

Two-Way Street: 1H 2020 Update

Pandemic and Politics: US-China Investment Hits Nine-year Low

A Report by the US-China Investment Project

September 2020



EXECUTIVE SUMMARY

Escalating bilateral frictions and the economic fallout from the COVID-19 pandemic pushed US-China capital flows to their lowest level in almost a decade in the first half of 2020. This report reviews the latest trends in US-China investment and analyzes the political dynamics and market developments behind them. Our findings are:

- **Two-way capital flows between the US and China dropped to a nine-year low:** Combined direct and venture capital investment between the two countries totaled \$10.9 billion in 1H 2020, the lowest level since 2H 2011. The drop would have been even larger if not for one especially large acquisition carried over from last year.
- **Chinese FDI in the US rebounded slightly due to one deal:** The total value of completed Chinese direct investment in the United States increased to \$4.7 billion in 1H 2020 from \$3.4 billion in 1H 2019, mainly thanks to Tencent's \$3.4 billion purchase of a minority stake in Universal Music Group. The number of completed investment transactions remained low as a wider and more restrictive set of US policies were applied, especially in the technology sector. Aggressive Chinese buying of distressed US assets under the cloud of COVID-19 – a concern voiced by some US politicians at the start of the year – has not materialized.
- **US FDI in China declined as the dual impact of the pandemic and bilateral tensions hit:** US companies slashed new investment in China in 1H 2020 but remained committed to ongoing greenfield projects and previously announced acquisitions. Completed investments declined to \$4.1 billion, a year-over-year drop of 31%. So far, China's response to more aggressive US policies has been restrained, but US investors could face a backlash if relations continue to sour.
- **Chinese venture activity in the US remained stable but total investment dropped to a six-year low:** While preliminary figures show a modest uptick in the number of Chinese VC transactions in the US in 1H 2020 compared to 2H 2019, the estimated investment volume of \$800 million was the lowest since 2014. The health and biopharma sector accounted for about 50% of the total transaction volume and five of the ten largest transactions in 1H 2020.
- **US venture investment in China hit its lowest level in four years amidst a broader tech slowdown:** VC investment by US firms in China notched a fourth consecutive six-month period of decline as the COVID-19 pandemic further deepened the correction in Chinese technology sector investment since 2018. We estimate US investors participated in 120 transactions and invested only \$1.3 billion in Chinese startups in 1H 2020 with a notable drop in contributions to early-stage fundraising rounds.
- **Growing bilateral tensions are pressuring firms to unravel existing investments:** The order by President Trump for Bytedance to sell social media app TikTok is the latest example of a series of high-profile asset divestitures forced by US regulators. At a time of rising discomfort with US-China technology integration, numerous other companies – both Chinese firms operating in the US and US firms with a presence in China – could face pressure to divest.
- **Flows are unlikely to recover in 2H amidst persisting systemic concerns and US election politics:** The political environment, stepped-up enforcement of FIRRMA rules and a meager deal pipeline will keep investment subdued in 2H 2020. The electoral outcome may prevent decoupling overreach and make a recovery in plain-vanilla flows in non-strategic sectors possible again but the systematic concerns driving caution on Chinese investment in high technology, critical infrastructure and personal data assets will not subside. China's new "internal circulation" campaign suggests that Beijing reads the writing on the wall to mean less two-way engagement with the world, especially the US, in the years ahead.

