 2014, Based on Planted Acreage." *http://www.statista.com/statistics/271897/leading-countries-by-acreage-of-genetically-modified-crops/*.

† China does allow the commercial use of GMO cooking oils, papaya, and imported animal feed. Stuart Leavenworth, "How a Chinese Acquisition Could Put Genetically Modified Foods on Menu," *Christian Science Monitor*, February 29, 2016. *http://www.csmonitor.com/World/Asia-Pacific/2016/0229/How-a-Chinese-acquisition-could-put-genetically-modified-foods-on-menu.*

back in 2009 for rice and corn, with no progress in recent years despite China's emphasis on developing its biotech industry.[126]

A major source of resistance to GMO products is from the Chinese public, which has grown wary of modified food products after a number of well publicized food safety violations over the past few years. In 2008, for example, a milk powder tainted with melamine was responsible for the deaths of at least six infants, and sent over 50,000 babies to the emergency room.[127] Then, in 2013 local government leaders in Guangdong Province admitted that 44 percent of the local rice had been found to be laced with dangerous levels of the metal cadmium.[128] Chinese consumers have also received conflicting messages about GMOs in recent years, with campaign groups like Greenpeace and Maoist nationalists stoking fears about genetically modified products.[129]

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