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# China's Foreign Agriculture Investments

Elizabeth Gooch and Fred Gale





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## Abstract

Chinese companies are increasing their investments in foreign agricultural and food assets. Their broad aims are to gain profits for Chinese investors while achieving national food security and projecting China's influence abroad. While the United States is the largest supplier of China's agricultural imports, it has not been a major target of Chinese agricultural investment. Chinese investors tend to enter less-developed countries where there are few competitors, potential to raise productivity using Chinese technology, and potential to diversify suppliers of Chinese imports. A few companies with access to financing from Chinese banks are pursuing mergers, acquisitions, and partnerships with companies in more developed markets. These investments reflect changes in China's demand for food and its need for upgrades in technology and management, but most ventures have modest impacts on agricultural trade.

**Keywords:** China, foreign direct investment, FDI, going global, investment, acquisition, greenfield, agriculture, food industries, supply chain, food security

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# China's Foreign Agriculture Investments

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## What Is the Issue?

Chinese companies are increasing their investments in foreign agricultural and food assets at a rapid pace. A better understanding of the motivations behind these ventures and their size and impacts can help Government officials, farmers, business leaders, and other stakeholders in the United States and other countries make more informed policies and business decisions regarding these investments.

## What Did the Study Find?

According to China's Ministry of Agriculture, over 1,300 Chinese enterprises had overseas investments in agriculture, forestry, and fisheries valued at \$26 billion in 2016. The investments include crop and livestock farming, fishing, processing, farm machinery, inputs, seeds, and logistics in over 100 countries. China's National Bureau of Statistics reports that foreign investment in farming, forestry, and fishing grew fivefold from 2010 to 2016. Increasing reliance on food imports, concerns about national food security, and a rising stock of foreign reserves are among the factors that propelled growth in outbound investment.

Chinese officials have ambitious strategic plans for agricultural investments to reshape patterns of agricultural trade and increase China's influence in global markets. Foreign investment in agricultural and food sectors is part of a broader initiative to encourage Chinese companies to become economically competitive by engaging in international markets. Since the first decade of this century, Chinese officials have given stronger encouragement to agricultural companies to invest abroad. While investors are chiefly motivated by profits, Government authorities and banks formulate strategic plans, broker deals, arrange credit, and supply training and information services to encourage foreign investments. These investments contribute to national food security, gain a greater share of the profits for Chinese companies from imported commodities, exert influence on global price determination, impart technical and managerial expertise, open new markets for Chinese products, and project political influence abroad.

While China's foreign investment in agriculture is growing rapidly, global news media often exaggerate its role. A number of studies have found that the scale of many Chinese agricultural projects falls far short of initial announcements. Chinese researchers have found that few projects were profitable and relatively few investors exported products back to China as planned. The researchers attributed poor results to factors such as inexperience in global markets, lack of language skills, local bureaucracy, corruption, and political instability.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

Most of China's foreign agricultural projects involve relatively small companies investing in neighboring countries in Southeast Asia, Russia's Far East, and Africa that have unexploited land and are often receptive to Chinese investment. Agricultural investment is now closely tied to China's One Belt One Road initiative, which targets countries between China and Western Europe. Chinese companies seeking sources of dairy, beef, and lamb imports have focused their investments and partnerships on New Zealand and Australia.

Apart from the large 2013 acquisition of Smithfield Foods, relatively little Chinese investment has targeted U.S. agriculture. Statistics for 2014 show that North America received only 2 percent of China's farming, forestry, and fishing investment, the smallest share of any continent. A database that tracks Chinese investments in the United States shows only two-to-three investments in agriculture and food annually, most valued at less than \$10 million. Statistics tracking foreign farmland holdings in the United States show 12-to-25 Chinese acquisitions annually during 2008-13.

Many of the investors seek to profit from growing consumer demand in China. Investments in the dairy and beef sectors in New Zealand and Australia, for example, have gained prominence as imports of animal protein increased. Many ventures have a mix of foreign aid and commercial objectives. Chinese officials are encouraging further foreign-aid-type investments in less-developed countries as part of their One Belt One Road initiative (a China-sponsored development strategy focused on connectivity and cooperation between Eurasian countries).

The report's extensive review shows that Chinese foreign investment strategies are shifting away from land purchases toward mergers and acquisitions. For example, COFCO—a state-owned agribusiness—embodies new tactics aimed at gaining more control over commodity trading, processing, and logistics. Bright Foods—another state-owned company—exemplifies the conglomerate approach of assembling various companies and brands under one umbrella. The WH Group—a privately owned company in China's fragmented pork industry—acquired Smithfield Foods, the world's largest pork processor, known for its swine-breeding and pork-processing capabilities. New Hope Group—China's largest animal feed company—has diversified its investments from feed mills in neighboring countries to joint ventures with Australian and New Zealand partners to meet growing demand for animal protein in China.

Chinese investments in countries other than the United States could influence the U.S. share of the Chinese market for certain commodities like dairy products and beef. However, the United States' abundant endowment of productive farmland, leadership in agricultural technology, efficient management and marketing, and skilled and experienced managers are all advantages that may help it retain its role as China's leading supplier of agricultural imports, regardless of where Chinese companies choose to invest.

## **How Was the Study Conducted?**

This study examines China's strategy for foreign direct investment in the agricultural and food sectors. While most investigations rely on English news media reports and interviews in particular regions, this study draws upon extensive discussion of strategies and how they have evolved over time as revealed in Chinese sources. The report reviewed a broad selection of Chinese speeches, reports, and news media to gain insights concerning China's rationale and policy support for outward investment in agriculture. The report also synthesizes trends in China's agricultural imports, examples of investments drawn from company reports and news media, and databases of investments for certain countries and regions to help readers evaluate the Chinese investment program.

# China's Foreign Agriculture Investments

## Introduction

China's outward investment strategy has attracted significant attention. China was the world's second-leading foreign investor in 2014, and the country is projected to spend \$1 to \$2 trillion on outward foreign direct investment (FDI) during 2015-25 (Paulson, 2016; Rosen and Hanemann, 2012). China's outbound FDI reflects a transition from "bringing in" capital and technology to a new stage where Chinese companies also "go out" or "go global" to play an active, assertive role in world affairs and the global economy (Shambaugh, 2013; Williamson and Raman, 2011).

China's foreign investments have included hundreds of agriculture- and food-related ventures involving dozens of commodities on every continent. Observers and targets of these investments are often puzzled about the motivations and objectives and the level of government support received by Chinese investors. Chinese agricultural investments are alternately viewed as state-sponsored "land grabs" and as benign commercial transactions.

China's agricultural investment initiative is an important development for U.S. farms, agribusiness, and policymakers since the United States is the leading supplier of China's agricultural imports (Gale, Hansen, and Jewison, 2015). Will Chinese companies invest in U.S. farms and agribusinesses, or will investment be focused on other countries? Does this investment pose an opportunity or a threat for U.S. agricultural industries? Will Chinese investments affect U.S. policies and initiatives?

Chinese investments in foreign agriculture have prompted widespread attention and discussion in the news media, but literature on this growing trend is limited and provides only fragmentary information. Previous investigations (Brautigam and Zhang, 2009; Meyers and Jie, 2015; KPMG, 2015; Oliveira, 2015) found that international news media reports tend to overstate the extent of outward Chinese investment in agriculture and often mischaracterize its role. The Economist Intelligence Unit (2010) profiled mergers and acquisitions by Chinese companies but included no discussion of agriculture.<sup>1</sup> Other authors have limited their analyses to aspects of the topic. Economy and Levi (2014) discussed China's investment in resource-based industries. Brautigam and Tang (2009) and Brautigam and Zhang (2013) investigated China's role in African agriculture; KPMG (2013) discussed investment in Australian agriculture; and Oliveira (2015) reported on Chinese investments in Brazilian agriculture. Gooch and Gale (2015) discussed some issues related to China's rising overseas agricultural investment.

Since there are no comprehensive data or rigorous studies of China's agricultural outbound investments, this report synthesizes various types of information to help readers understand and evaluate the Chinese investment program. Like Shambaugh's (2013) overview of China's "go global" strategy for international trade and governance, the current study investigates the strategic thinking of Chinese officials. Our study is based on a review of all available information sources in both English and Chinese to make a balanced assessment of China's investment program. The study draws upon Chinese sources that are not accessible to the non-Chinese-reading public—Chinese Government surveys and reports, Chinese news media, policy documents, and compilations of investments for

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<sup>1</sup>The Economist Intelligence Unit is a company engaged in market analysis and forecasting affiliated with *The Economist* magazine.

various countries and regions—to discern China’s strategic objectives and policy support for agricultural investment abroad. While it is difficult to draw strong conclusions about the impacts of Chinese agricultural investment, the report discusses some possible implications for U.S. agriculture.

The following sections provide detailed information on patterns of investment, China’s strategic thinking, and policy support for investments in agricultural and food sectors around the world. Further sections review the development of the investment strategy and its supporting policies and discuss commodity-targeting, regional patterns of investment, and merger and acquisition strategies.



# Review of Chinese Investments

## Diverse Investments

According to China's Ministry of Agriculture, the country had over 1,300 agricultural, forestry, and fisheries enterprises with registered overseas investments valued at 180 billion yuan (\$26 billion<sup>2</sup>) at the end of 2016 (*Farmer's Daily*, 2017a). The investments included crop and livestock farming, fishing, processing, farm machinery, inputs, seeds, and logistics in over 100 countries.<sup>3</sup>

Table 1 lists a selection of recent investments that illustrate the diverse mix of commodities and regions targeted by Chinese companies, including palm oil and natural rubber plantations in Southeast Asia, soybean and rapeseed farms in eastern Russia, dairy and beef operations in New Zealand and Australia, and alfalfa farms in the United States and Bulgaria. Most investments are made by relatively small companies in countries that neighbor China or in Africa, but the scope has expanded to include a variety of commodities and countries on every continent. More recently, Chinese companies, bolstered by greater financial resources, have acquired other companies to gain a foothold in particular markets like pork, dairy, or olive oil. Access to technology or management expertise appears to play a role in some acquisitions. Other acquisitions focus on agricultural trading and logistics companies, reflecting a shift in tactics toward gaining control over all links of the supply chain for imports and creating large multinational agricultural trading companies (Hu, 2013; Quer et al., 2010; Meng et al., 2016).

Qiu et al. (2013) estimated that 47 companies they surveyed rented or purchased a total of 983,000 hectares of land overseas. These included large state-owned companies like COFCO and China Agricultural Development Group, companies affiliated with provincial authorities like Chongqing Grain Group and Jilin Province Overseas Agriculture Investment Co., and 38 companies affiliated with provincial state farm systems. Another survey of 36 companies (Song and Zhang, 2014) revealed the diversity of investors in overseas agricultural projects but did not attempt to aggregate the data. Our analysis below draws on the insights from these surveys about the motivations of investors and problems they encountered.

Much of the discussion of Chinese agricultural investments is based on compilations of international news media reports by organizations like Landmatrix.com and grain.org. However, several investigations have found that Chinese acquisitions of land were much less than reported, including field investigations in Africa by Brautigam and Tang (2009) and Brautigam and Zhang (2013), examinations of Latin American investments by Meyers and Jie (2015), and Australian investments by KPMG (2015). Oliveira (2015) could only confirm a handful of Chinese investments reported in Brazil's soybean sector, and he cited the diversion of investments through third countries and opaque Chinese data as barriers to monitoring Chinese investments.

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<sup>2</sup>Based on the official exchange rate in December 2016.

<sup>3</sup>The Ministry reported these totals in a news media release; the underlying statistics have not been made publicly available to verify these totals. As discussed below, smaller investment totals for farming, forestry, and fishing are commonly reported.

Table 1

**Examples of Chinese overseas agricultural investments**

Commodity	Chinese companies	Location	Investments
Palm oil	Julong Group	Indonesia	Developed 50,000 ha plantation on Kalimantan Island and a crushing plant built in 2011.
	ZTE Energy	Indonesia	Two plantations totaling 30,000 ha in central and western Kalimantan Island. ZTE has four Indonesian ventures.
Olive oil	Bright Foods	Italy	Majority stake in Salov Group, an Italian olive oil producer with a distribution network reaching 60 countries.
Rapeseed, sunflower seed oil	Hengda Group, Hengsheng Grain and Oils Group	Russia	Manzhouli City, Inner Mongolia officials arranged a partnership with Russian suppliers to import oilseeds and grains for processing and distribution in China.
Soybeans	COFCO*	South America, Europe	During 2014-15, COFCO acquired agribusiness companies Noble Agri and Nidera with assets in 29 countries.
Dairy	Shanghai Pengxin	New Zealand	Purchased dairy farms covering more than 10,000 ha and built an infant formula processing facility.
Beef	Shandong Delisi Food Company	Australia	Purchased 45-percent share of Bindaree Beef, including a feedlot and processing plant.
Pork	WH Group (Shuanghui)	United States	Acquired Smithfield Foods, the world's largest pork producer.
Corn	China Complete Engineering Corporation	Ukraine	In 2012-13, negotiated contracts with Ukrainian suppliers to export Ukrainian corn to the Middle East, North Africa, and China.
Alfalfa	Escalante Ranch	United States	Two Chinese entrepreneurs purchased a 22,000-ha ranch to export alfalfa to China.
	Tianjin State Farm	Bulgaria	Joint venture with Mel Investment Holdings renting 20,000 ha to grow corn, alfalfa, and sorghum.
Cassava	Guangxi State Farm	Vietnam	Modified starch processing with planned capacity of 100,000 metric tons.
Sugar	COMPLANT International	Jamaica	Purchased three processing facilities and plantations and agreed to lease more than 100,000 acres of government land.
Sugar	Rui Feng International Co.	Cambodia	Mill and plantation will export sugar to Europe and China.

\*COFCO = China National Cereals, Oils and Foodstuffs Corporation; ha = hectares.

Source: USDA, Economic Research Service compilation of information from company websites and news media reports.

Studies by Chinese analysts have found that overseas agricultural investments encounter numerous barriers that curb their growth. Companies surveyed by Qiu et al. (2013) cultivated only 12.8 percent of the land they acquired overseas and invested only 5 percent of the amount they had planned due to unforeseen barriers and lack of financing. Chen et al. (2009), Qiu et al. (2013), and Song and Zhang (2014) found that most Chinese overseas investment projects in agriculture had low or negative profits. The studies cited inexperience in global markets, lack of technical personnel, poor language skills, problems with local bureaucracy, political instability, corruption, and restrictions on immigration as reasons for poor performance. Chinese investors in overseas agricultural projects complained that projects were often undermined by high tariffs in host countries on imports

of fertilizer and farm machinery and poor local infrastructure (Qiu et al., 2013; Song and Zhang, 2014). Song and Zhang found that some investment decisions were based on statistics that exaggerated the potential for overseas projects. Oliveira's (2015) investigations of Chinese investments in the Brazilian soybean sector found that plans were scaled back due to political developments in both countries, financial losses, clashes over business strategy, and a lawsuit.

