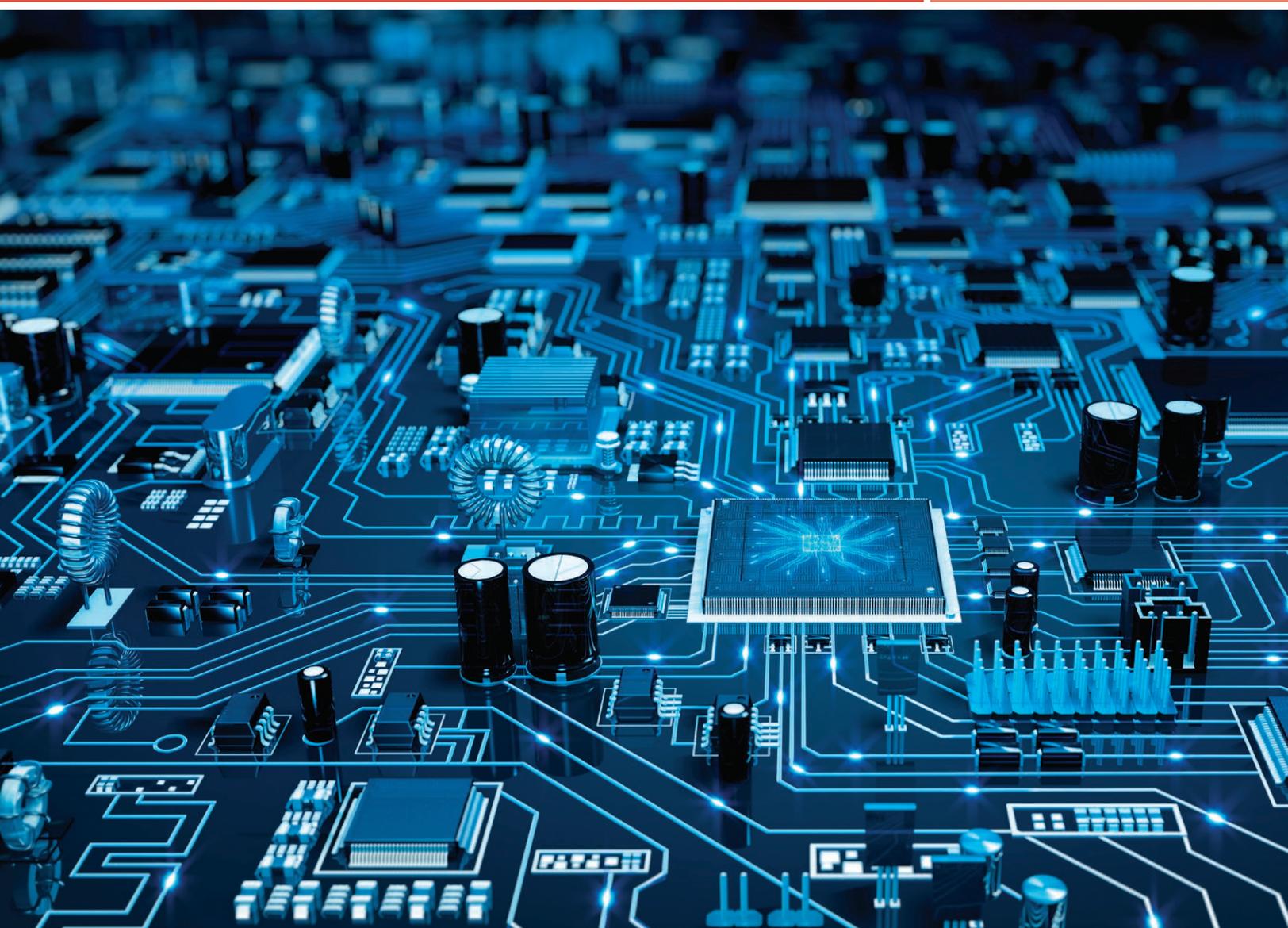


CHINESE DIRECT INVESTMENT IN CALIFORNIA: 2017 UPDATE

BY THILO HANEMANN



AN ASIA SOCIETY SPECIAL REPORT WITH RHODIUM GROUP

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November 2017

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WITH RHODIUM GROUP

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ABOUT THIS REPORT

THILO HANEMANN is a Director at Rhodium Group and leads the firm's work on global trade and investment. Thilo supports the investment management, strategic planning, and policy analysis requirements of RHG clients within his fields of expertise. He is also a Senior Policy Fellow at the Mercator Institute for China Studies in Berlin, Europe's biggest China think tank. Thilo's research focuses on new trends in global trade and capital flows, related policy developments, and the political and commercial dynamics of specific transactions. One of his areas of expertise is the rise of emerging economies as global investors, and the implications for host economies and the global economy. His most recent work focuses on the evolution of China's international investment position, and the economic and policy implications of this new trend.



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FOREWORD

IN 2016, CHINESE INVESTMENT INTO THE UNITED STATES SUPERSEDED U.S. INVESTMENT INTO CHINA FOR THE FIRST TIME – a remarkable transition that has implications for both countries far beyond simple economics. With the exception of 2005, an anomalous year when Lenovo acquired IBM’s PC division, Chinese investment in the US economy was negligible until 2010, when it skyrocketed to \$5 billion. By 2016, annual flows reached more than \$46 billion.

California became the number one recipient of Chinese FDI in recent years, with more than \$16 billion in 2016 alone. Much of the investment has gone into two important areas – real estate and technology. While the motivations for these investments have been somewhat different, both have already had an identifiable impact, one that will almost assuredly grow in the next few years.

First identified in the Asia Society – Rhodium Group study *An American Open Door? Maximizing the Investments of Chinese Direct Foreign Investment* in 2011, the Asia Society has worked on a wide range of research papers covering Chinese investment: in 2012 on *Chinese Direct Investment in California* with Rhodium Group; in 2014, *HIGH-TECH: The Next Wave of Chinese Investment in America*, also with Rhodium Group; and in 2015 with *Breaking Ground: Chinese Investment in U.S. Real Estate* with Rosen Consulting Group. Each of these data-driven reports has created awareness – in China as well as the US – of the scope and scale of growing Chinese investment into the US economy.

On the positive side of the ledger, Chinese investment has in many ways proven to be an enormous opportunity for both countries, providing Chinese investors the opportunity to diversify their portfolios, build value, create market awareness, and – in the case of the tech industry – support Chinese domestic R&D efforts. For the US, Chinese investment has provided capital for business and industry and contributed much needed investment in local infrastructure and jobs for communities across the US.

At the same time, investment from China has also provoked less positive reactions in the United States, with concerns over the acquisition of sensitive technologies by Chinese companies – and the likely enhancement of the Committee on Foreign Investment in the U.S.’ (CFIUS) mandate to scrutinize acquisitions deemed not to be in the interest of American security. There are also concerns that Chinese real estate acquisition drives the cost of affordable housing ever higher, thereby actually increasing the pressure on local communities.

This report, drafted by Thilo Hanemann of the Rhodium Group, brings many of these previous intellectual currents together into a new study with an emphasis on innovation, one that demonstrates just how profoundly Chinese investment is shaping the economic, financial and – to some degree – the social climate in the US. This project was developed from the ground up in conjunction with our partners at the Bay Area Council, the largest public advocacy business organization in Northern California. This report complements the Bay Area Council white paper *Chinese Innovation: China’s Technology Future and What it Means for Silicon Valley*, authored by Sean Randolph. Taken together, the two reports provide a strong foundation for understanding the opportunities – and challenges – inherent in the ever deepening financial relationship between the world’s two largest economies.

I would like to thank all of those who have done so much to bring this project to fruition, including Thilo Hanemann, who has authored many of these investment reports, the Asia Society team – Associate Director Robert Hsu and Program Manager Melissa La Bouff, as well as our partners at the Bay Area Council: report author Sean Randolph; Jim Wunderman, President and CEO; and Micah Weinberg, President of the Bay Area Council Economic Institute.

N. Bruce Pickering

Vice President of Global Programs, Asia Society

Executive Director, Asia Society Northern California

EXECUTIVE SUMMARY

RAPID GROWTH IN OUTBOUND FOREIGN DIRECT INVESTMENT (FDI) IS RE-SHAPING CHINA'S ECONOMIC RELATIONS WITH US STATES. This report explores Chinese FDI in California to improve policymakers', business leaders' and other stakeholders' understanding of these trends. Transparency and analytical clarity on this important subject are key to making the benefits achievable while managing concerns. The key findings are:

- **California is the top destination for Chinese FDI:** California is by far the number one recipient of Chinese FDI among US states, attracting more than \$26 billion from 2000 to 2016. It hosts nearly 600 Chinese-owned operations, more than any other state.
- **Chinese presence remains concentrated in major urban areas:** More than 96% of Chinese-owned establishments are in the San Francisco Bay, greater Los Angeles and San Diego County areas. Chinese presence in other cities and rural areas is minimal.
- **High-tech, entertainment and real estate are the biggest draws:** Mirroring the state's comparative advantages and famous industry clusters, Chinese investment in California is concentrated in entertainment, real estate, information technology and other high-tech sectors. Biotech and financial & business services have experienced strong inflows of Chinese capital as well. Logistics takes a high spot thanks to a single large acquisition. Chinese presence in energy, agriculture and automotive sectors remains small compared to the national picture.
- **Private strategic investors are driving Chinese FDI in California:** Investment by privately owned companies are more common in California than in other states, accounting for more than 80% of the Golden State total. Financial investors are prominent in California's real estate and technology sectors, but less so than in other states.
- **Chinese firms' track records demonstrate the tremendous opportunities Chinese FDI generates in local communities:** Chinese capital has sustained and created California jobs, has immense potential for local innovation spillovers, and is important for trade linkages that support goods and services exports back to China.
- **The rise of Chinese investment also poses legitimate concerns:** While evidence refutes some old concerns -- like fears that Chinese firms move jobs back to China after acquiring US assets -- China's increasing appetite for acquisitions and the shift to high-tech targets introduces new concerns. Loss of integrity in defense-related value chains and distortions to competitive conditions for US technology companies caused by Chinese subsidies and other policies are especially disquieting to Californian firms.
- **The record level of Chinese outbound FDI in 2016 triggered policy responses both in Washington and Beijing:** Alarmed by large capital outflows, Beijing reimposed regulatory checks to prevent "irrational outbound investment". On the US side, the

rising tide of Chinese acquisitions motivated calls to enhance screenings of inbound foreign direct investment acquisitions, and precipitated a debate about reciprocity in investment market access.

- **The changing political environment had a notable impact on investment patterns in 2017:** In 1H 2017 Chinese investment in the US held up in terms of completed transactions, but the number of newly announced acquisitions fell 10% and their combined value dropped 79% compared to 1H 2016. The impact was even more acute in California – the state only realized \$1.5 billion of completed Chinese FDI transactions in 1H 2017 compared to \$7.9 billion in 1H 2016, and the value of newly announced acquisitions fell by 80%.
- **Policy anxieties – on both sides -- need to be much better managed if Chinese capital flows and the benefits they present are to be sustained:** The contrast between Chinese commercial appetites to invest in America and rising US unease with these flows is stark. Sound leadership is needed to manage these issues and mitigate concerns effectively. California policymakers and businesses cannot afford to wait for a national consensus: instead, they should mobilize to chart the way forward.

INTRODUCTION

THE RISE OF CHINESE OUTBOUND INVESTMENT HAS FUNDAMENTALLY RE-SHAPED the economic linkages between states and cities in the US and China. In addition to exploring export opportunities, many governors and local officials are now chasing Chinese investment dollars in the hope of creating local jobs, taxes and innovation spillovers.

California has been a major destination for Chinese capital in the United States since the early years of China's outbound investment push. In 2012, the Asia Society and Rhodium Group produced a report describing the early patterns of Chinese investment in the Golden State, recording a total of \$1.3 billion of Chinese foreign direct investment (FDI) from 2000 through the end of 2011.¹ We projected that California had the potential to attract between \$10 billion and \$60 billion of Chinese direct investment by 2020.²

Fast forward to the summer of 2017, and California has now attracted almost \$26 billion of cumulative Chinese investment, a 20-fold increase from 2011. Two-thirds of these flows came in 2015 and 2016 alone. As of the end of 2016, California is the number one destination for Chinese FDI in the nation, accounting for 23% of the US total. California is also first in terms of number of investments: no other state hosts as many Chinese-owned businesses as California.

The rapid increase of Chinese investment over the past five years has radically altered the makeup of Chinese companies in the state. In this report we provide an update on Chinese FDI patterns in California, including geographic distribution, industry dynamics and investor characteristics. We then discuss local impacts based on examples and empirical information from the past five years. Finally, we comment on the latest policy developments in China and the United States and how they may impact Chinese investment patterns in California going forward.

¹ See Rosen and Hanemann (2012).

² See Rosen and Hanemann (2012). P48.

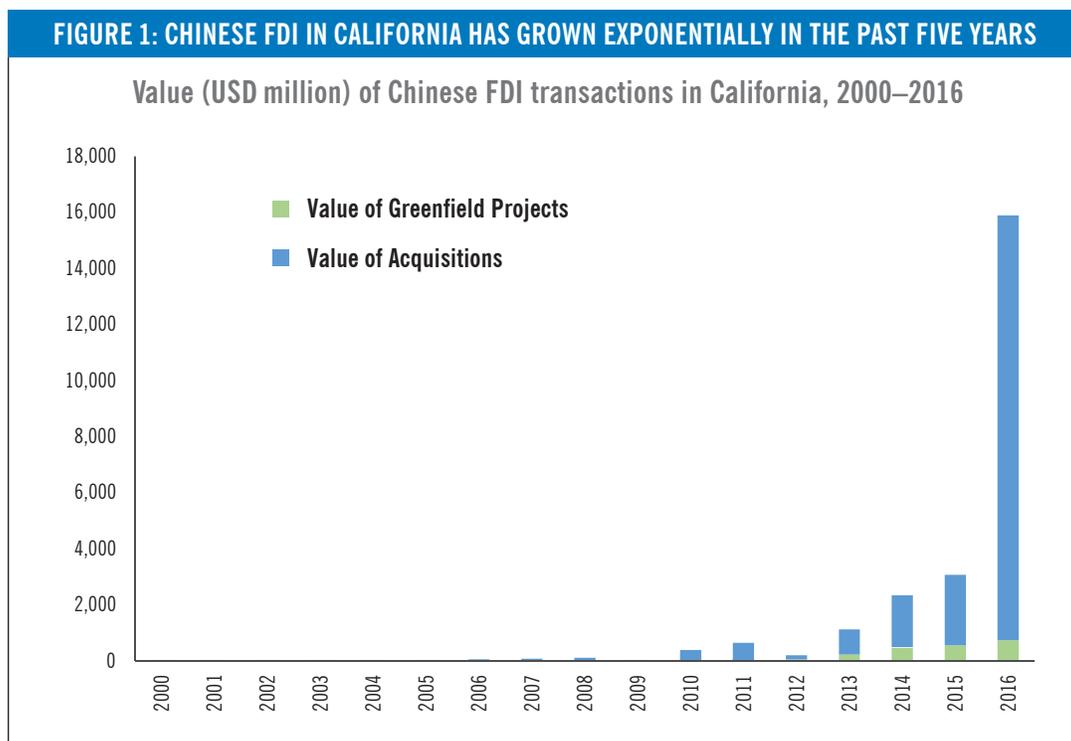
I. THE GROWTH OF CHINESE FDI IN CALIFORNIA

WHILE THERE IS A LONG HISTORY OF CHINESE INVESTMENT IN THE GOLDEN STATE, flows remained marginal until only recently (Figure 1). Before the 2000s, China's development strategy was focused on attracting foreign investment, and Chinese companies had neither the motive nor permission to invest overseas.

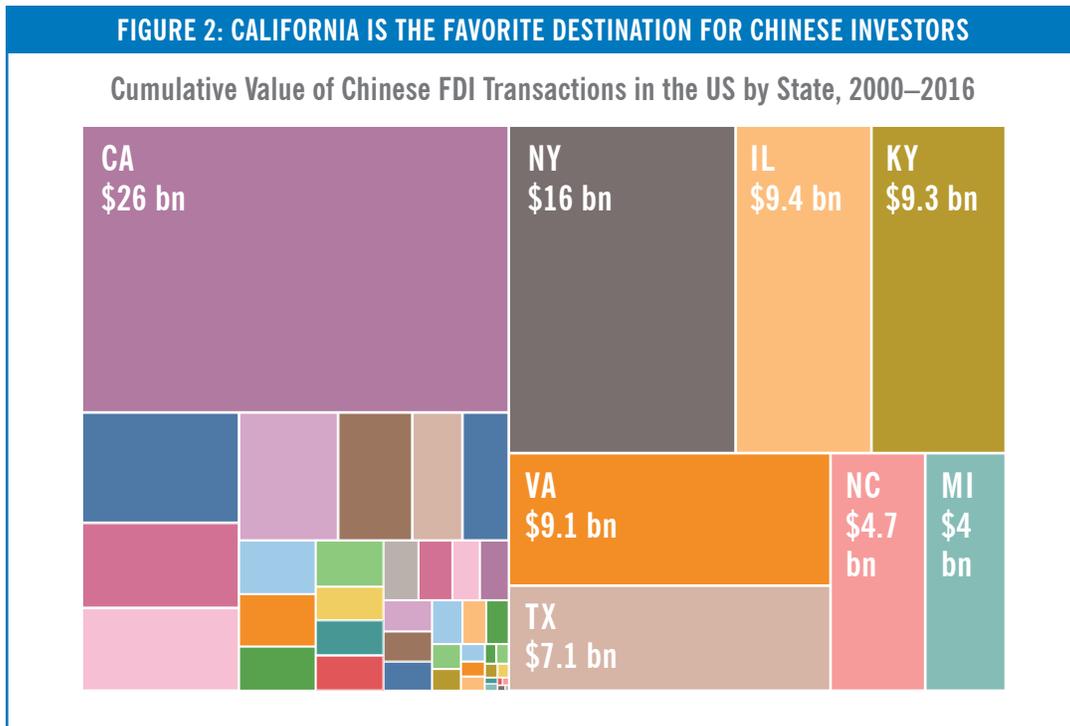
As China's global economic integration accelerated through the turn of the century, outbound investment started to take off, and state-owned firms and trading companies began investing in California. Annual flows increased through the mid-2000s, eventually reaching \$700 million in 2011. In 2013, annual investment surpassed the billion-dollar mark for the first time, driven by greater volume and value of mergers and acquisitions (M&A).

