U.S.-China Economic and Security Review Commission

Monthly Analysis of U.S.-China Trade Data



June 3, 2015

Highlights of this Month's Edition

- **Bilateral trade:** Monthly U.S. goods trade deficit with China down 15.2 percent in April on fall in U.S. imports.
- **Bilateral policy issues:** The United States indicts six Chinese citizens on charges of trade secret theft; IMF says China's currency is no longer undervalued.
- **Policy trends in China's economy:** China undercuts fiscal reform by reopening lending to indebted local governments; Chinese stocks volatile as exchanges rebound after dramatic falls; China's State Council redefines China Development Bank as a "development-oriented financial institution"; Xi Jinping goes to Eurasia, Li Keqiang to Latin America, both sign multibillion dollar bilateral finance deals.
- **Sector spotlight Sorghum:** Following a surge in U.S. sorghum exports to China, Chinese authorities are imposing stricter customs inspections, raising concerns about a possible barrier to trade.

Bilateral Goods Trade

U.S. Goods Deficit Down on Lower Imports

The U.S. trade deficit in goods with China fell to \$26.5 billion in April 2015, a 15.2 percent decrease from the previous month and a 3 percent year-on-year decrease (see Table 1). The decline was due primarily to a marked decrease in April of U.S. imports from China, which fell 13 percent month-on-month, and 1.4 percent year-on-year.

U.S. goods exports to China continued an overall downward trend in 2015, falling 5.8 percent month-on-month to \$9.3 billion in April and averaging a 5.75 percent monthly decline since January 2015. Compared with the previous year, however, China imported 3.2 percent more U.S. goods in April 2015. Year-to-date, the cumulative deficit expanded by \$12 billion compared to the same period in 2014.

Table 1: U.S. Goods Trade with China, January-April 2015 (US\$ billions)

	Jan	Feb	Mar	Apr
Exports	9.6	8.7	9.9	9.3
Imports	38.2	31.2	41.1	35.8
Balance	(28.6)	(22.5)	(31.2)	(26.5)
Total	47.7	39.9	51.0	45.1
Balance YTD				_
2014	(27.8)	(48.7)	(69.1)	(96.4)
2015	(28.6)	(51.1)	(82.4)	(108.9)
yoy growth %				_
Exports	-7.8%	-11.9%	-8.7%	3.2%
Imports	01%	1.6%	31.7%	-1.4%

Source: U.S. Census Bureau, NAICS database (Washington, DC: U.S. Department of Commerce, Foreign Trade Division, June 2015). http://www.census.gov/foreign-trade/balance/c5700.html.

Bilateral Policy Issues

Six Chinese Citizens Charged with Economic Espionage in Theft of U.S. Mobile Technology to Aid State-Owned Firms

Two Chinese professors who worked as engineers for U.S. companies are among six Chinese citizens charged with economic espionage in a nine-year conspiracy to steal technology from U.S. mobile phone companies and produce a competing product in China. One of the professors, Zhang Hao, 36, was arrested in Los Angeles as he stepped from a plane. The other five are still in China, including Pang Wei, 35, formerly of Avago Technologies in Colorado.¹

A 32-count unsealed indictment charges Pang and Zhang, who met while attending the University of Southern California (USC), with the theft of technology developed in part with funding from the U.S. Defense Advanced Research Projects Agency (DARPA). The technology, which has both civilian and military uses, involves a computer chip that filters out interference in mobile phones and other wireless devices.

After graduating from USC with doctoral degrees in electrical engineering, both suspects worked at two technology company offices in Colorado and Massachusetts that also developed the mobile phone filtering technology. They and the other four coconspirators hatched the plan to manufacture a competing product in China with the support of Tianjin University. Tianjin University officials travelled to San Jose to meet with the coconspirators to plan for a Chinese fabrication plant to produce mobile phone components using the purloined technology, according to the indictment. The indictment also describes e-mails among the conspirators in 2006, detailing plans to form a company in China to produce the filtering semiconductors.

According to the indictment, Tianjin University officials agreed to help establish a competing factory in China, and hired Pang and Zhang as professors after they left their jobs with the U.S. companies. At the direction of Tianjin University, Pang also set up a shell company, Novana, Inc., in the Cayman Islands "to appear to be the legitimate source of the trade secrets stolen" from Avago Technologies, headquartered in San Jose, and Skyworks Solutions, Inc., of Woburn, Mass., the indictment says.

This alleged high-value conspiracy was formulated during the pre-smartphone era when the market for the chips was estimated to be worth \$1 billion; the first iPhone was released in June 2007. Avago alone spent 20 years and \$50 million researching and developing its Film Bulk Acoustic Resonator (FBAR) technology, which filters incoming and outgoing wireless signals. Skyworks sold its technology to Avago in 2009.

