

# China's Global Investment Strategy

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China's ascent to economic power began 40 years ago—and while its government has at times adjusted the pace, it never turned back. In 2010, China became the second-largest economy and is currently on track to surpass the US as the world's largest economy by 2030.<sup>1</sup> With the growth of its economy, the country's actions and policy decisions have increasingly far-reaching effects on the global economy, which in turn feed back into its domestic political and economic environment.<sup>2</sup> China's new role as a source of global capital flows has provided both great opportunities as well as international and domestic instability.

There exists a vast literature on China's economic success story and faster-thanexpected transformation from a major recipient of investment to a global investor.<sup>3</sup> However, just as suddenly as it grew, Chinese investment in many countries (particularly the US) has suddenly dropped off, reigniting the discussion about the middle-income trap, the country's approach of a planned market-economy, and the issues surrounding investment-fueled growth.

Recently, Chinese investment has been in the limelight due to the trade dispute with the US and political tensions around high-profile, public investment programs like the Belt and Road Initiative (BRI) and Asian Infrastructure Investment Bank.<sup>4</sup> Additionally, the private sector in China has been generating significant wealth. More than one in five billionaires are Chinese, and many of the companies that have been the foundation of their wealth have become global phenomena.<sup>5</sup>

- 1 "IMF Country Report 19/266" (International Monetary Fund, August 9, 2019) https://www.imf.org/en/ Publications/CR/Issues/2019/08/08/Peoples-Republic-of-China-2019-Article-IV-Consultation-Press-Release-Staff-Report-Staff-48576.
- 2 Both its large trade surplus and investments abroad have caused political issues with trade partners, leading the world economy to sputter and ripple back into China's economy.
- 3 "Cross-Border Capital Flows, Fluctuations and Growth," NBER Reporter 2012 Number 4: Research Summary (The National Bureau of Economic Research, November 14, 2019), https://www.nber.org/ reporter/2012number4/Kalemli-Ozcan.html. This is the crux of the "Lucas paradox," where we see investment from faster-growing, developing countries (such as China) to richer but slower-growing countries (such as the US) despite the assumption that capital will flow from capital-abundant countries to capital-scarce ones, based on differing rates of return on investment.
- 4 "Cross-Border Capital Flows, Fluctuations and Growth," NBER Reporter 2012 Number 4: Research Summary (The National Bureau of Economic Research, November 14, 2019), https://www.nber.org/ reporter/2012number4/Kalemli-Ozcan.html. This is the crux of the "Lucas paradox," where we see investment from faster-growing, developing countries (such as China) to richer but slower-growing countries (such as the US) despite the assumption that capital will flow from capital-abundant countries to capital-scarce ones, based on differing rates of return on investment.
- 5 Chris Flood, "China Sees Explosive Growth of Billionaires" (Financial Times, October 26, 2018), https://www.ft.com/content/32e24663-a160-32ce-b748-1d005804f073.

In China's case, it is important to distinguish between private-sector led investment and the operations of the government and state-owned enterprises, since economic factors that drive investment decisions may be less motivating for the latter. Here we focus primarily on foreign direct investment (FDI), which involves investing to obtain a lasting interest in an enterprise domiciled in another economy.<sup>6</sup> Generally, FDI occurs when a company establishes a foreign business operation (greenfield investment) or acquires foreign assets (mergers and acquisitions).

This report provides a brief overview of recent trends surrounding capital and investment to and from China, as well as insights into underlying (mainly domestic) issues behind these trends. Observers often overlook that China has planned its opening with a clear tendency to adjust reform if the transition proceeds too swiftly. Currently, the government has decided to shift back temporarily to a more pro-growth, pragmatic approach. As uncertainty mounts, mainly surrounding protectionism and trade disputes, it is prudent to remember the Chinese government's' approach of "crossing the river by feeling the stones."<sup>7</sup>

In the end, understanding China's past reforms and its current approach provides insight for future reforms and thereby will inform where the country, and the world, go next. The report is structured as follows:

- Analyzing China's investment strategy and data trends
- The external environment and global response to Chinese investment
- China's policies and motivations for investment reform
- Summary and concluding remarks

7 A famous Chinese saying coined by Deng Xiaoping.

<sup>6</sup> Maitena Duce, "Definitions of Foreign Direct Investment (FDI): A Methodological Note" (Bank for International Settlements, July 31, 2003) https://www.bis.org/publ/cgfs22bde3.pdf. The "lasting interest" implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter, which differentiates it from equity investment, which is generally "passive" and does not exercise any influence or control. Definition source: Bank for International Settlements.



#### China's "Going Out" Strategy

Foreign direct investment (FDI) has been a primary driver of China's ascent in the global economy. While an open-door policy, which included four special economic zones, was adopted in 1979, it was not until 1992 that FDI was encouraged far beyond the coastal region, culminating in the Western Development Strategy in 1998 and China's entry into the World Trade Organization (WTO) in 2001.<sup>8</sup>

These changes had a direct impact on foreign investment, as total inflows doubled annually from 1991 to 1993 to reach \$33 billion, a level that was maintained until 2001 when FDI grew again by double digits to reach more than \$150 billion of total capital inflow in 2007. A key part of China's approach to reform has been a preference for a gradual opening while maintaining control. For capital inflows, and later outflows, this has accumulated in issuing guidance on the orientation of investments—classified into "encouraged," "permitted," "restricted," and "prohibited."

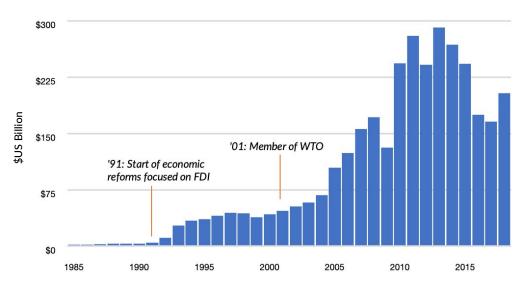


Figure 1: Annual Foreign Direct Investment, Inflow

Source: World Bank

Note: FDI data differ for UNCTAD, and World Bank and State Administration of Foreign Exchange, but trends are similar.

8 Chunlai Chen, "The Liberalization of FDI Policies and the Impacts of FDI on China's Economic Development," China's 40 Years of Reform and Development, Chapter 29 (ANU Press, 2018), http:// press-files.anu.edu.au/downloads/press/n4267/pdf/ch29.pdf. The world is now paying close attention to the growing investment activities of Chinese companies globally. Unlike the liberalization of capital inflows, the relative shortage of capital and fear of capital flight had limited Chinese investments abroad until the 10th Five-Year Plan in 2016 with which "going out" became a major policy.