Annual flows doubled to \$2 billion in 2014 and then again to nearly \$4 billion in 2015. In 2016, Chinese FDI in California quadrupled to over \$16 billion on the back of several multi-billion-dollar acquisitions including Ingram Micro (acquired by HNA), Legendary Entertainment (acquired by Wanda), Omnivision Technologies (acquired by a Chinese consortium) and Assetmark (acquired by Huatai Securities).

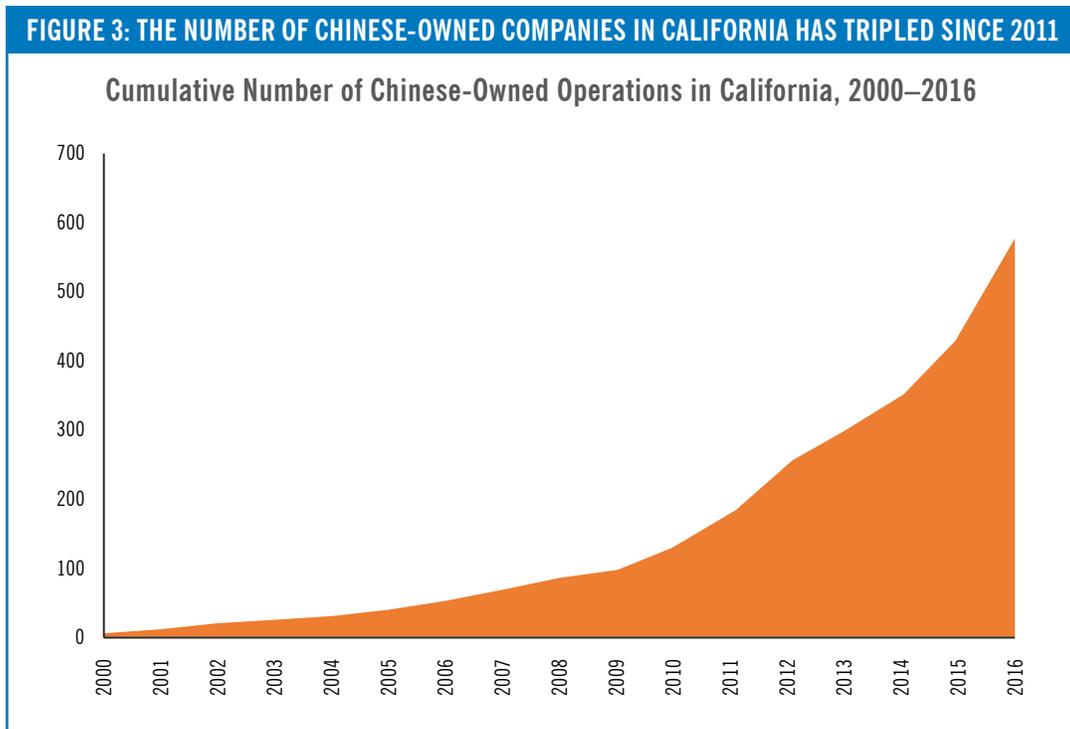
From 2000 to 2016, Chinese companies invested \$26 billion in California, or about one quarter of all Chinese FDI in the United States. California attracted almost twice as much as second-ranked New York, cementing the Golden State's position as the number-one recipient of Chinese capital (Figure 2).



Source: Rhodium Group. See the methodology appendix for more details.



Source: Rhodium Group. See the methodology appendix for more details.



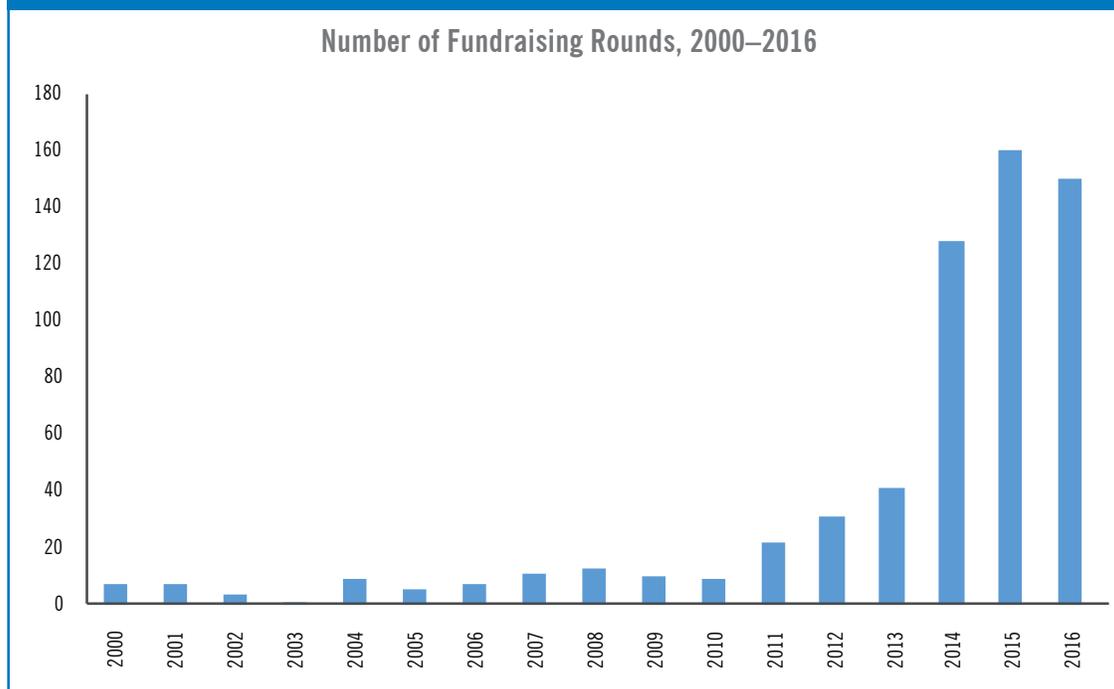
Source: Rhodium Group. See the methodology appendix for more details.

California leads nationally not only in cumulative Chinese investment dollars, but also in the number of Chinese-owned companies. At the end of 2016, the Golden State was home to 585 Chinese-owned operations, triple the amount at the end of 2011 (Figure 3). California has more Chinese businesses than any other state and accounts for more than 18% of all Chinese-owned companies nationwide.³

BOX 1: CHINESE VENTURE CAPITAL INVESTMENT IN CALIFORNIA

In addition to foreign direct investment (defined as 10% or more in equity), Chinese investors have also expanded their roles as early-stage funders for Californian growth companies (see chart below). From 2014 to 2016, China-based venture capital (VC) funds participated in more than 400 funding rounds of California-based firms, a sharp increase from previous years. Combined these funding rounds were worth more than \$14 billion (VC funding rounds typically have several investors, so only a portion of this money is attributable to Chinese VCs). Chinese venture transactions in California from 2014 to 2016 accounted for more than two-thirds of all China-based VC deals in the United States during the period.

FIGURE 4: CHINA-BASED VENTURE PARTICIPATION IN CALIFORNIA VENTURE CAPITAL FUNDRAISING ROUNDS



Source: Rhodium Group.

California's principal innovation clusters are particularly attractive to Chinese VC investors. Top sectors include information and communications technology; health, pharmaceuticals and biotechnology; and financial and business services. In each case, targeted companies tend to be on the leading edge in their respective industries – companies like free messaging app Tango, cancer-detection company GRAIL and fintech darling Social Finance (SoFi). Consumer and entertainment industries are also popular among Chinese venture firms, with notable investments including video social network Musical.ly, mobile game developer Kabam, and a host of consumer marketplaces like Airbnb, Uber and Getaround. As the Chinese VC industry matures, California's vibrant, innovative startup environment is likely to attract continued interest from Chinese venture investors.

³ This number is based on a variation of our dataset that counts not only greenfield investments and acquisitions of California-headquartered companies, but also subsidiaries of companies headquartered in other states that came under Chinese ownership. The minimum investment threshold for companies included in our sample is \$500,000.

II. GEOGRAPHIC DISTRIBUTION

The geographic distribution of Chinese companies in California closely overlaps with economic activity and the state's industry clusters. More than 96% of the 585 Chinese-owned establishments are in the San Francisco Bay Area, the greater Los Angeles area, or San Diego County (Figure 5).

Fewer than 30 operations are located outside of those major metropolitan areas. Six operations are in the greater Sacramento area, including the acquisition of GNB by Kinglai Hygienic Materials, the acquisition of a stake in Cesca Therapeutics by Boyalife Group, and Novogene's sequencing center around UC Davis. A handful of others are scattered throughout the Central Valley and other regions, which are mostly hospitality assets associated with Red Lion Hotels (acquisition of a stake by HNA), Carlson Hotels (acquired by HNA) and Starplex Cinemas (acquired by AMC/Wanda).

SAN FRANCISCO BAY AREA

San Francisco was host to some of the earliest Chinese greenfield investments in the US. Air China, China Shipping, and China Telecom all established offices in San Francisco before the early 2000s.

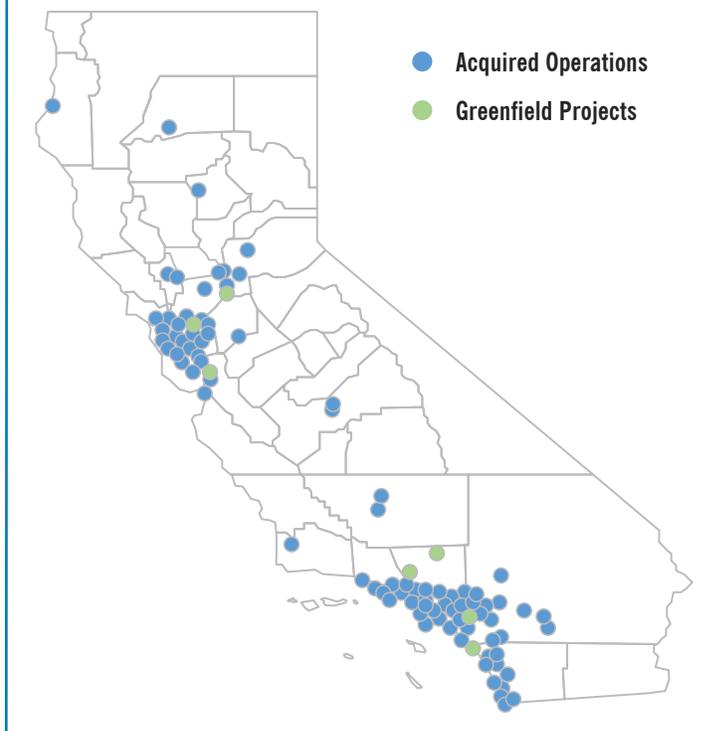
In the following years, the greater San Francisco Bay Area attracted additional greenfield investments from technology and services firms including Tencent, Neusoft, CSOFT, and China Daily.

From 2008 to 2011, the number of Bay Area operations increased rapidly as Chinese firms increased M&A activity. Notable transactions include Cryptic Studios (Perfect World) and Solar Power Inc. (LDK Solar). Greenfield FDI also continued apace as China Mobile, Trina Solar, Yingli Green Energy, China Unicom, Jun He Law, Baidu, Hanergy, China Sunergy, and the Bank of Communications invested in the area.

M&A activity dominated between 2012 and 2014 as Chinese investors set their eyes on larger acquisition targets. Wanda's AMC theaters purchase and Industrial and Commercial Bank of China (ICBC)'s Bank of East Asia USA acquisition added numerous

FIGURE 5: CHINESE COMPANIES ARE CONCENTRATED IN WEALTHY URBAN ECONOMIES

Geographic Location of Chinese-Owned Operations in California, 2000–2016

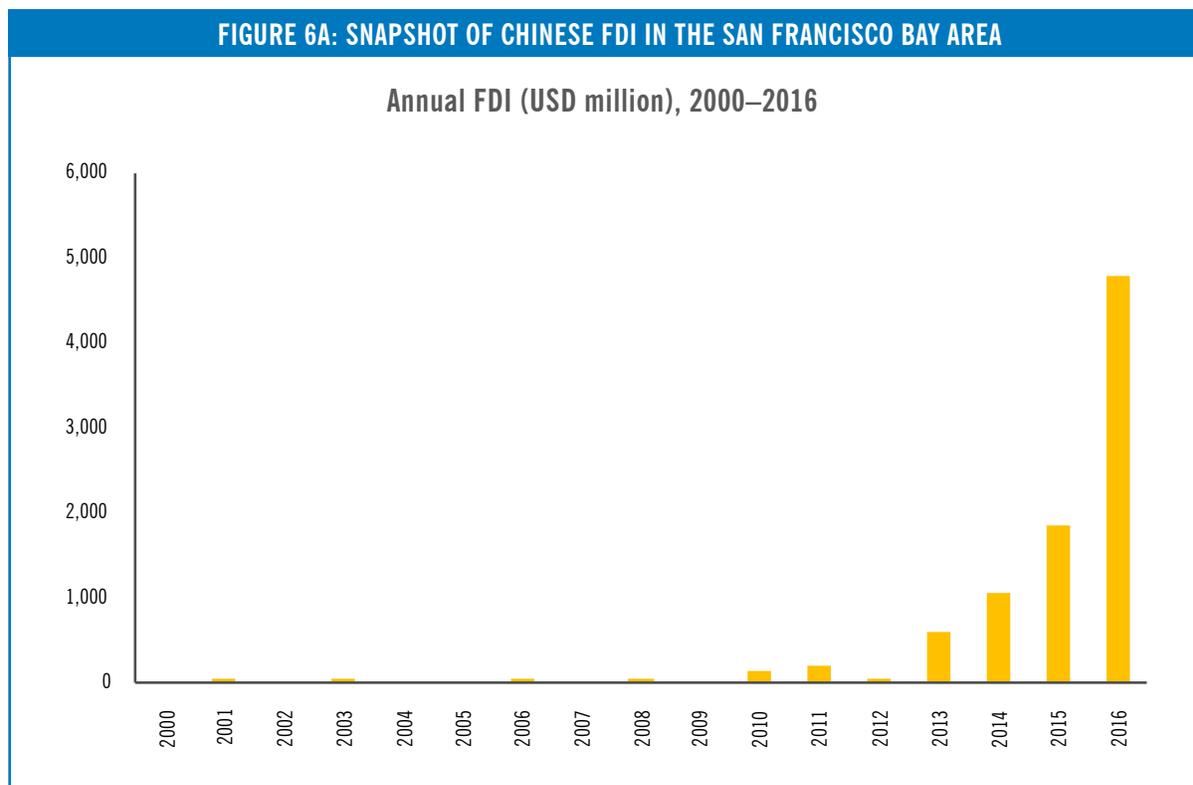


Source: Rhodium Group. See the methodology appendix for more details.

