



Chinese Investment in the United States

Recent Trends and the Policy Agenda

Prepared for the U.S.-China Economic and Security Review Commission

December 2016

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Executive Summary

The rapid growth of outbound foreign direct investment (FDI) by firms from China is changing the patterns of global capital flows. Chinese FDI flows grew at an average annual rate of 27% over the past decade, from \$3 billion in 2005 to \$123 billion in 2015. Initially focused on extractive sectors in developing countries, today Chinese FDI flows increasingly to advanced economies where technology, brands, and sophisticated manufacturing assets are abundant. Chinese FDI activity in the US has grown rapidly in recent years, adding a major new dimension to US-China economic relations and drawing attention from policymakers on both sides. While U.S. leadership awareness and the quality of public debate over Chinese investment have improved, a combination of data gaps and the sheer growth in flows continues to make clear analysis challenging. It is therefore in the interest of the United States to better understand the nature of these inflows and how to interpret them, in order to secure the benefits while continuing to manage any traditional or new forms of potential associated risk.

This study seeks to reduce gaps in information availability and thereby contribute to sound policymaking. It provides an overview of existing datasets on Chinese direct investment in the United States and describes their utility, assesses recent patterns and policy-relevant metrics based on a supplemental proprietary dataset, and looks at the broader policy context. To compile this report the authors reviewed concepts and official datasets on foreign direct investment, utilized a dataset that captures Chinese FDI transactions in the US since 2000, and conducted numerous interviews with government officials, corporate executives, and researchers in the United States and China.

The key findings are:

- **Official statistics do not offer a coherent perspective on the level and recent patterns of Chinese FDI in the United States:** Official numbers for Chinese FDI in the US economy vary greatly. Estimates of the *total stock* of total Chinese FDI in the United States range from \$21 billion, according to the US Bureau of Economic Analysis (BEA), to \$47 billion, according to China's Ministry of Commerce (MOFCOM).¹ Data points that try to capture the *flows* of China's US FDI in the last 5 years also differ greatly and are sometimes contradictory. BEA's balance of payments (BOP) figures show annual flows fluctuating between \$1 and \$5 billion during 2011-2015; MOFCOM shows a steady increase from \$1.3 billion in 2010 to \$7.6 billion in 2014.
- **Private research records higher levels of Chinese FDI than official statistics:** Alternative datasets based on aggregating individual transactions are indispensable for properly understanding the latest trends of Chinese investment and metrics relevant for policy. These datasets record a higher stock of Chinese FDI in the US and greater levels of investment in recent years than official statistics. The most detailed dataset available is Rhodium Group's China Investment Monitor (CIM), which includes more than 1,200 individual investments from 2000 to 2015, together amounting to \$64 billion. The discrepancy is generally attributable to specific methodological constraints on official metrics, not underreporting or attempts to "fly under the radar".
- **Chinese company US activity is expanding rapidly:** The CIM dataset shows that the value of Chinese FDI transactions in the US has grown from an annual average value of less than \$500 million before 2008 to \$15.3 billion in 2015. Most Chinese capital is entering the US through the acquisition of existing assets, but greenfield FDI is growing fast and numerous large projects are currently under construction. By the end of 2015, we count nearly

¹ FDI stock refers to the cumulative value of FDI flows at a given point of time, either at historical value or adjusted for market prices. The different ways FDI stocks are calculated are discussed in Part 1 of this study.

2,000 Chinese-owned subsidiaries in the US across 47 states.² Those subsidiaries now employ more than 100,000 Americans, up from fewer than 20,000 four years ago, demonstrating growing tangible benefits for local economies.

- **Chinese FDI is increasingly headed toward advanced manufacturing, services and safe haven assets:** China's US investments have broadened from trade facilitation and natural resource extraction to a more diverse set of activities. Since 2013, investment in unconventional oil and gas extraction has declined substantially from previous years. This drop was balanced by rapid growth of investment in technology and innovation-related activities and modern service sector assets, as well as commercial real estate and other safe haven assets that allow Chinese investors to diversify globally. In recent years, we record fast expansion of investment in US subsidiaries engaged in research and development as well as manufacturing.
- **China's US investment is now driven by private investors:** The shift in investment patterns has also transformed the mix of Chinese investors in the US economy. Previously dominated by trading companies and large state-owned enterprises (SOEs), investment in recent years was almost entirely driven by private sector firms.³ Private companies accounted for almost 80% of total investment value in recent years, more than in other advanced economies. However, recent Chinese restructuring plans suggest that SOEs will remain an important part of China's FDI flows in years ahead, so state-firm specific questions about national security and economic risks will continue to be prominent.
- **Chinese government policies are important variables in FDI patterns:** Greater freedom for private sector companies to expand their overseas presence was an important prerequisite for the current growth in Chinese FDI, in the US and elsewhere. Government policies impact patterns in Chinese companies' outbound investment both indirectly, through economic policy, and directly through incentives and policies aimed at promoting overseas investment in specific industries, technologies and geographies. The surge in global takeover offers in the semiconductor industry is the most notable example of the industrial policy-outbound investment nexus. Since 2014 Chinese private and state-affiliated players have hastened to explore US semiconductor asset acquisitions following a central government initiative to strengthen China's domestic semiconductor capabilities. Cumulative Chinese investment in the US semiconductor industry amounted to only \$200 million before 2014, but investment activity soared in 2014 and 2015, with more than \$800 million of completed transactions (and several failed takeover attempts) in those two years.
- **China's FDI growth is a structural trend with a long way to go, and the US is positioned to attract hundreds of billions of dollars more:** While Chinese outbound FDI growth has been impressive in recent years, the base is still low and there is much room to grow. Absent major economic and political disruptions, China's global outbound FDI stock could triple to \$3 trillion from today's \$1 trillion by 2025. Annual investment in the US will likely double in 2016 to more than \$30 billion and the US economy will remain a key destination for Chinese investors going forward, presenting states and localities with opportunities to attract investment and related local benefits.
- **China is different than most other large foreign investors in the US:** Investment from China may require a re-assessment of traditional risks related to FDI because China is different than most other countries that have significant FDI stocks in the US economy: it has a vastly different economic system with heavy state intervention, it has a non-democratic political system without rule of law, and it is emerging as a geopolitical competitor of the United States in the international system. There is no *prima facie* reason to presume that FDI originating from China is not, on net, beneficial, due to these factors. We find little to no deleterious side effects thus far, but we can

² The number of subsidiaries is higher than the number of transactions because one singular acquisition can result in Chinese ownership of multiple US entities.

³ We consider companies with 80% or more ultimate private control as private. Please refer to page 42 in Part 3.1 for details.

imagine that atypical Chinese characteristics, such as state-directed collusion among firms in some concentrated sectors, will spur new approaches to screening inward investment if those characteristics do not subside.

- **The US regulatory environment is generally well equipped for dealing with Chinese investment:** The US system for evaluating inward FDI has handled the influx of Chinese investment well thus far, simultaneously permitting the benefits while addressing concerns. The US government has identified and blocked acquisitions that could have threatened national security interests while allowing the vast majority of investments to proceed. Importantly, review by the Committee on Foreign Investment in the United States (CFIUS) is not the last opportunity to regulate the behavior of Chinese firms. Recent cases illustrate that the expansion of local presence and assets through FDI means that Chinese companies can be held accountable in US courts in cases of non-compliance with laws or commercial disputes, which is good news for US regulators and businesses. Attempts by SOEs to claim immunity have predictably triggered efforts to tighten loopholes, while firms place higher risk premiums on dealing with Chinese investors, showing that the system is functional. Lawmakers should further review and, if necessary, close potential loopholes that allow companies to escape accountability.
- **National security reviews are effective but need adequate resources:** While we do not see urgency to change the CFIUS mandate or processes, our data and case studies point to two important dimensions to ensure the efficiency of the current approach. First, the Treasury Department and CFIUS as a whole need to have sufficient resources to fulfill their mandates. The increase of Chinese FDI means that the number of reviewed transactions has grown rapidly in recent years, requiring additional resources to ensure an efficient process. Second, the growing local presence of Chinese companies and citizens means that US regulators and law enforcement need to have the appropriate resources to monitor new developments and assess their implications for US national security, for example local R&D cooperation with Chinese-owned companies, technology licensing by US firms to local subsidiaries of Chinese companies, or early stage technology financing.
- **Concerns about economic risks are increasing:** Inside China, implementing reforms to level the playing field for inbound foreign investors has been slow, leading to *economic* security worries in the US about outbound Chinese investors enjoying more liberal terms abroad. The discrepancy between market access for Chinese investors in the US and US investors in China, and potential distortions caused by state-owned enterprises, subsidies and other non-market elements in the Chinese economy are the two key concerns. Simple calls for reciprocity are misguided but we recognize the need for greater symmetry in the two-way US-China FDI relationship as a bulwark against further erosion of mutual trust and perceptions. We also share concerns about competition policy fundamentals and the potential for market distortion if Chinese FDI continues to grow without clearer separation between political authorities and commercial entities at home. If the scale of China's participation in the US reaches the levels we forecast, and the comingling of commercial and political motives is not resolved, then a new chapter in US – and global – competition policy activism may be required.
- **A bilateral investment agreement with China offers significant opportunities:** A robust bilateral investment treaty (BIT) that gives US investors pre-establishment rights in China limited only by a narrow list of restricted industries would help to level the playing field, which would contribute to avoiding the politicization of two-way FDI flows and thus sustaining the benefits of Chinese inflows into the United States for the long-term. At the same time, a BIT with China will not dilute existing US authority to scrutinize Chinese investment for legitimate purposes. It would not change the ability of the CFIUS to address national security concerns. The potential inclusion of investor state dispute settlement (ISDS) provisions in a BIT (based on the US model) has drawn concerns both from liberal activists and conservatives loath to subject US policy to possible foreign arbitration, but we are satisfied that the essential national security exceptions that would be included in any BIT are more than sufficient, since unlike other nations which have fumbled trying to employ broad net benefits tests for inward FDI, under US law CFIUS only considers a narrow and straightforward set of national security goals.

Introduction

After three decades of double digit economic growth, China's growth model faces tremendous challenges. The old drivers of growth are running out of steam and China's government needs to overhaul the country's economic structure to avoid getting caught in the middle income trap.⁴ This transition is expected to transform China's footprint in the global economy, and change the economic relationship with the United States and other major economies. While the track record of reform is mixed, change has taken place in many areas of the Chinese economy in recent years, which is beginning to affect China's position in the global economy.

Since the 1980s China's economy has been molded by integration into global production networks. Corporations from Asia and around the world invested billions of dollars in Chinese manufacturing, making use of the huge workforce, relatively low labor and capital costs, and the potential of an enormous consumer market.⁵ China became one of the world's top recipients of FDI and its share of global trade almost tripled in the decade after its accession to the World Trade Organization (WTO). Huge export surpluses swelled Beijing's reserves of foreign exchange, as capital outflows in the other direction remained tightly restricted. Recycling this surplus into liquid and safe foreign securities was no easy task for the central bank, leading to a massive expansion of Chinese holdings of US Treasury securities and other safe but low-yielding government securities. China's holdings of US Treasury and Agency securities have risen from \$91 billion in 2000 to \$1.5 trillion in 2015.⁶

Since the global financial crisis in 2008-2009, these long-standing patterns have changed. Rapid growth in external trade has slowed, and so has the inflow of FDI. Outflows of capital on the other hand have picked up, while new flows including tourism expenditures and particularly FDI by Chinese corporations now shape China's economic relationships abroad. Outbound FDI was barely existent until the mid-2000s, as Chinese companies had neither the motive nor the freedom to invest in overseas operations. The liberalization of China's outbound FDI policy framework, active government support through the "go out" strategy and new economic realities that are incentivizing greater global presence have changed that situation, catapulting annual FDI flows to more than \$100 billion in recent years.⁷ China has emerged to become one of the top exporters of FDI globally.

Those changes in China's global economic footprint are also increasingly shaping US-China economic relations. The period from 2002 to 2008 was characterized by a fast expansion of bilateral trade, significant growth of American FDI in China, and a massive expansion of Chinese holdings of US Treasury securities (Figure 1). Chinese FDI stock in the US remained comparably small, as Chinese firms had neither the capacity nor the motive to invest in the US economy, aside from small trade-facilitating operations such as trading and representative offices. In the years since the global financial crisis, these patterns have fundamentally changed. Trade between the two nations is still expanding, but growth has slowed down significantly. New FDI by US companies in China has also come down from the boom years, as opportunities in manufacturing diminish and American firms focus on less capital intensive service industries. Chinese purchases of US Treasury securities have plunged as trade and financial account surpluses have come down

⁴ Daniel H. Rosen, *Avoiding the Blind Alley: China's Economic Overhaul and Its Global Implications*, (New York: Asia Society Policy Institute, 2014). The middle income trap refers to the point at which a developing economy growth stalls after reaching a moderate level of prosperity.

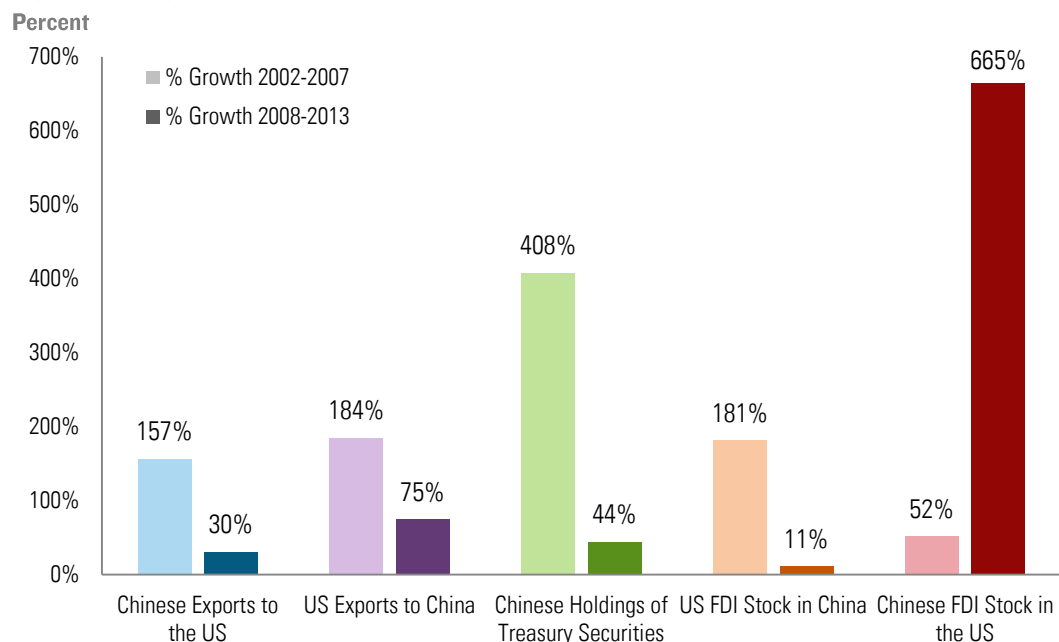
⁵ Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge: MIT Press, 2007), 402-420.

⁶ Department of the Treasury, Federal Reserve Bank of New York, and Board of Governors of the Federal Reserve System, *Report on Foreign Holdings of U.S. Long-Term Securities*, (2002), 7; Department of the Treasury, Federal Reserve Bank of New York, and Board of Governors of the Federal Reserve System, *Foreign Portfolio Holdings of U.S. Securities*, (2016), 10.

⁷ Daniel H. Rosen and Thilo Hanemann, *China's Changing Outbound Foreign Direct Investment Profile: Drivers and Policy Implications*, (Washington: Peterson Institute for International Economics, 2009). The Chinese Ministry of Commerce states that Chinese outbound FDI flows have risen to over \$100 billion in 2013, 2014 and 2015.

and the People's Bank of China (PBOC) has tried to diversify its exposure to US-dollar securities. The only channel with a significant swing in growth patterns is China's FDI stock in the United States. Albeit from a low base, China's FDI stock in the US has jumped more than 800% between 2009 and 2015, signaling a sharp deviation from previous patterns.

Figure I: Changes in Selected US-China Economic Flows, 2002-2007 and 2008-2013



Source: US Census, US Treasury, Bureau of Economic Analysis.

Increasing direct investment from China is a new pattern with important policy implications. As in previous eras of capital inflow from new investors – Japanese corporations in the 1980s, or Middle Eastern sovereign wealth funds in the early 2000s – the advent of Chinese investment flows brings fresh questions about security and economic impacts.

Foreign ownership of local assets is a deeper form of economic integration than trade and is therefore subject to further scrutiny. The US reviews certain foreign acquisitions for national security threats. Investment from China may require a re-assessment of traditional risks related to FDI because it is different than most other countries that have significant FDI stocks in the US economy. China has a vastly different economic system with heavy state intervention, which even by Chinese admission has led to resource misallocations and market distortions on a concerning scale, and FDI is one channel through which those market distortions can spill over into other economies. Since China is an emerging economy with significant further growth potential, the magnitude of these distortions and their associated spillover risks has not peaked, and, on the contrary, is liable to swell further. China has a non-democratic political system without rule of law and is emerging as a geopolitical competitor of the United States in the international system, which elevates certain security concerns traditionally associated with foreign control. These atypical characteristics do not mean Chinese outbound FDI fails to bring the net benefits associated with FDI generally, and in fact we are aware of little or no deleterious side effects from Chinese FDI in the US so far. But since China is different in these notable ways, we must remain open minded to the possibility that the approaches needed to secure benefits while managing risks simultaneously may be different than in traditional cases.

The political debate in the United States over Chinese investment has become much more sophisticated in recent years compared to the anxiety and knee-jerk reactions to early Chinese ventures, such as China National Offshore Oil Corporation's (CNOOC's) bid for Unocal in 2005. The most vocal arguments about Chinese investment since then have centered not on what China is doing, but on fears of what they *might intend to do* which we do not know about. The opaque decision-making structure of Chinese firms and the heavy state intervention in the economy makes it difficult

to determine Chinese firms' intentions. Nonetheless, thanks to more systematic tracking of Chinese investor behavior over a growing duration of time, the knowledge base and information available on Chinese investment, investor motives and local impacts are far better today, and this report aims to contribute to those foundations further.

The first part of this report reviews available datasets and estimates of Chinese FDI in the United States and how they compare. The nature of these sources and their institutional perspectives are examined. In Part Two we clarify the patterns of Chinese FDI in the US in recent years, utilizing a dataset we have developed, which records individual FDI transactions by Chinese companies in the United States since the year 2000. In Part Three we turn to the firm-level make-up of Chinese investment in the United States, and illuminate the most important changes over the years. A particular focus is on clarifying the different types of state-affiliated companies operating in the US economy and their US activities. Our analysis is based on our transactions dataset, case studies, and interviews with companies, competitors, regulators and other stakeholders. Part Four reviews the Chinese FDI policy framework, analyzing both the liberalization of FDI restrictions as well as support measures that encourage FDI in specific industries and regions. This section is based on China's policy documentation, case studies and discussions with officials and executives. Part Five then reviews the current US regulatory framework for incoming investment (including Chinese), based on a review of policy, research literature and interaction with US officials. We explore concerns and proposals related to Chinese investment, and consider the implications of a potential US-China bilateral investment treaty. Finally we summarize our findings and provide forward-looking perspectives on the trajectory of Chinese FDI globally and in the United States.

1. Available Data and Estimates of Chinese FDI in the United States

Data on Chinese FDI in the United States are available from a number of sources: government agencies in the United States and China, international organizations, think tanks and academics, and private data providers. This chapter provides an overview of existing datasets, their coverage, and how they compare. Government data from both the US and China record significant growth in Chinese investment in the US economy, but they show different patterns and have major coverage gaps and time lags. Alternative datasets from think tanks and private institutions are a useful complement for tracking recent patterns and offer access to many additional variables of interest to policymakers, such as entry modes, investor characteristics and the geographic distribution of investment which are useful for gauging how normal or usual Chinese activity is compared to traditional FDI inflows.

1.1 OFFICIAL US STATISTICS

The starting point for assessing Chinese investment in the United States is official data collected by the US government. The Bureau of Economic Analysis (BEA), a government agency under the Department of Commerce, is primarily responsible for tabulating statistics on FDI in the United States. BEA utilizes a system of mandatory company surveys to compile FDI data for Balance of Payments (BOP) statistics, as well as a number of additional datasets that try to capture the operations of foreign-invested companies in the US market and the economic impacts of foreign investment.⁸ These datasets are consistent in recording significant growth in Chinese FDI in the US over the past decade, though the scale and pace of that growth differ among alternate BEA data series.

Balance of Payments and International Investment Position Data

The United States collects economic data in line with the System of National Accounts, a framework that allows comparability of national statistics across the world.⁹ The two most important concepts to capture cross-border commercial activity are the Balance of Payments (BOP), capturing the inflows and outflows of capital for specific periods of time, and the “International Investment Position” (IIP), which records the investment stock of US residents abroad and foreigners in the US.¹⁰

BEA’s BOP statistics (also called “International Transactions Accounts”) record inbound FDI flows as part of the financial account, along with other types of capital flows. BEA collects statistics on aggregate *flows* from the world as well as the breakdown for individual countries, based on the residency status of the first foreign parent of the US company. Data are available for quarterly and annual periods and are recorded on a net basis, which means that divestitures and other outflows are subtracted from gross inflows. Correspondingly, BEA’s IIP statistics include data on direct investment positions, meaning the *stock* of FDI from the world or a specific country at the end of a quarterly or annual period. Figures on aggregate FDI stock in the United States are available for different valuation methods, but detailed data by source country are only available at historical cost, meaning that assets are not adjusted for inflation or the change in market value of the underlying assets.¹¹ BEA also provides additional details on the composition of FDI

⁸ Bureau of Economic Analysis, *A Guide to BEA’s Direct Investment Surveys*, (Washington: U.S. Department of Commerce), 8-12.

⁹ Bureau of Economic Analysis, *Concepts and Methods of the U.S. National Income and Product Accounts*, (Washington: U.S. Department of Commerce, 2015).

¹⁰ Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, (Washington: U.S. Department of Commerce, 2014), 11-3-11-10.

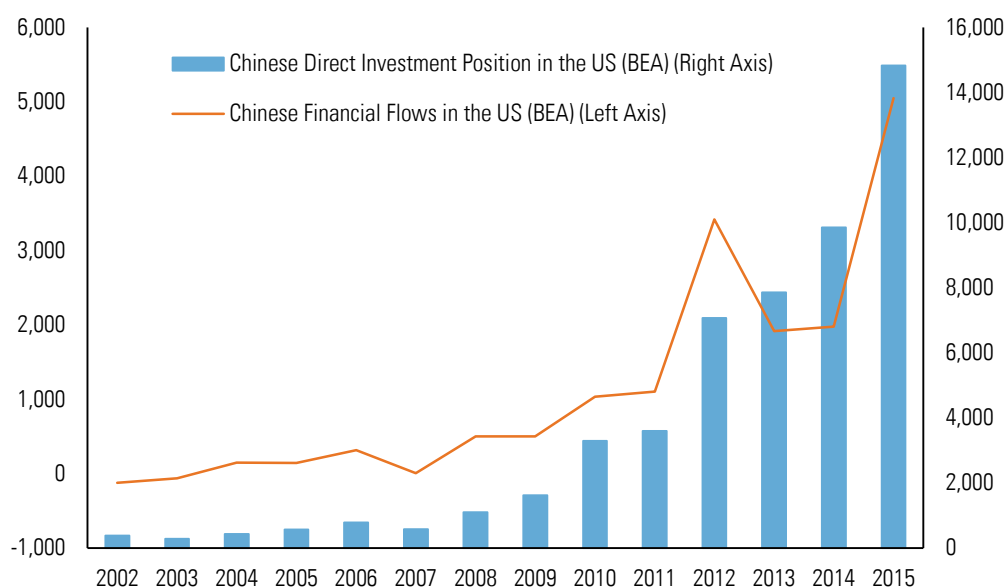
¹¹ In addition to historical cost, other concepts include current cost (which adjusts for depreciation from historical cost to current cost) and market value (which values assets according to the market price at the end of the respective period). Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, (Washington: U.S. Department of Commerce, 2014), G-2 and G-7.

flows and stocks, such as the breakdown of FDI by components (equity, reinvested earnings, and debt) or industry categories (based on the North American Industry Classification System, or NAICS).

Figure 2 displays available BEA data on the annual flows and total stock of FDI from China, confirming that Chinese FDI has expanded rapidly in recent years. Before 2008, annual flows were well below \$500 million on average and sometimes even negative. They grew to about \$3 billion in 2012, before dropping back to roughly \$2 billion in 2013 and 2014. In 2015, flows reached a record high of \$5 billion. The stock of Chinese FDI has jumped from \$1.1 billion in 2008, to \$3.6 billion in 2011, and up to \$14.8 billion in 2015.

Figure 2: Chinese FDI Financial Flows and Investment Position in the US, 2000-2015 (BEA)

USD million; flows without current-cost adjustment, investment position on historical cost basis



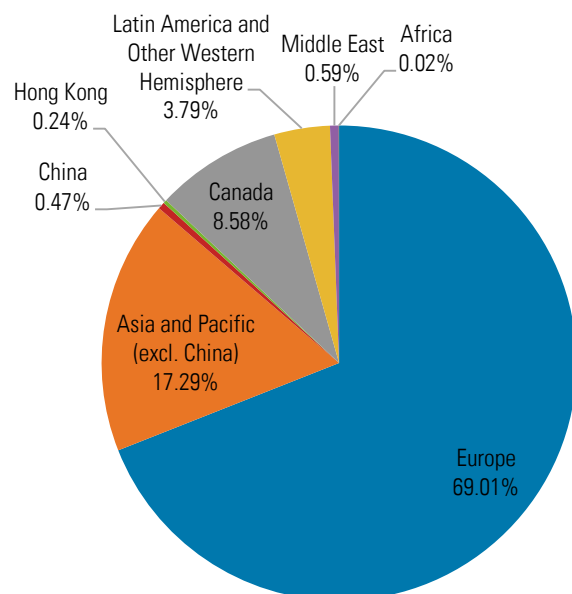
Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

The BOP/IIP data also allow for a comparison of Chinese and rest of world FDI to the US. In terms of annual flows Chinese FDI was 1.4% of the 2015 total, down from 1.8% in 2012. In terms of stock, China's role is even smaller, accounting for a trivial 0.47% of total inward FDI stock in the United States at the end of 2015 (Figure 3).

Figure 4 shows BEA's BOP FDI flow data broken down by industry. It shows that before 2014, the majority of data each year are undisclosed for confidentiality or other reasons. Wholesale trade displays negative inflows for 2012-2014, representing either intracompany transfers of funds raised in the United States or the divestment of assets, but these flows turned positive again in 2015. Depository institutions also show negative flows in 2013 and 2014, before a positive gain in 2015. The most complete breakdown in 2015 points to increasing diversification, with investments in computers and electronic parts, other industries, and other manufacturing.

Figure 3: Breakdown of FDI stock in the United States by Region and Country of Origin, 2015 (BEA)

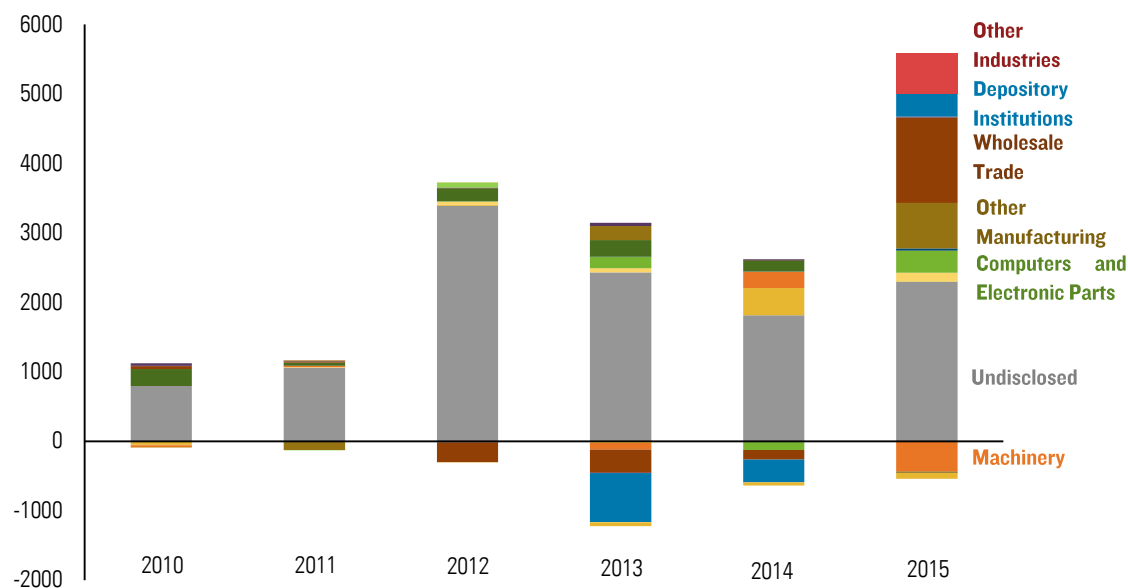
Percent of a total stock of \$3.1 trillion



Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

Figure 4: Chinese FDI Financial Flows by Industry, 2010-2015 (BEA)

USD million; flows without current-cost adjustment



Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

There are several caveats for using BEA's BOP and IIP data to analyze Chinese FDI in the United States. First and most importantly, BOP and IIP data record FDI flows and stock based on the guidelines of the IMF's Balance of Payments

Manual, so they only capture financial flows that originate from China, not investments made by Chinese-owned companies through Hong Kong and other pass-through locations.¹² Another problem is that the BOP/IIP data does not include information on many policy-relevant variables (for example, the geographic distribution of investments within the US), and many values are suppressed to protect potentially confidential business information. Finally, detailed BOP/IIP data that includes a breakdown by industry is only available with a time lag, usually about 6 months into the following year.

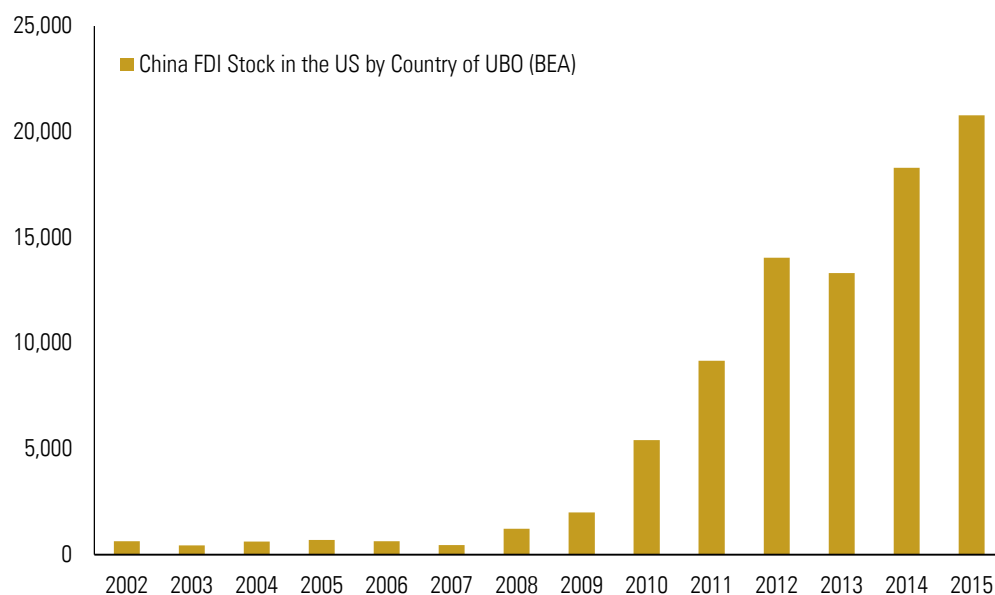
International Investment Position Data based on Ultimate Beneficial Ownership

To remedy the problem of pass-through locations distorting FDI data, BEA also provides FDI data compiled based on the country of ultimate beneficial ownership (UBO) principle. The UBO data presents FDI not based on the immediate source country, but on the country of the ultimate foreign investor (i.e. the entity that is ultimately controlling an asset).¹³ FDI data by source country based on the UBO principle is available for annual aggregate stocks and the breakdown of those stocks by industry. Data on FDI flows by UBO are not compiled.

Not surprisingly, the UBO statistics generally record a higher level of Chinese FDI stock in the US than the dataset based on country of immediate foreign investors (Figure 5). For 2012, the UBO dataset puts the Chinese FDI stock in the US at \$14 billion, almost twice the figure from regular IIP data. This is a result of Chinese investors relying heavily on entities in Hong Kong and other offshore financial centers for their global investments. Setting up entities in Hong Kong to make acquisitions elsewhere can be compelling for mainland Chinese companies from a tax perspective. The compatibility of the Hong Kong legal system with international commercial law norms and the abundance of legal and financial service providers also make such structures attractive. By the end of 2015, China's FDI stock in the US based on the UBO principle was \$20.7 billion, significantly higher than the IIP figure of \$14.8 billion.

Figure 5: Chinese FDI Stocks in the US by Country of Ultimate Beneficial Owner, 2002-2015 (BEA)

USD million; historical cost basis, UBO basis



Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

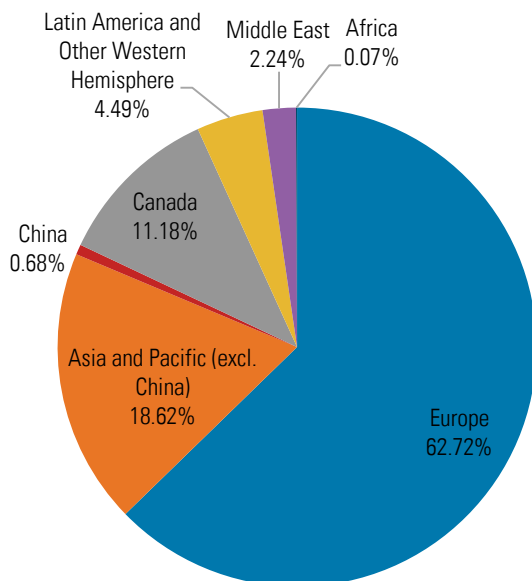
¹² Pierre Sola, "Distortions in Direct Investment Related to Special Purpose Entities," in Nineteenth Meeting of the IMF Committee on Balance of Payments Statistics (Frankfurt: IMF, 2006).

¹³ Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, (Washington: U.S. Department of Commerce, 2014), 11-3-11-10.

The UBO stock data can also be broken down by country and industry. Even under the UBO principle, China's role in total FDI stock in the United States remains marginal at only 0.68% (Figure 6). The inbound FDI position remains dominated by large traditional investment partners such as Europe (63% of the total) and Canada (11%). The Asia and Pacific region accounts for 19% of total FDI stock in the United States by UBO, but that is dominated by investors from Japan, Korea, Australia, and Hong Kong. The Middle East accounts for another 2%, while China accounts for less than 1%.

Figure 6: FDI Stocks in the US by Country of Ultimate Beneficial Owner, 2015 (BEA)

Percent of a total stock of \$3.1 trillion

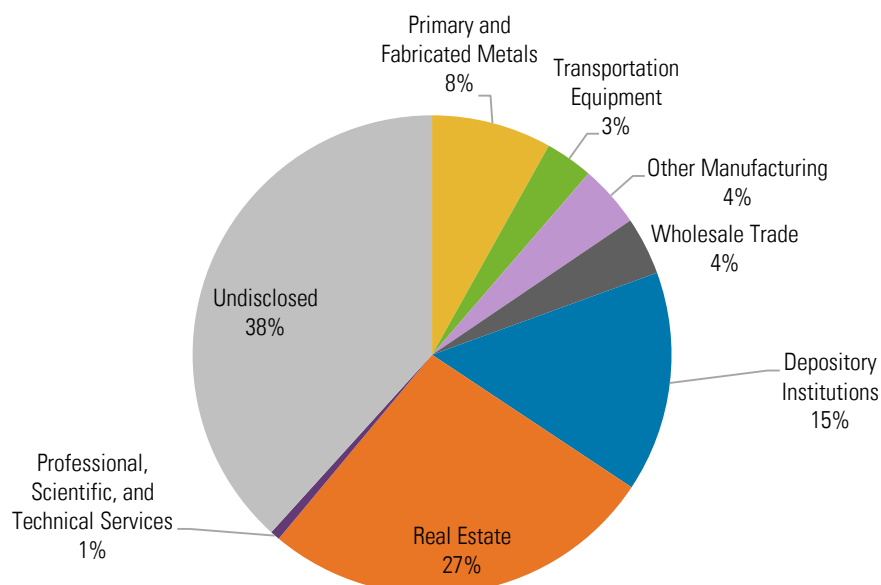


Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

Figure 7 displays the industry breakdown for Chinese FDI stock by industry on a UBO basis. Many industries' levels of investment are undisclosed. Real estate and depository institutions together account for over 40%. Other important industries are metals, wholesale trade, and other manufacturing.

Figure 7: Chinese FDI Stocks in the US on an Ultimate Beneficial Owner basis by Industry, 2015 (BEA)

Percent of a total stock of \$20.8 billion



Source: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis.

Dataset on New Foreign Direct Investment in the United States

In addition to recording financial flows and stocks according to BOP/IIP principles, BEA also compiles a dataset that records gross investment outlays by foreign companies to acquire, establish, and expand US businesses. This dataset is based on a separate survey and provides a useful alternative perspective on foreign investment in the United States, as it tracks new investments on a gross basis irrespective of the source of funds and financing structures.¹⁴ In other words, it calculates new investments by foreign entities based on funds from their home country, as well as third countries and local financing raised in the United States. It also provides additional details: for example, a breakdown by nationality of investor (based on UBO principle), type of transaction (acquisitions, greenfield projects, and expansions) or the geographic distribution of investments (by state).

Unfortunately, BEA is not able to provide a fully comparable and consistent time series for this perspective. Initially, the New Foreign Direct Investment survey was started in 1980, but BEA was forced to discontinue it in 2008 due to budget cuts. It was reinstated as the Survey of New Foreign Direct Investment in the United States in 2015, with 2014 as the first year of coverage. While BEA groups the two data series together, they are not compiled with the same methodology and thus not directly comparable. The new series includes expansions of previous greenfield investments not included in the former dataset. The reinstated series also includes investment from inversions, an increasingly important phenomenon that distorts the overall figures (notably making Ireland the largest investor in the United States), though it is not a significant issue for bilateral investment from China.¹⁵

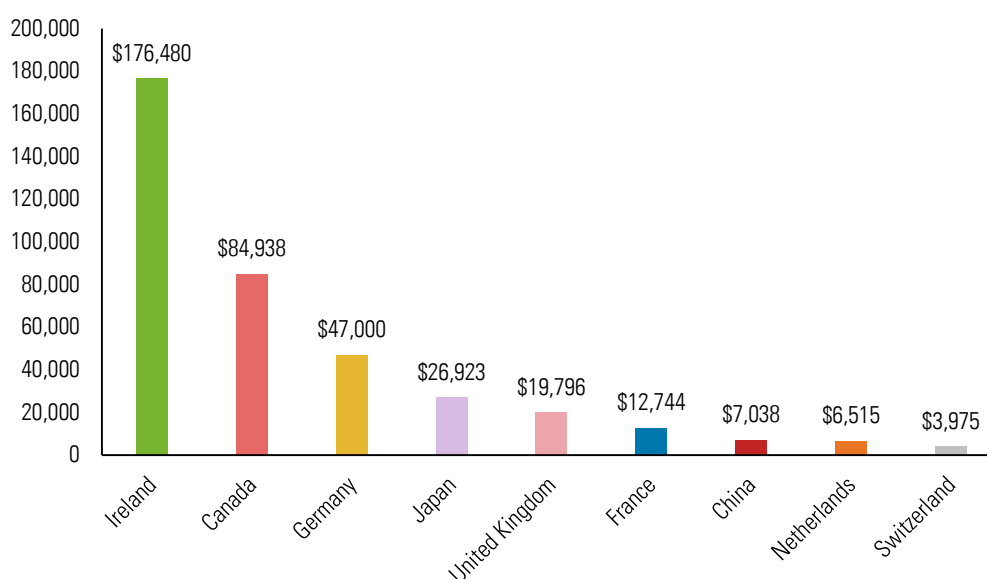
¹⁴ Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, (Washington: U.S. Department of Commerce, 2014), 11-3-11-10. Bureau of Economic Analysis, "Expenditures by Foreign Direct Investors for New Investments in the United States, 2014," *Bureau of Economic Analysis*, November 30, 2015.

¹⁵ Bureau of Economic Analysis, *New Foreign Direct Investment in the United States, 2014 and 2015*, (Bureau of Economic Analysis, 2016). Inversion refers to the process of relocating a corporation's legal domicile to reduce its tax burden.

Due to these coverage gaps, this alternative dataset does not provide material new insights on the patterns of Chinese investment in recent years. Before 2008, Chinese investments were marginal and not even disclosed separately.¹⁶ Between 2009 and 2013 there is no data. For 2015, total outlays by Chinese companies in the US are recorded at \$7.0 billion, \$5.9 billion of which are attributed to acquisitions and the remainder to greenfield projects and expansions. This is more than three times as much as the financial flows recorded by BEA in its official BOP statistics, suggesting that Chinese investment in the US is significantly higher if one includes funds that Chinese companies raise offshore or in the US locally. However, even from this perspective, China remains a comparably small investor in the US, accounting for only 1.7% of the total \$421 billion recorded by BEA from around the world in 2015 (Figure 8).

Figure 8: New FDI in the US by Country of Ultimate Beneficial Owner, 2015 (BEA)

USD million; annual flows; current cost basis



Source: "Data on New Foreign Direct Investment in the United States", Bureau of Economic Analysis.

Dataset on Activities of Multinational Enterprises

The third batch of BEA data that is useful for assessing Chinese investment in the US are its statistics on the Activities of Multinational Enterprises. This dataset is based on the Annual Survey of Foreign Direct Investment in the United States and the Benchmark Survey of Foreign Direct Investment in the United States. It collects information on the operations of US affiliates of foreign companies including total assets, employment, compensation of employees, exports of goods, imports of goods, net income, research and development (R&D) expenditures, gross property, plant, and equipment, property, plant, and equipment expenditures, and total sales.¹⁷ This dataset is calculated on a UBO basis for inbound US investments.¹⁸ The data series has a significant time lag and numerous missing values, but they are broken down by investor country and thus very helpful for adding additional color to an assessment of Chinese companies in the US.

¹⁶ Thomas Anderson, "Foreign Direct Investment in the United States: New Investment in 2008," *Survey of Current Business*, June 2009.

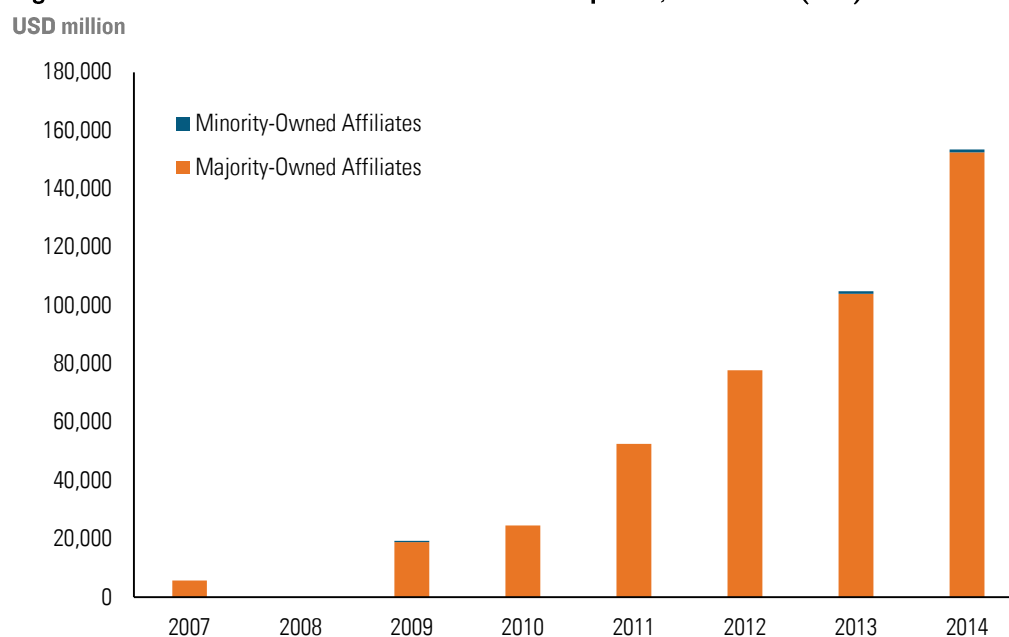
¹⁷ Bureau of Economic Analysis, *U.S. International Economic Accounts: Concepts and Methods*, (Washington: U.S. Department of Commerce, 2014), 12-3.

¹⁸ Ibid, 12-5.

Perhaps the most interesting data point is the figure on total assets by Chinese-affiliated US subsidiaries. These assets have grown from less than \$6 billion in 2007 to more than \$150 billion in 2014 (Figure 9). This is almost ten times larger than the figure on Chinese FDI stock in the IIP statistics. This discrepancy can be explained by a number of definitional differences: FDI stock is a net figure whereas assets represents a gross figure; FDI stock only includes funds from China whereas assets include funds raised locally and offshore; FDI stock is at historical cost whereas assets are at market value; and the asset figure includes the assets of both directly and indirectly held affiliates (meaning that it counts the full value of assets of all affiliates where a non-Chinese company has 10 to 50% ownership) and counts the full value of joint ventures (as opposed to a Chinese share only). Finally, the asset figure also includes banking assets, which partially explains the rapid increase since 2010.¹⁹ Nonetheless, this series offers a very useful alternative snapshot on the presence of Chinese companies in the US economy.

While all the other operational metrics for US affiliates of Chinese companies show rapid growth similar to that of their total assets, Chinese enterprises still account for extremely small shares in the overall economic impacts of foreign enterprises in the US (Table 1). On most metrics China accounts for a little more than half of a percent in the dollar value activities of foreign enterprises in the US for 2014, the most recent year of available data. The sole exception is expenditures for property, plant, and equipment for which China accounts for nearly 2% of all foreign expenditures. Importantly, this dataset misses the past one and a half years, during which Chinese FDI in the US expanded rapidly, which means that most of those metrics should be significantly higher by now. For example, Rhodium Group (RHG)'s dataset, discussed in Part 2, counts nearly 100,000 total employees for Chinese enterprises in the US at the end of 2015.

Figure 9: Total Assets of US Affiliates of Chinese Companies, 2007-2014 (BEA)



Source: "Data on Activities of Multinational Enterprises", Bureau of Economic Analysis. Years with no values are undisclosed by BEA.

¹⁹ The US assets of Bank of China alone increased from \$15.9 billion in 2011 to \$63.6 billion in 2016. See Federal Financial Institutions Examination Council, *Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks-Bank of China*, (Board of Governors of the Federal Reserve System, 2011) and Federal Financial Institutions Examination Council, *Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks-Bank of China*, (Board of Governors of the Federal Reserve System, 2016).

Table I: Data on activities of multinational enterprises from China, Japan, and the World for comparison, 2014 (BEA)

Dataset	World Total	Japan	China	China Share of World
Total Assets (USD trillion)	\$14.7	\$1.6*	\$0.15	1.02%
Total Employees (number of jobs)	6,649,000	902,100	38,300	0.58%
Compensation of Employees (USD billion)	\$547.4	\$83.9	\$1.98	0.36%
US Exports of Goods (USD billion)	\$434.2	\$79.9	\$3.4	0.78%
US Imports of Goods (USD billion)	\$735.0	\$190.8	All years withheld	N/A
Net income (USD billion)	\$143.6	\$15.2	\$1.2	0.83%
R&D Expenditures (USD billion)	\$61.4	\$8.0	\$0.50	0.81%
Gross property, plant, and equipment (USD billion)	\$2,291	\$354.8	\$19.5	0.85%
Expenditures for property, plant, and equipment (USD billion)	\$248.3	\$57.4	\$4.5	1.81%
Total sales (USD billion)	\$4,377	\$781.1	\$11.4 **	0.27%

Source: “Data on Activities of Multinational Enterprises”, Bureau of Economic Analysis. Values from most recent year available: *2010, **2011.

1.2 OFFICIAL CHINESE STATISTICS

Official statistics on outbound FDI compiled by Chinese government agencies provide additional data points for assessing the patterns of Chinese FDI in the United States. In China, two separate government agencies are responsible for the compilation of statistics on outbound FDI by Chinese companies. The State Administration of Foreign Exchange (SAFE), an agency under the central bank, is in charge of collecting and disseminating BOP data; the Ministry of Commerce (MOFCOM), which is China’s primary body governing trade and FDI relationships, maintains datasets on monthly and annual FDI flows to and from China.

Balance of Payments and International Investment Position Data

China broadly follows the System of National Accounts for compiling economic statistics, which makes its BOP and IIP statistics comparable to BEA’s data.²⁰ The State Administration of Foreign Exchange publishes quarterly and annual data on financial account transactions as well as investment positions, including FDI flows and stocks.²¹ However, in late 2015, SAFE began transitioning to the asset/liabilities presentation of FDI flows. It no longer publishes data based on the directional perspective, which makes it difficult to isolate outbound FDI by Chinese companies.²² More importantly, SAFE only publishes global aggregates and does not release a breakdown of flows by partner country or other variables.²³ Since 2009, SAFE has provided data on FDI positions with individual economies to the IMF’s Coordinated Direct Investment Survey (CDIS), but these submissions are limited to inbound FDI to China and do not yet include outbound FDI.²⁴

Detailed Outbound Foreign Direct Investment Statistics

More detailed statistics on outbound FDI, including breakdowns by recipient countries and industries, are collected by MOFCOM. MOFCOM collects and disseminates data for “non-financial” FDI on a monthly basis, based on administrative records stemming from China’s existing approval and recordal system for outbound FDI (see Part 4) as

²⁰ Xianchun Xu, “The Establishment, Reform, and Development of China’s System of National Accounts,” *Review of Income and Wealth* 55 (July 2009).