The strategy shift led to the first notable investments abroad in 2005 but grew exponentially after the financial crisis in 2007 as the "going out" strategy continued, and falling valuations spurred opportunities. However, as China became the secondlargest source of foreign investment and a global net capital exporter, concerns about investment decisions led to a reassessment of policy. The Chinese government's main worry was that investments—mainly aggressive acquisitions of hotels and real estate in the US—were lacking prudent analytics and could negatively impact the perception of the country abroad. After a record \$216 billion of outward foreign investment in 2016, the Chinese government adjusted its policy to a more cautionary stance.

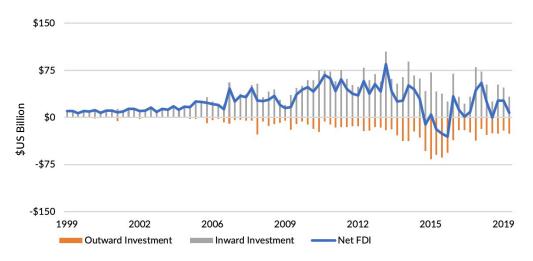


Figure 2: Foreign Direct Investment, Quarterly

Source: Thomson Reuters Eikon and State Administration of Foreign Exchange, China

#### **Regional Investment Trends**

While the policy adjustment has led to a sharp drop in outward investments from its 2016 high, a look at regional trends indicates that the policy shift targeted specific transactions rather than an overall limit. Investments in the three main regions of (over-)investment—Asia (specifically Hong Kong), North America, and Latin America—saw a decline in both 2017 and 2018. Investment in the US saw the most dramatic drop—more than 50 percent—as the new outward direct investment (ODI) regime scrutinized large deals that appeared irrationally valued.

Other regions, however, continued their growth over this period amidst strategic developments and a favorable economic environment. Chinese investments into Africa and Europe almost doubled from \$2.4 to \$4.1 billion and \$10.7 to \$18.5 billion, respectively. Europe surpassed Latin America significantly for the first time since the Great Recession. This trend resulted largely from a slacking European economy as well as China's focus on acquiring specialization through investment.<sup>9</sup>

Investments in the Belt and Road Initiative also continued, as its intent is both economical and political. As investments in Asia overall dropped significantly, acquisitions in the 68 countries that are part of BRI increased by almost 10 percent.<sup>10</sup> This uptick is another indicator that the restriction on overseas investment is targeted rather than a catch-all limitation.

As usual with international capital flows, the ultimate destination is almost impossible to verify. In the case of China, this is most obvious with large capital movements into Bermuda, the Cayman Islands, and the British Virgin Islands (labeled as tax havens in Figure 3)—accounting for around 15 percent of all outward investments and multiple times the countries' respective GDP. Similar to capital flowing through Hong Kong, most of it is deployed through investment vehicles. But some capital will return to mainland China in the form of round-tripping, where capital is routed through other countries to get beneficial treatment (countries incentivize foreign investment through tax breaks and other benefits), and it returns to China as "foreign" direct investment.<sup>11</sup>

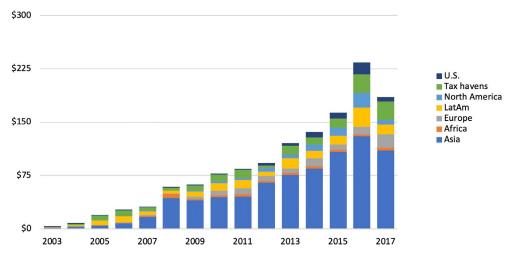


Figure 3: Annual Foreign Direct Investment by Region

Source: Thomson Reuters Eikon and State Administration of Foreign Exchange, China

9 Such as the takeover of robot maker Kuka by Midea in 2017.

10 "China's Investments in Countries Along its 'Belt and Road' Project Are Soaring" (Thomson Reuters, August 15, 2017), https://fortune.com/2017/08/15/china-one-belt-one-road-obor-investments/.

11 Geng Xiao, "People's Republic of China's Round-Tripping FDI: Scale, Causes and Implications," ADB Institute Discussion Paper No.7 (Asian Development Bank Institute, 2004).

The decline in foreign investments to and from China have been affected by domestic and international developments. On a local level, China is concerned with a sudden outflow of capital and the potential for companies extending beyond the financially prudent and the risk that highly leveraged overseas investment might impact the domestic financial system. Internationally, the difficulty lies with an increased perception that China is expanding its political influence through economic strength and taking advantage of its planned approach to economic growth over other nations. This has led to disputes surrounding the control of critical maritime ways (e.g., the South China Sea), as well as global trade deficits, particularly with the US.<sup>12</sup>

While recent guidance has dampened outward investment, it has not changed the overall strategy of "going out." Chinese companies will continue their expansion as it not only boosts the country's economy but also creates political clout with countries they invest in through economic strength. However, mistakes in decision-making and high levels of debt can impose severe financial pressure that could further complicate China's domestic imbalance of over-investment and external trade surplus.

12 See Wilhelmus et al. (2016).

### EXTERNAL FACTORS: GLOBAL RETRENCHMENT AND PUSHBACK

China's role in global investment is not entirely a result of its actions and policies; global factors also play an essential role.

#### **Global FDI Uncertainties**

#### CHINA'S DUAL-TRACK SYSTEM

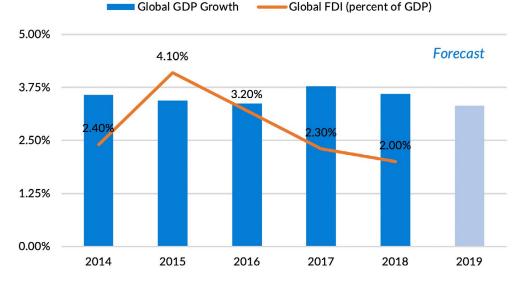
In the past 40 years, China adopted the dual-track strategy, which Deng Xiaoping described as "crossing the river by feeling the stones," to protect SOEs, or state-owned enterprises (command economy), while facilitating the rapid development of small and medium-sized enterprises, or SMEs (market economy). Chinese economists Yiping Huang and Xun Wang suggested that, in retrospect, there have been three dual-track reforms. The first was between state and non-state sectors. It was characterized by the various reform efforts, including responsibility systems, to improve SOEs' productivity. As SOEs continued to deteriorate, the second dualtrack reform was carried out. This reform was between product and factor markets, characterized by the government intervening in factor markets to support the deteriorating SOEs. The intervention, often including repressive measures and market distortion, led to the third dual track between the formal and the informal financial sectors. As SOEs enjoy preferential treatments from the formal sector, most SMEs must seek financial intermediation from the informal sector, which, while contributing substantially to China's economic landscape, is often unregulated and unstable.13

Cross-border investment tends to accelerate during periods of strong global growth and decelerate during periods of slow growth and global economic uncertainty, but recently this has not described the whole story. Global growth has been positive but moderate since 2012, but trade and cross-border investment as a percentage of GDP has lagged, sparking concerns about slowing globalization.<sup>14</sup>

<sup>13</sup> Ross Garnaut (Ed.), Ligang Song (Ed.), and Cai Fang (Ed.), "China's 40 Years of Reform and Development: 1978-2018," China Update Book Series (ANU Press, 2018).