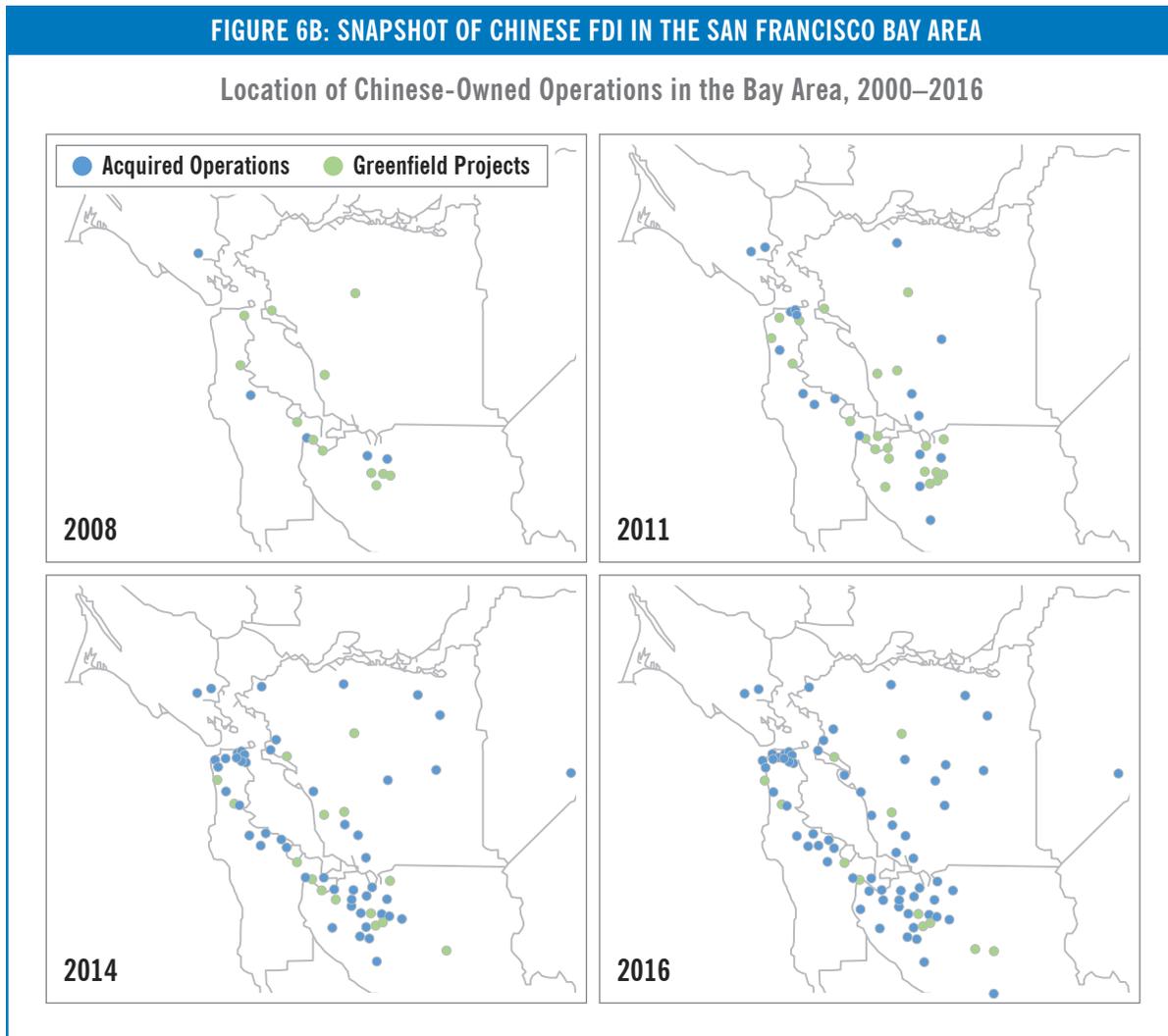
Chinese operations in the Bay Area. The acquisitions of MiaSole (Hanergy) and Complete Genomics (Beijing Genomics Institute) also included sizeable Bay Area operations. One important development during this period was the rapid growth of Chinese real estate investments in the Bay Area, with a flurry of acquisitions (such as Genzon’s purchase of 225 Bush Street in San Francisco) and greenfield developments (such as Vanke’s Lumina building).

In 2015 and 2016, M&A activity accelerated further, bringing big Bay Area technology companies like AssetMark (Huatai Securities) and Omnivision (a Chinese consortium composed of Hua Capital Management, CITIC Capital Holdings and Goldstone Investment). A few large-scale greenfield developments also emerged, for example Oceanwide’s Oceanwide Center complex at First and Mission Streets in San Francisco.

Chinese presence in the Bay Area has also been boosted by a boom in private equity and venture capital investments. Local growth companies with significant Chinese stakes include Lyft (Didi), Lending-Home (Renren) and Magic Leap (Alibaba). A summary of broader patterns of Chinese VC investment in California is available in Box 1.



Source: Rhodium Group. See the methodology index for more details.



Source: Rhodium Group. See the methodology appendix for more details.

GREATER LOS ANGELES AND SAN DIEGO

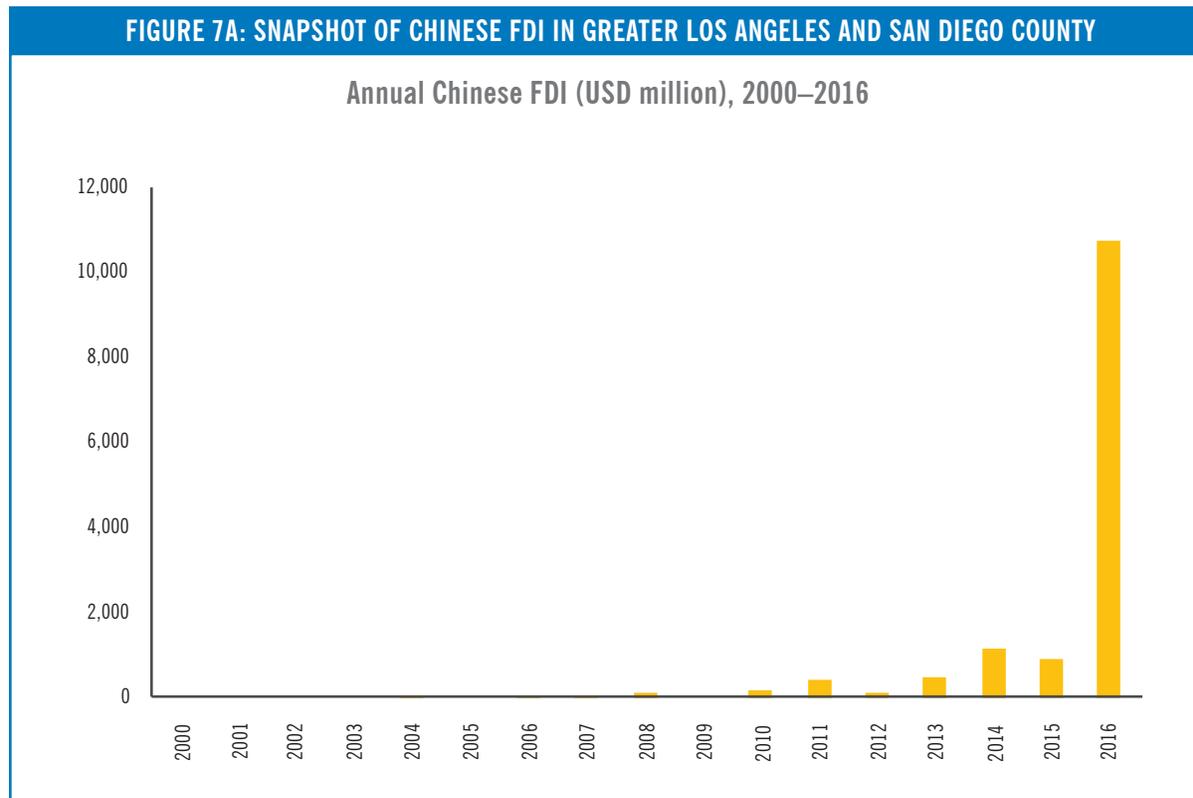
Chinese investment in the greater Los Angeles area also initially started with greenfield establishments. Before 2008, investments focused on transportation, logistics and other trade-related activities. Prominent early investors include state-owned companies like China Ocean Shipping (Group) Company (COSCO), China Shipping, China Unicom Americas and China Eastern Airlines. There were also a handful of private investments (such as Amass Freight International), but private deals were less frequent.

From 2008 to 2011, greenfield investments in transport and logistics continued (China International Marine Containers, Commercial Aircraft Corporation of China) and expanded into other areas like consumer electronics (Gree Electrical Appliances) and online gaming (Snail Games). Chinese investors also launched their first takeovers in Southern California. In contrast to the Bay Area, these early acquisitions were much higher in value – including Tencent’s investment in Riot Games, and Shenzhen New World’s acquisitions of the Sheraton Universal and the Downtown Marriot hotels in Los Angeles.

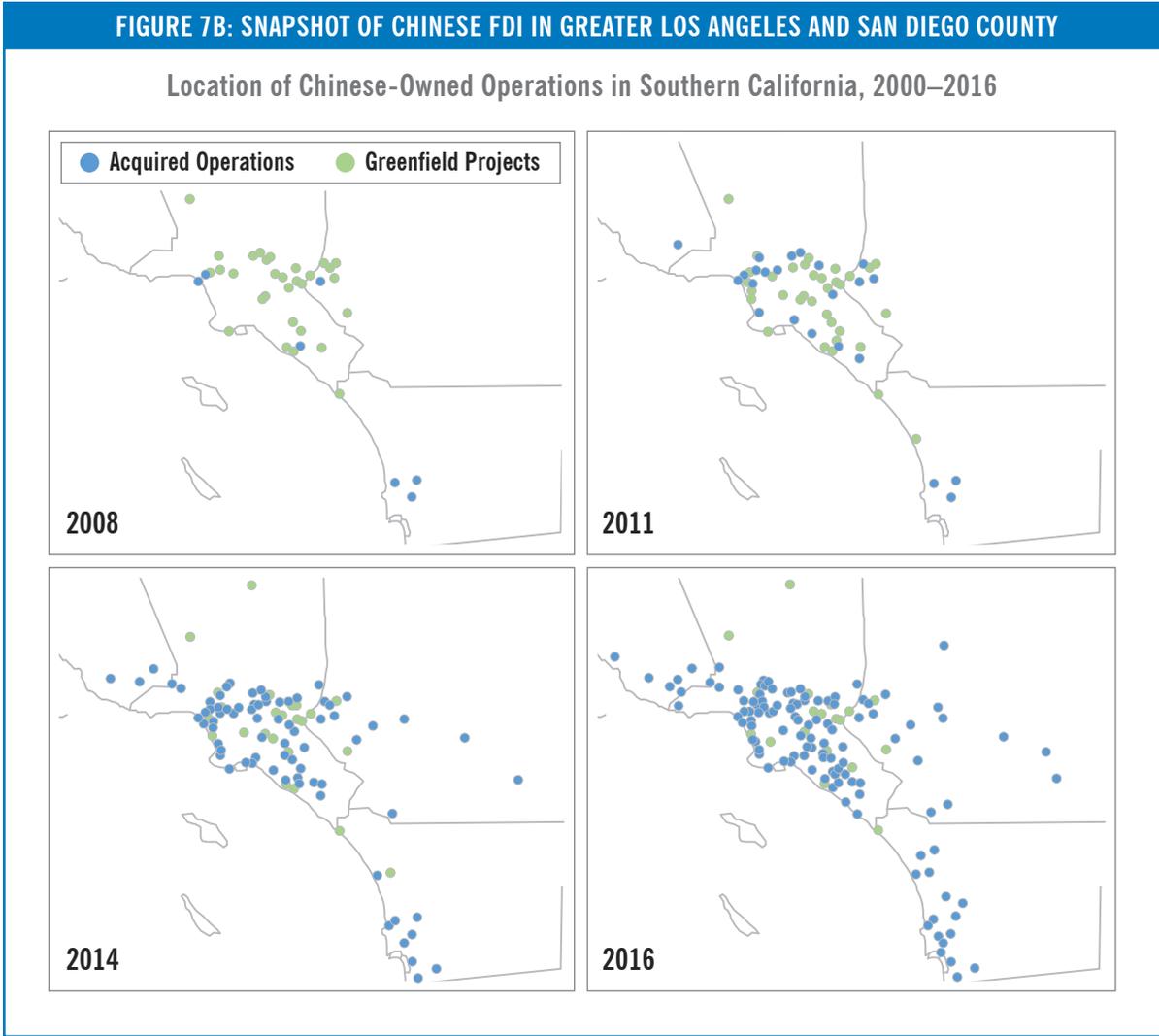
From 2011 to 2014, Chinese investors spent an increasing amount on real estate and hospitality developments (Metropolis by Greenland and Fig Central by Oceanwide) and acquisitions (Wanda's acquisition of One Beverly Hills, Shenzhen Hazens' acquisition of Luxe City Center Hotel, and Sichuan Xinglida's acquisition of Torrance Marriot South Bay hotel). Similar to Northern California, Chinese presence also increased through investments in consumer-related sectors such as entertainment, retail, and banking (AMC theaters, Bank of East Asia USA branches, Mili Pictures and LeEco offices). There were few major investments outside of these sectors, with one notable exception being Wanxiang's acquisition of Fisker Automotive assets out of bankruptcy.

Chinese investment in Southern California jumped dramatically in 2016 due to HNA's acquisition of Ingram Micro (\$6 billion) which is headquartered in Irvine, California. More than 80% of all Chinese investment in the greater Los Angeles area since 2000 happened in 2015 and 2016. Other Major transactions included Legendary Entertainment (Wanda) and Strategic Hotels properties (Anbang).

San Diego is home to about 40 Chinese-owned establishments. Most investments occurred since 2012 and are focused in pharmaceuticals and biotechnology. Prominent Chinese-owned companies include Ambrx (a Chinese consortium composed of Shanghai Fosun Pharmaceutical Group, HOPU Investments, CEL Healthcare Fund, and WuXi PharmaTech) and Abgent (Wuxi Pharmatech). In addition, San Diego hosts Chinese tech companies' offices including Huawei, ZTE, and Wireless Info Tech (acquired by VanceInfo).



Source: Rhodium Group. See the methodology index for more details.

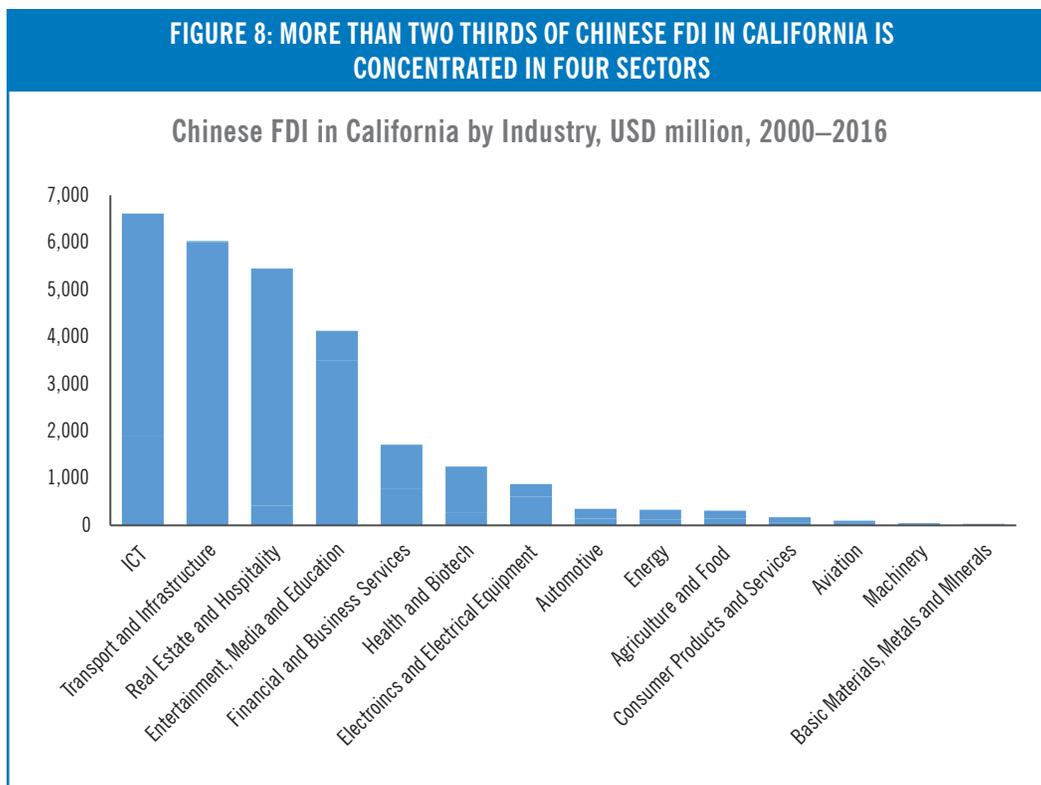


Source: Rhodium Group. See the methodology appendix for more details.

III. INDUSTRY CLUSTERS AND TRENDS

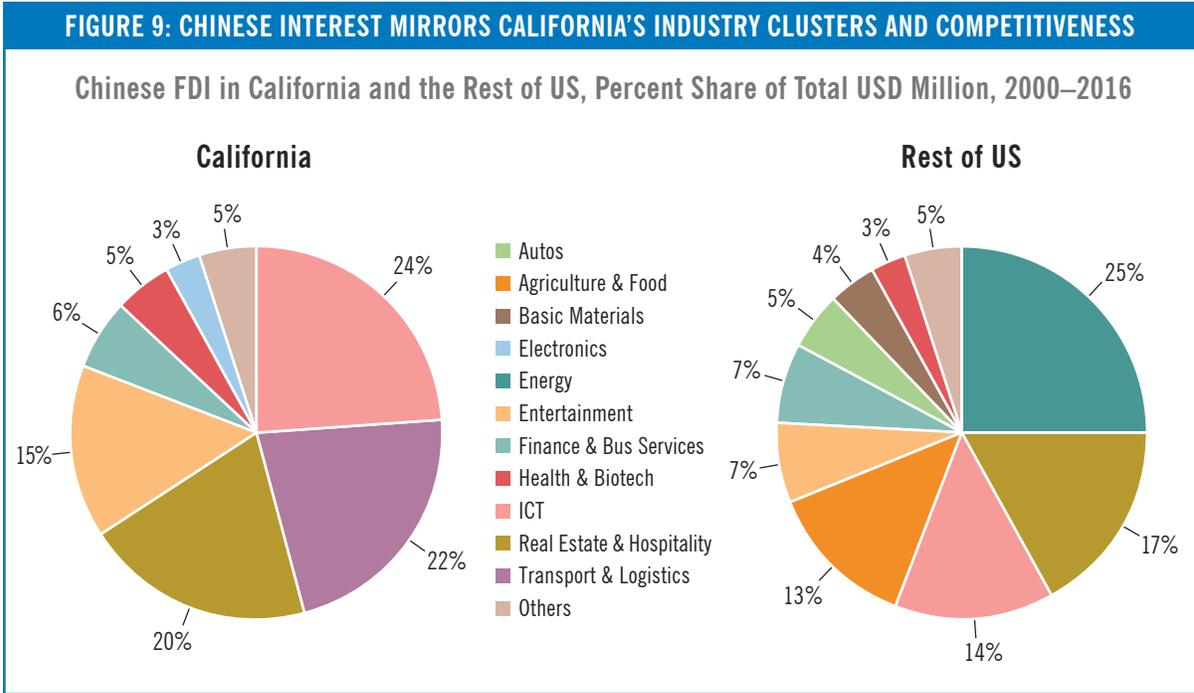
THE BIGGEST SECTORS FOR CHINESE FDI IN CALIFORNIA ARE INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT), transport and logistics, real estate and hospitality, and entertainment (Figure 8). These four sectors account for 81% of cumulative Chinese investment in the state since 2000.