Assistant Attorney General John Carlin, head of the Justice Department's national security division, said "the defendants leveraged their access to and knowledge of sensitive U.S. technologies to illegally obtain and share U.S. trade secrets with the [China] for economic advantage."²

The spokesman for the Chinese foreign ministry said the government in Beijing was "severely concerned" about the arrest and charges. The state-run news agency Xinhua said the six defendants had fallen "victim to Washington's growing paranoia" and that bilateral relations could suffer if the United States continued to bring "unwarranted charges against innocent people." ³

(The U.S.-China Economic and Security Review Commission will hold a hearing on Chinese commercial cyber espionage, and China's use of Internet censorship, standard-setting, and regulations to limit market access in China to U.S. information technology and communications companies. The hearing will take place on June 15 in Room 608 of the Dirksen Senate Office Building.)

IMF Says China's Currency Is No Longer Undervalued

Citing "the substantial real effective appreciation over the past year," the International Monetary Fund (IMF) on May 26 announced that in its view China's currency, the renminbi (RMB), is "no longer undervalued." The RMB rose against all 31 major currencies over the past 12 months, including 0.6 percent against the dollar (see Figure 1). This announcement marks an important reversal by the IMF after more than a decade of criticizing China for tightly managing the RMB's value.

8.5 | Sep-01 | Way-02 | Sep-03 | Sep-03 | Sep-03 | Sep-03 | Sep-04 | Sep-05 | Sep-05 | Sep-05 | Sep-05 | Sep-06 | Sep-07 | Sep-06 | Sep-07 | Sep-13 | Sep-13

Figure 1: RMB to U.S. Dollar Exchange Rate

Source: Oanda, "Historical Exchange Rates." http://www.oanda.com/currency/historical-rates/.

While acknowledging that the RMB "made real progress" toward appreciation, the U.S. government continues to insist that the RMB remains "significantly undervalued." In its latest semiannual report to Congress, the U.S. Department of the Treasury pointed to China's high current account surplus and lack of sufficient domestic rebalancing toward consumption over investment as indicators of the RMB's undervaluation. The report also highlighted that China's central bank, the People's Bank of China, continues to intervene in the value of the RMB. Following the IMF's announcement, the Treasury reiterated its view that the RMB remains significantly undervalued.

The IMF's decision comes amid China's efforts to promote the RMB for inclusion as a reserve currency in the Special Drawing Rights (SDR) basket at the IMF.* Chinese authorities have stated publicly their interest in including the RMB in the SDR basket. However, a currency needs to be "freely usable" to be eligible for inclusion. The Chinese government maintains strict controls on the availability of the currency outside China, although restrictions have been gradually relaxed. The IMF's First Deputy Managing Director David Lipton said "RMB inclusion [in the SDR basket] is not a matter of 'if' but 'when." ¹⁰

Policy Trends in China's Economy

China Backtracks on Fiscal Reform as Economy Slows

The Chinese government backtracked on recent efforts to limit local governments' unsustainable borrowing and restructure existing debt to more manageable levels. After weak first-quarter growth figures, † the Chinese government in May 2015 took more aggressive action to maintain growth. It reopened access to short- and medium-term bond markets to the local government financing vehicles (LGVFs) and relaxed previous funding restrictions on LGFV-financed infrastructure spending. The State Council also explicitly required financial institutions to extend existing loans for insolvent infrastructure projects that were started last year, resuming the very lending several prior reforms were meant to reverse. According to Deutsche Bank economists Zhang Zhiwei and Audrey Shi, this policy change represents "the most significant policy easing so far in 2015" and "a 180-degree reversal of

^{*} SDR is an international reserve asset created by the IMF. The value of the SDR is based on a basket of key international currencies reviewed by the IMF every five years. See International Monetary Fund, "Special Drawing Rights (SDRs)," April 9, 2015. http://www.imf.org/external/np/exr/facts/sdr.htm.

[†] For a quarterly review of China's economic growth, see the May 2015 USCC Trade Bulletin. http://origin.www.uscc.gov/sites/default/files/Research/May%202015%20bulletin%20-%205%205%2015_FINAL.pdf.

the fiscal policy from tightening to loosening." Further economic slowdown will place additional limitations on fiscal reform.

This move undercuts the Chinese government's plans to shed unwieldy local government debt and increase budget transparency. ¹⁴ In October last year, the government issued rules barring LGFVs from borrowing new funds, and China's Ministry of Finance in March 2015 issued a \$160 billion (RMB 1 trillion) quota to convert a portion of local governments' high-risk debt into lower-yielding municipal bonds. ¹⁵ Jiangsu Province became the first provincial government to do so, selling \$8.4 billion (RMB 52.2 billion) worth of bonds. ¹⁶ Initial pushback from commercial banks, the expected purchasers of these new bonds, delayed the launch of the first pilot program in Jiangsu until more favorable terms—such as access to low-interest loans from the central bank and higher yield rates—were offered. ¹⁷ The Ministry of Finance is considering expanding the quota by an additional \$80–\$160 billion (RMB 500 billion to 1 trillion) based on its initial success and ability to address local government debt. ¹⁸