While China's outward investment focuses largely on gaining access to resources to produce for the Chinese market, Chinese investors appear to sell most of the products from overseas ventures in the host country. In a survey of 47 Chinese investors operating overseas, Qiu et al. (2013) found that only 10 percent of the 352,000 metric tons (mt) of the grain they produced in 2011 was sold in China—most was sold in the host country. Both Qiu et al. and Song and Zhang (2014) found that investors encountered numerous obstacles to exporting products back to China, including export taxes in the host country and an absence of export protocols between the host country and China. Moreover, most companies were not able to obtain allocations of Chinese tariff-rate quotas needed to import grain and cotton into China. Some projects faltered due to high tariffs that prevented import of machinery and fertilizer and to China's restrictions on export of seeds (Song and Zhang, 2014). These studies focused on grain production overseas; investment may have played a stronger role in China's imports of palm oil and cassava from Southeast Asia. Investments in dairy, beef, and lamb in New Zealand and Australia may also play a prominent role in China's imports of these commodities (Gooch, et al., 2017).

China's outward investment in agricultural and food industries lagged behind investment in other industries such as commercial services, real estate, manufacturing, construction, mining, energy, and technology. Until the 1990s, China's agricultural and food sector was largely dominated by small-scale farms and fragmented agribusinesses, and few agribusiness companies were capable of operating in global markets until the most recent decade. Thus, agriculture composes a small share of China's outward investment.

A statistical communique issued by China's Ministry of Commerce, National Bureau of Statistics and State Administration of Foreign Exchange (2017) reported that China's overseas direct investment in agriculture, forestry, and fisheries during 2016 was 1.7 percent of all Chinese outward investment flows and 1.1 percent of China's stock of outward investment that year. However, these numbers do not include investments in food processing, trading, and agricultural technology, since those investments are counted in the manufacturing and service sectors.<sup>4</sup> Moreover, averages are not meaningful, since a few large deals worth billions of dollars skew statistics that are composed mainly of small investments of a few million dollars. In addition, statisticians may have difficulty measuring large investments.<sup>5</sup>

## Tracking the Rise in Investment

Agricultural investments have been boosted by a combination of a maturing Chinese agribusiness industry, growth in financial resources, and higher levels of policy support. While not a complete inventory of agricultural investments, National Bureau of Statistics (NBS) data on overseas direct

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<sup>4</sup>China Ministry of Commerce (2017) reported that investment in food manufacturing was \$810 million during 2016, but no totals are available for agricultural equipment, inputs, services, or logistics.

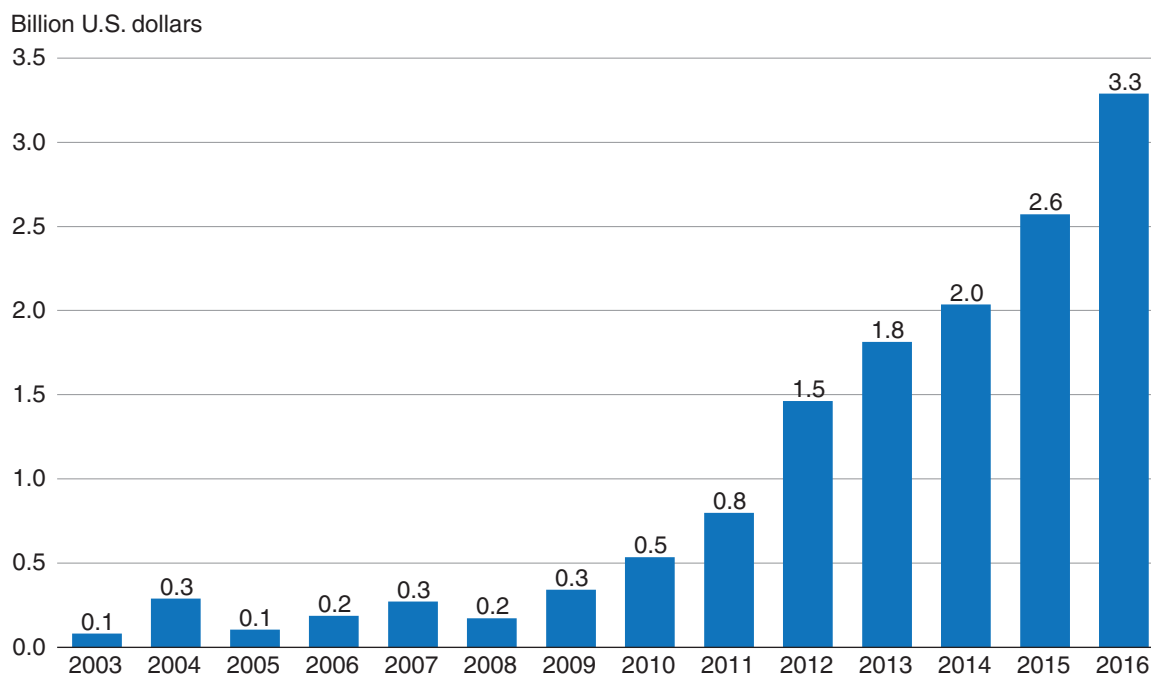
<sup>5</sup>A table in the 2013 report by the Ministry of Commerce included a footnote explaining that the acquisition of Smithfield Foods was not included in investment totals that year.

investment in the agriculture, forestry, and fisheries sector provide an indicator of the trend in China's outward agricultural investment flows. The statistics show that outward agricultural investments were low until growth accelerated after 2009 (fig. 1). During 2010-16, China's annual outward agricultural investment flow rose more than fivefold to reach nearly \$3.3 billion in 2016.

These statistics do not reflect the entirety of China's agriculture- and food-related investments. The \$14.9 billion stock of foreign investment in agricultural, forestry, and fishing sectors reported for 2016 (China Ministry of Commerce et al., 2017) was smaller than the \$26 billion reported by the Ministry of Agriculture (Farmer's Daily, 2017a). Presumably, the difference reflects the Ministry of Agriculture's inclusion of investments in processing, trading, transportation, and input manufacturing sectors related to agriculture. China's largest outward agriculture-related investments include a handful of very large ventures that would be classified as investments in manufacturing or logistics industries:

- During 2010-14, Bright Foods made a series of acquisitions, highlighted by its \$1.9-billion stake in Great Britain's Weetabix and a \$2.1-billion stake in Israeli dairy company Tnuva.
- In 2013, WH Group (known as Shuanghui in China) acquired U.S. Smithfield Foods for \$7.1 billion.
- In 2014, China National Cereals, Oils and Foodstuffs Corporation (COFCO) purchased controlling stakes in two trading companies, Noble Agri and Nidera; both stakes were expanded to full ownership in 2016 with a combined investment of nearly \$3 billion.
- In 2016, China National Chemical Corp. (ChemChina) agreed to acquire Syngenta, a Swiss producer of seeds and agricultural chemicals, for \$43 billion.

Figure 1  
**China direct overseas investment in agriculture, forestry, and fishing, 2003-16**

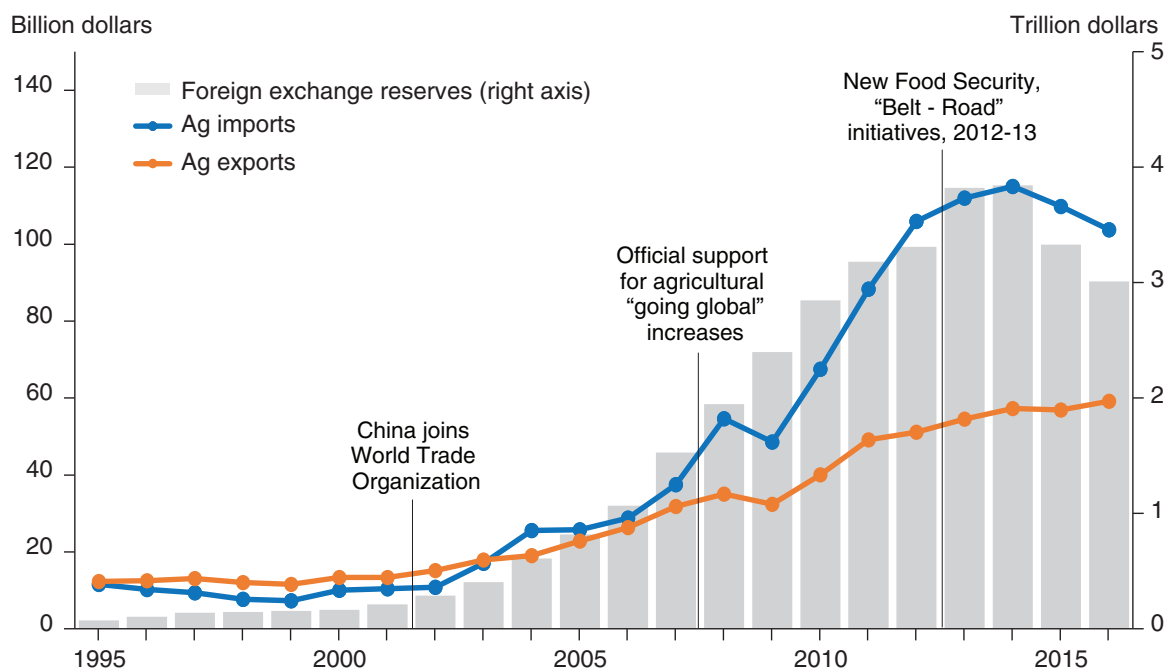


Source: USDA, Economic Research Service analysis of data from China Statistical Yearbooks and China Ministry of Commerce (2017).

The growth in China’s agricultural investment reflects a general acceleration in outward foreign investment by all types of Chinese companies. According to the NBS, agriculture accounted for a relatively steady 1- to 2-percent share of China’s total outward foreign investment during the years of rapid growth from 2010 to 2016.<sup>6</sup> The steady share is an indicator that agricultural investment was growing at a similar pace to that of other sectors. However, the “agriculture” category does not include the large acquisitions by Bright, WH Group, COFCO, and ChemChina, which are agriculture related but would be classified as investments in manufacturing and trading sectors.

Acceleration of China’s outward agricultural investment coincided with several related economic trends, including rapid growth in agricultural imports and foreign exchange reserves. The first prominent official endorsements of “going global” in agriculture appeared during 2007-08, as the value of China’s agricultural imports surged during those years (fig. 2). After a brief dip during the global financial crisis, China’s agricultural import growth accelerated from 2009 to 2013. The growing agricultural trade deficit prompted greater concern among Chinese officials about national food security. China’s foreign exchange reserves also grew rapidly during those years, peaking at \$4 trillion in 2014. These reserves provided financial resources to support outward investment. Figure 1 shows, however, that foreign investment flows continued to accelerate after foreign exchange reserves and agricultural imports declined during 2014-16.

Figure 2  
**Rapid growth in China's agricultural imports and foreign exchange reserves paralleled outbound investment initiatives**



Source: USDA, Economic Research Service analysis of data from Peoples Bank of China and Chinese customs statistics accessed from IHS Markit (2017).

<sup>6</sup>Agriculture, forestry, and fishing investment represented 1.7 percent of outbound investment flows during 2016 and 1.1 percent of the total stock of overseas direct investment at the end of 2016 (China Ministry of Commerce, 2017).

Chinese companies have made relatively few direct investments in U.S. agriculture and food sectors, even though the United States is the top supplier of China’s agricultural imports and a leading destination for Chinese FDI in other sectors such as real estate and manufacturing (Haneman and Gao, 2016). China Ministry of Commerce (2017, p. 113) reported that only 2 percent of agriculture, forestry, and fishing investment flows went to North America during 2014, the smallest share among that of the major continents reported.

The Rhodium Group’s compilation of Chinese investments in the United States showed agriculture and food industries accounted for only 34 of China’s 1,360 investments from 2000 to 2016 (table 2). The value of those investments represented 6.8 percent of the value of Chinese FDI in the United States during those years. These statistics are skewed by the \$7.1 billion Smithfield deal during 2013, which accounted for 96 percent of the agriculture and food total. The next largest agricultural project was a 2015 joint venture between China’s Yili Group and the cooperative Dairy Farmers of America to build a milk powder processing plant in Kansas (Dairy Reporter, 2015; DFA, 2015). In 2011, two Chinese entrepreneurs spent \$10 million to purchase a 22,000-acre ranch in Utah used to grow alfalfa for export to China (Leavenworth, 2014). Another transaction that probably is not counted “agricultural” is New Hope Group’s 20-percent stake in Lansing Group, a U.S. grain trading company, to improve its capacity to source imported feed ingredients and manage risk.

Rhodium Group data indicate that Chinese agricultural and food investments in the United States were mostly under \$10 million each. According to these data, there have been from two to three agricultural and food investments in the United States in most years since 2007. Excluding 2013—the year of the Smithfield investment—agricultural and food investments averaged \$16.8 million per deal and accounted for less than 1 percent of Chinese investment in the United States. California received nine agricultural and food investments, far more than any other State.

Table 2  
**Chinese investments in U.S. agriculture and food, 2000-16**

Year	Investments	Value	Ag-food share of China investment in United States	States
	<i>Number</i>	<i>Mil\$</i>	<i>Percent</i>	
2016	1	15	0.0	IA
2015	2	129	0.8	CA, KS
2014	3	54	0.4	CA, IN, IL
2013	3	7,116	49.8	CA, VA, FL
2012	3	19	0.3	CA, NE, VA
2011	3	17	0.3	CA, UT, TX
2010	3	31	0.7	CA (2), IA
2009	0	0	0.0	
2008	3	16	2.1	CA, IL, MO
2007	2	4	1.1	CA, IL
2000-06	11	8	0.3	CA (7), TX, MO, AR, MA
<b>Total</b>	<b>34</b>	<b>7,409</b>	<b>6.8</b>	

Source: USDA, Economic Research Service analysis of data from Rhodium Group (2017).

Records of foreign ownership of U.S. farmland show a slightly larger presence of Chinese investors in U.S. agriculture compared with the Rhodium Group data. ERS analyzed records of foreign-owned agricultural land compiled from reports mandated by the 1978 Agricultural Foreign Investment Disclosure Act, which requires foreign interests to notify the U.S. Department of Agriculture whenever they buy or sell U.S. agricultural land. Records for landholdings in 2014 (the latest currently available) show that 335 farms totaling 247,429 acres were identified as having “China” ownership, with a value of \$680 million. According to these records, Chinese acquisitions of land in the United States rose from less than 10 annually before 2008 to 12 to 25 each year during 2008-13. The number of Chinese farm acquisitions fell to four during 2014. The number of farm acquisitions exceeded the one-to-three annual agricultural investments reported by Rhodium Group, but the value of the farms acquired was less—under \$10 million annually in all but 2 years (2001 and 2013). Chinese farmland ownership is dominated by 50 swine farms owned by Smithfield Foods’ farming subsidiary, which exceeded 146,000 acres valued at over \$500 million, all acquired when WH Group acquired Smithfield during 2013.

Other large U.S. agricultural landholdings identified as having Chinese ownership were companies based outside of mainland China. The second-largest land owner identified as having Chinese ownership—with 126 farms and over 30,000 acres—is Walton International Group, a multinational real estate and property development company. Another multinational property management company controlled 5,900 acres acquired during 1990 and 1991. The third-largest Chinese investor is Formosa Plastics (27,500 acres acquired during the 1990s), a conglomerate based in Taiwan. A chemical company headquartered in the United States had 11,263 acres acquired in 1989.

The USDA, Farm Service Agency reported that foreign persons held an interest in just 2.1 percent of all privately held U.S. agricultural land during 2014 (Johnson, Feather, and Schultz, undated). The Chinese holdings listed in table 3 equal just 0.9 percent of the total of 26.7 million acres of foreign holdings of agricultural land reported by the Farm Service Agency. Thus, apart from farms controlled by Smithfield, China’s farmland holdings in the United States appear to be small. The database shows that Swiss company Syngenta owns 20 U.S. farms totaling 3,554 acres that could be added to the Chinese ownership total when ChemChina completes its acquisition of that company, but China’s holdings of U.S. farmland would remain small.