Compared to the US national distribution, Chinese investment in California is much more concentrated in a few top industries that reflect the state's comparative advantages. Notable sectors that are underrepresented by Chinese investment in California include energy, agriculture and automotive (Figure 9).

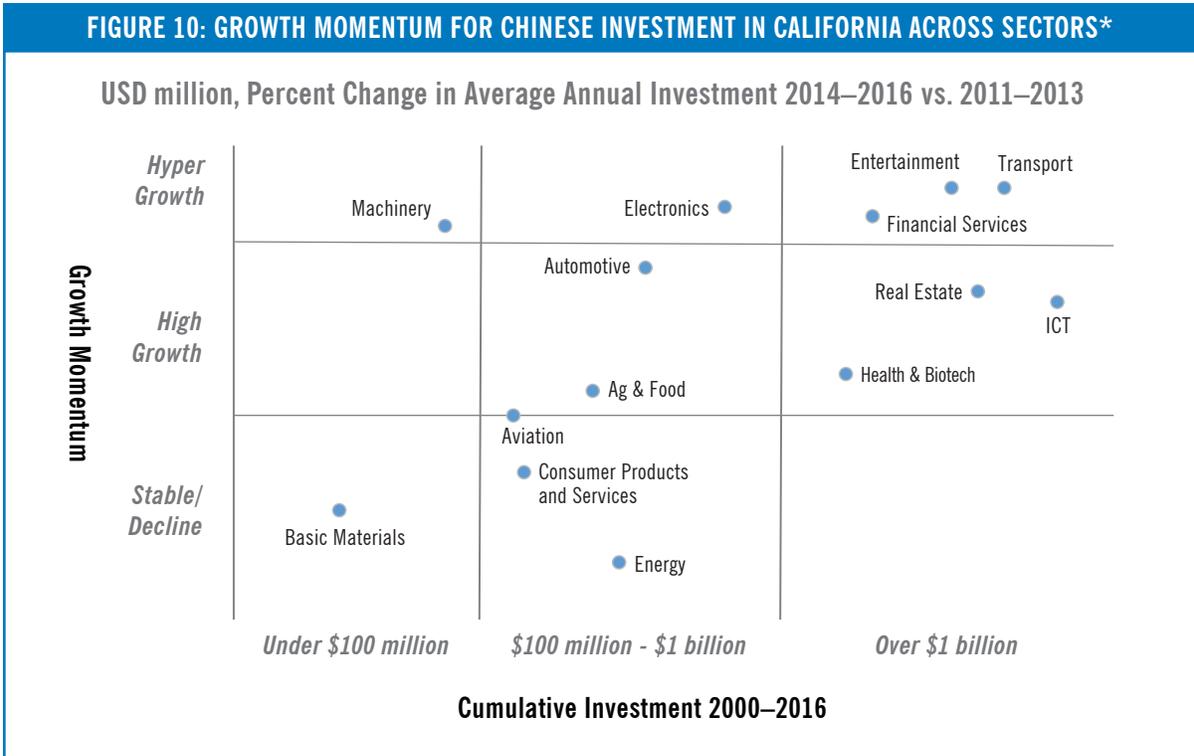


Source: Rhodium Group. See the methodology appendix for more details.

California's top sectors generally have the highest growth momentum. Comparing the average annual investment from 2014 to 2016 with average annual investment from 2011 to 2013, entertainment, financial and business services, and logistics witnessed the largest increases (Figure 10). Real estate, ICT and health and biotech also stand out as sectors with moderate growth from a solid base. In the following pages, we briefly discuss each of these industries.



Source: Rhodium Group. See the methodology appendix for more details.



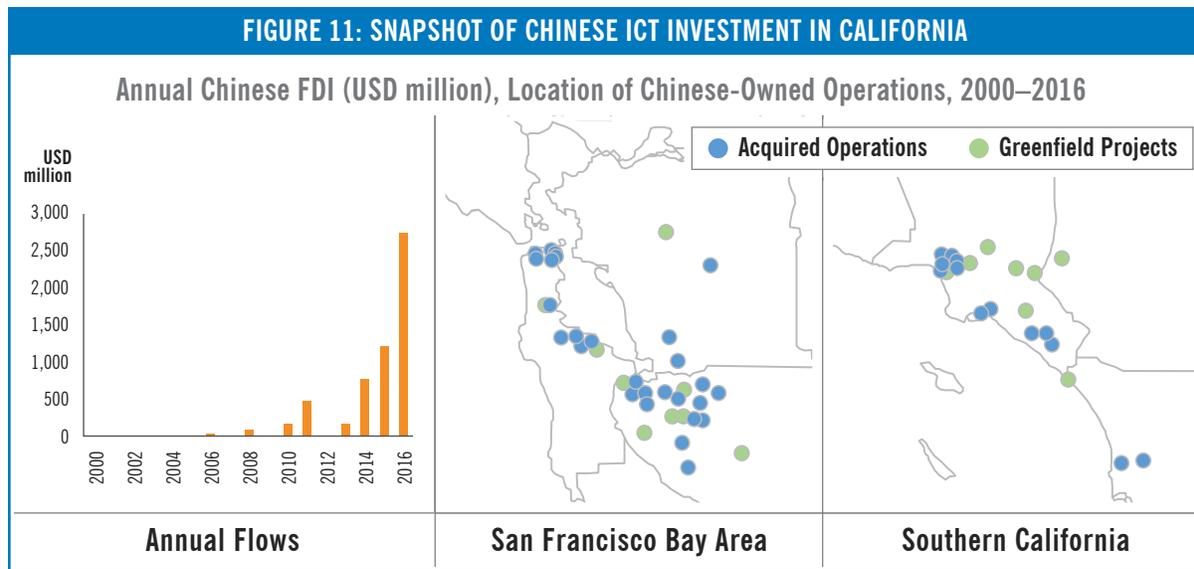
Source: Rhodium Group. See the methodology appendix for more details. *Position of dots on the chart are stylized presentations. Stable/Decline: = <0% growth; High Growth: 0%-1,000% growth; Hyper Growth: > 1,000% growth

INFORMATION AND COMMUNICATIONS TECHNOLOGY

About 41% of cumulative Chinese ICT investment in the United States from 2000 to 2016 targeted California, and most capital entered the sector through mergers and acquisitions (92%). The San Francisco Bay area hosts the nation’s most famous ICT cluster, so it is not surprising that many Chinese ICT investments are concentrated there. However, there are also a significant number of operations in Southern California, mostly in online gaming and software (such as Grindr, which was acquired by Beijing Kunlun Tech).

ICT investments fall into a few major sub-sectors. Most investments have gone into software development, including consumer-focused software such as gaming (Riot Games, acquired by Tencent) and app development as well as enterprise software. Chinese firms have also established a handful of greenfield research and development (R&D) operations, including in cutting edge areas such as artificial intelligence and autonomous driving. Hardware and IT equipment have likewise seen greenfield investment from firms like Huawei and ZTE. Most recently, investment in semiconductors has grown rapidly (Omnivision and ISSI, both acquired by Chinese consortiums), and would have been even higher if not for political sensitivities (see Chapter VI).

In addition, Chinese entities have expanded their investment in early stage US ICT companies rapidly since 2014. Most of those investments are not included in our figures since they rarely exceed the 10% threshold for FDI, but we estimate that Chinese venture capital firms have backed more than 150 early-stage ICT companies in California since 2000, most of which are focused on software development.



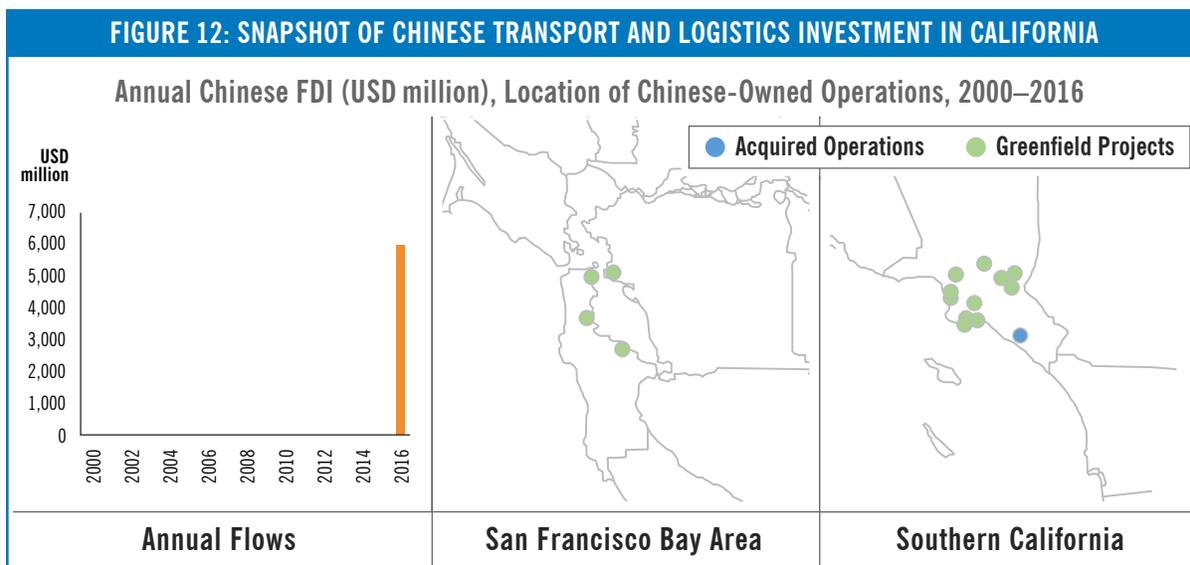
Source: Rhodium Group. See the methodology appendix for more details.

TRANSPORT AND LOGISTICS

Transport and logistics is the second largest sector for Chinese FDI in California by value. Chinese presence in Californian ports has a long history. Two state companies – China Ocean Shipping (Group) Company (COSCO) and China Shipping – have run services through ports in Los Angeles, Long Beach,

and San Francisco since before 2000. Today COSCO also operates Pier J at the Port of Long Beach as Pacific Container Terminal, a joint venture between COSCO Terminal America and Stevedoring Services of America. In 2016, COSCO and China Shipping merged, and the combined entity announced plans to acquire Hong Kong's Orient Overseas Container Line (OOCL) in 2017. All three companies have substantial activities in Californian ports (including OOCL's 40-year lease at Long Beach). However, much of this shipping-related activity has been structured around long-term leases, which are technically not classified as direct investments.

More than 90% of the FDI value in transportation and logistics is attributed to a single 2016 deal: HNA's purchase of Ingram Micro, an IT products distributor and logistics firm based in Irvine, California. The Ingram Micro acquisition will likely remain an isolated case.



Source: Rhodium Group. See the methodology appendix for more details.

REAL ESTATE AND HOSPITALITY

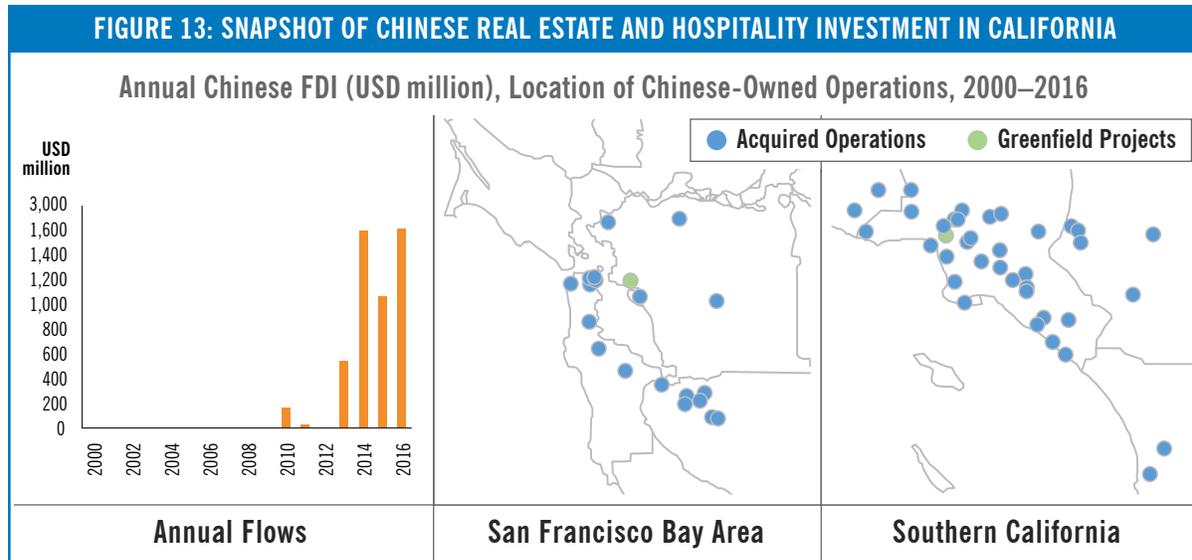
Real estate has become a huge draw for Chinese investors across the US, especially in gateway markets.⁴ In California, Chinese investors have acquired numerous assets in the San Francisco and Los Angeles areas. The most prominent examples include Wanda's purchase of One Beverly Hills and Genzon's purchase of 225 Bush Street. In recent years, Chinese developers and financiers have also participated in large development projects in both metro areas. The most notable greenfield investments include Greenland's developments in the Metropolis, Oceanwide's Fig Central and Oceanwide Center, Vanke's Lumina, and Landsea's participation in several large residential development projects across California.

Hospitality is a related sector that has attracted significant Chinese investment. Acquisitions have concentrated in the Los Angeles area, including the DoubleTree by Hilton (Aviation Industry Corporation of China), Marriott Downtown LA and Sheraton Universal (Shenzhen New World) and Hyatt Regency Orange County (Shanghai Construction Group, SCG America). Several large national deals in the hospitality sector have also brought California properties under Chinese ownership, including Red Lion Hotels, Carlson Hotels and Strategic Hotels locations in both the San Francisco Bay Area

⁴ Our data cover Mainland Chinese corporate investments in commercial and residential real estate projects. It does not cover investments by Chinese nationals in residential real estate properties. For a detailed assessment of Chinese investment in US real estate, see Rosen, Margon, Sakamoto, and Taylor (2016).

and Southern California. The boom in Chinese outbound tourism flows makes these attractive assets for long-term investment and leveraging.⁵

The future trajectory of Chinese investment in this sector is unclear, since real estate was one of the sectors explicitly targeted by Chinese regulators during the informal crack down on “irrational” outbound investment beginning in December 2016. Real estate is also included in the restricted list published in August 2017 as part of China’s new outbound foreign direct investment (OFDI) regulatory regime (see Chapter VI).



Source: Rhodium Group. See the methodology appendix for more details.

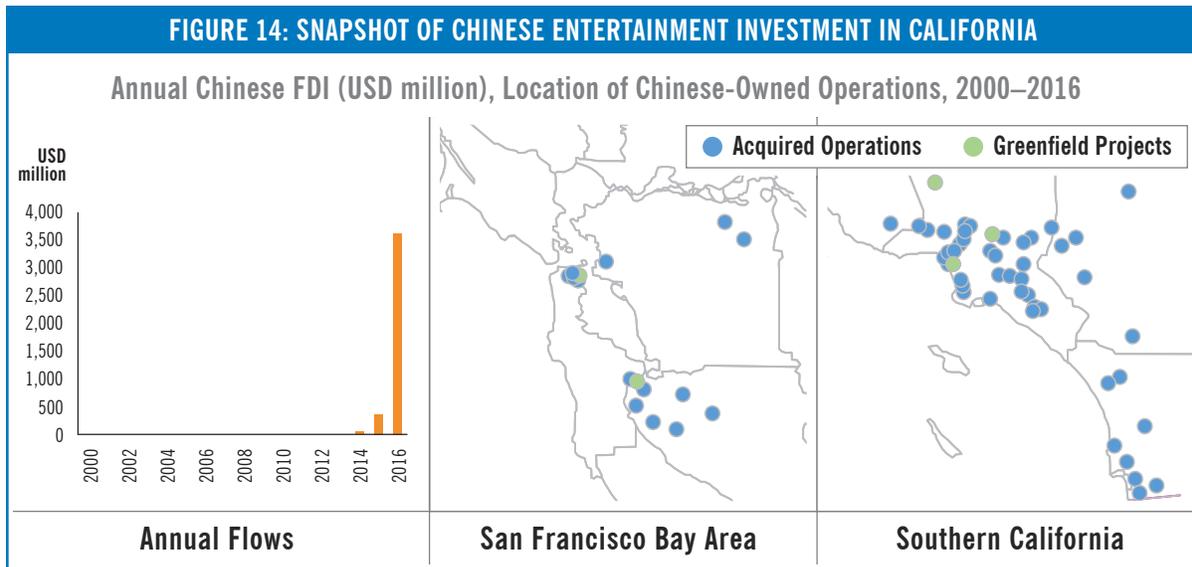
ENTERTAINMENT

As the center of the US entertainment industry, California has attracted substantial Chinese investment in the sector with a focus on Hollywood. The state has attracted significant FDI in film production, for example through Wanda’s \$3.5 billion purchase of Legendary Entertainment and China Media Capital Partners’ acquisition of a stake in Imagine Entertainment. Chinese film and television production firms have also set up various greenfield establishments in the Los Angeles area, including China Movie Media Group and Mili Pictures.