China's gross domestic product (GDP) growth fell to 7 percent in the first quarter, the slowest quarterly growth since early 2009. Anemic manufacturing figures, a drop in fixed asset investment, and weaker consumption growth contributed to this slowdown.¹⁹ The People's Bank of China has attempted to stimulate the economy by lowering interest rates three times in the last six months to encourage borrowers, and by reducing banks' reserve requirement ratios for the second time this year to loosen lending. These measures should stimulate short-term lending growth, but the market has not loosened credit and remains cautious due to slowing earnings and the increasing number of bad loans.²⁰ In April, banks issued only \$114 billion (RMB 707.9 billion) of new loans, 34 percent below forecasts by economists.²¹

High Volatility in Chinese Stock Markets Fuels Bubble Fears

Extreme volatility in Chinese stock markets continued as stocks rebounded after a dramatic tumble. On June 1, Shanghai was up 4.7 percent after falling 6.5 percent on May 26, 2015. Shenzhen, the smaller, technology- and media-dominated exchange, was up 4.8 percent after falling 5.5 percent.²² The fall marked a glitch in an otherwise dramatic upward trend in Chinese share prices. Despite the drop, Shanghai remained up 52 percent year-to-date, and 149 percent year-on-year, while Shenzhen is up 115 percent year-to-date and 190 percent year-on-year.²³ The recovery is attributable to investors' confidence in China's economy after China's official purchasing managers' index (PMI)* increased from 50.1 in April to 50.2 in May 2015 (official PMI tends to focus on larger, state-owned companies).²⁴ Unofficial estimate from HSBC, which focuses on small and medium-sized factories, was 49.2 for May 2015, up from 48.9 in April.²⁵

Analysts cited several reasons for the May 26 fall in prices: Central Huijin, a subsidiary of China's sovereign wealth fund, sold shares in two state-owned banks, the Industrial and Commercial Bank of China (ICBC) and China Construction Bank; the central bank drained liquidity from commercial banks by selling them bond repurchase agreements; and brokerages tightened restrictions on giving credit.²⁶

Before the drop, some observers started sounding the alarm over a potential bubble in the Chinese markets. With Chinese GDP growth falling below 7 percent in the first quarter of 2015 and debts on the rise, the speed with which stocks were increasing in value seemed "increasingly disconnected from reality." Because Chinese stock markets have always been volatile, however, some analysts warned this decline may not necessarily be the beginning of a broader correction. ²⁸

The *Economist* pointed to two reasons why China may be entering bubble territory. First, the price-to-earnings ratio on ChiNext, a tech startup board on the Shenzhen stock exchange, reached 130, "more than twice a reasonable level." Second, companies listed both on the Mainland and in Hong Kong saw their shares trade at a 30 percent premium on the Mainland. The Shanghai-Hong Kong Stock Connect, launched last year, was meant to prevent such gaps by allowing investors to seek to arbitrage between the two, which would presumably bring them into alignment. Investors, however, have been piling into the Mainland markets with the expectation that the Chinese government will act to boost the economy, given the weakness in key sectors.

^{*} A PMI below 50 indicates a contraction.

The latest gains came amid the announcement of a new investor scheme to allow for freer movement of funds between Hong Kong and China. Under the new agreement, which is expected to come into force July 1, asset managers in Hong Kong and on the Mainland will be able to sell their funds "to retail investors on the other side." The new program has the potential to allow Chinese investors, who have few domestic options, to invest overseas. However, the main beneficiaries are expected to be global fixed-income investors, who will have easier access to China's domestic bond market. The program will be capped at \$48 billion (RMB 300 billion) flowing in and out of China each way.

China's Policy Bank Reform and Bilateral Finance Deals

China's State Council approved reforms April 12 for China Development Bank (CDB) and the Export-Import Bank of China (China Exim Bank), two key providers of domestic and international finance. The reforms attempt to resolve a long-standing debate over CDB's role as either a commercially-oriented lender primarily focused on profit or a "policy bank" where maximizing profit comes second to government objectives. For the CDB, the decision was a blend: the bank will serve as a "development-oriented financial institution." According to Guo Tianyong, director of the Chinese Bank Research Center at China's Central University of Finance and Economics, the CBD will operate "entirely according to the market to support national strategy and can undertake any projects as long as they are development-oriented." As for the China Exim Bank, the reform plans call for the export credit agency to "strengthen its policy function" and play a central role in the country's "going out" strategy.³³

CDB and China Exim Bank finance featured prominently in recent state visits by President Xi Jinping to Belarus, Russia, and Pakistan, and by Premier Li Keqiang to Brazil, Chile, Colombia, and Peru, as well as in a Beijing meeting with Indian Prime Minister Narendra Modi. At each stop on their respective tours, the two Chinese leaders signed multibillion dollar cooperative agreements, indicating that China still intends to pursue its foreign policy goals by opening its wallet.