²¹ “中国国际收支平衡表 [China’s Balance of Payments],” 2015, <http://www.safe.gov.cn/>.

²² This change is in line with SAFE’s transition to Balance of Payments Manual, 6th Edition (BPM6) conventions.

²³ “中国国际投资头寸表 [China’s International Investment Position],” 2015, <http://www.safe.gov.cn/>.

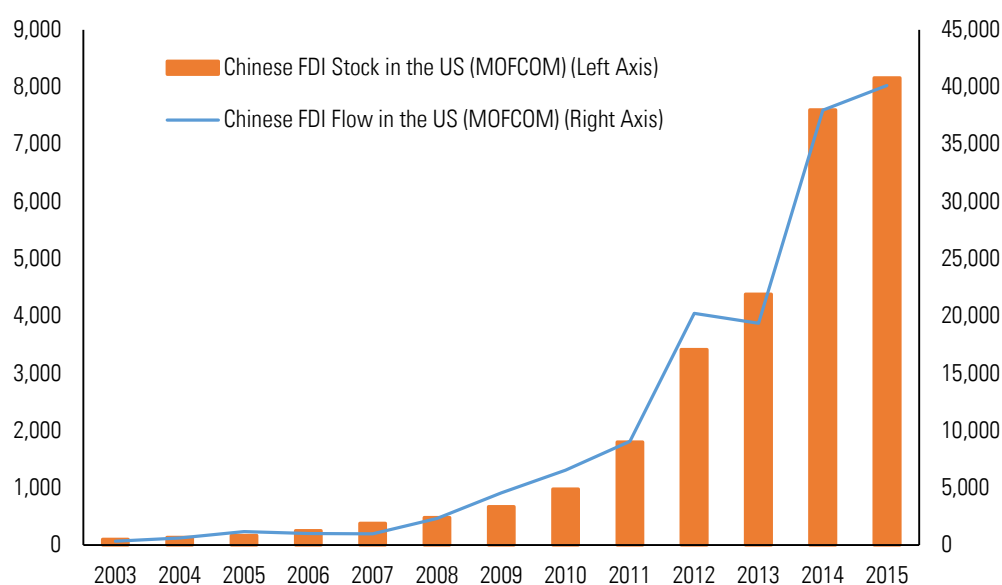
²⁴ International Monetary Fund, *Coordinated Direct Investment Survey Guide – 2015*, (Washington: International Monetary Fund, 2015).

well as periodic company surveys.²⁵ Non-financial FDI refers to direct investment by companies other than banking, securities, insurance, and other financial institutions. These monthly data points are then combined with data on financial FDI collected by SAFE and published in the form of an annual statistical bulletin on outward FDI, which is jointly published with SAFE and the National Bureau of Statistics.²⁶ The combined FDI statistics cover all foreign acquisitions and overseas establishments with over 10% resulting stake. This FDI yearbook also provides detailed information on the composition of outbound FDI in a given year by country and industry.

The data points on Chinese FDI in the United States presented in these official Chinese statistics are much larger than what official US government data show.²⁷ According to the latest yearbook, China's FDI stock in the United States reached \$40.8 billion by the end of 2015, up almost tenfold compared to five years ago. This is more than twice the latest UBO-basis stock figures published by BEA (\$21 billion in 2015). The patterns and scale of annual inflows in recent years are also significantly different. MOFCOM also recorded a small decline in 2013, but flows have subsequently climbed to \$7.6 billion in 2014 and to \$8.0 billion in 2015, which is much higher than the \$5.1 billion in the BOP for 2015 recorded by the BEA. It is also larger than the annual investment values that BEA's dataset on New Foreign Direct Investment in the US provides (\$3.5 billion for 2014 and \$7 billion for 2015). Those discrepancies can be explained by the different concepts and methodologies that both agencies use to compile FDI data. BEA follows a BOP approach, netting out reverse flows against gross outflows, whereas MOFCOM does not strictly follow the same approach.

Figure 10: Chinese Outward FDI Flows and Stocks in the US, 2003-2015 (MOFCOM)

USD million; not on a UBO basis



Source: "China's Outward Direct Foreign Investment", Ministry of Commerce.

China's statistical bulletin also includes data points on the industry distribution of Chinese outbound FDI in the United States. The categories are not exactly comparable with BEA's breakdown of Chinese stock by industry (Figure 11), but

²⁵ These administrative documents should record all investments that go through the official registration process, but they may not capture investments by Chinese entities that are routed through non-official channels or made by subsidiaries that already have funds offshore.

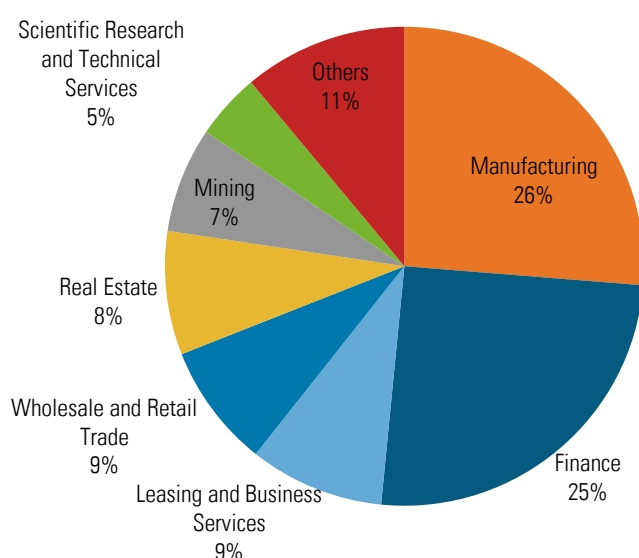
²⁶ Ministry of Commerce, 2014 年度中国对外直接投资统计公报 [2014 Chinese Outward Direct Investment Statistical Yearbook] (Beijing: China Statistics Press, 2015), 86-87, 119-120.

²⁷ In addition, in the past three years these figures have been subject to upward revisions after the initial release of data.

the two breakdowns show a broadly similar profile. The largest sector in the MOFCOM data is manufacturing, accounting for 26% or \$10.7 billion. While the analysis here further breaks down the BEA's industries, it also provides a measure for manufacturing (as a super-sector). For this measure, manufacturing accounts for 18% of investment, worth \$3.8 billion. Financial services also take a prominent role in both. MOFCOM attributes 25% of Chinese FDI stock to finance, while in BEA's measure depository institutions (the disclosed portion of financial sector investment) accounts for 15% of 2015 Chinese FDI stock in the US. The magnitude of these numbers is different though—MOFCOM records \$10.3 billion to BEA's \$3.1 billion. The next two largest sectors in MOFCOM's data are leasing and business services, and wholesale and retail trade. The BEA does not disclose any industry roughly corresponding to leasing and business services, and its two components for wholesale and retail trade sum to under 4%, compared to 8% in MOFCOM's data.

Figure 11: Chinese FDI Stock in the US by Industry, 2015 (MOFCOM)

Percent share of a total stock of \$41 billion



Source: "China's Outward Direct Foreign Investment", Ministry of Commerce. *Others includes industries specified by MOFCOM that have small shares of total stock.

I.3 INTERNATIONAL ORGANIZATIONS

A number of international organizations collect and disseminate data on global FDI trends. However, they do not have a mandate to independently compile data and instead rely on data supplied by national governments. Thus, none of the available datasets maintained by international organizations offers any additional insights on Chinese FDI flows or stocks in the United States.

International Monetary Fund

The most important source for data on globally comparable cross-border investment flows is the International Monetary Fund (IMF). The IMF collects and disseminates BOP and IIP data from more than 200 economies. In 2009, it also initiated a new program to better map out bilateral FDI flows, the Coordinated Direct Investment Survey (CDIS).²⁸

²⁸ International Monetary Fund, *Coordinated Direct Investment Survey Guide - 2015*, (Washington: International Monetary Fund, 2015).

However, both datasets rely on direct input from BEA and SAFE, so they do not yield any new insights. The one exception is that CDIS offers new SAFE data on the breakdown of China's inbound FDI by source country, which was not published before. Data points in the other direction, which would be useful for the purpose of analyzing Chinese FDI in the US, are not available. SAFE has indicated that because China's outward FDI surveys do not account for round-tripping back into China and are collected by multiple agencies (SAFE as well as MOFCOM and the National Bureau of Statistics) they do not correspond to the inbound FDI statistics.²⁹

United Nations Conference on Trade and Development

A second prominent international dataset is the FDI statistics compiled by the United Nations Conference on Trade and Development (UNCTAD), which are available through UNCTADSTAT.³⁰ The database provides historical data on global FDI flows and stocks, as well as bilateral FDI statistics. However, the data are also directly derived from national statistical agencies and thus resemble the data points released by BEA and MOFCOM. Moreover, UNCTAD's data suffers from an even longer time lag than national statistics, with the most recent data points on US-China FDI dating back to 2012.³¹ As such, UNCTAD's data does not add any value for assessing Chinese investment in the United States.

1.4 PRIVATE DATA SOURCES

Apart from official government statistics and data by international organizations, analysts can rely on a number of private datasets to assess various dimensions of Chinese investment in the United States. Several commercial data services enable a detailed perspective on Chinese investment in specific areas or industries, and a number of initiatives by think tanks and private research providers have produced data that provide a useful complement to official government statistics.

Commercial Data Services

A number of specialized data providers have data on global M&A transactions, offering a wealth of information on Chinese M&A in the United States at great detail and in real time. The most prominent firms are Bloomberg, Thomson, Dealogic, Capital IQ, and Mergermarket.³² Data on greenfield investments and expansions are more difficult to find, as there are only a few commercial providers such as fDi Markets or Oxford Intelligence. Databases that offer comprehensive information of company operations in the US market are also a possible source for information on Chinese FDI, such as Orbis, FactSet, and Capital IQ. Some of these, like FactSet, provide detailed information on privately investing companies as well as publically listed investors. Other firms provide industry-specific databases that monitor transactions in particular sectors; for example, real estate (CompStak, Real Capital Analytics, Advanced REI, and Jones Lang LaSalle), energy (Wood Mackenzie for oil and gas, Bloomberg New Energy Finance for renewables), or chemicals (N-tech Research, IHS Directory of Chemical Producers). Other providers track specific types of investment, such as CrunchBase or AngelList for early stage technology investments.

²⁹ State Administration of Foreign Exchange, *Plans and Difficulties in Reporting the CDIS Granular Data*, (International Monetary Fund, 2015), 4.

³⁰ United Nations Conference on Trade and Development, *UNCTAD Training Manual on Statistics for FDI and the Operations of TNCs*, (New York and Geneva: United Nations, 2009).

³¹ "Bilateral FDI Statistics 2014: China," April 2014, 2. "Bilateral FDI Statistics 2014: United States," April 2014, 1. "Bilateral FDI Statistics 2014," April 2014.

³² Please refer to the Data Resources section at the end of this report for more details and links to these sources, most of which require a paid subscription.

Think Tanks and Private Initiatives

In addition to commercial data providers, a number of think tanks and academic researchers have utilized a transactions-based approach to illuminate trends and the implications from growing Chinese outbound FDI.

One of the earliest databases covering China's global investments is the China Investment Tracker, which was launched by the Heritage Foundation and is now hosted by the American Enterprise Institute. The database covers China's global outbound investments from 2005 forward. It is updated bi-annually. The data are publically available for download at a transactional level and currently includes more than 1,750 transactions for the world. It also includes construction contracts and troubled transactions that were not completed. However, there are three major caveats. First, it only covers transactions of \$100 million and above, which neglects the vast majority of deals. Second, it includes all "non-bond" investments, i.e. it does not follow the common distinction between FDI (10% or more of equity) and portfolio investment (stakes of less than 10%) and instead mixes both together. Third, AEI's count of annual investment figures often also includes announced but not yet completed transactions.

For the period from 2005-2015, the AEI's China Investment Tracker records 144 transactions worth \$95.4 billion in the United States (Figure 12). The industries that attracted the most Chinese capital are finance (23% of total), real estate (19%), and energy (16%). Financial services takes such a prominent role because the dataset includes stakes of less than 10%, and a number of Chinese investors have acquired such stakes in US financial services companies over the past decade.³³ In 2015, it records investments of nearly \$18 billion, more than any other available count. That is largely because it includes portfolio investment transactions that would ordinarily not be counted as FDI.

Figure 12: Chinese Investments in the US, 2005-2015 (AEI)

USD million

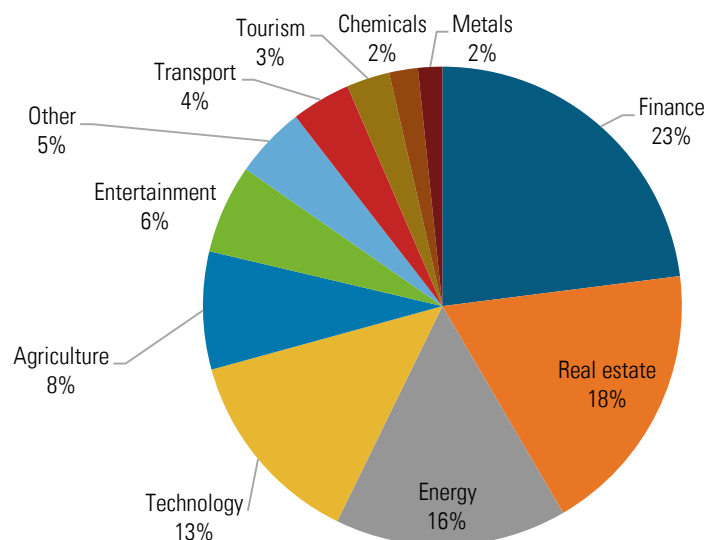


Source: China Global Investment Tracker, American Enterprise Institute and Heritage Foundation.

³³ For example, China Investment Corporation (CIC)'s multi-billion dollar 9.9% stakes in Blackstone and Morgan Stanley, discussed in the case study on CIC in Part 3.3.

Figure 13: Chinese Investments in the US by Industry, 2005-2015 (AEI)

Percent share of total stock of \$95.4 billion



Source: China Global Investment Tracker, American Enterprise Institute and Heritage Foundation.

Rhodium Group (RHG), a private research firm, maintains another transactional dataset on Chinese outbound FDI in the United States, covering only includes transactions that meet the conventional definition of FDI. Since 2008, RHG has tracked FDI transactions by Chinese firms in the US economy and published the results on a quarterly basis through its China Investment Monitor (CIM).³⁴ Similar to the AEI's China Investment Tracker, the CIM dataset is compiled by collecting information on individual transactions and then aggregating those data points.³⁵ However, the CIM dataset has a much lower threshold for deals to be included (\$500,000), and it only includes investments that would be counted as direct investment under international definitions (resulting stakes exceeding 10% of equity). It captures all FDI transactions by ultimately mainland Chinese-owned entities, regardless of intermediate sources of financing. The dataset also only includes transactions that have been completed and it logs large multi-year investments incrementally over time instead of recording the entire amount at the outset. The latter is important because the value of most FDI projects is overstated at announcement, so adding them at full face value increases the risk of over-counting. Moreover, recording multi-year investments incrementally makes the data more comparable to official datasets that aim at recording annual investment flows.

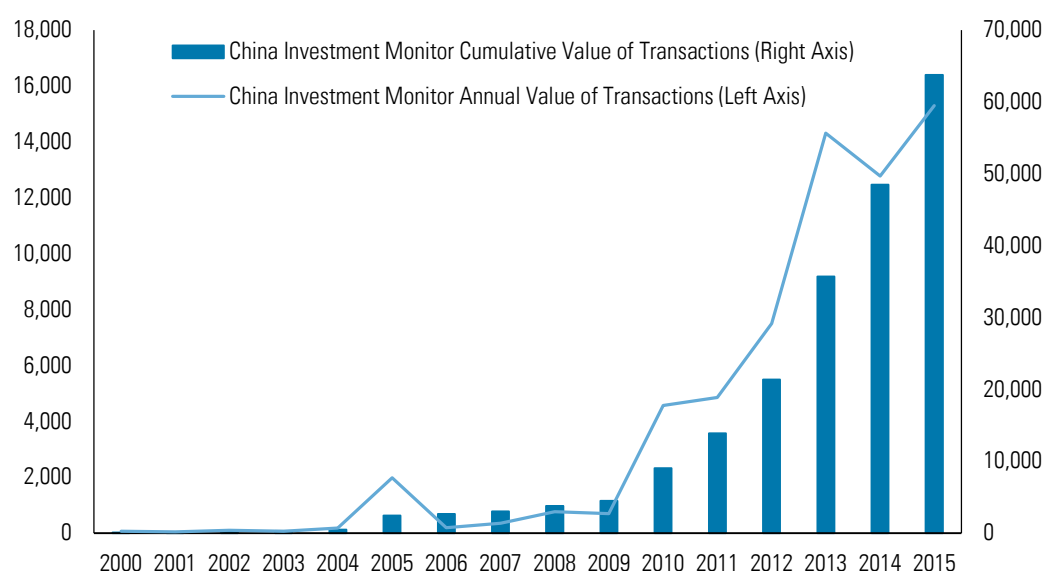
From 2000 to 2015, the CIM dataset recorded more than 1,200 individual FDI transactions by Chinese investors in the United States worth a combined \$63.8 billion (Figure 14). Aggregate annual investment has grown from less than \$1 billion before 2008 to more than \$15 billion in 2015. The CIM dataset also provides other information and variables such as investor characteristics, the geographic details of each investment, and measures for the local impacts. It cannot be used for analyzing balance of payments questions, but it is a useful complement to track Chinese FDI flows in a timely and granular way. A detailed analysis of the patterns and impacts of Chinese FDI in the US in recent years based on the CIM dataset follows in Part 2 of this report.

³⁴ Rhodium Group, "China Investment Monitor," 2011, <http://rhg.com/interactive/china-investment-monitor>.

³⁵ Thilo Hanemann, "China Investment Monitor: Methodology Update," *Rhodium Group*, July 21, 2015.

Figure 14: Chinese FDI Transactions in the United States, 2000-2015 (RHG)

USD million



Source: Rhodium Group.

1.5 COMPARISON OF OFFICIAL AND PRIVATE SOURCES

Figure 15 provides a comprehensive snapshot of all available official and private data points capturing annual inflows of Chinese FDI to the United States. The estimates for 2015, the latest year for which we have data from all of those sources, range from \$5 billion to \$18 billion. BEA's balance of payments data generally records the lowest amount of annual inflows because it doesn't capture the inflow of Chinese capital through third countries and it is a net number that reflects reverse flows as well. BEA's data series on new establishments—which records gross spending on acquisitions and new greenfield projects—records much higher amounts, but is only available for two years. Data from China's MOFCOM was very similar to BEA's BOP figures until 2013, but has diverged in recent years, recording a number multiple times higher than what BEA figures show.

Both available private datasets show a much more pronounced increase in Chinese FDI flows in the United States. RHG's CIM figures were similar to BEA and MOFCOM statistics up until 2009, but have recorded a much larger increase in annual flows since then. It also records a higher annual investment amount compared to BEA's new dataset on new establishments, only about \$1 billion higher. These differences can be explained by a range of factors. First, private providers do not rely on surveys and thus have more leeway to independently collect and estimate data. Second, there may be slight differences in the definition of FDI³⁶. Third, they use different methodologies and timelines for estimating and logging investment figures.³⁷ The AEI dataset is generally higher and more volatile because it does not strictly adhere to common definitions of FDI, and includes small percentage portfolio investments that inflate annual investment values and cause significant fluctuations.³⁸

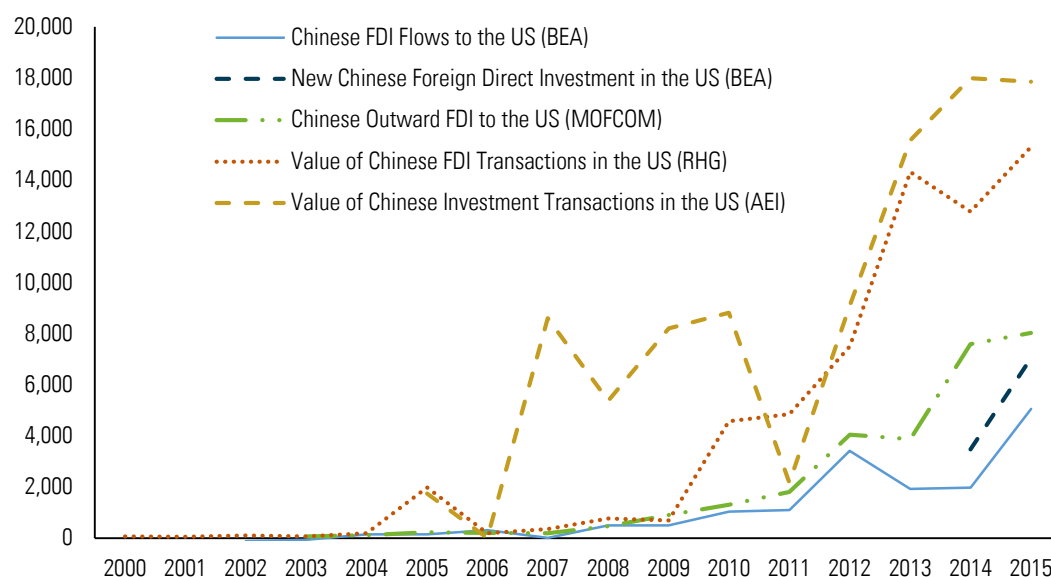
³⁶ The most significant differences are the treatment of commercial real estate investments; non-operating stakes in upstream resource extraction; and investments in aviation, shipping, and other services.

³⁷ For example, the assumption of debt or the accounting for greenfield projects that stretch over multiple years.

³⁸ Examples include most of China Investment Corporation (CIC)'s equity investments in the US, such as its stakes in Blackstone, Morgan Stanley, and BlackRock. These are discussed in the case study of CIC in Part 3.

Figure 15: Comparison of Available Data for Chinese FDI Flows to the US, 2000-2015

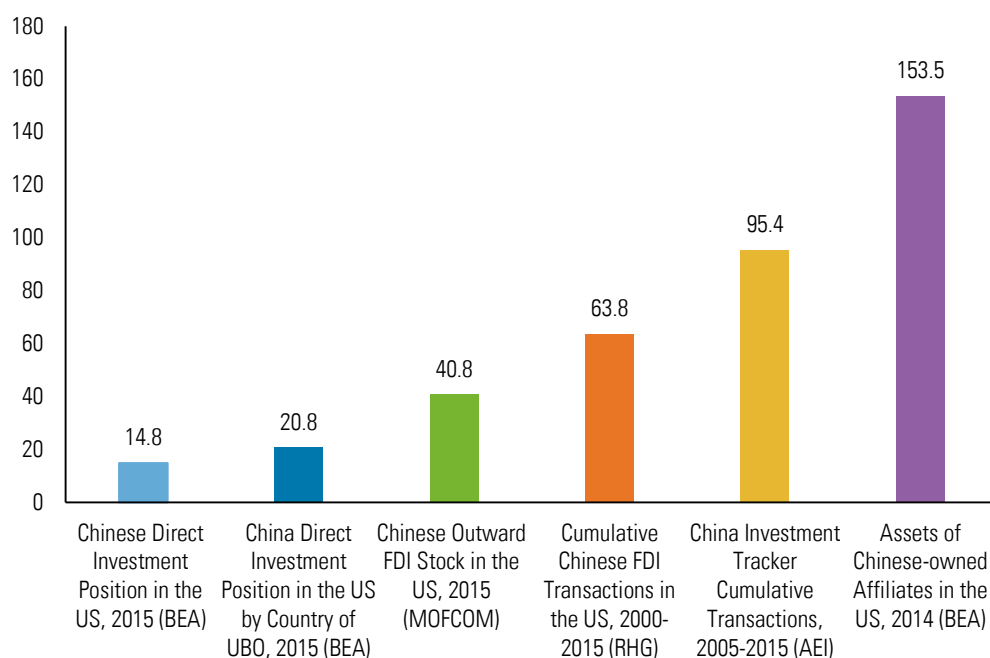
USD million



Sources: "Balance of Payments and Direct Investment Position Data", Bureau of Economic Analysis, "China's Outward Foreign Direct Investment", Ministry of Commerce, American Enterprise Institute, Rhodium Group.

Figure 16: Comparison of Available Data for Chinese FDI Stock in the US, 2015

USD billion



Sources: "Balance of Payments and Direct Investment Position Data" and "Data on Activities of Multinational Enterprises", Bureau of Economic Analysis, "China's Outward Foreign Direct Investment", China Ministry of Commerce, American Enterprise Institute, Rhodium Group.

Figure 16 provides a similar snapshot of available official and private data points capturing various measures of the total stock of China's FDI in the US. Traditional stock figures from BEA show the lowest figures, at \$14.8 billion and \$20.8 billion by UBO principle, respectively. Both of those figures are at historical value (i.e. don't take into account inflation or changes in asset prices) and incorporate account divestitures and other reverse flows. China's MOFCOM puts the total figure of China's FDI stock in the US at \$40.8 billion, a little less than three times as much as BEA. The cumulative value of FDI transactions captured by RHG's CIM amounts to \$64 billion. AEI's China Investment Tracker records a higher amount of \$95 billion, for the reasons explained earlier. BEA's figure on total assets comes in the highest, because it captures a gross figure including the full assets of Chinese joint ventures in the US and the assets of US subsidiaries of Chinese banks and other financial institutions.

2. Recent Trends in Chinese FDI in the United States

After reviewing available datasets that can be used for analyzing Chinese FDI in the United States, Part 2 of this report provides an in-depth review of recent Chinese investment patterns in the United States, focusing on the period from 2010 to 2015. Official datasets are not suitable for such an undertaking due to time lags, suppressed data, and coverage gaps. Therefore this section relies on RHG's CIM dataset to review the most recent trends including aggregate flows, entry modes, the geographic distribution of investment, the mix of targeted industries, the type of business activities, and the number of jobs directly provided by these companies.

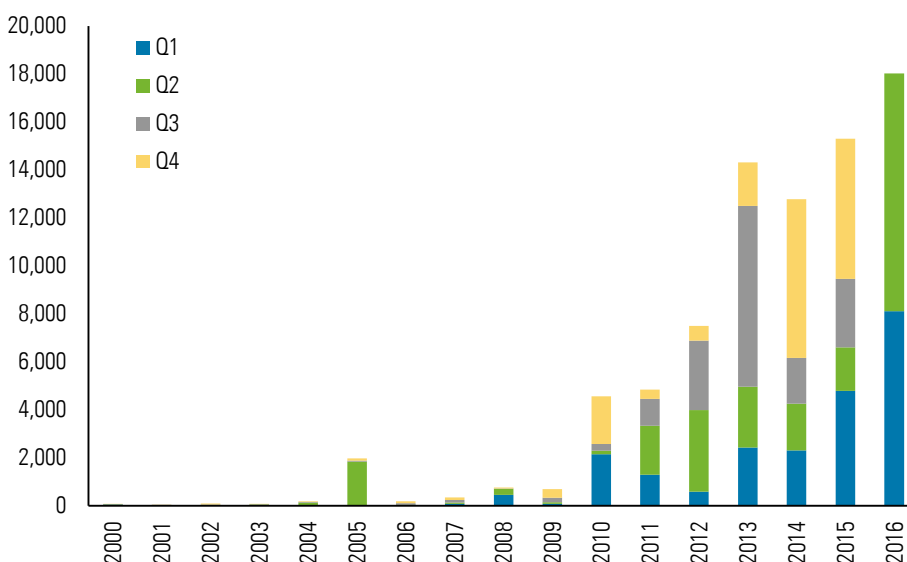
2.1 AGGREGATE FLOWS AND GROWTH

As described in Part 1, available official and private datasets all record fast growth of Chinese FDI in the US in recent years, but they show different trajectories. RHG's CIM dataset provides a coherent data series on the aggregate value of Chinese FDI transactions in the United States for each quarterly period since 2000, which is displayed in Figure 17.

Chinese investment levels remained low before 2008, with the singular exception of Lenovo's purchase of IBM's PC division in 2005 for \$1.75 billion. Annual investment then grew to more than \$500 million in 2008-2009, before jumping to over \$4.5 billion in 2010 and \$7.5 billion in 2012. In 2013, the aggregate value of Chinese FDI doubled to more than \$14.3 billion, partially reflecting Shuanghui's record acquisition of Smithfield Foods for \$7.1 billion. Investment levels dipped to \$12.8 billion in 2014, but subsequently reached a new record in 2015 with \$15.3 billion of completed investments. Completed transactions in the first half of the year add up to \$18 billion, which puts the US on track for another record year in 2016 (see the Conclusions and Outlook section at the end of this study).

Figure 17: Chinese FDI Transactions in the US by Quarter, 2000-1H 2016

USD million

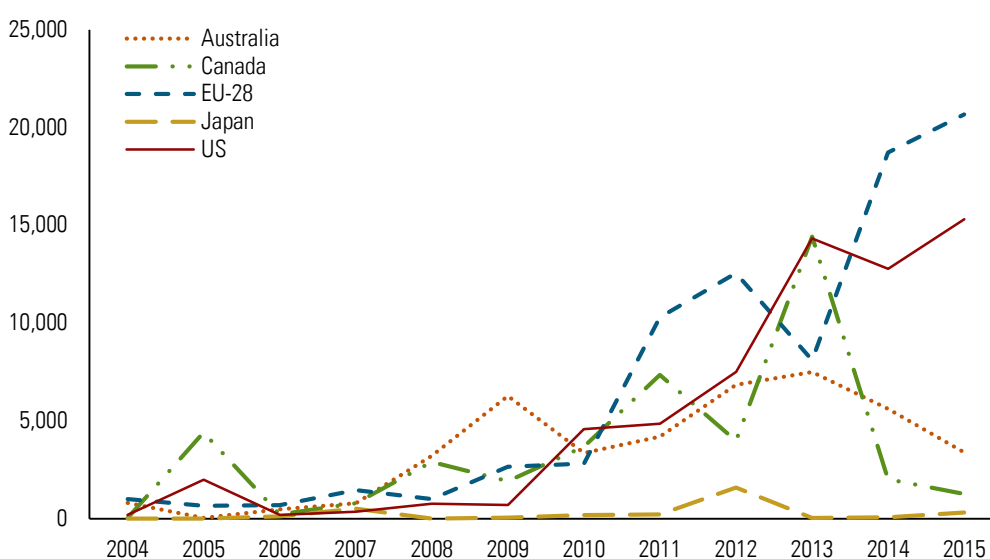


Source: Rhodium Group.

This rapid increase of Chinese FDI in the United States is similar to the patterns observed in other advanced economies. Figure 18 displays the increase of Chinese FDI in the United States, along with Chinese investment in European Union, Canada, Australia, and Japan. Chinese FDI in the EU-28 (which RHG counts using the same methodology as used for the CIM dataset) shows a very similar trajectory, with more than \$20 billion of annual investment in the past two years and a total of \$81 billion of FDI since 2000.³⁹ Canada also hosts significant FDI from China, around \$43 billion according to our count. However, investments were largely focused on natural resources assets (oil and metals) and the recent market dynamics as well as new rules by Ottawa issued in 2015 that prohibit the investment by state-owned enterprises in certain resource assets have caused a sharp drop in Chinese investment in Canada in 2014 and 2015. Chinese FDI in Australia, another resource-rich advanced economy, shows similar patterns, but the decline was less pronounced as strong interest in agriculture and food assets have somewhat made up for the sharp drop in metals and energy investments. The only advanced economy that has not received significant amounts of FDI from China is Japan, which can be explained by economic variables (Japan's economic profile and growth outlook) as well as political factors (a generally unwelcoming FDI environment and a complicated bilateral relationship with China).

Figure 18: Chinese FDI Transactions in Advanced Economies, 2000-2015*

Annual aggregate values, USD million



Sources: Thomson, Rhodium Group. *Canada, EU-28, and US from Rhodium Group data. EU-28 refers to all current EU members including years prior to EU accession. Australia and Japan data from Thomson M&A transactions only, do not include greenfield FDI transactions.

2.2 ENTRY MODES

Official statistics do not provide a good perspective on the modes that Chinese companies chose to enter the US market prior to 2014. BEA's new dataset offers a breakdown of new investments by entry mode, but only for 2014 and 2015. The CIM dataset breaks down Chinese investment by acquisitions, greenfield investments, and expansions (Figure 19).

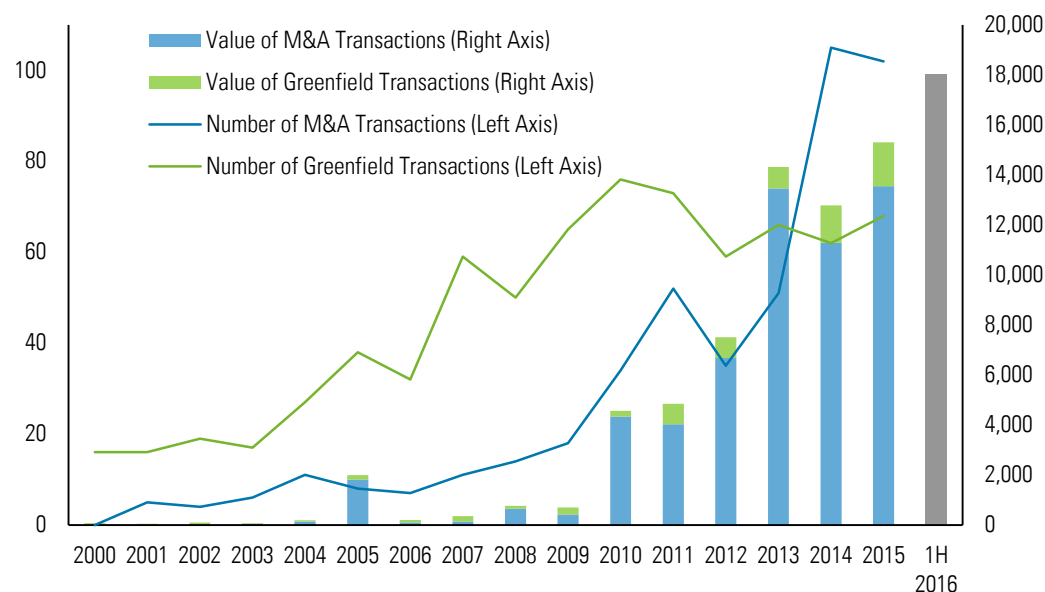
Acquisitions of existing companies and assets (mergers and acquisitions, or M&A) have been the preferred mode for Chinese investors to enter the US market because they allow quicker market access than organic growth. For the period of 2000 to 2015, M&A accounts for nearly 90% or \$56.6 billion worth of total investment. The share of M&A in the total

³⁹ Thilo Hanemann and Mikko Huotari, *A New Record Year for Chinese Outbound Investment in Europe*, (Berlin: Mercator Institute for Chinese Studies, 2016).

number of transactions in the same period is lower (463 deals, or 38% of total), but has increased since 2012 due to an increase in small and medium sized deals by private investors, as well as private equity transactions and other financial investments.

Figure 19: Chinese FDI Transactions in the US by Type, 2000-1H 2016

Number of transactions; USD million



Source: Rhodium Group. Grey reflect preliminary data in H1 2016 for the value of greenfield and M&A transactions, respectively.

Table 2: Top Greenfield Projects under Construction by Investment Value, 2016

USD million

Chinese Company	US Subsidiary	Projected Total Investment	Announced Date
Tranlin Paper	Paper plant in Virginia	2,000	6/18/2014
Shandong Yuhuang	Methanol plant in Louisiana	1,850	7/18/2014
Zarsion Holdings	Brooklyn Basin development in Oakland, California	1,500	4/19/2013
Shandong Sun Paper	Paper plant in Arkansas	1,360	11/23/2015
Greenland	Pacific Park development in Brooklyn, New York	1,300	8/5/2013
Greenland	Metropolis development in Los Angeles, California	1,300	10/11/2013
Tianjin Pipe	Steel pipe factory in Texas	1,100	1/26/2009
Volvo (owned by Geely)	Factory in South Carolina	500	5/11/2015

Source: Rhodium Group.

Greenfield projects—investments in new companies and operations as well as the expansion of current operations—account for the majority of transactions (743 or 61%). However, for the most part, greenfield projects remained small in scale and thus they only account for 11% of total investment in the period from 2000 to 2015. One important recent trend is the changing nature and increased profile of those projects. Earlier greenfield investments (and the majority of the total number of projects) were mostly small sales or representative offices for large Chinese companies or smaller trading firms. In recent years, new forms of more capital-intensive greenfield investment such as manufacturing plants, R&D centers, and new real estate developments have raised the profile of Chinese greenfield investment in the

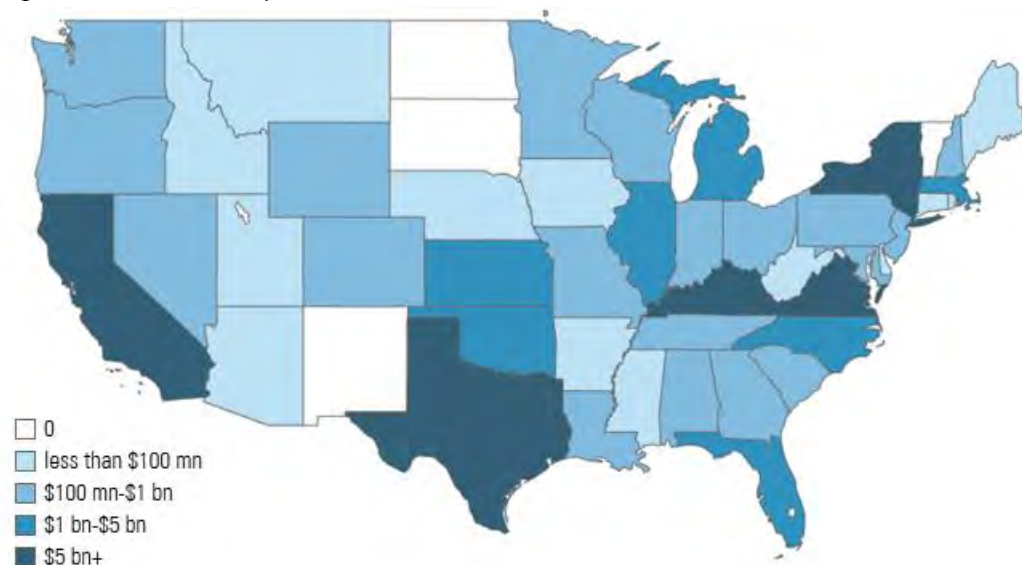
US. R&D operations are attracting interest as Chinese companies are eager to move up the technology ladder but are facing a lack of talent (see section 2.4 for more details). In 2015, investment in greenfield projects amounted \$1.8 billion, a sevenfold increase from \$240 million in 2010.

Several large projects with total investment of more than \$1 billion are now under way, such as Yuhuang Chemical's \$1.85 billion methanol plant in Louisiana and Tranlin Paper's \$2 billion paper plant in Virginia (see Table 2). Another important recent trend is the expansion of existing greenfield facilities, such as the expansion of Tianjin Pipe's plant in Texas. We are also recording a significant increase in cases of Chinese investors expanding their previously acquired US operations. A prominent example is Wanda's acquisition of theater chain AMC, which invested more than \$100 million to build a new headquarters in Kansas. Smithfield Foods has also expanded operations at multiple processing plants since it was acquired by Shuanghui in 2013.

2.3 GEOGRAPHIC DISTRIBUTION

None of the official datasets gave a detailed assessment of the distribution of Chinese investment across the US and the location of Chinese companies.⁴⁰ RHG's CIM dataset allows detailed tracking of Chinese investment by location. The map in Figure 20 shows cumulative Chinese FDI in each state since 2000, logged by the headquarters location of greenfield projects and acquired companies.⁴¹ By June 2016, 47 out of 50 states had received investment from China. The top five recipients of Chinese capital were California, New York, Virginia, Texas, and Kentucky (Table 3).

Figure 20: Chinese FDI by State, 2000-IH 2016*



Source: Rhodium Group. Alaska received \$7 million worth of investment and Hawaii \$500 million over that period. *Values assigned to each state are based on the location of greenfield projects and headquarters location of acquired companies.

⁴⁰ We are not aware of any significant Chinese investments in US Territories (Guam, American Samoa, the Northern Marianas Islands, Puerto Rico, or the US Virgin Islands).

⁴¹ This is the same data as the one presented in the China Investment Monitor (<http://rhg.com/interactive/china-investment-monitor>).

Table 3: Top Recipient US States of Chinese FDI, 2000–1H 2016

Cumulative value, USD billion

Ranking	State	Value of FDI Transactions	Top Industry	Significant Investments
1	California	\$9.1	Real Estate and Hospitality	Legendary Entertainment, OmniVision Technologies, Integrated Silicon Solutions, Robinsons-May site development
2	New York	\$9.2	Real Estate and Hospitality	Waldorf Astoria, Ironshore, 1 Chase Manhattan Plaza
3	Virginia	\$8.9	Agriculture and Food	Smithfield
4	Texas	\$7.0	Energy	Nexen Gulf of Mexico assets, Eagle Ford shale stake
5	Kentucky	\$5.7	Consumer Products	GE Appliances
6	North Carolina	\$4.7	ICT	IBM x86 division, IBM PC division
7	Michigan	\$4.0	Automotive	Henniges Automotive, Nexteer Automotive, Key Safety Systems, Meadowbrook Insurance
8	Illinois	\$3.9	ICT	Motorola, 311 South Wacker Drive
9	Oklahoma	\$3.7	Energy	Devon energy assets, Mississippi Lime joint venture
10	Kansas	\$2.7	Entertainment, Media, and Publishing	AMC

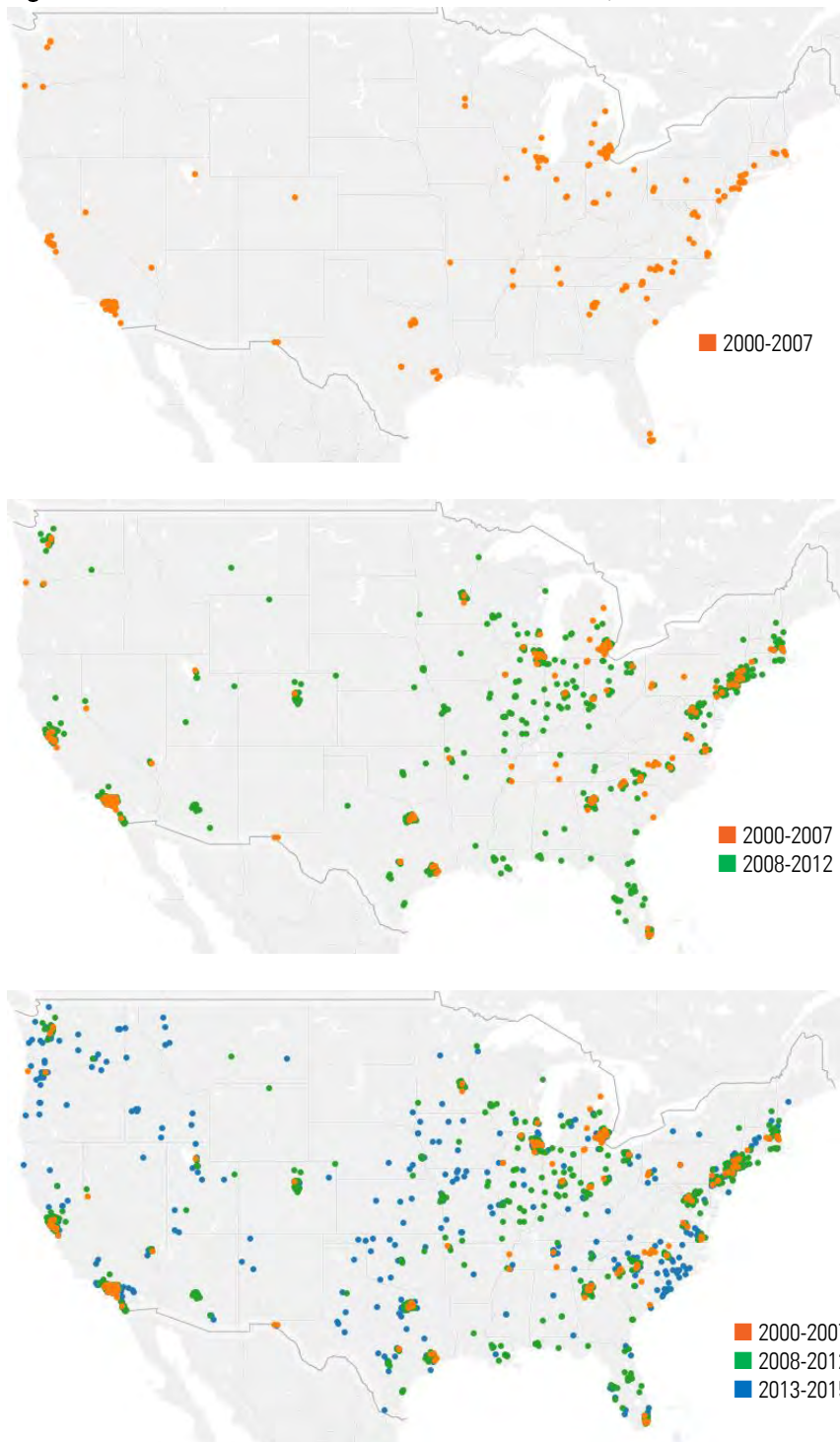
Source: Rhodium Group.

Figure 21 displays the distribution of Chinese investment across the US for three different periods of time. The figure utilizes a slightly different dataset that does not log investments at the headquarters location, but breaks each company into individual operations. This allows a more granular perspective on the migration of Chinese companies to the US and the local presence of each subsidiary.⁴²

Prior to 2008, most Chinese investment was concentrated on the coasts in California and New York, as well as a few other states with significant investments, including North Carolina (Lenovo's purchase of IBM), Michigan (a larger number of smaller deals such as Plastic Trim and early investments by Wanxiang) and Texas (Huawei's first major US operation). From 2008 onwards, as Chinese investment began to grow steadily, there was further deepening of Chinese investor presence in coastal metropolitan areas, especially along the Northeast Corridor between Washington D.C. and New York. Investment also expanded through the Midwest, in Michigan, Indiana, Ohio, and Illinois, with some of the largest investments in the auto sector. Michigan alone had more than 20 deals worth \$1 billion together. The US also received investment through China's expanded appetite for natural resources, as Chinese companies took stakes in energy projects in Wyoming, Colorado, Oklahoma, and Texas. While Chinese investment spread to new parts of the country, investors continued to push heavily into the coasts as well, with larger numbers of investments in the greater San Francisco, Los Angeles, and New York areas.

⁴² Rhodium Group first published this dataset in 2015 for a study on Chinese investment by Congressional District. For the original report, refer to National Committee on U.S.-China Relations and Rhodium Group, *New Neighbors: Chinese Investment in the United States by Congressional District*, (2015). For the 2016 update, refer to National Committee on U.S.-China Relations and Rhodium Group, *New Neighbors: 2016 Update*, (2016).

Figure 2I: The Growth of Chinese-owned US Subsidiaries, 2000-2015*



Source: Rhodium Group. *This charts displays the location of individual operations by Chinese-owned entities in the US. Each operation is recorded at the date of ground-breaking or closing date of the acquisition of the parent company.

In the current boom phase, which started around 2013, Chinese companies have pushed further afield, with new investments spreading further across the country. The Pacific Northwest, an area with a strong tradition of FDI but previously with little Chinese investment, began to receive greater Chinese investment. Other states with little FDI overall, such as Idaho and Utah, began to receive investment from China. Chinese investment also began to spread further across the south, with new investments in Tennessee, Georgia, and Alabama. Florida, another state that has attracted significant FDI overall but comparatively little from China, also received its first significant Chinese investments. Shuanghui's acquisition of Smithfield in particular expanded Chinese presence to many more areas of the US. New industry trends also attracted Chinese investors to traditional centers for FDI: the tech boom in San Francisco, increasing interest in financial services in New York, entertainment in Los Angeles, and real estate in all of these markets.

2.4 INDUSTRY MIX AND BUSINESS ACTIVITIES

Official statistics offer a fragmented, incomplete, and very aggregate picture of Chinese FDI in the United States by industry and activity of the respective US subsidiary. RHG's CIM data provides a detailed perspective on the evolution of Chinese investment interests in the US market by sector, including important shifts in the last two years. We also augmented the industry perspective by coding each transaction with the business activity of the new subsidiary, which gives an alternative perspective on the commercial logic of Chinese investment and recent changes therein.

Chinese FDI by Industry

Figure 22 shows a breakdown of the \$82 billion of Chinese FDI in US from 2000 to 1H 2016 by industry. The category of real estate and hospitality takes the top spot, accounting for one-fifth of total investment, as commercial real estate in large US cities has become increasingly attractive to Chinese investors in the past three years as they are seeking opportunities to diversify into safe haven assets with stable long term returns. Information and communications technology (ICT) accounts for 17% of total investment, ranging from early investments in IT equipment to newer deals in semiconductors and software. Energy comes in third place (13% of total investment), driven by a boom in unconventional energy investments from 2009-2013. Agriculture and food is tied with entertainment for fourth place, each with a 9% share. Agriculture's share almost solely derives from Chinese ownership of the largest US pork producer Smithfield Foods, while entertainment is due to multiple large acquisitions primarily by conglomerate Wanda, such as the purchases of AMC and Legendary Entertainment. The remaining 32% of total investment are widely spread across other sectors, reflecting the diversity of sectors of the US economy in which Chinese investors are interested.