A handful of national deals in the entertainment industry, particularly movie theaters, have also involved significant operations in California. These include Wanda’s acquisitions of AMC Entertainment, Carmike Cinemas and Starplex Cinemas. Theaters associated with these chains account for a substantial portion of the Chinese-owned operations found around San Francisco and Los Angeles.

As with real estate and hospitality, Chinese entertainment OFDI has faced increasing regulatory burdens since late 2016. A handful of large entertainment acquisitions collapsed in 2017 under the weight of China’s regulatory crackdown, including deals for Voltage Pictures, Dick Clark Productions and Millennium Films. These dynamics make the future trajectory of investment in this sector uncertain (see Chapter VI).

⁵ According to the US Department of Commerce, Chinese visits to the US increased 15 percent in 2016 and Chinese travel spending in the US increased 9 percent last year (reaching \$33 billion). See <https://www.trade.gov/press/press-releases/2017/INTERNATIONAL%20VISITORS%20TO%20THE%20UNITED%20STATES%20%20208-11-17.pdf>

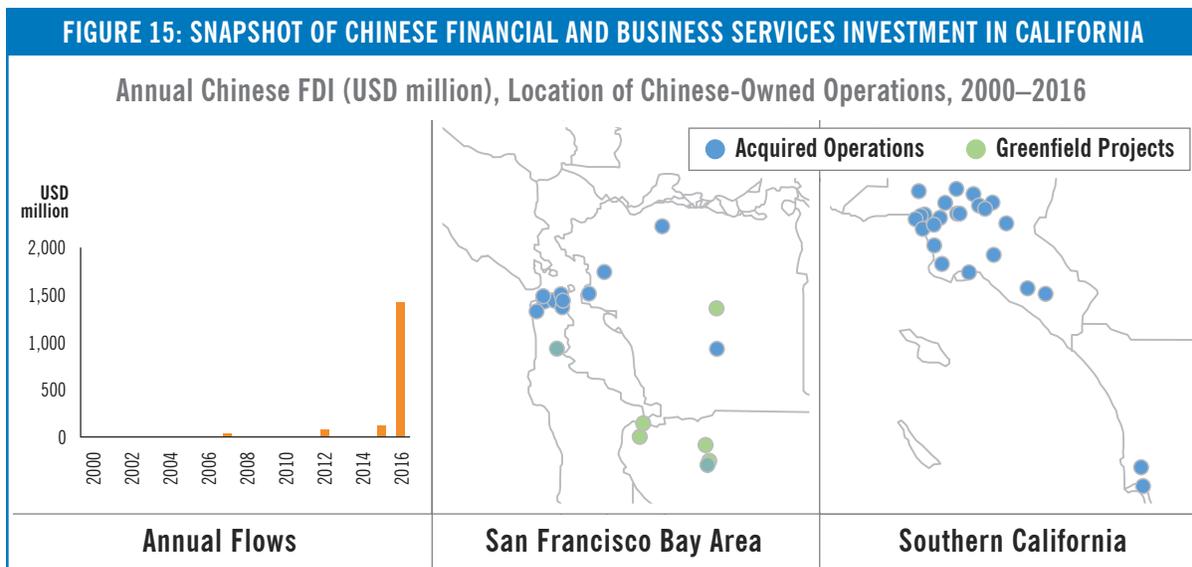


Source: Rhodium Group. See the methodology appendix for more details.

FINANCIAL AND BUSINESS SERVICES

Chinese investment in the California financial and business services industry initially lagged other states like New York. Prior to 2016, California’s only meaningful representation in this sector was due to a handful of national and international financial services and insurance acquisitions with California locations. ICBC’s acquisition of the Bank of East Asia USA, Fosun’s acquisition of Meadowbrook Insurance and China Merchant’s acquisition of Wing Lung Bank were among these.

This changed in 2016 as a growing number of California startups and technology companies emerged in the space. Chinese investors became more active in private equity and venture capital investments



Source: Rhodium Group. See the methodology appendix for more details.

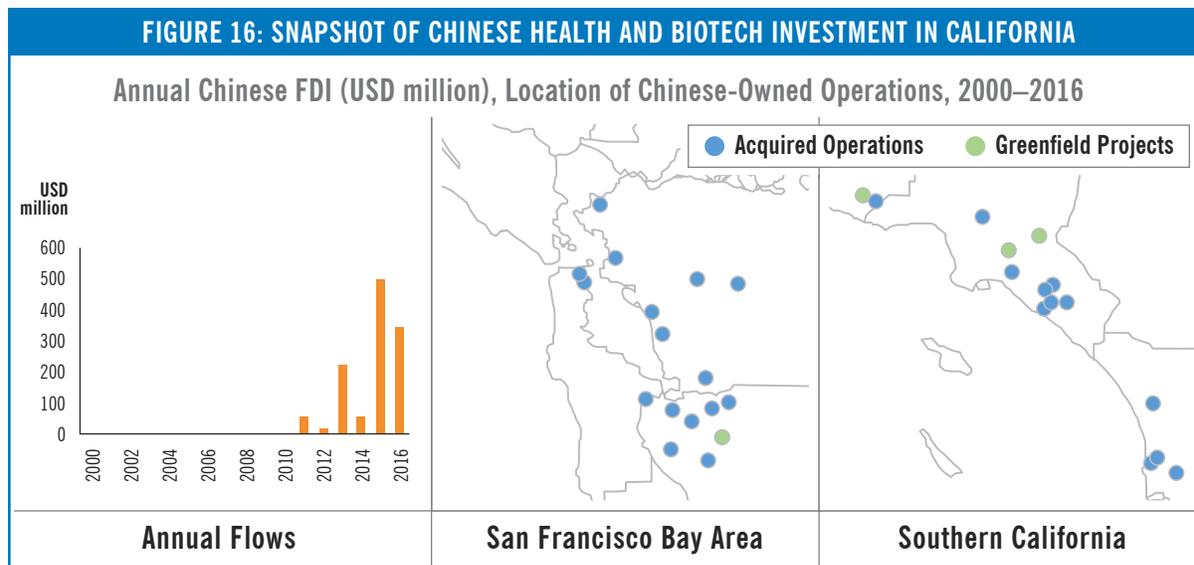
in innovative financial services companies like ZestFinance, LendingClub, LendingHome and SoFi. Chinese direct investments also multiplied in 2016, with major deals like Huatai Securities’ acquisition of AssetMark.

HEALTH AND BIOTECH

Acquisitions, including several sizeable deals, make up most of the cumulative Chinese investment value in California’s health and biotechnology sector. Top deals include BGI’s acquisition of Complete Genomics, Mindray’s acquisition of ZONARE Medical Systems, and a Chinese consortium’s acquisition of Ambrx.

The San Francisco Bay Area and San Diego County are established hubs for health and biotech research. Major Chinese-invested operations in the Bay Area include Complete Genomics and ZONARE, as well as PTS Diagnostics (Sinocare), and Spirometrix (Fosun). Major investments in San Diego include Ambrx (a Chinese consortium composed of Shanghai Fosun Pharmaceutical Group, HOPU Investments, CEL Healthcare Fund, and WuXi PharmaTech) and Abgent (Wuxi Pharmatech). Los Angeles is host to other health-related firms, including US Healthcare Management Enterprises (acquired by Golden Meditech) and nutritional supplement companies Vit-Best Nutrition and Doctor’s Best (both acquired by Kingdomway). Los Angeles also hosts subsidiaries of national healthcare companies such as MP Biomedicals (acquired by Valiant) and Alliance HealthCare Services (acquisition of a stake by Fujian Thai Hot).

As with the ICT sector, health and biotech has seen increasing interest from Chinese VC investors. Chinese venture firms have backed more than 100 such companies in California, mostly since 2014. Most of these investments have been in pharmaceuticals and biotechnology firms developing innovative therapies for cancers and other human infectious diseases and in medical devices and healthcare administration companies.



Source: Rhodium Group. See the methodology appendix for more details.

IV. INVESTOR CHARACTERISTICS

THE MIX OF CHINESE INVESTORS IN CALIFORNIA IS NOTABLY DIFFERENT FROM THE REST OF THE UNITED STATES. First, the clear majority of Chinese investment in California has come from private Chinese investors; more than 81% of transactions and 80% of transaction value from 2000 to 2016 originated from privately owned Chinese firms (which we define as 80% or more privately held). That compares to 72% of transactions and 68% of total value for the rest of the United States. The largest private investors in California are HNA, Wanda, Oceanwide and Tencent. The largest state-owned investors are firms connected to Beijing's national information technology fund (such as Hua Capital), financial sector investors (Huatai Securities) and real estate developers (Greenland) (Table 1).

TABLE 1: TOP CHINESE INVESTORS IN CALIFORNIA

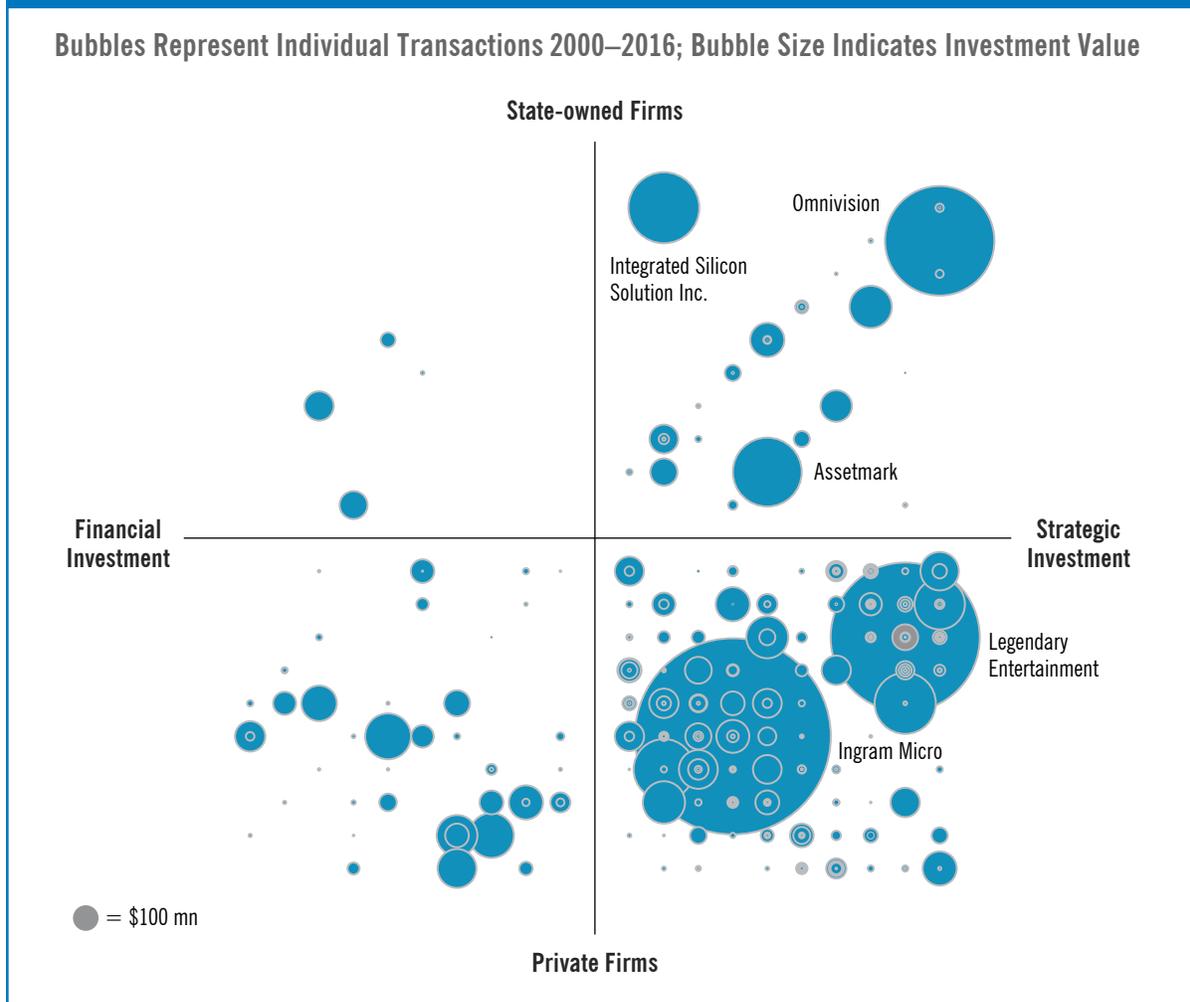
Selected Companies Based on Total Investment Value		
Investor	Ownership	Major Subsidiaries/Operations
Alibaba	Private	R&D operations, data centers
Baidu	Private	R&D operations
Beijing E-Town	State-Owned	Mattson Technology
Beijing Shanghai Capital	State-Owned	Analogix Semiconductor
Fosun	Private	Studio 8
Genzon Group	Private	Burlingame Point development, 225 Bush St. (SF Bay Area)
Greenland	State-Owned	Metropolis development (Los Angeles)
Guangzhou R&F	Private	Silvery Tower (SF Bay Area), 1133 South Hope St. (Los Angeles)
HNA Group	Private	Ingram Micro, hotel properties
Hua Capital	State-Owned	Omnivision, ISSI
Huatai Securities	State-Owned	AssetMark
Landsea	Private	Residential real estate developments
Legend Capital	Private	Pharmaron Holding
Oceanwide	Private	Oceanwide Center (Bay Area), Oceanwide Plaza (Los Angeles)
Shanda Group	Private	LendingClub
Shenzhen New World	Private	Marriot Downtown LA, Sheraton Universal (Los Angeles)
Suzhou Dongshan Precision Mfg.	Private	Multi-Fineline Electronix
Tencent	Private	Riot Games, Glu Mobile, Pocket Gems, data centers
Vanke	Private	Lumina development (SF Bay Area)
Wanda	Private	AMC theaters, Legendary Entertainment, One Beverly Hills development

Source: Rhodium Group. See the methodology appendix for more details.

Another major difference is that most Chinese firms in California have been strategic investors (companies investing in their core areas of business to improve technology and long-term competitiveness). From 2000 to 2016, 88% of total transaction value in California was tied to strategic investments (Figure 17). The largest of these included the Omnivision, Integrated Silicon Solutions Inc. (both acquired by

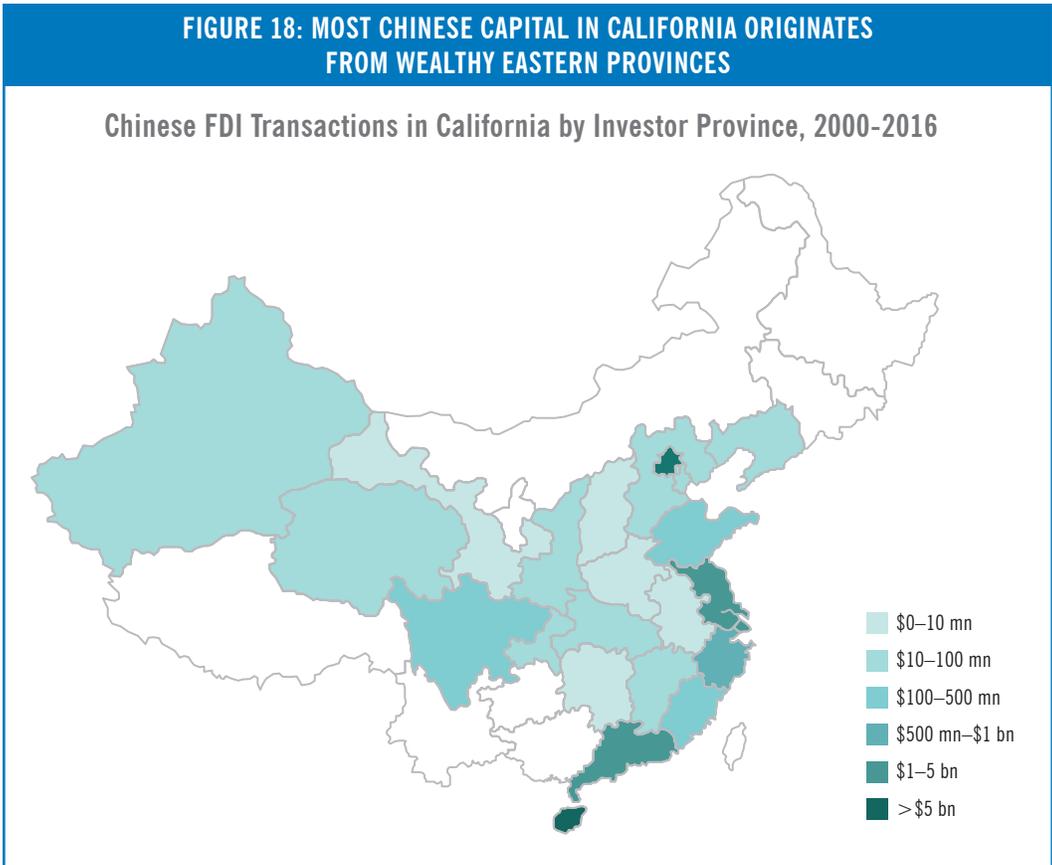
Chinese consortiums) and AssetMark (acquired by Huatai Securities) deals. Only 12% of total investment value in the state from 2000 to 2016 was tied to financial transactions (deals primarily motivated by financial returns). This is much lower than the mix in the broader US, where more than a quarter of total investment value from 2014 to 2016 (32%) was driven by financial deals in real estate and other sectors.