Since many of the deals were tied to earlier commitments or had been under discussion for some time, however, their value was mostly symbolic. Moreover, past high-level agreements have often yielded less than originally promised. According to the *Wall Street Journal*, from 2007 to 2012, only one-third of Chinese commitments in Latin America saw actual disbursements.³⁴

Key 2015 Agreements:

- **Brazil** During Premier Li's visit, the CDB announced that it would supply Petrobras, the Brazilian oil giant, with \$1.5 billion, augmenting its initial April 2015 offer of \$3.5 billion in financing. Petrobras also received a \$5 billion credit line from the ICBC and China Exim Bank.³⁵ Iron ore supplier, Vale, agreed to sell iron ore transport vessels to COSCO, a state-owned shipping and logistics giant, and China Merchants Energy Shipping—deals backed by \$2.4 billion in China Exim Bank credit. Embraer agreed to sell 22 jets to Tianjin airlines for \$1.1 billion. According to Chinese media, the state visit saw signed agreements totaling \$27 billion. In addition, ICBC and Brazilian state-owned bank, Caixa Econômica Federal, announced plans to establish a \$50 billion infrastructure fund.³⁶
- **Chile** Premier Li and President Michelle Bachelet agreed to a currency swap for three years of up to \$3.5 billion between the People's Bank of China and Chile's central bank to support bilateral trade and investment.³⁷
- **Peru** Premier Li and President Ollanta Humala agreed to a feasibility study for a trans-Amazonian, 5,300-km railroad connecting Peruvian and Brazilian ports.³⁸
- Belarus In May 2015, state talks between President Xi and President Alexander Lukashenko yielded a \$3 billion credit line to domestic companies on "favorable terms," a \$4 billion credit line to national banks financing business projects, and a five-year \$1.1 billion currency swap.³⁹ The two leaders agreed to cooperate on the Silk Road Economic Belt, envisioning Belarus as an important gateway between Eurasia and Europe.⁴⁰ They also reaffirmed a five-year supply contract for Belarussian potash negotiated in March. The contract had disappointed Russian and North American potash producers who hoped China, as the largest consumer and benchmark, would agree to a more substantial price increase and boost the recently depressed global market.⁴¹

- Russia Agreements between President Xi and President Vladimir Putin included a CDB credit line of \$966 million to Russian Sberbank and a \$5.6 billion loan for the construction of a Moscow-Kazan high-speed rail line, to be completed by 2020 by China Railway Group and China Railway Construction Group.⁴²
- India During Prime Minister Modi's visit to China, Airtel, a private Indian telecom company, signed deals for \$2 billion in finance from CDB and \$500 million from ICBC. Airtel already sources equipment from ZTE and Huawei and cooperates with China Mobile to expand LTE technology. The state visit saw signed agreements totaling \$22 billion.⁴³
- Pakistan President Xi and Prime Minister Nawaz Sharif agreed on a \$46 billion infrastructure finance plan, largely devoted to the construction of the 3,000-km China-Pakistan Economic Corridor (CPEC). The CPEC is expected to link Kashgar (in China's Xinjiang province) with Pakistan's Gwadar port, a deep-sea port on the Arabian Sea constructed and controlled by China under a 40-year lease agreement. The finance plan, equal to about 20 percent of Pakistan's GDP, also includes \$44 million for a fiber optic cable connecting China and Pakistan and \$15.5 billion for coal, wind, solar, and hydroelectric projects that will add 10,400 MW to the grid by 2017.⁴⁴

Sector Focus: China Scrutinizes U.S. Sorghum after Export Surge

China is currently the world's largest importer of U.S. sorghum. Sorghum—which is a corn substitute used as animal feed—is an increasingly important import for China. However, Chinese importers' interest in the grain is a new development. As recently as 2012, China was not even among the top 50 importers of U.S. sorghum⁴⁵; and the value of its sorghum imports from the United States was less than \$300,000. 46 In 2014, the value of U.S. sorghum, barley, and oats exports to China skyrocketed to nearly \$1.5 billion, and 2015 stands to be another record year (see Figure 2).*

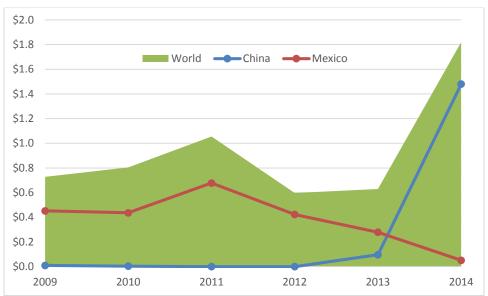
The world's largest exporter of sorghum is the United States, followed by Argentina and Australia.⁴⁷ Until 2013, total annual U.S. sorghum exports rarely exceeded \$1 billion, with the majority of exports bound for Mexico (see Figure 2). In 2013, the world market for U.S. sorghum changed markedly. Chinese demand for U.S. sorghum surged, tripling U.S. exports to the world from \$0.6 billion to \$1.8 billion. At the same time, the portion of exports bound for China increased to over 80 percent, causing exports to traditional markets for U.S. sorghum, like Mexico, to decrease dramatically.