TWO-WAY INVESTMENT DROPPED TO THE LOWEST LEVEL IN ALMOST A DECADE

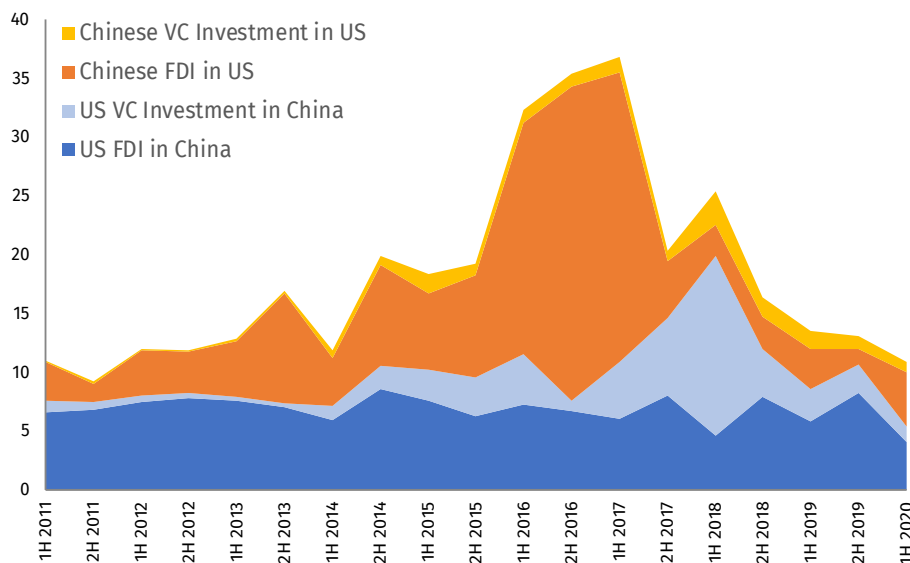
Combined direct investment and venture capital flows between the US and China totaled \$10.9 billion in 1H 2020 (Figure 1). This is a significant decline from the heights of nearly \$40 billion reached between 1H 2016 to 2H 2017 and represents the lowest six-month total since 2H 2011. Pressures stemming from the global COVID-19 pandemic and increasing US-China bilateral tensions were drivers of this decline.

Completed Chinese direct investment in the US rebounded slightly thanks to Tencent's purchase of a \$3.4 billion minority stake in Universal Music Group, but overall FDI levels remained far below the heights of over \$26 billion reached in 2H 2016. Chinese FDI in the US has totaled less than \$5 billion in every half-year period since 2H 2017. While Chinese venture capital investment in the United States has not fallen as dramatically from earlier highs, it too has declined since reaching a peak of around \$3 billion in 1H 2018.

Meanwhile, completed US direct investment in China decreased to \$4.1 billion in 1H 2020, its lowest level in a decade. US venture investors also spent less in China in 1H 2020, continuing a secular decline that began in 2018 after reaching a peak of \$15 billion in 1H 2017. In 1H 2020, we estimate that US VC investors contributed only \$1.3 billion as part of 115 unique funding rounds in China.

Figure 1: Completed Two Way FDI and VC Investment between the US and China

USD billion



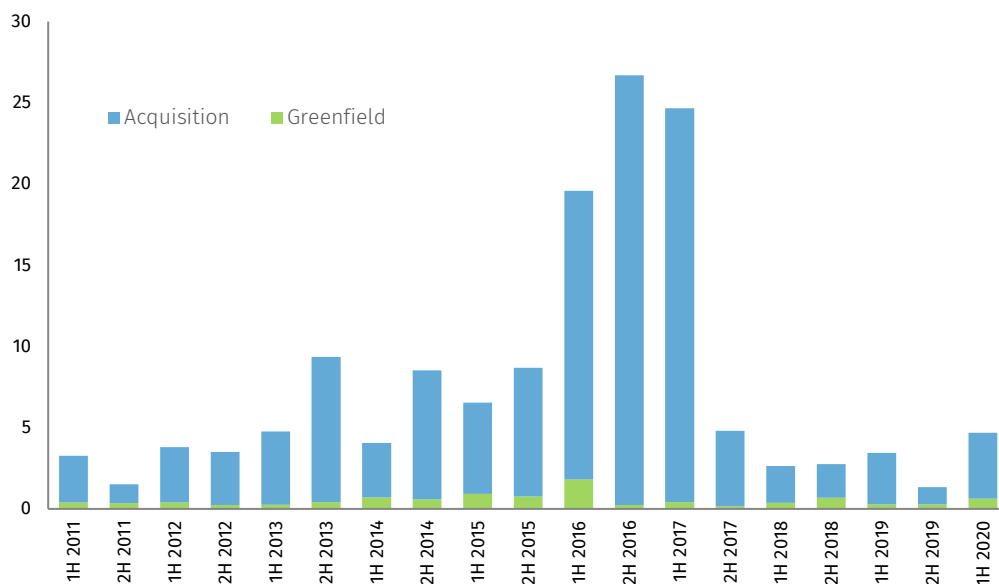
Source: Rhodium Group. FDI data represents the combined value of direct investment transactions by mainland Chinese companies in the US, including greenfield projects and acquisitions that result in significant ownership control (>10% of equity). VC data represents pro-rata values determined as the investor country's proportional share of each funding round's value based on the number of participating investors. 1H 2020 data are preliminary only.