Figure 23 shows dynamics in those 15 different industries over time, which allows us to synthesize the most important trends. Four themes stick out: the boom and subsequent bust in natural resource investment; the strong growth in FDI seeking to tap US technology and innovation; the change in services sector investment from trade facilitation to modern services; and a jump in direct investments with a financial nature.

Upstream energy and metals assets were primary targets of the first wave of China's global FDI beginning in the early 2000s, both in emerging markets and advanced economies. Interest in US natural resources was deterred by CNOOC's failed takeover of Unocal in 2005.⁴³ Since 2010, Chinese investment in the US energy sector (and to a lesser extent metals and minerals) jumped significantly. The boom in unconventional oil and gas extraction made the US a prime frontier for global oil and gas investments, and revived Chinese interest in North American energy plays.⁴⁴ Another factor was a greater awareness of political risks related to resource investments in politically unstable countries, triggered by developments in Syria and Sudan. In 2010-2013, the US energy sector attracted \$8.4 billion from Chinese firms eager to expand their overseas production bases and involvement in modern extraction techniques. Investments

⁴³ In 2005, one of China's big three oil companies, CNOOC, made an \$18.5 billion takeover bid for US oil company Unocal. Strong political opposition to the deal led to CNOOC dropping the bid, and Unocal ultimately merged with Chevron at a lower price.

⁴⁴ Unconventional oil and gas refers to deposits in low permeability rock that require alternative extraction methods, such as tight oil, tight gas, and shale gas.

dropped sharply after 2013, as firms were preparing for a new growth model with lower resource intensity, and as an anti-corruption campaign paralyzed decision making and chilled risk appetite at China's oil companies.⁴⁵ A small number of Chinese investors took advantage of opportunities to invest after the collapse of energy prices in 2015, but the investment levels remain small. In other economies, Chinese investors have shown strong interest in soft commodities such as food, but at present Chinese US activity in those sectors remains mostly limited to Shuanghui's acquisition of Smithfield.⁴⁶

Another important trend is the rise of Chinese investment in American technology and advanced manufacturing starting around 2010, which was accelerated by structural adjustment and pressure to upgrade innovative capacity at home. A number of domestic factors, including increasing competition, rising factor input costs (especially labor), environmental compliance and remediation costs, and local impediments to consolidation are threatening the old business model of many Chinese manufacturers. These new operating realities are compelling Chinese firms to look at assets in advanced economies to increase their competitiveness at home and move up the value chain. The growing amount of FDI in industrial machinery, electrical equipment and components, automotive, alternative energy, medical devices, and ICT illustrate that motive. In a number of sectors, industrial policy and other government guidelines are an important additional push factor (see our discussion in Part 4).

Since 2011, we also record a significant increase in service sector investments and much higher average transaction values. For most of the past two decades, most Chinese services investments consisted of low-value greenfield projects geared towards facilitating imports and exports. Chinese investors have ramped up investments in modern service operations such as research and development, design, and testing. Those investments complement the acquisition of advanced manufacturing assets, and allow Chinese firms to tap into the US talent base and move closer to their US customers. They are also acquiring US assets that are growing rapidly in China, such as entertainment.

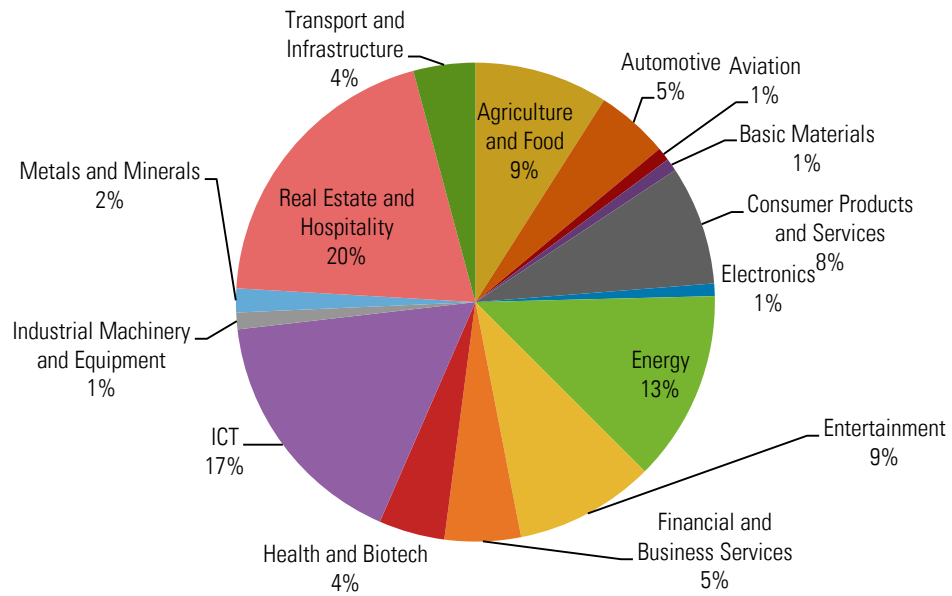
The last noteworthy trend is the rapid growth of "financial" FDI – namely direct investment stakes that are part of the asset management strategies of Chinese individuals, firms, and institutional investors. Traditionally, most Chinese investors held most of their assets in China because of political restrictions on outward investment and opportunities related to the strong appreciation of domestic real estate assets. However, in light of current uncertainties about the growth outlook and political risk in China, many investors currently look to diversify their portfolios internationally. Safe haven economies, with sound legal systems and property rights protections—like the United States—are naturally attractive for such flows. Fosun, a diversified conglomerate, Anbang, an insurance company, and HNA Group, an airline and logistics conglomerate, are the most important players in the US (see Part 3). The sector that is recording the most capital inflows from those entities is commercial real estate, which drew in a combined \$10.2 billion of Chinese investments in the past three years.

⁴⁵ When President Xi came to power in 2012, he launched an anti-corruption campaign, which over the past 4 years has led to the investigation of more than 1,800 officials and executives. Executives at state-owned oil companies were affected too, which diminished their appetite for future overseas investments. See Lucy Hornby, "China Shakes up Leadership at 3 State Oil Groups," *Financial Times*, May 04, 2015.

⁴⁶ Soft commodities refer to grown, as opposed to extracted, commodities, such as agricultural and forestry products.

Figure 22: Chinese FDI Transactions in the US by Industry, 2000-IH 2016

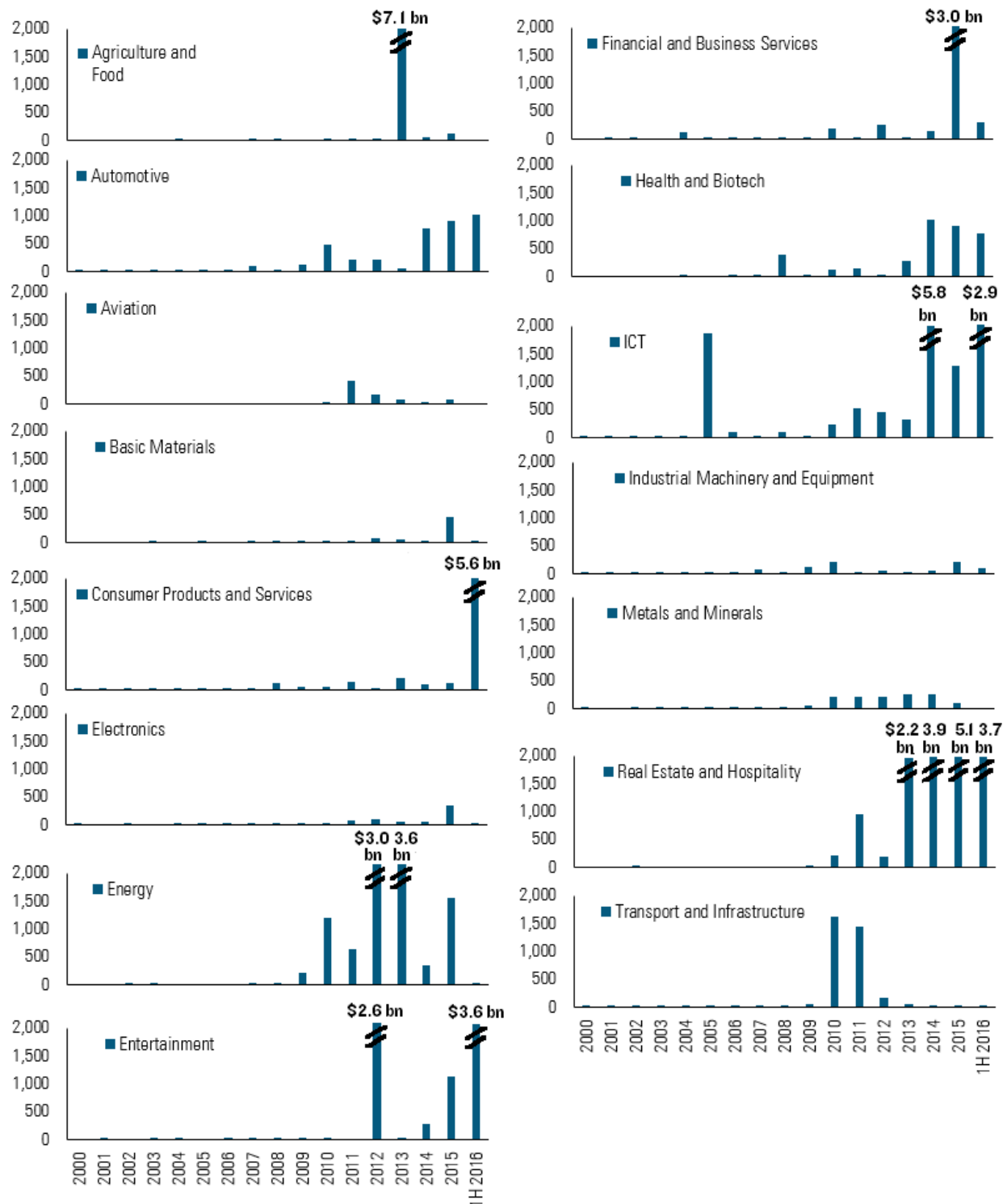
Percent share of total value



Source: Rhodium Group.

Figure 23: Chinese FDI Transactions in the US by Industry, 2000-1H 2016

USD million

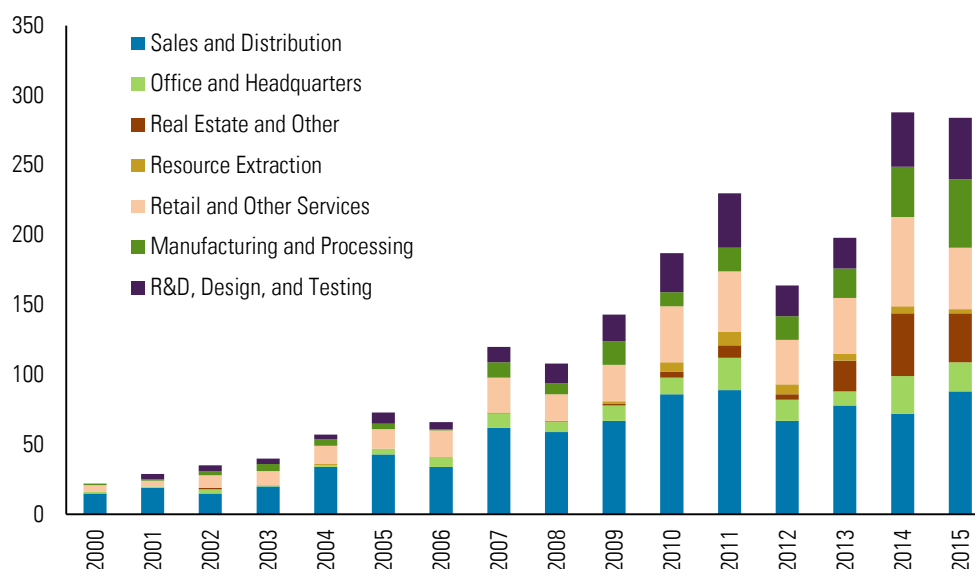


Source: Rhodium Group.

Chinese FDI by Business Activity of US Subsidiary

Another way to illustrate the evolution of Chinese investment interests in the United States is to analyze the business activities of Chinese companies in the US market. Official data gives little up-to-date information on the business activities of Chinese-owned subsidiaries in the United States, but the CIM dataset allowed us to come up with a comprehensive analysis of Chinese FDI activities in the period from 2000 to 2015. Figure 24 presents a snapshot of Chinese investment since 2000, broken down by the business activity of the US subsidiary. These data points are based on assessing the business activities of each company acquired or newly set up by Chinese investors in the United States, as defined by the CIM dataset. The scoring is based on the subjective judgment of the authors. Individual transactions can be coded for multiple business activities, which makes the total number of entries higher than the number of transactions over time.

Figure 24: Chinese FDI Transactions in the US by Business Activity, 2000-2015



Source: Rhodium Group.

The data show how the activities of Chinese-owned US entities have shifted from primarily trade facilitation to a much broader range of activities including manufacturing, provision of services, and research and development. Investments in early years were largely small operations by trading companies focused on sales and distribution activities. They were made by private trading firms as well as state-owned companies in sectors with greater need for a global presence, such as logistics or banking. Sales and distribution continued to be critical motivations for investment in the following years, as the range of Chinese companies seeking to market products in the US and others seeking to import US products to China grew. As more Chinese companies have established themselves in the US, the number of headquarters and offices naturally caught up. Large Chinese companies in certain sectors have also begun to establish offices before acquisitions or major greenfield investments as they integrate into the US market. Chinese companies have also used the US, the primary market for many Chinese companies in the Americas, as a base for regional or even global expansion.

In recent years, Chinese companies have shown more appetite for investing in services beyond just trade facilitation and administrative activities, expanding to the provision of services in the US market as well as conducting R&D and other advanced service activities. The rapid expansion of subsidiaries that are engaged in retail activities and other provision of services such as hospitality and entertainment is driven by two developments. First, Chinese companies have become more competitive in those areas. Second, their export portfolio has become more sophisticated and many products now require them to expand maintenance and other local service provision related to exported goods. Finally,

Chinese investors are seeking to gain experience in established US service sectors, so they can utilize that experience in building out their position in the Chinese market. One of the most striking developments is the increase in transactions that involve R&D activities. These investments reflect Chinese investors' interest in leveraging skilled US labor resources for research across a host of industries, the valuable intellectual property of acquired US firms, and the integrated networks of R&D across public and private institutions in the US. Of 1,200 FDI transactions between 2000 and 2015, 266 now include operations involving R&D. R&D is centered in research clusters across the country: in the Bay Area for software; in Maryland, Massachusetts, and Philadelphia for pharmaceuticals; and in the Midwest for industrial machinery and automotive parts.

Another key trend is the rapid growth of operations involving manufacturing activity. Unlike other historical cases (for example, firms from Japan), Chinese FDI involved comparably little manufacturing in the early years. However, that has changed since 2010 and Chinese firms are rapidly expanding their manufacturing presence in the US market, for a range of different reasons. Chinese firms' increasing capacity to manage manufacturing operations abroad means that they are now capable of taking on this complex task in the US market. In certain sectors, changing cost structures have affected Chinese firms. Supply inputs are economically viable in some instances, such as cheap natural gas for chemical manufacturer Yuhuang's under-construction methanol plant in Louisiana. In other instances, tariffs have incentivized setting up production in the US, as in the case of Tianjin Pipe Group Corporation's steel pipe plant in Texas, discussed in detail as a case study in Part Three. Chinese companies are also bringing manufacturing to the US to build relationships with local customers, as evidenced by Fuyao, an auto glass manufacturer with operations in Ohio and Illinois. Lenovo opened an assembly plant to complement its IBM-acquired operations in North Carolina and accelerate speed of delivery for its PCs to the U.S. market.

Investments in resource extraction have been large in value, but few in number. The number of new operations engaged in resource extraction rose particularly in the boom period of 2010-2013, with the rush into unconventional oil and gas assets. The largest are located in Texas, Oklahoma, Wyoming, and Colorado, as well as offshore in the Gulf of Mexico. As noted in the previous section and Figure 24, investment in such natural resources has declined rapidly in recent years.

2.5 EMPLOYMENT

Another area of interest to policymakers and the public is the local impact of Chinese FDI in the US. BEA offers some data on relevant metrics like employees and R&D expenses. However, the latest data points are almost three years old, so they do not capture a large part of the investment boom (see Part 1). BEA's most recent figures show Chinese enterprises employing 38,300 out of a total 6.6 million foreign enterprise-employed workers in the US as of the end of 2014. RHG has expanded the CIM dataset to include employment estimates, capturing all direct full-time positions provided by Chinese-owned entities in the United States. These provide a more recent and comprehensive estimate of employment provided by Chinese-owned US subsidiaries. RHG's employment figures are based on collecting and estimating employment figures for each Chinese-owned subsidiary in the US, as identified by RHG's CIM database. The BEA's figures are based on annual surveys and benchmark five-year surveys. Many investors are exempt from the annual surveys because they fall below the investment threshold for participation of \$300 million. Additionally, this BEA dataset is produced on a UBO basis, but the figures still attribute a large number of jobs to Caribbean tax havens and other pass-through locations.⁴⁷

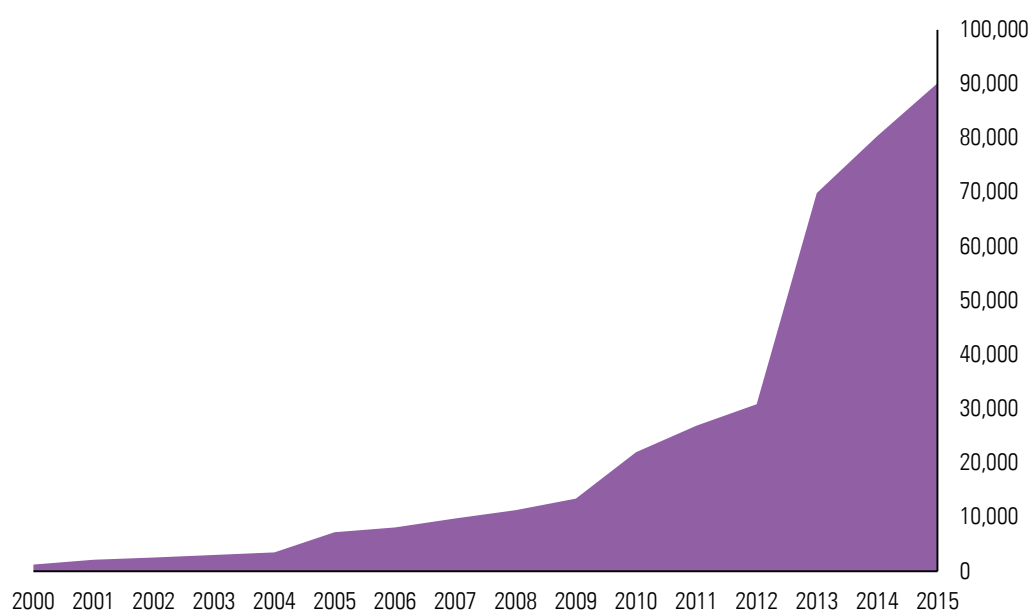
Figure 25 summarizes the growth of employment at Chinese-owned entities from 2000 to 2015. The number of Americans employed by Chinese companies has grown from less than 10,000 in 2009 to 30,000 in 2012 and more than 90,000 in 2015. These figures only count full time direct jobs and do not take into account part-time staff or any indirect

⁴⁷ National Committee on U.S.-China Relations and Rhodium Group, *New Neighbors: 2016 Update*, (2016).

jobs during the construction phase or at suppliers. Transactions closed in the first half of 2016, such as the acquisition of GE's appliances unit, have pushed this number to more than 100,000 by now.⁴⁸

The majority of those employees (around 80,000 by the end of 2015) were “acquired” by Chinese companies through M&A. Importantly, few Chinese companies have shut down operations in the US after acquisitions. There is, to our knowledge, no empirical evidence for concerns that Chinese companies could be more prone than other multinationals to acquire assets in the US and then move activities and related jobs to China. To the contrary, our dataset shows that the majority of US companies acquired by Chinese investors have undergone expansions in the years after the initial acquisition. We discuss one such case (Nexteer) in the Part 3 case study. New job creation through greenfield FDI amounted to 10,000 at the end of 2015. Some of the major greenfield projects under construction, mentioned in Table 2, could add thousands of more jobs to this count over the next few years.

Figure 25: Employment at Chinese-affiliated Companies
Number of jobs provided by US subsidiaries of Chinese companies



Source: Rhodium Group.

While Chinese-owned subsidiaries must now be considered significant employers in the United States, their role is still small compared to overall employment provided by foreign companies in the United States. While BEA's figures on total employment by foreign-affiliated entities are not directly comparable to our data, they provide some reference for scale. According to BEA's figures, foreign companies provided more than 6.5 million jobs in the US economy at the end of 2013. The two largest employers are companies from the UK and Japan. Companies from the UK alone employed 1.1 million; employment at Japanese firms totaled 870,000. These data points illustrate the potential to further grow job provision by Chinese companies in the US economy.

⁴⁸ Thilo Hanemann and Cassie Gao, “Chinese FDI in the US: Tripling Down on America,” *Rhodium Group*, July 22, 2016.

3. Characteristics of Chinese Companies Operating in the US

As Chinese investment into the US has grown rapidly, the composition of Chinese investors has changed substantially. Initially dominated by large state-owned players, nearly every type of Chinese investor is now present in the US market: small and medium sized private firms, large private companies transforming into multinationals, large state-owned enterprises directly owned by China's central government, enterprises owned by provincial and other local branches of the Chinese government, and sovereign investment vehicles. This section describes the changes in and current composition of Chinese investors in the US and then examines state-owned investors in greater depth, utilizing Rhodium Group's CIM dataset.

3.1 THE CHANGING MIX OF CHINESE INVESTORS

The rapid growth of US investment deal flow has transformed the mix of Chinese companies present here. None of the official datasets offer detailed information to describe this shift, but Rhodium Group's CIM dataset allows an analysis of the changing composition in recent years.

State-Owned and Private Investors

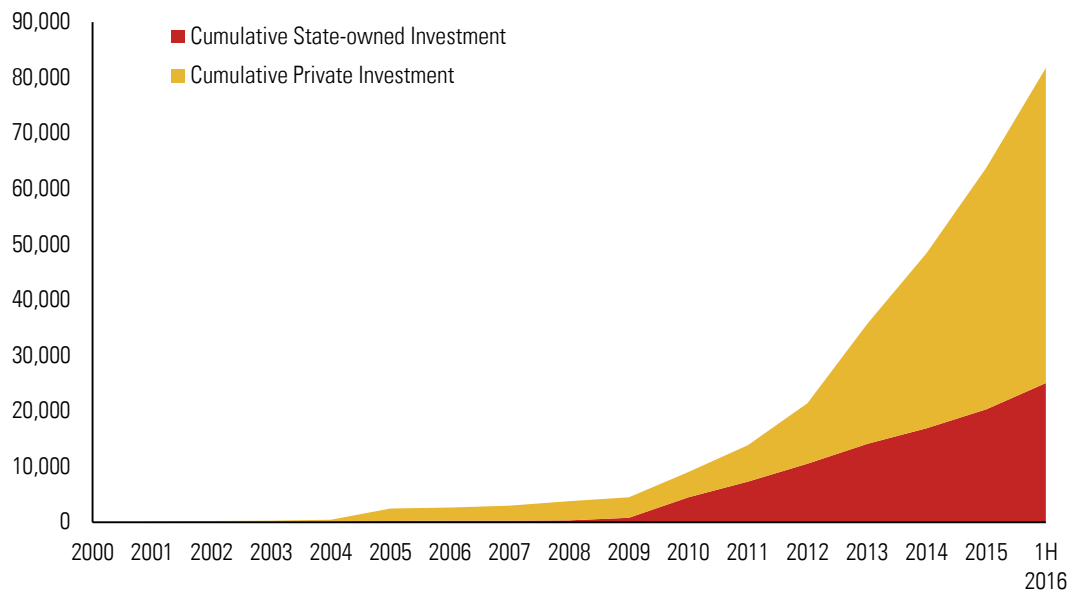
The first and most important development to highlight is the shift in the mix of state-owned and private investors. Figure 26 breaks down the cumulative aggregate value of Chinese FDI in the United States, utilizing a simple distinction between state and private ownership. The category of state-owned investors includes central SOEs under the State-Owned Assets Supervision Administration and Commission, local SOEs controlled by provincial or municipal governments, sovereign investors, and any other entities that have more than 20% combined government ownership. The category of private investors includes companies that are at least 80% owned and controlled by non-state-related investors. We chose the 80% threshold because most listed companies have small, passive stakes from state-related entities such as commercial banks, which makes a 100% threshold for the category of private ownership problematic for our analytical purposes. Another caveat is that the definition of private companies is based entirely on quantitative thresholds of direct equity ownership. It does not take into account potential government influence on firms through loans and debt financing, regulations, and other channels. Potential government influence on companies designated in this section as private is discussed in Part Four.

Before 2005, the mix of Chinese investors in the US consisted of large state-owned investors as well as small privately-owned trading and manufacturing companies, but investment values were tiny. In 2005, then state-owned firm Lenovo made the first sizable investment in the United States, which dominated cumulative investment until 2009.⁴⁹ From 2009 to 2013, Chinese capital inflows were predominantly state-related, as SOEs in energy and a handful of other sectors expanded their footprints. At the peak in 2011, SOEs accounted for 53% of cumulative Chinese FDI in the US. Since then SOE investment has continued, but *growth* has been largely driven by privately owned companies. By the middle of 2016 the share of state-owned entities in cumulative investment fell to 31%, and privately owned companies accounted for 69% of the total.

⁴⁹ Lenovo's acquisition of IBM's personal computer division is counted as a state-owned enterprise acquisition, as the state controlled more than 20% of the company in 2005. In the fall of 2009, the Chinese Academy of Sciences sold 29% of its stake in Lenovo to the privately-owned Fanhai Group for 2.8 billion yuan (US\$434 million). Subsequently, Lenovo became a private enterprise under our definition.

Figure 26: Cumulative Value of Chinese FDI Transactions in the US by Ownership of Investor, 2000-1H 2016

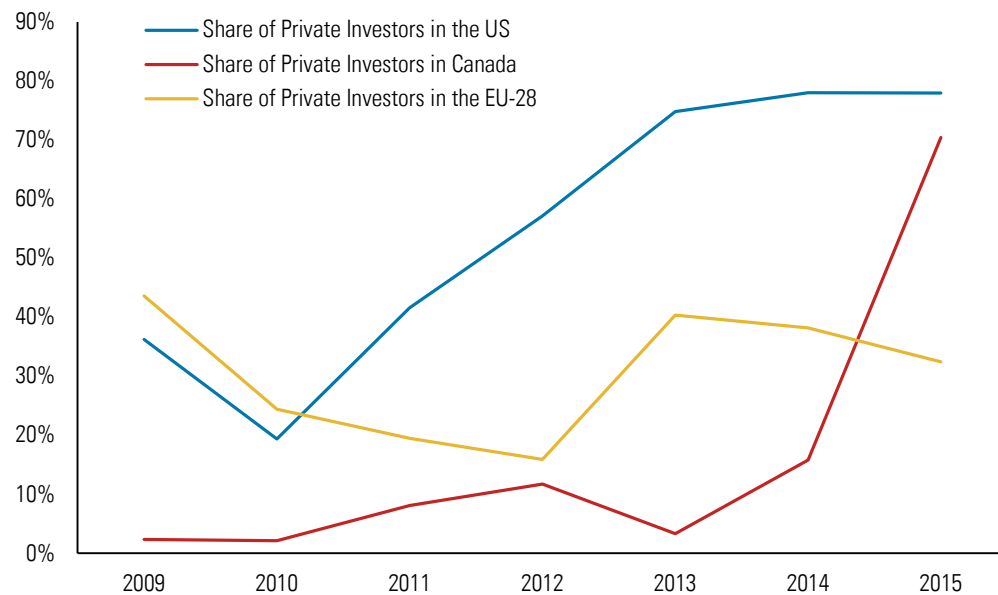
USD million



Source: Rhodium Group.

Figure 27: Share of Private Chinese FDI in the US and Selected Advanced Economies, 2009-2015

Percent of total



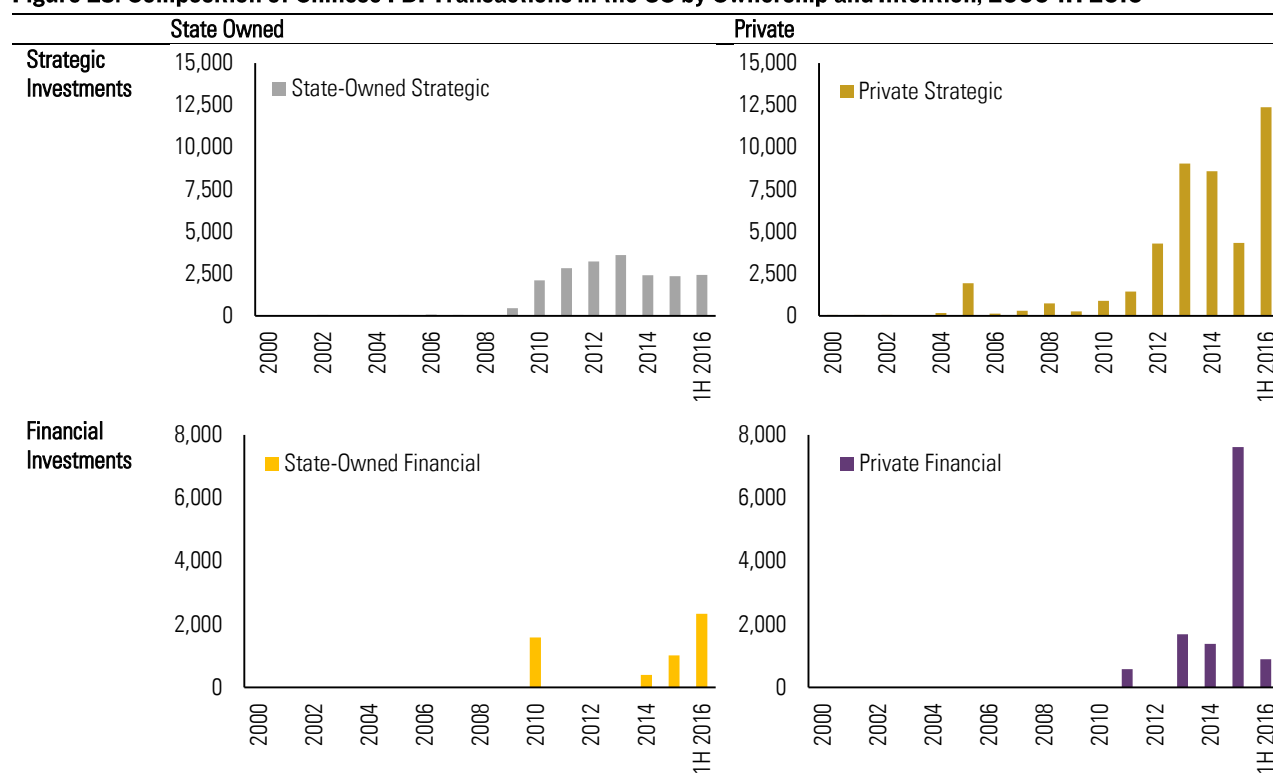
Source: Rhodium Group.

The rapid growth of private Chinese outbound investment is a global trend, but it is particularly pronounced in the United States. Figure 27 shows the share of private capital in total Chinese FDI in the US and other major advanced economies (Canada and the European Union) since 2009 in terms of annual flows. In the United States, the share of private capital in total Chinese FDI has risen from less than 20% in 2010 to 75% in 2013 and almost 80% in 2014 and 2015. Private investment shows a similar growth trajectory in Europe in recent years, but state-affiliated investment grew even faster as SOEs were eyeing major industrial assets and infrastructure opportunities, leading to a decline in the importance of private capital (32% for the EU in 2015). Due to the importance of natural resources, the inflows of Chinese capital to Canada was heavily dominated by state-owned investors and the share of private investors averaged less than 10% before 2015. However, the sharp drop in upstream resources investment has driven the share of private investors up since 2014, hitting 70% in 2015.

Strategic and Financial Investments

Figure 28 shows annual investment values of state-owned and private investors over time, adding the type of investments as second dimension. Strategic investments refer to investments made for purposes directly related to the primary area of business of the investor. Financial investments are investments that are made for the purpose of financial returns.

Figure 28: Composition of Chinese FDI Transactions in the US by Ownership and Intention, 2000-1H 2016



Source: Rhodium Group. Strategic investment refers to investments made in related sectors to the core business activities of the investor. Financial investment refers to investments made in unrelated sectors solely for financial purposes.

It shows that state-owned investors significantly expanded their strategic investments in the US on the back of the unconventional oil and gas boom in the United States since 2010. Annual investments jumped from \$444 million in 2009 to \$2.1 billion in 2010, and then steadily increased to a peak of \$3.6 billion in 2013. Large deals by China's big oil majors (CNOOC and Sinopec) taking stakes in upstream energy operations account for the majority of this increase.

SOE strategic investment since 2013 has dropped slightly as Chinese appetite for energy assets has declined, but SOEs in other sectors have compensated by keeping investment flows steady. Financial investment by SOEs remained comparatively low and restricted to a few singular investments, largely made by sovereign investment entities in areas such as utilities (CIC's investment in AES, a global utility company, in 2010) and real estate (Ping An and China Life's participation in Boston's Pier 4 redevelopment in 2015, Cinda's investment in 311 South Wacker Drive in Chicago in 2014).

The tremendous increase of private investment was driven by strategic and financial investments alike. The first, and for a long time only spike, occurred in 2005 when Lenovo acquired IBM's personal computer unit for \$1.75 billion.⁵⁰ After a long pause, private investment increased in the period from 2008 to 2011, but investment levels generally remained below those of state-owned investors due to lower capital intensity of their investments. In subsequent years, the number and scale of private investments further ballooned and private investment exceeded state-owned capital for the first time in 2012. In 2013 and 2014, private investment was three times as high as the inflow of state capital. In 2015, private strategic investment dropped back to 2012 levels (\$4.3 billion), but already increased to a record \$12.4 billion in the first six months of 2016, driven by large acquisitions such as Haier's purchase of GE Appliances and Wanda's investment in Legendary Pictures. Another trend is the growth of private financial investment, which jumped to \$7 billion in 2015 alone. This increase can be attributed to a handful of larger transactions (Fosun's acquisition of Ironshore Insurance and Anbang's purchase of the Waldorf Astoria Hotel), as well as the rapid growth of smaller private equity and venture capital investments in high-tech sectors. Financial investment by private Chinese investors is a new phenomenon that is driven by a combination of policy liberalization (see Part 4), the maturation of these sectors in China, and greater uncertainty about future investment returns in real estate and other asset classes in the Chinese market.

A Ranking of the Top Chinese Investors

The recent increase of private investors is also apparent if one compiles a ranking of the biggest Chinese investors in the United States (Table 4). It shows that all of the top five and 12 out of the top 20 investors are private. It is also apparent that most of the top 20 companies only have one singular investment in the United States, but that the majority of early private investors have expanded their footprint in the US market since their first investment. Among SOEs, those with the largest investments are oil companies Sinopec and CNOOC. AVIC, discussed at length as a case study later in this section, is unusual for investing over \$2 billion through a host of smaller deals unlike most investors, state-owned or otherwise. CIC, China's primary sovereign wealth fund, is another high-ranked state-affiliated investor. However, it divested from its stake in AES in 2015.

The largest private investor is Wanda, an entertainment and real estate conglomerate with major investments in the US film industry.⁵¹ Shuanghui (now WH Group), which acquired pork producer Smithfield in 2013 is second. Lenovo, an early investor in 2005 with two more major deals in 2014 (acquisitions of IBM's x86 server division and Motorola Mobility) is a close third. Haier, an appliance maker and one of the earliest investors in the US, became one of the largest investors after acquiring GE Appliances in June 2016. Diversified conglomerate Fosun has been another significant actor in the newest wave of Chinese investment, acquiring real estate, entertainment companies, and financial services.

⁵⁰ Figure 28 shows historical patterns from the perspective of current ownership. In a handful of cases, ownership of companies changed over time. In 2005, Lenovo had combined government ownership of 29%, which would classify it as state-controlled company. In 2009, the combined government stake fell below 20% as the Chinese Academy of Sciences sold its stake to the private firm Fanhai Group.

⁵¹ While nominally a private company, Deng Jiagui, President Xi's brother-in-law, had previously been listed as a shareholder in Wanda. It is not clear what level of influence this position has in the firm's decision-making process. Charles Clover, "Dalian Wanda Chairman Admits Xi Family Member Was Shareholder", *The Financial Times*, October 30, 2015.

Table 4: Ranking of the Biggest Chinese Investors in the United States

By cumulative investment from 2000–IH 2016, USD billion

Rank	Investor	Ownership	Total Investment
1	Wanda	Private	\$7.4
2	Shuanghui / WH Group	Private	\$7.1
3	Lenovo	Private	\$7.0
4	Haier	Private	\$5.7
5	Fosun	Private	\$4.0
6	Sinopec	State-Owned	\$3.6
7	China National Offshore Oil Corporation (CNOOC)	State-Owned	\$3.3
8	Anbang	Private	\$2.4
9	China Investment Corporation (CIC)	State-Owned	\$2.3
10	Aviation Industry Corporation of China (AVIC)	State-Owned	\$2.2
11	Hua Capital consortium	State-Owned	\$1.9
12	Yantai Xinchao	Private	\$1.3
13	Zhang Xin family	Private	\$1.3
14	Huaneng	State-Owned	\$1.2
15	Wanxiang	Private	\$1.2
16	HNA	Private	\$0.9
17	Tencent	Private	\$0.9
18	Ningbo Joyson	Private	\$0.9
19	Cinda	State-Owned	\$0.9
20	Summitview Capital consortium	State-Owned	\$0.8

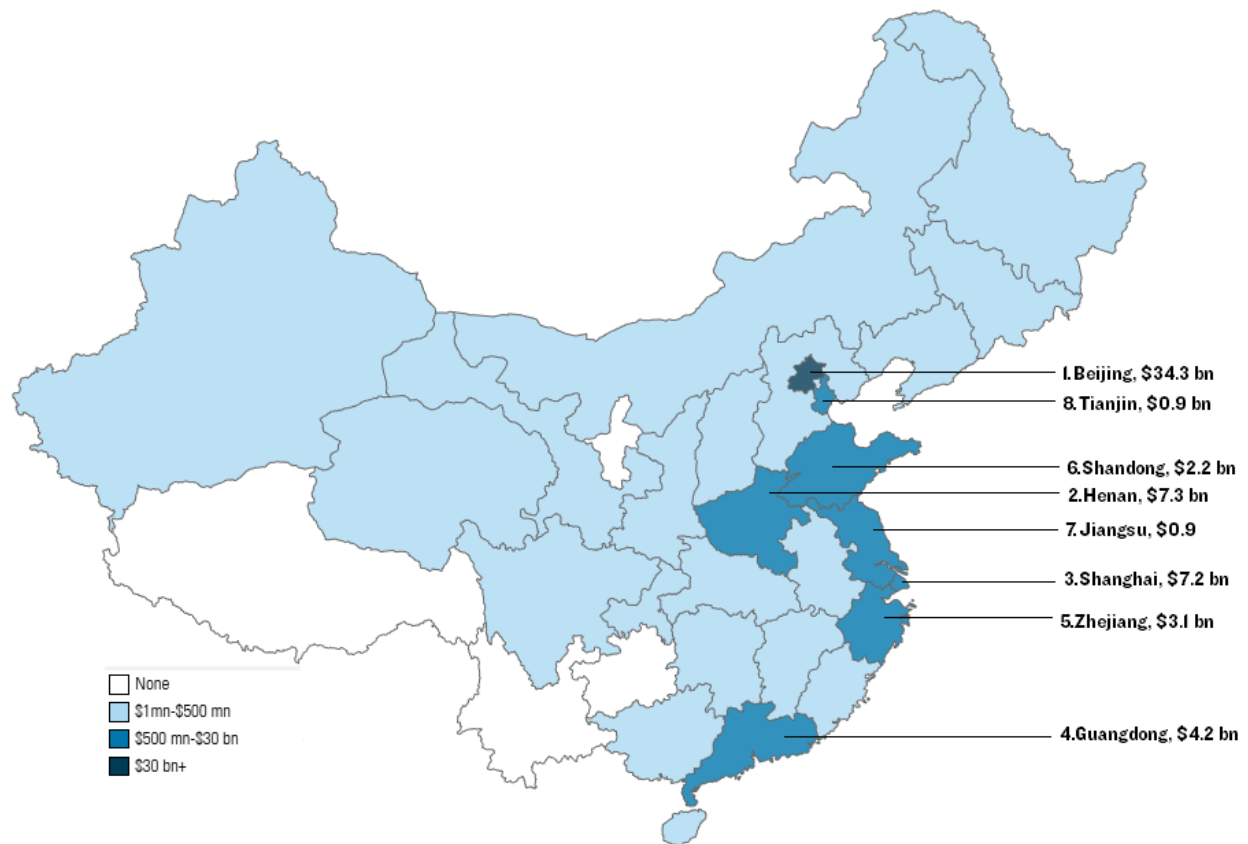
Source: Rhodium Group. This table is based on transactions since 2000 only and does not take into account divestitures. For a definition of private and state ownership, see page 42.

A Geography of Chinese Investors

Figure 29 offers another perspective on the mix of Chinese investors in the US, showing the distribution of total Chinese investors by province of headquarters. Investment is highly concentrated, with more than 50% of all investment coming from Beijing, attesting to its importance as location for both SOEs and private investors. Other important economic centers on eastern coast and in the south, such as Shanghai and Guangdong, account for a significant share of total investment, at 11% and 6.5% respectively. Overall, wealthier provinces with higher GDP per capita along the east coast invest more than other parts of China. The top five wealthiest administrative areas by GDP per capita (Tianjin, Beijing, Shanghai, Jiangsu, and Zhejiang) have all invested at least roughly \$1 billion in the US. The other multibillion investors, Guangdong and Shandong, are also above average provinces in terms of GDP per capita on the east coast of China. The sole outlier is Henan, one of the poorer provinces of China, which accounts for 11.5% of total investment. This is almost entirely due to Shuanghui, the acquirer of Smithfield, being headquartered there. Like Virginia in the United States, Henan is a traditional center of pork production in China. Most of China's provinces have originated some investment in the US, but beyond Zhejiang and Shandong they account for around 1% or less of the total.

Figure 29: Chinese Investors in the US by Province of Headquarters, 2000-2015

Percent share of total investment



Source: Rhodium Group.

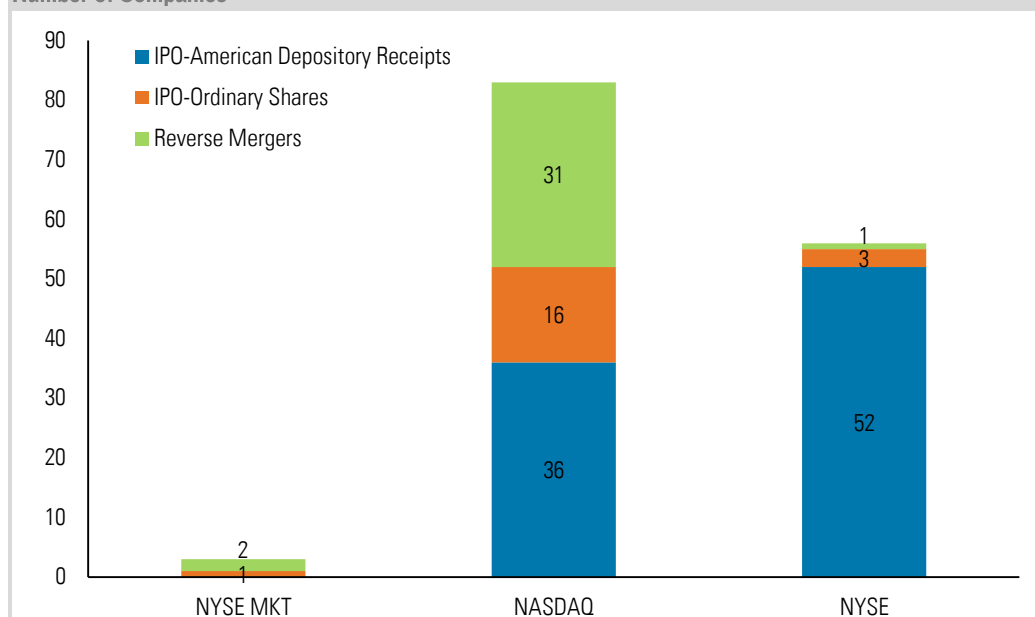
Box: Recent Trends for Chinese Company Listings at US Stock Exchanges

Apart from FDI, another aspect of Chinese cross-border capital flows on the agenda of US policymakers is the listing of Chinese companies on US stock exchanges. International listings have been part of the reform program of China's SOEs throughout the 2000s, which brought shares of several Chinese SOEs to US stock exchanges. The rationale was to increase the efficiency and financial performance of SOEs by introducing international investors as shareholders. Private companies also found US capital markets to be an attractive opportunity for raising funds, as doing so domestically in China was difficult due to an underdeveloped financial system and restrictions on initial public offerings (IPOs).

As of September 2016, 142 Chinese companies were listed on major US securities exchanges. Figure 30 illustrates that 56 of those were listed on the New York Stock Exchange (NYSE), 83 on the National Association of Securities Dealers Automated Quotations Exchange (NASDAQ), and 3 on the NYSE MKT, formerly known as the American Stock Exchange (AMEX).⁵² Securities issued by Chinese companies are also available for US investors through the less regulated over-the-counter (OTC) market.⁵³

Figure 30: Chinese Companies Listed on Major US Securities Exchanges, September 2016

Number of Companies



Sources: NASDAQ, Bloomberg, U.S. Securities and Exchange Commission.

Figure 30 also breaks down the channels Chinese companies have used to list their shares on US exchanges. Twenty Chinese companies have listed their shares through IPOs of ordinary shares (OS), a process in which shares are issued directly by the company. This route receives the greatest regulatory scrutiny and was thus mostly used by large Chinese companies with high transparency and credibility. The latest example was Alibaba's IPO in 2014. Another 88 Chinese companies have listed their shares in the US through American depository receipts (ADRs), where US banks hold the company's shares and then issue certificates to market them on US exchanges. Finally, 34 Chinese companies utilized

⁵² A full list of individual companies listed on NYSE, NASDAQ, and NYSE MKT can be found at: <http://www.nasdaq.com/screening/company-list.aspx>.

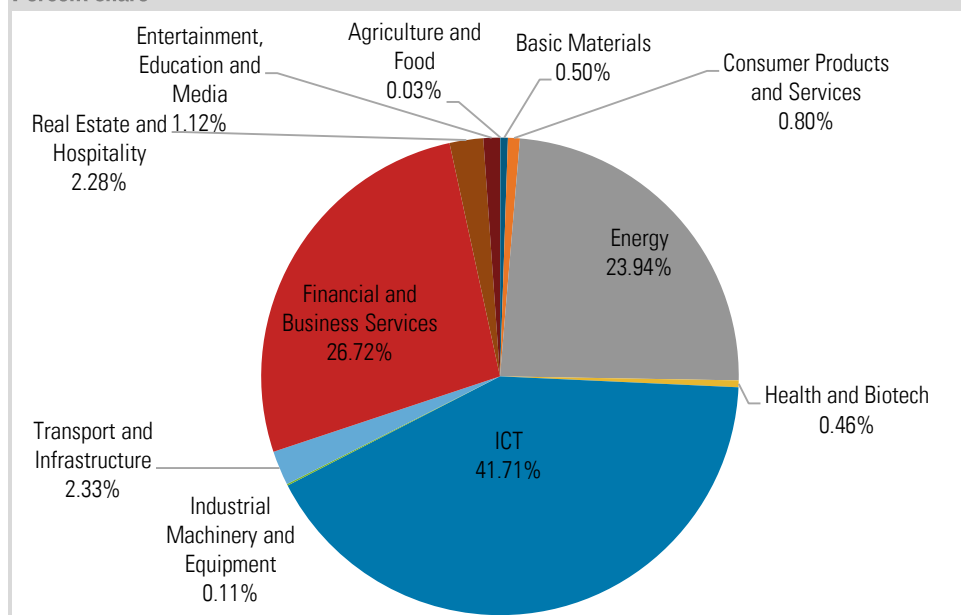
⁵³ More details on Chinese securities traded in OCT markets is available at: <http://www.otcmartets.com/research/companyDirectory>.

so-called “reverse mergers”, a process in which a defunct but already listed US company merges with a Chinese company. This process was used as backdoor to avoid the lengthy and burdensome process of a formal IPO.

As of September 2016, the combined market capitalization of these 142 Chinese companies was \$1.1 trillion. The industry breakdown is shown in Figure 31. Three industries—ICT, energy, and financial and business services—account for almost 95% of total market capitalization. Out of 142 companies, only 14 companies are ultimately controlled by the Chinese government (10%). However, their share in total combined market capitalization is disproportionately large (\$690.5 billion or 61%).