The sudden spike in China's demand for U.S. sorghum is largely due to Chinese government intervention in the corn market. Domestic corn prices in China have been on the rise in recent years partly because of growing demand for corn as animal feed, but primarily due to Chinese government subsidies for domestic production coupled with tariffs on imports.⁴⁸ In order to bolster the income of local corn farmers, China's government has been purchasing domestic corn at above market rates for almost a decade.⁴⁹ The subsidy program began in 2006 when the China National Development and Reform Commission announced a plan for national self-sufficiency in grains by 2015. The grain self-sufficiency plan served as the basis for China's government purchasing domestic corn at above market rates and building its corn stockpiles.[†]

^{*} The most recent U.S. Census Bureau data available on U.S.-China sorghum trade combines sorghum, barley, and oats into a single category.

[†] For more detailed analysis of China's agricultural policies and U.S.-China agricultural trade, see U.S.-China Economic and Security Review Commission, "Section 4: China's Agricultural Policy, Food Regulation, and the U.S.-China Agricultural Trade," 2013 Annual Report to Congress, November 2013. http://www.uscc.gov/Annual_Reports/2013-annual-report-congress.

Figure 2: U.S. Sorghum, Barley, and Oats Exports (US\$ billions)



Source: U.S. Census Bureau.

To avoid paying the higher domestic corn prices, some Chinese traders have looked for cheaper foreign sources. Although the United States is the world's largest producer of corn, China imposes tariffs on U.S. corn to make it uncompetitive in China. Moreover, China has a history of rejecting U.S. corn imports due to genetic modification. According to the U.S. Department of Agriculture (USDA), U.S. corn exports to China were "disrupted during 2013-14 when inspection and quarantine officials began rejecting U.S. corn shipments containing a genetically modified corn variety that [Chinese] agricultural officials had not approved."⁵¹

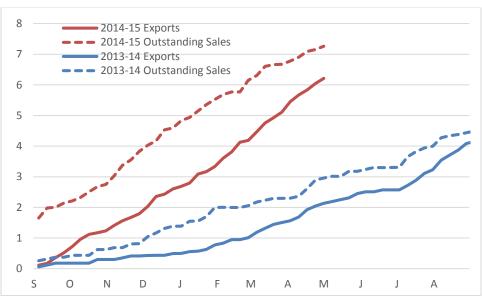
With limited sources of affordable corn in China, U.S. sorghum, which is tariff-free and cheaper to grow, is now a widely sought after substitute. Not only do Chinese livestock producers use the grain as inexpensive animal feed, but sorghum is also a key ingredient in the popular liquor *baijiu*. China's demand for U.S. sorghum has increased so much that traders expect the pace of imports from the United States to slow as U.S. supplies drop.⁵² According to data from the USDA, the gap between outstanding sales of U.S. sorghum to China and actual exports is wider than last year, which might reflect the challenges U.S. growers face in keeping up with Chinese demand (see Figure 3). Perhaps of greater concern among U.S. exporters is the risk of China's government imposing new barriers to trade on U.S. sorghum.

^{*} For more detailed analysis of China refusing imports of U.S.-grown genetically modified organisms (GMOs) and market access for bulk agricultural goods, see the April 2014 USCC Trade Bulletin.

http://origin.www.uscc.gov/sites/default/files/trade_bulletins/April%202014%20Trade%20Bulletin.pdf.

Figure 3: Volume of Accumulated U.S. Sorghum Exports to China

(per marketing year; metric tons)



Source: U.S. Department of Agriculture.

Note: The USDA measures a marketing year from September to August.

Although rising demand in China has been a welcomed trend for U.S. sorghum farmers, the surge has alarmed Chinese authorities, who are now scrutinizing imports more closely—allegedly to ensure compliance with food safety and quarantine standards. In July 2014, China's General Administration for Quality Supervision, Inspection and Quarantine (AQSIQ) issued a "Notice on Strengthening Inspections of Corn, Sorghum, Barley, and Other Grain Imports." The instructions, labeled Notice 342, claimed that with the increase of sorghum and other grain imports, inspections have detected more frequent incidents of toxic substances and poor food quality. As a result, the AQSIQ instructed customs inspectors at ports of entry to "ensure strict implementation" and "increase checks for food quality and safety" of grain imports. ⁵⁴ By August 2014, sorghum traders were already reporting that local Chinese authorities were tightening inspections of imported sorghum and barley. ⁵⁵