CHINESE FDI IN THE US REMAINED LOW BUT ONE BIG DEAL SAVED HEADLINE FIGURE

Chinese firms completed \$4.7 billion of FDI transactions in the US in the first six months of 2020, a modest rebound from \$1.3 billion in 2H 2019 and \$3.4 billion in 1H 2019 (Figure 2). However, that rebound can largely be attributed to the completion of one significant acquisition announced in late 2019: Tencent's \$3.4 billion a 10% stake in Universal Music Group. Without this transaction, China-to-US FDI would have fallen to its lowest level in a decade.

Figure 2: Completed Chinese FDI Transactions in the US

USD billion

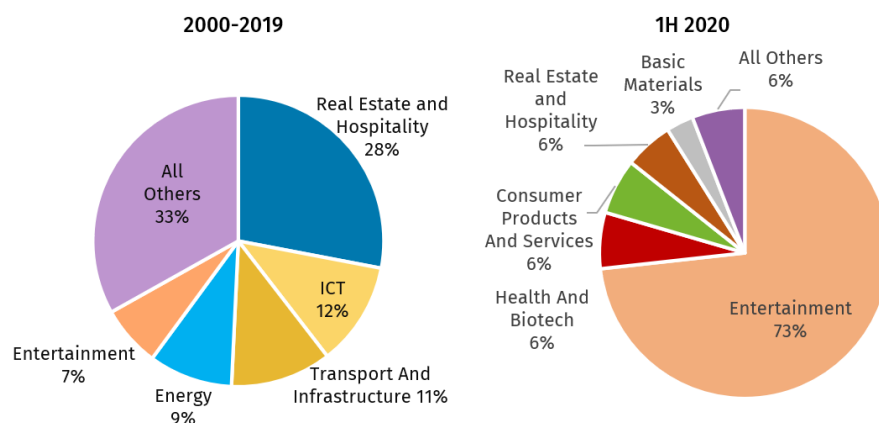


Source: Rhodium Group. Data represents the combined value of direct investment transactions by mainland Chinese companies in the US, including greenfield projects and acquisitions that result in significant ownership control (>10% of equity).

Entertainment Media and Education made up nearly three quarters of all Chinese FDI in the United States in 1H 2020, mainly due to the Tencent deal. The second most significant sector was Health, Pharmaceuticals, and Biotechnology on the back of greenfield investments by Beijing Gan & Lee Biotechnology and Shanghai Henlius Biotech. Third was Consumer Products and Services due to ongoing greenfield investments such as GE Appliances' \$125 million expansion of its Decatur refrigerator plant.

Figure 3: Chinese FDI Investment in US by Industry

Percent of total



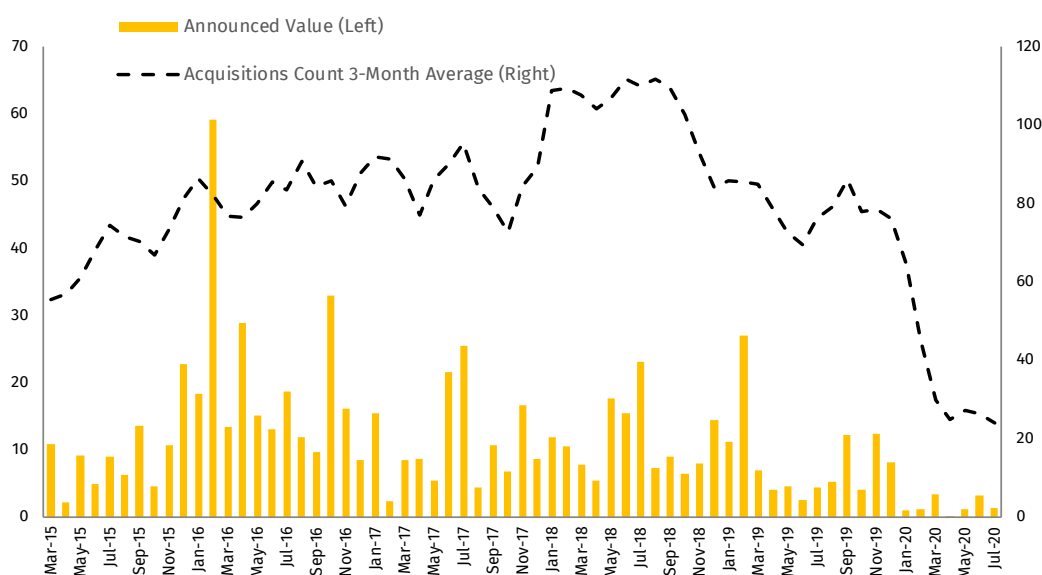
Source: Rhodium Group. Data represents the percentage of direct investment transactions in certain industries by mainland Chinese companies in the US, including greenfield projects and acquisitions that result in significant ownership control (>10% of equity).