FIGURE 17: CHINESE INVESTORS IN CALIFORNIA ARE MOSTLY PRIVATE AND MAKE STRATEGIC INVESTMENTS



Source: Rhodium Group. State-owned entities refer to companies that are at least 20% owned by the government, sovereign entities, and central state-owned enterprises (SOE); Private entities refer to companies with less than 20% ownership by the government, sovereign entities, and central SOEs. Strategic investments refer to real economy firms making strategic investments in their core areas of business; financial investments refer to those made primarily for financial returns. The four quadrants are categorical and the position of the bubbles are arbitrary. See the methodology appendix for more details.

Chinese investors in California generally come from the same Chinese provinces as investors in the broader United States. The top sources of Chinese FDI in California are Beijing, Hainan, Guangdong, Shanghai, Jiangsu, and Zhejiang. These are mostly affluent, coastal provinces with significant global outbound investment activities. Despite its smaller geographic size, Beijing is a popular headquarters location for state-owned enterprises as well as big private firms like Wanda. Hainan also stands out somewhat from the rest of this list as a much smaller island province and is only included because of HNA, which has a large asset base and numerous subsidiaries in California.



Source: Rhodium Group.

V. LOCAL IMPACTS

THE TRADITIONAL VIEW THAT FOREIGN DIRECT INVESTMENT INCREASES A NATION'S AGGREGATE ECONOMIC WELFARE rests on several arguments. FDI allows firms to explore new markets and operate more efficiently across borders, reducing production costs and increasing economies of scale while promoting specialization. FDI supports better pricing for firms looking to divest assets thanks to a larger pool of potential bidders. For consumers, FDI can increase buying choices, lower prices and promote firms to innovate and produce higher-quality products and services. And in local communities, FDI brings new jobs, tax revenues, and knowledge spillovers from worker training, technology transfers and R&D activities.

There is also long list of potential negative impacts on host countries and local communities from foreign investment: national security risks tied to foreign ownership of or proximity to sensitive assets; changes in sourcing behavior impacting the host country's trade patterns and balance; decrease in competition and consumer welfare if mergers are anti-competitive; and market distortions caused by subsidies and mercantilist behavior.⁶

Historically, the evidence has shown that benefits from FDI outweigh the potential risks, especially if risks are controlled through adequate regulatory frameworks (such as competition or security reviews). However, the rise of China as a global investor has re-kindled debates about these traditional assumptions due to the special characteristics of the Chinese economy and political system. In this section we discuss both the benefits as well as the concerns associated with increasing Chinese investment in California, and review evidence and examples that shed light on the validity of enthusiasm and anxieties.

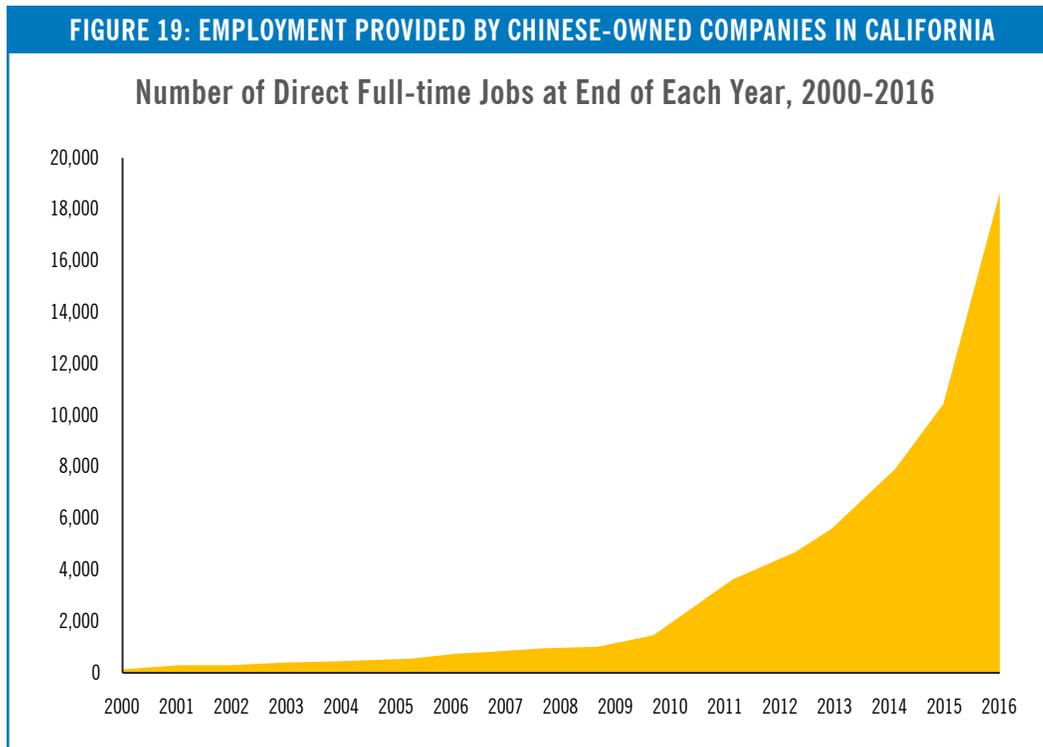
BENEFITS

Foreign direct investment has been a critical source of growth, innovation, and long-term competitiveness for California and is a vital part of the state's economy. Foreign companies create and sustain jobs, are drivers of innovation and technology clusters and maintain much-needed linkages to facilitate the export of Californian products and technology to overseas markets. The rise of China – an 11 trillion-dollar-plus economy – as a major global investor is an important opportunity for the state. There is plenty of evidence from recent years that illustrates potential benefits.

First, **Chinese companies have created local jobs in high-paying industries.** Compared to the broader United States, California is an outsized beneficiary of China's technology investment push and resulting local white-collar employment. Based on our transactions data, we estimate that by the end of 2016 more than 19,000 Californian households were receiving paychecks from Chinese-owned companies.

The majority (82%) of these 19,000 employees came onto the payrolls of Chinese companies through acquisitions. Chinese companies are trying to climb up the global technology ladder quickly but face shortages of talent at home. With its world-class industry clusters, rich universe of innovative companies, and a well-educated, international and diverse workforce, California is an ideal place for Chinese companies to build technology-related outposts in the United States. Acquisitions are the quickest way for building that presence. Importantly, most Chinese acquisitions in the US so far have resulted in

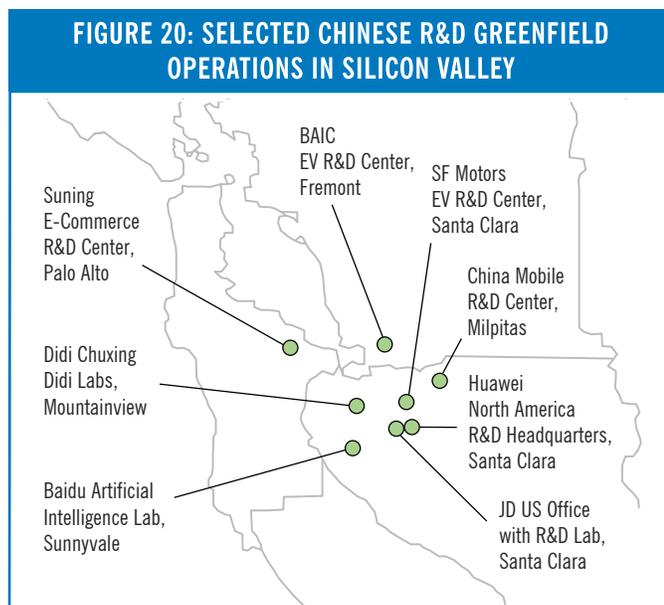
⁶ For a more detailed discussion of benefits and risks associated with FDI, see Rosen and Hanemann (2011), Rosen and Hanemann (2012).



Source: Rhodium Group.

stable or expanding local workforces (see discussion of the “headquarters effect” in the risk section).

California also benefits from significant Chinese investment in research and development centers and other technology-related greenfield operations. Since 2000, the state has received more than \$820 million of Chinese greenfield FDI in innovation-intensive industries, which is 20% of the national total. In the San Francisco Bay Area, we count more than twenty R&D facilities by Chinese companies with more than 500 combined employees (Figure 20). One of the most prominent examples is Baidu’s artificial intelligence laboratory in Sunnyvale, California. Baidu established the lab in 2014 and was one of the first Chinese tech giants to embrace artificial intelligence (AI) research. The center focuses on deep learning topics such as speech recognition and now has nearly 200 employees. In early 2017, Baidu announced it will open a second “Artificial Learning and Autonomous Driving Unit” in Silicon Valley close to the current AI lab.



Source: Rhodium Group.

Chinese presence also benefits California through local innovation spillovers. While Chinese companies are – on average – not yet technology leaders in their fields, several companies have already made this leap. Examples include Huawei in communications technology, Alibaba and JD.com in e-commerce and logistics, DJI in drones, Tencent and Alipay in mobile payments and Xiaomi in mobile phones.⁷ China will produce more of these leaders going forward, and California can benefit enormously from these firms bringing new technologies, approaches and brain power to the state and its innovation clusters.

Financial technology illustrates this potential. China has leapfrogged others in this area and now has the world's largest mobile payments market with an estimated annual transactions value of more than \$5.5 trillion (more than 50 times the size of the US market). China's two largest mobile payment providers, Tencent's Wechat (650 million global monthly active users) and Alibaba's Alipay (450 million global monthly active users) both have operations in California. These firms' presences will help boost growth of local fintech clusters, facilitate the transfer of knowledge to US staff and partners and fund additional R&D activities. Moreover, those companies' US market entry can help facilitate innovation in other parts of the California economy. In early 2017, Alipay inked a deal with US payment processor First Data to allow the Alipay service to be used by Chinese visitors at four million US retail locations. Similarly, Wechat recently partnered with Silicon Valley start-up Citcon to allow Chinese tourists to pay at brick-and-mortar shops.

Finally, Chinese FDI creates **critical linkages** to foster the export of physical goods and services to the Chinese market. China is now the third-largest export market for Californian goods, accounting for more than \$13 billion in 2016.⁸ China's middle class is also a large and growing source of demand for Californian services such as tourism, education, entertainment, and software. In 2016, California exported services worth \$7 billion to China, the most of any state. The presence of Chinese companies in California also creates additional demand for modern business services, for example financial services provided by California banks or transportation services through California ports.

An illustrative example of Chinese FDI fostering Californian service exports to China is online gaming. Riot Games is a US video game developer based in Los Angeles. After partnering to bring Riot's main game League of Legends to China in 2008, Chinese tech giant Tencent bought a majority stake (93%) in Riot Games in 2011 for a reported \$400 million. Tencent's leadership pushed the number of active League of Legends players in China to over 100 million in the following years, accounting for about 90% of total global players. Revenue swelled to more than \$1.5 billion annually. Riot Games now employs nearly 2,000 people in the US, up from just 150 in 2011, the majority of whom are based in California.

RISKS

While these data points and examples illustrate the tremendous potential benefits from additional Chinese FDI in California, there are also potential risks stemming from foreign ownership. Some have argued that Chinese capital may pose greater risks than investors from other countries due to China's unique characteristics: China has an autocratic political system and no rule of law; it is not a military ally of the United States but a geopolitical competitor; it has a fundamentally different economic system with heavy state intervention; and its innovation system is based on industrial policy and other non-market elements.⁹ These realities present a number of challenges atypical of most inward investment in the US.

⁷ For more details on Chinese innovation developments, see Randolph (2017).

⁸ See the US-China Business Council report: <https://www.uschina.org/reports/us-exports/california>

⁹ See Daniel and Hanemann (2011).

First, there are **heightened security concerns about Chinese investment, which could impact local companies' ability to participate in defense-related supply chains**. China and the US are competing geopolitically with increasing frequency, and China has demonstrated growing assertiveness in the global arena.¹⁰ As such, Chinese ownership triggers greater sensitivities in the defense and security community than investments from Canada, the United Kingdom or other allied democracies. At the federal level, these considerations cause Chinese transactions to receive particular scrutiny by the Committee on Foreign Investment in the United States (CFIUS), an inter-agency panel that reviews foreign acquisitions for potential security threats including leakage of sensitive technology, influence over defense-relevant supply chains and proximity of acquired assets to military bases and other sensitive infrastructure.

For California, these security concerns could impact the ability of local companies or industry clusters to participate in defense-related value chains if they take on Chinese capital. Defense has historically been an important source of funding for Silicon Valley and other technology clusters in the United States. Even today, the military-industrial market remains large with more than \$200 billion of annual revenue. Integrity standards for these value chains are very high, and participation of companies from non-allied states is scrutinized heavily. Chinese investment, no matter how small it is or whether it receives CFIUS approval, will most likely hinder the future prospects of Californian companies participating in those markets.

Second, there are concerns that **Chinese companies could acquire Californian technology assets and then offshore activity and jobs back to China** (the so-called “headquarters effect”).¹² This argument has grown in potency against the backdrop of China’s extensive use of industrial policy and government pressure to maximize job creation and R&D spending at home. However, from a national perspective our dataset does not currently indicate that Chinese firms are, in general, behaving differently than other foreign investors in this regard. On the contrary, in most cases Chinese firms have ramped up local spending and US employment, indicating that they value the American high-tech talent and industry clusters they are investing in.

The track record of Chinese companies in California is similar. There are examples for California technology companies that were purchased by Chinese investors and subsequently downsized or even shut down. In 2012 Beijing Genomics Institute (BGI) acquired gene sequencing company Complete Genomics in Mountain View for \$118 million. Three years later, BGI cut local staff at Complete Genomics substantially as part of a restructuring that turned the company into an R&D organization supporting BGI products and clinical work. However, cases like this are a small minority and we find no tendency toward greater post-acquisition struggles or predatory behavior. In most cases, Chinese companies add to local staff after Golden State acquisitions. Prominent examples include Miasole in Santa Clara, Fisker Automotive in Anaheim, and Riot Games in Los Angeles.

A third concern from a local perspective is that **Chinese companies do not have the governance structures in place to comply with local regulations**. Compared to most high-income economies, China’s legal and regulatory environment is still under-developed in areas such as labor and other social standards, environmental protection, bribery and money laundering and protection of intellectual property rights. Many Chinese companies lack the experience and internal structures to comply

¹⁰ See the Economist, “China Declares itself a Global Power,” September 14, 2017, <https://www.economist.com/news/china/21728970-its-all-thanks-xi-jinping-china-declares-itself-global-power>.

¹¹ See Louis Uchitelle, “The U.S. Still Leans on the Military-Industrial Complex,” *New York Times*, Sept. 22, 2017, <https://www.nytimes.com/2017/09/22/business/economy/military-industrial-complex.html?mcubz=0>

¹² See Graham and Krugman (1995).

with more complex regulations in other jurisdictions.

Several Chinese firms have encountered difficulties in the US market because of the lack of adequate compliance frameworks. The most prominent example is ZTE's lack of compliance with US export controls. Earlier this year, the firm pleaded guilty to breaking US sanctions by exporting US technology to Iran for a period of five years, and hiding evidence through a complex internal system. ZTE agreed to pay a fine of \$892 million.¹³ In California, Chinese companies have struggled with labor laws. For example, in 2014 California regulators fined Chinese auto and battery maker BYD \$10,000 for breaking the minimum wage law. The citation was later dropped after BYD provided additional evidence. Under a separate dispute with the City of Los Angeles regarding paying a “living wage” as a city contractor, BYD paid back \$1,300 in wages and benefits to three workers in 2016.¹⁴

While cases of mis- or under-compliance clearly exist, there is no evidence that Chinese companies violate local laws intentionally. More importantly, fears that Chinese companies could “import” weaker regulatory standards and bad practices are not justified. Market entry through FDI gives local regulators and courts the leverage to enforce compliance with local laws, which is markedly different from Chinese firms serving the US market through exports. In the past, intellectual property rights violations by Chinese manufacturers were often not sanctionable as China does not enforce US court decisions. FDI translates into local assets in the US, which means that Chinese firms can be sued in local courts and face serious consequences from litigation.

Finally, and perhaps most importantly, there are concerns that **Chinese investment could introduce unfair competition for Californian companies**. Beijing still intervenes heavily in its economy through various subsidies, industrial policy, direct state ownership, restrictions on foreign investment and other means.¹⁵ Thus, the conventional argument that FDI brings healthy competition must be evaluated in light of the strategic economic policy considerations that could harm American firms, market systems or individual vested interests. Existing investment restrictions and discrimination of foreign firms in China are particular problems. In the past, these obstacles mostly hampered business opportunities for American companies in China. However, as Chinese companies have now developed the capabilities to invest overseas, such unequal market access could give them an unfair advantage not just at home but also in the US and other foreign markets.

This is highly relevant for California, as Chinese restrictions and distortions are particularly pervasive in sectors in which California firms possess a strong competitive edge. Many large US technology companies have faced significant formal and informal hurdles in China for some decades, which has enabled local companies to displace their foreign counterparts and conquer the domestic market. The advent of two-way FDI flows now makes that asymmetry even more problematic. Growing outbound investment is a clear sign that Chinese companies are now able to compete head-to-head with US firms in their home market and third markets, and protectionism at home tilts the playing field in their favor and hurts Californian companies.¹⁶

The internet industry provides plenty of relevant case studies. China's search engine giant Baidu, for example, started out as a Google clone and then came to dominate China's search engine market after Google exited the Chinese market in 2010 due to concerns about complying with Chinese internet

¹³ See Karen Freifeld, “China's ZTE Corp Pleads Guilty in U.S. Court in Sanction Case,” Reuters, March 22, 2017, <https://www.reuters.com/article/us-usa-china-zte/chinas-zte-corp-pleads-guilty-in-u-s-court-in-sanctions-case-idUSKBN16T33Y>

¹⁴ See Emily Alpert Reyes, “Electric Vehicle Firm Pays Back Wages to Three Workers After City Investigation,” *Los Angeles Times*, April 29, 2017, <http://www.latimes.com/local/lanow/la-me-ln-wage-rules-20160429-story.html>

¹⁵ For more background on Chinese government's influence over business operations and innovation, see Randolph (2017).

ensorship. Baidu now utilizes operations in California to create capabilities in artificial intelligence and other areas, which could be utilized to beat-out Google (which employs more than 30,000 people in California) in third markets in Southeast Asia, the Middle East or elsewhere.