## The Rationale for Investment

China’s general “going out” or “go global” strategy began in the 1990s as an initiative to strengthen Chinese companies by encouraging them to move out from their home base and into global markets.<sup>7</sup> Shambaugh (2013) explained that “going out” was viewed as a transition from passively “bringing in” new technology and investment to more active participation in global markets to create globally competitive Chinese enterprises.

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<sup>7</sup>Nearly all discussions of agricultural investment use the Chinese term “zou chu qu,” which can be translated as “go out” or “go global.” This report uses the term “go global” since it is more meaningful to an English-speaking audience. Shambaugh (2013) distinguished between “zou chu qu” (go out), used for commercial firms, and “zou xiang shijie” (go global), used for Chinese localities and organizations.

Table 3

**China holdings of U.S. farmland, 2014**

Year acquired	Farms		Current value <i>Million dollars</i>	States
	<i>Number</i>	<i>Acres</i>		
2014	4	1,674	.7	FL, ME
2013	52	147,752	501.3	CO, IL, MO, NC, OK, SC, TX, UT, VA
2012	12	2,400	1.9	AZ, MD, NC, TX
2011	30	5,892	7.5	AZ, MD, VA, TX
2010	27	6,865	4.2	AZ, GA, TX
2009	25	6,995	4.9	AZ, TX
2008	30	8,127	4.4	AZ, TX, MO
2007	6	360	1.6	CA
2006	4	318	1.4	CA
2005	9	704	6.8	CA, FL, TX
2004	4	337	9.1	CA, AR
2003	2	278	.3	MO
2002	1	1	.5	PA
2001	3	1,005	25.5	FL, VA, WA
2000	2	162	7.1	CA, TX
1990-99	39	36,057	43.6	
1980-89	43	22,182	51.5	
1970-79	42	6,320	7.7	
<b>Total</b>	<b>335</b>	<b>247,429</b>	<b>680.0</b>	

Source: USDA, Economic Research Service analysis of USDA data on foreign ownership of farmland, accessed from Midwest Center for Investigative Reporting database.

“Going global” in agriculture is most often linked to food security concerns. During the 1990s, a food security white paper issued by China’s State Council advocated a 95-percent self-sufficiency rate for the main food crops. As China’s imports increased after its World Trade Organization accession, authorities grew more concerned about both “food security” and “industry security”—ensuring that imports do not undermine the development of domestic industries.

Official endorsements gained prominence when the 2006-08 spike in global commodity prices prompted authorities to secure more control over the rising flow of agricultural commodity imports. In 2006, both an “Opinion” issued by three ministries encouraging agricultural “going global” and the Ministry of Agriculture’s (MOA) Five-Year Plan for agricultural development outlined a broad “go global” strategy (table 4). In 2007-08, prominent Chinese Communist Party policy documents advocated outward agricultural investment for the first time.

A national food security strategy outlined in China’s 11th Five-Year Plan (2006-10) advocated “going global” by utilizing China’s abundant labor resources to develop foreign land, water, and energy resources. The Plan encouraged large-scale, competitive food conglomerates to produce grains, oilseeds, and sugar crops on rented land in South and North America and Africa and then to transport these crops back to China to balance supply and demand.



Table 4

**Chinese official initiatives advocating agricultural “going global”**

Year	Documents advocating agricultural “going global”
2006	Ministries of Commerce, Finance, and Agriculture jointly issued “Opinions on Accelerating Agricultural ‘Going Global.’” Ministry of Agriculture issued the “First Five-Year Plan for National Agriculture and Agricultural Development” that included strategies for “going global.”
2007	Chinese Communist Party’s “Central Document Number One” on rural policy endorsed outward agricultural foreign investment for the first time.
2008	A document on agricultural reform issued by the third plenum of the 17th Communist Party Congress and a medium- and long-term food security plan both endorsed agricultural “going global.”
2012	Revised food security strategy advocated an active role for Chinese companies in ensuring China’s supply of agricultural imports.
2013	“One Belt One Road” (“New Silk Road Economic Belt” and “Maritime Silk Road”) initiative became the focus of China’s outward investment endeavors by combining infrastructure investments, cooperation in science and technology, and trade to create new economic corridors across Asia, Europe, and Africa.
2017	State Council guidance on outbound investment repeated emphasis on “One Belt One Road” and identified agriculture as one of six sectors where investment is encouraged.

Source: Compiled by USDA, Economic Research Service from Chinese documents, Song et al. (2012) and Ma (2016).

“Going global” gained more impetus from two signature initiatives of President Xi Jinping: a revised food security strategy issued in late 2012 and the One Belt One Road<sup>8</sup> initiative launched in 2013. The revised national food security strategy advocated a proactive approach of boosting domestic production through technology and greater efficiency, while encouraging Chinese companies to gain control over the supply chain for imports of agricultural commodities (Cheng, 2013; COFCO, 2015; Han, 2012; Li, 2015; Wang, 2014; Ye, 2014). The new strategy narrowed the scope of commodities targeted for self-sufficiency to rice and wheat and allowed for “moderate” imports of other commodities. Supportive statements from officials, training programs, and subsidies for agricultural “going global” increased after the new food security strategy was released (Han, Jin, and Wu, 2014).

China’s “New Silk Road Economic Belt” and “Maritime Silk Road” initiative—the so-called One Belt One Road initiative—is now a major driver of “going global” in agriculture and other industries (Ernst and Young, 2015). Infrastructure construction and other types of investment are aimed at creating trade routes from China to Western Europe and fostering new markets for Chinese goods. The initiative focuses on building ports, railroads, and other transportation and logistics infrastructure and promoting trade and technical exchanges. Guidance on outbound investment issued by China’s State Council during 2017 repeated the emphasis on One Belt One Road and identified agriculture as one of six priority sectors for which investment is encouraged.

*Farmer’s Daily* (2017b) identified countries in six “economic corridors” between China and Western Europe that would be the focus of agricultural trade, investment, scientific cooperation, and exchange of personnel in the One Belt One Road initiative (fig. 3). A recent article featuring commentators associated with China’s Ministry of Commerce described the initiative as aiming to reform the global trading system and build production capacity in Asia, Africa, Latin America, and Europe (Shanghai Securities News, 2017). This article explained that the initiative’s strategy is to

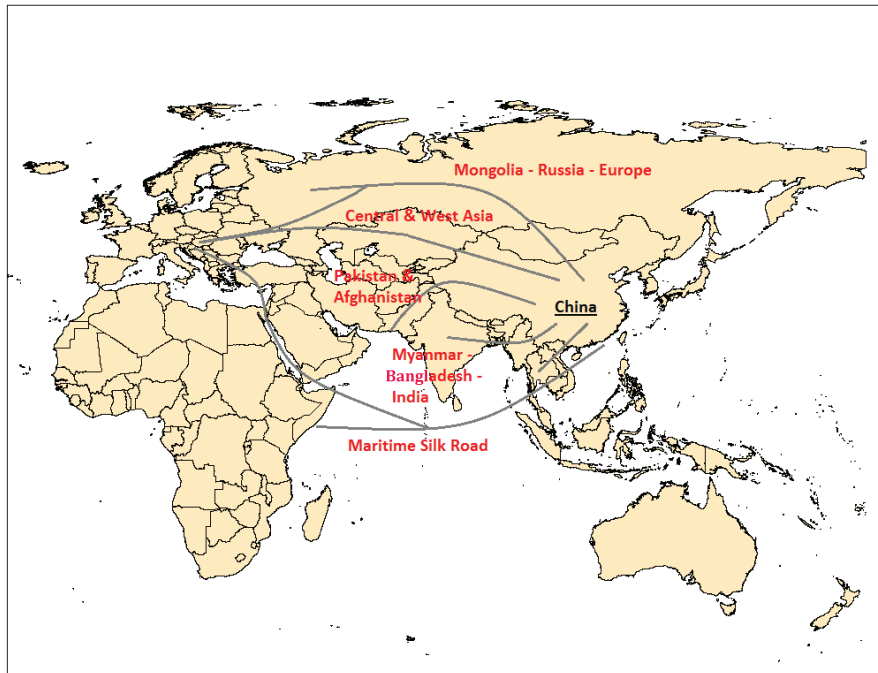
<sup>8</sup>There are different versions of the title “One Belt One Road.” In this report, the authors use the direct translation from Chinese characters, which also predominates in articles about the initiative on the Web.

construct new trade routes across the Asian continent and Indian Ocean to Europe as an alternative to established trade routes that often radiate from North America. The commentary emphasized construction of rail routes, dissemination of Chinese technology to Southeast Asia, acquisition of advanced technology from Europe, and bilateral trade with Russia. The One Belt One Road initiative does not exclude any countries; in practice, though, the United States is not a significant target for One Belt One Road investment. According to *Farmer's Daily* (2017b), companies from all countries are welcome to invest in One Belt One Road countries.

Agricultural technology is a prominent component of Chinese agricultural investments. This includes both China's dissemination of its own technology as well as acquisition of advanced technology developed by multinational companies. Qiu et al. (2013) and Song and Zhang (2014) found that Chinese agricultural investors tend to enter neighboring countries and developing countries in Southeast Asia, Far Eastern Russia, and Africa, where technology and crop yields lag behind those in China and where officials are receptive to Chinese investment.<sup>9</sup> In particular, the large number of investments in Africa reflects the foreign aid-goodwill component of many projects (see Box: "Rice as a Diplomatic and Economic Commodity").

More recently, acquisition of foreign technology to improve agricultural productivity has become another objective of China's outward investment. During the 1980s and 1990s, officials sought to upgrade technology by attracting inbound FDI, but now the acquisition of research and development capabilities and managerial and trading expertise appears to be the objective of several prominent Chinese outbound investments in pork, agricultural trading, and farm input companies.

Figure 3  
Trade routes defined in One Belt One Road initiative



Source: USDA, Economic Research Service analysis of information from *Farmers Daily* (2017b).

<sup>9</sup>Large Chinese companies surveyed by Economist Intelligence Unit (2010) reported that mergers and acquisitions were easiest in Africa and most difficult in the United States.

China's outward investment strategy differs from the role of foreign investment in international trade in food that emerged during the 1970s and 1980s. Connor (1983) and Henderson et al. (1996) documented the influence of U.S. and European food companies on agricultural and food trade. Dunning (1981) and Helpman (2004) incorporated multinational firms into economic theory by hypothesizing that firms set up foreign plants to utilize firm-specific assets such as research and development, marketing, and management in multiple plants. However, most Chinese companies investing in agriculture overseas lack brands and firm-specific assets (Daving, 2013; International Cooperation, 2009; Rosen and Hanemann, 2009; Sauvart, 2013; Zhang and Ebberts, 2010). In the earlier wave of investment studies, agricultural economists examined the link between foreign investment and the size and composition of agricultural exports to markets targeted for such investment (Gopinath, Pick, and Vasavada, 1999; Marchant, Saghaian, and Vickner, 1999; Marchant, Cornell, and Woo, 2002). Chinese investors, however, have been attracted mainly to less-developed countries with abundant land and other natural resources (Song and Zhang, 2014). China Ministry of Commerce (2017) suggested that Chinese agribusinesses invest abroad to overcome problems they face in China: loss of farmland, degradation of soil, pollution, and rising production costs. Many investments appear to have ambiguous objectives as both foreign aid projects and commercial ventures.

### **Rice as a Diplomatic and Economic Commodity**

China uses its technical prowess in rice as a goodwill-building tool overseas. China's numerous overseas rice projects are operated by companies and have a mixture of commercial and foreign aid objectives.

A foreign aid-type rice farm was set up in Cuba during 1996 by Xintian Group (also known as Suntime Group)—a company affiliated with China's Xinjiang Production Corps, which has 14 subsidiaries in tourism, petroleum, coal, and real estate as well as in agriculture (Liu, 2008). The 5,000-ha rice-farming project producing food for the local market may have generated goodwill for a much larger \$150 million hotel investment in the country and a Cuban-themed hotel in Shanghai (Hearn, 2016). Xintian's investment in a Mexican rice farm followed a bilateral agreement reached during a visit to Mexico by China's premier in 1997. China does not import rice or any other grain from either Cuba or Mexico.

Other companies founded by research institutes such as Hubei Provincial Seed Group and Longping High Tech Co. have been prominent in both foreign aid projects and exports of rice seed in Southeast Asia, South Asia, and Africa. Descriptions of China's One Belt One Road initiative suggest that rice will have a prominent role as seed companies promise to provide technical assistance and training to countries in Asia and Africa to raise rice yields, while also creating new markets for Chinese seed exports. However, the success of the initiative may be limited by regulations that limit exports of China's most advanced rice seeds.<sup>10</sup>

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<sup>10</sup>Ministry of Agriculture regulations ban exports of germplasm and seeds on a list of prohibited varieties and the regulations require provincial and national approvals for exports of seed.

China's outward agricultural investment initiative is modeled on similar efforts by Japan and other countries to gain control over agricultural imports and develop new suppliers (Ji, 2014). As Japan's rapid economic growth during the 1950s and 1960s raised concerns about resource scarcity in that country, Japan stepped up its foreign aid and technical assistance related to agriculture and encouraged Japanese companies to diversify sources of agricultural imports (see Economy and Levi, 2014). Pike (1970) described Japanese efforts to grow corn, sorghum, silk, rice, and bananas in Southeast Asia and India for the Japanese market. Investments in Australia, Latin America, Mexico, and Africa were also explored. Japan's investment included acquisitions of U.S. farmland and agribusinesses during the 1980s. Investment was driven by the appreciation of the Japanese currency, a divergence between rising Japanese real estate prices and falling U.S. farmland values, and Japanese companies' vertical integration strategies (Bolling, 1992). While Pike (1972) raised concern that Japan's investment could erode the preeminent position of U.S. exporters in the Japanese market, the United States remains the leading source of Japan's agricultural imports, nearly two decades into the 21st century.

## Policy Support for “Go Global”

Nearly all of China’s outward FDI is undertaken by companies. The Government plays a supporting role by arranging deals or providing low-interest loans, information, or advice. Officials describe the industry-Government partnership with a slogan: “The Government sets the stage; companies sing.” Chen et al. (2009) described several models for overseas investment in which Government officials play varying roles in either initiating projects for companies or supporting private ventures (Lan, 2013; Liu, 2015; Peng, 2015). Oliveira (2015) described how provincial governments brokered investments by Chinese companies in Brazil’s soybean sector. While local and central governments have many initiatives to encourage outward investment in agriculture, actual support is uneven. Surveys by Qiu et al. (2013) and Song and Zhang (2014) found most investors have limited financial resources and little knowledge of foreign markets, and many complain that Government support is insufficient. Moreover, many Chinese companies are accustomed to reliance on Government connections and subsidies for success in the domestic market, but these benefits are not always available to companies operating overseas (Shambaugh, 2013; Chen et al., 2009).