Despite escalating trade frictions, our numbers show little evidence of Chinese firms investing in the US with the aim of localizing their operations in order to circumvent tariffs. Historically, greenfield investments have been a relatively small contributor to overall Chinese FDI in the United States and that trend held in 1H 2020.

Our data also shows that concerns about Chinese purchases of distressed US assets on the back of the COVID-19 pandemic were overdone. New M&A activity in the US by China in 1H 2020 remained at low levels, with just 33 newly announced transactions worth \$700 million. This is a global phenomenon: In the first six months of 2020, Chinese companies announced approximately 217 new M&A transactions globally, down from an average of over 500 per half-year in the 2016-2019 period (Figure 4). Compared to the same period in 2019, newly announced global outbound deals by Chinese firms were down by more than half in terms of both value and number of deals.

Figure 4: Announced Global Outbound M&A Transactions by Chinese Companies

USD billion, numbers of acquisitions

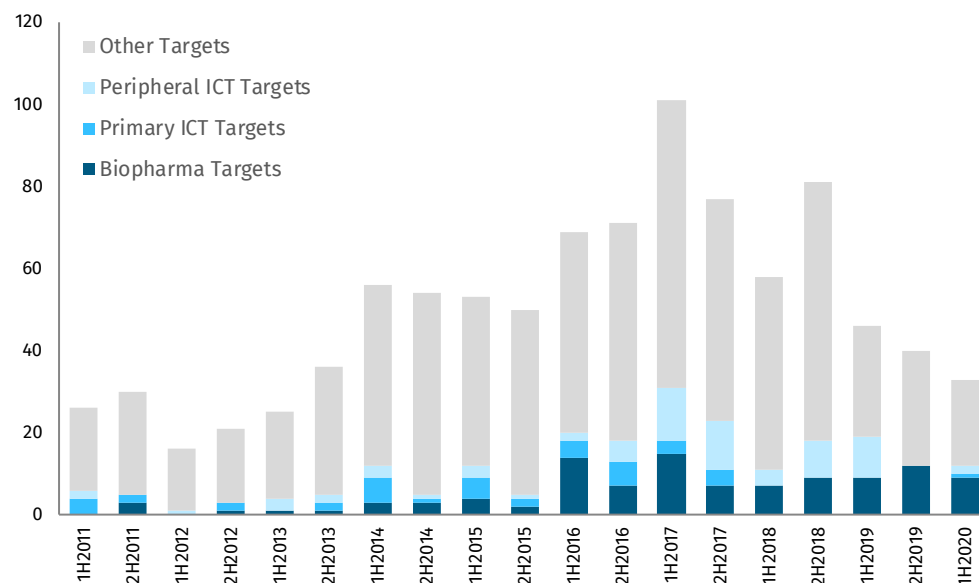


Source: Rhodium Group; includes all announced M&A activity by mainland Chinese companies irrespective of resulting stake.

A notable trend is the drop in Chinese acquisitions of US technology assets. As a benchmark for Chinese tech M&A in the US we looked at three areas of activity: US targets whose core focus is IT equipment, semiconductors, or software and IT services (“Primary ICT Targets”); US targets that have integrated similar technologies into derivative services or products in other sectors (“Peripheral ICT Targets”); and US targets with a core focus in pharmaceuticals and biotechnology (“Biopharma Targets”). Combined activity in these three areas has noticeably declined (Figure 5), falling to just 12 announced deals worth \$177 million in 1H 2020. Some \$135 million of this total was tied to a single transaction: Jiangsu Huaxicun raising its stake in optoelectronics developer Source Photonics.