Cloud-based storage and related services are another example. Through its Cybersecurity Law and a range of related regulations, China imposes numerous restrictions on foreign technology companies (including mandatory joint ventures). At the same time, Alibaba, China Unicom and other Chinese providers can operate without such restrictions in the United States, competing with Google, Dropbox, Oracle, and other Californian companies for market share.

Similar concerns apply to many advanced manufacturing sectors, where Chinese acquisitions and R&D operations in the US are improving the capabilities of Chinese firms that may already enjoy unfair advantages from subsidies, industrial policies and protected home markets. Electric vehicles are an excellent example. With Tesla Motors, California is home to one of the world's most advanced and iconic electric car manufacturers. China is a large market for electric cars and already accounts for 15% of Tesla's revenue. However, Tesla and other foreign companies face massive restrictions for operating in China, including high tariffs on imported cars and the requirement to engage in a joint venture with a Chinese company (and presumably share technology) in order to manufacture in China.¹⁷ Tesla's Chinese competitors on the other hand have full and unrestricted access to the US market. They can acquire US technology and other assets (see Wanxiang's acquisition of Fisker and A123), tap local talent through research and development centers (Atieva, Nio), and sell their products to consumers and local governments (BYD in Los Angeles).

This double standard in investment is not only a clear burden on US commercial interests, but it is a major problem for California-based companies as it could contribute to the unfair support of new and powerful global competitors.

¹⁶ See comments submitted in response to the Section 301 Investigation on Chinese IPR practices: <https://www.regulations.gov/docketBrowser?rpp=25&so=DESC&sb=commentDueDate&po=50&dct=PS&D=USTR-2017-0016>

¹⁷ Since July 2017, Foreign EV manufacturers are able to establish wholly-owned operations with China's Free Trade Zones (FTZ). See http://www.gov.cn/zhengce/content/2017-06/16/content_5202973.htm

VI. THE CHANGING POLICY ENVIRONMENT

THE BIG 2016 INCREASE IN CHINESE INVESTMENT HAS ELICITED RESPONSES FROM POLICYMAKERS IN BOTH CHINA AND THE US. These new policies have already re-shaped investment patterns in 2017 and will have a significant impact on the level and composition of Chinese FDI in the US going forward. These policies also have special relevance for California; the Golden State is the largest Chinese FDI recipient in the United States, and policies and politics are targeting sectors and types of investments that account for a large share of incoming Chinese investment in the state.

CHINA: CAPITAL FLIGHT CONCERNS AND FINANCIAL RISK MITIGATION

Ballooning Chinese outbound FDI in 2016 coincided with large-scale capital outflows from China through other channels, eliciting concerns among Chinese leaders about exchange rate and balance of payments stability. Net capital outflows under China's non-reserve financial account amounted to \$291 billion in the second half of 2015, reducing China's reserves from a peak of \$4 trillion in June 2014 to \$3.1 trillion in September 2017. In response to these pressures, the Chinese government started rolling back openness for certain types of outbound capital flows, including outward FDI.

This began in early 2016 with Beijing asking banks to exert greater scrutiny over companies' access to foreign exchange and culminated in an internal document in November 2016 that imposed formal restrictions on certain types of outbound FDI to weed out "irrational" outflows. The State Council document blacklisted certain types of overseas direct investments including SOE acquisitions and development of real estate projects over \$1 billion; investments over \$1 billion that are not in a Chinese company's core area of business; all investments over \$10 billion; investments by limited partnerships; investments that involve small stakes under 10% in overseas listed companies; investments in overseas subsidiaries that are much larger than the parent company, and investments that are followed by quick divestitures; domestic capital participating in overseas listed Chinese companies delisting; and investments by companies with high debt to asset ratios and low return on equity.

Several months after introducing this informal guidance, on August 18 the National Development and Reforms Commission (NDRC), Ministry of Commerce (MOFCOM), People's Bank of China (PBOC) and Ministry of Foreign Affairs (MOFA) jointly released the "Guiding Opinions on Further Guiding and Regulating Overseas Investment Direction". The document formally codifies the lists of encouraged, restricted, and prohibited outbound investments and sets up a new system of approvals and regulation. The new system formally restricts investments in sectors such as real estate, hospitality, movie theatres, entertainment, and sports clubs (Table 2).

For California, these new restrictions could mean less Chinese investment in certain industries. For one, China's new "negative list" for outbound investment includes many of the sectors that have been the biggest draws for Chinese capital in the state including real estate, online gaming and other entertainment. But on a more optimistic note, the new rules and high-level comments by Chinese leaders also explicitly reinforce that "rational" outward investment by Chinese companies in innovation and technology is supported by the government, which bodes well for future technology acquisitions and greenfield investments in R&D centers and similar operations.

TABLE 2: ENCOURAGED, RESTRICTED AND PROHIBITED SECTORS UNDER CHINA'S NEW OFDI MANAGEMENT REGIME**ENCOURAGED**

- Infrastructure investments under the Belt and Road initiative
- Investments that promote export of competitive production capacity, high-quality equipment and technical standards
- High-tech and advanced manufacturing investments, overseas R&D centers
- Oil and gas, mining, and other energy investments (after evaluation of economic benefits)
- Agricultural investments
- Service sector investments (business services, culture, logistics and certain types of financial investments)

RESTRICTED

- Investments in regions with no diplomatic relations with China, war or conflicts, and investment restrictions from international agreements
- Investments in real estate, hospitality, movie theatres, entertainment, sports clubs and similar areas
- Equity investment funds or investment platforms with no actual physical projects abroad
- Those employing old equipment not in compliance with the target country's technical standards and regulations
- Those that are not in compliance with the target country's environmental requirements, energy use, and safety standards

PROHIBITED

- Those involving export of unapproved military industrial core technology or products
- Those that utilize technology or products that are prohibited from being exported
- Investments in gambling and pornography
- Those that are prohibited based on international agreements
- Any other investments that may harm China's interests and security

Source: Rhodium Group.

In addition to rolling back its liberal outbound FDI regime, Beijing has also put pressure on outbound investors through a campaign that scrutinizes potential financial liabilities arising from aggressive outbound investment. In the summer of 2017, China's banking regulators announced investigations into overseas investments by several private companies including Wanda, Fosun, Anbang, HNA and Rossoneri Sport Investment (investor in AC Milan), cautioning banks to not extend further loans to these companies for overseas projects. These investigations should be seen in the context of a more aggressive campaign to reduce leverage and potential risks in China's financial system. These steps may be prudent, but they did have a chilling effect on the pace of outbound investment by privately-owned firms, which have been key drivers of Chinese investment in California.

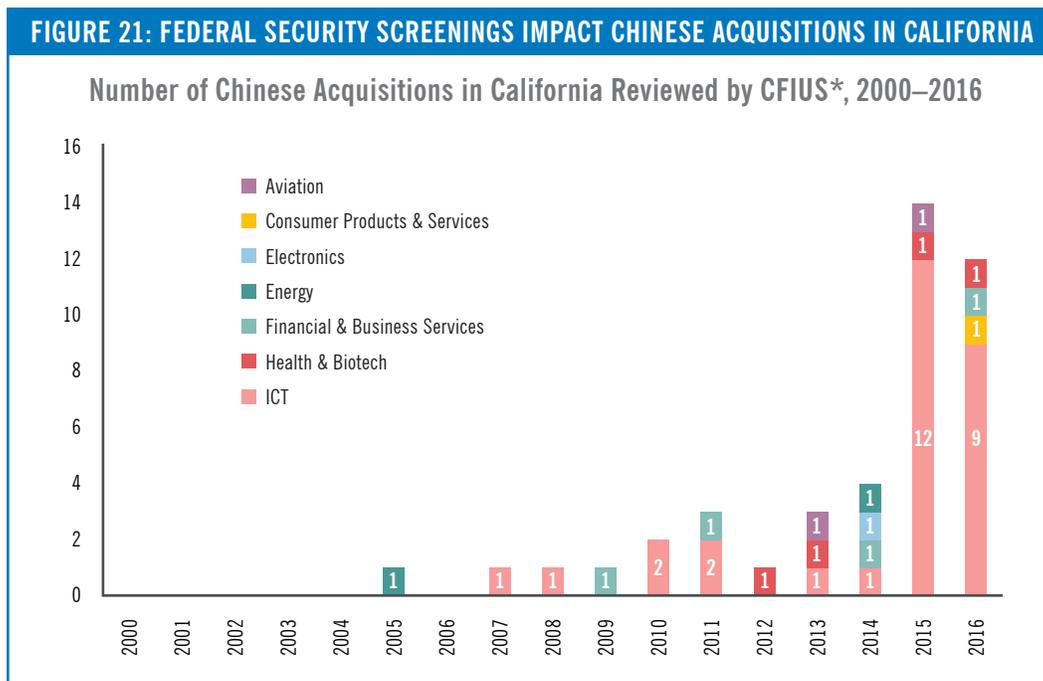
UNITED STATES: NATIONAL SECURITY SCREENING, TECHNOLOGY TRANSFER AND RECIPROCITY CONCERNS

The surge of Chinese outbound investment in 2016 has also triggered greater scrutiny of Chinese investors in the United States. Much attention has been given to the role of national security screenings through CFIUS, which Chinese firms have found increasingly difficult to navigate since the beginning of 2017. Longer review and approval times can likely be attributed to significant delays in appointing key officials within the Trump administration, the rapid increase of Chinese acquisitions and the shift toward technology investments. An increase in early-stage venture financing has also contributed to

fundamental debates about the need to reform CFIUS to make it more robust.

Several members of Congress are currently in the process of drafting legislation that would change the scope and process of CFIUS reviews. One of these efforts is led by Senator John Cornyn of Texas, who aims at introducing a bipartisan bill to reform CFIUS dubbed “The Foreign Investment Risk Review Modernization Act”. According to Senator Cornyn, the bill will keep CFIUS narrowly focused on national security and not expand its scope to include economic considerations. However, the bill will expand CFIUS’ ability to review foreign investments in early stage technology companies and other high-tech investments, allow reviews of joint ventures, and increase scrutiny for investment from “problematic” countries, which appear likely to include China and Russia.¹⁸

For California, greater federal scrutiny of Chinese technology investments could pressure deal flow. CFIUS has been a major factor for Chinese acquisitions in the state; we estimate that the number of deals in California subject to CFIUS review grew into the double digits in 2015 and 2016. Most of these transactions were eventually approved, but some had to be modified or were only approved with conditions. And some deals have been abandoned due to CFIUS concerns, for example a Chinese consortium’s bid for Fairchild Semiconductor in 2016 and the takeover of Lattice Semiconductor by a consortium with Chinese involvement. Finally, and perhaps most importantly, it is impossible to know how many transactions have not been pursued by Chinese buyers due to concerns about CFIUS reviews. We know of several prospective Californian deals that were withdrawn as it became clear that CFIUS would stand in the way – for example Tsinghua Unisplendour’s proposed investment in Western Digital. Looking forward, the design of a new CFIUS regime will be an important variable for future Chinese deal flow in California, especially if there is greater scrutiny over high-tech acquisitions, venture capital and other non-FDI investment channels.



Source: Rhodium Group. *CFIUS cases are confidential, numbers represent conservative estimates by the author based on corporate filings and other publicly available information.

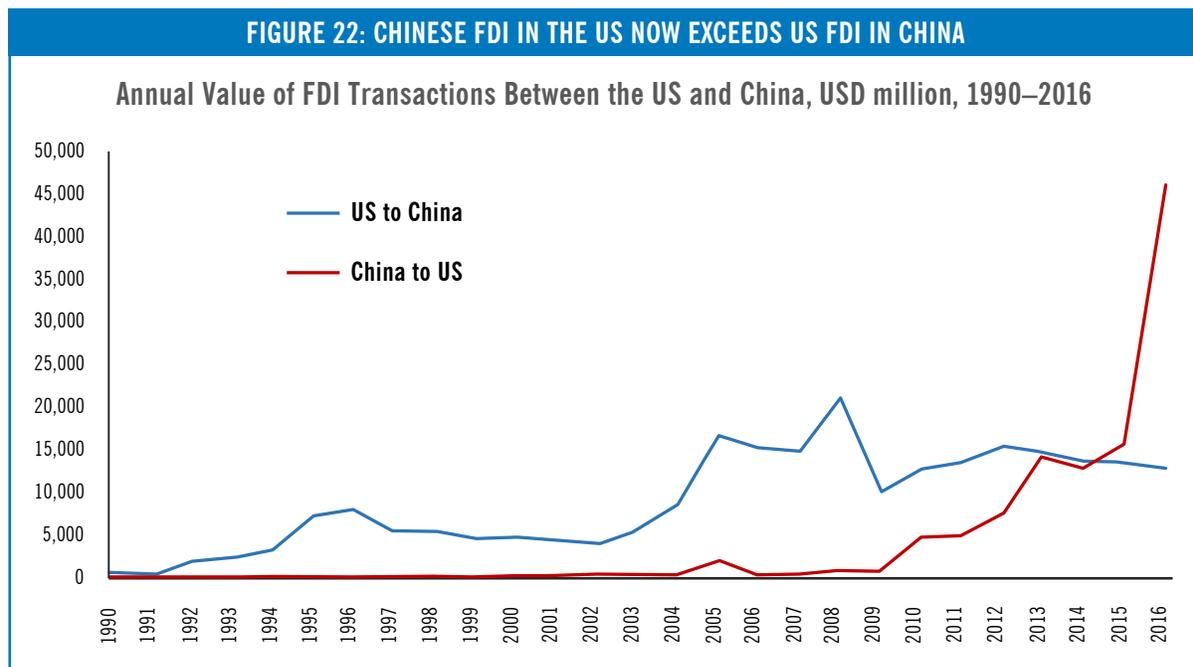
¹⁸ See Senator Cornyn speak on the proposal: <https://www.cfr.org/event/foreign-investments-and-national-security-conversation-senator-john-cornyn>

Other federal government initiatives may also impact Chinese investment going forward. One important arena is the Trump Administration’s effort to address forced technology transfers through a Section 301 investigation. In August 2017, the U.S Trade Representative Robert Lighthizer (USTR) formally initiated an investigation into China practices under Section 301 of the Trade Act of 1974. The investigation will seek to determine whether China has engaged in unfair intellectual property practices. Within the investigation, Chinese acquisition of US technology is explicitly mentioned as a channel for potentially illicit technology transfer:

“[T]he Chinese government reportedly directs and/or unfairly facilitates the systematic investment in, and/or acquisition of, US companies and assets by Chinese companies to obtain cutting-edge technologies and intellectual property and generate largescale technology transfer in industries deemed important by Chinese government industrial plans.”¹⁹

In case of a negative outcome, the 301 Investigation could result in US government policies that at least temporarily limit the ability of Chinese companies to invest in the United States. Section 301 of the Trade Act of 1974 gives the US President the authority to “take all appropriate action, including retaliation, to obtain the removal of any act, policy, or practice of a foreign government that violates an international trade agreement or is unjustified, unreasonable, or discriminatory, and that burdens or restricts US commerce.”

Finally, as discussed above, the lack of reciprocity in market access has opened another channel for potential political pushback against Chinese FDI in the US. While China has been extraordinarily open compared to other emerging economies, foreign investors continue to face significant barriers and restrictions for investing in the Chinese economy. Reforms have moved slow and key sectors such as automotive manufacturing and financial services remain subject to foreign ownership limits. Chinese

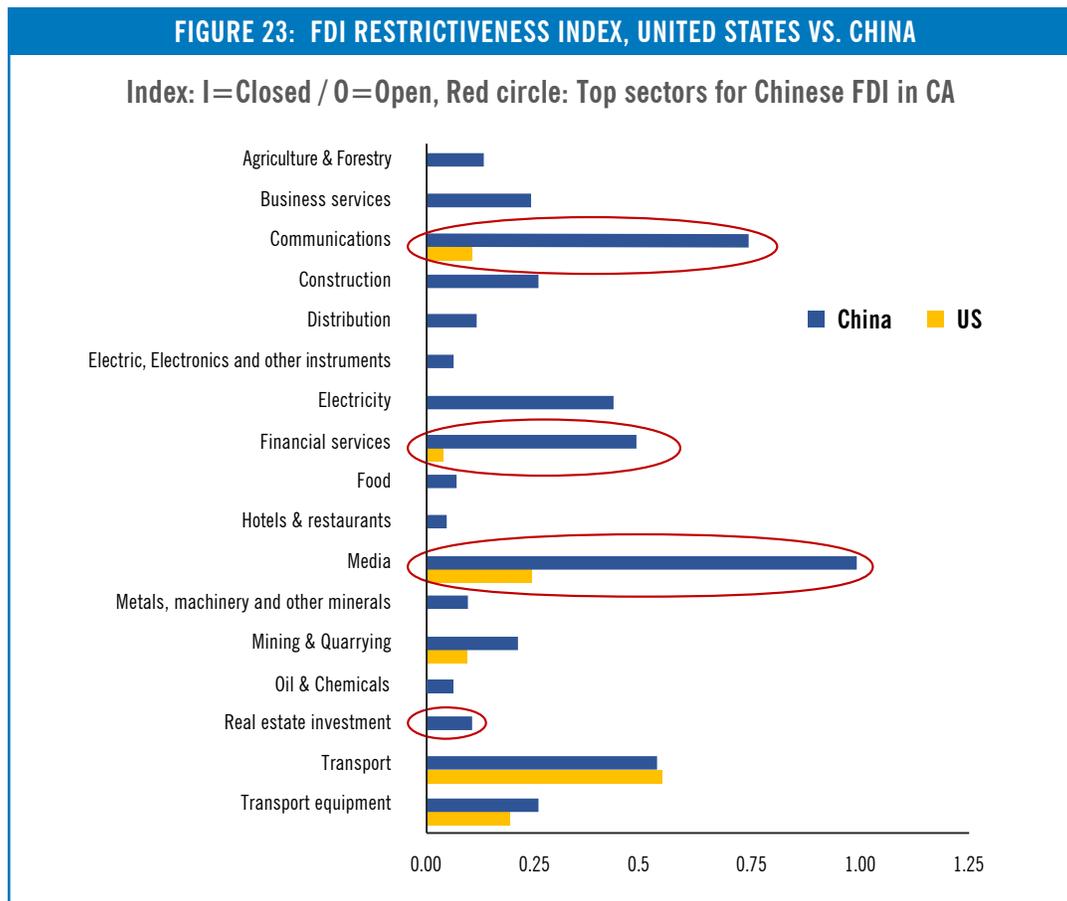


Source: Rhodium Group. See the methodology appendix for more details.