Since then, local Chinese Inspection and Quarantine services (CIQs) have issued similar reports claiming that various toxins, weeds, and fake sorghum were found during inspections of sorghum imports. In May 2015, the USDA office in Beijing reported that Chinese authorities had "begun to pay close attention to the rapid increase in sorghum imports," which some Chinese policymakers believed would make it difficult for China to dispose of its excess corn stockpiles, a result of years of government subsidization. Reports from multiple local and provincial CIQs were leaked with instructions in nearly identical language calling for stricter inspections and application of quarantine and food safety standards, in what appeared to be a coordinated national campaign. In one case, a CIQ report from Jiangsu Province alleged finding certain bacteria and pests in a shipment of U.S. sorghum; the report claimed the Jiangsu CIQ informed U.S. officials of the inspection and "demanded [they] take corrective measures."

The crackdown on U.S. sorghum appears to be a coordinated nation-wide effort rather than routine enforcement of proper compliance with quarantine standards. Some analysts argue that the timing of the crackdown is further evidence of a new trade barrier given that China's government is seeking to dispose of its own large corn stockpile.⁶⁰

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Endnotes

¹ United States District Court, Northern District of California, San Jose, United States of America v. Wei Pang, Hao Zhang, Huisui Zhang, Jinping Chen, Zhao Gang, and Chong Zhou, Defendants, Case No. CR-15-00106 EJD, April 1, 2015.

² Ellen Nakashima, "U.S. Indicts 6 Chinese Citizens on Charges of Stealing Trade Secrets," Washington Post, May 19, 2015. http://www.washingtonpost.com/world/national-security/us-indicts-6-chinese-on-charges-of-stealing-trade-secrets/2015/05/19/f11fd35e-fdd8-11e4-805c-c3f407e5a9e9_story.html.

³ Sam Thielman, "Six Chinese Nationals Charged in US over Alleged Economic Espionage Plot," *Guardian*, May 19, 2015. http://www.theguardian.com/world/2015/may/19/six-chinese-nationals-charged-us-economic-espionage.

⁴ International Monetary Fund, "IMF Staff Completes the 2015 Article IV Consultation Mission to China," May 26, 2015. http://www.imf.org/external/np/sec/pr/2015/pr15237.htm.

⁵ Fion Li, "IMF Says Yuan No Longer Undervalued amid Reserve-Status Push," Bloomberg, May 26, 2015. http://www.bloomberg.com/news/articles/2015-05-26/imf-says-yuan-is-no-longer-undervalued-amid-reserve-currency-bid.

⁶ U.S. Department of the Treasury, Report to Congress on International Economic and Exchange Rate Policies, April 9, 2015, 3. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Documents/Report%20to%20Congress%20on%20International%20Economic%20and%20Exchange%20Rate%20Policies%20 04092015.pdf.

U.S. Department of the Treasury, Report to Congress on International Economic and Exchange Rate Policies, April 9, 2015, 13. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Documents/Report%20to%20Congress%20on%20International%20Economic%20and%20Exchange%20Rate%20Policies%20 04092015.pdf.

⁸ Fion Li, "IMF Says Yuan No Longer Undervalued amid Reserve-Status Push," Bloomberg, May 26, 2015. http://www.bloomberg.com/news/articles/2015-05-26/imf-says-yuan-is-no-longer-undervalued-amid-reserve-currency-bid.

⁹ International Monetary Fund, "Special Drawing Rights (SDRs)," April 9, 2015. http://www.imf.org/external/np/exr/facts/sdr.htm.

¹⁰ International Monetary Fund, "IMF Staff Completes the 2015 Article IV Consultation Mission to China," May 26, 2015. http://www.imf.org/external/np/sec/pr/2015/pr15237.htm.

¹¹ Jamil Anderlini, "China Orders Banks to Keep Lending to Insolvent State Projects," *Financial Times*, May 15, 2015. http://www.ft.com/intl/cms/s/0/3ec5fea4-faef-11e4-84f3-00144feab7de.html#axzz3aUsk9y73.

Lingling Wei, "China Backtracks on Local Government Debt," Wall Street Journal, May 15, 2015. http://www.wsj.com/articles/china-urges-banks-to-continue-lending-to-local-financing-vehicles-1431682151.

¹² Jamil Anderlini, "China Orders Banks to Keep Lending to Insolvent State Projects," *Financial Times*, May 15, 2015. http://www.ft.com/intl/cms/s/0/3ec5fea4-faef-11e4-84f3-00144feab7de.html#axzz3aUsk9y73.

Lingling Wei, "China Backtracks on Local Government Debt," Wall Street Journal, May 15, 2015. http://www.wsj.com/articles/china-urges-banks-to-continue-lending-to-local-financing-vehicles-1431682151.

¹³ "China Backpedals on Fiscal Reform," Bloomberg, May 28, 2015. http://www.bloomberg.com/news/articles/2015-05-28/china-s-local-government-debt-fiscal-reform-reversed.