Earmarked, subsidized loans from Government policy banks are the chief means of support. From 2000 to 2005, several decrees and regulations authorized support for small and medium companies investing abroad through direct aid or subsidized loans.<sup>11</sup> China Development Bank established cooperative funds with Southeast Asia and several European countries that can be used for overseas investment. The Ministry of Agriculture signed agreements with two Government policy banks to provide financial support to agricultural foreign investment projects: the China Import-Export Bank in 2008 and the China Development Bank in 2011 (Ma, 2016).<sup>12</sup>

Not all support is explicitly subsidized. A catalog of policy support compiled by China’s Ministry of Commerce (China Ministry of Commerce, 2015) said that China’s Bank Regulatory Commission issues “guidance” to encourage large commercial banks to give credit to companies investing abroad and help them raise funds for mergers and acquisitions. The Agricultural Bank of China (2015) pledged to support “go global” investments in agriculture as well as infrastructure and energy, and Bank of China (2016) said it provided \$164 billion to finance export credit, company acquisitions, and overseas business loans for 2,334 “go global” projects.<sup>13</sup> A 2016 agreement between the Ministry of Agriculture and the Agricultural Development Bank of China included support for agricultural companies going global as 1 of 10 items targeted for a total of \$450 billion in agricultural lending (MOA, 2016a). In 2015, China Investment Corporation—China’s sovereign wealth fund—acquired a 20-percent stake in a joint venture with COFCO to invest in overseas ventures. Other special funds for Southeast Asian and African investments and lending organizations like the Asian Infrastructure Investment Bank may also finance outward investment.

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<sup>11</sup>Documents include “中小企业国际市场开拓资金管理(试行)办法”[management of funds for medium-small enterprise international market development]; “关于做好2004年资源类境外投资和对外经济合作项目前期费用扶持有关问题的通知”[circular for improved work in 2004 on problems related to support for initial expenses resource-type overseas investment and foreign economic cooperation projects]; “对外经济技术合作专项资金管理办法”[management of special funds for external economic and technology cooperation].

<sup>12</sup>When its agreement was signed, China Development Bank reported that it had outstanding loans of \$420 million supporting agricultural “go global” projects and a RMB19.5 billion (\$2.88 billion) balance of all types of agricultural loans.

<sup>13</sup>The Bank of China provided a \$4 billion loan to finance WH Group’s acquisition of Smithfield Foods.

Despite these financing programs, Chinese analysts widely cite lack of financing as an obstacle to companies investing overseas in agriculture (China Trade Promotion Commission, 2011; Zhai and Han, 2006; Zhai, 2013). Song and Zhang (2014) reported that only a few large companies benefit from such loans; they found that most investors financed overseas ventures by commercial bank loans mortgaged with their assets located in China.

Chinese authorities disseminate information, provide training sessions, and have procedures and facilities at the border to support companies “going global.” An online platform for prospective investors provides information on countries, laws, policies, and statistics. The Ministry of Agriculture compiles lists of overseas projects and country and industry plans and has a pilot program to give aid for machinery and equipment needed for overseas agricultural cooperation projects (China Ministry of Commerce, 2015). In 2016, China’s Academy of Agricultural Sciences launched a “Global Agricultural ‘Big Data’ Information Services Alliance” to act as a clearinghouse for information on agricultural science and technology to support overseas investments and cooperation by Chinese agribusinesses (MOA, 2016b).

An “agricultural industrialization” program sponsored by the Ministry of Agriculture is used as a platform to identify potential investors and provide services. This program, mainly focused on the domestic market, designates “leading enterprises” (also known as “dragon head” or “flagship” enterprises) that may receive aid such as earmarked loans, favorable access to land, and assistance recruiting farmer-suppliers in exchange for providing a market for small-scale farmers and transmitting technical and market information to them (China Ministry of Agriculture News Office, 2010).<sup>14</sup> *Farmer’s Daily* (2014) described the funds, equipment, and personnel of the 118,300 agricultural leading enterprises as a “strong foundation for agricultural going global.” Agricultural and bank officials held a “going global” training session for agricultural leading enterprises during 2014 (Shandong Agricultural Information Net, 2014).

Provincial and local governments provide much of the support for agricultural “go global” projects. Ma (2016) reported a coordinated initiative to develop provincial strategic plans for overseas investment in agriculture. Heilongjiang Province Development Research Center (2014) described provincial and local government support for farming activities in Russia, one of the largest recipients of China’s outward agricultural investment.

The 2015 and 2016 Number One Documents called for enhancing cooperation with trading partners to facilitate customs clearance, inspection, and quarantine for agricultural products. Many projects in recent years have upgraded border crossings, streamlined inspection procedures, and constructed special port facilities to enhance trade with neighboring countries and One Belt One Road countries:

- Customs and inspection procedures were reportedly expedited for corn imported from Bulgaria (Dai, 2014).
- An October 2015 document issued by China’s inspection and quarantine authority called for setting up a series of zones with inspection, testing, and cold storage facilities designated to receive imported meat; 56 such zones had been approved by September 2016 (AQSIQ, 2015). According to the document, the meat entry points are an initiative to standardize and upgrade inspection of imported meat with a specific objective of supporting the One Belt One Road strategy.

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<sup>14</sup>Nearly all prominent agribusinesses in China are designated as “leading enterprises”—including public, private, and foreign-invested enterprises.

- Chinese authorities reported construction of special rail, storage, and inspection facilities at a port in Jiangsu Province to act as a designated entry point for wheat imported from Kazakhstan, described as a “major national strategy” to boost the volume of grain from One Belt One Road countries imported into China (Lianyungang Net, 2016).

## Targeting Commodities, Regions, and Companies

This section discusses strategic factors considered for targeting investments articulated by business and Government officials in China. As noted, there are diverse objectives and rationales for investments that can change with priorities and market conditions. Below, we summarize strategies for targeting commodities, regions, and companies for mergers and acquisitions, based on a review of Government documents, news media, and other sources.

### Targeting Commodities To Address Import Reliance

The “going global” initiative continues Chinese officials’ longstanding objective of managing the flow of agricultural imports to fill deficits in domestic supplies and stabilize markets (Gale, Hansen, and Jewison, 2015, pp. 19-20). Outbound investment loosely focuses on commodities that China needs to import to satisfy demand from its consumers.<sup>15</sup> Zhai (2013) highlighted ocean fishing, soybeans, corn, rice, rubber, palm oil, and cassava as main targets for Chinese investment. Han, Jin, and Wu (2014) cited projections showing growth in corn imports to justify acceleration of “going global” by Chinese companies.

A second objective is to develop multiple suppliers of each imported commodity to avoid excessive reliance on a single country. The food security strategy outlined in the 11th Five-Year Plan (2006-10) called for diversifying suppliers of imports to preserve China’s “food sovereignty” and mitigate political risk. Ni (2014) profiled China’s growing reliance on imports of soybeans, edible oils, and other products, raised concerns about the risks posed by volatility and monopolization of foreign markets, and recommended that Chinese companies “go global” to gain more control over imports and diversify sources of imports. China’s 2016 Number One Document called for diversification of agricultural import suppliers, and *Economy Daily* (2016) emphasized that import diversification could give China greater bargaining and price-setting power for its imports. An advisor to China’s State Council noted that the top five supplying countries accounted for 95 to 99 percent of China’s imports of grains, oilseeds, and oils, but the share of the top five suppliers was only 54 percent for all agricultural commodity imports (Ye, 2017). He recommended increasing trade with One Belt One Road countries to reduce reliance on North and South America and Oceania for agricultural imports.

To illustrate China’s foreign investment targeting, figure 4 classifies commodities along two dimensions—import reliance and concentration of suppliers. The horizontal axis shows China’s average import reliance for 18 commodities calculated from USDA’s production, supply, and distribution data for 2010-15. The vertical axis shows the degree of concentration of its suppliers for each commodity—the share of China’s imports that comes from its top two supplying countries. Both data items were calculated using averages for 2010-15 from Chinese customs statistics.

The upper-right quadrant of figure 4 includes commodities for which China relies on imports for most of its consumption and also relies mainly on one or two countries for its supply. These commodities are prime targets for Chinese overseas investment. For example, China imports all of its palm oil from Malaysia and Indonesia, the targets of some large investments by Chinese companies. Soybeans, which are also predominantly imported from two countries—Brazil and the United States—have been targeted by several Chinese ventures in South America (Oliveira, 2015).

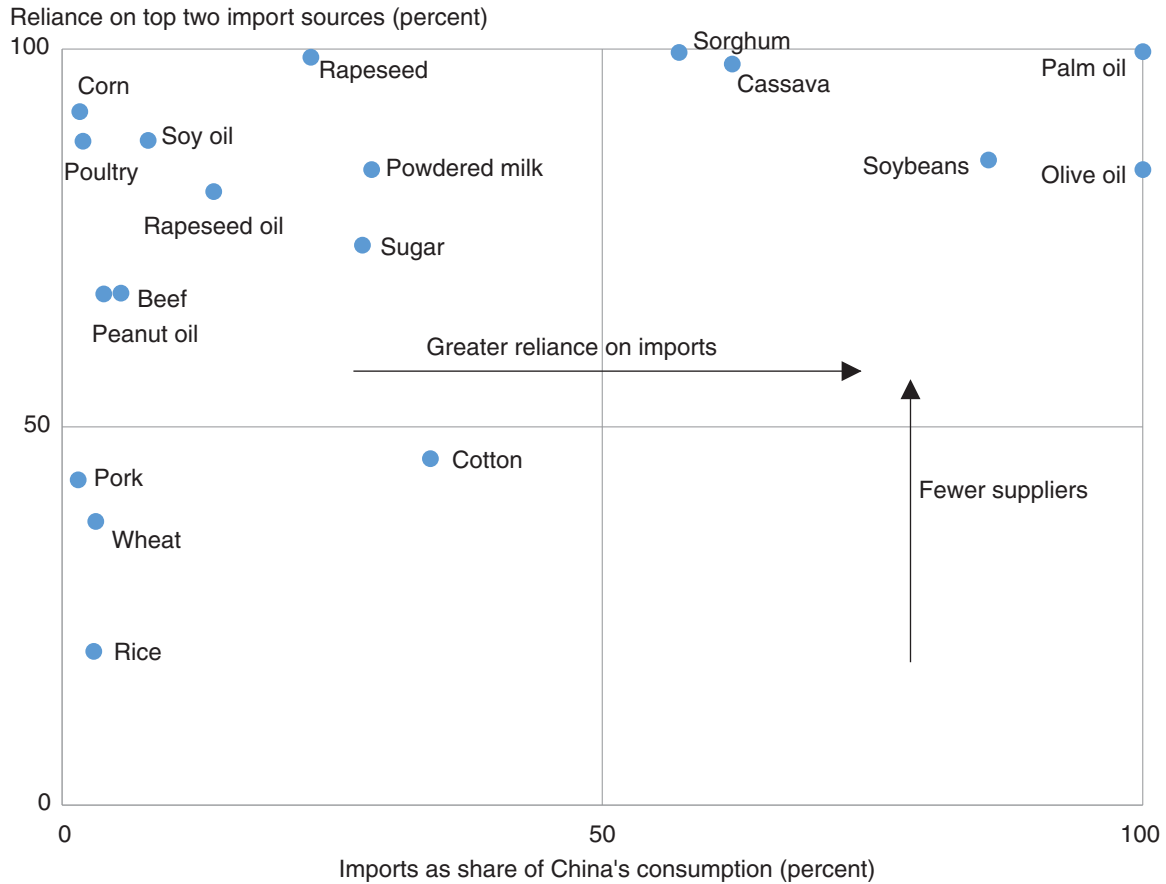
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<sup>15</sup>The earliest examples of “going global” were in ocean fishing and tropical plantation crops like rubber, but our report does not investigate these sectors in depth since it focuses on agricultural and food commodities.



Figure 4

**China's import reliance and diversification, by commodity, 2010-15**



Note: All figures are averages for 2010-15 using market-year data. Imports as share of China's consumption = (imports)/(domestic consumption) x 100, using data from USDA Production, Supply, and Distribution database (PSDOnline). Cassava import reliance was obtained from estimates by a private-sector market analysis company in China. Reliance on top-two import sources = (imports from two leading countries)/(all imports) x 100 using Chinese customs statistics accessed through IHS Markit (2017).

A Chinese company's recent acquisition of an Italian company with a broad production and distribution network for olive oil reflects emerging demand for this product, which China imports mainly from Italy and Spain.

The upper-left quadrant includes commodities for which China has a lower degree of overall import-reliance but is still reliant on two importers. These commodities could be targeted for investment in order to diversify suppliers. Prominent examples in this quadrant include corn and rapeseed. China imports only about 2 percent of the corn it consumes, but these imports came predominantly from the United States until 2013. China dramatically increased its corn imports from Ukraine after signing an agreement to accept grain shipments as repayment for loans. China also increased its corn imports from Bulgaria through a "go global" project, although the volume was much smaller. China imports rapeseed from Canada, but some recent initiatives sought to procure oilseeds and oils from Russia and Ukraine.

The lower-left quadrant includes commodities in which China appears to be more “secure” in these two dimensions: China imports less than 50 percent of its consumption, and import sources are relatively diversified. This quadrant includes wheat and rice, which China targets for self-sufficiency. Nevertheless, China has a number of ventures involving commodities in this quadrant. As noted above, China is largely self-sufficient in rice, but Chinese companies have invested in a number of rice projects that appear to have a foreign aid objective. Pork is also in this quadrant. Later in the report, we discuss the technology, management, and marketing assets gained through WH Group’s acquisition of pork producer Smithfield Foods.

## Target Regions for Chinese Outward FDI in Agriculture and Food

Like the objectives for outward agricultural investment, the criteria for choosing locations are also broad and can encompass any country. Analysis of information presented by Song et al. (2012), Zhai (2013), Ma (2016), and Ye (2016) shows that these criteria may include:

- Abundance of land, water, and other natural resources needed for agricultural production and food processing;
- Presence of production, processing, and logistics assets targeted by Chinese companies in “whole industry chain” strategies;
- Countries targeted for technical assistance in agriculture, especially for “South-South” cooperation between China and less-developed countries; and
- Countries where agricultural ventures may be tied to diplomatic overtures or initiatives like One Belt One Road.

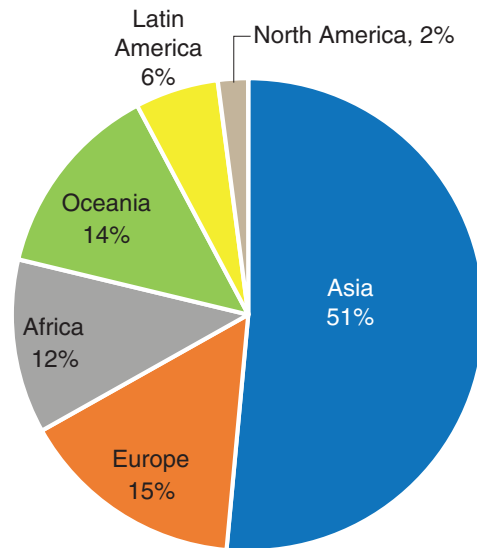
In practice, China’s investment has been concentrated in neighboring areas, especially Southeast Asia and Russia’s Far East—regions that are geographically accessible and have abundant endowments of land. According to China’s Ministry of Commerce (2017), Asian countries accounted for half of China’s outbound investment in agriculture during 2014 (fig. 5). Europe received 15 percent, but much of this investment was near China’s northeastern border in Russia’s Far East. Oceania—a region with abundant dairy and other agricultural resources—received a nearly equal share. Africa, another land-abundant region and a target for “South-South” cooperation, received about 12 percent of China’s outbound agricultural investment. In contrast, land-abundant Latin America (6 percent) and North America (2 percent) received relatively little Chinese agricultural investment.