Figure 5: Announced Chinese Acquisitions in the United States

Number of transactions

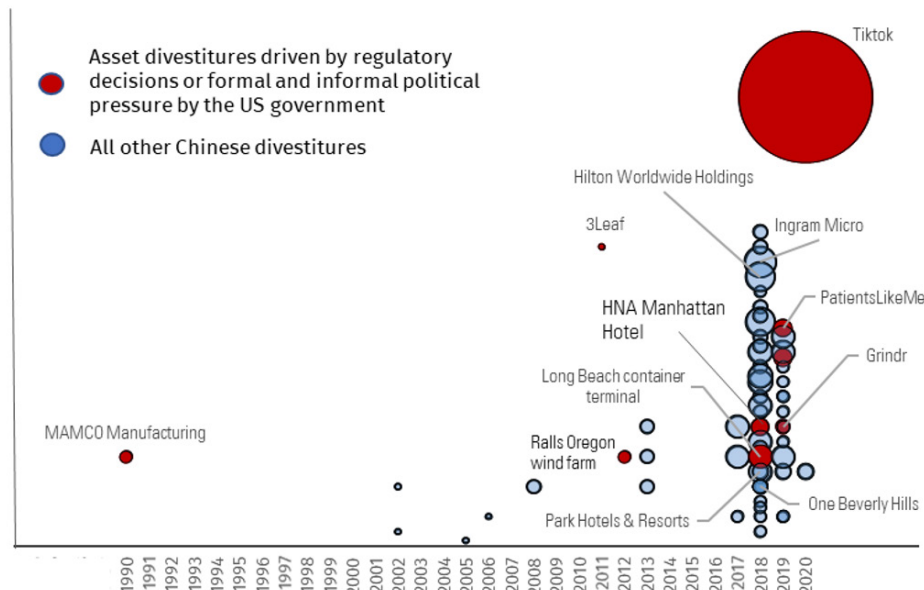


Source: Rhodium Group;

Not only is *new* investment on the decline. Growing frictions between the US and China over technology and an expansion of the defensive US policy toolbox is also affecting Chinese companies that have made past investments in the US. For one, we are seeing stepped-up efforts by CFIUS to retroactively review transactions that were not filed voluntarily. These include full acquisitions and venture capital stake purchases that were not covered before the introduction of FIRRMA. This has triggered a slew of asset divestitures, adding momentum to a trend that began when over-leveraged Chinese investors started divesting US assets due to pressure from Beijing (Figure 6). The most prominent example is Bytedance, which is facing pressure to sell its TikTok assets in the US due to national security concerns and after it failed to file for clearance of its acquisition of Musical.ly in 2017. Other recent examples of forced asset divestitures include Grindr and PatientsLikeMe.

Figure 6: Major Asset Divestitures by Chinese Companies in the US

Bubble size represent proportional size of the deal; total announced Chinese asset divestitures in the US 2000-2020 = \$76 billion



Source: Rhodium Group.

Chinese firms are also facing pressure as a result of other US policy moves. Recent measures have targeted firms in specific industries, including telecommunication infrastructure and services (Huawei, ZTE, China Telecom); state-related media (Xinhua News and China Daily); and rolling stock and vehicle makers (CRRC and BYD). At a time of rising US discomfort with allowing Chinese technology firms to operate in the United States at scale, a handful of other companies with significant US operations may be at risk in the future. And tighter immigration policies, export controls and sanctions in response to the passage of Beijing's new national security law in Hong Kong and the repression of Uighurs in Xinjiang point to deepening political risk for Chinese firms operating in the United States.