Helen Sun, "China's Solution to \$3 Trillion Debt Is to Deal with It Later," Bloomberg, March 10, 2015. http://www.bloomberg.com/news/articles/2015-03-10/five-questions-on-3-trillion-local-debt-pile-plan-china-credit.

¹⁵ Lingling Wei, "China Readies Fresh Easing to Tackle Specter of Debt," Wall Street Journal, April 28, 2015.

¹⁶ Liyan Qi, "China's Jiangsu Sells First Provincial Bonds under New Program," Wall Street Journal, March 18, 2015. http://www.wsj.com/articles/chinas-jiangsu-sells-first-provincial-bonds-under-new-program-1431951828.

¹⁷ Lingling Wei, "China Launches Stimulus Aimed at Local Debt Crisis," Wall Street Journal, May 13, 2015. http://www.wsj.com/articles/china-stimulus-aims-at-restructuring-trillions-in-local-government-debt-1431511027.

Bloomberg, "China Considers Doubling Its Local Bond-Swap Program," May 31, 2015. http://www.bloomberg.com/news/articles/2015-06-01/china-said-to-consider-doubling-its-local-bond-swap-program.

¹⁹ Lingling Wei, "China Backtracks on Local Government Debt," Wall Street Journal, May 15, 2015. http://www.wsj.com/articles/china-urges-banks-to-continue-lending-to-local-financing-vehicles-1431682151; Fielding Chen and Tom Orlik, "Falling Factory Output Shows China Growth Off Target," Bloomberg Briefs, May 26, 2015.

http://newsletters.briefs.blpprofessional.com/document/7H1DiN47eXJeq71s7dNk.Q--_46z19irn3ixz9pyx4w/big-picture.