Figure 31: Market Capitalization of US-listed Chinese Companies by Industry, September 2016

Percent share

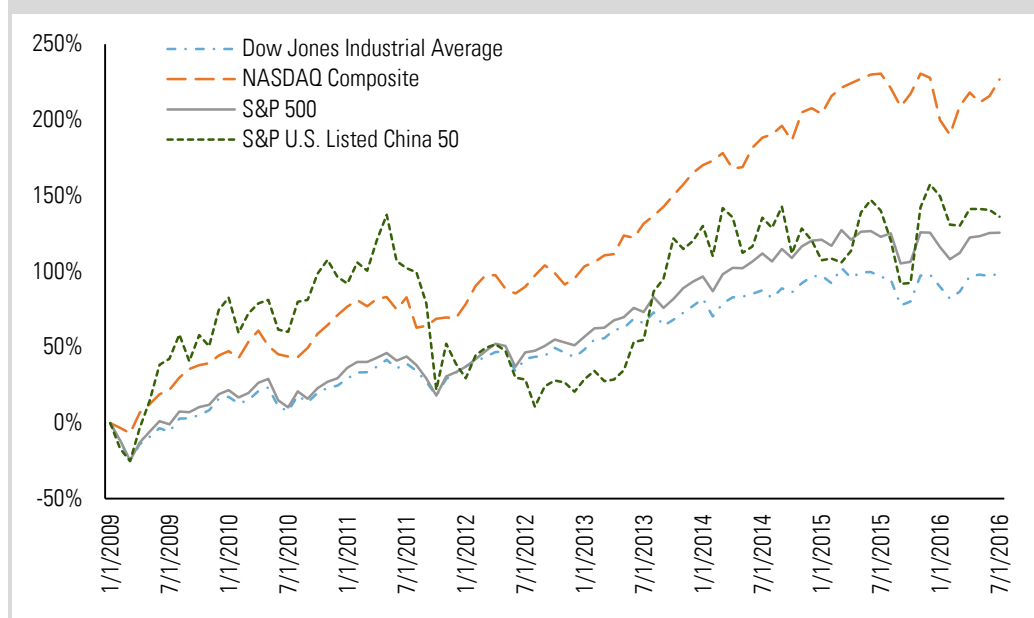


Sources: NASDAQ, Bloomberg.

Foreign listings on US securities exchanges have a long history and are generally seen as beneficial to investors and the US economy in general. Chinese listings have the same benefits: they contribute to a deeper and more diverse US capital market, generate fees for local advisors and other service providers, and facilitate greater disclosure and transparency. Moreover, they offer US investors the opportunity to invest in Chinese stocks and diversify their portfolio despite the restrictions on the Chinese A-share market.⁵⁴ The performance of Chinese stocks listed in the US over the past five years depends on sector and individual company metrics. In several cases, stocks declined tremendously in value or were even completely delisted (see discussion of fraudulent companies below). Other stocks, particularly those of e-commerce and other internet companies, generated triple digit returns over time. Figure 32 shows the performance of the S&P U.S. Listed China 50 Index, which captures the performance of the largest Chinese stocks listed in the US, along with a number of comparators. It shows that the China 50 Index was more volatile in this period, but that it outperformed both the S&P 500 and the Dow Jones Industrial Average.

⁵⁴ Investing directly in Chinese equities is prohibited for foreigners, with the exception of investment coming through the Qualified Foreign Institutional Investor (QFII) program, where institutional investors are granted licenses to invest in A-Share (RMB denominated) equities on China's stock exchanges.

Figure 32: Performance of US-Listed Chinese Companies vs. Market Benchmarks, January 2009 - September 2016
Percent change from January 1, 2009



Sources: S&P Dow Jones Indices, CEIC, Bloomberg.

While Chinese stocks have not performed worse than the overall stock market, several particular concerns have emerged with regard to Chinese company listings in the US in the past decade. As opposed to FDI, most of those concerns are related to potential risks for US investors and the protection of investor rights.⁵⁵

First and most importantly, US listings have been abused by a number of Chinese companies for fraudulent activities, causing heavy losses for US retail and institutional investors. The practice of reverse mergers allowed Chinese companies to avoid the regulatory scrutiny of a formal IPO process, giving firms with poor corporate governance and sometimes outright fraudulent motives access to US capital markets.⁵⁶ These problems were compounded by divergent accounting standards between the US and China, and the lack of a framework for US-China legal cooperation to allow independent audits. The Public Company Accounting Oversight Board (PCAOB), which oversees accounting firms that audit U.S.-listed public companies in order to protect investors, has had significant difficulties in gaining access to Chinese auditors' books, an issue that still exists today (see below).

Second, many Chinese companies use so-called variable interest entities (VIE) to list overseas, which brings great legal uncertainty for US investors.⁵⁷ VIEs are entities that enable an investor to maintain a controlling interest despite not formally holding the majority of voting rights. Those structures are often used to conceal balance sheet risks through a dense web of contracts. Chinese companies have used those structures extensively for overseas listings, particularly in sectors that do not technically allow foreign investment, for example software and e-commerce. The Chinese

⁵⁵ A comprehensive survey of academic literature by the authors yielded no concerns related to US national security posed by foreign listings or foreign SOE listings in particular.

⁵⁶ Qiang Cheng et al., "Does Foreign Firms' Shortcut to Wall Street Cut Short Their Financial Reporting Quality? Evidence from Chinese Reverse Mergers," in 2013 FARS Conference (Singapore Management University, 2013); Charles M. C. Lee, Kevin K. Li, and Ran Zhang, "Shell Games: Are Chinese Reverse Merger Firms Inherently Toxic?" *Stanford Graduate School of Business Working Papers*, no. 3063 (March 25, 2014).

⁵⁷ Kevin Rosier, *The Risk of China's Internet Companies on U.S. Stock Exchanges*, (Washington: U.S.-China Economic and Security Review Commission, 2014).

government has tolerated those structures in the past, but it has not formally recognized or regulated them. Thus there is tremendous legal uncertainty about the future treatment of companies listed in the US under those structures. In the worst case scenario, a Chinese regulatory change could render VIE investments invalid, causing forced sales or even the uncompensated loss of ownership.

Listings on US stock exchanges remains an attractive option for Chinese companies, but the pace of new listings has slowed since 2012, dropping from more than 35 IPOs in 2010 to only two IPOs in 2012 after a series of fraud scandals and reaccelerating in 2014 and 2015. From 2014 to 2015, 28 Chinese companies were newly listed at the NYSE and NASDAQ. By far the biggest IPO was by internet giant Alibaba in 2014, raising \$25 billion. The massive growth of internet-related markets in China and the difficulty private internet firms have domestically in securing financing means internet firms in particular have entered the US exchanges to attract more foreign investment. Notable examples apart from Alibaba include JD.com, a retailing website and Weibo, China's largest microblog platform with over 212 million users.

One new development is that a growing number of Chinese companies that are listed in the US receive buyout proposals from investors who intend to take firms private and then relist them in the Chinese market. Since 2015, 42 Chinese companies listed in the US have received proposals from investors to be taken private. Thirteen companies have already accepted such offers and were delisted. The biggest case was the privatization of internet security company Qihoo 360, which was completed in 2016 (\$9.3 billion). Five of those companies were relisted in China using reverse mergers over the past three years.⁵⁸ Table 5 lists major recent and ongoing privatization bids.

Table 5: Private-Taking Bids for Chinese Companies Listed on US Stock Exchanges, Selected Examples

Target	Acquirer	Announcement Date	Valuation (\$ bn)	Status*
Qihoo 365	Investor Group	6/15/2015	9.3	Completed
Qunar	Ocean Management	6/23/2016	4.4	Ongoing
Wuxi Pharma	Ally Bridge Group	8/14/2015	3.3	Ongoing
21 Vianet	Existing Management	6/10/2015	2	Ongoing
Mindray Medical	Solid Union	6/6/2015	1.9	Completed
Renren	Existing Management	6/10/2015	1.1	Ongoing

Sources: NASDAQ, NYSE, Bloomberg. *As of October 2016.

While the topic of reverse mergers has somewhat faded from the spotlight, the current situation has several important dimensions for US regulators and policymakers. Several structural problems persist. For one, most Chinese companies still utilize VIE structures, and the legal uncertainty has not yet been resolved. The practice of listing Chinese companies through VIEs in offshore jurisdictions also reduces the protection of US investors in the case of private-taking proposals. In several cases, investors were forced to accept takeover bids that they deemed too low, because relatively lower degrees of shareholder rights in those jurisdictions allowed the buyer to squeeze out minority shareholders.⁵⁹

Finally, the issue of cross-border audit cooperation remains unresolved. The PCAOB is seeking to get full access to Chinese accountants' auditing reports and the ability to conduct joint inspections of accounting firms based in China. Chinese accountants' audits are currently withheld by the Chinese government on the grounds of national security and are only available to US investors on a case-by-case basis if fraud investigations are ongoing. But fraud cases can only be properly identified if full access to all financial statements is available to US regulators. Negotiations between Chinese and US regulators are on-going, with reports of a collapse of negotiations in late 2015.⁶⁰ Under interim ad-hoc

⁵⁸ Wei Gu, "Scrutiny Greet Overseas-Listed Chinese Companies Returning Home to Relist," *The Wall Street Journal*, May 06, 2016.

⁵⁹ Peter Halesworth, *Chinese "Squeeze Outs" in American Stock Markets and the Need to Protect U.S. Investors*, (Boston: Heng Ren Partners, 2016).

⁶⁰ Dave Michaels, "U.S. Investors Have Another Reason to Fret Over China Firms," *Bloomberg*, November 03, 2015.

arrangements, in August 2016 the PCAOB will be able to review all Chinese audit reports relating to Alibaba and Baidu and their China-based auditors.⁶¹ In addition, the PCAOB made a new proposal in April that considers restricting the auditing of US-listed firms solely to accountants which conform to US-auditing standards. This would bypass the issue of harmonizing Chinese standards with US ones by forcing companies to undergo audits in line with PCAOB regulations. Currently, even major firms such as the Big Four violate US law through some of their Chinese subsidiaries' (or subcontractors') auditing practices.⁶² There has been no public follow-up from the PCAOB after its draft proposal in April, as of September 2016.

3.2 FOCUS: INVESTMENTS BY CHINESE STATE-OWNED ENTERPRISES

While the share of state-owned companies in China's FDI globally and the US is declining, the role of state-affiliated companies is still significantly higher than in the FDI profile of other economies and therefore receives particular attention from policymakers and regulators. Official statistics do not provide any information on the types of state-affiliated enterprises operating in the US; therefore, the following section provides a granular assessment of the patterns of Chinese state capital in the US market since 2000 based on our CIM data.

The Universe of State-Owned Investors

Figure 33 and Table 6 further break down the \$20.3 billion of state capital deployed in the US into four different categories. The first is central SOEs and their subsidiaries listed by the State-Owned Assets Supervision and Administration Commission (SASAC) as "Central SOE groups" (中央企业集团) either under the direct supervision of SASAC or other central ministries, as well as the banks under the direction of the Ministry of Finance. Provincial and municipal SOEs refer to SOEs under the control of provincial or lower levels of the Chinese government. Sovereign wealth funds include China's major sovereign wealth funds and their subsidiaries, including China Investment Corporation (CIC), SAFE Investment Company, the National Social Security Fund, and the China-Africa Development Fund. As discussed in the case study of CIC, only CIC has made significant direct investments in the US. There is a fourth residual category of "other," which refers to central government-controlled entities that are not under the supervision of SASAC or the Ministry of Finance but have invested in the US.⁶³

Central SOEs have long been present in North America and are among the earliest Chinese investors in the US market. However, investment values remained small as projects mostly consisted of smaller offices and similar operations. The era of large SOE investments began in 2010, driven by large investments in unconventional oil and gas assets, which continued until 2013 and added up to \$7.4 billion. After 2013, the annual investment value originating from SOEs dropped by more than 50% as SOEs pulled back from upstream energy investments. SOEs expanded investments in other areas—such as automotive, aviation and machinery—in recent years, but not quickly enough to make up for the drop in energy investments. For the entire period of 2000 to June 2016, central SOEs accounted for nearly 70% of total transactions by state-owned entities. More than 90% of central SOE capital entered the US through acquisitions.

The reason that the overall level of SOE investment has remained stable in recent years was a jump in FDI by provincial and municipal SOEs. Companies owned by provincial and municipal governments invested an average of \$250 million per year from 2009 to 2013, which jumped to around \$1.5 billion per year in 2014 and 2015, reaching a similar level as central SOE investment. Table 6 illustrates that provincial and municipal SOEs disproportionately invested in

⁶¹ Kathy Chu, Chao Deng, and Michael Rapoport, "U.S. May Finally Get a Peek at the Books of Alibaba, Baidu," *The Wall Street Journal*, August 18, 2016.

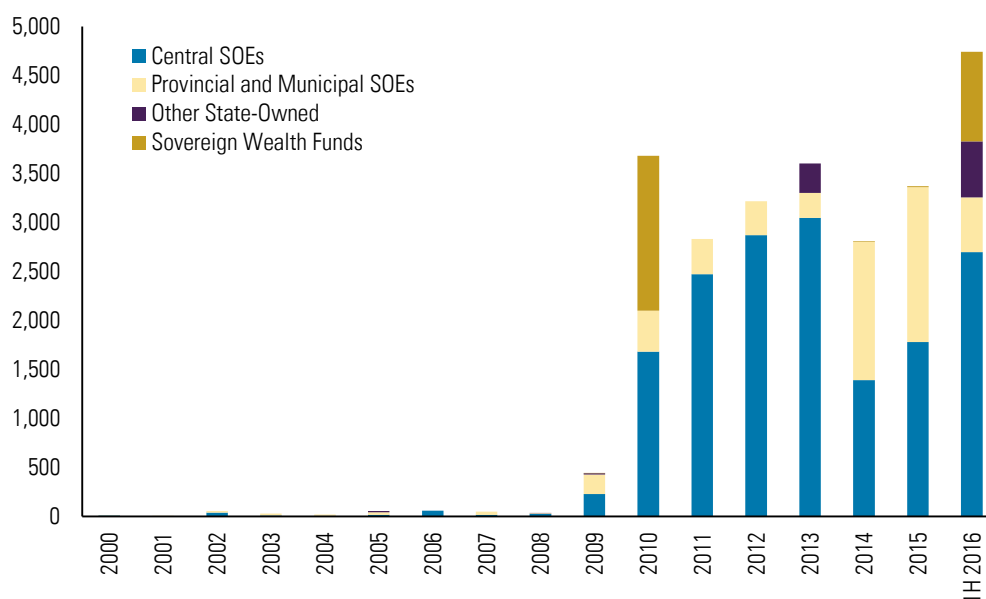
⁶² Paul Gillis, "New PCAOB Standard," *China Accounting Blog*, April 13, 2016, <http://bit.ly/2dkZWLC>.

⁶³ One example for such entities is China Daily. The only significant investor in this category is Cinda, a non-depository financial institution owned by the National Social Security Fund (a sovereign wealth fund), CITIC (a central SOE), as well as private investors, which makes it difficult to classify.

greenfield investment—they only account for 20% of total SOE investment in the United States, but are responsible for over 60% of the nearly \$3 billion that Chinese SOEs have spent on greenfield projects.

Figure 33: FDI Transactions in the US by Chinese SOEs by Category, 2000-1H 2016

USD million



Source: Rhodium Group.

China's *sovereign wealth funds* (SWFs)—investment entities that are charged with investing government capital for financial returns and, in some cases, to fulfill social and political mandates—have received much attention from policymakers, yet they account for a fairly small amount of Chinese direct investment in the US. China has two major SWFs that are allowed to deploy capital overseas: the CIC, which was set up in 2007 and is charged with managing a portion of China's foreign exchange reserves; and the SAFE Investment Corporation, an investment arm directly under SAFE, which operates out of Hong Kong.⁶⁴ Both of these entities have significant investment portfolios in the United States, but are largely focused on debt securities and smaller equity stakes that do not fall under the common definition of FDI. CIC and SAFE may also provide co-financing for Chinese private and state-owned companies' overseas investments through funds or subsidiaries. However, Chinese SWFs made only two significant direct investments in the United States in the period from 2000 to June 2016. One was CIC's \$1.6 billion stake in global utility company AES, which was divested in 2015 and the other was its recent acquisition of 1 New York Plaza for \$700 million in 2016. More details on CIC's investments can be found in the following case study (3.3).

⁶⁴ A third important Chinese SWF is the National Social Security Fund (NSSF), which manages funds for pensions. Until 2014, it was restricted from making investments overseas, but these restrictions have been relaxed. It has not as of mid-2016 made any direct investments in the US.

Table 6: FDI Transactions in the US by Chinese SOEs by Category, 2000-IH 2016

Value of deals, USD billion

Investor	Greenfield	Share of Total	M&A	Share of Total	All Deals	Share of Total
Central SOEs	\$1.1	39%	\$15.6	71%	\$16.7	66%
Provincial and Municipal SOEs	\$1.7	61%	\$3.2	14%	\$4.9	20%
Sovereign Wealth Funds	\$0.0	0%	\$2.5	11%	\$2.5	10%
Other	\$0.0	0%	\$0.9	4%	\$0.9	4%

Source: Rhodium Group.

A Ranking of the Top Chinese State-Owned Investors

A ranking of the 10 largest state-owned investors (Table 7) mirrors these trends. The combined investment of the top ten largest state investors (\$14.6 billion) represents nearly 60% of all SOE investment. Seven of the top ten companies are central SOEs. Only two municipal SOEs made it into the list. Both companies (Tianjin Pipe and Greenland) are investors in large greenfield projects in the metals and real estate sectors, respectively. About half of the companies on the top ten list have multiple investments in the US market, the other half only has one investment.

Table 7: The Ten Largest Chinese State-Owned Investors in the United States

Ranking calculated based on cumulative investment from 2000–IH 2016, USD billion

Rank	Investor	Administration	Primary Sector of Investor	Total Investment	Largest Investment
1	Sinopec	Central	Energy	\$3.6	Devon Energy assets (\$2.4)
2	CNOOC	Central	Energy	\$3.3	Nexen Gulf of Mexico assets (\$1.5)
3	AVIC	Central	Aviation	\$2.2	Henniges Automotive (\$0.6)
4	Huaneng	Central	Transport and Infrastructure	\$1.2	InterGen stake (\$1.2)
5	Cinda	Other	Financial and Business Services	\$0.9	Group of Manhattan hotels (\$0.7)
6	Tianjin Pipe	Local (Tianjin Municipality)	Metals and Minerals	\$0.8	TPCO America (\$0.8)
7	Greenland	Local (Shanghai Municipality)	Real Estate and Hospitality	\$0.8	Metropolis development (\$0.3)
8	CIC*	Sovereign Wealth Fund	Financial and Business Services	\$0.7	1 New York Plaza (\$0.7)
9	Bank of China	Central	Financial and Business Services	\$0.6	7 Bryant Park (\$0.6)
10	Sinochem	Central	Basic Materials	\$0.5	Wolfcamp Shale stake (\$0.5)

Source: Rhodium Group. *CIC's value does not include all of its direct investments, as it has divested from other major direct investments as of September 2016.

Industry Focus of State-Owned Investors

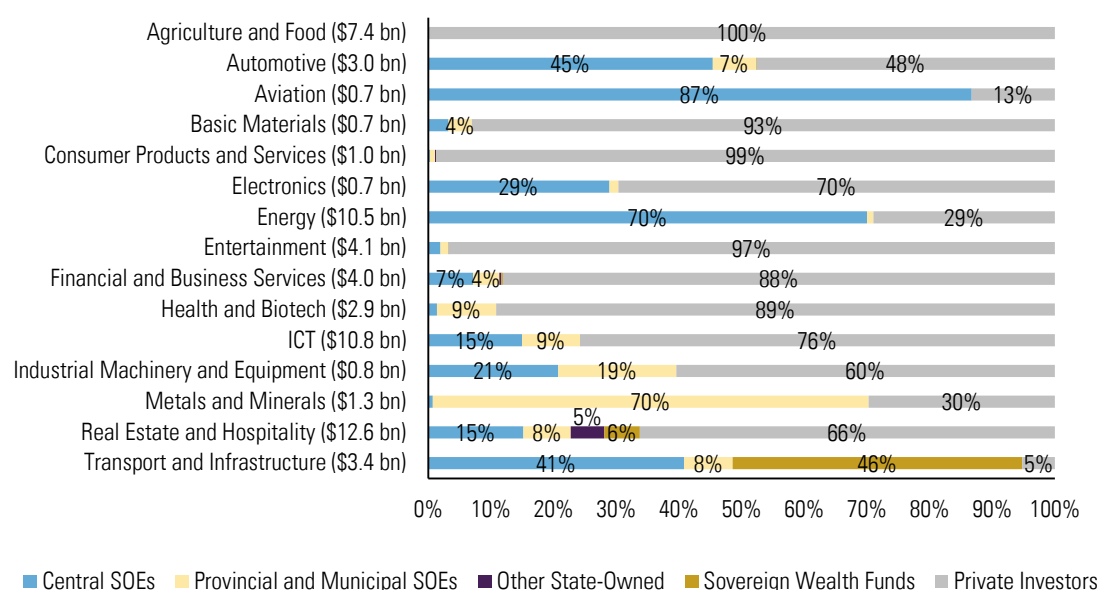
Figure 34 provides a detailed breakdown of cumulative Chinese FDI since 2000 across 15 industries, by ownership of the investing entity. State-related companies account for significantly more than 50% of total Chinese FDI in four out of the fifteen industry categories. Eight sectors are dominated by privately owned companies. Only three sectors show relatively equal distribution between state-related and private investors. The presence of state-owned entities across different sectors mostly mirrors the mix of ownership in the respective sector of the Chinese economy, but there are several exceptions and caveats.

The five sectors dominated by state-affiliated players are transport and infrastructure, aviation, energy, and metals. In those sectors, state-controlled entities account for more than 70% of total investment from 2000 to 2015. The importance of state capital in transportation and infrastructure can be explained by a low level of private sector investment and two large transactions by state-owned entities (CIC and Huaneng's respective stakes in power utility providers AES and InterGen). The same applies to metals and minerals, where overall investment levels have remained low and the only significant investment was made by a local SOE (Tianjin Pipe). Aviation is a special case, where almost 90% of investment from China can be traced back to a single parent company, Aviation Industry Corporation of China

(AVIC), the country's large state-owned aviation conglomerate (see case study in 3.3). Chinese investment in energy is large (\$10.5 billion) and almost entirely dominated by China's large national oil companies, mirroring the oligopolistic structure of China's energy sector.⁶⁵ However, there are new signs that this oligopolistic structure is pushing private capital that is looking for opportunities in upstream oil and gas to overseas markets (for example, Yantai Xinchao's investment in Texas oilfields in 2015).

The eight industries dominated by private investors are agriculture and food, entertainment, basic materials, consumer products, ICT, financial and business services, health and biotech, and real estate. For many of those sectors this is not surprising, as state ownership in China is limited and growth is driven by private capital. This particularly applies to consumer-facing sectors such as consumer products and services, health and biotech, and some areas of entertainment. Sectors with mixed-ownership structures in China generally have greater private investment activity in the US, suggesting that private companies are more willing to take overseas investment risks in those sectors. Examples are basic materials, agriculture and food, and real estate.⁶⁶ One special case is ICT, where the high share of private investment reflects not only commercial trends but also political realities. On the one hand, Chinese ICT companies such as Lenovo or Huawei were among the first private Chinese companies to meaningfully enter the US market and have since rapidly expanded their presence. At the same time, the share of state-owned players would be meaningfully higher today if large state-affiliated technology investors (such as Tsinghua Unigroup) would not face regulatory barriers in acquiring US assets in semiconductors and other advanced and potentially dual-use technology assets.

Figure 34: Composition of Cumulative Chinese FDI in the US by Industry and Investor Ownership, 2000-IH 2016
Percent of total cumulative investment from 2000 to 2015



Source: Rhodium Group.

⁶⁵ Daniel H. Rosen and Trevor Houser, *China Energy: A Guide for the Perplexed*, (Washington: Peterson Institute for International Economics, 2007).

⁶⁶ It is important to note that some of those ratios are the result of overall low investment levels combined with a singular large deal, so the robustness of these findings may be limited and composition can change quickly with just one large-scale investment.

One of the most striking differences in the ownership composition of assets between China's domestic economy and Chinese FDI in the US is the situation in financial and business services. China's financial sector is heavily dominated by large state-owned players in most sub-sectors, including commercial banking and insurance. In contrast, almost 90% of total investment in the United States in business and financial services that we count since 2000 were made by private Chinese companies. The majority of those transactions target the US insurance sector, originating from financial investors such as Fosun or Anbang. US investments by state-owned Chinese commercial banks stretch back many decades and have been expanding more rapidly in recent years, but are small compared to the multibillion dollar transactions by newly emerging private financial investors.

Only three industries show a relatively even split between state-owned and private investors: automotive, industrial machinery, and electronics. This is generally in line with the mixed ownership structure in those sectors in China. The majority of investments in the automotive industry were driven by private Chinese parts manufacturers (such as Wanxiang and Fuyao), as well as Ningbo Joyson's \$0.9 billion acquisition of Key Safety Systems. A few large-scale acquisitions by state-owned players (primarily AVIC) keep the split of ownership balanced. For industrial machinery and electronics, this split also reflects the low level of investment in both sectors (\$920 and \$690 million, respectively), which limits the robustness of those findings. It is also notable that low investment in those sectors could partially be related to the economic structure of the US economy, as other advanced economies with a stronger manufacturing base are recording much higher inflows of state-owned and private Chinese capital in those two sectors, partially driven by state-owned investors. In Europe, cumulative Chinese investment in machinery exceeded \$6.5 billion, six times as much as in the United States. 65% of that investment originated from state-owned investors.

Outlook

Going forward, it is reasonable to assume that secular growth of Chinese outbound FDI will continue to be driven by private capital. However, we do expect state-owned entities to continue to play an important role in Chinese outbound investment activity. Chinese policy to reform SOEs does not target the abolition of state-owned enterprises, but aims at creating stronger and more globally competitive SOEs.⁶⁷ It is likely that this stance will translate to more outbound investment to strengthen competitiveness, for example through the acquisition of foreign technology and brands. Outbound FDI will also be an important way for those national champions to expand overseas market share for their products and services, through localization of production or co-financing. China National Rail's investment in Massachusetts to build railway cars in the US is one such example.⁶⁸ With the rise of financial investments, an emerging trend is the increasing participation of state-owned investment funds in joint investments with private investors. As discussed in a case study of industrial support in Part 4, this has particularly been the case in the semiconductor industry. Another significant trend that may further increase state capital entering the US market is the growing appetite of large sovereign and other state-affiliated institutional investors for alternative investments in safe-haven economies. Existing global investors such as CIC are increasing their capabilities to make direct investments in commercial real estate and other US assets. Moreover, new entities that have not had a significant overseas investment portfolio, such as the National Social Security Fund, are expected to get more freedom to invest more of their assets globally, and the US is a natural market for both securities and direct investments.

3.3 CASE STUDIES: CHINESE SOES IN THE UNITED STATES

The following section examines the US investment activities and operations of three state-affiliated Chinese entities, which demonstrate the breadth of state-owned companies operating in the United States: the Aviation Industry Corporation of China (AVIC), China Investment Corporation (CIC), and Tianjin Pipe Group Corporation (TPCO). AVIC is a large, central SOE under the control of SASAC. Its US investments are focused on aviation, but it also has

⁶⁷ Wendy Leutert, "Challenges Ahead in China's Reform of State-Owned Enterprises," *Asia Policy* 21 (January 2016); State Council, "中共中央, 国务院关于深化国有企业改革的指导意见 [Central Committee and State Council Guidance on Deepening the Reform of State-Owned Enterprises]", August 24, 2015.

⁶⁸ Jad Mouawad, "Chinese Rail Firm Makes Inroads with U.S. Factory and Boston Transit Deal," *The New York Times*, September 03, 2015.

investments in automotive and other industries. CIC is China's primary sovereign wealth fund and its overseas investment arm has the mandate to increase returns on foreign exchange held by the Chinese government.⁶⁹ CIC was an early Chinese investor in the US, but its investments are largely focused on passive and non-controlling stakes. TPCO is a municipal SOE, owned by the Tianjin municipal government, and China's largest steel pipe producer. It has built a steel pipe plant in Gregory, Texas, which is one of the largest Chinese greenfield investments in the US. These case studies help to illustrate the particular opportunities and concerns associated with SOE investments.

Aviation Industry Corporation of China (AVIC)

AVIC was founded as part of the China's defense ministry. It was converted into an SOE in 1993, split into two SOEs in 1999 and merged again in 2008 into its current form.⁷⁰ The top-level SOE, the Aviation Industry Corporation of China Group (中国航空工业集团公司) is one of the 105 central SOEs under the direct administration of SASAC.⁷¹ It has established a presence in the US through multiple subsidiaries and joint ventures. The most prominent of these is AVIC International Holding (中国空行技术国际控股有限公司), one of the primary subsidiaries of AVIC for overseas investments. AVIC International Holding has in turn created, often jointly with other companies, additional subsidiaries that have invested in the US.⁷²

Investments in the US

AVIC's US forays date to the late 1980s, making it one of the first Chinese companies entering the US market in the reform era. One of its subsidiaries, China National Aero-Technology Import and Export Company (CATIC), opened an office in 1987 and in November 1989 it purchased MAMCO, an aircraft manufacturer based in Seattle. A few months later, President Bush, based on the recommendation of CFIUS, ordered CATIC to divest MAMCO assets on national security grounds.⁷³ This was the first instance in which the President ordered divestment of a completed FDI transaction under the CFIUS system.

After this initial investment, no AVIC subsidiaries invested in the US until the reorganization of the company in 2008. In that year, AVIC International Holding opened an office in Pomona, California. Restructuring into the consolidated AVIC Group led to a more concerted push to invest abroad. In 2010, AVIC Automotive, an automotive sector focused subsidiary, joined other Chinese investors in acquiring Nexteer Automotive from GM. Pacific Century Motors, a joint venture eventually created by AVIC Automotive and Beijing E-Town Investment, an investment entity controlled by the Beijing municipal government, purchased Nexteer for \$450 million. A few months later in early 2011, AVIC Automotive purchased a controlling stake in Pacific Century Motors, effectively taking control of Nexteer.⁷⁴ Later in 2011, Technify Motors, an AVIC International Holding subsidiary, acquired the aviation engine business of Teledyne Technologies for \$186.0 million. This was later reincorporated as Continental Motors. Also in 2011, China Aviation Industry General Aircraft (CAIGA), AVIC's light aviation civil aircraft manufacturer subsidiary, acquired Cirrus Aircraft, a similar manufacturer, for \$210 million. AVIC also provided funding for a \$150 million expansion of

⁶⁹ China Investment Corporation, *China Investment Corporation Annual Report 2015*, (2016), 7.

⁷⁰ "AVIC International: Our History," 2013, <http://www.avic-intl.cn/category.aspx?NodeID=81>.

⁷¹ "中央名录 [List of Central SOEs]," July 15, 2016, <http://www.sasac.gov.cn/n86114/n86137/index.html>. Note that the precise number of enterprises under central SASAC control is presently in flux due to consolidations.

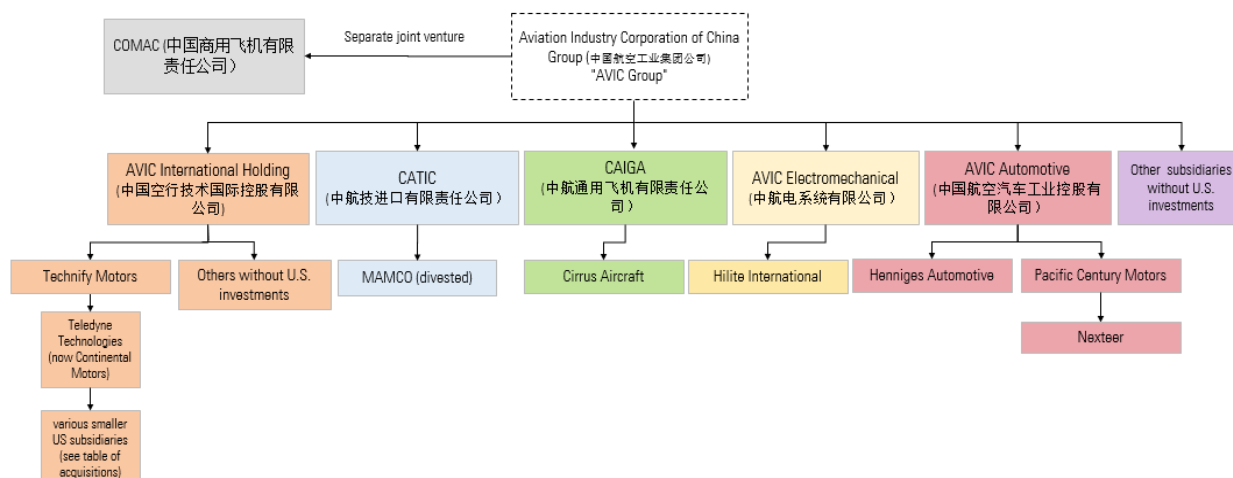
⁷² AVIC does not publicly release its sources of capital, so it is unclear what the level of government funding it receives. The only listed component of any of AVIC's US entities is Nexteer, which is listed on the Hong Kong stock exchange. Its annual report indicate its ownership structure and its financial balance sheet, but not its sources of capital, both proximately from other AVIC entities or ultimately from Chinese government funds.

⁷³ Art Pine and James Gerstenzang, "China Must Sell U.S. Aircraft Parts Maker, Bush Says," *Los Angeles Times*, February 3, 1990; Harriet King, "China Ends Silence on Deal U.S. Rescinded," *The New York Times*, February 20, 1990.

⁷⁴ Damien Ma, *China Drives into America's Auto Parts Industry*, (Chicago: Paulson Institute, 2013), 24-25.

Nexteer's R&D capabilities in September 2011. Figure 35 visualizes these different subsidiaries and their respective position in AVIC's structure.

Figure 35: AVIC's Subsidiaries with U.S. Investment



Source: Rhodium Group.

Over the next two years, AVIC subsidiaries continued to invest in the US, through expansions and new establishments. In 2012, CAIGA invested \$100 million of new capital into Cirrus to develop a new light aircraft line to be manufactured at the company's headquarters in Duluth, Minnesota. Nexteer also received a further \$70 million of investment in December 2012 after the signing of new supply contracts with major US automakers. In 2013, AVIC International Holding acquired real estate in the form of mid-range hotels in multiple US locations. That year the Commercial Aircraft Corporation of China (COMAC), a joint venture between AVIC and other central SOEs, established COMAC America, as a business development office.

In 2014, AVIC Electromechanical acquired Hilite International, a manufacturer and developer of automotive engine and transmission components. The total transaction was worth \$644.1 million (the company is headquartered in Germany), with US assets worth roughly \$250 million. Other subsidiaries such as Continental Motors continued to make smaller investments. In the spring of 2015, AVIC Automotive acquired Henniges Automotive in partnership with BHR, a state-backed Chinese private equity firm. Henniges is a producer of sealing and anti-vibration components for cars. The transaction was worth approximately \$600 million, with most of its assets in the US, making it the largest single acquisition by an AVIC subsidiary in the US.

Table 8: Timeline of AVIC Investments in the US

USD million

Date	Type	Target	AVIC Subsidiary Investor	Value	Stake*
1987	Greenfield	Office	CATIC		100%
1989	Acquisition	MAMCO**	CATIC	\$20	100%
2008	Greenfield	New office in Pomona	AVIC International		100%
4/2010	Acquisition	Epic Air- technology and foreign development rights	CAIGA	\$4	100%
11/2010	Acquisition	Nexteer Automotive	Pacific Century Motors	\$450	100%
12/2010	Greenfield	COMAC office in Los Angeles	COMAC	\$1	100%
4/2011	Acquisition	Teledyne Continental Motors and Teledyne Mattituck Services	Technify Motors	\$186	100%

6/2011	Acquisition	Cirrus Industries	CAIGA	\$210	100%
8/2011	Expansion	Consolidation and renaming of Teledyne assets as Continental Motors	Continental Motors		100%
9/2011	Expansion	Nexteer expansion	Pacific Century Motors	\$150	
3/2012	Expansion	Cirrus expansion	CAIGA	\$100	
7/2012	Greenfield	Zulu Flight Training, Inc.	Continental Motors	\$1	100%
12/2012	Expansion	Nexteer expansion	Pacific Century Motors	\$70	
3/2013	Acquisition	DoubleTree by Hilton San Pedro	AVIC International Shenzhen	\$12	100%
9/2013	Acquisition	3 hotels in Fullerton, CA, Atlanta, GA, South Field, MI	AVIC USA		100%
11/2013	Greenfield	COMAC America in Newport Beach	COMAC America	\$50	100%
5/2014	Acquisition	Hilite International	AVIC Electromechanical	\$250***	100%
11/2014	Acquisition	Southern Avionics	Continental Motors	\$15	100%
12/2014	Acquisition	Align Aerospace	AVIC International	\$50	
1/2015	Acquisition	United Turbine Corp.	Continental Motors	\$2	100%
5/2015	Greenfield	Vision Center	Cirrus Aircraft	\$15	100%
7/2015	Greenfield	Aviage Systems R&D center	Aviage Systems	\$5	50%
9/2015	Acquisition	Henniges Automotive	AVIC Automotive Systems	\$600	100%

Source: Rhodium Group. *Refers to stake of Chinese investors, some of which are not AVIC itself. **Divested. ***Only includes value of US assets in transaction.

Altogether, AVIC through its subsidiaries and with other Chinese joint venture partners have invested approximately \$2.2 billion in the US. Some of the smaller subsidiary offices have closed or moved, and a handful of smaller investments have been divested (MAMCO, Epic Air assets). This makes AVIC the third largest state-owned investor in the US, passed only by the Sinopec and CNOOC, as shown previously in Table 7. Unlike the stakes in oil fields owned by the oil companies, AVIC's numerous investments and subsidiaries mean it has a presence spread widely across the US.

AVIC currently has a presence in 12 states and 22 cities and towns. The largest AVIC-owned operations in the US are from its five largest subsidiaries: Henniges, Hilite, Continental Motors, Cirrus, and Nexteer. Henniges is headquartered in Auburn Hills, Michigan and has other significant operations in Reidsville, North Carolina, Keokuk, Iowa, and New Haven, Missouri. Hilite, headquartered in Germany, has smaller operations in Whitehall and Orion, Michigan as well as Arlington, Texas. Continental Motors is headquartered and has its largest operations in Mobile, Alabama. Cirrus is headquartered and has primary operations in Duluth, Minnesota. The largest single operation is Nexteer's headquarters and primary operation in Saginaw, Michigan.

AVIC has also invested in other advanced economies, although not to as great an extent as in the US. Apart from the 2014 acquisition of Hilite by AVIC Electromechanical, AVIC subsidiaries have made other significant investments in Europe. AVIC International Holding acquired a 39% stake in KDH Humboldt Wedag, a German cement machinery developer for \$83 million in 2013. Later that year, it also fully acquired Thielert, a German aircraft engine maker for an undisclosed amount. In 2015, Xinfei, a French subsidiary of AVIC, acquired Lamberet, a refrigerated trailer manufacturer for an undisclosed amount. In May 2016, AVIC International completed the full acquisition of AIM Altitude, a UK-based aircraft interior developer.

Issues for Regulators and Policymakers

AVIC's US investments demonstrate some of the positive aspects of deep-pocketed state owned investors. AVIC has been capable of providing capital injections to struggling firms during difficult periods, taking a long-term perspective

based on fundamentals. In different parts of the US, this has saved a considerable number of jobs, and created new ones through expansion. AVIC now employs over 10,000 people in the US through 23 operations. These employment figures make AVIC and its subsidiaries the largest state-owned Chinese employer in the US, and second only to WH Group (Smithfield) as the largest Chinese employer overall. While AVIC has not made significant greenfield investments apart from establishing representative offices of some subsidiaries, it is one of the most notable investors in terms of the expansion of acquired businesses, putting more than \$300 million worth of investment into Cirrus and Nexteer *after* acquisition at sites in the US (Duluth, Minnesota for Cirrus and Buena Vista and Saginaw, Michigan for Nexteer) to expand production capabilities, creating over 500 new jobs locally. Although difficult to quantify, AVIC has also spent millions of dollars on R&D, contributing to local innovation. There are a few private investors that have similarly focused on purchasing cheap, distressed companies and sought to inject capital in their US operations. The largest example is Wanxiang, focused on automotive parts, but also with interests in renewable energy and other sectors. Nonetheless, no other Chinese investor has matched the scale of AVIC.

At the same time, AVIC is perhaps one of the best examples for illustrating potential national security risks from Chinese investment. AVIC is at the center of China's military-industrial complex and a key vehicle for the Chinese government's desire to nurture domestic commercial and military aviation industries.⁷⁵ Through its numerous operations, it takes directives from multiple Chinese government agencies, such as the State Administration for Science, Technology, and Industry (SASTIND) and the People's Liberation Army (PLA). Most of the main industrial policy directions, such as the development of domestic commercial aircraft and automotive industries, stress the importance of partnerships and joint ventures with foreign firms both at home and abroad.⁷⁶ AVIC's US investments in these sectors, as well as its numerous partnerships with US and other international firms must be viewed against this backdrop of strategic technology upgrading.

The stated strategic goal to acquire technology with potential dual-use applications for both civilian and military technology and its role as a key player in China's military industrial complex rightly makes AVIC subject to particular scrutiny by the US defense and intelligence community. To our knowledge, all major US acquisitions by AVIC and its subsidiaries have been reviewed by the Committee on Foreign Investment in the United States (CFIUS). One of AVIC's predecessor's investments, MAMCO, was the first Chinese investment to be divested through executive order by the US President. Since then, CFIUS has reviewed and approved all transactions, some of which may have been subject to mitigation agreements. One potential issue could be the growing scope of local R&D activities and research collaborations by AVIC-owned US subsidiaries, which may not be covered by CFIUS. One of AVIC's subsidiaries in the UK, Beijing Aeronautical Manufacturing Technology Research Institute (BAMTRI)—while placed on a US Department of Commerce watch list due to potential leakage of missile technology to Iran—had research agreements with a number of UK universities.

Finally, there are concerns about the behavior of AVIC and its US subsidiaries in US courts and legal procedures, which are directly related to state ownership. AVIC and its subsidiaries were involved in a number of lawsuits in recent years, including litigation and arbitration. In at least one of those cases, an arbitration suit with US wind developer Tang Energy, AVIC has tried to escape the jurisdiction of US courts by evoking the Foreign Sovereign Immunities Act (FSIA). FSIA grants sovereign entities that are not involved in commercial activity immunity in US courts. In the arbitration process, AVIC claimed that it was an arm of the Chinese government and as such it would not be liable to US courts.⁷⁷ This may simply have been a case of a tactical delay by its lawyers, but it casts a negative light on AVIC's readiness to take responsibility for its actions and points to an area that may warrant attention by lawmakers (see Part 5.3).

⁷⁵ Keith Crane et al., *The Effectiveness of China's Industrial Policies in Commercial Aviation Manufacturing*, (Santa Monica: RAND, 2014).

⁷⁶ *Ibid.*, 55-59.

⁷⁷ *Soaring Wind Energy LLC et al. v. AVIC International USA Inc. et al.*, 2015 N.D. Texas, 3:15-cv-04033. Another AVIC subsidiary has made the same claim in another ongoing case, *Technology, Inc. v. Yubei (Xinxiang) Power, et al.*, 2015, 6th Cir., 14-2319.

China Investment Corporation (CIC)

China Investment Corporation (中国投资有限责任公司) is one of China's three major sovereign wealth funds. It was founded in 2007 and is charged with managing part of China's foreign exchange reserves. As a sovereign wealth fund it focuses primarily on investing for financial returns.⁷⁸ Its primary investment interests are fixed income products and public equities, but it also invests in alternative investments including direct investments.⁷⁹ While it is technically directly controlled by the State Council, it maintains in practice close ties with the Ministry of Finance, and has officials from the Ministry of Finance on its board.⁸⁰ It has three primary subsidiaries, which operate with operational firewalls between them: Central Huijin, CIC International, and CIC Capital. Central Huijin is focused on domestic equity investments in China and has a wider remit to support the modernization of state-owned assets as well as seek financial returns. In contrast, CIC International, the unit for global portfolio investments, and CIC Capital, the direct investment arm, are tasked with improving the financial returns on China's foreign exchange assets.⁸¹

Investments in the US

Figure 36 shows the distribution of CIC's portfolio in 2015. Its total assets amounted to \$813 billion. Securities accounted for over 60% of its total assets, with US securities taking a large share. Long-term investments (the category under which most FDI in the scope of this report falls) are classified by CIC itself as direct investments and private equity investments in all industries, natural resources and commodities investments, and real estate and infrastructure.⁸² Altogether, these account for 22% of CIC's assets, worth roughly \$180 billion.⁸³

After its founding in September 2007, CIC quickly entered the US market seeking investment opportunities. This section will discuss some of its portfolio investments, as they are significant in size, though they are not counted as direct investment in the Rhodium Group data used throughout the report. Its first investment, a \$3 billion (9.9%) stake in Blackstone, the private equity firm, took place in May 2007, a few months before CIC was organized in its current form. Later in the year, it purchased a \$5 billion (9.9%) stake in investment bank Morgan Stanley as the US financial crisis forced US financials to seek fresh capital. In 2009, CIC pushed aggressively into equity investments, handing over funds for management, taking further equity stakes in Blackstone and Morgan Stanley and others.

In March 2010, CIC made its first direct investment by the terms of the standard threshold of a direct investment by purchasing a 15% stake worth \$1.58 billion in AES, a power utility company. Headquartered in Virginia, AES had substantial assets outside the US, especially in Latin America. The AES transaction also marked the first time that CIC took a board seat in one of its investments, having declined to take seats at both Blackstone and Morgan Stanley despite its stakes entitling it to do so. CIC sold most of its stake in AES, going below the 10% threshold in September 2015.

⁷⁸ CIC also has domestic investment arms, which mostly hold stakes in financial institutions and which have the added mission of improving governance structures and shareholder value at those entities. However, according to CIC, domestic activities are strictly separated from international activities. See: <http://www.china-inv.cn/>.

⁷⁹ China Investment Corporation, *China Investment Corporation Annual Report 2015*, (2016).

⁸⁰ Ibid, 13-19.

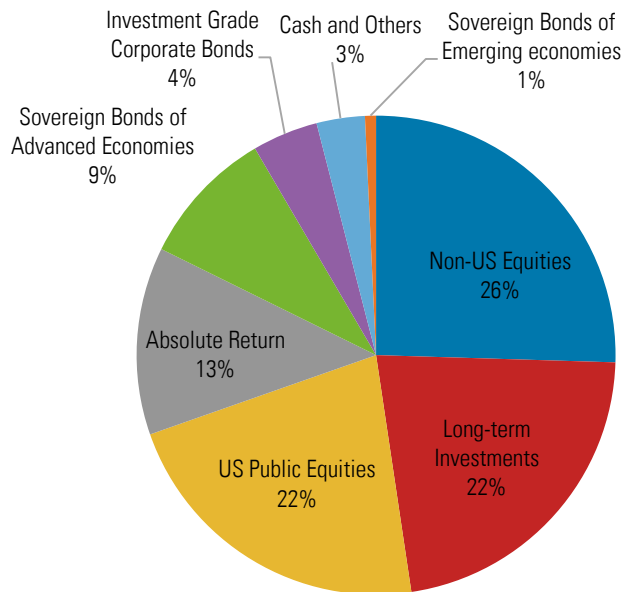
⁸¹ Ibid, 7.

⁸² Ibid, 26.

⁸³ These figures do include assets within China as well.

Figure 36: China Investment Corporation's Assets by Class, 2015

Percent share



Source: China Investment Corporation.

Table 9: Timeline of Major CIC Investments in US

USD million

Date	Action	Type*	Target	CIC Investor	Subsidiary	Value	Stake*	Date Divested
5/2007	Investment	Portfolio	Blackstone	CIC		\$3,030	9.9%	
12/2007	Investment	Portfolio	Morgan Stanley	CIC		\$5,000	9.9%	7/2010
3/2008	Investment	Portfolio	Visa	CIC		\$100		
4/2008	Managed Fund	Portfolio	JC Flowers Fund	CIC		\$1,800	80%	9/2015
9/2008	Managed Fund	Portfolio	Reserve Primary Fund	CIC		\$5,400		10/2008
10/2008	Investment	Portfolio	Blackstone	CIC		\$200	3%	
3/2009	Investment	Portfolio	Morgan Stanley	CIC		\$1,200	9.9%**	7/2010
6/2009	Managed Fund	Portfolio	Blackstone	CIC		\$500		
6/2009	Investment	Portfolio	BlackRock	CIC		\$710		9/2012
9/2009	Investment	Greenfield	CICC office in New York	CICC			100%	
9/2009	Managed Fund	Portfolio	Oaktree Capital Management distressed asset fund	CIC		\$1,000		
9/2009	Managed Fund	Portfolio	Goldman Sachs distressed asset fund	CIC		\$600		
2/2010	Managed Fund	Portfolio	Lexington Partners	CIC		\$500		
2/2010	Managed Fund	Portfolio	Goldman Sachs	CIC		\$500		
2/2010	Managed Fund	Portfolio	Pantheon Ventures	CIC		\$500		
3/2010	Investment	FDI Acquisition	AES	CIC		\$1,500	15%	5/2015
6/2010	Investment	Portfolio	Chesapeake Energy	CIC		Part of \$900		
11/2010	Investment	Portfolio	General Growth Properties	CIC		\$1,030	7.4%	11/2013

12/2011	Managed Fund	Portfolio	Deutsche Bank New Germany Fund	CIC		5%
2/2012	Investment	Portfolio	EIG Global Energy Partners	CIC		
4/2012	Managed Fund	Portfolio	BlackRock	CIC	\$200	
8/2012	Investment	Portfolio	Cheniere Energy	CIC	\$500	
12/2015	Investment	Greenfield	CIC office in New York	CIC		100%
5/2016	Investment	FDI Acquisition	1 New York Plaza	CIC	\$700	49%

Source: Rhodium Group. *Portfolio refers to equity investments of less than 10%. **Intervening investments by others had reduced the percentage value of CIC's initial stake in JP Morgan. This investment returned CIC's stake to 9.9%.