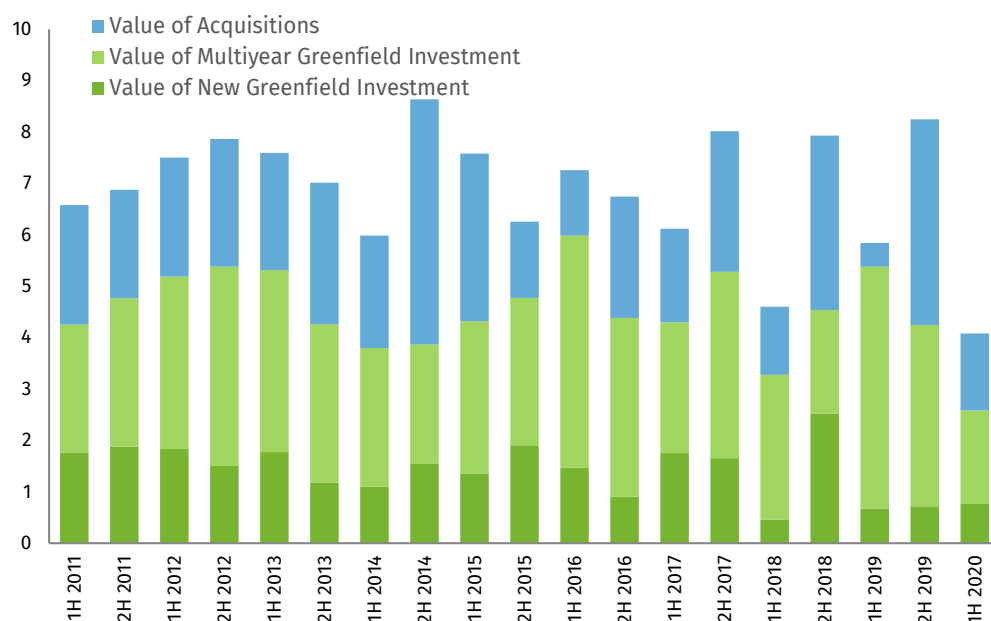
US FDI IN CHINA DROPPED BUT ONGOING GREENFIELD PROJECTS SET A FLOOR

Last year, US investment in China was resilient compared to flows in the other direction. But data from 1H 2020 shows that US flows into China are also coming under pressure due to the COVID-19 pandemic and rising political risks related to the US government's decoupling push.

In 1H 2020 US-to-China FDI fell to \$4.1 billion, down 31% from \$5.9 billion in 1H 2019 (Figure 7). Multiyear greenfield investment dropped as several projects wrapped up construction (such as Tesla's Shanghai factory) in 1H 2020, and no major M&A deals over \$1 billion were completed during the period. At the same time, several significant pending M&A deals (such as JPMorgan's \$1 billion deal to take control of its Chinese mutual fund JV) and ongoing greenfield investments (such as Exxon Mobil's \$10 billion petrochemical complex and GM's electric vehicles push) remain on track. In particular, capital expenditure from the ongoing greenfield constructions are baked in for the next few years, so a rapid drop-off like we've seen in the other direction is unlikely to happen for US FDI in China.

Figure 7: Completed US FDI Transactions in China

USD billion



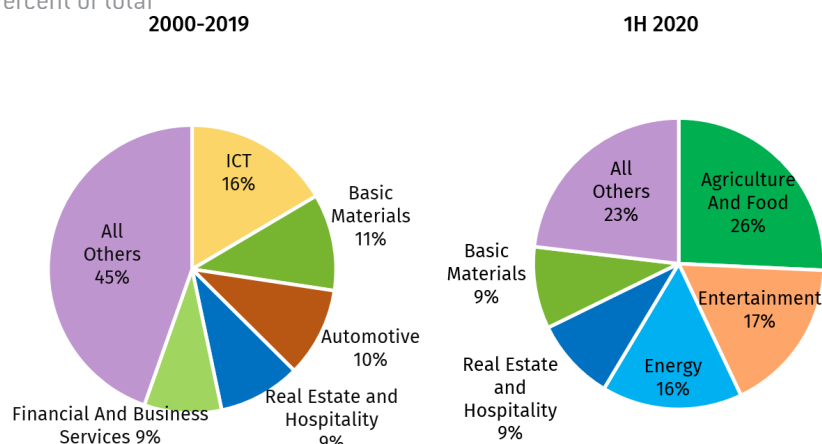
Source: Rhodium Group. Data represents the combined value of direct investment transactions by US companies in China, including greenfield projects and acquisitions that result in significant ownership control (>10% of equity).