<sup>14</sup> Jaime Malet, "International Trade is Slowing. What Does this Mean for Globalization?" (World Economic Forum, November 17, 2017), https://www.weforum.org/agenda/2017/11/international-trade-is-slowing-what-does-this-mean-for-globalization/.





Source: World Economic Outlook Database, UNCTAD World Investment Report

With global growth decreasing from 3.8 percent to 3.2 percent over the past two years, it appears unlikely that global FDI growth will pick up any time soon.

According to the United Nations Conference on Trade and Development (UNCTAD), FDI flows fell 13 percent in 2018; US multinational enterprises repatriating earnings from abroad, making use of tax reforms introduced in 2017, were the main cause of this decrease. Other factors included stronger-than-expected global growth, political uncertainty caused by issues like Brexit, and US President Donald Trump announcing many trade-related policy changes. These US policy changes include the withdrawal from the Trans-Pacific Partnership and renegotiation of the North American and the US-Korea free trade agreements. These changes have created significant uncertainty for firms making location decisions.

There were a few strong categories: For example, according to UNCTAD, greenfield project announcements rose 41 percent in 2018 from a low in 2017. Another database, fDi Markets, found that the number of confirmed greenfield projects increased 7 percent in 2018 and increased capital investment by 42 percent to \$917.3 billion after falling in 2017. This indicates that 2017 was a highly uncertain year for cross-border investment.

- 15 IMF World Economic Outlook (July 2019) forecasts, International Monetary Fund, 2019.
- 16 "World Investment Report 2019" (UNCTAD, United Nations, 2019), https://unctad.org/en/pages/ PublicationWebflyer.aspx?publicationid=2460.
- 17 fDi Intelligence, "The fDi Report 2019: Global Greenfield Investment Trends," (Financial Times, 2019), http://report.fdiintelligence.com/.

Despite the recent increase, however, the underlying growth trend remains poor. According to UNCTAD, if one-off factors such as tax reform, megadeals, and volatile financial flows are stripped away, FDI over the past decade averaged only 1 percent growth per year, compared with 8 percent between 2000 and 2007, and more than 20 percent before 2000. In this context of weak global and cross-border investment growth, it is not surprising to see Chinese investment fading. However, China has shown in many ways that it is large and dynamic enough to counter global trends.

#### **Tighter Investment Scrutiny and the Sino-US Trade Conflict**

Beyond global macroeconomic factors, the main policy reason for slowing Chinese investment is increased scrutiny over national security. While Chinese investment grew quickly, it may have grown too fast for its own good in some instances, sparking fear and uncertainty.

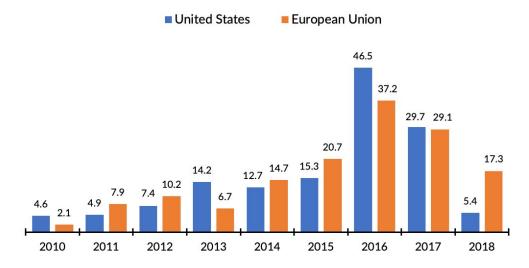


Figure 5: Chinese FDI in the United States and the European Union, Billions USD

The pattern of growth and retrenchment played itself out publicly in the United States. For a time, there was hope that Chinese investment—particularly greenfield foreign direct investment—represented an opportunity to rebalance the US-China commercial relationship. In 2016, the Milken Institute released a report, "A Golden Opportunity with China: How California Can Become an Even Bigger Destination for Chinese Foreign Investment," which reflected that sentiment and delved into opportunities to deepen the China-California relationship.

Source: Rhodium Group, China Investment Monitor

After years of running trade surpluses against the US, many viewed the opportunity for Chinese investors and companies to reinvest in the US as a natural way to deepen the economic relationship. Many states and local governments began to court Chinese investment. By 2014, 29 US states had state trade and investment offices or representatives in China.<sup>18</sup>

Now, much of that optimism has faded, and it appears that 2016 was the highwater mark for Chinese investment in the US. Since then, growth in both countries has slowed, and tensions between the two countries have introduced significant uncertainty. The greater role of investment screening has gone hand in hand with uncertainty caused by the Sino-US trade conflict. At the root of this conflict are the differing views of US and China government officials about the extent to which the Chinese economy, and thus investment, is directed by free-market forces or by the state. Unfortunately, it is difficult to say which is the case, as ownership structures are opaque and vary on a case-by-case basis. So, the subtleties are left to investment screening programs.

The US mechanism for screening foreign direct investment for security considerations is called the Committee on Foreign Investment in the United States (CFIUS). It is an interagency committee tasked with determining the effect of covered transactions on national security. CFIUS has existed for decades but was given the authority to reject deals in the late 1980s as concerns about Japanese investment in the US peaked. CFIUS has figured prominently in the US-China context over the last few years.

Concerns about growing Chinese investment were a major motivator for Congress to pass the Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA). This bill is important because it expanded the jurisdiction for CFIUS review transactions that had previously been beyond its scope. For example, the new review may cover "any nonpassive investment in a critical industry or critical technologies" and "transactions in which a foreign government has a direct or indirect substantial interest"<sup>19</sup> as well as include new provisions for data privacy and security.

Though CFIUS review is rarely used, it has had a chilling effect on Chinese investment, particularly in high-tech industries such as semiconductors, pharmaceuticals, robotics, and autonomous/electric vehicles, which are all part of China's "Made in China 2025" industrial plan. The Office of the United States Trade Representative has decided that investment in these industries, even where privately led, fall under the Chinese government plan and are worth examining. Even where

<sup>18 &</sup>quot;Export Promotion: Trade Agencies Should Enhance Collaboration with State and Local Partners," GAO-14-393 (United States Government Accountability Office, May 2014).