These investments were coupled with a much greater focus on investments in other advanced economies. In 2011, CIC opened its first overseas representative office in Toronto, part of an approach that saw a string of high-profile direct and equity investments in Canada between 2010 and 2014. With the downturn in global commodities, these investments performed poorly and the Toronto office closed in 2015. In 2014 and 2015, CIC also turned to investment in Europe, taking stakes in utilities and infrastructure investments like GDF Suez in France and Tank & Rast in Germany as well as real estate in the UK. After a period of declining activity from 2011 onward, as CIC focused on investments elsewhere, the sovereign wealth fund has indicated it will once again focus on the US. At the end of 2015, CIC opened a new office in New York. In May 2016, it made a new direct investment in real estate, acquiring a 49% stake in 1 New York Plaza for \$700 million. This is in line with CIC's stated goal of moving into more real estate investment, after setting up a specific group within its long-term asset division.⁸⁴

Issues for Regulators and Policymakers

Given CIC's asset structure and mission, long-term investments in US infrastructure could be an attractive option for CIC, and the fund's track record and transparency should make it an interesting prospect for US states and regions seeking such investments. However, as a sovereign investment entity run by a country that is not a military ally and a geopolitical competitor, CIC also faces particular scrutiny with regard to potential national security threats. All major investments, such as the stake in AES, were reviewed and cleared by CFIUS.⁸⁵ If US policymakers would like to reap the benefits from such large pools of state capital, they need to work on identifying structures and vehicles that allow entities such as CIC to deploy their funds in US infrastructure projects without posing security risks.⁸⁶ Consortia of interested investors and project developers have explored equity investment, debt financing and other approaches to deploying Chinese capital in American infrastructure, and identified a number of regulatory hurdles that may require policy adjustment such as compliance with the U.S. Foreign Account Tax Compliance Act.⁸⁷

Another traditional concern with SWF investments is transparency.⁸⁸ However, by all publicly available metrics, CIC must be considered as relatively transparent. It joined the International Working Group of Sovereign Wealth Funds and co-drafted and signed the Santiago Principles on sovereign wealth fund transparency in 2008. Edwin Truman of the Peterson Institute scores sovereign wealth funds on transparency and gives CIC a score of 64, above the average of

⁸⁴ China Investment Corporation, *China Investment Corporation Annual Report 2015*, (2016), 32-33.

⁸⁵ Jacob N. Koch-Weser and Owen D. Haacke, *China Investment Corporation: Recent Developments in Performance, Strategy, and Governance*, (Washington: U.S.-China Economic and Security Review Commission, 2013), 39.

⁸⁶ Covington, Rhodium Group, and Sphere, *From International to Interstates: Assessing the Opportunity for Chinese Participation in U.S. Infrastructure*, (Washington: U.S. Chamber of Commerce, 2013).

⁸⁷ Ibid, 65-73.

⁸⁸ Edwin M. Truman, *Sovereign Wealth Funds: The Need for Greater Transparency and Accountability*, (Washington: Peterson Institute for International Economics, 2007).

59 in 2013, but below Singapore's Temasek (76).⁸⁹ CIC discloses the membership of its board and information on its senior staff, and also has an external advisory board comprised of individuals from countries across the world, with 3 members from the US. China's other sovereign wealth funds, notably SAFE Investment Company and the NSSF are much less transparent and use a number of offshore shell companies to invest in the US and elsewhere.

CIC's investment portfolio also points to another phenomenon that could become a long-term challenge for the US and other economies: the secular rise of non-FDI investment flows from China, following the current expansion of outbound FDI. If China continues to liberalize its capital account, it could end up exporting trillions of dollars of capital to overseas markets. While the growth of Chinese direct investment follows the well-known investment in securities by CIC and a few others, the participation of more Chinese companies, funds, and retail investors in non-FDI investment flows to the US in the future could lead to greater volatility in cross-border capital flows and increase associated risks.⁹⁰ The risk is made greater by the uncertainty surrounding the structure of China's financial system as an emerging market economy, since reliance on China for inflows coupled with a sudden disruption in China's financial system could be painful. However, as the world's largest and most liquid financial market with a diversified foreign investor base, no country is better placed than the US to deal with such volatility.

Tianjin Pipe Corporation (TPCO)

Tianjin Pipe Corporation (天津钢管集团有限公司) is a municipally-owned SOE based in Tianjin municipality. Founded in 1992, the SOE specializes in seamless steel pipes including oil country tubular goods (OCTG) pipes, critical inputs for extraction of oil and gas. After struggling financially through the 1990s, the company was recapitalized in 1999 and began a period of steady growth at the beginning of the 2000s. By 2006, TPCO had become the largest OCTG producer in China with 20% of the market and started to look for overseas opportunities.⁹¹ Today, like many other SOEs in steel, TPCO is struggling to remain profitable and is highly leveraged.⁹²

Investment in the US

While TPCO is a local SOE, it is one of the largest steel pipe producers in China. Chinese markets for industrial materials such as steel are well-documented to have severe problems with overcapacity, a reality that contributed to TPCO seeking growth abroad. This overcapacity had a secondary effect for Chinese steel producers in that it led to antidumping measures in both the US and the EU. The saturation of the Chinese market consequently created a dual motivation for TPCO to produce domestically in the US market. TPCO became interested in producing seamless pipes in the US for domestic US sales in 2006. It reasoned initially that it could help satisfy US demand through direct production in the US market.⁹³ The take-off of the US shale industry created increased US demand for seamless pipes in shale extraction. In 2009, the US government began moving toward the introduction of tariffs on Chinese steel pipes. These were implemented in 2010 with countervailing duties at rates of between 11 and 13%. Additionally, shale's effect on energy prices made US production more profitable for TPCO than shipping from abroad. TPCO stated that these

⁸⁹ Allie E. Bagnall and Edwin M. Truman, *Progress on Sovereign Wealth Fund Transparency and Accountability: An Updated SWF Scoreboard*, (Washington: Peterson Institute for International Economics, 2013), 5. By comparison, the most transparent sovereign wealth funds, such as Norway's Government Pension Fund and New Zealand's Superannuation Fund score above 90 (98 and 94 respectively). The most opaque are Libya's Libyan Investment Authority and Equatorial Guinea's Fund for Future Generations (6 and 2 respectively).

⁹⁰ For more background, see: Carmen M. Reinhart and Vincent R. Reinhart, "Capital Flow Bonanzas: An Encompassing View of the Past and Present," *NBER Working Papers*, no. W14321 (2008).

⁹¹ Damien Ma, *Pipe Dreams: How a Chinese State Company Sought to Ride the US Energy Boom*, (Chicago: Paulson Institute, 2014), 11-13.

⁹² At the end of 2Q 2015, its debt-to-asset ratio stood at 83.4% and this has stayed roughly constant (always above 80%) since 2012. Its 2Q 2015 net profit stood at a loss of -23.2 million RMB and its 2014 net profit was negative -6.8 million RMB. Tianjin Pipe Group Corporation, 天津钢管集团股份有限公司 2015 年度第二期短期融资券募集说明书 [Tianjin Pipe Group Co Brochure to Raise Short-Term Financing], (Tianjin Pipe Group Corporation, 2015).

⁹³ Damien Ma, *Pipe Dreams: How a Chinese State Company Sought to Ride the US Energy Boom*, (Chicago: Paulson Institute, 2014), 17.

factors, stemming from structural conditions in China and shale boom in the US, gave it a strategic rationale for investment in US manufacturing.⁹⁴

In 2009 TPCO selected a site in Gregory, Texas for a \$1 billion steel pipe plant. At completion, the plant is expected to employ 600. The project broke ground in 2011 and construction was completed on its first phase, an end finishing plant for unrolled steel, in 2014. Construction, somewhat delayed, of the second and final phase (a pipe rolling and finishing plant), is expected to be completed in the first half of 2017.

Issues for Regulators and Policymakers

TPCO's investment in Texas exemplifies the scale of opportunities state and local officials are encountering, and demonstrates that sub-national Chinese SOEs can invest hundreds of millions of dollars in capital and employment-intensive greenfield manufacturing in the US. From an economic perspective such projects bring positive impacts for local communities in terms of investment, job creation and other spillover effects. Many local Chinese SOEs are showing that such investments make sense to them and are permissible with their home authorities.⁹⁵

At the same time, TPCO's investment illustrates certain concerns. For one, the firm is a leading player in one of China's highest overcapacity industries. Many provincial and municipal SOEs are in a similar position in China. As such, one concern is that local presence through FDI could be followed by augmented US imports as these companies seek to offload overcapacity. There is no evidence that TPCO had done so, and the track record of most companies in the same position is too short to draw conclusions. Moreover, the US has strong laws and regulatory capacity for oversight on rules of origin. Yet, it is important to continue careful monitoring of impacts and these firms' US trade patterns and balance, particularly in sectors with looming overcapacity. As of this writing, concerns about transactions in the aluminum sector being used to alleviate Chinese overcapacity are also in the press.⁹⁶ While we have noted that SOEs in these sectors are highly unlikely to sidestep U.S. countermeasures with claims of sovereign immunity, we share concerns about damage to market conditions while due process runs its course.

Another concern is that provincial and municipal SOEs often receive subsidies and other non-market advantages due to their role as employers and drivers of growth in their home provinces and cities. As a large SOE from one of the wealthiest areas of China (Tianjin municipality), TPCO has received support from the municipal government in the past, which it discloses in its annual reports.⁹⁷ For example, in 2013 Tianjin Pipe Group Corporation reported government subsidies (及政府补助) worth 7.3 million RMB and deferred subsidies amounting to 2 million RMB.⁹⁸ The recognition of the adverse competition impacts of such subsidization are at the heart of the US's trade policy toward Chinese industries with overcapacity issues like steel. However, US competition policy currently does not have robust mechanisms and tools to screen for the potentially adverse impacts of subsidized companies operating in the US market through FDI (see Part 5.2). The US does not have a "competitive neutrality" framework that exists in Australia, Europe and other OECD economies to address such concerns (see Part 5.3 for a more detailed discussion).

⁹⁴ Quoted in *ibid*, 17.

⁹⁵ Ming Hua Li, Lin Cui, and Jiangyong Lu, "Varieties in State Capitalism: Outward FDI Strategies of Central and Local State-Owned Enterprises from Emerging Economy Countries," *Journal of International Business Studies* 45, no. 8 (April 17, 2014).

⁹⁶ John W. Miller, "Steelmakers in U.S. To File Complaints Over Alleged Tariff Evasion by Chinese Competitors," *The Wall Street Journal*, September 22, 2016.

⁹⁷ Damien Ma, *Pipe Dreams: How a Chinese State Company Sought to Ride the US Energy Boom*, (Chicago: Paulson Institute, 2014), 11-15.

⁹⁸ Tianjin Pipe Group Corporation, 天津钢管集团股份有限公司 2013 年度合并财务报表审计报告 [Tianjin Pipe Group Corporation 2013 Consolidated Financial Statements Audit Report], (2014), 64-65.

4. The Chinese Regulatory Environment for Outbound FDI

Changing Chinese regulations and policies are critical for understanding the growth and shifting patterns of Chinese FDI, both globally and in the United States. This section reviews the Chinese regulatory environment for outbound FDI, based on official policy documents and interaction with Chinese officials and companies over a period of almost ten years. We illustrate that the gradual removal of administrative barriers to outbound FDI was a key prerequisite for China's outbound FDI boom. In particular, the move to a recordal system in the past three years has propelled growth of investment by private companies to the US and other high-income economies. Policies to support outbound investment were a secondary factor, but they are important to explain investment patterns in specific sectors and by specific companies. Going forward, China faces the risk of capital outflows accelerating again, which could force the government to slow down and even backtrack on further FDI liberalization.

4.1 RESTRICTIONS: APPROVAL AND REGISTRATION REQUIREMENTS

While China embraced inward foreign direct investment (FDI) to a far greater extent than most developing countries since the 1980s, it long prohibited its firms from investing overseas. For most of the first two decades of China's economic reform period, Chinese companies were forbidden from investing overseas unless they had direct approval from the government. Foreign exchange controls were strict due to anxieties about foreign currency shortages, and control over currency access was an important tool to keep firms at home. During this period, the State Council (China's cabinet) was directly responsible for granting FDI approvals. Beginning in 1983, the Ministry of Commerce (MOFCOM) became responsible for project approvals, and the former planning commission was in charge of overall policy guidance. The approval regime was modified several times but outbound FDI remained largely the domain of state-owned trading and technology companies.⁹⁹ This restrictive stance changed only gradually starting in the early 2000s.

“Going Out” – but on a Tight Leash

In 2000 China adopted a “going out” policy encouraging Chinese companies to invest overseas.¹⁰⁰ This change was driven by the recognition that China had arrived at a development stage at which outward investment was positive for future economic development as well as Chinese access to oil and other much needed imports from abroad. In 2004, China began to establish a new investment approval regime that established more formal bureaucratic mechanisms for regulating FDI. The key responsibilities were shared by two government entities: the National Development and Reform Commission (NDRC) and the MOFCOM.

The NDRC, China's central economic planning bureaucracy, had a central role in that regime. Its mandate was to review overseas investment projects to ensure that they were in line with national economic development goals and balance of payments projections. Most outbound investment projects were subject to the NDRC's approval process: resource projects over \$30 million and non-resource projects over \$10 million.¹⁰¹ For projects under the threshold in both categories, central SOEs went through a recordal process with NDRC and MOFCOM, and all other companies

⁹⁹ For a detailed summary of policy developments in those early years, see Daniel H. Rosen and Thilo Hanemann, *China's Changing Outbound Foreign Direct Investment Profile: Drivers and Policy Implications*, (Washington: Peterson Institute for International Economics, 2009).

¹⁰⁰ Central Committee of the Communist Party, “中共中央关于制定国民经济和社会发展第十个五年计划建议[Recommendations for the 10th Five-Year Plan for National Economic and Social Development]”, October 11, 2000.

¹⁰¹ In 2011 these thresholds were raised to \$300 million and \$100 million, respectively.

went through an approval process at the local government level.¹⁰² The NDRC was notorious for interfering with investment projects and several investments during this time, including US acquisitions, were withdrawn because of the agency's interference.¹⁰³

MOFCOM, the agency with the primary mandate of promoting foreign trade and inbound FDI, was the second main player in China's 2004 outbound FDI approval regime.¹⁰⁴ MOFCOM was in charge of reviewing outbound FDI projects with a focus on verifying the commercial details of the project and the legitimacy of the overseas entities. Under the 2004 regime, it was responsible for recording small central SOE investment projects alongside the NDRC (resource projects under \$30 million, non-resource projects under \$10 million).¹⁰⁵ In addition, MOFCOM was in charge of approving all establishments of overseas entities except for financial enterprises.¹⁰⁶ It was mostly supportive of overseas investments, but added another layer of bureaucratic red tape.

The State Administration of Foreign Exchange (SAFE), an agency under the People's Bank of China and responsible for managing the country's foreign exchange reserves, became the third major actor in outbound FDI approval system. SAFE was a hurdle that investors had to take as it controlled access to foreign currency needed for outbound investments. However, once firms had NDRC and MOFCOM approvals, SAFE usually did not independently scrutinize transactions. Over the course of 2003-2006, SAFE accelerated the pace of outbound FDI foreign exchange policy reform by increasing foreign exchange review thresholds, and simplifying the administrative process.¹⁰⁷

In addition to these three main agencies, the regulatory process also involved other bureaucratic actors: outbound investments by firms in certain industries required additional approval from industry regulators, for example the China Banking Regulatory Commission (CBRC), the China Insurance Regulatory Commission (CIRC) or the Ministry of Industry and Information Technology (MIIT). State-owned enterprises also required additional approval or registration from the State-owned Assets Supervision and Administration Commission (SASAC). Listed companies needed to submit their project details to the Shanghai and Shenzhen stock exchanges if the investment would result in a restructuring of the listed entity. Finally, certain transactions were subject to competition review by the MOFCOM's anti-monopoly division as well.

Recent Reforms and Current Legal Framework

While formally this regime made it easier for Chinese companies to invest overseas, in practice the process was long and onerous given the involvement of at least three and often more regulators. This put Chinese firms at a significant disadvantage in competitive bidding processes over global assets. Since 2013, the State Council has embarked on a modernization of China's outbound FDI regime with the goal of further streamlining the process and transitioning to a recordal-based system.

In 2013 and 2014, the State Council released two updates to its "*Catalog of Investment Projects Subject to Government Approval*", effectively mandating the transition to a simplified registration-only process for most outbound

¹⁰² State Council, "国务院至于投资体制改革的决定[Decisions Regarding Reform of the Investment Regime]", July 16, 2004.

¹⁰³ One notable case was the 2010 attempted acquisition of US carmaker Hummer by Tengzhong, a Sichuan-based industrial equipment maker, which was reportedly stopped by NDRC interference. Aileen Wang and Alan Wheatley, "China's NDRC against Tengzhong Bid for Hummer: Report," *Reuters*, June 25, 2009.

¹⁰⁴ State Council, "国务院至于投资体制改革的决定[Decisions Regarding Reform of the Investment Regime]", July 16, 2004.

¹⁰⁵ In 2011 these thresholds were raised to \$300 million and \$100 million, respectively.

¹⁰⁶ This process was further liberalized by MOFCOM in 2009.

¹⁰⁷ The State Administration of Foreign Exchange gradually loosened foreign exchange control on outbound investment during this period. See State Administration of Foreign Exchange, "国家外江管理局调整部分境外投资外江管理改革 [Adjustment of Certain Overseas Investment Foreign Exchange Administrative Policies]", June 8, 2006.

investment.¹⁰⁸ The State Council first raised the NDRC approval threshold to \$1 billion for all firms, and completely abolished regulatory approvals in October 2014 except for projects in sensitive regions and industries. But one key remaining question is whether or not the NDRC has formally defined which countries and industries are “sensitive” at the national level, which brings uncertainty for investors with regard to the length of the administrative process as well as the outcome.

These far-reaching reforms were accompanied by changes in other relevant agencies. Most importantly, in 2015 SAFE simplified and shortened the review process for foreign exchange approvals and delegated the verification of foreign exchange needs for outbound investments to local bank branches.¹⁰⁹ Figure 37 provides an overview of China’s current regulatory framework for outbound FDI.¹¹⁰

Under the current system, the first step that companies might have to go through is a pre-approval process with the NDRC, which is often referred to as the “road pass”. For overseas acquisition or bidding for an asset worth over \$300 million, companies need to submit a project information report to NDRC before engaging in substantial work (such as a binding contract, a binding price, an application to foreign government review, or an official bid).¹¹¹ The NDRC will issue a confirmation within 7 days to those that comply with China’s overseas investment policy. It is generally assumed that the NDRC will only grant one approval per project, effectively coordinating bidding competition among Chinese companies. In April 2016, NDRC released a draft update to its outbound FDI rules under which the “road pass” would be eliminated.¹¹² However, as of June 2016, the draft rule for public comment has not resulted in a new final regulation, and the “road pass” is still in effect.

The second step in the current outbound FDI regime is recordal with or approval from the NDRC and MOFCOM. Most investments now only need to be registered with the regulators, and the timeline for both agencies to respond to filings has been reduced significantly. The NDRC process requires all central SOEs and local enterprises who are investing over \$300 million to record with the central NDRC directly.¹¹³ Local enterprises (both private and SOE) who are investing less than \$300 million can record with local NDRC offices. This process should take no more than 7 business days, unless there are complications.¹¹⁴ Approval is only required for projects in sensitive countries, regions and industries. Within this category, projects under \$2 billion can be approved by the NDRC directly, and projects over \$2 billion are submitted to the State Council for approval.¹¹⁵ This process should take no more than 20 business days,

¹⁰⁸ State Council, “国务院关于发布政府核准的投资项目目录（2014 年本）的通知 [Catalog of Investment Projects Requiring Government Approval for 2014]”, October 31, 2014.

¹⁰⁹ State Administration of Foreign Exchange, “国家外汇管理局关于进一步简化和改革直接投资外汇管理政策的通知 [Notice of the State Administration of Foreign Exchange about Further Simplify and Improve Direct Investment Foreign Exchange Administrative Measures]”, February 28, 2015.

¹¹⁰ The following qualitative assessment is based on expert interviews conducted by the authors in 1H 2016.

¹¹¹ National Development and Reform Commission, “境外投资项目核准和备案管理办法 [Administrative Measures on Outbound Investment Projects Approval and Recordal]”, May 8, 2014.

¹¹² National Development and Reform Commission, “关于就修订“境外投资项目核准和备案管理办法”向社会公开征求意见的公告（已结束） [Announcement about Seeking Public Commenting about the Editing of “Administrative Measures on Outbound Investment Project Approval and Recordal]”, April 13, 2016.

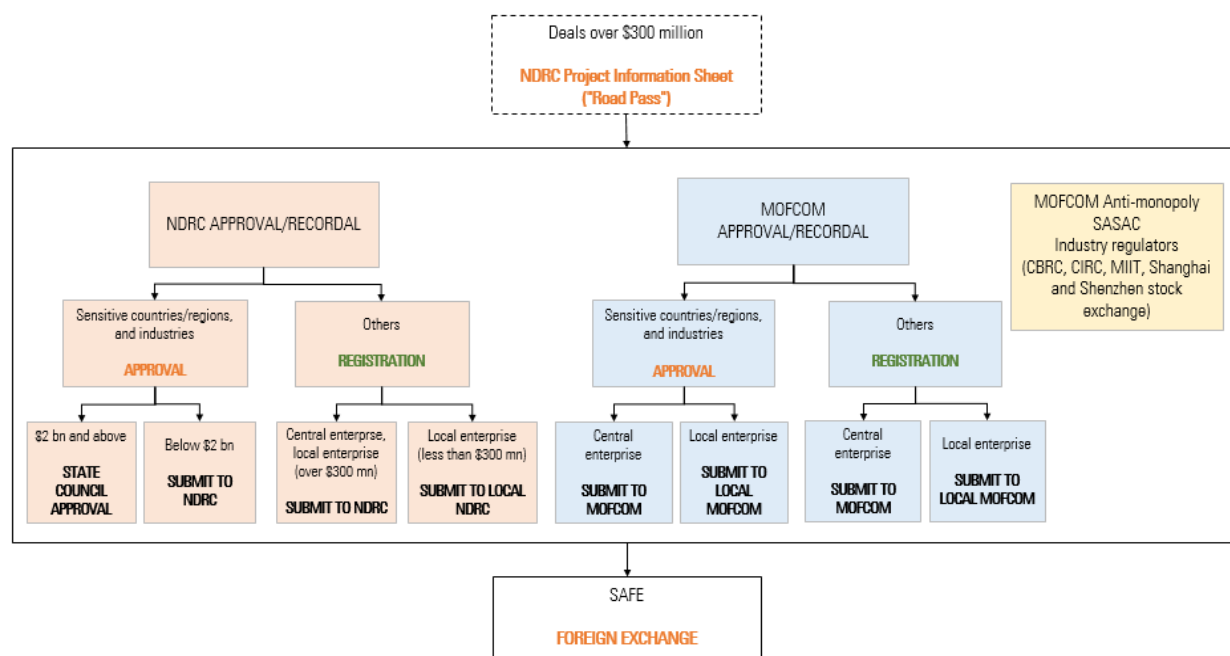
¹¹³ National Development and Reform Commission, “境外投资项目核准和备案管理办法 [Administrative Measures on Outbound Investment Projects Approval and Recordal]”, May 8, 2014; National Development and Reform Commission, “国家发展改革委办公厅于严格执行“政府核准的投资项目目录（2014 年本）”做好相关后续工作的通知 [NDRC Notice About Strictly Implementing “Catalog of Investment Projects Subject to Government Approval (2014 Edition)” and Completing Follow-up Work]”, December 10, 2014.

¹¹⁴ According to NDRC, the criteria for successful project registration are: the project falls under the scope of registration; the project complies with PRC laws, industrial policies, and outbound investment policies; the project complies with PRC capital controls; the project does not harm sovereignty, security, and public interests of the PRC; and the investing entity has the capacity to invest.

¹¹⁵ The new April 2014 draft NDRC outbound FDI regulation proposed to eliminate State Council’s role here and have all approvals done at NDRC.

unless there are complications.¹¹⁶ One major problem that remains is that the NDRC has not defined in public documents which countries and industries are considered “sensitive” at the national level, which brings uncertainty for investors with regard to the length of the administrative process as well as the outcome.¹¹⁷

Figure 37: China’s Regulatory Regime for Outbound FDI, June 2016



Source: Authors’ compilation based on policy documents and expert interviews (June 2016).

The MOFCOM process was also simplified greatly and more than 90% of projects now go through the recordal process instead of approvals.¹¹⁸ Only central SOEs are required to submit their documentation to central MOFCOM, whereas local enterprises can register with local MOFCOM offices. The process should take no more than 3 business days unless there are complications.¹¹⁹ Only projects in sensitive countries, regions and industries need to go through the approval process. The approval processes are similar to the recordal, but should take less than 20 business days without complications. Unlike the NDRC, MOFCOM has elaborated on what it considers sensitive countries and industries.

¹¹⁶ According to NDRC, criteria for successful project approval are: the project complies with PRC laws, industrial policies, and outbound investment policies; the project complies with the principles of “mutual benefits, joint developments”, and does not harm sovereignty, security, and public interests of the PRC; the project does not violate PRC international agreements; the project complies with PRC capital controls; and that the investing entity has the capacity to invest.

¹¹⁷ The NDRC only updated a new website at the beginning of 2016 where they publish the result of some reviews. This small sample means that as of now, it is difficult to infer NDRC’s rubric into what entails a sensitive country.

¹¹⁸ See State Council Information Office, “国新办就“2014 年度中国对外直接投资统计公报”有关情况举行发布会 [State Council Information Office Holds Press Conference about the 2014 China Outbound Direct Investment Statistical Bulletin]”, September 17, 2015; Ministry of Commerce, “商务部令 2014 年第 3 号“境外投资管理办法” [Outbound Investment Administrative Measures]”, September 6, 2014.

¹¹⁹ According to MOFCOM, the criteria for granting registration are: the application form is true, complete, and legal; the project does not harm sovereignty, security, and public interests of the PRC; the project does not violate PRC law; the project is not detrimental to relations of PRC with other countries or regions; the project does not violate PRC international agreements, or export products and technologies with export control.

Sensitive countries include those with no diplomatic relations with China, those with UN sanctions, and any other ones announced by MOFCOM. Sensitive industries include those related to exports of products and technologies subject to export controls, and industries affecting the interest of more than one countries or regions. At the same time, MOFCOM has not released a written comprehensive list of sensitive countries and industries, which induces uncertainty about which industries are subject to approval in practice.¹²⁰

With recordal or approval papers from MOFCOM and NDRC, firms can then proceed to retrieve foreign exchange from local banks. Previously, companies had to apply directly to SAFE. Under the new regime, review and approval for access to foreign exchange have been delegated to local banks, under supervision from SAFE. Banks are supposed to ensure the legitimacy of the project (based on recordal and approval documents) and the legitimacy of funds. The degree of scrutiny exerted by banks depends on guidance by SAFE, and this guidance often correlates with the macroeconomic situation. In the first half of 2016, banks were asked by SAFE officials to tighten reviews of foreign exchange transactions for outbound FDI projects following pressure by SAFE to slow down the outflow of foreign exchange. Banks were reportedly asked by SAFE to submit outbound FDI transactions of a certain size and type directly to SAFE for review.¹²¹ The looming threat of capital outflows could further increase attention on specific outbound FDI transactions (see Part 4.3).

Lastly, though their roles are less formally defined, a number of other regulators continue to play an important part in regulating outbound investment. As more diverse types of Chinese companies start to invest abroad, the range of additional regulators involved and their influence have even increased in recent years. The China Insurance Regulatory Commission (CIRC) reportedly started to intervene in outbound investment deals by insurance companies whose foreign investment to total asset ratio exceeds 15%.¹²² The Shanghai and Shenzhen stock exchanges have also recently stepped up inquiries into the restructuring of listed companies that involve foreign acquisitions.¹²³

In short, the transition from a highly bureaucratic approval system to a “recordal” system for most investments has made it easier and faster to get the necessary administrative documents to facilitate overseas investments, helping to drive the outbound FDI boom of the past five years. These changes particularly benefitted private companies undertaking small to medium sized investments, which often did not have the resources, capacity, and political connections to manage the approval process previously. Despite this progress, China’s current system is still not comparable with most OECD economies. China’s outbound FDI regime remains in transition and Chinese companies with overseas investment ambitions continue to face uncertainty due to potential interference from regulators, including ad hoc changes in the implementation of specific rules (see 4.4). In 2016 this was exemplified by the loosening and then re-tightening of approval processes for foreign exchange needed to complete transactions. While the volume of outflows continues to grow, proving that in the main the outbound regime is opening, authorities’ ability and intention to put a speed limit on that growth is still evident.

4.2 INCENTIVES AND SUPPORT

In addition to removing controls and cutting administrative red tape for outbound investment, the Chinese government has implemented policies to actively support and encourage outbound investment by Chinese companies.

¹²⁰ There is, for example, anecdotal evidence that investments in financial services and insurance are considered sensitive and require approval.

¹²¹ “Bloomberg Reports Shanghai SAFE Stops Individual Investment FX Buying”, *Sina*, June 28, 2016.

¹²² CIRC reportedly played a role in Anbang’s failed bid for Starwood. “保监会或否决安邦两笔海外并购 [CIRC blocks two overseas acquisitions from Anbang]”, *Caixin*, March 22, 2016.

¹²³ SSE has, for example, inquired into HNA’s pending acquisition of Ingram Micro. “天海投资关于收到上海证券交易所‘关于天海投资发展股份有限公司重大资产购买暨关联交易报告书信息披露的问询函’的公告 [Tianhai Investment on the Shanghai Stock Exchange Regarding an ‘Inquiry Letter for Tianhai Investment and Development Regarding a Major Asset-Purchase Related Transaction Report,’]”, *eastmoney.com*, July 16, 2016.

Since the early 2000s, many different parts of the government, from the State Council to ministries and local governments, have enacted policies to provide support for Chinese outbound investors. Moreover, many economic and industrial policies primarily aimed at meeting domestic development goals are important to explain outbound investment trends globally as well as in the United States.

General Support for Outbound FDI

The 10th Five Year Plan (2000-2005), which laid out the high-level theme of “Going Out,” represented a major shift in tone for the Chinese government on outbound FDI. This change was driven by a number of factors, including the recognition that a gradual and supervised expansion of outbound FDI was beneficial for China’s economic development, access to global markets and the competitiveness of Chinese companies. For the first time the plan emphasized that it was acceptable and even encouraged for Chinese investors to think about overseas investment. This marked the beginning of a more comprehensive shift toward outbound FDI support in the following years.¹²⁴

Many of the policies in the following years represented a normalization of government attitude toward outbound FDI, gradually converging with other economies. For example, the government began to provide Chinese companies with basic information and risk management services, such as information on investment opportunities and assessments of political risk in overseas economies.¹²⁵ Government entities such as Sinosure expanded their portfolio from providing export credit insurance to covering overseas investments as well.¹²⁶

Government agencies have also implemented various measures to improve access to financing for overseas investment, and provide favorable tax and accounting policy to reflect new realities of overseas investment. On access to credit, in May 2003 the NDRC and China Exim Bank jointly released the “Notice about Granting Credit Support to Government-Encouraged Outbound Investment Key Projects”. Under the scheme, Exim Bank provided “overseas investment special loans” with favorable interest rates to companies investing abroad in 1) resources extractive sectors complementary to domestic resource needs, 2) manufacturing and infrastructure projects that can bring up exports, 3) R&D centers 4) market-seeking acquisitions abroad that can improve international competitiveness of the sector.¹²⁷ In 2005, NDRC and China Development Bank (CDB) jointly released the “Notice about Further Improving Financing Support for Outbound Investment Key Projects”, which established a special fund for equity loans for companies engaging in outbound investment in the same four areas as mentioned in the 2003 document.¹²⁸ In 2006, CDB and Sinosure jointly released another notice on further improving financing support for outbound investment’s key projects, providing loans and insurance for 1) projects in key natural resources, 2) infrastructure and manufacturing projects with natural resources as loan guarantee, 3) M&A and engineering contracts in natural resources that can open up international markets and improve competitiveness, 4) projects affecting bilateral and multilateral government economic cooperation, and 5) key central SOEs under SASAC and large local enterprises.¹²⁹ In addition, China also

¹²⁴ Other high-level policy documents include: the 2006 State Council Opinions on Encouraging and Guiding Foreign Investment and Cooperation by Chinese Enterprises, which further emphasized the need for outbound FDI, and stressed the links with changes in domestic economy.

¹²⁵ Such as MOFCOM’s Country Guide, see <http://fec.mofcom.gov.cn/>.

¹²⁶ Sinosure, “商务部，中国出口信用保险公司关于实行出口信用保险专项优惠措施支持个体私营等非国有企业开拓国际市场的通知 [Notice on Piloting Export Credit Insurance Special Favorable Measures to Support Individual, Private, and Other Non-Public Ownership Enterprises to Explore the International Market]”, 2005.

¹²⁷ National Development and Reform Commission, “Notice about Granting Credit Support to Government-Encouraged Outbound Investment Key Projects”, May 9, 2003.

¹²⁸ National Development and Reform Commission, China Development Bank, “国家发展和改革委员会、国家开发银行关于进一步加强对外国投资重点项目融资支持有关问题的通知 [Notice about Further Improving Financing Support for Outbound Investment Key Projects]”, September 25, 2005.

¹²⁹ China Development Bank, China Export & Credit Insurance Corporation, “国家开发银行、中国出口信用保险公司关于进一步加大对境外重点项目金融保险支持力度有关问题的通知 [Notice about Further Improving Financing Support for Outbound Investment Key Projects]”, January 18, 2006.

provides a range of taxation support for outbound investment companies, such as export tax rebate and income tax reduction for investments in certain countries/regions, certain industries (such as in some agriculture activities) and by certain types of companies (such as high-tech enterprises). These are generally national policies by the State Administration of Taxation and other national ministries.

On favorable tax policies, China provides a range of taxation support for outbound investment companies, including country-based limited tax reduction, income tax reduction, and export tax rebates. Such policies exist on the national level (enacted by MOFCOM and the State Administration of Taxation) as well as on the provincial and local levels. Favorable tax policies are applied to encouraged industries, such as the textile industry starting in 1999 and advanced manufacturing in recent years. China also provided favorable accounting policies for outbound investing companies. For example, in 1999, MOFCOM released “Notice on Accounting Issues of Overseas Materials Processing and Assembly Enterprises”. According to the policy, enterprises that engage in these activities overseas are exempt from remitting their profits for the first five years.¹³⁰ In the same year, MOFCOM also started to provide export tax rebates for these companies.¹³¹ Some of these policies continue to be in effect today in various forms, others have been phased out gradually.

Support for Specific Types of Companies

Another important development was the set of incentives and policies to promote outbound investment by certain types of Chinese corporations. In the early 2000s, the stated goal was to support large Chinese companies to become internationally competitive multinationals.¹³² Given the structure of China’s economy, most of those companies were state-owned. In addition to high-level support, the government also increased financing and other support for overseas investments by large, key companies (and their key projects) through guidance of the large state banks such as the CDB.

Over the past decade the focus shifted to supporting private companies and promoting those firms’ competitiveness and globalization. Various central government agencies have also implemented specific support measures for private sector outbound FDI. For example, as early as June 2001, MOFCOM and the Ministry of Finance (MOF) jointly released the “Temporary Implementation Details on SME International Market Exploration Funds Administrative Measures”, creating funds to support small- and medium-sized enterprise outbound investment.¹³³ In 2007, MOFCOM, the MOF, the PBOC, and the All-China Federation of Industry and Commerce jointly released the “Several Opinions about Encouraging and Guiding Non-Public Ownership Enterprises Outbound Investment and Cooperation”.¹³⁴ As part of the initiative, eligible non-public ownership enterprises may receive capital support from specialized funds. Specifically, companies in light industry, textiles, appliances, machinery, construction materials, ICT, and healthcare and pharmaceuticals were encouraged to establish manufacturing and sales networks abroad. All R&D investments abroad were encouraged. In 2012, the NDRC and 12 ministries jointly released the “Implementation Opinions about Encouraging and Guiding Private Companies Actively Engage in Overseas Investment”.¹³⁵ Several policies aimed at

¹³⁰ Ministry of Commerce, “关于对境外带料加工装配企业有关财务问题的通知 [Notice on Accounting Issues of Overseas Materials Processing and Assembly Enterprises]”, April 23, 1999.

¹³¹ State Administration of Taxation, “关于境外带料加工装配业务有关出口退税问题的通知 [Notice on Export Tax Rebate Issues of Overseas Materials Processing and Assembly Enterprises]”, May 5, 1999.

¹³² For example, the NDRC 10th Five Year Plan on Inward and Outward FDI supports firms that had a comparative advantage to develop into internationally competitive MNEs. Another example is the 12th Five Year Plan on Industrial Reform and Upgrading, which emphasized that big corporations with ample capital should be investing overseas.

¹³³ Ministry of Commerce, “中小企业国际市场开拓资金管理暂行办法实施细则（暂行） [Temporary Implementation Details on SME International Market Exploration Funds Administrative Measures]”, January 16, 2003.

¹³⁴ Ministry of Commerce, “商务部财政部人民银行全国工商联关于鼓励支持和引导非公有制企业对外投资合作的若干意见 [Several Opinions about Encouraging and Guiding Non-Public Ownership Enterprises Outbound Investment and Cooperation]”, May, 21, 2007.

¹³⁵ National Development and Reform Commission, “关于印发鼓励和引导民营企业积极开展境外投资的实施意见的通知 [Implementation Opinions about Encouraging and Guiding Private Companies Actively Engage in Overseas Investment]”, June 29, 2012.

supporting small- and medium-sized enterprises also have an outbound FDI dimension, for example, the 2005 “Several Opinions about Encouraging, Supporting, and Guiding Individual, Private, and Other Non-Public Ownership Economic Entities Development”.¹³⁶ These more specific pronouncements have been buttressed recently by high-level documents emphasizing the growing importance of private firms include the 12th Five Year Plan on Inward and Outward FDI by the NDRC and MOFCOM’s 13th Five Year Plan (FYP) on Commercial Development.¹³⁷ Finally, a myriad of policies exists at the provincial and municipal government level to support outbound investment for local enterprises, especially “key companies” in a specific local industry clusters.¹³⁸

Support for Outbound Investment in Specific Geographies

The Chinese government has also supported overseas investments in specific countries and geographic areas, often in connection with specific geopolitical initiatives and bilateral economic cooperation. Since 1998, the CDB has established numerous industrial investment funds to support outbound investment, including the Sino-Swiss Cooperation Fund (62.5 million Swiss francs), the Sino-ASEAN SME Investment Fund (\$76 million), the Sino-Belgium Direct Equity Investment Fund (100 million Euros), and the Sino-Africa Development Fund (\$1 billion).¹³⁹ These funds act as private equity investment funds; they operate by forming joint-venture companies with Chinese companies abroad, in order to support joint-investment projects. In practice they are motivated predominantly by profit considerations and largely focus on equity stakes that do not exceed the 10% FDI threshold.¹⁴⁰

The most recent, high-profile example of active overseas investment promotion by the Chinese government has been the “One Belt, One Road” (OBOR) initiative, which was announced in late 2013 and is aimed at increasing economic activities and cooperation between China and a large group of countries across Asia, Europe and Africa. The top-level promotion of this policy has been heavily publicized with large sums quoted as being transferred for financing purposes to CDB, EX-IM, CITIC, as well as the 2014-established \$40 billion Silk Road Fund and the newly established Asian Infrastructure and Investment Bank (AIIB).¹⁴¹ However, it has been difficult to assess the details of outbound FDI support beyond the headline figures announced, as many policies are still evolving and the sample of investments related to OBOR remains small. Various data points suggest that OBOR and related policy measures have not yet resulted in sizable investment flows in those economies. For example, Figure 38 shows that the level of Chinese investment in Eastern European OBOR countries was in line or even below the average of the years before OBOR was announced.

¹³⁶ State Council, “国务院关于鼓励支持和引导个体私营等非公有制经济发展的若干意见 [Several Opinions about Encouraging, Supporting, and Guiding Individual, Private, and Other Non-Public Ownership Economic Entities Development]”, August 12, 2005.

¹³⁷ National Development and Reforms Commission, “‘十二五’利用外资和境外投资规划 [12th Five Year Plan on Inward and Outward FDI]”, July 24, 2012; Ministry of Commerce, “商务发展第十三个五年规划纲要 [Commercial Development Outline of the 13th Five Year Plan]”, July 12, 2016.

¹³⁸ Such as Jiangsu People’s Congress “关于‘走出去’战略实施情况的公报 [Report on the Status of the Implementation of the ‘Going Out’ Strategy]”, November 21, 2014. The key companies vary by province and city, one example is Jiangling Motors, which was mentioned in Jiangxi province’s latest policy document on encouraging outbound investment: Jiangxi Provincial People’s Government, “江西省人民政府办公厅关于加快推进‘走出去’战略的实施 [Jiangxi Provincial People’s Government on Accelerating the Implementation of the ‘Going Out’ Strategy]”, June 1, 2016.

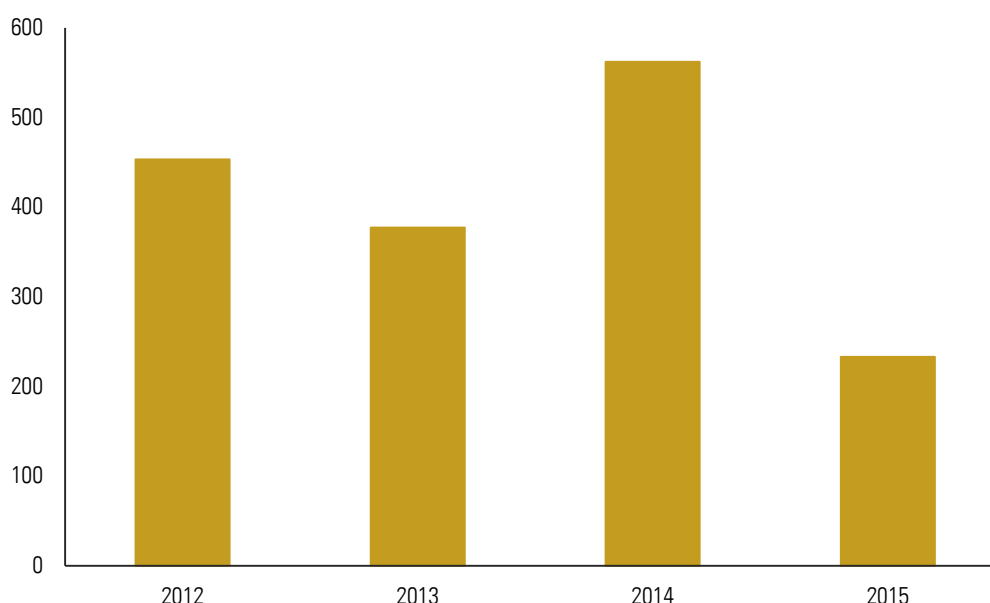
¹³⁹ Xiao Yu and Lei Qiao, “Summary of ‘Going Out’ Strategy”, State Council Overseas Chinese Affairs Office, Overseas Chinese Affairs Work Research, 2011.

¹⁴⁰ Based on review of available documentation and interviews by authors with staff at a number of relevant entities.

¹⁴¹ CITIC is a state-owned investment company and conglomerate with numerous subsidiaries. Through its investment arms, it has established an OBOR fund, with an eventual capitalization 700 billion RMB.

Figure 38: Chinese Outbound FDI Transactions in Eastern European OBOR Economies*

USD million



Source: Rhodium Group. *Includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

Support for Outbound Investment in Specific Sectors

Chinese outbound investment patterns are also influenced by economic policies, industrial policies and other development plans. At the highest level, the Third Plenum's plans to overhaul China's growth model and transition to a consumption, service and innovation-driven economy is an important driver of outbound investment.¹⁴² These reforms increase the pressure on Chinese companies to reinvent their business models, which is linked to greater interest in advanced economy assets, including technology, brands and human talent.¹⁴³ More specifically, China still follows an active industrial policy, which promotes certain economic activities through incentives and directives.¹⁴⁴ Many of those indirectly impact outbound investment patterns, as they shape Chinese companies' view on future market developments and resource allocation. Some of these plans also incorporate outbound investment as specific channel to achieve certain goals.

One of the earliest national policies to have triggered significant outbound investment was the plan to increase Chinese energy security by investing in overseas oil and gas extraction. In light of growing imports of overseas oil and other commodities, the Chinese government began to encourage Chinese state firms to acquire equity stakes in global upstream oil and gas. Starting in 2001, NDRC released a 10th Five Year Plan on Inward and Outward FDI which explicitly mentioned encouraging natural resources investment. A string of support policies then followed, including special funds (for example, the Special Fund for Overseas Mineral Resources Exploration and Development, established in

¹⁴² Politburo of the Communist Party, “中共中央关于全面深化改革若干重大问题的决定 [Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening Reform]”, November 15, 2013.

¹⁴³ Thilo Hanemann and Daniel H. Rosen, *High Tech: The Next Wave of Chinese Investment in America*, (New York: Asia Society Policy Institute, 2014).

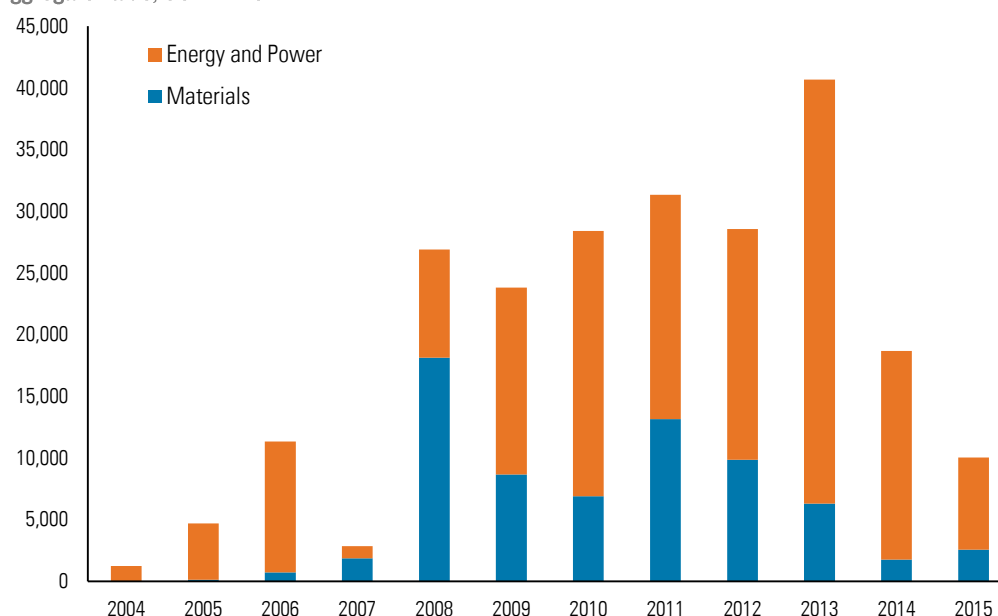
¹⁴⁴ Industrial policies involve government restriction and encouragement of certain industries through regulations and policies. Examples of industrial policy include strategically restricting a sector's size (reduce capacity), guiding industry structure change (encourage consolidation), and encouraging technological development through favorable policies.

2003¹⁴⁵) and other financial support (for example, the MOFCOM and MOF joint release “Notice about Executing Well the 2004 Natural Resources Outbound Investment and Cooperation Projects Upfront Costs Support”¹⁴⁶).

These policy measures helped boost Chinese outbound investment in oil, gas and other natural resources throughout the first decade of the 2000s. The value of acquisitions around the globe reached its peak in 2013, at more than \$34 billion (Figure 39).¹⁴⁷ Initially, investments were focused on developing countries in Africa and Latin America. However, Chinese capital also moved to the United States, Canada, Australia and other resource-rich OECD economies. The outbound investment boom in resources ended after 2013, as reforms signaled a lower resource intensity of Chinese growth and an anti-corruption campaign under the new leadership impacted decision-making at oil companies and other large state-owned investors.

Figure 39: Completed Outbound Chinese Cross Border M&A Transactions in Energy and Materials, 2004-2015

Aggregate value, USD million



Sources: Bloomberg, Thomson, Rhodium Group; includes disclosed value of all completed M&A transactions by ultimately Chinese-owned firms irrespective of the size of the resulting stake, aggregated by date of completion.

More recent industrial policy initiatives are largely focused on upgrading China’s technology and innovation capacity. High-level guiding documents on this include the Ministry of Science and Technology (MOST)’s Five-Year Plan for Science and Technology Development and the science and technology section under the Five-Year Guidelines for National Economic and Social Development.¹⁴⁸ Examples of special programs under these guiding plans include the

¹⁴⁵ Ministry of Finance, “国外矿产资源风险勘查专项资金管理办法 [Special Fund for Overseas Mineral Resources Exploration and Development]”, October 31, 2005.

¹⁴⁶ Ministry of Commerce, “财政部，商务部关于做好2004年资源类境外投资和经济合作项目前期费用扶持有关问题通知 [Notice about Executing Well the 2004 Natural Resources Outbound Investment and Cooperation Projects Upfront Costs Support]”, September 19, 2004.