The breakdown of completed US FDI transactions in China by industry reveals a clear shift in comparison to the previous twenty years (Figure 8). In 2020, Agriculture and Food was the hottest sector, led by Pepsi's over \$700 million purchase of "Be & Cheery", an online snack company. Beyond Meat, which entered China in April 2020, is also building up its presence with two new manufacturing facilities. The second largest sector was Entertainment, Media, and Education driven by multi-year greenfield investments in amusement parks, such as Universal Studios in Beijing. Energy and Chemicals, Metals, and Basic Materials also received significant investment as US companies continue to tap into the growing Chinese market.

One sector that does not yet show up in the top five ranking this period but is experiencing significant growth momentum is Financial and Business Services. After China further opened up its financial services and insurances sectors to foreign ownership on April 1, 2020, a number of US companies are now in the process of upping their investment in the Chinese market: JPMorgan is acquiring 49% in its China mutual fund JV, China International Fund Management (CIFM), to take full ownership of the venture. Morgan Stanley and Goldman Sachs were both granted approvals to take control of their securities joint ventures in late March (Morgan Stanley plans to boost its stake to 51% from 49% while Goldman Sachs said it will seek full ownership of its JV). BlackRock and Vanguard Group are also applying for mutual fund license in China.

Figure 8: US FDI Investment in China by Industry

Percent of total



Source: Rhodium Group. Data represents the percentage of direct investment transactions in certain industries by US companies in mainland China, including greenfield projects and acquisitions that result in significant ownership control (>10% of equity).

Although investment has remained robust, US firms operating in China are considering the extent to which US-China decoupling may affect their assets in China in the coming months and years. This is a particularly important question in the technology space, where the US treatment of Chinese firms such as ByteDance and a broader shift away from US-China technology integration may lead to policies that make it more difficult for US technology firms to operate in China.

Table 1: Select US Tech Companies' China Exposures as of 2019

Company	Est. Cumulative Investment (\$bn)	Unique China Subsidiaries	Unique China Joint Ventures	Est. Percent Revenue Exposure
Alphabet	\$1.2	20	0	2.3
Amazon	\$2.1	10	0	1.0
HP Enterprise	\$2.1	15	4	10.5
IBM	\$0.6	23	9	2.7
Intel	\$7.2	111	1	27.8
Microsoft	\$0.5	18	9	1.8

Source: Rhodium Group.

The impact of such policies, whether they originate in the US or China, could be substantial. Drawn by market opportunities in China, many of the most important US technology companies have built significant operations there over the last few decades, deploying billions of dollars in assets. For example, in 2019 China accounted for over 45% of Qualcomm's total revenue, while Apple and AMD relied on China for approximately 15% and 25% of their revenue, respectively. The China exposures of several other prominent technology firms are described in Table 1. These figures offer an estimate of the potential costs to these firms if economic disengagement between the US and China were to accelerate, forcing them to withdraw from China.