<sup>19</sup> James K. Jackson, "The Committee on Foreign Investment in the United States (CFIUS)" (Congressional Research Service, August 6, 2019), https://fas.org/sgp/crs/natsec/RL33388.pdf.

transactions are still possible, undergoing a CFIUS investigation means delays, higher costs for legal fees and regulatory filings, and increased uncertainty. CFIUS's larger role is a new concern that investors are still learning to accommodate. According to *The Washington Post*, from 2005 to 2007, fewer than 5 percent of transactions filed to the agency resulted in a formal investigation to see if there was a problem. But between 2014 and 2016, more than 42 percent of covered transactions produced an investigation.<sup>20</sup>

#### TABLE 1: HIGH-PROFILE CFIUS REVIEWS-2012 to 2019

2012: President Barack Obama blocks **Ralls Corporation**, owned by Chinese nationals, from acquiring four Oregon wind farms near a Department of Defense facility.

2016: President Obama blocks China's **Fujian Grand Chip Investment Fund** from acquiring **Aixtron**, a German semiconductor firm with assets in the United States.

2017: President Trump blocks the acquisition of Lattice Semiconductor Corp. by the Chinese investment firm Canyon Bridge Capital Partners over semiconductor intellectual property and supply chain security concerns.

2018: President Trump blocks the acquisition of **Qualcomm** by **Broadcom** (a Singaporean multinational corporation) due to concerns over US 5G technology leadership.

2019: Beijing Kunlun Tech is told to divest from LGBTQ dating app Grindr for national security reasons. The committee raised concerns over foreign access to personally identifiable information of US citizens and the potential for blackmail.

2019: China's **iCarbonX** is forced to divest its majority stake in **PatientsLikeMe**, an online service that helps patients find people with similar health conditions, over concerns of foreign access to health-care information of US citizens.

<sup>20</sup> Sarah Bauerle Danzman and Geoffrey Gertz, "Why is the US Forcing a Chinese Company to Sell the Gay Dating App Grindr?" (*Washington Post*, April 3, 2019), https://www.washingtonpost.com/politics/2019/04/03/why-is-us-is-forcing-chinese-company-sell-gay-dating-app-grindr/.

While CFIUS is a specific drag on Chinese investment, the broader trade war also creates uncertainty and is another negative factor. The Sino-US trade conflict began in earnest with the initiation of a Section 301 investigation into China's "acts, policies, and practices related to technology transfer, intellectual property, and innovation" in 2017.<sup>21</sup> This report and its proposed action became reality in 2018 with the imposition of tariffs, which have continued to expand and will, by the end of this year, cover nearly all US imports from China.

To the extent that trade and foreign direct investment are substitutes for serving foreign markets, there was some initial hope from the US side that tariffs would incentivize investment in the US and promote domestic production instead of importing. However, modern investment decisions are not so simple. Companies are integrated into complex global supply chains and have a multitude of options for where and how to produce their products.

As seen previously, the top destination for Chinese investment is Asia: In the case of trade war tariffs, shifting production to Asian neighbors is the most likely way to avoid these costs. Some of this production-shifting, particularly in low-skilled labor, was already underway to places like Vietnam and Bangladesh, and now tariffs have accelerated it.

In reality, the trade conflict has negatively affected Chinese-US investment patterns. According to a 2018 study by EY, most Chinese businesses believe the trade conflict will not affect their investment decisions (61 percent of respondents).<sup>22</sup> Of those that said they would reduce investment in the US (27 percent of respondents), many said they would instead invest in the EU. This sentiment is confirmed in the data: After mirroring each other for years, Chinese investment in the US fell in 2018 compared to investment in the EU (Figure 5).

The EY study goes on to show that the main external risks to overseas investment are a weak global economy (53 percent), foreign policy adjustment (market entry barriers, investment reviews) (52 percent), and unstable financial markets (49 percent). Each of these risks, covered in this report, is important in making private investment decisions and have all had a negative impact. To the extent that China's "going-out policy" is promoting FDI, the major global trends are all in the opposite direction.

<sup>21 &</sup>quot;Investigation: Technology Transfer, Intellectual Property, and Innovation" (United States Trade Representative), accessed August 20, 2019, https://ustr.gov/issue-areas/enforcement/section-301-investigations/section-301-china/investigation.

<sup>22 &</sup>quot;China Go Abroad (8th issue) How Does Geopolitical Dynamics Affect Future China Overseas Investment?" (EY, 2018), https://www.ey.com/Publication/vwLUAssets/ey-china-overseas-investmentreport-issue-8-en/\$FILE/ey-china-overseas-investment-report-issue-8-en.pdf.

## INTERNAL FACTORS: CHINA'S REBALANCING AND REFORM

Promoting FDI is a key strategy for China's supplyside structural reform, but addressing macroeconomic imbalances and the flaws of existing FDI deals has also taken priority.

#### **Rebalancing the Chinese Economy**

Since the Great Recession, the narrative of the global savings glut has tended to dominate the view of many observers.<sup>23</sup> China has often been cited as one of the main sources of the "savings glut," as its consumption level declined from more than 50 percent to a low of 35 percent while savings reached more than 50 percent of GDP by 2008 (see Figure 6). The increased savings financed both increased investments after the dot-com bubble and the Great Recession, and a current account surplus that reached almost 10 percent in 2007.

The financial crisis made it evident that the current account surplus was not sustainable, and massive investment was needed to avoid a further economic downturn. The transition of the unsustainable current account surplus and a switch to consumption-driven growth have been well underway since then, as can be seen by the narrowing gap between Savings and Consumption in Figure 6. The extensive investment programs after the Great Recession, however, brought new problems.

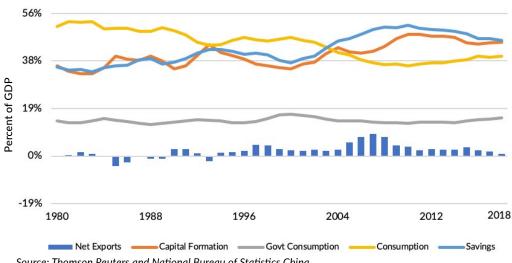


Figure 6: China's GDP by Expenditure

Source: Thomson Reuters and National Bureau of Statistics China Note: Authors' calculation; savings based on the macroeconomic identity of Y-C=S=I+X-M

23 Ben Bernanke, "The Global Saving Glut and the US Current Account Deficit," Remarks at the Sandridge Lecture, Virginia (March 10, 2005), https://www.federalreserve.gov/boarddocs/speeches/2005/200503102/.