The relatively small number of Chinese agricultural investments in North and South America is surprising in view of the strong agricultural trading relationship with these regions. North America was the largest source of China’s agricultural imports during 2010-15 at 31 percent (fig. 6), yet only 2 percent of China’s outbound agricultural investment was made there. South America accounted for 27 percent of China’s agricultural imports but only 6 percent of its agricultural investment. In contrast, Asia and Africa attracted the majority of China’s outbound agricultural investment, but Asian countries supplied only 20 percent of agricultural imports and Africa just 2 percent.

Official documents generally prioritize investment in less-developed countries, where Chinese companies face less competition for assets and local officials are often receptive to Chinese investment and diplomatic overtures. “Number One Documents” issued in 2014, 2016, and 2017 prioritized neighboring countries and One Belt One Road countries for agricultural cooperation and investment. The 2016-20 Five-Year Plan for the Rural Economy also prioritized One Belt One Road countries in Asia, Africa, Central and Eastern Europe, and Latin America.

Figure 5

**China's outward agricultural investment, by region, 2014 (percentages)**

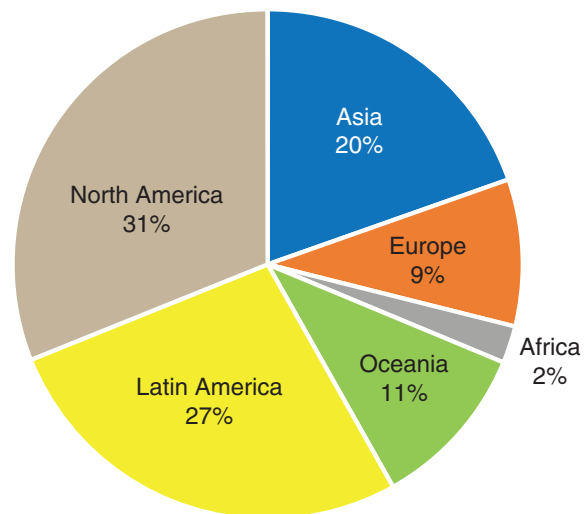


Note: Chart shows stock of investment at the end of 2014.

Source: USDA, Economic Research Service calculations using data from China Ministry of Commerce (2016, p.113).

Figure 6

**China's agricultural imports, by region, 2010-15 (percentages)**



Source: USDA, Economic Research Service calculations using China's customs statistics accessed through IHS Markit (2017).

The 2016-20 Five-Year Plan also advocated stronger cooperation with North America, Western Europe, and Oceania. North America and Western Europe have been targets for a smaller number of very large acquisitions of prominent agribusiness companies, as we discuss later. The United States, Canada, and Western Europe already have highly developed agribusiness industries and infrastructure, so Chinese investors face keen competition for assets there. Also, local officials in these countries may be less eager to attract investment from Chinese companies.

## Southeast Asia

China Ministry of Commerce (2017, p. 32) estimated the stock of agriculture, forestry, and fishing investment in Southeast Asia at the end of 2016 to be \$3.1 billion. Southeast Asia has a tropical climate suited to rubber, oil palm, and cassava. It also has a large ethnic Chinese population—an attribute that facilitates business ties. Southeast Asia has also been a focus of China’s diplomatic and trade initiatives.<sup>16</sup> Greenfield investments in which Chinese firms develop a new resource are common in this region, since these neighboring areas require relatively low upfront financial investments and since Chinese businessmen and traders have a relatively long history in the region (Westad, 2012).

Southeast Asia is an important neighboring region for investments in tropical crops, such as oil palm plantations and processing ventures in Indonesia. Starting in 2006, Tianjin Julong Group invested US\$56 million to develop two palm plantations and two palm oil processing facilities totaling 24,000 hectares on Indonesia’s Kalimantan Island. Between 2015 and 2020, Julong intends to enlarge the plantation size to 500,000 hectares. However, Julong has met some resistance to its expansion from the Indonesian Government and environmental advocates (Nan, 2014). Julong’s palm oil is exported back to China. Julong’s oil crushing mill, opened in 2011 on Kalimantan, is the first one owned outside of China by a Chinese enterprise.

As a neighboring country with low costs and plentiful resources, Cambodia has been a target for Chinese investment (Ji, 2014). Since the early 1990s, the Cambodian Government has leased out large tracts of land, called economic land concessions (ELCs), to Chinese and other companies for investment in tree plantations and large-scale agricultural operations. Nearly 1 million ha of Cambodian farmland is currently part of an ELC, and about 85 percent of the ELC is leased by a foreign entity. Chinese businesses are leasing 24 percent of all Cambodian ELCs.

Table 5 lists the Cambodian ELCs granted to Chinese developers between 1996 and 2014, as compiled by the nongovernmental organization (NGO) Open Development Cambodia. The investments were primarily in rubber, lumber, and other tree crops. In the NGO’s full dataset, 25 percent of the ELCs granted to foreign companies were to Chinese developers (21 of 80 companies).

Between 2012 and 2014, the Cambodian Government returned one-third of ELCs to local farmers and diverted some to preservation initiatives. Chinese developers lost more than one-third of their original land size due to the Cambodian Government’s downsizing initiative. Since 2012, 143,000 ha of Cambodian ELCs have been revoked, of which 15 percent had been originally granted to Chinese developers.

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<sup>16</sup>A prominent trade initiative is the “early harvest” reduction of agricultural tariffs in China’s free trade agreement with ASEAN.

Table 5

**Cambodian economic land concessions for Chinese developers (1996-2014)**

Chinese developer	Excised amount (ha)	Updated contract size	Investment intension
<b>Downsized between 2012-14</b>			
The Green Rich Co. Ltd.	42,200	18,000	Palm oil, fruit trees, and acacia
Great Asset Agricultural Development (Cambodia) Co. Ltd.	2,057	6,928	Cashew and other crops
Heng Rui (Cambodia) International Company Ltd.	1,680	7,439	Rubber, acacia, and sugarcane
Gold Foison (Cambodia) A/C Import Export & Construction Co. Ltd.	1,301	5,699	Acacia and processing plant
Holy Ykho-Industrial (Cambodia)	1,051	6,446	Rubber and other crops
Lan Feng (Cambodia) International Company Ltd. (Close up Industrial)	662	8,353	Rubber, acacia, and sugarcane
Huayue Group Co. Ltd. (previously Siv Guek Investment Co. Ltd.)	589	9,411	Acacia, trincomali, and other crops
Heng Nong (Cambodia) International Company Ltd.	543	5,945	Rubber, acacia, and sugarcane
Rui Feng (Cambodia) International Company Ltd.	185	8,656	Rubber, acacia, and sugarcane
GG World Group (Cambodia) Development Co. Ltd.	179	4,821	Unspecified crops, animal husbandry, and processing plant
Un-Inter Trading and Development Group (Cambodia)	14	6,986	Rubber, acacia, and other crops
Subtotal	50,462	88,683	
<b>No evidence of adjustment</b>			
Union Development Group		36,000	Unknown
Cambo Victor Investment and Developing Co. Ltd.		26,550	Peanut, rice, corn, soybean, other crops, and animal husbandry
Asia World Agricultural Development (Cambodia) Co. Ltd.		10,000	Teak, other crops, and processing plant
Phou Mady Investment Group		10,000	Acacia, teak, and other crops
Wuzhishan L.S. Group Co. Ltd.		10,000	Pine, fruits, vegetables, and processing
Grand Land Agricultural Development (Cambodia) Co. Ltd.		9,854	Unspecified crops
Union Development Group		9,100	Unknown
Yellow Field (Cambodia) International Ltd.		8,591	Unknown
Huor Ling (Cambodia) International Insurance		8,400	Pine
Great Wonder Agricultural Development (Cambodia) Ltd.		8,231	Cashew and other crops
Unigreen Resources Co. Ltd.		8,000	Rubber
(Cambodia) Tong Min Group Engineering		7,465	Rubber, acacia, jatropha, and processing plant
Crops & Land Development (Cambodia)		7,200	Rubber and acacia
Agri-Industrial Crops Development		7,000	Rubber and acacia
Land & Developing (Cambodia) Co. Ltd.		7,000	Rubber and acacia
Seang Long Green Land Investment (Cambodia) Co. Ltd.		7,000	Rubber and acacia
Subtotal		180,391	
<b>Revoked ELC between 2011 and 2015</b>			
Agro Forestry Research	7,000	0	Rubber and acacia
Fu Sheng Hai (Cambodia) Co. Ltd.	7,079	0	Other crops, eco-tourism, and special economic zone
Jian King (Cambodia) International Investment Co. Ltd.	8,568	0	Pine and processing plant
Subtotal	22,647		

ha = hectares.

Source: Compiled by USDA, Economic Research Service from Open Development Cambodia (2015).

Five Chinese companies (Rui Feng, Lan Feng, Heng Rui, Heng Nong, and Heng Yon) pooled ELC licenses totaling 40,000 ha to create a sugarcane supply base for a sugar mill that opened in 2016. The mill was built adjacent to their ELCs in Preah Vihear Province, and is expected to be one of Asia's largest, with products reportedly destined for export to Europe, China, and India (Sokhorn, 2017). The sugar mill investment is part of a larger project that features a power plant, a fertilizer plant, and other infrastructure including a hospital and school, altogether totaling US\$1.5 billion.

In Cambodia and other Southeast Asian countries, foreign aid has been a significant part of China's agricultural investments. In Cambodia, a Chinese tropical crops research institute partnered with a local company to initiate cassava and rubber tree seed propagation and to research mechanization of cassava cultivation. A report on China-Laos cooperation by the Shanghai International Issues Research Institute (2016) noted that China is the largest donor of foreign aid to Laos. According to the report, China's investment in Laos during 2001-09 totaled \$1.2 billion, including rice, corn, sugarcane, rubber, tobacco, and tropical fruit, mainly in northern Laos.

A company based in China's Hunan Province reportedly introduced Laotian rice to the Chinese market during 2016, an activity described as a key One Road One Belt cooperative venture (Xinhua News Service, 2016). An earlier project intended to grow rice and other commodities in Laos illustrates the mixture of foreign aid, commercial intentions, and other objectives in some projects. It also illustrates the pitfalls that can be encountered in overseas ventures. Experts in China interpreted the Laos venture's failure as a demonstration of the need for stronger support and planning from the central Government for outward investment projects (see box, "Chongqing Investment in Laos Illustrates Pitfalls of Investment").

## Chongqing Investment in Laos Illustrates Pitfalls of Investment

The Chongqing Municipal Government established an agricultural park in Laos with 6 companies during 2004-08 as one of 11 projects in a bilateral agreement reached with Laos by China's Ministry of Foreign Affairs. The agricultural park was planned for 5,000 hectare (ha) producing rice, flowers, aquaculture, and other items. Officials planned to employ workers displaced by the Three Gorges dam project, which flooded many cities and villages in Chongqing.<sup>17</sup> Reportedly, 200 companies expressed interest in the park, but only 4 actually invested. A seed company was the only one of the four with experience in agriculture; the others were an industrial conglomerate and two real estate companies from Chongqing. Initially, each of the companies leased 15 ha of land from the local government in Laos at a rent of about \$1-to-\$2/ha per season. Seeds brought from Chongqing proved to be unsuited to local climate and soils, and it took several years to find a hybrid variety with good yields. The companies then discovered that transportation costs would consume all profits for rice marketed in China as they had planned. The seed company questioned whether it could earn enough profit to justify even more investment in irrigation, roads, and canals needed to make the planned park viable.

According to the news media, the original four companies had reportedly given up on the Laos project by 2013, and the Chongqing Government reportedly requested assistance from national authorities to rescue the park. A task force sent to Laos decided to try planting tung oil trees to make biodiesel fuel, and a number of other companies came to investigate business opportunities. But the park never grew beyond 50 ha, 1 percent of its planned size.

## Russia

Far Eastern Russia, just across the border from Heilongjiang Province, is a leading location for Chinese outward FDI. China Ministry of Commerce (2017, p. 37) estimated the cumulative investment in agriculture, forestry, and fisheries in Russia at over \$3 billion at the end of 2016. Nearly half of the agricultural “going global” Chinese companies interviewed by Qiu et al. (2013) had investments in Russia. According to Heilongjiang Development Research Center (2014), individual Heilongjiang farmers began growing grain and vegetables and raising livestock in Russia in the early 1990s. In 2005, Heilongjiang officials developed a strategic plan to organize and support farming activities in Russia that included both company-driven and China-Russian Government-driven models. By 2011, 40 percent of counties in Heilongjiang and the province's State Farm system had agreements with local governments in Russia, encompassing 6.9 million mu (460,000 hectares) of Russian land.

In 2007, the Heilongjiang provincial agriculture commission started a fund to finance equipment purchases and other support for foreign agricultural development. Many projects involve Heilongjiang companies or farmer associations cultivating rented land in Russia, frequently arranged by county government agreements with counterparts in Russia. Investors use China's agricultural machinery purchase subsidy to buy machinery for foreign projects. The Sino-Russian Modern Agriculture Cooperation District opened in 2007 was described as the first national-level

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<sup>17</sup>Chongqing Commercial News, “种得出粮赚不到钱 渝企老挝种粮铩羽而归 [Grain did not earn money; Chongqing companies planting grain in Laos playing with toys],” 4 April 2009. Business Reference News, “专家呼吁：海外“种地”国家战略亟待建立 [Expert: urgent to establish overseas farming national strategy],” 22 September 2009.



foreign agricultural industry zone, encompassing 68,000 hectares of Russian cropland, agricultural production, processing, logistics, and organic food (Heilongjiang Mobile Phone Party News, 2016).

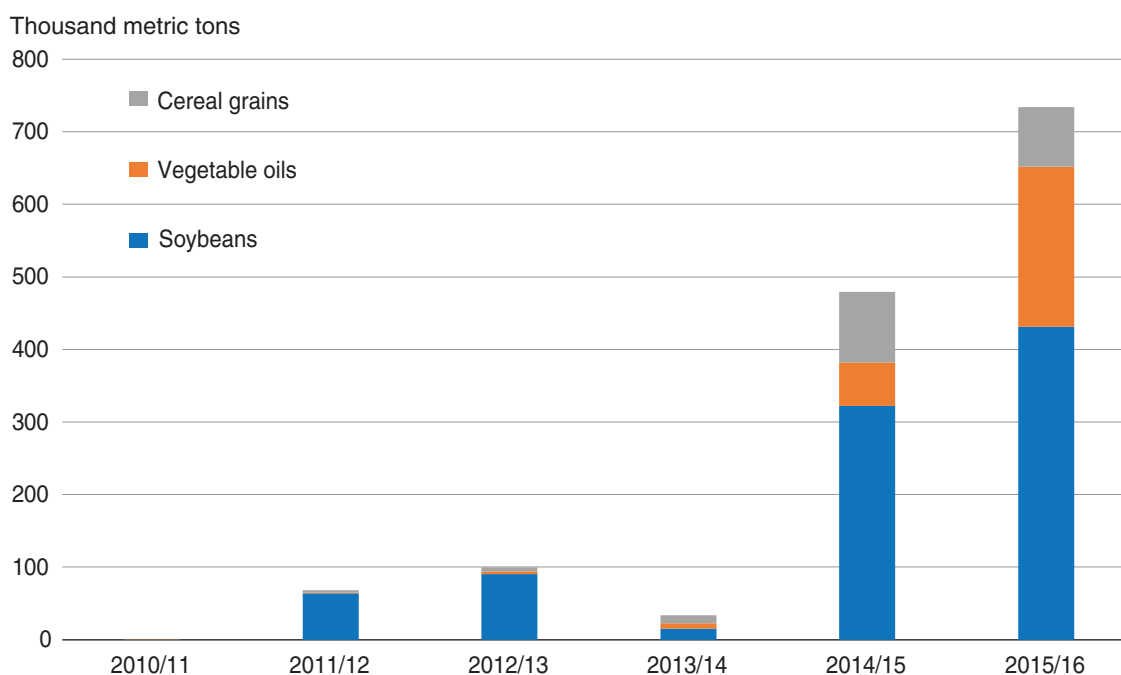
Song and Zhang (2014) described Russia as having great potential for agricultural investment due to low land rent and low prices for energy. However, they also reported that few of the crops grown by Chinese investors in Russia were exported to China. The survey by Qiu et al. (2013) reported problems such as restrictions on work visas and the failure of Russian officials to pursue agreements that would allow rapeseed grown in Russia to be exported to China. Song and Zhang reported complaints about high tariffs on imported inputs, high taxes and fees assessed on products shipped into China, uneven enforcement of laws, canceled land rental contracts, weather risk, and poor infrastructure.