¹⁴⁷ Thilo Hanemann and Cassie Gao, “China’s Global Outbound M&A in 2015”, *Rhodium Group*, January 4, 2016.

¹⁴⁸ Ministry of Science and Technology, “国家 ‘十二五’ 科学和技术发展规划 [National 12th Five-Year Plan for Science and Technology Development and Planning]”, July 4, 2011. The 13th Five Year Plan’s equivalent is too recent to be assessed in terms of outbound investment impacts, but it does maintain the same language about supporting outbound investment, which suggests that policies

“973” National Basic Research Plan, Strategic Emerging Industries Initiative, and the 17 Megaprojects and 7 Strategic Emerging Industries.¹⁴⁹ More recently in July 2011, the 12th Five Year Plan on Industrial Reform and Upgrading put a new emphasis on high technology industries as well as urging the construction of overseas R&D centers. In 2015, the Chinese government put forward a number of new initiatives that have the potential to shape future outbound investment patterns, including “Internet Plus” and “Made in China 2025,” which aim to accelerate the technological upgrading of China’s manufacturing capabilities through integration with the Internet and advanced robotics.¹⁵⁰

Within these plans, overseas investment plays a major role, and there are additional measures to support overseas investments in those areas. The Chinese government recognizes the importance of developing technology abroad and it has been especially explicit about establishing R&D centers in foreign countries. For example, the MOST 2013 “12th Five Year Plan on Technology Markets Development and Planning” encourages enterprises to “engage in international technology transfer and cooperation and drive forward Chinese technology import and export through outbound investment, mergers and acquisitions, contract work, investment through technology contribution, and establishing overseas R&D base”. The 13th Five Year Plan’s equivalent maintains this support.¹⁵¹

It is difficult to fully gauge the extent to which these plans directly or indirectly impact Chinese investment patterns in the United States. On the one hand, we record a significant increase of Chinese investment in innovation-related activities, including both the acquisition of technology assets as well as increasing investment in R&D activities in the US. If we consider all sectors mentioned in the four key technology-related industrial plans that China currently has in place (the Strategic Emerging Industries Initiative, the 13th Five Year Plan, Made in China 2025, and Internet Plus) and put together a sub-sample of US FDI transactions in those areas, we see a significant increase of investments in the past five years, from \$3.5 billion in 2011 to \$11.4 billion in 2015 (Figure 40), even though this overestimates investment into the targeted aspects of these respective industries, since they are based on broader industry classifications.¹⁵² Despite this increase, investment in this subset of industries actually grew *slower* than total Chinese FDI in the same period and its weight declined from a peak of 66% of total FDI in 2007 to 23% in 2015.

In short, the data do not support clear-cut conclusions about causality between industrial policy and outbound investment patterns. It is impossible to determine whether these investments are directly driven by a specific policy, or whether they are the result of Chinese companies taking advantage of opportunities in the Chinese market or being forced to invest in overseas technology to escape shrinking profit margins in low-end manufacturing by moving up the value chain. While we do not find compelling evidence that Chinese industrial policy explains outbound FDI in the US, there are individual cases in which the relationship is qualitatively and anecdotally apparent, one of which we will discuss next.

pursued under the 12th Five Year Plan will continue: State Council, “国务院关于印发“十三五” 国家科技创新规划的通知 [State Council Statement Regarding the 13th Five Year Plan Science and Technology Innovation Plan]”, July 28, 2016.

¹⁴⁹ Tai Ming Cheung et al., *Planning for Innovation: Understanding China’s Plans for Technological, Energy, Industrial, and Defense Development*, (San Diego: Institute on Global Conflict and Cooperation, University of California, 2016).

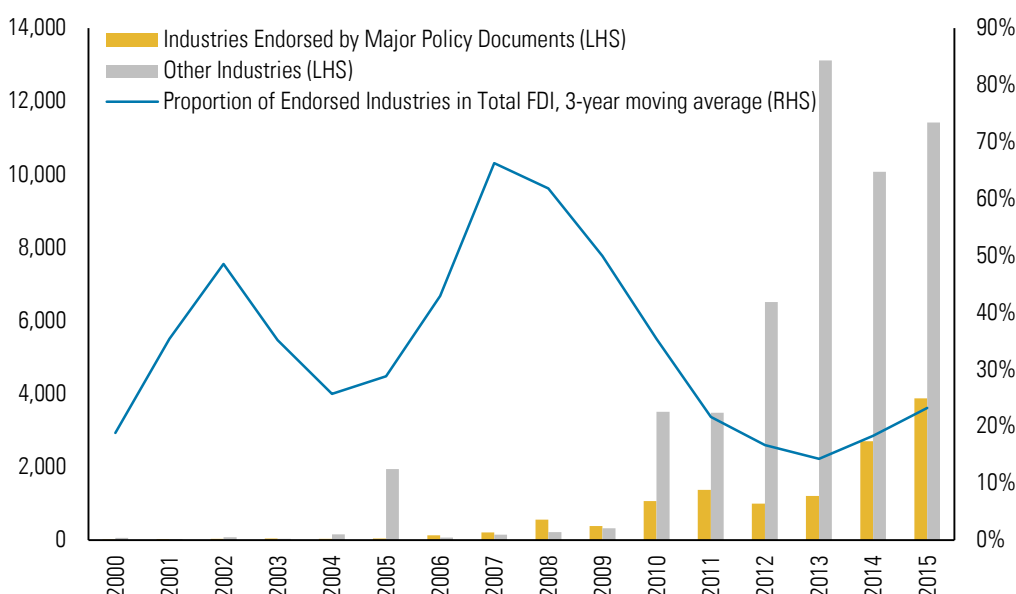
¹⁵⁰ State Council, “‘十二五’ 规划纲要 [12th Five Year Plan]”, March 16, 2011: Chapter 3, Section 3; State Council, “国务院关于印发 ‘中国制造 2025’ 的通知 [State Council Announcement on ‘Made in China 2025’]”, State Council, May 8, 2015; “李克强: 用‘互联网+’ 打造经济转型升级新引擎 [Li Keqiang: ‘Internet+’ can be an engine of economic transformation]”, *www.gov.cn*, June 24, 2015; State Council, “中华人民共和国国民经济和社会发展第十三个五年规划纲要 [People’s Republic of China 13th Five Year Plan for Economic and Social Development]”, March 17, 2016: Chapter 22, Section 2.

¹⁵¹ Ministry of Science and Technology, “科技部关于印发技术市场‘十二五’发展规划的通知 [12th Five Year Plan on Technology Markets Development and Planning]”, February 5, 2013. State Council, “国务院关于印发“十三五”国家科技创新规划的通知 [State Council Statement Regarding the 13th Five Year Plan Science and Technology Innovation Plan]”, July 28, 2016.

¹⁵² Note that our grouping is based on broader industry classifications, so the numbers likely overestimate the scope of investment into relevant sub-industries specified in the relevant plans.

Figure 40: Chinese FDI Transactions in the US in Sectors Supported by Major Chinese Industrial Policy Documents

Percent share, USD million



Source: Rhodium Group. “Industries Endorsed” includes Aerospace, Automotive, Chemicals, Healthcare and Medical Devices, Industrial Machinery, Other Transportation Equipment, Pharmaceuticals and Biotechnology, Plastic, Rubber, and Other Materials, Renewable Energy, Semiconductors, and Software and IT Services. The category excludes IT Equipment because activity in this sector largely targeted low-end equipment and consumer-oriented assets.

4.3 CASE STUDY: CHINESE INVESTMENT IN SEMICONDUCTOR TECHNOLOGY

One example that illustrates the nexus of industrial policy and outbound FDI is the recent push by Chinese investors to gain a foothold in the global semiconductors industry. Following decades of unsuccessful attempts to develop a domestic semiconductor industry, in 2014 China enacted a new national policy to accelerate the development of its semiconductor industry, which includes overseas investment as one element. After the announcement of this initiative private investors and government funds have embarked on an unprecedented buying spree of assets along the semiconductor supply chain in Asia, Europe and North America.

Despite a growing role in the global ICT equipment industry, China’s design and production capacity in semiconductors and other advanced inputs for those goods remains relatively small. China remains dependent on foreign inputs of those goods. In 2015 China accounted for 29% of global demand for chips, for both domestic consumption and re-export. The majority of this demand was fulfilled through imports.¹⁵³

In 2013 Chinese planners launched a program to overcome this import dependency and increase the capabilities and competitiveness of Chinese suppliers.¹⁵⁴ In the fall of 2013 the State Council established a small leading group led by Ma Kai, one of the four Vice Premiers. Vice Premier Ma explicitly included overseas M&A as a key component of China’s strategy in this area. Other central officials including Huai Jinpeng, Vice Minister of the Ministry of Industry and

¹⁵³ International Trade Administration, 2016 *Top Markets Report Semiconductors and Semiconductor Manufacturing Equipment Country Case Study: China*, (Washington: Department of Commerce, 2016).

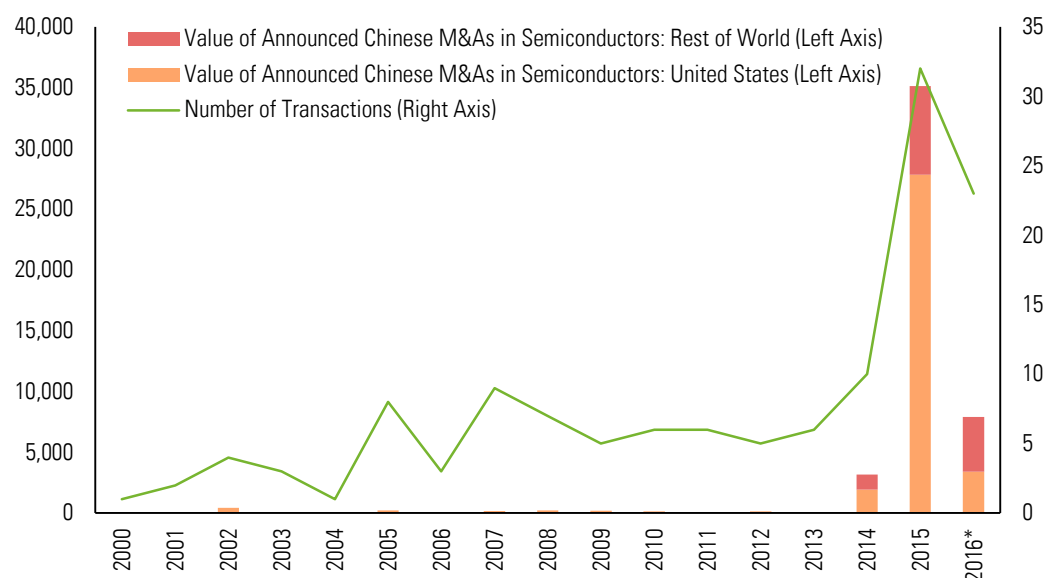
¹⁵⁴ Tai Ming Cheung et al., *Planning for Innovation: Understanding China’s Plans for Technological, Energy, Industrial, and Defense Development*, (San Diego: Institute on Global Conflict and Cooperation, University of California, 2016), 202.

Information Technology (MIIT) and Diao Shijing, Director-General of MIIT, frequently echo this intention. Support for this outbound FDI was codified in the 2014 National Development and Promotion of the Integrated Circuit (IC) Industry (国家集成电路产业发展推进纲要) plan, which states formally that international cooperation and the integration of international resources is encouraged.¹⁵⁵ Under the plan, the MIIT also established the National IC Fund in October 2014, with capital from a number of SOEs, state-owned investment funds, and the CDB. According to industry experts, more than \$160 billion in government funding is now available to the domestic semiconductor industry through national and local IC funds.¹⁵⁶

Figure 41 shows the response of Chinese investors to these government directives, displaying the combined value of all announced and rumored Chinese acquisitions in the global semiconductors industry. Before the strategy was announced, outbound investment activity in this industry was low and never exceeded \$1 billion in a single year. In 2014, the value of combined announced takeovers increased to \$3 billion. In 2015, Chinese companies announced takeover offers worth \$35 billion.¹⁵⁷ Moreover, there were more than a dozen informal approaches by Chinese investors, which are not captured in this chart.¹⁵⁸ The total value of completed transactions since 2000 adds up to \$8.1 billion, nearly all of it in the 3 years since the Chinese government announced its strategic plan.

Figure 41: Value of Announced and Rumored Chinese M&A in the Semiconductors Industry, 2000-2016*

USD million; number of transactions



Sources: Bloomberg, Rhodium Group. * 2016 through August. Announced includes deals that are completed, pending, withdrawn, or terminated.

At present, China has few SOEs in the semiconductor industry that are independently capable of acquiring and, most importantly, operating overseas companies. Except for a few fabless design firms such as HiSilicon, most of the large

¹⁵⁵ “‘国家集成电路产业发展推进纲要’ 正式公布 [Announcement of ‘National Development of Semiconductor Industry Summary’], June 24, 2014. Jimmy Goodrich, “China’s 13th Five-Year Plan: Opportunities and Challenges for the U.S. Semiconductor Industry”, (April 26, 2016).

¹⁵⁶ Gordon Orr and Christopher Thomas, “Semiconductors in China: Brave New World or Same Old Story?,” *McKinsey*, August 2014.

¹⁵⁷ Tsinghua Unigroup’s proposal to acquire Micron for \$23 billion (which was never formalized) accounts for a significant share of this spike.

¹⁵⁸ Based on authors’ interviews with industry experts.

Chinese semiconductor firms, such as Semiconductor Manufacturing International Corporation (SMIC), have significant state ownership stakes. Moreover, as the National Integrated Circuit Fund attests, the state is deeply involved in outbound investments as a cofunder. Apart from the National IC Fund, one of the biggest investors is the investment arm of Tsinghua University, through various jointly-owned subsidiaries. Tsinghua Unigroup, a partially-owned subsidiary, has invested heavily in Chinese semiconductor firms (such as Spreadtrum and RDA).¹⁵⁹ It also attempted a \$1.7 billion investment in the Taiwanese firm Siliconware Precision Industries and currently has pending bids for two other Taiwanese firms (Powertech and ChipMOS). Tsinghua Holdings, wholly owned by the university, announced plans to acquire US firm Micron. Another partially-owned subsidiary, Tsinghua Unisplendour, attempted to take a 15% stake in US firm Western Digital.¹⁶⁰ Hua Capital Management is another fund related to Tsinghua that participated in both the completed investment in Integrated Silicon Solutions (the firm's largest US investment to date) and a failed bid for Fairchild Semiconductors. CITIC Capital Holdings, a subsidiary of CITIC, a central SOE investment company, was part of a consortium that acquired OmniVision, a US firm, in conjunction with Hua Capital Management.

While funds from provinces and municipalities have been more visible in semiconductor investments within China, some have been involved in overseas acquisitions. Hua Capital Management's two partners in the Integrated Silicon Solutions acquisition were E-Town Memtek, part of the Beijing E-Town group of funds owned by Beijing municipality, and SummitView Capital, a private equity firm with funding from Shanghai municipality. Other E-Town affiliates that have participated in overseas acquisitions are E-Town Dragon (Mattson) and E-Town Chipone (Integrated Memory Logic). Fujian Grand Chip, a fund originating from Fujian province, purchased German firm Aixtron in the second quarter of 2016.

Table 10 shows all announced and rumored Chinese M&A targeting semiconductor companies in the United States. Before 2013, we record six transactions worth \$214 million. For 2013-2016, we record 27 announced M&A deals worth more than \$37 billion. Several investments were withdrawn because the buyer rejected the approach or CFIUS signaled concerns. Chinese investors have completed three major acquisitions of US semiconductor firms since 2014: Integrated Silicon Solutions, Mattson Technology, and OmniVision.

Table 10: Chinese Investments in US Semiconductors Companies, 2000-2016

Announced Date	US Target	Chinese Investor	Value	Stake Size	State Financing	Ownership	Status
7/2006	LSI Logic- ZSR(R) Digital Signal Processor Unit	VeriSilicon Holdings	\$13 mn	Majority	N/A	Private	Completed
1/2008	Quorum Systems	Spreadtrum Communications	\$77 mn	Majority	N/A	Private	Completed
11/2010	Creation of US subsidiary	China WLCSP Co. Ltd.	\$1 mn	Majority	N/A	Private	Completed
6/2011	MobilePeak Systems stake	Spreadtrum Communications	\$27.2 mn	Minority	N/A	Private	Completed
8/2011	Telegent Systems	Spreadtrum Communications	\$92 mn	Majority	N/A	Private	Completed

¹⁵⁹ Tsinghua Unigroup is 51% owned by Beijing Jiankun Investment Group, but this appears to be a private investment vehicle. Based on public documents, its ultimate ownership structure is unclear.

¹⁶⁰ Similar to Unigroup, Unisplendour has an opaque ownership structure, though through its public listing it reports having other 22,000 shareholders. The largest shareholders are also investment vehicles. Unisplendour Corporation, 紫光股份有限公司二零一五年半年度报告 [Unisplendour 1H 2015 Report], (Unisplendour Corporation, 2015): 23.

9/2011	MobilePeak Systems stake	Spreadtrum Communications	\$3.6 mn	Majority	N/A	Private	Completed
3/2015	Integrated Silicon Solutions	Hua Capital Management, SummitView Capital, E-Town MenteK	\$640 mn	Majority	Yes	State-owned	Completed
4/2015	FlipChip International	Tianshui Huatian Technology	\$41 mn	Majority	Yes	State-owned	Completed
5/2015	WiSpry	AAC Technologies Holdings	\$10 mn	Majority	No	Private	Completed
5/2015	Static Control Components	Apex Microelectronics	\$63 mn	Majority	Yes	Private (with state financing)	Completed
6/2016	Marvell Technology	Datang Telecom	\$2 bn	Majority	Yes	State-Owned	Rejected by Target
7/2015	Bridgelux	China Electronics Corporation, Chongqing Linkong Development Investment	\$130 mn*	Majority	Yes	State-owned	Completed
7/2015	Micron Technology	Tsinghua Holdings	\$23 bn	Majority	Yes	State-owned	Withdrawn
8/2015	Micrel Technology	Unnamed Chinese Buyer	\$839 mn	Majority	Yes	State-owned	Rejected by Buyer
9/2015	Atmel	China Electronics	\$3.4 bn	Majority	Yes	State-owned	Withdrawn
9/2015	Western Digital	Tsinghua Unisplendour	\$3.8 bn	Minority	Yes	State-owned	Withdrawn
9/2015	Pericom Semiconductor	Montage Technology Group (subsidiary of China Electronics Corp.)	\$442 mn	Majority	Yes	State-owned	Rejected by target
12/2015	Xcerra- interface board business	Fastprint	\$23 mn	Majority	No	Private	Completed
12/2015	Mattson Technology	Beijing E-Town Dragon Semiconductor Industry Investment Center	\$300 mn	Majority	Yes	State-owned	Completed
12/2015	Fairchild Semiconductor	China Resources, Hua Capital Management	\$2.5 bn	Majority	Yes	State-owned	Rejected by Target
1/2016	OmniVision Technologies	CITIC Capital Holdings, Goldstone Investment, Hua Capital Management	\$1.9 bn	Majority	Yes	State-owned	Completed
1/2016	Initio	Sage Microelectronics	\$40 mn	Majority	Yes	Private	Completed
1/2016	Vivante	VeriSilicon Holdings	unknown	Majority	Yes	Private	Completed

3/2016	Global Communications Semiconductors	Sanan Optoelectronics	\$226 mn	Majority	Yes	Private	Withdrawn
3/2016	GigOptix	Shanghai Pudong Science and Technology Investment	\$5 mn	Majority	Yes	State-owned	Completed
3/2016	Anadigics	Unnamed Chinese Buyer	\$78.2 mn	Majority	Yes	Unknown	Rejected by Target
4/2016	Lattice Semiconductor	Tsinghua Holdings	\$41.6 mn	6% ownership**	Yes	State-owned	Completed
5/2016	Marvell Technology Group	Tsinghua Holdings	\$78.2 mn	5% ownership**	Yes	State-owned	Completed
6/2016	Multi-Fineline Electronix	Suzhou Dongshan Precision Manufacturing	\$610 mn	Majority	Yes	Private	Completed
6/2016	Integrated Memory Logic	Beijing E-Town Chipone Technology	\$136 mn	Majority	Yes	State-owned	Pending
8/2016	MEMSIC	HC Semitek	Unknown	Majority	No	Private	Pending
9/2016	Analogix	Beijing Shenhai Capital Management & National IC Fund	\$500 mn	Majority	Yes	State-owned	Pending
11/2016	Lattice Semiconductor	Canyon Bridge Capital Partners	\$1.3 bn	Majority	Yes	Unknown	Pending

Source: Rhodium Group. *estimated. **These fall below the direct investment threshold of 10% but are included in the table for illustrative purposes.

As we have demonstrated, the recent wave of Chinese overseas acquisitions in semiconductors closely followed an announcement of a national policy to upgrade China's domestic capabilities. It is evident that the surge in M&A activity includes funding from strategic vehicles set up by central government entities with an industrial policy mandate. In our view, this is the clearest example yet of the nexus between strategic high-tech policy and outbound investment in today's China.

This has implications for US policymakers. First, it is warranted that these acquisition overtures receive close scrutiny from government agencies concerned with national security. Semiconductors are a strategic industry for national defense and the emerging patterns of Chinese strategic takeovers driven by a national strategic plan stating the goal of China to become the world leader in IC by 2030 is only compounding existing concerns.¹⁶¹ Second, the semiconductor case also points to the broader economic risks that policy-driven Chinese outbound investment could bring for certain sectors and asset classes. Semiconductor innovation and other key components of the modern ICT cluster have mushroomed in an environment of transnational collaboration and production chain diffusion over the past three decades. If major economies pursue self-stated ICT nativization plans which entail systematic efforts to buy up global

¹⁶¹ “‘国家集成电路产业发展推进纲要’ 正式公布 [Announcement of ‘National Development of Semiconductor Industry Summary’]”, June 24, 2014.

capabilities in these industries, the scope for international cooperation will likely be greatly reduced. The welfare impacts of such a scenario are likely to be huge.¹⁶²

4.4 OUTLOOK: CAPITAL OUTFLOWS AND OUTBOUND FDI POLICY

We have demonstrated that Chinese government policy has played a role in shaping Chinese outbound FDI globally and to the US. Going forward, China has officially committed to continue the reform of outbound FDI policies in the broader context of the liberalization of its financial account.¹⁶³ At the highest levels, these goals were reiterated in China's 12th and 13th Five-Year Plans and the Third Plenum decision document in November 2013. Most recently, during the March 2016 Two Meetings, MOFCOM reiterated commitments to two-way FDI reform. In the first half of 2016, China continued to implement the relaxation of its outbound FDI rules, with new draft rules that formally remove the requirement to get approval from the NDRC for most investment.¹⁶⁴

However, the behavior of Chinese regulators in the first six months of 2016 has also illustrated that liberalization is not perpetual and could be disrupted or even reversed if macroeconomic concerns about capital outflows arise. In the past year exchange rate pressures and fears that Beijing will reassert capital controls have prompted China's households and corporates to diversify into foreign assets, triggering large scale outflows of capital through various channels. After experiencing record capital outflows of \$226 billion in the third quarter of 2015, China saw another \$378 billion leaving the country in the fourth quarter of 2015 and the first quarter of 2016 through the financial account and other channels. Net capital outflows have broadened from the "other investment" channel (which mostly captures lending and other shorter term flows) to include portfolio and direct investment. China's FDI balance has shifted from a surplus of \$40-50 billion in 2013 and 2014 to a deficit of \$20 billion in the first quarter of 2016 (Figure 42).

As a result, the State Administration of Foreign Exchange (SAFE) and other regulators have taken steps to "manage" the outflow of foreign exchange through various channels, including outbound FDI. Since 2015, SAFE had officially delegated the verification of outbound FDI projects to local banks, but is now actively requiring those banks to report large and potentially problematic transactions to local SAFE offices, which then conducts background checks and other reviews. Market sources report that banks now have to report all outbound FDI projects over \$50 million to SAFE. Additional regulatory changes include a May 2016 regulation by CIRC mandating insurance companies disclose information about investments in unlisted companies (both onshore or offshore) that exceed RMB 3 billion (\$450 million) and direct investment in offshore real estate assets that exceed RMB 1 billion (\$150 million) in equity or RMB 5 billion (\$750 million) in total.¹⁶⁵ MOFCOM and other bureaucracies also confirmed that they are "researching" potential impacts of outbound FDI on the balance of payments and additional measures to prevent illicit outflows through the outbound FDI channel. The increased regulatory scrutiny on outbound FDI has already slowed down or

¹⁶² U.S. Chamber of Commerce and Rhodium Group, *Preventing Deglobalization: An Economic and Security Argument for Free Trade and Investment in ICT*, (Washington: U.S. Chamber of Commerce, 2016).

¹⁶³ People's Bank of China Department of Statistics Task Force, "加快资本账户开放条件基本成熟 [Time is Ripe for Accelerating Capital Account Liberalization]", February 27, 2012; People's Bank of China Department of Statistics Task Force, "协调推进汇率改革与资本账户开放 [Coordinating and Promoting Exchange Rate Reform and Capital Account Liberalization]", April 17, 2012.

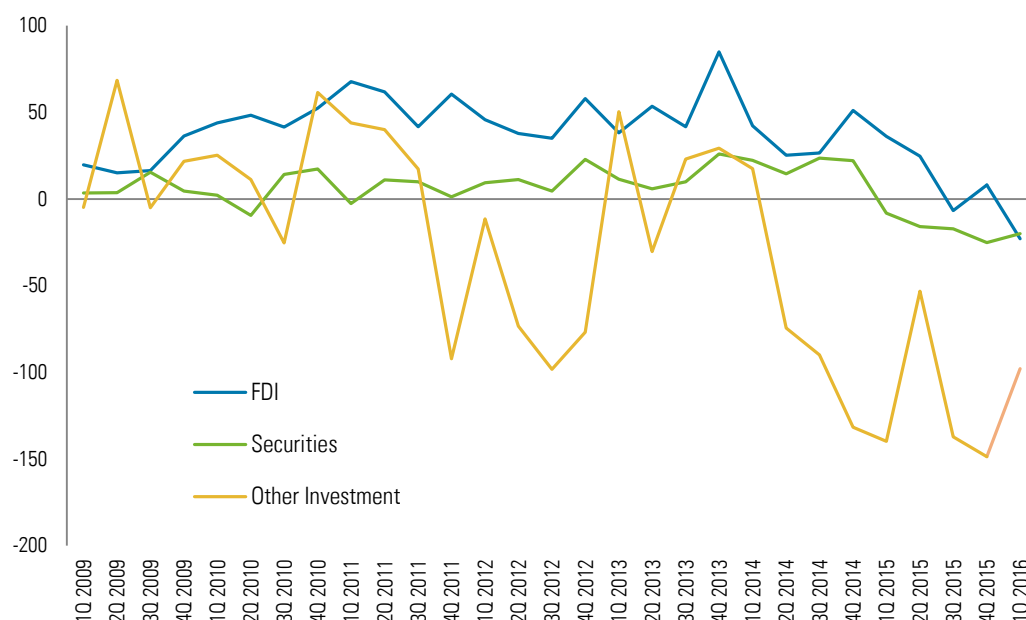
¹⁶⁴ National Development and Reform Commission, "关于就修订《境外投资项目核准和备案管理办法》向社会公开征求意见的公告 (已结束) [Notice about Seeking Public Comments about Revising the 'Administrative Measures on Outbound Investment Project Approval and Recordal']", April 13, 2016.

¹⁶⁵ China Insurance Regulatory Commission, "中国保监会关于印发《保监公司资金运用信息披露准则第4号：大额未上市股权和大额不动产投资》的通知 [CIRC Notice about Release "Article 4 of Insurance Company Capital Utilization Information Disclosure Standards]", May 5, 2016.

derailed a number of transactions in the US and elsewhere (for example the buyout bid for internet security company Qihoo 360, and Anbang's bid for Starwood Hotels).¹⁶⁶

Figure 42: China's Capital Flows under the Balance of Payments, Financial Account Balance by Type, IQ2009- IQ2016

USD million



Source: State Administration of Foreign Exchange. Positive values indicate inflows and negative values indicate outflows. 1Q2016 data are preliminary; securities and other investment balances are based on RHG estimates.

We believe that China will generally continue to liberalize its outbound FDI policy framework going forward. *Traditional* FDI transactions (non-financial economy firms investing in non-financial assets) will continue to enjoy policy support, especially if they have a clear strategic rationale and are seen as beneficial for China's long-term economic development. However, we do not see China transitioning to a completely open regime under which the government gives up its existing ability to monitor and record transactions and tighten the screws on certain types of outflows when deemed necessary. As in recent months, we believe that investments with a "financial" nature and especially transactions that allow households to move sizable funds overseas will face scrutiny. One should also assume continued regulatory attention to deals involving large amounts of foreign exchange, particularly when geopolitical factors or USD strength trigger additional capital outflows.

¹⁶⁶ Qihoo 360 investors were reportedly engaged in negotiations with SAFE regarding foreign investment transactions for the deal, "外媒：奇虎 360 私有化财团正与外江局就外江问题谈判 [Foreign Media: Qihoo 360 negotiating with SAFE on foreign exchange issues in privatization attempt]", *Sina Finance*, May 12, 2016. As mentioned previously, CIRC reportedly played a role in Anbang's failed bid for Starwood: "保监会或否决安邦两笔海外并购 [CIRC blocks two overseas acquisitions from Anbang]", *Caixin*, March 22, 2016.

5. The US Regulatory Environment for Inbound Chinese FDI

While market realities are the primary forces shaping Chinese FDI in the United States, the American regulatory regime plays a role as well. US FDI screening is narrowly limited by law, sustaining the attraction for Chinese investors. The principal screening is review by the Committee on Foreign Investment in the United States (CFIUS), which reviews acquisitions for national security concerns. In recent years, the number of Chinese transactions reviewed by CFIUS has grown, but this rise is in line with overall deal volume and a preference for higher technology, which is inherently more sensitive. Beyond national security screening, Chinese companies are only subject—with very few exceptions—to the same rules and requirements that any other local or foreign firm is. Chinese firms have struggled with some of these restrictions, especially those different from what they know at home such as disclosure requirements, export controls, or litigation practices. Current policy debates focus on the scope and adequacy of national security reviews, ways to achieve greater reciprocity in market access and options for addressing potential distortions through investment by state-owned enterprises.

5.1 REGULATORY PROCESSES FOR CHINESE INVESTORS AT MARKET ENTRY

International investment openness has been a core US principle for most of American history.¹⁶⁷ The US championed inbound and outbound investment after World War II. US companies began to invest abroad heavily in the 1950s and 1960s, and the US government began to actively promote inbound FDI during the 1970s. President Ford first created an inward investment committee in 1975 to ensure an orderly executive review process that would gauge security considerations and avoid frequent politicization of cases.¹⁶⁸ The principle of openness was formally embraced by President Reagan in 1983 and has since been reaffirmed by each administration.¹⁶⁹ With the exception of a handful of sectoral restrictions and the screening processes for narrow security concerns, there are no outright restrictions on foreign investors in the United States. Foreign-owned firms are entitled to be treated no differently from domestic firms once national security considerations are set aside—they enjoy pre-establishment national treatment (PENT). The US takes a non-discriminatory approach with regard to specific countries: PENT and other basic principles of openness are equally applied to firms regardless of national origin, with the exception of countries, individuals and firms specifically listed in the Specially Designated Nationals (SDN) list of the Office of Foreign Asset Control (OFAC) at the Department of Treasury, the mechanism for enacting sanctions on targeted countries.

Various indicators reflect America's openness to foreign direct investment. Figure 43 shows the OECD's FDI Restrictiveness Index, which measures FDI openness across different countries by cataloguing regulations and scoring them.¹⁷⁰ It shows that the US is comparatively open in the global context. However, this index only measures formal and not informal barriers, and is thus not a complete measure – as is apparent from the ranking of Japan as more open than the US, which common sense tells us is not the case.

¹⁶⁷ Mira Wilkins, *The History of Foreign Investment in the United States, 1914-1945* (Cambridge: Harvard University Press, 2004); Edward M. Graham and Paul R. Krugman, *Foreign Direct Investment in the United States* (Washington: Peterson Institute for International Economics, 1995).

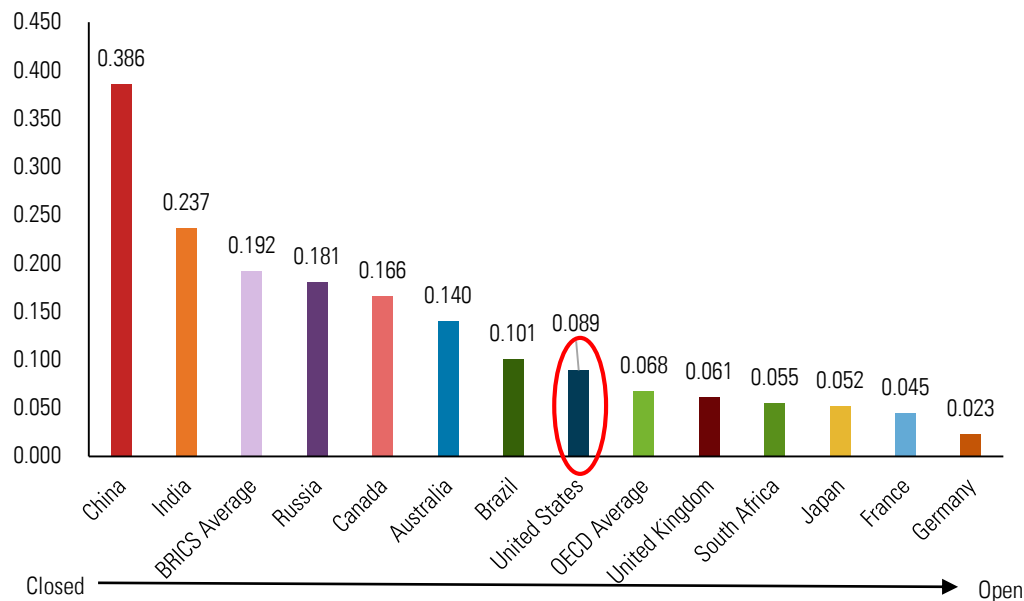
¹⁶⁸ Executive Order 11858 of May 7, 1975, Foreign Investment in the United States, 40 F.R. 20263.

¹⁶⁹ Ronald Reagan, *Statement on International Investment Policy*, (1983).

¹⁷⁰ Blanka Kalinova, Angel Palerm, and Stephen Thomsen, "OECD's FDI Restrictiveness Index 2010 Update," *OECD Working Papers on International Investment*. August 1, 2010.

Figure 43: Formal FDI Restrictiveness, Selected Economies and Country Groups, 2015

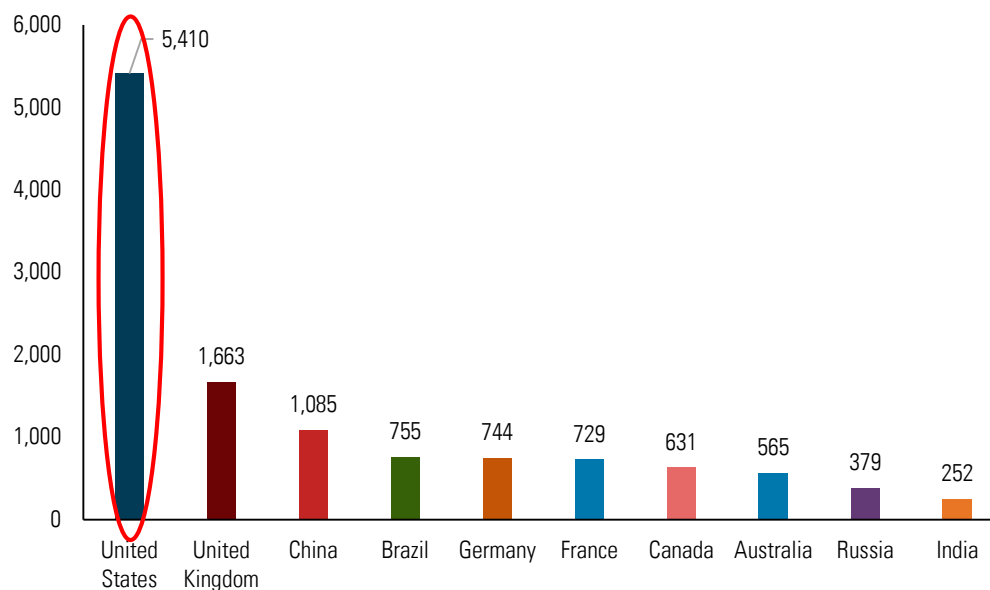
Index: 1=Closed / 0=Open



Source: OECD. The index is compiled by measuring restrictions on foreign equity, screening and prior approval requirements, rules for key personnel, and other restrictions on operating foreign enterprises. These factors are weighted and scored for all industries, which are then aggregated and weighted into an overall index for each country. See Kalinova et al. (2010) in the references for details.

Figure 44: Stock of Foreign Direct Investment, Selected Economies, 2014

USD billion



Source: UNCTAD.

Inward FDI stock across different economies (Figure 44) can serve as a *de facto* measure openness and economic attractiveness. It shows the unrivaled attractiveness of the United States economy for foreign investors, with more than

\$5.4 trillion of inward FDI stock as of the end of 2014, 22% of the global total and more than three times the amount of the second-ranked United Kingdom.¹⁷¹ While this obviously reflects GDP size and other factors, it does provide an acid test for openness.

Restrictions to Foreign Ownership in Specific Industries

While the US is generally open to FDI, it does place restrictions on foreign ownership in several specific industries. Figure 45 tallies the seven sectors in which the US restricts foreign investment and the type of restriction. These are: fisheries, transport, media, communications, energy, resource extraction, and financial services. Only in two industries, fisheries and transport does the US significantly restrict foreign ownership; the remaining five have only minor restrictions. The majority of formal restrictions across all seven sectors come in the form of equity restrictions, meaning that there are limits on the size of the stake foreign investors are permitted to take in the US firm.¹⁷² These equity restrictions and other regulations are generally enforced by federal agencies tasked with regulating the respective industry.¹⁷³

- The most protected sector is the relatively small *fisheries* industry, which is also shielded from foreign ownership in many other nations with otherwise open investment regimes, such as Canada and the United Kingdom. Under the American Fisheries Act of 1998 in title 46 of the US Code, 75% of a fishing vessel must be owned and controlled by US citizens.¹⁷⁴ The US Maritime Administration within the Department of Transportation is responsible for its implementation.
- Restrictions in the *transport* sector mostly apply to coastal and freshwater merchant shipping. The Jones Act (1920) and title 46 of the US Code stipulate that shipping in US waters and between US ports must be done by ships flying US flags. Ownership of merchant ships must be American; the level of foreign ownership of a corporation owning merchant ships cannot be large enough to constitute a quorum in corporate governance matters.¹⁷⁵ This is also regulated by the US Maritime Administration within the Department of Transportation.
- In the *media* sector, US law stipulates a 20% limit on foreign ownership without review for broadcast radio licensees and a limit of 25% ownership through holding companies. Acquisitions that target stakes above those thresholds are subject to review by US regulators, which can permit 100% foreign indirect ownership as long as 75% of this investment is from a WTO member. Additionally, radio licenses cannot be granted to foreign governments—a legacy of concerns about foreign propaganda at a time when communication bandwidth was scarce.¹⁷⁶ This regulation is administered by the Federal Communications Commission (FCC).

¹⁷¹ UNCTAD is the primary source for the international comparison of FDI data. However, one important caveat for the interpretation of this data is that UNCTAD does seem to lump together data points that are based on different concepts and valuation methodologies. The \$5.4 trillion figure reflects US inward FDI stock in 2014 at market value, not at historical value. The US inward FDI stock at historical value is significantly lower at only \$3 trillion at the end of 2015 (see Part 1.1).

¹⁷² For example, a 0.5 equity restriction rating in the OECD index means that foreign investors are not permitted to take a stake of over 50%.

¹⁷³ The following industry description draws heavily from Michael V. Seitzinger, *Foreign Investment in the United States: Major Federal Statutory Restrictions*, (Washington: Congressional Research Service, 2013). Other secondary sources are U.S. Chamber of Commerce, *China's Approval Process for Inbound Foreign Direct Investment: Impact on Market Access, National Treatment and Transparency*, (U.S. Chamber of Commerce, 2012) and David Fagan, *The U.S. Regulatory and Institutional Framework for FDI*, (Vale Columbia Center and Deloitte, 2008)

¹⁷⁴ 46 U.S.C. §50501.

¹⁷⁵ 46 U.S.C. §12102(a).

¹⁷⁶ 47 U.S.C. §310(a).

- In the *electricity* industry, foreign companies or entities are forbidden from owning (or operating) nuclear facilities in the US and cannot be granted licenses to do so, under the Atomic Energy Act of 1954 in title 42 of the US Code and managed by the US Atomic Energy Commission.¹⁷⁷
- In the *communications* sector, foreign governments or their representatives as well as private aliens are prohibited from holding radio station licenses under title 47 of the US Code. Any corporation with more than 20% or 25% foreign ownership (depending on its location of incorporation) is also prohibited from holding radio licenses.¹⁷⁸ Foreign governments, individuals, and businesses owning newspapers must register with the Attorney General and label any materials in its interest disclosing the relationship between the newspaper and the foreign “principal”. When the stake is less than 20% and the newspaper is incorporated in the US, this is not required.¹⁷⁹
- In *resource extraction*, US law mandates disclosure of stakes above 10 percent and prohibits lease holdings if investors are from countries that do not give US investors “reciprocal privileges”. If foreign citizens own more than 10% of a corporation that holds leases or interests in natural resources such as coal, oil, and gas, they are required to disclose their citizenship information to the Bureau of Land Management (BLM) within the Department of the Interior.¹⁸⁰ If these foreign citizens are from countries that do not grant reciprocal rights to US citizens, they are not permitted under title 30 of the U.S. Code to own such leases in any form.¹⁸¹
- Foreign investment in *financial services*, particularly in banking and insurance, may require approval from the Federal Reserve Board, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of Currency (OCC). In order to establish branches in the US that can take deposits or acquire existing US banks, foreign banks over a certain size must form bank holding companies. Under the Bank Holding Company Act (BHCA), the Federal Reserve examines the competitive impacts of acquisitions, the financial conditions and managerial resources of the acquiring bank, and whether the bank is properly regulated in its home market.¹⁸² Recent changes introduced by the Dodd-Frank Wall Street Reform and Consumer Protection Act require that foreign banks must establish intermediate bank holding companies if their total combined assets exceed \$50 billion and combined US assets exceed \$50 billion.¹⁸³ Smaller foreign banks must still meet home country capital stress test requirements, operate risk committees for US operations, run liquidity stress-tests for US operations, and certify that they meet home country capital standards pursuant with the Basel Accords.¹⁸⁴ These are prudential regulations typical of other countries as well.

¹⁷⁷ 42 U.S.C. §2133(d).

¹⁷⁸ 47 U.S.C. §310(a-b).

¹⁷⁹ 22 U.S.C. §611-614.

¹⁸⁰ 43 C.F.R. §3502.30.

¹⁸¹ 30 U.S.C. § 181.

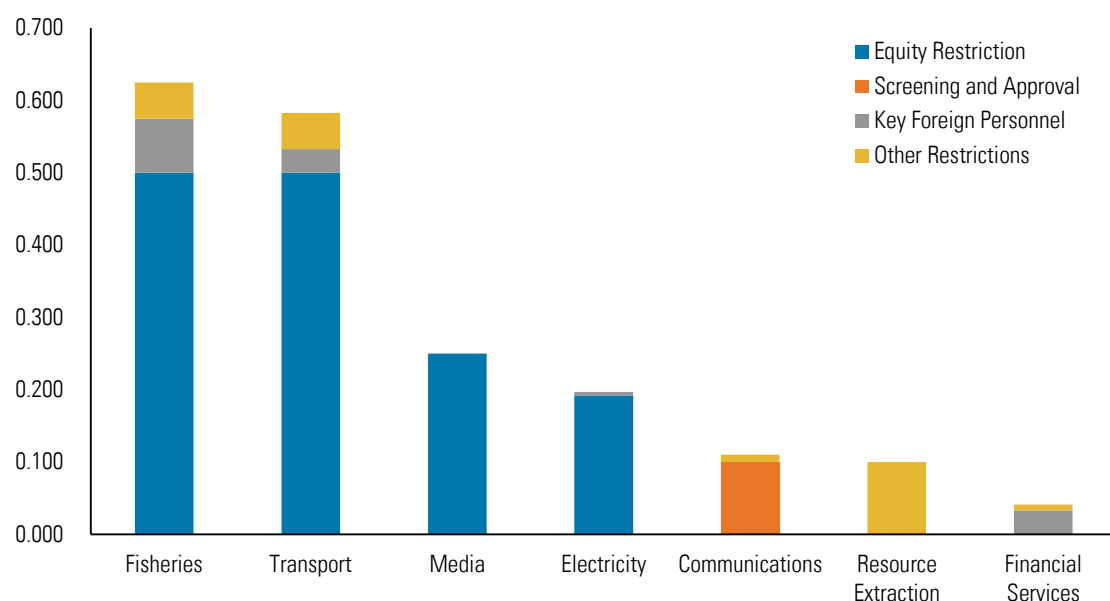
¹⁸² 12 U.S.C. §1842(c).

¹⁸³ 12 U.S.C. § 1841(h)(3) and 12 U.S.C. §5365.

¹⁸⁴ Mitchell Berlin, “New Rules for Foreign Banks: What’s at Stake?,” *Philadelphia Fed Business Review* Q1, 2015, 6.

Figure 45: Formal FDI Restrictiveness in the US by Industry, 2015

OECD FDI Restrictiveness Index; index ranging from 0=completely open to 1=completely closed



Source: OECD.

In addition to federal regulations, foreign investors may face a handful of requirements and restrictions on the subnational level (which are not reflected in the OECD index). The most important of these concern ownership and use of land and especially farmland by non-nationals, and additional regulatory reviews in banking and insurance, which had a long history of state-level management pre-dating financial federalism. In the financial sector, these often are concerned with evaluation of regulatory efficacy of the entrant's home country regulator. In most cases these instances of state level review have not been prohibitive: for example, South Carolina's land rules stipulate that "non-U.S. citizens or corporations controlled by non-U.S. citizens may not hold more than 500,000 acres of land," a high cap.¹⁸⁵ Moreover, pro-foreign investment incentives offered by the states greatly overshadow the limited number of foreigner-specific limits. Nonetheless, Chinese officials have expressed concerns about sub-national restrictions, probably because China's own sub-national restrictions are so onerous that it is difficult to imagine the US could be so liberal. The growing abundance of evidence of Chinese success investing across the full range of American localities goes far to prove that there is not a hidden body of restrictions at work beneath the national level.¹⁸⁶

A number of Chinese investments in the US were subject to reviews and approvals by federal and state-level regulators in recent years. The industry most impacted was financial services. In 2009, the Federal Reserve did not deliver a ruling in the prescribed window on whether China Minsheng Bank could acquire United Commercial Bank, which thwarted Minsheng's takeover attempt.¹⁸⁷ The Federal Reserve never disclosed its reasons for failing to make a decision in time. In 2012, the Federal Reserve did approve the takeover of the US operations of Bank of East Asia by ICBC, declaring that Chinese banks were sufficiently supervised.¹⁸⁸ In its ruling, the Federal Reserve said that the China Banking Regulatory Commission (CBRC) was satisfactorily implementing the Basel Core Principles, the basis of "comprehensive,

¹⁸⁵ S.C. Code Ann. § 27-13-30.

¹⁸⁶ U.S.-China Relations and Rhodium Group, *New Neighbors: Chinese Investment in the United States by Congressional District*, (2015).

¹⁸⁷ Tom Braithwaite and Jamil Anderlini, "Minsheng bid block was 'costly mistake'", *Financial Times*, November 20, 2009.

¹⁸⁸ Federal Reserve Board, FRB Order No. 2012-4 *Industrial and Commercial Bank of China Limited China Investment Corporation Central Huijin Investment Ltd. Beijing, People's Republic of China Order Approving Acquisition of Shares of a Bank*, (2012).

consolidated supervision” (CCS).¹⁸⁹ This decision makes it easier for Chinese banks to acquire US banking assets in the future. Going forward Chinese banks, especially larger ones, will face the same challenges from the changes under Dodd-Frank as other foreign banks in the US, given the considerable changes to corporate structure and capital, liquidity, and risk requirements.¹⁹⁰

Review of Foreign Acquisitions by the Committee on Foreign Investment in the United States (CFIUS)

The general regulatory barrier that confronts foreign acquirers upon market entry is CFIUS.¹⁹¹ CFIUS is an inter-agency committee mandated to examine the national security implications of foreign investments and foreign control of critical infrastructure in the US. It was set up through an Executive Order in 1975 in response to concerns about OPEC member investments. As Japanese foreign direct investment took off in the 1980s, Congress passed the Exon-Florio provision expanding the process and authorizing the president to block specific transactions.¹⁹² This statute was modified in 1992 through the Byrd Amendment, section 837(a) of the National Defense Authorization Act for Fiscal Year 1993, specifying that CFIUS would investigate investments made on behalf of a foreign government or that were a threat to national security.¹⁹³ The Committee’s role was further systematized by the Foreign Investment and National Security Act (FISNA) of 2007, giving CFIUS statutory authority (rather than just executive order) and codified its procedures.