Like the US, China reacted with an extensive fiscal stimulus to the financial crisis that caused capital formation to double from 2005 to 2009. Most of the increase in credit has been through local governments, which are funded by state-owned banks. These banks, in turn, tightened credit on private companies, thereby crowding out the most vital investment for economic growth.<sup>24</sup> In fact, local government debt increased more than 10 times from 2006 to 2013 to almost \$2 trillion (12.5 trillion RMB).

Subsequently, as a sign of too much money chasing deals and projects, deleveraging has become the top priority for the Chinese government since 2015. However, the credit extension has not slowed since. According to a note by the Rhodium Group, local government financing vehicles' outstanding debt had increased to \$6.4 trillion (41.8 trillion RMB) by July 2018.<sup>25</sup> The increased debt is coming at a time when China's economic growth is slowing, making current debt levels not only unsustainable but also complicating the balance of deleveraging amidst a continued pro-growth strategy.

The debt of non-financial corporations grew as a percent of GDP from 140 to almost 260, a very high level in any account that not only is a risk to companies but also could threaten the national financial system in the worst case. The unique dual-track system of China's financial markets complicates this risk. State-owned enterprises (SOEs) enjoy preferential treatment from the official banking sector, while most private businesses rely on non-bank institutions. The scale of off-balance sheet debt, mainly accrued via "non-bank financing,"<sup>26</sup> ballooned to \$9.4 trillion in 2017, reflecting a complex network of risky investment products and unregulated lending (see Figure 7.a).

- 24 Yi Huang, Marco Pagano, and Ugo Panizza, "Local Crowding Out in China," EIEF Working Papers Series 1707 (Einaudi Institute for Economics and Finance, published 2017, revised February 2019).
- 25 Bart Carfagno and Allen Fang, "Credit Risk Shifts to LGFVs," Research Note (Rhodium Group, September 19, 2018), https://rhg.com/research/credit-risk-shifts-to-lgfvs/.
- 26 These financial institutions conduct similar activities to banks (quasi-banking) but are not part of the traditional bank system.

Figure 7.a: Growing Non-bank Financing Activities

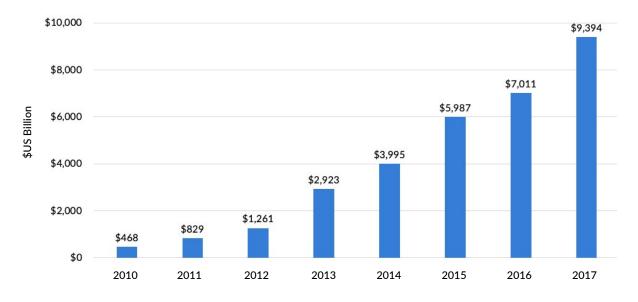
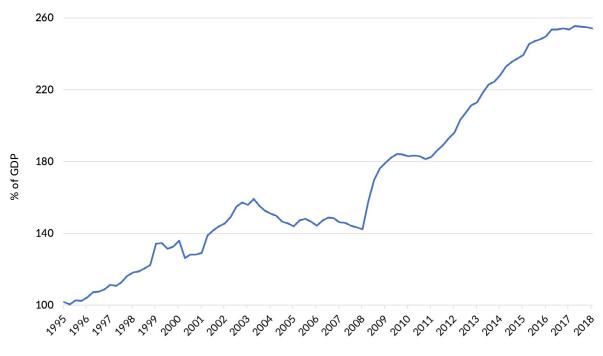


Figure 7.b: Non-financial Companies' Debt



Source: Thomson Reuters, Financial Stability Board, and Sun (2018)

The outstanding balance decreased slightly to \$9.3 trillion (RMB 61.3 trillion) in 2018 due to government action.<sup>27</sup> Many private enterprises rely on large-scale borrowings from unregulated sources to fund their overseas investments. High levels of unregulated lending and ballooning debt pose serious threats to the Chinese financial system, increasing the risk of capital chain ruptures. To mitigate the threat posed by the rapid increase in credit and risky lending in the informal sector, the Chinese government has carried out numerous measures in recent years. In the Government Work Report, delivered by Premier Li Keqiang on March 5, 2018, at the National Congress of the CPC, guarding against systemic financial risks was listed as the top priority.<sup>28</sup> While the drying up of non-bank financing has been a victory for China's banking regulators, it has also meant that private companies that are primary borrowers are running out of cash for their operations, let alone outward investment.

#### Recent Chinese Government FDI Policies: Stronger Guidance of FDI

China's policies to promote or inhibit outward direct investment can play a role in determining its investment patterns, not just how much investment occurs but also where this investment goes. So, while lending policies may be tightening as a result of rebalancing, multiple officially directed investment policies since 2016 have been encouraged (Table 2).

Introduced in 2015, supply-side structural reform (SSSR) is a key component of China's economic policy framework.<sup>29</sup> It targets cutting excessive industrial capacity, reducing inventory, deleveraging, lowering corporate costs, and bolstering areas of weakness—known in Chinese as "three cuts, one reduction, one strengthening" (三 去一降一补).<sup>30</sup> One of the primary means to achieve these goals is to route China's excessive industrial capacity and inventory to other countries via FDI, as suggested by its prominence in the 13th Five-Year Plan. For instance, from 2008 to 2017, China's FDI in the manufacturing industry increased rapidly, from \$1.7 billion to \$29.5 billion, accounting for 18.6 percent of China's total FDI that year.<sup>31</sup> Certainly, it is no surprise that China's FDI in manufacturing has resulted from rapidly rising

- 28 "China to Deepen Reforms in Fundamental, Key Areas in 2018" (State Council, The People's Republic of China, March 5, 2018), http://english.www.gov.cn/premier/news/2018/03/05/ content\_281476067241603.htm.
- 29 John Boulter, "China's Supply-side Structural Reform," Bulletin (Federal Reserve Bank of Australia, December 2018).
- 30 "Three Cuts, One Reduction, One Strengthening" (CPC News), http://theory.people.com.cn/ n1/2017/0906/c413700-29519361.html.
- 31 "Report on Development of China's Outward Investment" (Ministry of Commerce, People's Republic of China, 2018).