Chinese authorities have taken steps to reduce barriers to exporting products from Russia to China:

- Heilongjiang provincial authorities lobbied the National Development and Reform Commission to gain an exemption from import tariffs during October to December for soybeans grown by Chinese farmers in Russia (Heilongjiang Development Research Center, 2014).
- Inspection and testing facilities at Russian border crossings were upgraded to handle agricultural products grown in Russia, and procedures were established to inspect farms and products in Russia to expedite their entry into China (China Economy Net, 2015; AQSIQ, 2013).
- Chinese authorities reported upgrading and streamlining customs and inspections procedures at Russian border crossings to facilitate trade in agricultural commodities.
- Agreements to export rapeseed from Russia to China were signed. A large Chinese conglomerate was matched up with a local grain and oil enterprise in Inner Mongolia to import rapeseed and other commodities produced in Russia, process them at the Chinese border crossing, and then distribute the products within China (Central People's Government Net, 2016).

Customs statistics confirm, however, that few commodities produced in Russia were exported to China until recently. Imports of soybeans, vegetable oils, and major commodities were negligible until the last few years. China's soybean imports from Russia increased from 64,000 mt during 2011/12 to 431,000 mt during 2015/16 (fig. 7). Vegetable oil imports from Russia—mainly soybean and rapeseed oil—surged from under 8,000 mt during 2013/14 to over 220,000 mt in 2015/16. Cereal grain imports—mainly corn—also became significant during 2014/15 and 2015/16 but never reached 100,000 mt. Despite rapid growth, Russia was China's smallest supplier of imported soybeans, and the 431,000 mt imported from Russia that year was a small fraction of the total volume of China's soybean imports, which exceeded 83 million mt during 2015/16.

Figure 7  
**China imports of key commodities from Russia**



Note: Data are for October-September market years.  
 Source: USDA, Economic Research Service analysis of China customs statistics accessed through IHS Markit (2017).

## Latin America and the Caribbean

South America is a land-abundant region that supplies more than half of China’s soybean imports. It is an important supplier of sugar, other grains, oilseeds, and livestock products; the Caribbean region also produces sugar.

Chinese diplomatic overtures to these regions and infrastructure development have been linked to agriculture. In 2015, Premier Li Keqiang toured Latin America to emphasize increased trade relations between China and the region. Brazil was the first stop of his visit. Li and Brazilian President Dousseff signed trade agreements that involve bilateral investments to strengthen infrastructure, energy, and agriculture, among other sectors (Xinhua, 2015a). Premier Li specifically spoke of China’s purchase of high-quality Brazilian agricultural products, while Brazil will import infrastructure-related machinery from China. Although Chinese publications refer to many parts of the world as potential “breadbaskets,” South America is already a substantial supplier of soybeans, grain, and sugar to China. Therefore, Chinese investment in South American agriculture can take a wide variety of forms—entrance of Chinese firms into each stage of the supply chain, improvements to transportation infrastructure, and better diplomatic relations through foreign assistance and relaxed trade restrictions—each with the goal of increasing Chinese access to South American commodities.

Chinese firms have encountered some difficulties with their greenfield investments in South American agriculture. For example, large investments by China’s Chongqing Grain Group in Brazil and Beidahuang in Argentina were stalled or rejected due to opposition from environmental groups and infringement on local land ownership laws. Song and Zhang (2014) noted that local land ownership laws had been revised over concerns about Chinese investment, but Economy and Levy (2014)

reported that some local leaders in Brazil ascertained that prospective Chinese investors were not serious about doing business. An on-the-ground investigation by the Inter-American Dialogue found that only 10 of 17 major Chinese land acquisitions in Latin America were confirmed and under cultivation (table 6).

The failure of many direct land purchases for greenfield investments and the limited availability of financial resources have prompted a shift in strategy toward obtaining assets by acquiring established companies that control assets in Latin America (described in next section). Through purchases of Noble Agri and the Netherlands-based trading company Nidera, China's COFCO gained control of a number of grain terminals, port docks, and processing facilities in Argentina, Uruguay, Paraguay, and Brazil (table 7).

Chinese investment in Latin American infrastructure and China's relaxation of restrictions on Latin American imports could contribute to stronger trade ties between the regions. Chinese firms have proposed large infrastructure projects such as a waterway and railroad linking the Caribbean to the Pacific, an Amazon-Andes railway, and a "super port" in Rio de Janeiro that could facilitate transport of commodities, but these projects have not gotten underway.

Table 6

**Confirmed and unconfirmed land purchases in Latin America and Caribbean by Chinese investors (1996-2013)**

Country	Project	Land (ha)	Investor
Jamaica (2011)	Sugarcane farming and processing	27,800	COMPLANT International Sugar Industry Co., Ltd.
Brazil (2007)	Soybean farming	700 in Rio Grande do Sul & 16,100 in Tocantins	Zhejiang Fudi Agricultural Group & Agricultural Bureau of Heilongjiang Province
Bolivia (2010)	Soybean Industrial zone	12,488	Shanghai Pengxin International Group Ltd.
Cuba (1996)	Rice farming	5,000 in Pinar del Rio & 3,259 in Granma	Suntime Group
Venezuela (2001)	Farming	2,000	
Mexico (1998)	Rice and other cash-crop cultivation	1,005	Suntime Group
Venezuela (2001)	Farming	535	Tongwei Group Co. Ltd.
Venezuela (2004)	Sisal Demonstration Project	450 in Lara & 200 in Falcon	Guangxi Sisal Group Company Ltd.
Chile (2010)	Winery	350	COFCO Wine & Spirits
Chile (2013)	Fruit farms	370	Joyvia
		Total = 70,257 ha	
Unconfirmed or stalled/rejected investments			
Argentina (2011)	Soybeans, corn, and wheat farming	300,000 (rejected)	Heilongjiang Beidahuang Nongken Group, Co.
Brazil (2010)	Grain production and a bioenergy sector	200,000-250,000	Pallas International Consultants Group
Brazil (2005)	Cotton and soybean farming	200,000	Shanghai Pengxin International Group Ltd.
Brazil (2008)	Soybean farming and industrial complex	200,000 (stalled)	Chongqing Grain Group
Argentina (2012)	Soybean	130,000	Chongqing Grain Group
Venezuela (2013)	Corn, rice, and soybean production	60,000	Heilongjiang Beidahuang Nongken Group, Co.
Argentina (2012)	Soybean and dairy farming	10,000	Chongqing Grain Group
Bahamas (2010)	Vegetable, fruit, and livestock production and processing plant	5,000	
		Total = 1,155,000 ha	

ha = hectares.

Source: Compiled by USDA, Economic Research Service from Meyers (2013) and Meyers and Jie (2015).

Table 7

**Noble Agri's South American assets as of 2015**

Country	Description of assets
Argentina	Salta Interior Elevator has grain storage capacity of 4,500 mt with the capability of expansion to 50,000 mt.
Argentina	Timbues River Port Grain Terminal is the largest facility in Noble's South American network. The US\$65-million terminal occupies 231 hectares, with 2,100 m of waterfront.
Argentina	Delta Dock SA is on the Parana River and covers 288 ha with a frontage of 1,400 m close to one of Argentina's major new agricultural zones, rich in the production of multiple types of grains.
Argentina	Timbues Oilseed Processing Complex is capable of processing 2.7 million mt of soybeans every year. The plant produces soybean oil, meal, and pellets, which adds value to grain exports that would otherwise be processed abroad.
Uruguay	Terminal Granaleras Uruguayas (TGU) has a storage capacity of 60,000 mt per day and a barge-unloading capacity of 10,000 mt per day, and, with an operable depth of 10 meters, is capable of accommodating Panamax vessels.
Paraguay	Pacu Cua Barge Terminal is a 55,000 mt barge-loading facility on the Parana waterway, with a 10,000 mt per day load capacity for soybeans and corn.
Paraguay	A total of five storage facilities across Paraguay providing a total of 120,000 mt of storage.
Brazil	Parana, Maringa, and Jussara warehouses with a total capacity of 65,600 mt.
Brazil	NBC fertilizer storage facility is located in Parangua, Parana State, at one of the most important ports in Brazil. The facility has the capacity to store 3,000 mt of fertilizer and is equipped with a 100 mt scale for loading and discharging goods and vehicles.
Brazil	Noble Agri has a 100-percent shareholding of Terminal 12A, a dry bulk export terminal, in Santos, São Paulo, South America's largest port. First operational in 2010, the terminal covers an area of 10,000 ha and has an export capacity of 30,000 mt per day.
Brazil	Casa Nobre Coffee Facility is a fully automated, computerized facility for preparing coffee beans. In addition, a processing and storage facility is under construction on a 157,000 ha site in Alfenas, south of the state of Minas Gerais.
Brazil	Catanduva Sugar Mill, with sugarcane crushing capacity of 4.6 mt per annum, has a modern sugar refinery that allows for the production of crystal sugar and refined white sugar.
Brazil	Potirendaba Sugar Mill has a crushing capacity of 3.4 mt per annum.
Brazil	Votuporanga Sugar Mill has an annual crushing capacity of 5 million mt. The plant burns sugarcane bagasse that generates 55 megawatts of electricity that is sold to the grid.
Brazil	Meridiano Sugar Mill has a crushing capacity of 4 million mt a year. Meridiano will also sell 55 megawatts of electricity to the grid.
Brazil	Rondonopolis Oilseed Crushing Facility has crushing capacity of 4,000 mt per day and storage capacity of 246,000 mt, with another daily 600 mt of production at its biodiesel facility.
Brazil	NBC Blending Facility in Rondonia has the capacity to store 2,000 mt of blended fertilizer and 4,000 mt of raw materials.
Brazil	Mato Grosso warehouses are capable of storing corn and soybeans. They include Nova Maringa, with a capacity of 45,000 mt; Sorriso, with a capacity of 60,000 mt; and KBKK and Campo Verde with a capacity of 100,000 mt.

Source: Compiled by USDA, Economic Research Service from Noble Agri 2015.

## Australia and New Zealand

The abundant agricultural resources of New Zealand and Australia place these countries among the more attractive locations for FDI in the agricultural and food processing sectors. The importance of dairy, beef, and sheep—all commodities with growing demand in China—and trade agreements further enhance the attractiveness of this region. China has sought out both low- and high-value commodities in the form of barley, sorghum, wheat, milk powder, cheese, live cattle, beef, and infant formula.

Chinese investors are entering the Australia/New Zealand supply chain at each stage for various commodities, from sugar and wheat cultivation in Western Australia to milk and meat production in New Zealand, through acquisition of name brands in foodstuff such as New Zealand’s Silver Fern Farms and Synlait Milk (Gray, 2015). Additionally, Chinese companies have built new dairy processing facilities in New Zealand. However, proposals by COFCO and Beidahuang to build new grain terminals in Australia have been scaled back (Thompson, 2015; 2014).

Table 8 lists the major investments by Chinese companies in New Zealand’s dairy sector between 2010 and 2015. The greenfield and brownfield investments and firm acquisitions include all stages of the dairy supply chain from farm to export. New Zealand and Australian dairy exports to China grew substantially after China’s 2008 scandal in which melamine was added to milk to artificially boost the protein content during testing. The melamine contamination caused six deaths and hundreds of sick infants across China. Following this tragic event, consumer trust in the domestically produced output of the Chinese dairy industry plummeted (IRGC, 2010; Baldwin, 2010).

Table 8

### Major Chinese Investments in the New Zealand dairy sector (2010-15)

Company	Investment	Investment type	Investment	Commodity
Shanghai Pengxin	Crafar Farms (7,892 hectares)	Land and facilities	\$70 million	16,000 cattle
Shanghai Pengxin	Lochinver Farms (13,800 hectares)	Land and facilities	\$70 million	5,800 cattle/60,000 sheep
Shanghai Pengxin	Synlait Farms	Land and facilities	\$20 million	13,000 cattle
Bright Dairy	51% share of Synlait Milk	Firm acquisition	\$58 million	UHT milk
Yili Industrial Group	100% of Oceania Dairy Group	Firm acquisition	\$3 million	Milk powder
Pengxin/Mengniu/ NZ Miraka	Miraka Processing Plant	Joint venture	\$27 million	Milk powder and infant formula
Bright Dairy/ Synlait Milk	Synlait Processing Plant	Joint venture		
Yili Industrial Group	South Canterbury Infant Formula Plant	Greenfield investment	\$214 million	56,000 mt of milk powder annual production capacity
Yashili	Pokeno Infant Formula Plant & Greenfield Investment	Greenfield investment	\$210 million	52,000 mt of finished and semifinished milk annual production capacity

Source: Compiled by USDA, Economic Research Service from news media reports.

Both Australia and New Zealand have concluded recent free-trade agreements (FTAs) with China that include tariff reductions for a number of agricultural commodities. China's imports from New Zealand have risen after the 2009 FTA eliminated most tariffs on such imports (Wilson, 2014; Sandrey and Jensen, 2008). The Australia-China FTA (ChAFTA) will reduce tariffs on Australian dairy, beef, sheep meat, live animals, wine, seafood, and horticultural products between 2014 and 2025. Tariffs on dairy products will be eliminated. Trade reform with the ChAFTA also raises the maximum limit on the size of Chinese investments in Australia, as well as the threshold for an investment screening process.

## Africa

China's agricultural investment in Africa reflects a mix of commercial ventures, foreign technical assistance, and projects tied to nonagricultural ventures. The African continent has been a focus of China's technical assistance, including agricultural technology demonstration centers (Brautigam and Tang, 2009; Zhou, 2012). Shambaugh (2013) reported that Africa received about one-fourth of China's foreign aid. Some agricultural projects in Africa are linked to construction of roads, ocean ports, airports, rail, and schools, which are not directly related to agriculture but may foster agricultural trade in the long term by upgrading physical infrastructure, technology, and human capital (Lin, 2015). Chinese aid and investment may be designed to build goodwill in African countries to create business opportunities for Chinese importers and contractors (Sun, 2015).