CFIUS is chaired by the Secretary of the Treasury, and includes representatives from 16 departments, agencies, and the executive office of the president, shown in Table 11.¹⁹⁴ Its statutory mandate covers acquisitions of any size, but not greenfield investments. CFIUS reviews proposed or completed acquisitions for narrow security concerns as well as foreign government control, not economic interests. “National security” is not defined in CFIUS’ mandate, giving the executive branch latitude in its determination. CFIUS is given similar latitude to determine what constitutes government control.¹⁹⁵ Technically, any merger, acquisition, or takeover that grants control to a foreign person can be covered by CFIUS.¹⁹⁶

Table 11: Composition of the Committee on Foreign Investment in the United States

Secretary/Director	Status
Secretary of State	Full Member
Secretary of the Treasury	Full Member
Secretary of Defense	Full Member
Secretary of Homeland Security	Full Member
Secretary of Commerce	Full Member
Secretary of Energy	Full Member
Attorney General	Full Member

¹⁸⁹ Ibid, 11.

¹⁹⁰ China General Chamber of Commerce-USA, *China General Chamber of Commerce - USA 2015 White Paper*, (CGCC Foundation, 2016), 15.

¹⁹¹ James K. Jackson, *the Committee on Foreign Investment in the United States (CFIUS)*, (Washington: Congressional Research Service, 2016), 14-15, 16-17.

¹⁹² 50 U.S.C. § 2170.

¹⁹³ P.L. 102-484, October 23, 1992.

¹⁹⁴ 50 U.S.C. § 2170.

¹⁹⁵ 50 U.S.C. § 2170(a)2,4.

¹⁹⁶ 50 U.S.C. § 2170(a)3.

United States Trade Representative	Full Member
Director of the Office of Science and Technology Policy	Full Member
Secretary of Labor	Member Ex Officio
Director of National Intelligence	Member Ex Officio
Director of the Office of Management and Budget	Observer
Chairman of the Council of Economic Advisers	Observer
Assistant to the President for National Security Affairs	Observer
Assistant to the President for Economic Policy	Observer
Assistant to the President for Homeland Security and Counterterrorism	Observer

Source: James K. Jackson, *the Committee on Foreign Investment in the United States (CFIUS)*, (Washington: Congressional Research Service, 2016), 8.

Generally, acquiring firms file for CFIUS review *voluntarily* in order to get a clean bill of health that the transaction will not face dissolution or divestiture after costly investments in the future due to national security problems – if they have any doubt as to the presence of security concerns. The Committee can also self-initiate a review for whatever reason it sees fit. The Committee then has 30 days to conduct a review of whether an investigation is required, then 45 days to conduct that investigation, and then there are 15 days for the President to make a determination on the case in the rare instances where the Committee recommends blocking. In most cases, parties withdraw and abandon their transaction if CFIUS signals that it will issue such a negative recommendation. In some cases, CFIUS and the transaction parties will sign a mitigation agreement specifying measures that remedy specific concerns without impeding the entire transaction. Mitigation measures may include sale of certain assets, restrictions on personnel and access to specific operations or locations, and periodic inspections and reporting requirements.¹⁹⁷

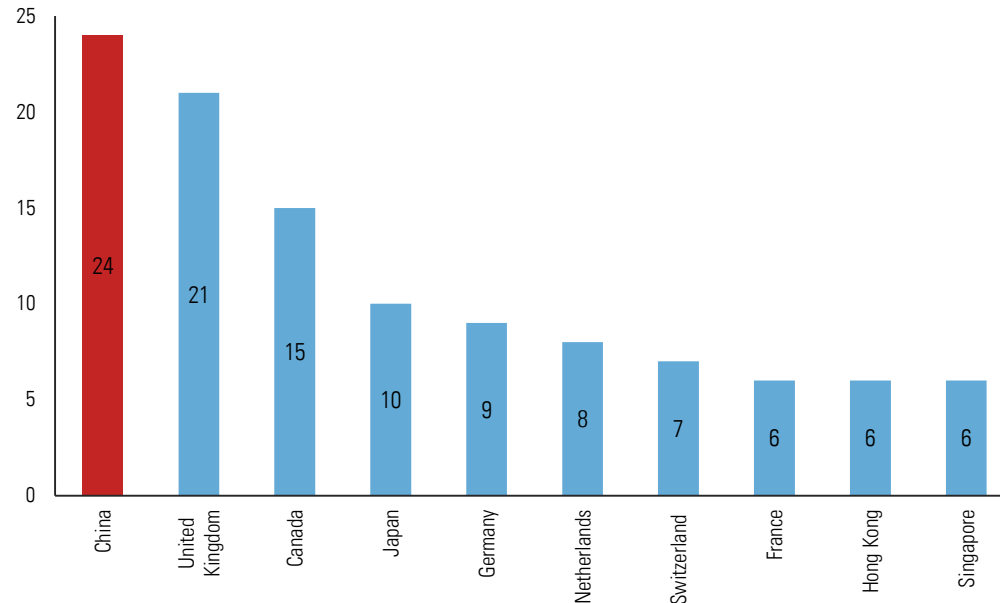
After the passage of FINSA, additional rules for state related investors were introduced. While the choice to submit a deal for review is still voluntary, if a deal involving a foreign government as buyer or an SOEs is submitted for review, then CFIUS' second phase investigation is *mandatory*, unless the Secretary or Deputy Secretary of the Treasury and of the lead agency (assigned for each review depending on the sector) find the transaction “will not impair” national security and provide a waiver. As before, the Committee can self-initiate a mandatory initial review, and in the FINSA era is somewhat more likely to do so given congressional oversight.

Rising numbers of acquisitions, a shift toward technology assets, and strong state involvement in outbound investment have swelled the number of CFIUS reviews of Chinese deals in recent years, from fewer than 10 before 2011 to more than 20 from 2012 to 2014. In 2014 (the latest year for which official data is available) China was the nation with the most covered transactions (Figure 46). While the increase in covered transactions has captured headlines, the *proportion* of Chinese transactions covered by CFIUS relative to all covered transactions has actually declined in recent years. The share held around 20% as acquisitions grew from 2009–2011, then rose to fully two-thirds in 2012 at the height of the first wave of Chinese investment before dropping in 2013 and 2014, to 40% and then to 25%, despite record deal numbers (Figure 47).

¹⁹⁷ 50 U.S.C. § 2170(l).

Figure 46: Number of CFIUS Covered Transactions in 2014, Top 10 Countries

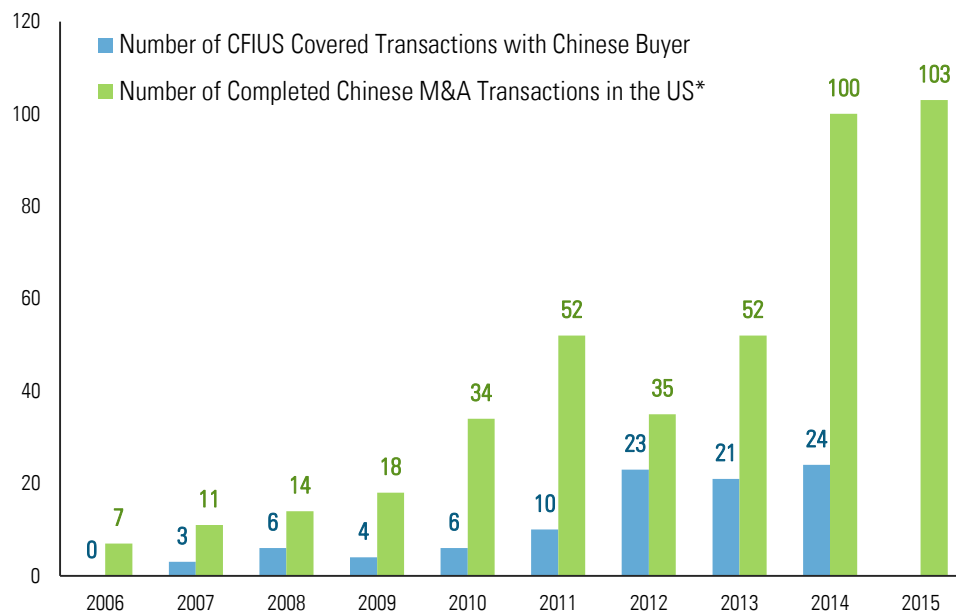
Number of transactions



Source: US Department of the Treasury.

Figure 47: Number of Completed Chinese Acquisitions vs. Transactions Covered by CFIUS

Number of transactions



Source: Rhodium Group, US Department of the Treasury. *Includes completed Chinese M&A transactions in the US with over 10% resulting stake. CFIUS data for 2015 not yet available as of October 2016.

CFIUS activity is confidential, which limits informed discussion of its impact. However, public filings and other data points allow us to draw some conclusions about the Committee with respect to Chinese investment. First, we know that Chinese transactions have been blocked by the President or withdrawn by the parties after CFIUS signaled that it

would make a negative recommendation (see Table 12). CFIUS appears most concerned with two threats: First, the Committee is concerned with access to critical dual-use technology.¹⁹⁸ The cases of 3Leaf, Lumileds and Western Digital reflect this concern. Second, transactions that raise risks of economic or military espionage through geographic proximity to defense installations or other national security facilities have been a focus. Cases of mining investments in Nevada (Nevada Gold Holdings and Lincoln Mining) and the prominent case of Ralls Corporation's wind farm in northern Oregon fall into this category.

Table 12: Chinese Acquisitions with Negative CFIUS Outcome, Selected Cases, 1990-2016

Year*	Chinese Buyer		US Target	Industry	Outcome
1990	CATIC / AVIC		MAMCO	Aviation	POTUS ordered divestiture.
2009	Northwest International Co.	Nonferrous Investment	Firstgold	Mining	Withdrawn by parties after filing with CFIUS
2010	Huawei		3Leaf	ICT	Voluntary divestiture after CFIUS asked for filing post-closing
2010	Tangshan Investment Corporation	Caofeidian	Emcore	Mining	Withdrawn
2012	Far East Golden Resources Investment Limited		Nevada Gold Holdings	Mining	Voluntary divestiture after CFIUS asked for mitigation measures as conditions for approval
2012	Ralls (owned by Sany)		Oregon Wind Farms	Renewable Energy	POTUS ordered divestiture
2012	Procon Mining and Tunneling Ltd.		Lincoln Mining	Mining	Divestiture after CFIUS review
2015	Lumileds (Royal Philips NV)		Consortium / GO Scale Capital of Chin	Electronics	Withdrawn
2015	Tsinghua Unisplendour		Western Digital	Semiconductors	Withdrawn
2016	Sanan Optoelectronics Co. Ltd.		Global Communications Semiconductors	Semiconductors	Withdrawn

Source: Authors' compilation based on regulatory filings and other public sources. *Year of announcement.

The topic of control over dual-use technologies and other vectors for national security concern is huge, and far exceeds the domain of FDI. Clearly CFIUS, and FDI from China, are just small parts of the picture. That said, we can draw several important conclusions from the analysis above and our database of more than 1,250 Chinese investments in the US since 2000.

First, as tabulated above, US authorities have shown the capacity and willingness to block acquisitions of US firms when they wish. Second, we know from our extensive discussions with parties involved that a still greater number of such transactions are stopped before they even get to a formal review, based on informal guidance and the precedents which past reviews have created. Third, these screening has been achieved while not shutting out the vast majority of deals, even in advanced sectors. This in turn has benefitted the US economy and, sometimes singly and sometimes in the aggregate, bolstered American security by strengthening US innovativeness and involvement in the international economy. Fourth, having identified the vast majority of Chinese deals that have succeeded in the past, we can say that we are aware of none that have managed to hide from normal security laws inside the US after establishment and very

¹⁹⁸ Those assessments are based on publicly available resources, expert interviews, and the authors' review of historical cases.

few that have had to be called to account for their US operations. Fifth, the American practice of mitigating concerns wherever possible, rather than outright prohibitions on investment in whole industries, has worked well and serves as an important model for others to learn from – not least China itself.

As national security priorities are shifting due to changes in technology and other factors, some have proposed changing CFIUS to make it much broader in reach. Others argue that the screening system is working well and that new threats arise from other vectors and not the directions CFIUS was created for. It is important that the United States debates these different views. The evidence on Chinese FDI patterns provided in this report permits a better, informed discussion.

Mandatory Reporting and Disclosure Requirements for Foreign Investors

Foreign investors face a third specific requirement when entering the US market: special disclosure requirements. They are required to participate in BEA surveys compiling FDI statistics. These are conducted every five years, and participation is mandatory under the International Investment and Trade in Services Survey Act, in title 22 of the US Code.¹⁹⁹ All US business enterprises wherein a foreign person owns, directly or indirectly, more than 10% of voting securities or the equivalent interest in an unincorporated enterprise must respond. This applies to all investments, both mergers and acquisitions and greenfield. The exception is residential real estate held for personal use. The responsibility for reporting falls on the US enterprise, not the foreign parent. The US affiliate, as US enterprises with foreign shares meeting the threshold are referred to, must also file for all other enterprises in which it holds more than 50% of voting securities.²⁰⁰

There are three other required surveys: upon investment, quarterlies, and annual data reporting. All surveys must be filed no later than 45 days after the completion of the investment transaction for new investments, and after the end of the respective fiscal quarter and year for quarterly and annual data. The survey for new foreign investments corresponds to the BEA's Dataset on New Foreign Direct Investment in the United States described in Part 1.1. Like the benchmark survey, it covers all forms of investment and requires an ownership threshold of 10%. Investments below \$3 million are exempted from responding.²⁰¹ The quarterly and annual surveys inform the BOP and IIP datasets described in Part 1.1. These are intended to track both new investments and divestitures. Again, affiliates involved in all forms of investment are required to complete these disclosures. The thresholds for the size of the investment are based not on a given transaction, but financial characteristics of the US affiliate of the foreign investor. For quarterly surveys filing is required if total assets, annual sales, gross operating revenues, or annual net income are greater than positive or negative \$60 million. For annual survey filing, this threshold is increased to positive or negative \$300 million.

In addition to FDI surveys, foreign investors also face special registration requirements in certain sectors. As mentioned previously in sector-specific restrictions on foreign investment, foreign citizens who own more than 10% of a corporation that holds leases or interests in natural resources such as coal, oil, and gas, are required to disclose their citizenship information to BLM. Under the Agricultural Foreign Investment Disclosure Act of 1978 in title 7 of the US Code, foreign investors in agricultural lands must disclose investment and investor information to the Department of Agriculture.²⁰² Foreign investors that own agricultural land through tradable securities do not have to report.²⁰³

¹⁹⁹ 22 U.S.C. § 46.

²⁰⁰ Bureau of Economic Analysis, *A Guide to BEA's Direct Investment Surveys*, (Washington: U.S. Department of Commerce), 8-12.

²⁰¹ Ibid: 9.

²⁰² 7 U.S.C. § 3501. In this context, a security interest refers to a mortgage or other debtsecuring interest, as defined in 7 U.S.C. § 3501(j).

²⁰³ 7 C.F.R. § 781.2(c).

5.2 COMPLIANCE WITH US LAWS AND REGULATORY REQUIREMENTS

Aside from rules specific to foreign investors, entities from abroad also must abide the same general regulatory and legal provisions as any local US company, on a national treatment basis. There is no discrimination between entities owned by Americans and foreigners in this regard, as long as the US affiliate is registered. Under the principles of PENT, US regulators or law enforcement agencies do not discriminate between Chinese and other foreign entities.

That said, operating in the US and complying with the US laws may pose challenges for foreign investors given the differences with their home economies. This is especially true for companies from China and other emerging markets, whose corporate governance structures and processes often reflect regulatory cultures vastly different from the complex law-based US system. It exceeds the scope of this study to catalogue federal and local regulations, but we highlight the most important areas in the context of Chinese FDI. This summary is based on the authors' tracking of relevant cases, discussion with legal practitioners, and survey data from Chinese companies operating in the United States.²⁰⁴

Disclosure and Reporting Requirements

Investors in the United States may be subject to expanded disclosure and reporting requirements when making investments in certain industries and types of corporations. Examples of industry-specific disclosure requirements are the above-mentioned banking and insurance sectors, where investors have to regularly report to the Federal Reserve and other regulators. Another example is the energy sector, where under the Federal Power Act, investments of \$10 million or more in a renewable energy project or public utility that results in a change of 10% or more of voting interest triggers a review by the Federal Energy Regulatory Commission as well as state commissions.²⁰⁵ Investors also have to fulfill specific disclosure requirements when they acquire significant stakes in publicly listed companies, which need to be filed with the Securities and Exchange Commission (SEC). Under the Domestic and Foreign Investment Disclosure Act of 1977, added to the Foreign Corrupt Practices Act and amending Section 13(d) of the Securities Exchange Act of 1934, foreign persons who acquire 5% or more of equities in a company registered with the SEC must disclose information on citizenship and residence.²⁰⁶

Chinese-owned subsidiaries are generally complying with these requirements, and public filings allow researchers to get considerable clarity on the operations of Chinese-owned entities in these sectors.²⁰⁷ It is possible that multiple Chinese (state-owned or private) companies are holding securities in US companies that are below the reporting threshold for each individual company, but would add up to a more substantial stake if taken together. However, there is little reason to be concerned about such a scenario. If such companies were to exert influence through voting or a board seat they would necessarily need to combine stakes, triggering disclosure requirements and potentially subjecting them to merger control regulatory mechanisms and possibly CFIUS. Furthermore, patterns of nefarious securities positioning in collusion with others to secure control are often identified by regulators today using forensic accounting techniques. Not only would such machinations by Chinese—or other—covert acquirers likely lead to legal investigations, but they would draw unwanted attention to “Chinese” behavior more broadly and hence stern consequences at home. This does not at all insure that such activities would never be attempted, but it does reduce the likelihood.²⁰⁸

²⁰⁴ China General Chamber of Commerce-USA, *China General Chamber of Commerce - USA 2015 White Paper*, CGCC Foundation, 2016.

²⁰⁵ 16 U.S.C. § 824b.

²⁰⁶ P.L. 95-213.

²⁰⁷ For example, Chinese banks in the US as part of Dodd-Frank compliance need to submit mitigation plans, accessible at: <https://www.federalreserve.gov/bankinfo/reg/resolution-plans-search.htm>.

²⁰⁸ The SEC has in recent years stated and demonstrated its intention to focus on actively identifying and pursuing cases in which entities violate the requirement to disclose significant ownership stakes in publicly listed US companies. Securities and Exchange

Chinese firms that are listed at US stock exchanges are also subject to additional information disclosure in their prospectuses and periodic reporting. These include standard disclosure forms on the firm's balance sheet and its corporate governance, both at the time of listing, on an annual basis (in the form of annual reports), and ad-hoc if major changes in the company occur, including changes in ownership control, defaults, bankruptcy, and other major business events. This is regardless of whether the IPO was done through ordinary shares or through an ADR program.²⁰⁹ However, there are no disclosure requirements that would create transparency on subsidies or other government support that Chinese and other foreign companies receive at home.²¹⁰

There have also been instances where Chinese investors struggled with providing in-depth information to regulators in the US. Anbang reportedly had to delay its acquisition of US insurance company Fidelity & Guaranty because it wasn't able to produce information on ultimate beneficial shareholders, its ownership structure, and the sources of funding.²¹¹ There are situations in which Chinese privacy or state secret laws prohibit China-headquartered companies from sharing certain information with US regulators. For example, long-arm jurisdiction conflicts have emerged between disclosure requirements for US subsidiaries of Chinese banks and confidentiality requirements in Chinese commercial banking law.²¹² However in such cases the Chinese investor either has to give-in or walk away from the investment, and thus we do not see a particular need for any specific policy or regulatory change.

Export Controls

US law stipulates that the export of US products or technologies with dual-use applications for civilian and military purposes is restricted or in some cases prohibited. Additionally, there are single-use defense-applications products and technologies that require licensing and authorization for export. The Treasury Department monitors for US-produced goods and services being exported to countries under economic sanctions regimes by the US.²¹³

The arrival of Chinese companies in the US has been an export control concern for a number of reasons. First, many US products that require licensing for export are currently prohibited for export to China. Second, Chinese companies are more likely than multinationals from other OECD economies to have existing business relationships with countries that fall under US export restrictions (for instance North Korea), reflecting China's different geopolitical position. Finally, newly emerging Chinese multinationals may not have the right corporate governance frameworks in place to ensure compliance with complex cross-border regulations across different entities and subsidiaries. The recent cases of ZTE and Huawei substantiate these concerns. In March 2016, the Department of Commerce alleged that ZTE violated US export controls pertaining to Iran (it has been granted temporary reprieves three times over implementation of controls since then as it negotiates with the Department of Commerce). In June 2016, Huawei was subpoenaed for alleged export control violations to the five countries currently under US embargo (Cuba, Iran, North Korea, Sudan,

Commission, "SEC Announces Charges Against Corporate Insiders for Violating Laws Requiring Prompt Reporting of Transactions and Holdings," *Securities and Exchange Commission*, September 10, 2014.

²⁰⁹ Securities and Exchange Commission, *Accessing the U.S. Capital Markets - A Brief Overview for Foreign Private Issuers*, (Washington: Securities and Exchange Commission, 2013). 15 U.S.C. § 77 and 78 (Securities Act of 1933 and Securities Exchange Act of 1934 and amendments).

²¹⁰ Information about subsidies is, however, often available from filings at Chinese stock exchanges. For example, see Dinny McMahon, "Chinese Industrial Subsidies Grow 23%," *Wall Street Journal*, June 23, 2013, which takes information available from Chinese exchange disclosure forms to estimate subsidies.

²¹¹ Leslie Scism, "Anbang Withdraws Application for N.Y. Approval of Insurance Deal," *Wall Street Journal*, May 31, 2016.

²¹² For example, Bank of China argued that Chinese privacy law prohibited the release of information on customers accused of counterfeiting luxury goods in a case brought by Gucci America. Sneha Teresa Johny, "Bank of China Submits Records in Gucci Case after Fines," *Reuters*, January 21, 2016.

²¹³ This is cited numerous times throughout the U.S. Code for different specific sanctions [cf. 50 U.S.C. § 1-44 (North Korea), 50 U.S.C. § 1701-1706 (Diamond Trading, Sudan, Iran, Zimbabwe, the Balkans, Terrorism, Narcotics, Nonproliferation, Syria, and Burma) etc.]

and Syria). The case is ongoing. While these examples show the potential compliance problems, they also foreshadow the possibility of greater regulatory convergence as investment interdependence creates more mutual benefits.

Protection of Intellectual Property Rights and Trade Secrets

The United States has in modern times maintained strong legal frameworks to protect intellectual property rights (IPR) and trade secrets. Both through statutory and common law frameworks at the state and federal level, the US has been a comprehensive pioneer in the fields of copyright, trademarks, patents, and trade secrets. Intellectual property protection is enforced both through civil and criminal proceedings, and the US is also party to a number of international agreements on IPR protection.²¹⁴

As a developing country, China has traditionally not put an emphasis on the enforcement of IPR, and problems with its IPR enforcement, such as weak laws on trademarks, copyrights, and patents leading to infringement and IP theft, are well documented.²¹⁵ Moreover, cases of economic espionage and trade secret theft involving Chinese actors targeting US companies have increased exponentially in recent years. The physical market entry of Chinese companies through FDI has brought concerns—vaguely conceived—about aggravated IPR problems.

But the vast majority of trade theft and economic espionage tied to Chinese actors is *not* related to FDI subsidiaries. Most incidents are related to actors overseas, Chinese nationals working for US companies, or persons entering the United States on travel or student visas. Also, in cases of violation FDI increases the exposure of Chinese firms to US courts and the opportunity for US prosecutors and businesses to hold Chinese firms and executives accountable. It is not the stated policy of the US to minimize the flow of intellectual property to China, but rather to prevent IP flows additive to the force capabilities of potential adversaries and to insure Chinese parties pay for legitimate intellectual property acquisitions rather than pilfer it. Growing FDI from China into technology assets and IPR indicates that Chinese companies are increasingly willing to pay market price for technology assets, and that they consider the US as a better place for safeguarding their IPR than China.

Competition Policy

Competition policy has been an important dimension of the US government's role in maintaining efficient market outcomes for over a century.²¹⁶ The first dimension of US competition policy is merger control, which screens mergers and acquisitions (by both foreign and domestic investors) for potential negative impacts on competition or the creation of monopolies within the US market. Under the Hart-Scott-Rodino Antitrust Improvements Act, no merger or acquisition can be completed until a filing is made with the Department of Justice and the Federal Trade Commission (FTC).²¹⁷ Acquisitions trigger reviews if they exceed a certain size (\$76.3 million in 2015), this threshold is adjusted every year based on GNP. The reviews conducted by the Department of Justice and the FTC follow a number of tests and standardized metrics for market concentration such as the Herfindahl-Hirschman index (HHI).²¹⁸ In addition to merger reviews, US competition policy authorities also monitor and sanction predatory behavior by firms that could have detrimental impacts on competition and consumer welfare, and other forms of anti-competitive practice.

²¹⁴ William M. Landes and Richard A. Posner, *The Economic Structure of Intellectual Property Law* (Cambridge: The Belknap Press of Harvard University, 2003), 5-10. Lionel Bently and Brad Sherman, *Intellectual Property Law*, 2nd ed. (New York: Oxford University Press, 2004).

²¹⁵ Joseph A. Massey, "The Emperor Is Far Away: China's Enforcement of Intellectual Property Rights Protection, 1986-2006," *Chicago Journal of International Law* 7, no. 1, 2006.

²¹⁶ William E. Kovacic, "The Modern Evolution of US Competition Policy Enforcement Norms," *Antitrust Law Journal* 71, no. 2, 2003.

²¹⁷ 15 U.S.C. § 18a.

²¹⁸ The Herfindahl-Hirschman Index is the standard measure of market concentration, calculated by squaring the market share of each firm in a market and summing these squares. Higher numbers indicate a more monopolistic market and lower ones indicate a more competitive one.

Thus far the exposure of Chinese companies to US competition policy has been limited. Acquisitions have not been impacted materially by US merger review because the US market share of Chinese investors is still minor and well below a threshold that would trigger interest by US antitrust authorities. The only major exception is Wanda's acquisition of movie theater operator Carmike, which was announced in 2016 and would create the largest theater chain in the US, due to the potential consolidation with Wanda-owned AMC. With regard to price fixing and anti-competitive behavior, the US has brought a few cases against Chinese companies in recent years, but most of those were not FDI companies. In 2013, a US court ruled against two Chinese companies for price fixing of Vitamin C, although this was directed at imports into the US, and a federal appeals court threw out the case in the fall of 2016.²¹⁹ Going forward, it is possible that exposure of Chinese companies to US competition policy will grow as the market share of Chinese companies increases, while these companies evolve under a very different approach to competition policy at home. While China has had an anti-monopoly law since 2008, competition policy and the due process around its use is at a very primitive stage compared to the US and advanced market economies.²²⁰

More fundamental questions are arising about the ability of US competition policy regimes, which were built with private enterprises in mind, to fully address the activities of SOEs or state-affiliated investment funds. As demonstrated in Part Two, the role and importance of state-owned Chinese players in the US market is not predominant and in fact has been shrinking. Nonetheless, SOEs will remain an important component of Chinese outbound investment, and current competition policy theories and assessments may not be able to effectively address potential distortions arising from the behavior of those entities in the US market in the future. Other OECD economies, notably the European Union, share many of these concerns. In fact, officials responsible for economic reform in China itself have bemoaned that "there is still no separation between government administration and business management," and that, "A substantial breakthrough is needed to transform SOEs into competitive and profit-driven modern companies."²²¹ Given such domestic concerns about the damage to markets from China's SOEs, it should be little surprise that their impact on other countries' markets should be concerning.

5.3 CURRENT POLICY PRIORITIES AND PROPOSALS

The US approach to screening inward FDI has been generally consistent since the 1970s, although periodic revisions have been made to respond to concerns of the times. The latest evolution, passage of the Foreign Investment & National Security Act of 2007 (FINSA), emphasized coverage of state-related players including sovereign wealth funds, the importance of the energy sector, a desire for greater congressional voice and accountability of administration officials, and the need to clarify the narrow parameters of the Committee's purview. But FINSA was also important for the continuity it demonstrated.

The ongoing rise of Chinese FDI has encouraged further debate about the design of US FDI screening procedures, fueled by concerns that China is different, just as previous campaigns emphasized how Japanese, Middle Eastern and—long ago—German investment inflows were different. Chinese leaders regularly point out China's uniqueness as a nation, unique policies and particular characteristics, many of which do matter for global investment. China has an authoritarian political system and leaders are not bound by rule of law, separation of powers, or the will of voters. It has a geopolitical footing marked by few alliances and increasingly assertive external claims. These are statements of fact, not judgments about the legitimacy of these claims. China's economic size is exceptional and unique for a nation committed to a dominant role for state-owned firms run by a single political party. Beijing traditionally focused on industrial policy to spur growth and nurture national champions, and is ramping industrial policy up, not winding it down, at this juncture. Given all this, it is appropriate and inevitable that countries hosting Chinese FDI will consider their FDI regulatory processes anew. In our view, the US approach today remains effective, and even envied by

²¹⁹ Brent Kendall, "U.S. Court Throws Out Price-Fixing Judgment Against Chinese Vitamin C Makers," *The Wall Street Journal*, September 20, 2016.

²²⁰ Xiaoye Wang and Adrian Emch, "Five Years of Implementation of China's Anti-Monopoly Law—Achievements and Challenges," *Journal of Antitrust Enforcement*, no. 2 (August 16, 2013).

²²¹ People's Daily, "Questions on the Start of the First Quarter [开局首季问大势]," *People's Daily*, May 9, 2016.

policymakers abroad finding it hard to balance conflicting interests with regimes not limited to national security. And many of the presently heard arguments for altering the FDI screening process have been debated in the past and found wanting. Nonetheless, a US debate about whether to make further adjustments is necessary and healthy, especially if based on data and objective analysis.

Current debates and policy proposals focus on three main areas: fine-tuning national security screenings; the extent to which to consider potential *economic* risks (most importantly lack of symmetry in market access and potential distortions through state-owned entities and subsidies); and closing loopholes that Chinese investors could use to escape US courts.

National Security

Publicly available data points and evidence suggests that CFIUS has been able to fulfill its legal mandate of screening Chinese investments for national security threats while at the same time allowing transactions that do not pose any concerns. While drawing conclusions about the robustness of CFIUS is difficult without access to classified records (which the authors do not have), it is apparent that CFIUS has been able to effectively block transactions that it deemed too risky, either through negative recommendations that resulted in Executive Orders to divest assets or through pressure on buyers and sellers to abandon their bid or divest certain assets (see Table 12).²²² At the same time, CFIUS did allow transactions that were deemed as non sensitive by the security agencies participating in the CFIUS process (see Figure 47). In short, CFIUS has allowed the United States to successfully manage the balance between security and economic efficiency with regard to Chinese FDI in the past. In recent years, lawmakers and other groups have made several proposals to adjust the role and process of CFIUS.

In the context of two Chinese acquisitions in agriculture and food industries—Shuanghui’s acquisition of Smithfield Foods in 2013 and ChemChina’s proposed purchase of Syngenta in 2016—several lawmakers have argued that agriculture and food supply chains should be seen as the nation’s critical infrastructure, and thus they call for the Department of Agriculture and the Food and Drug Administration to be included ad hoc in the review of both deals.²²³ In July 2016, a proposed Senate bill, the Securing American Food Equity (SAFE) Act, went further, proposing to add the Secretary of Agriculture as a permanent member of CFIUS.²²⁴ In our view this would not add capacity to assess national security implications not already available to the Committee, and would likely introduce a specific-industry point of view inherently concerned as much with commercial interests as with traditional security considerations. We are not convinced that in the long run specific industrial policy considerations are serving China’s interests well, and so we are reluctant to embrace a lean in the direction of such policies in the United States.

Another proposal recommends expanding CFIUS beyond acquisitions to cover greenfield FDI projects. One prominent analyst of Chinese investment trends has described the absence of greenfield coverage as a gap, arguing that national security concerns should not be determined by the nature of the transaction.²²⁵ A 2014 legislative proposal in the House, the Foreign Investment and Economic Security Act, included this idea.²²⁶ Along with reviewing greenfield investments, the bill would have added a “net benefits” test. In this context, the concept of a net benefits test contends that inward investments can create employment or reduce it, spur exports or diminish them, affect a nation’s “cultural sovereignty”, and change the value-added mix of activities conducted by target entities and even the aggregate growth in an economy, all in addition to whatever national security implications it might have. Discerning the essential

²²² Our numerous interviews with government officials and others have also supported this point of view.

²²³ Debbie Stabenow, “Bipartisan Group of Senators Urge Appropriate Oversight of Proposed Smithfield Purchase,” (2013). Chuck Grassley, “Senators Send Letter to Treasury Asking for USDA, FDA to be Included in CFIUS Review of Syngenta/ChemChina Merger,” (2016).

²²⁴ Securing American Food Equity Act of 2016, 2016.

²²⁵ Derek Scissors, “A Better Committee on Foreign Investment in the United States,” *Heritage Foundation*, January 28, 2013.

²²⁶ Foreign Investment and Economic Security Act of 2014, 2014.

national security interests of a country in relation to an inward investment is hard enough; adding these other considerations, some of them perhaps quantifiable, others (like culture) clearly not, makes an objective determination of national interests next to impossible, converting FDI screening into an ad hoc political debate about the merits of investment every time a deal is proposed. This would obviously cast great uncertainty over the outcomes. Several nations, such as Canada and Australia, employing net benefits tests are currently struggling to assure global investors (not just Chinese) that their screening systems are not just arbitrary regimes. We conclude that the downside of shifting the US regime in this direction outweigh any possible benefit. Further, the United States hosts tens of thousands of greenfield projects per year. Building a system to register and approve those projects would not only be costly for taxpayers but also significantly increase the cost of doing business in the United States and thus reduce competitiveness. Would there be marginal national security benefits? If any, it would be small, as greenfield projects by definition do not transfer any existing assets to foreign control, and greenfield operations just like any other are subject to the full array of US law and law enforcement capabilities.

While we have not seen CFIUS reform proposals meriting support yet, our data and case studies do suggest two priorities. First, the Treasury Department and CFIUS need sufficient resources to fulfill their mandate as deal flow expands. The increase of Chinese FDI means that the number of reviewed transactions has grown rapidly in recent years, to more than 20 cases in 2013 and 2014. By our count these numbers probably doubled in 2015-2016. Second, the growing local presence of Chinese companies and citizens means that US regulators and law enforcement need to have the appropriate resources to persistently monitor new developments and their implications for national security, for example local R&D cooperation with Chinese-owned companies, technology licensing by US firms to local US subsidiaries, or early stage technology financing. CFIUS cannot shoulder the burden of overseeing Chinese firms over time, only the task of identifying specific conditions at the moment of market entry through acquisition. There is no simple “fix” to CFIUS that will change that reality.

Economic Concerns

National security concerns dominate public debate about Chinese FDI, but economic competitiveness considerations are just beneath the surface, and increasingly pushing through. Two issues stand out: the discrepancy between market access for Chinese investors in the US and US investors in China; and the tilting of the level playing field caused by various forms of Chinese subsidies, especially those directed to SOEs, and other policies and practices which distort market-based competition.

Openness to select FDI has been a core element of China’s economic reform since the 1980s. The nation embraced foreign investment to bolster domestic growth, deepen global links such as exports, and strengthen innovation and employment. But while admirably open to foreign investment by developing country standards, China’s open door came with formal and informal restrictions in many sectors. By advanced economy standards, China is among the least open (see comparison among the G-20 economies in Figure 43). Widespread discrimination against foreign companies in China is a reality that becomes more problematic as Chinese firms broaden their international footprints.²²⁷ Chinese firms face far fewer barriers in the United States and other OECD hosts than they benefit from at home, and this is prompting calls for action.

Most economists tend to view calls for outright FDI reciprocity requirements as deeply misguided. Through impacts on employment, R&D spending and tax base growth, inward FDI is beneficial to the US irrespective of what China does.²²⁸ This rule has proven itself repeatedly over time in a long list of US bilateral investment relationships. But economic rationality is not the only voice in the American conversation, and rapid growth of Chinese investment without corresponding progress on investment market access in China creates an asymmetry certain to motivate

²²⁷ Timothy P. Stratford, *Measures and Practices Restraining Foreign Investment in China*, (New York: Covington, 2014).

²²⁸ Daniel H. Rosen and Thilo Hanemann, *An American Open Door? Maximizing the Benefits of Chinese Foreign Direct Investment*, (Asia Society, Center on U.S.-China Relations, 2011).

complaints and threats to change US policy. More broadly, perceived unfairness in two-way investment would further erode support for economic integration with China in general, especially from US businesses.

A second economic concern is that FDI brings market distortions rife in China's domestic economy even more directly to US shores. Chinese exports to the US allegedly predicated on abnormally low production costs and production or financial subsidies have been a first-order irritant for decades. Often it is generally unusual factor costs—like low risk-adjusted interest rates—which are the most important distortion, not actionable specific subsidies that can be addressed more easily through trade remedies. In light of that history, many observers assume that distortions in the cost considerations facing China's outward investor, such as cheap financing to make acquisitions abroad, would harm American interests. These commercial distortions are most associated with the behavior of SOEs, but inefficient conditions in many Chinese sectors not dominated by SOEs—such as solar—are perpetuated by government interventions which preempt market forces. The evidence on whether Beijing is changing its tendency to prevent structural adjustment at home is at best mixed, and thus promises that home conditions such as overcapacity will not be permitted to spillover internationally are met with skepticism. Some Chinese companies investing in the US are receiving preferential treatment from local or central authorities, or are incentivized by fundamental conditions in China which do not reflect market disciplines.

If substantial enough, such conditions could distort markets. The question is whether—given the still low volume of Chinese FDI in the US—we are remotely close to such conditions, and who is to decide when we are. Unlike trade, for which the World Trade Organization (WTO) can adjudicate many subsidy disputes, there is no global definition of investment subsidies or a multilateral institution to handle such disputes. More than 80% of traditionally global FDI flows came from advanced economies, which had reduced state ownership to modest levels and limited most subsidies to sectors providing public goods or otherwise less suited to the market. Some OECD countries and groups, for example Australia and the EU, have policies of “competitive neutrality”, which actively seek to counter bias toward domestic state-owned firms over foreign players in realms including public procurement, taxation, government transparency, and competition control. Since it was less prone to state ownership in the first place, the US has fewer tools to address the distortions they can create, and does not espouse a competitive neutrality doctrine.²²⁹ To date, the prevailing US view has been that the scale of investment distorted by government subsidies and other factors—Chinese or otherwise—was not large enough to distort market pricing on the whole, and thus did not warrant a new regime to ensure the competitive neutrality of state-owned or state-supported companies in the US market.²³⁰ This was the conclusion with regard to Japanese corporate investors benefiting from lower financing costs thanks to cross-shareholding agreements and hence less head-to-head competition for capital in the 1980s. But Japan never threatened to rival the US in economic size, and hence be big enough to distort global prices: China is getting much closer to that point. The advent of China's FDI era has motivated close inspection to the utility of US competition law for managing the potential impact of Chinese investment on US market fairness.²³¹

There has been a lively debate in the US about such concerns. The most far-reaching proposal is for the US to follow other economies and institute a net benefits test for foreign investment. Canada is an example of an OECD economy following this approach. The Canadian Minister of Industry determines whether an investment would be “beneficial to Canada”, based on the economic consequences of the investment, as well as its compatibility with national and provincial interests.²³² The proposed Foreign Investment and Economic Security Act introduced in 2014 would follow such an approach, expanding CFIUS' mandate to include a net benefit test.²³³ As argued above, such an approach would

²²⁹ Elizabeth J. Drake, “Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing Chinese State-Owned Enterprises,” (2012), 9.

²³⁰ For an overview of the US position on competitive neutrality, see: Organisation for Economic Co-operation and Development. “Note by the United States for the Roundtable on Competitive Neutrality in Competition Enforcement,” June 9, 2015.

²³¹ U.S.-China Economic and Security Review Commission, *Chinese State-Owned and State-Controlled Enterprises*, (2012): 164.

²³² Investment Canada Act, ss. 23, 24, 1985.

²³³ Foreign Investment and Economic Security Act of 2014, 2014.

require massive resources due to much higher FDI volumes into the United States compared to economies such as Canada or Australia, and increase inefficiency and red tape, while inviting frequent politicization²³⁴ and reliance on ever-changing political moods to determine deal prospects.

Accountability of Chinese Investors

A separate line of Chinese FDI concern centers on the accountability of Chinese investors. Growth in FDI has naturally come with an increase in litigation and legal disputes; this is a natural fact of life in commerce. This can even be seen as a positive development, as the shift from trade to FDI interaction increases avenues for holding Chinese companies accountable in US courts. As opposed to trading relationships with US customers or shares listed in US stock exchanges, FDI assets are not as liquid or easily movable, and thus require Chinese investors to be more attentive to international norms. This insight is at the core of international relations theories such as complex interdependence, which proposes that two-way direct investment creates mutual alignment of interests between nations, increasing the cost of conflict and thus reducing the risk of it. Yet in the process of building-out that connectedness, misunderstandings about accountability are likely to surface.

Several cases have recently put the spotlight on laws which could provide loopholes for state-owned Chinese companies to sidestep US courts, or at least to slow proceedings, and this generates proposals to close such loopholes. Under the Foreign Sovereign Immunity Act (FSIA) of 1976, sovereign investors are exempt from litigation in US courts.²³⁵ Chinese SOEs have evoked this clause repeatedly in recent law suits. One prominent case is a class action law suit against a subsidiary of China National Building Materials, alleged to have exported faulty drywall to the US in 2014, leading to homeowners in several US states to file suit. Federal Court in Louisiana ruled that it lacked the jurisdiction to hear this case due to the sovereign immunity of the manufacturer given its state-owned status. A second case (described in the AVIC case study in Part Three) is AVIC's dispute with US wind energy developer Tang Energy. AVIC used sovereign immunity as an argument late in the litigation to further extend the hearing. If SOEs from China or elsewhere insist on sovereign immunity from litigation, the US must address this assertion, and in the interim make sure this ambiguity is understood by US counterparties.

5.4 THE IMPACT OF A US-CHINA BILATERAL INVESTMENT TREATY

One of the most high-profile policy initiatives related to Chinese FDI in the United States is a bilateral investment treaty (BIT). The United States and China have been exploring the option of a bilateral investment treaty (BIT) since the 1980s and formally started negotiations in 2008. These negotiations usually take place semi-annually, both on an ad-hoc basis and during other high-level talks such as the G20. Negotiations have intensified in the past two years, and throughout 2016 both US and Chinese officials have signaled that they made good progress.²³⁶

Bilateral investment agreements set forth binding rules on the promotion and protection of foreign investments, and typically define substantive protections and standards of treatment for foreign investors and dispute settlement provisions.²³⁷ Modern BITs typically afford the following protections: most favored nation (MFN) treatment, allowing foreign investor treatment that is at least as favorable as that afforded to other foreign investors under other host State BITs; national treatment, allowing foreign investors treatment at least as favorable as that provided to the host State's own nationals; protections against government expropriation of foreign investments; provision of fair and equitable

²³⁴ For example, Australian conglomerate BHP's attempted takeover of PotashCorp in 2010 fell through after failing a net benefits test. The basis for its failure was unclear and was attributed to pressure from the Saskatchewan provincial government to keep the company under Canadian control.

²³⁵ 28 U.S.C. § 1330, 1391(f), 1441(d), 1602-11.

²³⁶ Office of the Press Secretary, the White House. "Fact Sheet: U.S.-China Economic Relations," September 4, 2016.

²³⁷ For an in-depth examination of the implications of a U.S.-China BIT, see Lauren Gloudeman and Nargiza Salidjanova, *Policy Considerations for Negotiating a U.S.-China Bilateral Investment Treaty*, (Washington: U.S.-China Economic and Security Review Commission, 2016).

treatment of foreign investments; and provisions governing investor-State dispute resolution in the event of a breach of agreement terms. The US is negotiating the US-China BIT based on its 2012 model BIT.²³⁸

Importance of a BIT for US Investors

A BIT based on the current US template and with a robust negative list implies a very significant liberalization of the FDI environment in China and thus a far more level playing field for US investors. If implemented properly, this would go a long way to address existing concerns about the lack of reciprocal openness. Not surprisingly, concluding a BIT has therefore been on top of the policy wish list for US businesses with regard to China. At the same time, the impact of a BIT on market access for US companies in China will critically depend on its implementation, as informal discrimination remains a major concern for US companies as well. Efforts to track investment patterns in real time, such as the CIM database, will help to create transparency and monitor the progress of FDI liberalization in China.

Impact of a BIT on US Regulations

The US BIT template and existing BITs allow an assessment of what the likely implications would be for US regulatory framework and Chinese FDI flows, though an in-depth economic and legal analysis is only possible once the full details of the US-China BIT are disclosed. Overall, we expect few changes in the US regulatory framework governing foreign investments resulting from a US-China BIT. First, a US-China BIT would not undermine the ability of the Committee on Foreign Investment in the United States (CFIUS) to address national security concerns, including those related to state-supported investment. The Foreign Investment and National Security Act of 2007 (FINSA) requires that CFIUS apply closer scrutiny when a foreign State or state-owned enterprise (SOE) acquires and gains control of a U.S. business where national security may be affected. While higher scrutiny takes the form of a mandatory 45-day CFIUS review, FINSA regulations do not require a different substantive assessment of SOE investments by CFIUS that could be perceived as violating the treaty terms.²³⁹

In theory, US BIT practice allows flexibility in determining an investment's national security risk without violating the terms of the agreement. The 2012 US model BIT does not adopt a specific inward screening mechanism for sovereign states or SOE investments, or limit investor-State arbitration claims by States or SOEs acting as investors.²⁴⁰ The Model BIT does, however, include an "essential security" provision to allow the United States to protect its security interests without breaching the agreement.²⁴¹ This flexibility would apply to any covered transaction, regardless of whether the investment is private or state-owned. Thus, if a state or state-supported investor presented a unique national security risk as provided for under the "essential security" clause, the US would be entitled to treat the SOE differently than its own investors without violating its national treatment obligation, according to legal scholars.²⁴²

It is possible that a US-China BIT could impel an evolution of existing CFIUS procedures to enhance transparency in instances where a CFIUS determination results in mitigation measures, prohibition of a transaction, or divestment, as exemplified by the case of the Ralls Corporation ("Ralls"). In 2012, Ralls, owned by two Chinese nationals, purchased four wind farms in Oregon that were near or in US Navy airspace. After CFIUS determined the acquisitions posed a threat to national security and ordered unwinding of the transaction (affirmed by an executive order), Ralls filed suit against CFIUS alleging it exceeded its statutory authority, acted arbitrarily and capriciously, and deprived Ralls of its Constitutional rights to due process. A DC circuit court agreed with Ralls and mandated that the company be provided

²³⁸ 2012 U.S. Model Bilateral Investment Treaty, 2012.

²³⁹ James E. Mendenhall, "Assessing Security Risks Posed by State-Owned Enterprises in the Context of International Investment Agreements," *ICSID Review* 31, no. 1 (2016): 36-44.

²⁴⁰ Charlene Barshefsky et al., *United States to Resume Bilateral Investment Treaty Negotiations on the Basis of a Revised Model Treaty*, (WilmerHale, 2012).

²⁴¹ E.g., 2012 U.S. Model Bilateral Investment Treaty, 2012, article 18. U.S.-Korea Free Trade Agreement, 2007.

²⁴² James E. Mendenhall, "Assessing Security Risks Posed by State-Owned Enterprises in the Context of International Investment Agreements," *ICSID Review* 31, no. 1 (2016): 36-44.

access to the unclassified evidence against it. In November 2015, the dispute was settled, and Ralls was permitted to sell its assets in the wind farms to a third-party. Giving reasons for such decisions could ultimately serve to minimize transaction costs for firms undergoing the national security review process and enhance transparency and fairness in CFIUS review mechanisms.²⁴³

Under the 2012 US model BIT, US investors abroad and foreign investors in the US have access to investor-state dispute settlement (ISDS). According to the Office of the US Trade Representative (USTR), ISDS provisions serve to resolve investment conflicts without creating state-to-state conflict; protect investors abroad; and signal to potential investors that rule of law will be respected.²⁴⁴ While ISDS does not provide additional substantive rights to foreign investors relative to existing US law, it does provide an additional procedural right for foreigners to choose impartial arbitration rather than domestic court arbitration. This is needed as local courts may be viewed as less than objective, especially in highly politicized situations. Countries with weaker legal institutions are frequent respondents in ISDS cases, but investors have also utilized ISDS in countries with well-developed legal institutions. ISDS also benefits small- and medium-sized enterprises, which otherwise may not have the resources to defend their legal rights in court. Despite having 50 ISDS agreements in place, the US has never lost a case. Critics of ISDS have complained about the lack of basic transparency requirements of public courts. Article 29 of the US Model BIT effectively addresses this concern, as it would require both parties to make claims, pleadings, written submissions, and arbitral awards and orders public, and to hold open hearings.

While international treaties can in principle impact state law, a US-China BIT and relevant ISDS provisions are unlikely to affect the modest number of state-level laws and restrictions facing Chinese investors. Investment treaties explicitly protect sovereign authority to impose public health, environmental, or labor regulations in a national treatment consistent manner. Recent US investment treaties also prevent governments from reducing such protections in order to attract foreign investment.²⁴⁵ As for ISDS, BITs do not grant arbitral tribunals the authority to overturn domestic laws or regulations. The 2012 US model BIT limits arbitral panels to monetary compensation for a treaty breach.²⁴⁶ According to the USTR, “no government can be compelled to change its laws or regulations, even in cases where a private party has a legitimate claim that its basic rights are being violated and it is entitled to compensation.”²⁴⁷ There are concerns that potential monetary penalties resulting from ISDS arbitration can impel countries to change the law or regulation in question in order to avoid paying the penalty, but this is mostly a concern for smaller developing countries without sufficient financial resources.