¹⁹ The Federal Register is available at: <https://www.gpo.gov/fdsys/pkg/FR-2017-08-24/pdf/2017-17931.pdf>

firms have not faced the same barriers abroad as Chinese OFDI has surged since the early 2000s, spawning debates about fairness. These concerns have become increasingly acute in the past year as the relative growth rate of two-way flows has diverged further. In 2016, the gap in flows to the US versus flows to China widened dramatically, with Chinese FDI in the US tripling to \$46 billion and US FDI in China staying largely flat at just a quarter of that level (Figure 22).

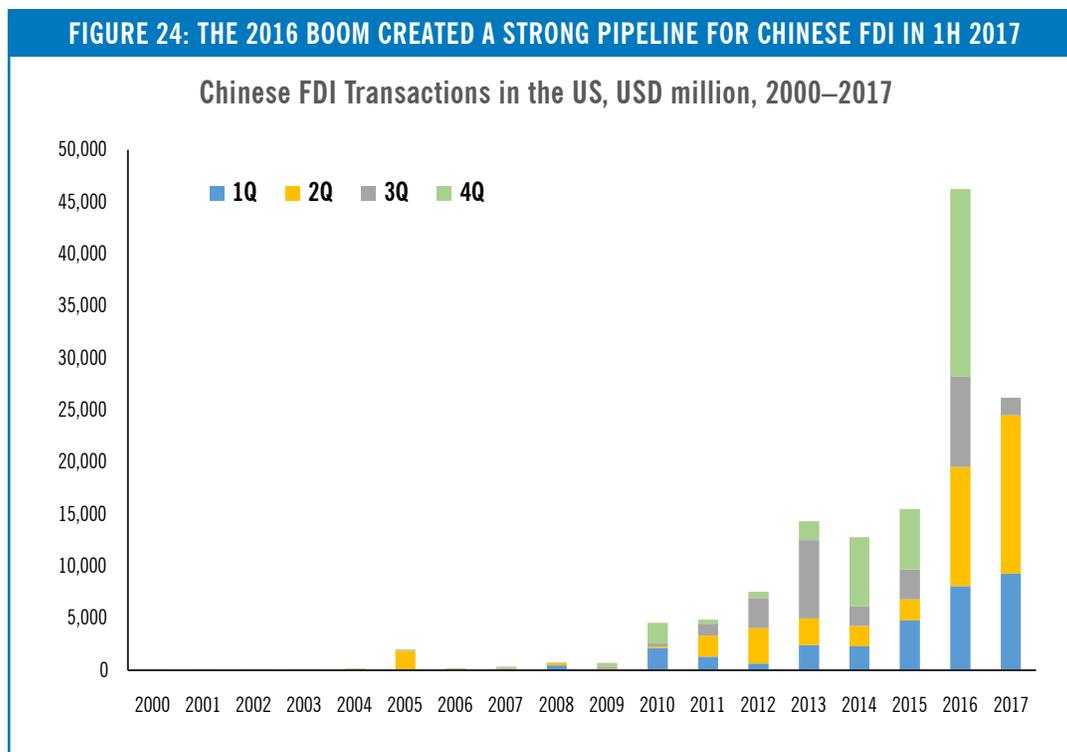
This situation is raising red flags in business communities and political circles alike. If this frustration translates into political action (for example through direct or relative reciprocity requirements), Chinese investment in California would be in jeopardy. Chinese market barriers are especially pervasive in sectors in which the Chinese invest in California (high-tech and services); thus, if the federal government imposes formal reciprocity requirements – forbidding Chinese firms from investing in sectors in which US companies don't have market access in China – California would be one of the most impacted states with its clusters of advanced manufacturing, software or entertainment. It is also likely that China would retaliate against any such policies, which could put additional burdens on Californian companies' Chinese operations.



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.

OUTLOOK AND CONCLUSIONS

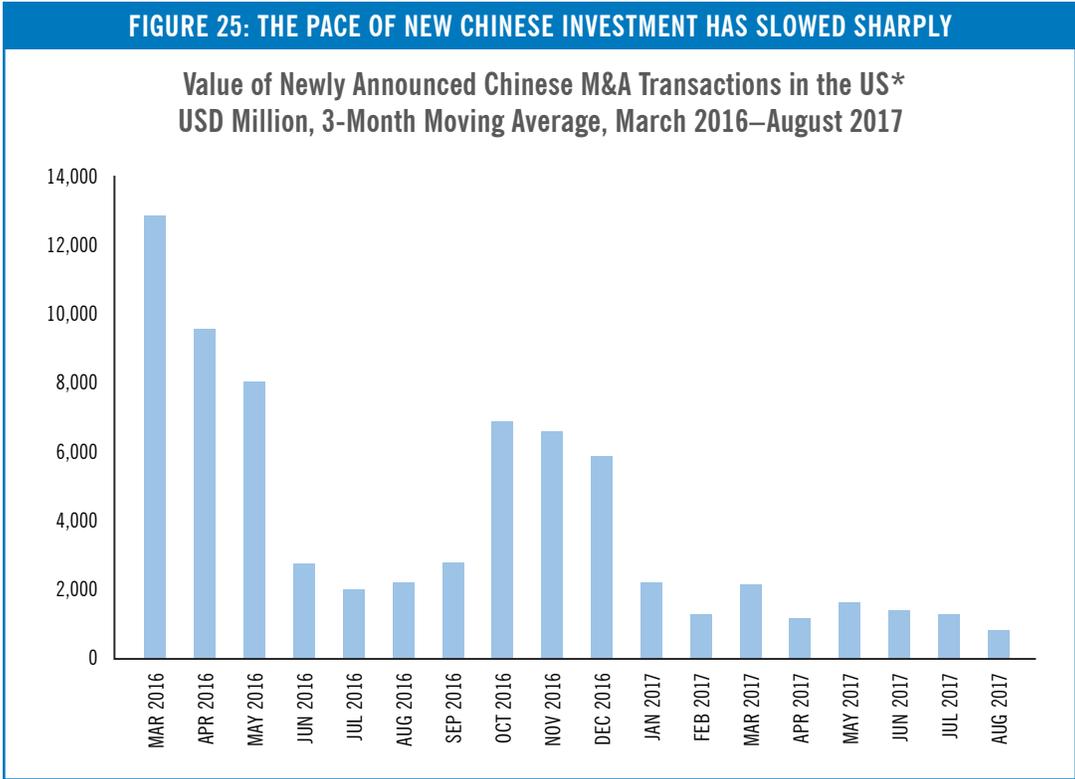
The shifts in the political and regulatory landscape impacted Chinese outbound investment in the US and California in 2017. In 1H 2017, Chinese investment held up in terms of completed transactions; Chinese companies completed \$24.7 billion FDI transactions in the US, an increase of 34% compared to the same period last year. However, this largely reflected completion of deals announced in 2016.



Source: Rhodium Group.

The pace of newly announced transactions declined sharply in the first half of 2017, reflecting the more restrictive drift in policy both in Beijing and Washington. From January to June, the number of newly announced M&A transactions in the US fell 10% compared to 2016. The combined value of new acquisitions in the same period dropped 79% year-on-year. Greenfield investment was more resilient and the number of newly announced projects held up well. However, there have not been any announced billion-dollar greenfield projects in the past few months, and we are seeing projects in several sectors being scaled down.

The 2017 numbers are also down for both completed and new projects in California. From January to June, Chinese companies only completed \$1.5 billion of FDI transactions, an 81% drop from the \$7.9 billion during the same period last year. The number of newly announced Chinese M&A transactions in California stayed on par during the first six months, but the value of new deals declined 80% compared to 2016. Greenfield FDI was more stable, but financing of projects in real estate and other sectors particularly affected by policy changes is at risk. For example, a consortium led by developer



Source: Bloomberg, Rhodium Group. *Announced deals include all deals that are completed, pending, and terminated/withdrawn.

Greenland is reportedly looking to sell a recently-purchase plot in Bay Area that was originally intended to be a billion-dollar development.²⁰

The future trajectory of Chinese investment in California will be decided by powerful competing forces: an ever stronger commercial logic for Chinese firms to expand their ambitions in California through direct investment, tested against policy impulses both in China and the US to intervene – for very different reasons – against those investments. Economic fundamentals and business competitiveness demand continued expansion of Chinese outbound investment. With a per capita GDP of just \$8,123 in 2016, China’s outward investment catch-up is still in an early stage, with trillions of dollars more likely to be deployed globally by Chinese firms over the decades to come. The United States stands to receive a significant portion of this capital, and the past decade has shown that diverse and innovation-intensive economies like California are ideally positioned to attract a major share.

While commercial rationale is strong, political headwinds are stronger than ever before. The same innovation advantages that position California to attract foreign investment put on the front lines of emerging policy battles about capital flows and national security. While political opposition to specific deals has in the past been temporary and resolvable in general, today’s concerns arise from deeper, more fundamental questions about the national interest and its compatibility with evolving Chinese tendencies.

Charting a path forward that preserves the benefits of Chinese FDI while adequately mitigating emerging concerns will be difficult. It will require leadership, time, analysis, transparency, education,

²⁰ See Greg Isaacson, “Greenland-led Chinese Consortium Said Dumping \$2 Bil Bay Area Project,” Mingtiandi, October 3, 2017, <https://www.mingtandi.com/real-estate/outbound-investment/greenland-led-chinese-consortium-said-dumping-2-bil-bay-area-project/>

and non-partisan cooperation within the US and between Americans and Chinese both in business and policy. US-China geopolitical frictions will persist, and likely deepen before they subside, over the coming decade or more. Technological innovation will continue to overrun the planning of policymakers, persistently calling into question the boundaries of what is defined as security sensitive.

In light of this foreseeable perfect-storm of challenges, California, as a leading beneficiary of cross border investment in general and FDI from China in particular, has little logical choice but to assume a leadership role in the search for solutions. Both the US and China need better frameworks to separate circumstances in which security-related exceptions to general openness is merited from the far more common cases in which investment is demonstrably benign. Both nations must be truly confident that their screening approaches achieve security imperatives.

At the same time, the non-security issues of fairness in two-way investment must be taken just as seriously. There is near-consensus in the US that China has not yet fulfilled its economic opening objectives, and that the playing field for US companies in China is too unlevel compared to the full national treatment Chinese businesses enjoy in America. The lack of reciprocal treatment is a major factor undermining public support for US openness to Chinese capital, as well as trust in the bilateral relationship more generally. The US and China need to address this situation and agree on a joint pathway to re-establish relative reciprocity and thus public support for open investment policies. As the US state with both the largest value of Chinese investment hosted and the greatest value of US deal flow into China, California is in the best position to speak to the reciprocity debate.

Californians will not be served by waiting for other States, or Washington, to tell them how the FDI regime will be changed. California should step forward and actively shape this discussion. To be credible, and produce a template for managing emerging concerns which will work nationwide – or perhaps globally – Californian officials, businesses, academics and other stakeholders must first get smart on the global context around these issues, and then ensure the agenda they develop addresses both sides of the investment coin – national security and symmetry in economic opportunities for Chinese and Americans. To protect space for the role of Chinese investment California must defuse the knee-jerk nativist instincts which are sweeping through policy debates like brushfires, not just in the US but worldwide, but just as energetically deal frankly and transparently with circumstances that cannot be mitigated. Finally, the Chinese business community in California, which represents a large group of the most advanced and globally-oriented Chinese firms, should be part of the solution too by participating more actively and frankly in efforts to find solutions to current policy challenges.

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METHODOLOGY APPENDIX

Chinese FDI in the United States has grown rapidly over the past decade, yet there is a lack of reliable, real-time data sources to track this trend. Official data often exhibit a 1-2 year time lag and do not capture major trends, due to problems such as significant round tripping and trans-shipping of investments.

RHG's China Investment Monitor (CIM) database offers an alternative perspective on Chinese direct investment in the US by providing an accurate and real-time assessment of trends to policy leaders, executives, and the general public in both China and the US, leading to better policymaking and understanding of opportunities and risks. The data are compiled from a transactional approach which relies on collection and aggregation of data based on individual transactions, including acquisitions, greenfield projects, and expansions. The database provides an aggregated headline figure as well as various metrics of interest.

All data in this report are based on RHG's China Investment Monitor dataset. However, for maps and the assessment of local impacts, we rely on a modified dataset that breaks down FDI transactions into individual subsidiaries instead of logging investments at the headquarters location.

Coverage

The CIM database tracks FDI transactions by ultimately Mainland Chinese-owned firms in the United States. In accordance with common international standards, FDI transactions are defined as greenfield projects or acquisitions of stakes in existing companies that exceed 10% of voting shares. Expansions of existing facilities and joint ventures where Mainland Chinese-ownership equals or exceeds 10% are also recorded.

Portfolio investment transactions (debt or equity stakes of less than 10%) are not included, which accounts for some differences between the CIM database and other sources. The CIM only counts investments in physical assets in the US. In other words, reverse mergers and Chinese firms listing their assets in US markets are not recorded.

Only completed transactions are recorded, while pending and promised transactions are excluded. Completed transactions refer to acquisitions that have been closed, and greenfield and expansion projects that have commenced. Large, multi-year greenfield projects over \$100 million are recorded incrementally. In other words, only the portion actually invested during a specific quarter is recorded.

As there are hundreds or even thousands of small-scale FDI transactions every year that are impossible to follow, the minimum value for individual deals included in the database is \$500,000.

Data Compilation

The CIM database is compiled from a transactional approach, where RHG identifies and collects information on individual transactions that meet the above criteria. The data mining relies on a wide range of different channels, including commercial databases, online search algorithms, media reports, regulatory filings, company reports, industry associations, official statistics, investment promotion agencies, industry contacts, and other sources.

Acquisitions are added to the list at the date of their completion and greenfield projects are added at the date of project commencement when there is evidence available that the project has broken ground or started.

The deal values are recorded based on either the officially announced investment value or the most convincing analyst estimates; total deal values for M&A transactions include both equity investment and assumption of debt. We do not distinguish between domestic and foreign financing for the deal value. Transactions without reliable values are recorded in the database with our best estimate based on similar projects.

Each transaction is coded with additional variables such as headquarters location of the Chinese parent company, employment, geographic location, or ownership of investing company. For ownership, we apply a conservative threshold that requires 80% or more private ownership in order to qualify as private enterprise. Employment data is retrieved directly from company sources or estimated based on similar transactions, revenue, and other data points. Each deal is then assigned an industry category based on the main activity of the US subsidiary, using an industry category system derived from the Standard Industrial Classification (SIC).

The geographic location refers to the state and city which the headquarters of the US subsidiary resides in. For each transaction, the full investment value is logged at the headquarters location.

Data Dissemination and Updates

The CIM database provides aggregates of annual values for FDI transactions calculated from simple aggregation of single investments. This is different from the “stock” concept in official FDI statistics, which are often adjusted for market price fluctuations in equity or for depreciation. The data is updated quarterly, with each update also providing details on various metrics of interest, such as ownership and employment.

During each update, past deals and existing operations are screened again in order to ensure that changes in investment amount, employment, or other relevant metrics are captured in the newest version of the database. Our data is therefore never final, but instead subject to constant updates.

Data Use and Comparability

The CIM dataset provides a real-time perspective on Chinese FDI transactions in the United States. By recording investment flows from a bottom-up perspective, several problems commonly related to balance of payments data are avoided (most importantly the significant time lags and distortions resulting from extensive use of pass-through locations). This makes the dataset a useful alternative for a real-time assessment of aggregate investment patterns, as well as the distribution of those investments by industry, modes of entry, geographical spread, and ownership.

However, the data resulting from this transaction-based approach are not directly comparable to FDI statistics compiled according to Balance of Payments (BOP) principles. The transactions data capture the total value of investment projects by Mainland Chinese—companies in the US, but do not distinguish between financing from China and domestic sources. They also do not take into account intra-company flows between a Chinese parent and US subsidiary if they are not related to a new establishment or expansion of an existing operation. As such, the transactions data cannot be used to analyze BOP-related problems and other topics that require a national accounting perspective.

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