Much of the attention on Chinese "land grabs" in international news media has focused on Africa, but investigations by Brautigam and Tang (2009) and Brautigam and Zhang (2013) found that only around 4 percent of reported land acquisitions by Chinese could be confirmed. Similarly, a list of Chinese agriculture ventures in Africa shows that reported projects totaling over 6 million ha had a confirmed area of less than 240,000 ha actually developed (table 9). More than half of the African lands contracted by Chinese companies had exaggerated claims about the size, while the actual size of the project conformed to the planned size for only five ventures. Media reports overstated two investments—one by ZTE/Zongery and the other by Wuhan Kaidi, both firms largely known as energy companies—by more than 2 million ha each. About 80 percent of the area developed is part of four large investments in rubber and biofuel nongrain feedstocks: GMG in Cameroon (104,000 ha), COMPLANT in Madagascar (30,000 ha), Hubei Lianfeng in Mozambique (30,000 ha), and CGC Overseas Construction Group in Mali (26,000 ha). The remaining 17 investments are not as large, averaging only 3,600 ha.

A tobacco venture in Zimbabwe is China's most prominent commercial venture in Africa. Tian Ze, a subsidiary of state-owned China Tobacco Company, grew from one contract farmer with 20 ha in 2005 to 387 contract farmers by 2014 (Mutenga, 2014). The venture reportedly has expanded since to Malawi, Tanzania, and Zambia. Chinese-supported contract farming arrangements such as Tian Ze have exempted Chinese companies from Zimbabwe's 2010 Indigenisation and Economic Empowerment Act, which requires foreign investors to have at least 51 percent of shares of business owned by indigenous Zimbabweans (Mukwereza, 2014).

The link between Chinese investment and the Chinese food supply is weaker than many observers assume. As noted, imports from Africa account for only 2.5 percent of China's agricultural imports. China's leading agricultural imports from Africa are tobacco and cotton and wool, along with sesame seeds and fruit and nuts, which are the leading food imports. China does not import any rice or other grains from African countries.

Table 9

**Chinese agricultural investment in Africa involving land purchases**

Country	Companies	Span of years	Land area reported (hectares)	Actual area (hectares)	Crops
Difference between reported and actual land purchase of more than 2 million hectares (ha)					
DR Congo	ZTE Agribusiness/Zongery	2007-10	3,000,540	740	Oil palm, mixed crops
Zambia	Wuhan Kaidi, CSFAC/CAAIC, Jiangsu SFAC, China Yong Group	1993-2009	2,009,379	8,852	Biofuel, mixed crops
Difference between reported and actual land purchase of more than 100,000 ha					
Zimbabwe	China Intl. Water, Elec. Corp., Anhui SFAC, Anhui Tianrui Env. Tech., Hubei Liangfeng (JV)	2003-14	155,685	13,913	Maize, wheat, soy, tobacco
Sierra Leone	Hainan Rubber, COMPLANT	2003-12	143,100	1,845	Rubber, rice, sugarcane
Madagascar	Sucoma (COMPLANT), Hunan WinMa Resources, Hunan Yuan Int'l	1997-2013	142,470	30,470	Castor, sugarcane, sugar, rice, cassava
Mali	CGCOC/CNHRDC, CLETC/Mali govt., COVEC, Shimen State Farm	1995-2009	126,674	26,174	Rice, sugarcane, tea
Difference between reported and actual land purchase of more than 50,000 ha					
Angola	CITIC Construction, CEIEC, CAMC Engineering	2011-14	92,013	-	Grains, rice, cattle, fish
Senegal	Datong	2008	60,000	-	Sesame, rubber, rice
Uganda	Qiu Lijun [Hebei Hanhe Ag. Inv. Co.], Liu Jianjun [Baoding]	2009-10	45,000	160	Mushrooms, mixed crops
Nigeria	CGC/LPHT, ZJS International, Wems Agro	2006-14	32,025	2,025	Rice seed
Ethiopia	Hunan Dafengyuan	2010	25,000	-	Sugarcane
Difference between reported and actual land purchase of more than 5,000 ha					
Sudan	ZTE Energy, Shandong IETC/H. Shuofeng	2009-12	16,667	1,727	Mixed crops, cotton
Cameroon	GMG/Sinochem, Shaanxi SFAC/Sino-Cam IKO	2006-10	114,555	104,655	Rubber, grains, rice
Mozambique	Hubei Lianfeng, Wanbao, Luambala Jatropha, Hao Shengli, Rizhao Sunway, Hubei Hefeng Grain & Oil	2006-14	39,313	30,524	Rice, stevia, mixed crops, oilseeds, cotton
Benin	COMPLANT	2003-10	10,800	5,200	Sugar
Difference between reported and actual land purchase of more than 500 ha					
Mauritania	CSFAC	1999	638	-	Rice
Actual land purchase is equivalent to that reported					
Côte d'Ivoire	GMG Global/Sinochem	2008	1,580	1,580	Rubber
Ghana	Jiangxi Yu Sheng Food	2013	500	500	Soybeans
Guinea	CSFAC	1996	2,400	2,400	Mixed crops
Tanzania	CSFAC/CAAIC	2000	6,900	6,900	Sisal
Togo	COMPLANT	1987	1,700	1,700	Sugar
Totals:			6,026,939	239,365	

Source: Compiled by USDA, Economic Research Service from School for Advanced International Studies (2016).



## A Strategic Shift to Mergers and Acquisitions

Most of China's outward investment in agriculture initially focused on "greenfield" investments that build an overseas operation from the ground up, often in developing countries and the Russian Far East where technology and yields are low (Qiu et al., 2013). More recently, a smaller number of companies have made much larger investments by acquiring or forming joint ventures with companies in more developed markets to acquire sales networks, logistics, processing facilities, and brand name recognition (OECD, 2008; Shambaugh, 2013). Zhai (2013) observed that Chinese agricultural investors have pursued mergers and cooperative ventures with other companies after encountering numerous obstacles and risks in investment projects. Investments now commonly focus on managerial expertise and technology as well as physical assets. In many instances, Chinese firms aware of their own management shortfalls have taken a passive approach to managing firms they acquire by leaving existing managers in place or hiring experienced managers (Economist Intelligence Unit, 2010).

China Ministry of Commerce (2017, p. 259) reported 35 mergers and acquisitions in agriculture, forestry, and fishing during 2015—less than 1 percent of all such investments by Chinese companies. The companies profiled here—COFCO, Bright Foods, WH Group, and New Hope Group—made large acquisitions, but nearly all were in food processing, distribution, and logistics rather than farming assets (table 10). They include state-owned companies (COFCO and Bright) and private companies (WH Group and New Hope Group). All are conglomerates of numerous—sometimes unrelated—companies, a business model that waned among U.S. and European firms in recent decades but is still common in Asia (Khanna and Palepu, 1999; Ramachandran, Manikandan, and Pant, 2013). Most of these acquisitions are recent—from 2010 to 2017.

### COFCO

China National Cereals, Oils and Foodstuffs Corporation—widely known as COFCO—was established in 1949 to import and export grains and edible oils. COFCO is the most prominent state-owned company in the agriculture and food sector, with trading and processing capacity in flour, rice, edible oils, feed, pork, sugar, dairy, wine, wool, and tomato products. COFCO has established leading brand-name retail products in each of these sectors.<sup>18</sup> As a state-owned company, COFCO has dual commercial and national objectives, including the preservation of China's national food security.

COFCO's history of "going global" efforts reflects changing strategies over time. Its first major overseas venture was a small subsidiary set up in the former West Germany during 1987 to export canned and frozen vegetables to Europe. A 2005 venture established a company in Gabon, West Africa, to procure, process, and export tropical wood. During 2010-11, COFCO acquired vineyards and wineries in Chile and France to supply the growing demand for wine in China. In 2012, COFCO acquired a controlling stake in the Australian sugar company Tully, which eventually was raised to full ownership.

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<sup>18</sup>Like many conglomerates in China, COFCO also has holdings in real estate and hotels.

Table 10

**Acquisitions and joint ventures by four Chinese agribusiness companies**

Chinese company	Year	Company acquired	Country of company acquired	Type of business	Investment	Ownership
COFCO	2012	Tully	Australia	Sugar		
	2014-16	Nidera	Netherlands	Grain, oils, sugar trading and processing	\$1.4bil	100%
	2014-16	Noble Agri	Hong Kong		\$1.4bil	100%
	2017	Growmark*	United States	Grain logistics	NA	partnership
Bright Foods	2010	Synlait	New Zealand	Dairy	\$58mil	51%
	2011	Manassen Foods	Australia	Yogurt	\$516mil	
	2012	Diva Bordeaux	France	Wine	Unknown	70%
	2012	Weetabix	Great Britain	Breakfast cereals	\$1.9bil	60%
	2012	Salov	Italy	Olive oil	Unknown	51%
	2014	Tnuva	Israel	Dairy	\$2.1bil	77.70%
	2016	Silver Fern Farms	New Zealand	Lamb/beef	\$197mil	50%
New Hope Group	2013	Kilcoy	Australia	Beef	\$100mil	majority
	2014	Synlait**	New Zealand	Dairy	NA	
	2015	Moxey Farms***	Australia	Dairy	\$100mil	
	2015	Lansing Trade Group	United States	Grain trading	\$127mil	20%
WH Group	2013	Smithfield Foods	United States	Pork	\$7.1bil	100%
	2017	Clougherty Packing LLC	United States	Pork production and processing	\$145mil	100%
	2017	Pini Polska, Hamburger Pini, Royal Chicken	Poland	Meat and poultry processing	NA	100%

\* COFCO and Growmark will jointly operate a grain terminal and source corn and soybeans for export.

\*\*Synlait acquired 25 percent of New Hope dairy subsidiary in China and formed a long-term supplier relationship.

\*\*\* New Hope and Australian companies Freedom Foods and Leppington Pastoral jointly acquired the dairy farming operation.

NA=not available.

Source: USDA, Economic Research Service compilation of news media reports.

COFCO's most recent—and largest—acquisitions of commodity trading companies marked a strategic shift away from land acquisitions to trading, logistics, and processing assets—a so-called “whole supply chain” approach (Economic Observer, 2012; Ma et al., 2014). In 2014, COFCO acquired majority stakes in Dutch grain trading company Nidera NV and Noble Ltd's agricultural trading operation, and both were raised to full ownership during 2016. The acquisition of commodity trading companies and COFCO's control of Nidera and Noble Agri gave the Chinese state-owned company agricultural assets in 26 countries in international production, domestic logistics and transportation, processing centers, and sales networks in some of the world's most productive regions, including Latin America and the Black Sea region of Eastern Europe (Li, 2015; Yap et al., 2015).

The Noble and Nidera acquisitions came after COFCO's chairman and a vice premier promised that the company would ensure China's food security by controlling a greater share of global agricultural resources (COFCO, 2013). The acquisitions appear to reflect national policy goals of creating a “large, internationally competitive agricultural conglomerate” included in Number One Documents issued by China's State Council during 2014 and 2016.

During 2017, COFCO made a less prominent move into the United States when it announced a partnership with Growmark, a U.S. farmer cooperative. According to public announcements, Growmark will help COFCO operate a grain terminal in Illinois it gained as part of its Nidera acquisition. Growmark also will help COFCO source corn and soybeans for export.

As noted earlier, Chinese analysts report that most overseas investors are constrained by lack of financing, but COFCO has received large infusions of credit from Chinese policy banks. These include a 30-billion yuan (\$4.7 billion) line of credit from the Agricultural Development Bank of China for investment in grain-related projects in 2011 (ADBC, 2011); 30 billion yuan in financing over 5 years from the China Development Bank (China Daily, 2013); and another commitment in 2016 from the Agricultural Development Bank to finance projects related to food security, food safety, and agricultural modernization (Securities Daily, 2016).

## Bright Foods

Bright Foods Group—known as Guangming in China—is a conglomerate owned by Shanghai's municipal government. Bright is the most prominent of a group of companies created from provincial branches of the nationwide system of state farms that were set up during China's central planning era to cultivate reclaimed land in border and coastal regions and to supply cities with meat and vegetables.<sup>19</sup> These groups have been designated by agricultural officials as models for overseas investment, probably because they are among the few companies with experience in farming on a large scale. Besides Bright, Beidahuang, Jiusan, the Guangxi and Guangdong Province State Farms, and companies affiliated with the Xinjiang Production Corps have been prominent overseas investors.

Bright Foods' strategy of acquiring stakes in consumer-oriented food companies, dairy, and meat suppliers based mainly in Oceania and Europe contrasts with the more numerous land-focused farming acquisitions in less-developed countries. Consistent with its status as a prominent dairy

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<sup>19</sup>State farms are known in China as Nong Ken Ju, or reclamation bureau farms, because they were built primarily in undeveloped border regions, on reclaimed coastal areas or wetlands, and the outskirts of cities. According to Ministry of Agriculture statistics, state farms account for about 5 percent of the value of China's agricultural output. The state farm branches include large-scale farms, food processing, distribution, and real estate businesses (Shao, 2015).

brand in China, a major focus of Bright's acquisitions has been dairy products. Bright acquired majority stakes in New Zealand's Synlait in 2010, and Australian yogurt producer Manassen Foods in 2011; formed a joint venture with New Zealand's Dunsandel Pure Canterbury milk powder plant in 2013; and purchased a majority stake in Tnuva, an Israeli dairy producer and distributor in 2014. Other acquisitions are oriented toward emerging demands in China. Bright acquired a French winery, an Italian olive oil producer, and Great Britain's breakfast cereal company Weetabix—its largest acquisition—in 2012. Bright acquired 50 percent of New Zealand lamb and beef producer Silver Fern Farms in 2016. Bright's acquisitions have been larger than those of most Chinese investors; they range from \$58 million for Synlait to \$1.9 billion for Weetabix and \$2.1 billion for Tnuva.

## New Hope Group

A few private Chinese companies like New Hope Group have become significant overseas investors. New Hope began in 1982 as a venture launched by four brothers to raise quail and is now one of the largest animal feed companies in the world (Fu, 2011). New Hope's primary business is in feed milling, a highly competitive sector in China with relatively low margins, but the company adjusted its strategy to focus on emerging demands in China and sectors with higher value-added. New Hope has forward-integrated into poultry, meat, and dairy in its home market, notably by a merger with poultry producer Liuhe Group in 2005. It operates a string of dairy farms and processors across China.

New Hope Group was one of the first private agribusiness companies in China to invest overseas. After opening its first feed mill in Vietnam during 1999, New Hope made additional investments in Southeast Asia. The company expanded to other developing countries like Egypt, Mongolia, and South Africa, with a focus on selling feed products in local markets.

New Hope's more recent overseas business included acquisitions, joint ventures, and collaborations with other investors and governments in beef, dairy, and shellfish production and processing to position the company to profit from dietary diversification in China. The geographic focus has shifted from developing countries to Australia and New Zealand. This includes investment in an Australian beef producer, a joint venture in Australian dairy farms with local investors, and a deal with New Zealand's Synlait to supply milk to a New Hope subsidiary in China. According to New Hope's chairman, the company has pursued joint ventures with local companies rather than outright acquisitions, a strategy designed to build goodwill with the public in New Zealand and Australia—where opposition to Chinese investment has risen—and to reduce the need for investment capital (*Number One Business News*, 2016).

As a major importer of raw materials for feed operations in China, New Hope has also explored investments in grain trading. In 2015, the company acquired 20 percent of Lansing Trade Group LLC, a grain and energy-trading company based in Kansas with offices in North and South America, Britain, and China. New Hope's \$127-million, 20-percent stake is much smaller than state-owned COFCO's acquisition of trading companies Nidera and Noble Agriculture.