<sup>27</sup> Don Weinland, "China Shadow Banking Cools for First Time in a Decade" (Financial Times, March 19, 2019), https://www.ft.com/content/fa026b16-492f-11e9-bbc9-6917dce3dc62.

manufacturing wages, estimated to increase 15 percent per year in the last two decades. From 2009 to 2017, China's annual average manufacturing wage increased from 26,810 yuan to 64,452 yuan, an increase of 2.4 times in less than a decade.<sup>32</sup>

Outward investment in manufacturing is in line with the goal of reducing excessive industrial capacity domestically by distributing industrial capacity globally as China collaborates with countries in its supply chain. By moving some lower-skilled manufacturing overseas, Chinese firms can also benefit from globalization, and the economy can focus more on higher value-added jobs. Since 2017, these efforts have been concentrated in Vietnam and India through programs such as the Belt and Road Initiative (BRI) and in Brazil, Russia, and South Africa (see Table 1) at the expense of previously fast-growing destinations like the United States. China's effort to encourage FDI as a way of rebalancing its supply-side structure fits into its larger "going out" strategy, which has dominated China's outward economic policy-making landscape since the 2000s and has lifted the country's FDI levels by more than threefold within a decade.

32 2018 China Statistical Yearbook (National Bureau of Statistics, PRC).

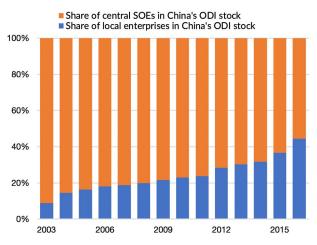
MILKEN INSTITUTE CHINA'S GLOBAL INVESTMENT STRATEGY

 Table 2: Key People's Republic of China Reforms and Policies in 2017 and 2018.

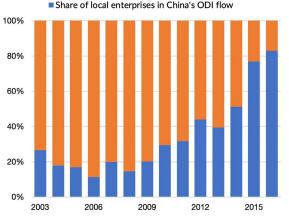
Policy Document	Enunciator	Date	Summary
Work Together to Build the Silk Road Economic Belt and the 21st Century Maritime Silk Road	Party Central Committee	May 14, 2017	The speech describes the value basis of the BRI (e.g., peaceful coexistence), lays out the Chinese government's outlook for the global economy, enumerates achievements so far, and makes promises about China's upcoming commitments, such as foreign aid of RMB 2 billion worth of emergency food supplies to BRI countries in need.
Forwarding the Guiding Opinions of the National Development and Reform Commission	State Council of the People's Republic of China	August 4, 2017	Classifies FDI into encouraged, restricted, and prohibited. Specific to regional investment, the regulation mandates that any investment in sensitive countries and regions with which China has not established diplomatic ties, is in a war, or is restricted by bilateral or multilateral treaties or agreements of which China is a signatory is to be restricted.
Johannesburg Declaration	Brazil, Russia, India, China, and South Africa (BRICS)	July 27, 2018	The declaration reiterates BRICS countries' commitment to strengthen multilateral institutions and intra-trade, reaffirms principles of democracy and inclusiveness, and determines to fight unilateralism and protectionism.
Elaboration on the Eight Major Initiatives of the FOCAC (Forum on China–Africa Cooperation) Beijing Summit	Party Central Committee	September 19, 2018	President Xi Jinping announced eight major initiatives in collaboration with Africa for industrial promotion, infrastructure connectivity, trade facilitation, green development, capacity-building, health care, people-to-people exchange, and peace and security, delineating the blueprint for China- Africa relations in the new era and opening an ambitious chapter in China-Africa cooperation for the new era.
The Facts and China's Position on China-US Trade Friction	State Council of the People's Republic of China	September 24, 2018	A white paper that clarifies the facts about China- US economic and trade relations demonstrates its stance on trade friction with the United States and suggests reasonable solutions. Specific about ODI, it emphasizes that the trade tension will lower investors' confidence in the American economic environment.

As China's FDI grew, however, various problems emerged. For the past two decades, despite China's preferential treatment for central state-owned enterprises (SOEs), private enterprises have been developing rapidly and surpassed the productivity and investment levels of the former. The domestic shift is seen in the increase of private enterprises in China's non-financial FDI flows (Figure 8). While the trend to private-sector-led development is good in general, there are three major reasons this concerns the Chinese government. As discussed previously, some investors were overleveraged, fueled by the rise of non-bank financing, which threatens financial stability. According to Wang and Gao, China's private-sector investors also have limited FDI experience and are prone to making irrational or fraudulent investments.<sup>33</sup>





Share of central SOEs in China's ODI flow



Source: Garnaut et al. (2018)

#### **Limited FDI Experience**

Given that most private enterprises have relatively little experience investing overseas, along with limited access to accurate information, decision-making mistakes frequently happen. The lack of experience often concurs with a weak awareness of local compliance. The increase in FDI footprint grants Chinese companies a stronger influence and leverage over local communities. However, certain companies overemphasize pursuing profits and hence blatantly neglect social responsibility, environmental protection, and labor safety standards. According to China's state planner, these practices "violate international conventions and United Nations resolutions, or that disrupt foreign economic cooperation [...] or harm China's reputation."<sup>34</sup> There were few formal institutions to keep investors in check during the initial outward surge.

33 Garnaut et al., "China's 40 Years," pp. 629-630.

34 "China To Set Up System To Monitor Its Firms Overseas" (November 27, 2017), https://www.reuters. com/article/us-china-investment-overseas/china-to-set-up-system-to-monitor-its-firms-overseasidUSKBN1DSONR. To address the issues, the National Development and Reform Commission (NDRC), the Ministry of Commerce (MOFCOM), and the People's Bank of China co-issued two regulations in December 2017. The first document—Code of Conduct for Overseas Investment by Private Enterprises<sup>35</sup>—mandates that private companies investing overseas must improve their internal management, fulfill social responsibility, increase environmental awareness, follow legal requirements, and strengthen overseas risk management.<sup>36</sup> The second document—Administrative Measures for Overseas Investments by Enterprises—establishes new regulatory mechanisms to improve collaborative supervision while improving existing disciplinary enforcement.<sup>37</sup> While the first document describes guiding principles, the second document acts as disciplinary enforcement. It lays out a general warning and punishment for misconduct, including unfair competition, illegal financing, false declarations, and more. Companies' violation records are uploaded on government-run information-sharing systems to facilitate joint enforcement and punishment.<sup>38</sup>

#### "Irrational" and Fraudulent Investment Deals

Private companies tend to make what the Chinese government calls "blind and irrational outward investments."<sup>39</sup> They include high-profile investments in areas such as hospitality/real estate, sports clubs, gambling, and entertainment. These kinds of investments lack productive linkage to the real economy; compared to investment in supply chains or intellectual property, there is little value to be gained for the Chinese domestic economy. These large investments also challenge China's effort to regulate capital outflow that can easily be disguised as overseas investment.