Impact of a BIT on US-China FDI flows

The impact of BITs on FDI flows is ambiguous—sometimes it seems to boost activity, other times not.²⁴⁸ We would expect a US-China BIT to impact FDI flows from China to the US fairly minimally, given the high degree of US openness and equal legal treatment Chinese investors already enjoy. The main exception could be modest reductions in sectoral restrictions through an improved US negative list. The U.S.-China Business Council notes eight types of activities

²⁴³ Paul Rose, “US Regulation of Investment by State-Controlled Entities,” *ICSID Review* 31, no. 1 (2016).

²⁴⁴ United States Trade Representative, *FACT SHEET: Investor-State Dispute Settlement*, (2015).

²⁴⁵ Marney Cheek and Catherine Gibson, *Maximising Investment Treaty Protection*, (New York: Covington, 2015).

²⁴⁶ Lauren Gloudeman and Nargiza Salidjanova, *Policy Considerations for Negotiating a U.S.-China Bilateral Investment Treaty*, (Washington: U.S.-China Economic and Security Review Commission, 2016).

²⁴⁷ United States Trade Representative, “The Facts on Investor-State Dispute Settlement,” *Tradewinds*, March 2014.

²⁴⁸ Eric Neumayer and Laura Spess, “Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?,” *World Development* 33, no. 10 (2005); Susan Rose-Ackerman and Jennifer Tobin, “Foreign Direct Investment and the Business Environment in Developing Countries: The Impact of Bilateral Investment Treaties,” *Yale Law & Economics Research Paper*, no. 293 (May 2, 2005); Axel Berger et al., “Do Trade and Investment Agreements Lead to More FDI? Accounting for Key Provisions inside the Black Box,” *International Economics and Economic Policy* 10, no. 2 (2013) and the literature cited therein.

where US FDI restrictions are based on reciprocal treatment.²⁴⁹ These areas are open to foreign investment if US companies face equal access in the BIT partner economy. In four of those areas (radio and other audio broadcasting service, cable television operations, preference programs for minorities, and maritime services), the US maintains the right to maintain or impose further restrictions after a BIT goes into force. The potential impact of opening these sectors on reciprocal terms on aggregate flows would likely be marginal. However, in the broader context of growing backlash against Chinese FDI, a BIT that addresses fairness concerns would certainly help to reduce politicization of two-way FDI flows going forward.

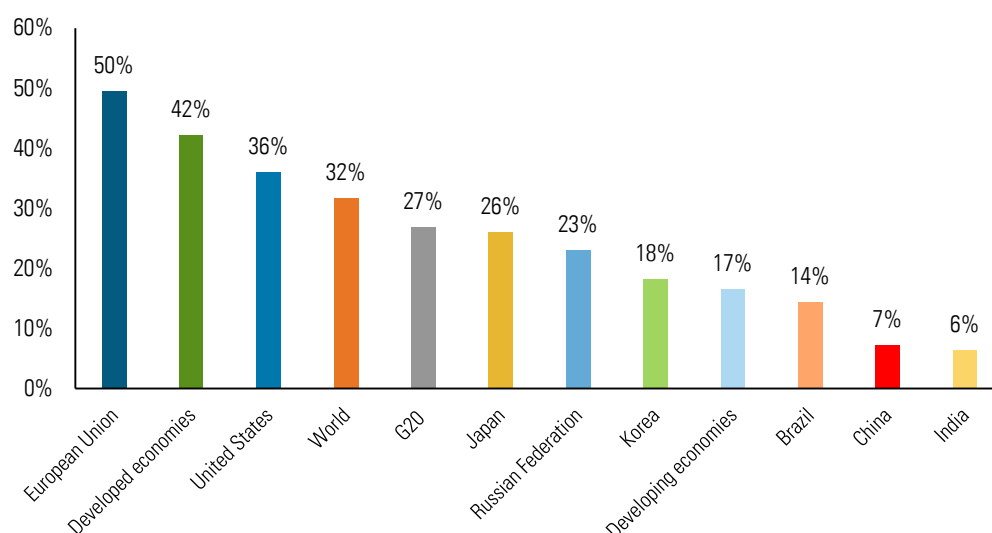
²⁴⁹ These are rights-of-way for oil or gas pipelines, and access to federal leases on Naval Petroleum Reserves; specialty air services; trustees of indentures for bond offerings; dealer of US government debt securities; radio spectrum allocation, direct-to-home and direct broadcasting television services, and digital audio services; cable television operations; preference programs for minorities; and maritime services. U.S.-China Business Council, *Summary of US Negative Lists in Bilateral Investment Treaties*, (2014).

6. Conclusions and Outlook

This report has analyzed the patterns of Chinese FDI in the US market from various angles, illustrating the rapid growth that has taken place in recent years. While the increase of Chinese outbound FDI in recent years has been impressive, Chinese capital exports are not at their peak yet. China's global FDI stock now tops \$1 trillion, but this is still low compared to its GDP. In 2014, China's FDI-to-GDP ratio was a mere 7%, or about one-fifth the global average of 32%, and still less than half of the developing country average of 14% (Figure 48).

Figure 48: Ratio of Outbound FDI Stock to GDP, Selected Regions and Countries, 2014

Percent



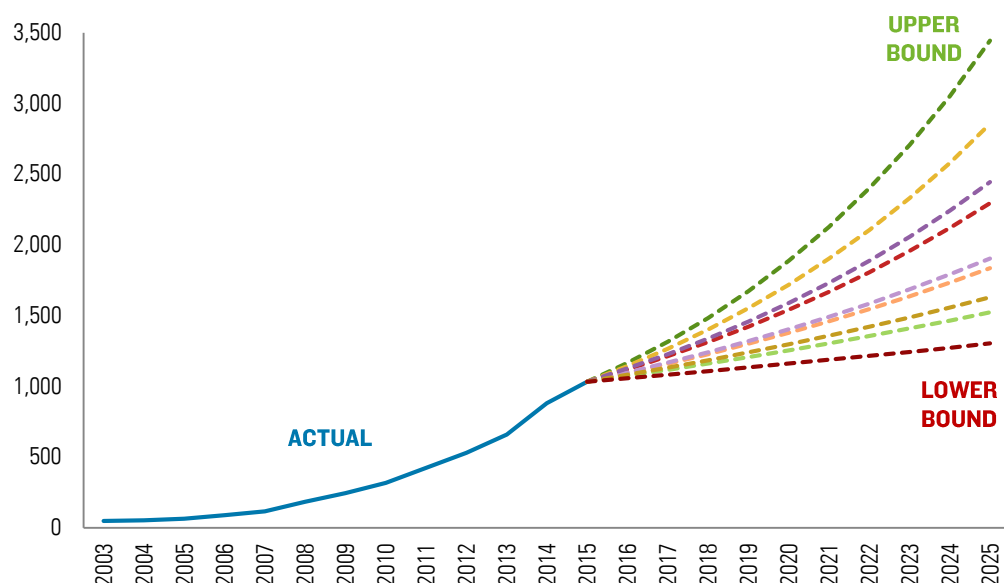
Sources: UNCTAD, Rhodium Group.

If China's investment path follows the historical example of other emerging economies, its global outbound FDI stock will grow by hundreds of billions of dollars in the coming decade. While it is impossible to accurately project FDI trajectories, Figure 49 shows a range of different scenarios that are based on China's GDP trajectory and different outbound FDI-stock-to-GDP ratios.²⁵⁰ There are short- and medium-term risks to scenarios at the upper bound of this projection: The recent jump in capital outflows has already triggered informal government measures to screen more diligently for "illegitimate" outbound FDI, and high levels of outflows could further increase scrutiny on certain transactions. China's financial system also remains highly fragile and disruptions that impact financing channels and force Chinese companies to de-leverage could lead to a drop in outbound investment activity. Another risk is growing political backlash from recipient countries, which has increased in response to investment growth, and the slow progress in opening up the Chinese economy and implementing market-oriented reforms.

²⁵⁰ “李克强：中国未来五年海外投资可望超 1 万亿美元 [Li Keqiang: China's foreign investment over the next five years could exceed \$1 trillion],” *Sina Finance*, November 11, 2015.

Figure 49: Projections for Chinese Outbound Investment Stock by 2025

Total stock, USD billion



Source: Rhodium Group. This chart combines three scenarios for China's GDP size (\$16, \$19, and \$23 trillion) and outbound FDI stock to GDP ratio (8%, 10%, and 15%) to estimate different trajectories for China's outbound FDI stock in 2025.

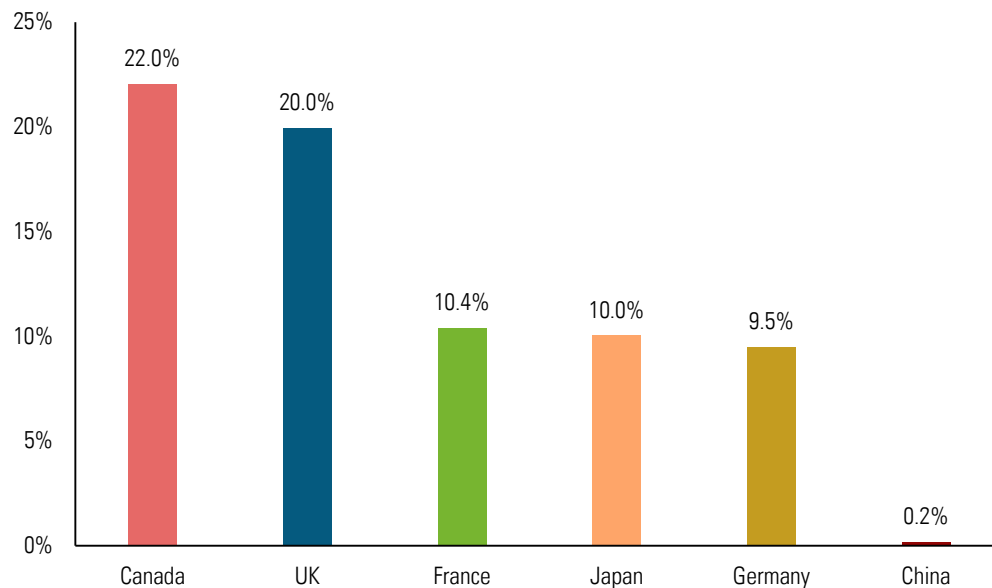
The United States is well positioned to attract a significant portion of future Chinese investment. The US is a preferred destination for the kinds of investments and assets that Chinese investors are seeking: investments that allow them to upgrade technology and innovative capacity, companies that help them to get ready for a more consumer-oriented Chinese economy, and safe-haven assets that allow them to store value and gain stable long-term returns. The open investment environment, strong legal protections, and political stability are all important to Chinese investors. Figure 50 displays the ratio of FDI stock in the US to the GDP of major economies, illustrating how underweight China currently is compared to its peers. China is the second largest economy on the planet, but is underrepresented with regard to FDI in the US. Its FDI stock in the US is a mere 0.19% of its GDP, much smaller than the 22% of Canada or 10% for Japan.

Investment patterns in the first half of 2016 support a strong outlook for Chinese FDI in the United States. In the first half of 2016, Chinese investors have invested more than \$18 billion into acquisitions and greenfield projects in the United States (Figure 51).²⁵¹ This represents a threefold increase from the first half of the previous year and already exceeds Chinese FDI in the US for all of 2015. Private sector acquisitions in services, technology, and consumer-oriented assets as well as more capital intensive greenfield projects in real estate and manufacturing continued to drive growth. The value of pending transactions was also at a new record level at the end of June 2016, with more than \$23 billion worth of M&A transactions and \$9.5 billion worth of greenfield projects.

²⁵¹ Thilo Hanemann and Cassie Gao, "Chinese FDI in the US: Tripling Down on America," *Rhodium Group*, July 22, 2016.

Figure 50: Ratio of FDI Stock in US to GDP for Major Economies, 2015

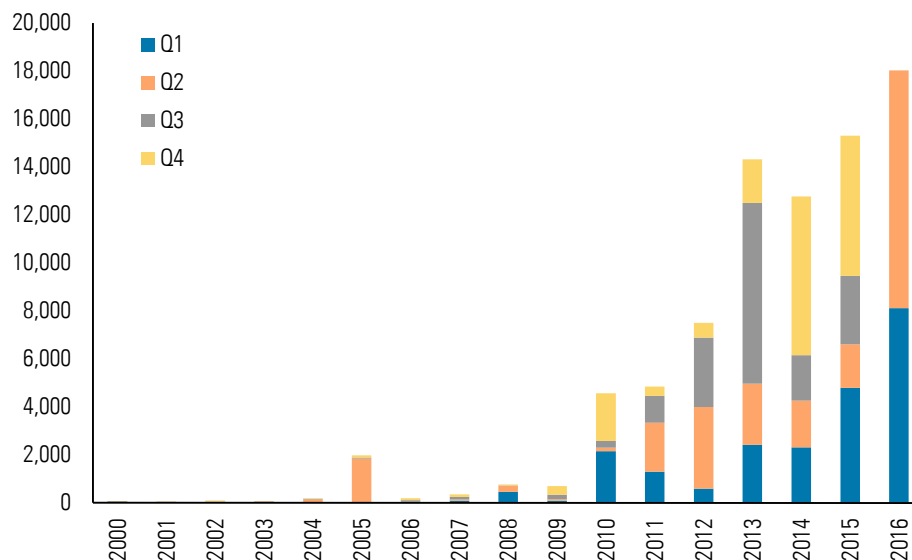
USD million



Sources: Bureau of Economic Analysis, International Monetary Fund. FDI Stock in US is Direct Investment Position on a UBO Basis and GDP is real 2015 GDP in current US dollars.

Figure 51: Chinese FDI Transactions in the US by Quarter, 2000-2015

USD million



Source: Rhodium Group.

Growth in Chinese direct investment in the United States is—assuming stable overall US-China relations—is likely to continue for some time, given the still modest level and ample commercial incentive, a condition the US shares with other most advanced economies. What we see in the US is the same as we see elsewhere. China-US FDI is at an early stage, and is therefore among the most important channels of economic exchange that will shape US-China relations

in the years ahead. While these inflows are likely to make a meaningful net addition to US investment, job creation and commercial opportunity, we know from previous instances of new investor arrivals in America that deepening investment links can also precipitate national security concerns, adverse political reactions and misgivings. It is therefore in the interest of the United States to better understand the nature of these inflows and how to interpret them, in order to secure the benefits without anxiety over known and unknown potential risks.

We have reviewed a number of policy proposals and presented our own view in light of our analysis of actual flows. Some proposals have suggested altering the CFIUS national security screening process, for instance to look at a broader slate of questions, or to look at greenfield investments along with acquisitions. We find no benefit from such a modification and much additional cost. Instead, we emphasize the need to raise funding for existing CFIUS review and traditional law enforcement and regulatory attention to keep pace with the work entailed in managing Chinese inflows. We find that a net-benefits or similar “unlimited review scope” regime likely to be injurious to American interests without improving security, and we reject calls for outright reciprocity that advise following other nations down less productive paths rather than sticking to what has worked for the US to date.

That said, the US—like any democracy—is required by its citizens to emphasize fairness and mutuality in external relations, especially with rival nations, and we underscore the importance of greater symmetry in the two-way US-China FDI relationship as a bulwark against further erosion in mutual trust. Moreover, we do share concerns about competition policy fundamentals and the potential for collusion and harm to market efficiency if China continues to grow, and its outbound FDI continues to grow, while shirking from reforms that clarify the division between political power and commercial entities at home. Chinese policy is also increasingly explicit in calling for consolidation of state-owned enterprises to enhance competitiveness abroad. If the scale of China’s participation in the US reaches the levels we forecast above, and Beijing strengthens state dominance at the same time (as pledged), then a new chapter in US—and global—competition policy activism may be required.

Finally, we encourage analysts not to confuse the missteps that come with learning to operate in a new environment with willful intentions to neglect US rules. Based on our study of patterns of Chinese investment in the US to date, and direct conversations with a great many of the Chinese executives overseeing these endeavors, we conclude that the overwhelming majority aspire to hold a long-term, prosperous and mutually beneficial place in the US marketplace. The major commercial frictions between the US and China do not arise from the firms which have sunk money and roots into America. We concur with those theorists who suspect Chinese FDI in the US have a moderating effect on Chinese external behavior and cause Beijing to take a more cosmopolitan and less parochial view of the global equation.

References

Anderson, Thomas. “Foreign Direct Investment in the United States: New Investment in 2008.” *Survey of Current Business*, June 2009, 54–61.

AVIC International. “AVIC International: Our History.” 2013. <http://bit.ly/2aGm6a7>.

Bagnall, Allie E. and Edwin M. Truman. *Progress on Sovereign Wealth Fund Transparency and Accountability: An Updated SWF Scoreboard*. (Washington: Peterson Institute for International Economics, 2013). <http://bit.ly/2b39Olo>.

Barshefsky, Charlene, Gary Born, Benjamin A. Powell, and David J. Ross. *United States to Resume Bilateral Investment Treaty Negotiations on the Basis of a Revised Model Treaty*. WilmerHale, 2012. <http://bit.ly/2boRuyu>.

Berger, Axel, Matthias Busse, Peter Nunnenkamp, and Martin Roy. “Do Trade and Investment Agreements Lead to More FDI? Accounting for Key Provisions inside the Black Box.” *International Economics and Economic Policy* 10, no. 2 (June 2013): 247–275.

Bently, Lionel and Brad Sherman. *Intellectual Property Law*. 2nd ed. New York: Oxford University Press, 2004.

Berlin, Mitchell. “New Rules for Foreign Banks: What’s at Stake?” *Philadelphia Fed Business Review* Q1, 2015.

Bureau of Economic Analysis. *A Guide to BEA’s Direct Investment Surveys*. (Washington: U.S. Department of Commerce). <http://bit.ly/2aGjKEk>.

Bureau of Economic Analysis. *U.S. International Economic Accounts: Concepts and Methods*. (Washington: U.S. Department of Commerce, 2014). <http://bit.ly/2aVr9yU>.

Bureau of Economic Analysis. “Expenditures by Foreign Direct Investors for New Investments in the United States, 2014.” *Bureau of Economic Analysis*. November 30, 2015. <http://bit.ly/2boRPRE>.

Bureau of Economic Analysis. *Concepts and Methods of the U.S. National Income and Product Accounts*. (Washington: U.S. Department of Commerce, 2015). <http://www.bea.gov/national/pdf/all-chapters.pdf>.

Bureau of Economic Analysis. *New Foreign Direct Investment in the United States, 2014 and 2015*. (Bureau of Economic Analysis, 2016). <http://bit.ly/2boRmyR>.

Central Committee of the Communist Party, “中共中央关于制定国民经济和社会发展第十个五年计划建议 [Recommendations for the 10th Five-Year Plan for National Economic and Social Development]”. *Central Committee of the Communist Party*. October 11, 2000. <http://bit.ly/2b8olww>.

Cheek, Marney and Catherine Gibson. *Maximising Investment Treaty Protection*. Covington, 2015. <http://bit.ly/2b8vtOm>.

Cheng, Qiang, Kun-chih Chen, Chou Lin Ying, Xiao Xing, and Chen Lin Yu. "Does Foreign Firms' Shortcut to Wall Street Cut Short Their Financial Reporting Quality? Evidence from Chinese Reverse Mergers." *2013 FARS Conference*. Singapore Management University, 2013.

Cheung, Tai Ming, Thomas Mahnken, Deborah Seligson, Kevin Pollpeter, Eric Anderson, and Fan Yang. *Planning for Innovation: Understanding China's Plans for Technological, Energy, Industrial, and Defense Development*. San Diego: Institute on Global Conflict and Cooperation, University of California, 2016. <http://bit.ly/2agLBc5>.

China General Chamber of Commerce-USA. *China General Chamber of Commerce - USA 2015 White Paper*. (CGCC Foundation, 2016). <http://bit.ly/2boTbeY>.

China Insurance Regulatory Commission, "中国保监会关于印发‘保监公司资金运用信息披露准则第4号：大额未上市股权和大额不动产投资’的通知 [CIRC Notice about Release ‘Article 4 of Insurance Company Capital Utilization Information Disclosure Standards]”. *China Insurance Regulatory Commission*. May 5, 2016. <http://bit.ly/2benNYo>.

China Investment Corporation. *China Investment Corporation Annual Report 2015*. 2016. <http://bit.ly/2b7Wotd>.

Crane, Keith, Jill E. Luoto, Scott Warren Harold, David Yang, Samuel K. Berkowitz, and Xiao Wang. *The Effectiveness of China's Industrial Policies in Commercial Aviation Manufacturing*. (Santa Monica: RAND, 2014). <http://bit.ly/1QGAFpl>.

Department of the Treasury, Federal Reserve Bank of New York, and Board of Governors of the Federal Reserve System. *Report on Foreign Holdings of U.S. Long-Term Securities*. 2002. <http://ticdata.treasury.gov/Publish/shl200or.pdf>.

Department of the Treasury, Federal Reserve Bank of New York, and Board of Governors of the Federal Reserve System. *Foreign Portfolio Holdings of U.S. Securities*. 2016. <http://ticdata.treasury.gov/Publish/shl2015r.pdf>.

Drake, Elizabeth J. "Chinese State-Owned and State-Controlled Enterprises: Policy Options for Addressing Chinese State-Owned Enterprises," (Testimony before the U.S.-China Economic and Security Review Commission, 2012). <http://bit.ly/2b9iyvZ>.

Dunning, John H. and Sarianna M. Lundan. *Multinational Enterprises and the Global Economy*. 2nd ed. (Northampton: Edward Elgar, 2008).

Dunning, John H., Changsu Kim, and Donghyun Park. "Old wine in new bottles: A comparison of emerging-market TNCs today and developed-country TNCs thirty years ago." *The rise of transnational corporations from emerging markets: Threat or opportunity* (2008), 158-180.

DuVal, Charles W. and Will Quilliam. "A Study of Chinese Reverse Mergers in United States Capital Markets." *GSTF Journal on Business Review* 4, no. 1 (July 2015).

Economist Intelligence Unit. *Evaluating a Potential US-China Bilateral Investment Treaty*. (Washington: US-China Economic and Security Review Commission, 2010). <http://bit.ly/2b8uRsm>.

Ernst, Dieter. *From Catching Up to Forging Ahead? China's Prospects in Semiconductors*. Honolulu: East-West Center, 2015. <http://bit.ly/2dn9Vjq>.

Fagan, David. *The U.S. Regulatory and Institutional Framework for FDI*. (Vale Columbia Center and Deloitte, 2008). <http://bit.ly/2b8vzpm>.

Federal Financial Institutions Examination Council. *Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks-Bank of China*. Board of Governors of the Federal Reserve System, 2011.

Federal Financial Institutions Examination Council. *Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks-Bank of China*. Board of Governors of the Federal Reserve System, 2016.

Gloudeman, Lauren and Nargiza Salidjanova. *Policy Considerations for Negotiating a U.S.-China Bilateral Investment Treaty*. (Washington: U.S.-China Economic and Security Review Commission, 2016). <http://bit.ly/2acmtYN>.

Goodrich, Jimmy. "China's 13th Five-Year Plan: Opportunities and Challenges for the U.S. Semiconductor Industry," (Testimony before the U.S.-China Economic and Security Review Commission, 2016). <http://bit.ly/2aWcbbS>.

Graham, Edward M. and Paul R. Krugman. *Foreign Direct Investment in the United States*. 3rd ed. (Washington, D.C.: Peterson Institute for International Economics, 1995).

Halesworth, Peter. *Chinese "Squeeze Outs" in American Stock Markets and the Need to Protect U.S. Investors*. Boston: Heng Ren Partners, 2016. <http://bit.ly/2aGCqEU>.

Hanemann, Thilo. "Trends and Implications of Chinese Investment in the United States," (Testimony before the U.S.-China Economic and Security Review Commission, 2013). <http://bit.ly/2aGCfd3>.

Hanemann, Thilo. "Made by China - in America?" *Rhodium Group*. July 1, 2014. <http://bit.ly/2aP2GuE>.

Hanemann, Thilo. "China Investment Monitor: Methodology Update." *Rhodium Group*. July 21, 2015. <http://bit.ly/2behyns>.

Hanemann, Thilo and Mikko Huotari. *A New Record Year for Chinese Outbound Investment in Europe*, (Berlin: Mercator Institute for Chinese Studies, 2016). <http://bit.ly/2b3bQli>.

Hanemann, Thilo, and Cassie Gao. "China's Global Outbound M&A in 2015," *Rhodium Group*. January 4, 2016. <http://bit.ly/2aFpufu>.

Hanemann, Thilo and Cassie Gao. "Chinese FDI in the US: Tripling Down on America." *Rhodium Group*. July 22, 2016. <http://bit.ly/2b7S4fz>.

Hanemann, Thilo and Daniel H. Rosen. *High Tech: The Next Wave of Chinese Investment in America*. New York: Asia Society Policy Institute, 2014. <http://bit.ly/2aVtrOz>.

Hannas, William C., James Mulvenon, and Anna B. Puglisi. *Chinese Industrial Espionage*. Taylor & Francis, 2013.

International Trade Administration. *2016 Top Markets Report Semiconductors and Semiconductor Manufacturing Equipment Country Case Study: China*. Washington: Department of Commerce, 2016. <http://bit.ly/1RZsIPf>.

Jackson, James K. *The Committee on Foreign Investment in the United States (CFIUS)*. (Washington: Congressional Research Service, 2016). <http://bit.ly/2aFqf8i>.

Jiangsu People's Congress, “关于‘走出去’战略实施情况的公报 [Report on the Status of the Implementation of the ‘Going Out’ Strategy]”. *Jiangsu People's Congress*. November 21, 2014. <http://bit.ly/2b8E2sA>.

Kalinova, Blanka, Angel Palerm, and Stephen Thomsen. “OECD’s FDI Restrictiveness Index 2010 Update.” *OECD Working Papers on International Investment*. August 01, 2010. <http://bit.ly/2aP2XoM>.

Koch-Weser, Iacob. *China’s Hunger for U.S. Planes and Cars: Assessing the Risks*. (Washington: U.S.-China Economic and Security Review Commission, 2014). <http://bit.ly/2boSPW2>.

Koch-Weser, Iacob and Garland Ditz. *Chinese Investment in the United States: Recent Trends in Real Estate, Industry, and Investment Promotion*. (Washington: U.S.-China Economic and Security Review Commission, 2015). <http://bit.ly/1MUMo2V>.

Koch-Weser, Iacob N. and Owen D. Haacke. *China Investment Corporation: Recent Developments in Performance, Strategy, and Governance*. (Washington: U.S.-China Economic and Security Review Commission, 2013). <http://bit.ly/2auDJZq>.

Kovacic, William E. “The Modern Evolution of US Competition Policy Enforcement Norms.” *Antitrust Law Journal* 71, no. 2 (2003): 377–478.

Landes, William M. and Richard A. Posner. *The Economic Structure of Intellectual Property Law*. Cambridge: The Belknap Press of Harvard Univ. Press, 2003.

Lee, Charles M. C., Kevin K. Li, and Ran Zhang. “Shell Games: Are Chinese Reverse Merger Firms Inherently Toxic?” *Stanford Graduate School of Business Working Papers*, no. 3063 (March 25, 2014). <http://stanford.io/2behB2y>.

Leutert, Wendy. “Challenges Ahead in China’s Reform of State-Owned Enterprises.” *Asia Policy* 21 (January 2016): 83–99.

Li, Ming Hua, Lin Cui, and Jiangyong Lu. “Varieties in State Capitalism: Outward FDI Strategies of Central and Local State-Owned Enterprises from Emerging Economy Countries.” *Journal of International Business Studies* 45, no. 8 (April 17, 2014): 980–1004.

Luo, Yadong, Qiuzhi Xue, and Binjie Han. “How Emerging Market Governments Promote Outward FDI: Experience from China.” *Journal of World Business* 45, no. 1, January 2010, 68–79.

International Monetary Fund. *Coordinated Direct Investment Survey Guide - 2015*. (Washington: International Monetary Fund, 2015). <http://bit.ly/2aFqnob>.

Ma, Damien. *China Drives into America’s Auto Parts Industry*. (Chicago: Paulson Institute, 2013). <http://bit.ly/2beh8xp>.

Ma, Damien. *Pipe Dreams: How a Chinese State Company Sought to Ride the US Energy Boom*. (Chicago: Paulson Institute, 2014). <http://bit.ly/2behbJB>.

Ma, Damien. *A Chinese Paper Maker Commits to Green Production in Virginia*. (Chicago: Paulson Institute, 2016). <http://bit.ly/2b8wnL6>.

Massey, Joseph A. “The Emperor Is Far Away: China’s Enforcement of Intellectual Property Rights Protection, 1986–2006.” *Chicago Journal of International Law* 7, no. 1 (2006): 231–37.

Mendenhall, James E. “Assessing Security Risks Posed by State-Owned Enterprises in the Context of International Investment Agreements.” *ICSID Review* 31, no. 1 (2016): 36–44.

Milhaupt, Curtis J. “Is the U.S. Ready for FDI from China? Lessons from Japan’s Experience in the 1980s” U.S. China Services Group, Vol. 1, 2008. <http://bit.ly/2aGlcGM>.

Ministry of Commerce, “关于对境外带料加工装配企业有关财务问题的通知 [Notice on Accounting Issues of Overseas Materials Processing and Assembly Enterprises]”. *Ministry of Commerce*. April 23, 1999. <http://bit.ly/2aUB8WM>.

Ministry of Commerce, “中小企业国际市场开拓资金管理实施办法实施细则（暂行） [Temporary Implementation Details on SME International Market Exploration Funds Administrative Measures]”. *Ministry of Commerce*. January 16, 2003. <http://bit.ly/2aGI8ql>.

Ministry of Commerce, “财政部，商务部关于做好 2004 年资源类境外投资和经济合作项目前期费用扶持有关问题通知 [Notice about Executing Well the 2004 Natural Resources Outbound Investment and Cooperation Projects Upfront Costs Support]”. *Ministry of Commerce*. September 19, 2004. <http://bit.ly/2b82wn9>.

Ministry of Commerce, “商务部令 2014 年第 3 号“境外投资管理办法” [Outbound Investment Administrative Measures]”. *Ministry of Commerce*, September 6, 2014. <http://bit.ly/2aGtIJS>.

Ministry of Commerce. *2014 年度中国对外直接投资统计公报 [2014 Chinese Outward Direct Investment Statistical Yearbook]*. (Beijing: China Statistics Press, 2015).

Ministry of Commerce. “商务发展第十三个五年规划纲要 [Commercial Development Outline of the 13th Five Year Plan]”. *Ministry of Commerce*. July 12, 2016. <http://bit.ly/2eEuUKw>.

Ministry of Finance, “国外矿产资源风险勘查专项资金管理办法 [Special Fund for Overseas Mineral Resources Exploration and Development]”. *Ministry of Finance*. October 31, 2005. <http://bit.ly/2b86d9j>.

Ministry of Science and Technology, “国家 ‘十二五’ 科学技术发展规划 [National 12th Five-Year Plan for Science and Technology Development and Planning]”. *Ministry of Science and Technology*. July 4, 2011. <http://bit.ly/2aPbm4d>.

Ministry of Science and Technology, “科技部关于印发技术市场‘十二五’发展规划的通知 [12th Five Year Plan on Technology Markets Development and Planning]”. *Ministry of Science and Technology*. February 5, 2013. <http://bit.ly/2b8F4Vv>.

Moran, Theodore H., and Lindsay Oldenski. *Foreign Direct Investment in the United States: Benefits, Suspicions, and Risks with Special Attention to FDI from China*. (Washington: Peterson Institute for International Economics, 2013).

National Committee on U.S.-China Relations and Rhodium Group. *New Neighbors: Chinese Investment in the United States by Congressional District*. 2015. <http://bit.ly/2boSG4P>.

National Committee on U.S.-China Relations and Rhodium Group. *New Neighbors: 2016 Update*. 2016. <http://bit.ly/2auE51W>.

National Development and Reforms Commission, “‘十二五’ 利用外资和境外投资规划” 12th Five Year Plan on Inward and Outward FDI”. National Development and Reforms Commission. July 24, 2012, <http://bit.ly/2aM12gg>.

National Development and Reform Commission, “关于印发鼓励和引导民营企业积极开展境外投资的实施意见的通知 [Implementation Opinions about Encouraging and Guiding Private Companies Actively Engage in Overseas Investment]”. National Development and Reform Commission. June 29, 2012. <http://bit.ly/2benkoZ>.

National Development and Reform Commission, “境外投资项目核准和备案管理办法 [Administrative Measures on Outbound Investment Projects Approval and Recordal]”. *National Development and Reform Commission*. May 8, 2014. <http://bit.ly/2aFw7OO>.

National Development and Reform Commission, “国家发展改革委办公厅于严格执行“政府核准的投资项目目录（2014年本）” 做好相关后续工作的通知 [NDRC Notice about Strictly Implementing “Catalog of Investment Projects Subject to Government Approval (2014 Edition)” and Completing Follow-up Work]”. *National Development and Reform Commission*. December 10, 2014. <http://bit.ly/2auIGkK>.

National Development and Reform Commission, “关于就修订“境外投资项目核准和备案管理办法” 向社会公开征求意见的公告（已结束） [Announcement about Seeking Public Commenting about the Editing of “Administrative Measures on Outbound Investment Project Approval and Recordal]”. *National Development and Reform Commission*. April 13, 2016. <http://bit.ly/2b84C2X>.

Naughton, Barry. *The Chinese Economy: Transitions and Growth*. Cambridge: MIT Press, 2007.

Neumayer, Eric and Laura Spess. “Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?” *World Development* 33, no. 10 (2005): 1567–85.

Orr, Gordon and Christopher Thomas. “Semiconductors in China: Brave New World or Same Old Story?” *McKinsey*. August 2014. <http://bit.ly/2av7kla>.

People’s Bank of China Department of Statistics Task Force. “加快资本账户开放条件基本成熟 [Time is Ripe for Accelerating Capital Account Liberalization]”, *People’s Bank of China*, February 27, 2012.

People’s Bank of China Department of Statistics Task Force, “协调推进利汇率改革与资账户开放 [Coordinating and Promoting Exchange Rate Reform and Capital Account Liberalization]”, *People’s Bank of China*, April 17, 2012.

Politburo of the Communist Party, “中共中央关于全面深化改革若干重大问题的决定 [Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening Reform]”. *Politburo of the Communist Party*. November 15, 2013. <http://bit.ly/2aVC7UW>.

PwC. *A Decade of Unprecedented Growth: China's Impact on the Semiconductor Industry 2014 Update*. PwC, 2015. <http://pwc.to/2dmqHie>.

Rose-Ackerman, Susan and Jennifer Tobin. "Foreign Direct Investment and the Business Environment in Developing Countries: The Impact of Bilateral Investment Treaties." *Yale Law & Economics Research Paper*, no. 293 (May 2, 2005).

Reinhart, Carmen M. and Vincent R. Reinhart. "Capital Flow Bonanzas: An Encompassing View of the Past and Present." *NBER Working Papers*, no. W14321 (2008).

Rosen, Daniel H. *Avoiding the Blind Alley: China's Economic Overhaul and Its Global Implications*. New York: Asia Society Policy Institute, 2014. <http://bit.ly/2behT9A>.

Rosen, Daniel H. and Thilo Hanemann. *China's Changing Outbound Foreign Direct Investment Profile: Drivers and Policy Implications*. (Washington: Peterson Institute for International Economics, 2009). <http://bit.ly/2b8wWEw>.

Rosen, Daniel H. and Thilo Hanemann. *An American Open Door? Maximizing the Benefits of Chinese Foreign Direct Investment*. (New York: Asia Society, Center on U.S.-China Relations, 2011). <http://bit.ly/2aGoFsR>.

Rosen, Daniel H. and Thilo Hanemann. *Chinese Direct Investment in California*. (San Francisco: Asia Society, 2012). <http://bit.ly/1CUoNGL>.

Rosier, Kevin. *The Risks of China's Internet Companies on U.S. Stock Exchanges*. (Washington: U.S.-China Economic and Security Review Commission, 2014). <http://bit.ly/1wisq7c>.

Rosier, Kevin. *China's Great Legal Firewall: Extraterritoriality of Chinese Firms in the United States*. (Washington: U.S.-China Economic and Security Review Commission, 2015). <http://bit.ly/1lhqaWZ>.

Saha, Devashree, Kenan Fikri, and Nick Marchio. *FDI in U.S. Metro Areas: The Geography of Jobs in Foreign-Owned Establishments*. (Washington: Brookings Institution, 2014). <http://brook.gs/2aGDiti>.

Salidjanova, Nargiza. *Going Out: An Overview of China's Outward Foreign Direct Investment*. (Washington: U.S.-China Economic and Security Review Commission, 2011). <http://bit.ly/1EI3JYL>.

Sauvant, Karl P. and Victor Zitian Chen. "China's Regulatory Framework for Outward Foreign Direct Investment." *China Economic Journal* 7, no. 1, January 2, 2014, 141-63.

Scissors, Derek. "A Better Committee on Foreign Investment in the United States." *Heritage Foundation*. January 28, 2013. <http://bit.ly/2aVvS3C>.

Securities and Exchange Commission. *Accessing the U.S. Capital Markets - A Brief Overview for Foreign Private Issuers*. Washington: Securities and Exchange Commission, 2013. <http://bit.ly/2d1I718>.

Securities and Exchange Commission. "SEC Announces Charges Against Corporate Insiders for Violating Laws Requiring Prompt Reporting of Transactions and Holdings." *Securities and Exchange Commission*. September 10, 2014. <http://bit.ly/2fSeHoJ>.

Seitzinger, Michael V. *Foreign Investment in the United States: Major Federal Statutory Restrictions*. (Washington: Congressional Research Service, 2013). <http://bit.ly/2b7Z2O8>.

Sinosure, “商务部，中国出口信用保险公司关于实行出口信用保险专项优惠措施支持个体私营等非国有企业开拓国际市场的通知 [Notice on Piloting Export Credit Insurance Special Favorable Measures to Support Individual, Private, and Other Non-Public Ownership Enterprises to Explore the International Market]”. *Sinosure*. 2005. <http://bit.ly/2auIwtG>.

Snyder, Matt and Nicole Stroner. *Chinese Tourism and Hospitality Investment in the United States*. (Washington: U.S.-China Economic and Security Review Commission, 2016). <http://bit.ly/2aoUMg7>.

Sola, Pierre. “Distortions in Direct Investment Related to Special Purpose Entities.” *Nineteenth Meeting of the IMF Committee on Balance of Payments Statistics*. Frankfurt: IMF, 2006.

State Administration of Foreign Exchange, “国家外汇管理局调整境内银行为境外投资企业提供融进性对外担保管理方式 [Notice about Adjusting Administrative Measures on Domestic Bank Providing Financing Guarantee to Overseas Investment Enterprises]”. *State Administration of Foreign Exchange*. August 16, 2005. <http://bit.ly/2aGrczn>.

State Administration of Foreign Exchange, “国家外汇管理局调整部分境外投资外江管理改革 [Adjustment of Certain Overseas Investment Foreign Exchange Administrative Policies]”. *State Administration of Foreign Exchange*. June 8, 2006. <http://bit.ly/2boZ4Jj>.

State Administration of Foreign Exchange. *Plans and Difficulties in Reporting the CDIS Granular Data*. (International Monetary Fund, 2015). <http://bit.ly/2aGECMZ>.

State Administration of Foreign Exchange, “国家外汇管理局关于进一步简化和改革直接投资外江管理政策的通知 [Notice of the State Administration of Foreign Exchange about Further Simplify and Improve Direct Investment Foreign Exchange Administrative Measures]”. *State Administration of Foreign Exchange*. February 28, 2015. <http://bit.ly/2aGH3ih>.

State Administration of Foreign Exchange. “中国国际收支平衡表 [China’s Balance of Payments].” 2015. <http://www.safe.gov.cn/>.

State Administration of Taxation, “关于境外带料加工装配业务有关出口退税问题的通知 [Notice on Export Tax Rebate Issues of Overseas Materials Processing and Assembly Enterprises]”. *State Administration of Taxation*. May 5, 1999. <http://bit.ly/2aPaHzF>.

State-owned Assets Supervision and Administration Commission. “中央名录 [List of Central SOEs].” July 15, 2016. <http://bit.ly/2aGnaH6>.

State Council, “国务院至于投资体制改革的决定 [Decisions Regarding Reform of the Investment Regime]”. *State Council*. July 16, 2004. <http://bit.ly/2b81cNU>.

State Council, “国务院关于鼓励支持和引导个体私营等非公有制经济发展的若干意见 [Several Opinions about Encouraging, Supporting, and Guiding Individual, Private, and Other Non-Public Ownership Economic Entities Development]”. *State Council*. August 12, 2005. <http://bit.ly/2b81BTy>.

State Council, “‘十二五’规划纲要 [12th Five Year Plan]”. *State Council*. March 16, 2011. <http://bit.ly/2dag7te>.

State Council, “国务院关于印发‘中国制造 2025’的通知 [State Council Announcement on ‘Made in China 2025’]”. *State Council*. May 8, 2015. <http://bit.ly/2b12yLY>.

State Council, “中共中央，国务院关于深化国有企业改革的指导意见 [Central Committee and State Council Guidance on Deepening the Reform of State-Owned Enterprises]”. *State Council*, August 24, 2015. <http://bit.ly/2cZedbF>.

State Council, “中华人民共和国国民经济和社会发展第十三个五年规划纲要 [People’s Republic of China 13th Five Year Plan for Economic and Social Development]”. *State Council*. March 17, 2016. <http://bit.ly/2cWkncJ>.

State Council, “国务院关于印发‘十三五’国家科技创新规划的通知 [State Council Statement Regarding the 13th Five Year Plan Science and Technology Innovation Plan]”. *State Council*. July 28, 2016. <http://bit.ly/2d53dvv>.

State Council Information Office, “国新办就‘2014 年度中国对外直接投资统计公报’有关情况举行发布会 [State Council Information Office Holds Press Conference about the 2014 China Outbound Direct Investment Statistical Bulletin]”. *State Council Information Office*. September 17, 2015. <http://bit.ly/2aVAfLA>.

Stratford, Timothy P. *Measures and Practices Restraining Foreign Investment in China*. (Washington: Covington, 2014). <http://bit.ly/2aGneGT>.

Tianjin Pipe Group Corporation, 天津钢管集团股份有限公司 2013 年度合并财务报表审计报告 [Tianjin Pipe Group Corporation 2013 Consolidated Financial Statements Audit Report], 2014. <http://bit.ly/2dE4LyJ>.

Tianjin Pipe Group Corporation. 天津钢管集团股份有限公司 2015 年度第二期短期融资券募集说明书 [Tianjin Pipe Group Co Brochure to Raise Short-Term Financing]. Tianjin Pipe Group Corporation, 2015. <http://bit.ly/2d7Npf1>.

United Nations Conference on Trade and Development. *UNCTAD Training Manual on Statistics for FDI and the Operations of TNCs*. (New York and Geneva: United Nations, 2009). <http://bit.ly/2azLvN3>.

United Nations Conference on Trade and Development. “Bilateral FDI Statistics 2014: China.” April 2014. <http://bit.ly/2b8oaS5>.

United Nations Conference on Trade and Development. “Bilateral FDI Statistics 2014: United States.” April 2014. <http://bit.ly/2aLV6DV>.

U.S. Chamber of Commerce. *China’s Approval Process for Inbound Foreign Direct Investment: Impact on Market Access, National Treatment and Transparency*. (Washington: U.S. Chamber of Commerce, 2012). <http://uscham.com/2b7ZGet>.

U.S. Chamber of Commerce and Rhodium Group. *Preventing Deglobalization: An Economic and Security Argument for Free Trade and Investment in ICT*. Washington: U.S. Chamber of Commerce, 2016. <http://bit.ly/2cC8cRy>.

U.S.-China Business Council. *Summary of US Negative Lists in Bilateral Investment Treaties*. 2014. <http://bit.ly/2bek5Oj>.

U.S.-China Economic and Security Review Commission. *Chinese State-Owned and State-Controlled Enterprises*. 2012. <http://bit.ly/2dBgpHK>.

United States Trade Representative. 2012 *U.S. Model Bilateral Investment Treaty*. (Washington: United States Trade Representative, 2012). <http://bit.ly/1PH5Lwd>.

United States Trade Representative. "The Facts on Investor-State Dispute Settlement." *Tradewinds*. March 2014. <http://bit.ly/2aFsQzc>.

United States Trade Representative. *FACT SHEET: Investor-State Dispute Settlement*. (Washington: United States Trade Representative, 2015). <http://bit.ly/1B4SfHQ>.

Wang, Xiaoye and Adrian Emch. "Five Years of Implementation of China's Anti-Monopoly Law--Achievements and Challenges." *Journal of Antitrust Enforcement*, no. 2 (August 16, 2013): 247-71.

Wilkins, Mira. *The History of Foreign Investment in the United States to 1914*. (Cambridge, MA: Harvard University Press, 1989).

Wilkins, Mira. *The History of Foreign Investment in the United States, 1914-1945*. (Cambridge, MA: Harvard University Press, 2004).

World Trade Organization. *Trade Policy Review: United States*. (Geneva: World Trade Organization, 2014). <http://bit.ly/2b8ofoz>.

Xu, Xianchun. "The Establishment, Reform, and Development of China's System of National Accounts." *Review of Income and Wealth* 55, July 2009, 442-65.

Zhang Min. *中国海外投资国家风险评级 [Country-risk Rating of Overseas Investment from China]*. (Beijing: Chinese Academy of Social Sciences, 2016). <http://bit.ly/2b8owlp>.

Data Resources

AdvancedREI. *AdvancedREI* (Irvine, 2016). <http://bit.ly/2aMH5G8>.

American Enterprise Institute. *China Global Investment Tracker*. (Washington, 2005–2016). <http://bit.ly/1LfXVbJ>.

AngelList. *AngelList* (San Francisco, 2016). <http://bit.ly/1EL5sJm>.

Bloomberg. *Bloomberg Mergers and Acquisitions Deal List* (New York, 2016). <http://bloom.bg/2aAvyGj>.

Bloomberg New Energy Finance. *Bloomberg New Energy Finance* (New York, 2016). <http://bit.ly/1chcMkT>.

Bureau of Economic Analysis. *Balance of Payments and Direct Investment Position Data*. (Washington, 1999–2016). <http://bit.ly/2aPKtgs>.

Bureau of Economic Analysis. *Activities of Multinational Enterprises*. (Washington, 2007–2013). <http://bit.ly/2aPKtgs>.

Bureau of Economic Analysis. *Foreign Direct Investment in the United States*. (Washington, 2015–2016). <http://bit.ly/2aPKtgs>.

Bureau van Dijk. *Orbis*. (Amsterdam, 2016). <http://bit.ly/1FwdG9f>.

CompStak. *CompStak*. (New York, 2016). <http://bit.ly/2aV8eFR>.

CrunchBase. *CrunchBase*. (San Francisco, 2007–2016). <http://bit.ly/2b8Nydo>.

Dealogic. *Dealogic*. (New York, 2016). <http://bit.ly/2dvj4n4>.

Department of Treasury. *Treasury International Capital System*. (Washington, 2016). <http://bit.ly/2cDPEWm>.

FactSet Research Systems. *FactSet*. (New York, 2016). <http://bit.ly/1lzFJM6>.

Financial Times. *fDi Markets*. (London, 2016). <http://bit.ly/2aV7Ual>.

IHS Markit. *IHS Directory of Chemical Producers*. (Englewood, 2016). <http://bit.ly/2aHgHwF>.

International Monetary Fund. *Coordinated Direct Investment Survey*. (Washington, 2009–2015). <http://bit.ly/2aAwtqb>.

JLL. *JLL [Jones Lang LaSalle] Data*. (New York, 2016). <http://bit.ly/2aH6jnm>.

Mergermarket. *Mergermarket*. (London, 2016). <http://bit.ly/2aHgSZ4>.

Ministry of Commerce. 2014 年度中国对外直接投资统计公报 [2014 Chinese Outward Direct Investment Statistical Yearbook]. (Beijing: China Statistics Press, 2015).

NanoMarkets. *N-tech Research*. (Glen Allen, 2016). <http://bit.ly/2beTf8G>.

Oxford Intelligence Partners. *Oxford Intelligence*. (Chicago, 2016). <http://bit.ly/2aH2YJn>.

Organization for Economic Cooperation and Development. *OECD FDI Regulatory Restrictiveness Index*. (Geneva, 2014). <http://bit.ly/2aAuja8>

Real Capital Analytics. *Real Capital Analytics* (New York, 2016). <http://bit.ly/2aPNCg6>.

Rhodium Group. “China Investment Monitor.” 2011-2016. <http://rhg.com/interactive/china-investment-monitor>.

S&P Capital IQ. *S&P Capital IQ* (New York, 2016). <http://bit.ly/1GXTLj2>.

State Administration of Foreign Exchange. *China's Balance of Payment Statistics*. (Beijing, 2016). <http://www.safe.gov.cn/>.

Thomson Reuters. *Thomson Reuters Mergers and Acquisitions*. (New York, 2016). <http://tmsnrt.rs/2aHgGsD>.

United Nations Conference on Trade and Development. *Bilateral FDI Statistics*. (Geneva, 2014). <http://bit.ly/1iRAEdQ>.

United Nations Conference on Trade and Development. *Foreign Direct Investment*. (Geneva, 2014). <http://bit.ly/2avd1zD>.

WoodMackenzie. *WoodMackenzie*. (Edinburgh, 2016). <http://bit.ly/1PQKpew>.