- ²⁰ Kevin Yao and Nathaniel Taplin, "China's April New Bank Loans, Money below F'Casts," Reuters, May 13, 2015. http://www.reuters.com/article/2015/05/13/china-economy-loans-idUSZZN3EGA0020150513.
- ²¹ Grace Zhu, "China April New Yuan Loans CNY707.9 Billion; Analysts Expected CNY950 Billion," Dow Jones Newswires, May 23, 2015. https://www.gfmag.com/topics/syndicate/34399393-china-april-new-yuan-loans-cny7079-billion-analysts-expected-cny950-billion.
- ²² Josh Noble, "China's Stock Market Plunges More than 6%," *Financial Times*, May 28, 2015. Patrick McGee, "China Stocks Roar Back to Resume Rally," *Financial Times*, June 1, 2015.
- ²³ Data from Bloomberg on June 2. http://www.bloomberg.com/quote/SZCOMP:IND; http://www.bloomberg.com/quote/SHNCOMP:IND.
- ²⁴ Samuel Shen and Pete Sweeney, "China's Key Stock Index Posts Biggest One-Day Rise in 2 1/2 Yrs," Reuters, June 1, 2015; Koh Gui Qing, "China Factories Scrabble for Growth in May, Export Demand Shrinks," Reuters, June 2, 2015. http://www.reuters.com/article/2015/06/01/us-china-economy-pmi-idUSKBN00H15820150601.
- 25 Koh Gui Qing, "China Factories Scrabble for Growth in May, Export Demand Shrinks," Reuters, June 2, 2015. http://www.reuters.com/article/2015/06/01/us-china-economy-pmi-idUSKBN00H15820150601.
- ²⁶ Chao Deng, "Shanghai Stocks Plummet after Months of High-Flying Gains," Wall Street Journal, May 28, 2015; "RPT-UPDATE 1-China C. Bank Draining Cash from Flush Banks through Back-Door Repos Sources," Reuters, May 28, 2015. http://www.reuters.com/article/2015/05/28/markets-china-bonds-idUSL3N0YJ2QQ20150528.
- ²⁷ Chao Deng, "Shanghai Stocks Plummet after Months of High-Flying Gains," Wall Street Journal, May 28, 2015.
- ²⁸ Josh Noble, "China's Stock Market Plunges More than 6%," *Financial Times*, May 28, 2015.
- ²⁹ "A Crazy Casino," *Economist*, May 26, 2015.
- ³⁰ "A Crazy Casino," *Economist*, May 26, 2015.
- ³¹ Anjani Trivedi, "Hong Kong, China to Liberalize Cross-Border Fund Transactions," Wall Street Journal, May 22, 2015.
- ³² Anjani Trivedi, "Hong Kong, China to Liberalize Cross-Border Fund Transactions," Wall Street Journal, May 22, 2015.
- ³³ "Three Policy Banks Reform Plan Approved," Xinhua Daily Telegraph, April 13, 2015.
- ³⁴ Paul Kiernan and Paulo Trevisani, "Chinese Premier Li Keqiang Unveils Billions of Dollars in Financing, Trade Pacts in Brazil," Wall Street Journal, May 19, 2015.
- ³⁵ Juan Pablo Spinetto and Sabrina Vale, "Petrobras Turns to China for \$10 Billion to Avert Crunch," *Bloomberg Business*, May 20, 2015.
- ³⁶ Paul Kiernan and Paulo Trevisani, "Chinese Premier Li Keqiang Unveils Billions of Dollars in Financing, Trade Pacts in Brazil," Wall Street Journal, May 19, 2015.
- ³⁷ Xinhua, "China, Chile Ink Multi-billion-USD Currency Swap Deal amid Closer Financial Ties," May 26, 2015.
- ³⁸ Reuters, "China and Peru Agree to Study Transcontinental Rail Link," May 23, 2015.
- ³⁹ Reuters, "China Extends \$7 Bln Credit to Belarussian Firms, Banks during Xi Visit," May 11, 2015.
- ⁴⁰ Shannon Tiezzi, "In Belarus, China Seeks Gateway to Europe," *The Diplomat*, May 12, 2015.
- ⁴¹ Reuters, "China Extends \$7 Bln Credit to Belarussian Firms, Banks during Xi Visit," May 11, 2015.
- ⁴² Reuters, "Russia and China Sign Deal for Sberbank Credit Line; Rail Link Planned," May 8, 2015.
- ⁴³ Victor Mallet and Lucy Hornby, "India and China Sign \$22bn in Deals during Modi Visit," Financial Times, May 17, 2015.
- ⁴⁴ BBC News, "China's Xi Jinping Agrees \$46bn Superhighway to Pakistan, April 20, 2015.
- ⁴⁵ "The Observatory of Economic Complexity," MIT Media Lab. https://atlas.media.mit.edu/en/.
- ⁴⁶ U.S. Census Bureau, "U.S. Exports by 5-digit End-Use Code," 2005-2014. http://www.census.gov/foreign-ptrade/statistics/product/enduse/exports/index.html.
- ⁴⁷ U.S. Grains Council, "World Sorghum Production and Trade." http://www.thegrainsfoundation.org/sorghum.
- ⁴⁸ David Kesmodel, "U.S. Farmers' Latest Hot Crop: Sorghum," Wall Street Journal, January 21, 2015. http://www.wsj.com/articles/u-s-farmers-scramble-to-supply-latest-hot-crop-sorghum-1421858950
- ⁴⁹ Chris Lehner, "Will Sorghum Replace Corn?," Inside Futures, April 29, 2015. http://www.insidefutures.com/article/1423183/Will%20Sorghum%20Replace%20Corn.html.
- ⁵⁰ Statistica, "Global Corn Production in 2014." http://www.statista.com/statistics/254292/global-corn-production-by-country/.
- ⁵¹ Fred Gale, et al. "China Growing Demand for Agricultural Imports," U.S. Department of Agriculture, February 2015. http://www.ers.usda.gov/media/1784488/eib136.pdf.
- ⁵² David Kesmodel, "U.S. Farmers' Latest Hot Crop: Sorghum," Wall Street Journal, January 21, 2015. http://www.wsj.com/articles/u-s-farmers-scramble-to-supply-latest-hot-crop-sorghum-1421858950
- ⁵³ China General Administration for Quality Supervision, Inspection and Quarantine, "Notice on Strengthening Inspections of Corn, Sorghum, Barley, and Other Grain Imports," July 2014.
- ⁵⁴ China General Administration for Quality, Supervision, Inspection and Quarantine, "Notice on Strengthening Inspections of Corn, Sorghum, Barley, and Other Grain Imports," July 2014.
- 55 Niu Shuping and Dominique Patton, "China Tightens Checks on U.S. Sorghum Imports Traders," Reuters, August 21, 2014. http://uk.reuters.com/article/2014/08/21/china-sorghum-usa-idUKL4N0QP1RW20140821.
- ⁵⁶ Dim Sums, "China Scrutinizes Imported Sorghum," May 9, 2015. http://dimsums.blogspot.com/2015/05/china-scrutinizes-imported-sorghum.html.
- ⁵⁷ Emiko Terazono, "U.S. Fears Over China Clampdown on Sorghum," Financial Times, May 14, 2015. http://www.ft.com/intl/cms/s/0/732ef676-fa29-11e4-b432-00144feab7de.html.
- ⁵⁸ Dim Sums, "China Scrutinizes Imported Sorghum," May 9, 2015. http://dimsums.blogspot.com/2015/05/china-scrutinizes-imported-sorghum.html.
- ⁵⁹ Jiangsu Inspection and Quarantine Service (CIQ), "Jiangsu Inspection and Quarantine Issuance No 75," April 20, 2015.
- ⁶⁰ Dim Sums, "China Scrutinizes Imported Sorghum," May 9, 2015. http://dimsums.blogspot.com/2015/05/china-scrutinizes-imported-sorghum.html.