Moreover, some private firms have been using fraudulent overseas deals to obtain foreign exchange, transfer corrupt assets abroad, and get involved in money laundering. During the 2017 National Financial Work Meetings, President Xi declared that irrational and fraudulent investment deals should be treated as "national security matters."<sup>40</sup> It was the first time the country's leadership explicitly linked FDI to national security.

- 35 National Development and Reform Commission, "Code of Conduct."
- 36 Garnaut et al., "China's 40 Years."
- 37 Ibid.
- 38 Ibid.
- 39 Keith Bradsher, "After \$225 Billion in Deals Last Year, China Reins in Overseas Investment" (March 12, 2017), https://www.nytimes.com/2017/03/12/business/dealbook/china-deals-capital-controls-hollywood.html?\_ga=2.121231752.1855700606.1567101336-352873601.1567101336.
- 40 Frank Tang, "Overseas Deals a National Security Matter for China, Xi Says" (South China Morning Post, June 27, 2017), https://www.scmp.com/news/china/economy/article/2100066/overseas-deals-national-security-matter-china-xi-says.

In December 2017, NDRC set a new mandate that required all Chinese firms and their overseas affiliates to report their deals through a new online government information system.<sup>41</sup> According to Wang Jun, chief economist at Hong Kong-listed Zhongyuan Bank, the new mandate aimed to bring order to firms seeking overseas investment, rather than "simply blocking some deals." The State Council of the PRC also issued Guiding Opinions of the National Development and Reform Commission, classifying FDI targets into "encouraged," "restricted," and "prohibited" categories.<sup>42</sup> The result was effective and immediate: There were no new FDI projects in real estate, sports, and entertainment in 2017.<sup>43</sup>

After President Xi described rampant outbound investment as a "national security matter," the banking regulator began scrutinizing China's top private enterprises such as HNA, Anbang, and Wanda, which had led the Chinese FDI boom since 2014. The regulator singled out these leading private companies as aggressive overseas investors and ordered banks to check their exposure to these companies. Consequently, several of these top private deal makers have not just halted new investments in countries such as the US but have also had to divest most of their previously acquired assets.<sup>44</sup>

After a series of interim measures, China's 2017 non-financial FDI flows decreased for the first time in 14 years with a year-on-year drop of 19.3 percent. According to China's Ministry of Commerce, such a decline is not a bad sign; instead, it is a good signal that China's outward investments have been improving.<sup>45</sup> In other words, Chinese foreign direct investment has transitioned from primary asset-acquiring investment intended to evade capital controls to productive investment in multinational's value chains. These reforms, combined with the deleveraging and rebalancing of the Chinese economy, are, in our view, the primary driver of the fall in Chinese investment. Slowing global cross-border investment and the US-China trade conflict were also negative factors, but the main drivers have been domestic Chinese policy.

- 44 Hanemann et al., "Two-Way Street."
- 45 "MOFCOM Department of Outward Investment and Economic Cooperation Comments."

<sup>41</sup> Frank Tang, "China Sets New Rules on Overseas Investment for Its Biggest Deal Makers" (South China Morning Post, December 27, 2017), https://www.scmp.com/news/china/economy/article/2125725/ china-sets-new-rules-overseas-investment-its-biggest-deal-makers.

<sup>42</sup> The "restricted" category includes real estate, hotels, cinemas, the entertainment industry, and sport clubs.

<sup>43 &</sup>quot;MOFCOM Department of Outward Investment and Economic Cooperation Comments on China's Outward Investment Cooperation in 2017" (Ministry of Commerce, January 18, 2018).



The financial market, the last segment of the Chinese economic system that has been under strict control by the government, is rapidly opening up to the world. FDI, whether in- or out-flows, is more open now than before. However, one cannot assume that the financial market liberalization will be smooth and linear. Looking back in time, from China's agriculture sector reform in the 1980s, housing and corporate ownership reforms in the 1990s, and the WTO accession at the turn of this century, China has, without exception, followed the patterns of "push and pull-back" repeatedly. The "going out" policy is a symbol of opening and for Chinese enterprises to embrace globalization. Furthermore, it is very unlikely that the Chinese government reverses its long-term strategic planning and governing approach for nation-building in the future. After all, planned policies and flexible implementations thus far have brought the Chinese economy to an unprecedented height in a relatively short period of 40 years.

On that note, China has been and will continue to be a significant player in the global investment landscape. At present, the various measures and guidance to tackle problems incurred by private enterprises and unregulated financing do not signal diminished support for FDI. On the contrary, some of the regulations (e.g., the Administrative Measures for Overseas Investments by Enterprises) include several approaches to facilitate overseas investment.<sup>46</sup> These newly formulated measures and regulations put forth clear rules and guidelines for Chinese companies "going out." It is intended to both encourage private companies to conduct investment overseas, as well as to supplement earlier versions of "going out" policies, which in many ways provided few details and regulations. This augmented guidance can be viewed as the Chinese government's commitment, or at least attempt, to improve overseas investment transparency. Also, by introducing restrictions, the Chinese government and financial market regulators expanded their arsenal of useful tools to monitor investment risks that could be detrimental to the developing Chinese financial market. In the end, it will help promote, not curb, a more rational, sustainable foreign investment trend.

The Chinese government's deleveraging campaign had been particularly damaging to China's private enterprises from 2016 to 2018. With the clamping down on non-bank financing and fraudulent lending practices noted above, the Chinese government not only curbed domestic firms' appetite for overseas expansion, but forced many to sell assets to address corporate indebtedness at home. The goal of deleveraging is, however, not an instrument to curb the Chinese firm's ambition for overseas market expansion. Rather it is a regulatory and preventive measure from the Chinese government to secure financial stability at home. One can comment that the Chinese financial market or firms will perhaps need to find a better financing mechanism to support overseas investment needs.

46 Garnaut et al., "China's 40 Years."

The Chinese government recognizes the importance of FDI not only in the course of its SSSR but also as an important channel by which it can increase its international presence as a global player. As overcapacity, rapidly rising production costs, and more constraint on entry-level labor supply have become domestic issues, the Chinese private sector will need to rely more on international markets for sourcing and production. As China makes progress in both regulating non-bank financing and improving the management and stewardship of overseas investments, it remains to be seen whether China's private companies—the most active actors of the economy—can truly discover its forte and symbiosis with its investment destinations. While it is too early to tell, private enterprises cannot afford not to engage global investment and production, as domestic competition is fierce, and the cost is rising rapidly.