In 2010, New Hope founded an investment fund to finance agribusiness mergers and acquisitions in partnership with Japan's Mitsui & Co, Archer Daniels Midland, Singapore's Temasek Holdings, and the World Bank's International Finance Corporation. The fund acquired a U.S. food processing company and an Australian beef processor. In 2016, New Hope reached an agreement with Zhejiang provincial officials and a private equity fund to set up an Overseas Agricultural Development Fund

that will finance international supply chain ventures supporting an agribusiness trade hub planned for the Zhoushan Islands in Zhejiang.

New Hope leveraged Government agreements to expand its business, including a bilateral “Sino-Australian 100-Year Agricultural and Food Safety Partnership” signed by China’s president and Australia’s prime minister in 2014. The company spearheaded an agreement signed with China’s Zhejiang Province and Australia’s Trade Commission in 2016 to set up a Sino-Australia trade processing zone, which will focus on trade and logistics for animal protein products. In New Zealand, New Hope initiated a cooperative agreement with a Government research institute to study health and nutrition aspects of dairy products.

## WH Group/Shuanghui

WH Group—previously known as Shuanghui International—is a holding company headquartered in Hong Kong that owns Shuanghui Development, one of China’s largest meat companies. In 2013, WH Group acquired Smithfield Foods for \$4.7 billion, the largest Chinese acquisition of a U.S. agricultural or food company.

The Chinese pork company Shuanghui was founded in the 1980s when the municipal government of a small city in Henan Province turned over an unprofitable slaughterhouse to its managers. It was renamed Shuanghui and became a private company focused on the slaughter and processing of pork—the predominant meat consumed in China. Smithfield was WH Group/Shuanghui’s first significant overseas acquisition. Before the acquisition, sales by Smithfield Foods were twice those of Shuanghui. Acquiring Smithfield made WH Group the largest pork company in the world.

WH Group also gained Smithfield’s holdings of meat processing and swine production companies in Europe, which include Animex, a Polish pork and poultry processor that derives 25-30 percent of annual revenue from exports, and Agri Plus, a vertically integrated swine production company that supplies hogs to Animex. A Romanian Smithfield subsidiary operates the largest pork processing plant in that country, using pigs sourced from another Romanian Smithfield subsidiary. In 2015, Smithfield sold its 37-percent equity interest in Spanish pork producer Campofrio for \$354 million. In 2017, WH Group sought regulatory approval for acquisition of Pini Poland, another Polish meat company. The Group further expanded U.S. operations in 2017 when Smithfield acquired Clougherty Packing LLC, a company that owns two U.S. meat brands and a sales network in the Western United States.

WH Group has never explicitly stated its motives for acquiring Smithfield Foods. Observers surmised that the company sought access to pork supplies for China’s growing market and Smithfield’s technology, food safety, and management capacity (Tao and Xie, 2015). The acquisition may have been supported by public officials and banks as part of an initiative to upgrade sanitation and technology in the pork industry (the purchase was funded by a \$4 billion loan from the Bank of China).

China’s pork industry is highly fragmented, with weak backward and forward linkages. While Shuanghui was ranked as China’s top meat company in 2005, it was one of a handful of large pork companies with a specialization in processed pork products.<sup>20</sup> Most hogs are slaughtered in small abattoirs and sold to consumers by local meat vendors and supermarkets the same day they are slaughtered. Initiatives to consolidate pork processors, build large-scale farms, and strengthen links between processors and producers of swine were featured in a Five-Year Plan and subsidy programs

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<sup>20</sup>See rankings of pork processors and pig producers reported by WattAgNet.

launched during 2006-10 and received continued emphasis in subsequent years. China's emergence as a major pork importer in 2008 and ongoing concerns about disease epidemics and food safety incidents prompted Government and industry officials to reshape the industry.

Smithfield was known for both large, technically advanced meatpacking facilities and vertical control over swine breeding and production. Smithfield's engagement in research and development and the breeding and propagation of pigs reflects its own past acquisitions of swine-farming companies. According to the list of U.S. assets under Smithfield's ownership (table 11), Smithfield's 450 hog farms have the capacity to hold 933,000 sows and over 2.5 million nursery pigs.<sup>21</sup> The regional concentration of Smithfield's sow and nursery capacity in North Carolina and Virginia reflects the focus on breeding and multiplier farms. The company has research facilities in North Carolina and Texas. It supplies piglets to over 2,000 independent farmers and contract growers who raise approximately 16 million hogs to market weight annually. Midwestern Corn Belt States are the predominant region for finishing hogs, reflecting their proximity to feed resources.

WH Group appears to have taken a relatively passive approach to managing Smithfield, which retained its brand, facilities, and management after the acquisition. Although Smithfield announced a change in organizational structure during 2015, there was no discernible change in the company's U.S. operations during the first 2 years after its acquisition by WH Group. Each of its executives had extensive experience in U.S. food and agricultural industries, suggesting that WH Group gave Smithfield considerable autonomy in its U.S. operations.<sup>22</sup>

Table 11  
**Smithfield U.S. farm locations and size as of 2015**

Location	Employees	Sows	Nursery pigs	Finishing spaces
Colorado	210	24,000	92,000	100,000
Midwest (Iowa, South Dakota, Illinois, Nevada, Missouri)	500	133,000	224,000	2,933,000
Missouri	1,100	105,000	364,000	695,000
North Carolina (East central)	300	132,000	436,000	1,240,000
North Carolina (South central)	500	220,000	760,000	1,800,000
North Carolina (West)	400	100,000	300,000	680,000
Oklahoma	220	45,000	NA	NA
Utah	450	74,000	156,000	454,000
Virginia	415	100,000	236,000	1,000,000
<b>U.S. Totals</b>	<b>4,095</b>	<b>933,000</b>	<b>2,568,000</b>	<b>8,902,000</b>

Note: Smithfield Premium Genetics also has research facilities in North Carolina and Texas. It has wholly-owned operations in Poland and Romania and two joint-venture operations in Mexico. NA = not available.

Source: USDA, Economic Research Service analysis of information compiled from Smithfield Hog Production Division (Smithfield, 2016).

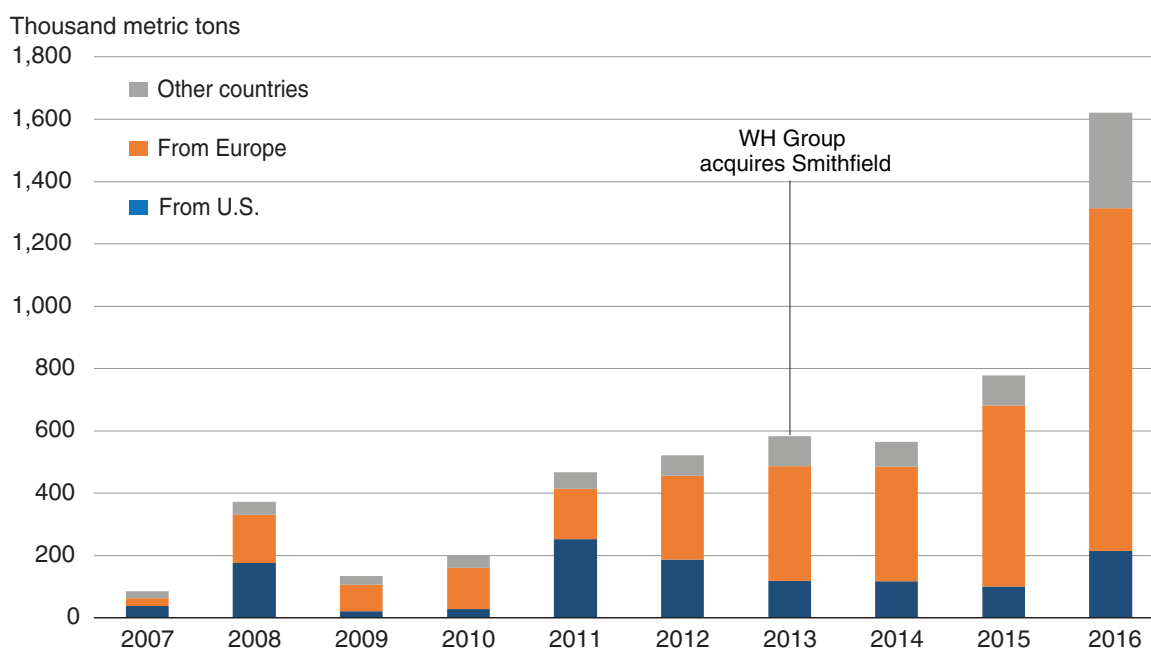
<sup>21</sup>USDA's report on foreign holdings of agricultural land listed a smaller number of 50 farms owned by Murphy-Brown Farms that was renamed Smithfield Hog Production Division in 2015. Farms were located in North Carolina, Virginia, Missouri, Texas, Illinois, Utah, and Oklahoma.

<sup>22</sup>See Smithfield February 16, 2015 press release, "Smithfield Foods Announces New Structure to Accelerate Growth."

Many observers presumed that WH Group acquired Smithfield in order to import pork from the United States. WH Group began test-marketing Smithfield-branded pork in China soon after the acquisition. In 2015, WH Group opened a new processing plant to produce “American-style” bacon, ham, and sausages under the Smithfield brand for the China market. In January 2016, inspection and quarantine authorities opened a facility to receive and inspect imported pork in Luohe City—the site of WH Group’s headquarters—capable of handling 400,000 mt of meat annually (Xinhua Food, 2016).

Customs data suggest that the acquisition has played at most a minor role in China’s pork trade. The Smithfield acquisition took place in 2013, 2 years after China became a steady importer of pork (fig. 8).<sup>23</sup> China’s pork imports did rise sharply in 2015 and 2016, but the increase reflected tight supplies and high prices in China during those years. Most of the import surge came from countries in Europe, Canada, and Brazil where Smithfield does not operate. Imports from the United States were stagnant during 2014-15; while they doubled in 2016, they did not grow as fast as imports from Europe and other countries. Poland and Romania—European countries where Smithfield has subsidiaries—were also not significant sources of import growth.

Figure 8  
**China pork imports before and after investment in Smithfield**



Note: Imports of pork, harmonized system code 0203. Europe: Germany, Spain, Denmark, France, U.K., Netherlands, Ireland, Hungary, Belgium, Romania, Poland. Others: Canada, Brazil, Chile, Taiwan.  
 Source: USDA, Economic Research Service analysis of China customs statistics accessed through IHS Markit (2017).

<sup>23</sup>COFCO acquired a stake in Smithfield in 2008—the first year China imported significant amounts of pork—but divested it in 2012.

## Challenges Encountered in Mergers and Acquisitions

China Ministry of Commerce (2016) observed that Chinese companies have faced challenges when acquiring overseas firms due to differences in legal and institutional systems abroad, adapting management structure to differing cultures, and accommodating different corporate values in the acquired firm. Economist Intelligence Unit (2010) found that negative perceptions of Chinese companies was a chief barrier to success investing abroad—especially in resource-dependent sectors. In interviews with Chinese companies, Economist Intelligence United identified weak due diligence, “failure to think through a vision for the acquired entity,” and failure to “gain agreement on this vision with existing management” as common mistakes.

While the acquisitions made COFCO one of the top global grain trading companies by asset value, the company nevertheless encountered unexpected difficulties. After COFCO’s chairman left the company in 2016, the new chairman portrayed a less ambitious business plan, more focused on procuring commodities for the China market than on becoming a company with global scope that would challenge other multinational trading companies. The company was also hit by resignations of several key executives and traders who had been recruited from other multinationals. Soon after the acquisition of Nidera, that company experienced large losses due to a rogue trader, and an overstatement of assets in Nidera’s Brazilian operations was discovered. Shuanghui International experienced financial pressure when an initial public offering raised less capital than expected, crimping its ability to repay a loan that financed its acquisition of Smithfield Foods.

Like COFCO, Bright has experienced disappointment with two of its largest acquisitions. Israeli dairy company Tnuva experienced losses in sales, profits, and estimated market value after Bright acquired a majority stake in that company. In 2017, Bright sold its stake in Weetabix 5 years after acquiring it, reportedly due to disappointing sales of the traditional British breakfast cereal in China.



## Discussion and Conclusions

U.S. farmers, agribusiness, and Government leaders should be aware of China's overseas investment strategies since transactions can be worth millions or even billions of dollars. The scale of China's outbound agricultural investments appears to be less than is often portrayed in global news media, but investment is nevertheless growing at a rapid pace. Chinese officials have ambitious strategic plans for agricultural investments to help reshape patterns of agricultural trade and increase China's influence in global markets.

Chinese investments present both opportunities and challenges for U.S. farmers, business leaders, and policymakers. Chinese investments can bring benefits to owners of land and other assets, and Chinese investors potentially can help U.S. products gain access to China by facilitating access to customers or meeting registration requirements and standards in the China market. On the other hand, foreign ownership of land and other agricultural assets reduces the proportion of income received by U.S. residents from a given dollar value of exports. Concerns have been raised about threats to U.S. food security, food safety, and environmental protection from Chinese investment, but these risks are difficult to rigorously establish and quantify.

Most Chinese agricultural investment has bypassed the United States. North America has received the smallest share among all continents of China's outbound agricultural investment, despite being top supplier of China's agricultural imports and a top destination for China's nonagricultural investments. Apart from the acquisition of Smithfield Foods in 2013, Chinese investment in U.S. farmland and agribusiness has been small.

The small number of U.S. agricultural investments appears to reflect Chinese investors' greater interest in other destinations rather than U.S. regulatory or other barriers. U.S. policymakers mandate reporting of foreign farmland acquisitions and Federal reviews of Chinese investments by the interagency Committee on Foreign Investment in the United States (CFIUS). Several States have banned foreign ownership of farmland. However, it is not clear that these regulatory hurdles have been a deterrent to Chinese investment in agriculture. To date, CFIUS reviews have not blocked any agricultural investments. Some State governments recruit and assist prospective foreign investors, and assistance in clearing regulatory hurdles is available from attorneys, bankers, and consultants. The Paulson Institute—a nongovernmental think tank—has advocated more Chinese agribusiness investment in the United States.

China's agricultural investors are mainly small companies focusing on neighboring countries in Southeast Asia, Russia's Far East, and Africa that have unexploited land and are often receptive to Chinese investment. Agricultural investment is now closely tied to China's One Belt One Road initiative, which targets countries between China and Western Europe. Chinese companies seeking sources of dairy, beef, and lamb imports have focused their investments and partnerships on New Zealand and Australia.

A broader concern for U.S. exporters and business leaders is the potential for Chinese investments to steer trade toward competing countries. For example, Chinese investments in New Zealand dairy, Australian beef, and Ukrainian corn may bolster the share of commodities China imports from these countries versus competing U.S. commodities. Some of China's guiding strategies for agricultural investment aim to reduce reliance on the United States for agricultural imports by nurturing new suppliers, steering more of the profits from Chinese imports to Chinese trading and logistics

companies, improving China's capacity to develop its own agricultural technology, and using commercial agricultural projects as a platform for dispensing China's foreign aid.

Market fundamentals are likely to be the chief factor determining the volume of China's agricultural imports and whether they are supplied by the United States. A very similar investment program by Japan in earlier decades raised concerns about prospects for U.S. farm exports and effects of investment on the U.S. food industry, but the United States is still the leading supplier of Japan's agricultural imports. Japanese investors played a role in developing Brazil as an exporter, and Japanese companies are now active competitors for established grain-trading companies. Similarly, Chinese investors may influence agricultural trade patterns at the margins and bring more competition to agricultural markets.

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