A prolonged trade dispute has discouraged Chinese overseas investment in the US market, but Europe is still a favorite destination for Chinese foreign investment. The active promotion of BRI in Europe by the Chinese government is indicative of the vision and desire of Chinese firms to engage the European private sector. A main advantage of Europe is accessibility, as land connectivity facilitates smooth transportation from China to most of the European nations.

Asia will continue to be the primary recipient of China's outward investment, as has been the case in the last decades. If the US-China trade war is prolonged and geopolitical conflict intensifies, Asia will continue to be a safe destination for Chinese outbound investment. In a keynote address at the 2019 Asia Security Summit, Singapore Prime Minister Lee Hsien Loong said that nation members should not be asked to choose between the US and China.<sup>47</sup> Huawei and its technologies' acceptance by many Association of Southeast Asian Nations members is perhaps a good indicator of continued economic cooperation despite geopolitical tension.

While China's SOEs may continue to engage in large-scale infrastructure projects to which political leaders have committed, it rests upon private enterprises to diversify China's FDI and to attract other countries to China's economic ecosystem and supply chain. Given China's current trade tension with the US and the urgent supply-side structural reform, it is crucial that the country consolidates and expands its FDI footprint to hedge against global volatility and domestic downturn. As we have seen, private enterprises respond quickly to government reforms and policies. Therefore, when new reforms such as the internationalization of RMB lie on the horizon, bigger developments to China's FDI landscape might be yet to come.

<sup>47</sup> Singapore Prime Minister Lee Hsien Loong, "Keynote," 18th Asia Security Summit, Singapore (May 31, 2019).



Bernanke, Ben. "The Global Saving Glut and the U.S. Current Account Deficit." Remarks at the Sandridge Lecture, Virginia, March 10, 2005. https://www.federalreserve.gov/boarddocs/speeches/2005/200503102/.

Boulter, John. "China's Supply-side Structural Reform." Bulletin, Federal Reserve Bank of Australia, December 2018.

Carfagno, Bart, and Allen Fang. "Credit Risk Shifts to LGFVs." Research Note, Rhodium Group, September 19, 2018. https://rhg.com/research/credit-risk-shifts-tolgfvs/.

Chen, Chunlai. "The Liberalization of FDI Policies and the Impacts of FDI on China's Economic Development." China's 40 Years of Reform and Development, Chapter 29, ANU Press, 2018. http://press-files.anu.edu.au/downloads/press/n4267/pdf/ch29. pdf.

EY. "China Go Abroad (8th issue): How Does Geopolitical Dynamics Affect Future China Overseas Investment?" November 2018. https://www.ey.com/Publication/ vwLUAssets/ey-china-overseas-investment-report-issue-8-en-new/\$File/ey-chinaoverseas-investment-report-issue-8-en.pdf.

fDi Intelligence. "The fDi Report 2019: Global Greenfield Investment Trends." 2019. http://report.fdiintelligence.com/.

Garnaut, Ross (Ed.), Ligang Song (Ed.), and Cai Fang (Ed.). "China's 40 Years of Reform and Development: 1978-2018." China Update Book Series, ANU Press, 2018.

Hanemann, Thilo, Daniel H. Rosen, Cassie Gao, and Adam Lysenko. "Two-Way Street: 2019 Update US-China Direct Investment Trends." Rhodium Group, May 8, 2019. https://rhg.com/research/two-way-street-2019-update-us-china-direct-investment-trends/.

Huang, Yi, Marco Pagano, and Ugo Panizza. "Local Crowding Out in China." EIEF Working Papers Series 1707, Einaudi Institute for Economics and Finance (EIEF), published 2017, revised February 2019.

Jackson, James K. "The Committee on Foreign Investment in the United States (CFIUS)," Congressional Research Service, August 6, 2019. https://fas.org/sgp/crs/natsec/RL33388.pdf.

Ministry of Commerce, People's Republic of China. "Report on Development of China's Outward Investment," 2018.



National Development and Reform Commission (2017), Ministry of Commerce, and People's Bank of China, et al. Code of Conduct for Overseas Investment Operations by Private Enterprises (国家发展改革委、商务部、人民银行等关于发布《民营企业境外投资经营行为规范》的通知), December 6, 2017.

O'Rourke, Ronald. "U.S.-China Strategic Competition in South and East China Seas." Congressional Research Service, 2019. https://fas.org/sgp/crs/row/R42784.pdf.

People's Republic of China. "Staff report for the 2018 Article IV Consultation." International Monetary Fund, 2018. https://www.imf.org/en/News/ Articles/2018/07/25/na072618-chinas-economic-outlook-in-six-charts.

Sun, Guofeng. "Measuring Chinese Shadow Banking: Banks' Shadow and Traditional Shadow Banking." *VoxChina*, February 7, 2018. http://www.voxchina.org/show-3-65. html.

United Nations. "World Investment Report 2019." UNCTAD, 2019. https://unctad. org/en/pages/PublicationWebflyer.aspx?publicationid=2460&fbclid=IwAR1cDvNrfX 0Z8um9oM0a6mipfelxWKdXpZZ1oYws9-C4RB\_g1OEZwgk2gWk.

United States Government Accountability Office. "Export Promotion: Trade Agencies Should Enhance Collaboration with State and Local Partners." GAO-14-393, May 2014.

United States Trade Representative. "Investigation: Technology Transfer, Intellectual Property, and Innovation." Accessed August 20, 2019. https://ustr.gov/issue-areas/enforcement/section-301-investigations/section-301-china/investigation.

Wilhelmus, Jakob, Perry Wong, Keith Savard, and Cindy Li. "China's Global Integration and Capital Flows." Milken Institute, 2016. https://www.milkeninstitute. org/sites/default/files/reports-pdf/China-Capital-Flws-2016.pdf.

Wilhelmus, Jakob, Matt Horton, and Kevin Klowden. "A Golden Opportunity with China: How California Can Become an Even Bigger Destination for Chinese Foreign Investment." Milken Institute, 2016. https://www.milkeninstitute.org/reports/goldenopportunity-china-how-california-can-become-even-bigger-destination-chineseforeign.

Xiao, Geng. "People's Republic of China's Round-Tripping FDI: Scale, Causes and Implications." ADB Institute Discussion Paper No.7, Asian Development Bank Institute, 2004.



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