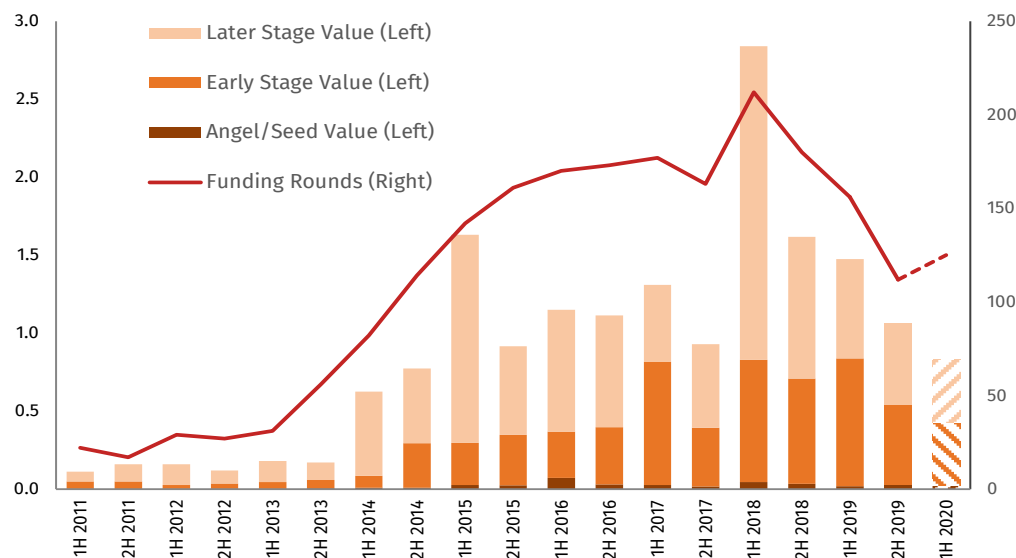
CHINESE VC ACTIVITY IN THE UNITED STATES REMAINED STABLE BUT VALUE DROPPED

Venture capital investment by China-based firms in the United States has been falling steadily since reaching a high mark in the first half of 2018 (Figure 9). In 1H 2020, this trend continued: we estimate that venture capital investment from China fell to \$800 million, the lowest level since 2014. However, preliminary figures show a modest uptick in transaction count to 125 compared to 2H 2019 [data from recent months are adjusted upward to account for reporting lags and should therefore be seen as preliminary estimates].

Transaction counts in the entire US venture capital fundraising ecosystem also likely rose modestly from 2H 2019 to 1H 2020, showing that venture investment from China was in line with broader trends. Total US venture fundraising hit a new record of more than \$77 billion in the first half of 2020 even as funds contributed by firms from China fell. This suggests that investors from China are continuing to target smaller, earlier stage venture transactions in the United States instead of the higher-profile later stage deals many did in previous years.

Figure 9: Completed Chinese VC Investment in the US

USD billion, number of funding rounds



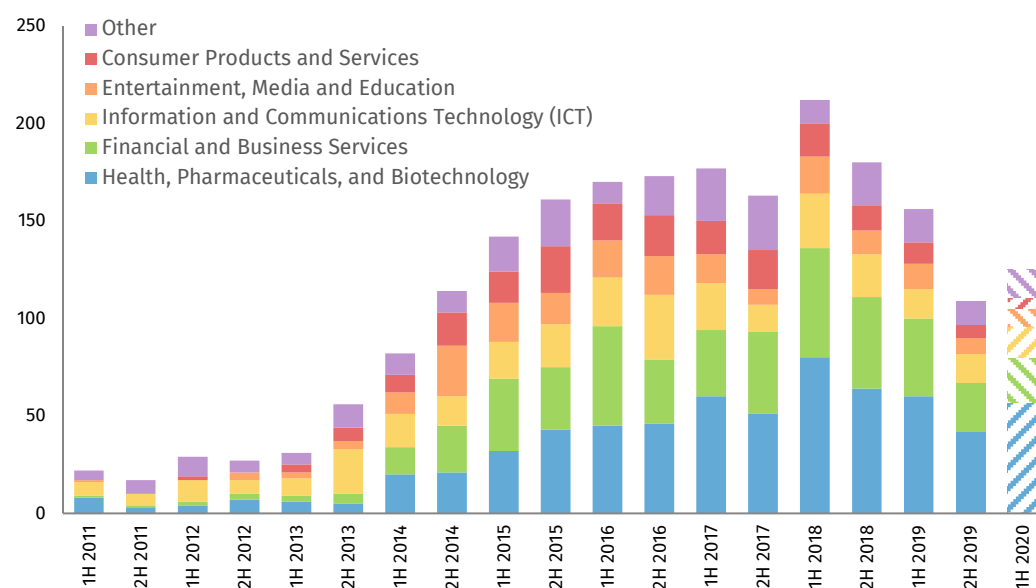
Source: Rhodium Group.

Five of the ten largest Chinese venture investments in 1H 2020 targeted firms in the Health, Pharmaceuticals, and Biotechnology sector, which accounted for 45% of total transactions by count (Figure 10). For example, Decheng Capital was one of several investors in a \$100 million series C round of funding for Cue, a healthcare technology company developing a health monitoring system. Similarly, Wuxi AppTec participated in a \$143 million series B round of funding for insitro, a drug development company using machine learning.

Other sectors with notable investments in the first half of 2020 included Entertainment, Media, and Education (e.g. stakes in Roblox and Genvid) and ICT (e.g. stakes in Lightelligence and Agora.io). Chinese investors in some sectors have shied away from the US market due to tightening liquidity in China and increasing US regulatory scrutiny towards Chinese investment. However, this regulatory scrutiny has so far been mostly focused on ICT and social media companies. Opportunities still exist in areas that are less sensitive. For example, biotech is still a growing industry for Chinese venture capital investment.

Figure 10: Completed Chinese VC Investment in the US by Industry

Number of transactions



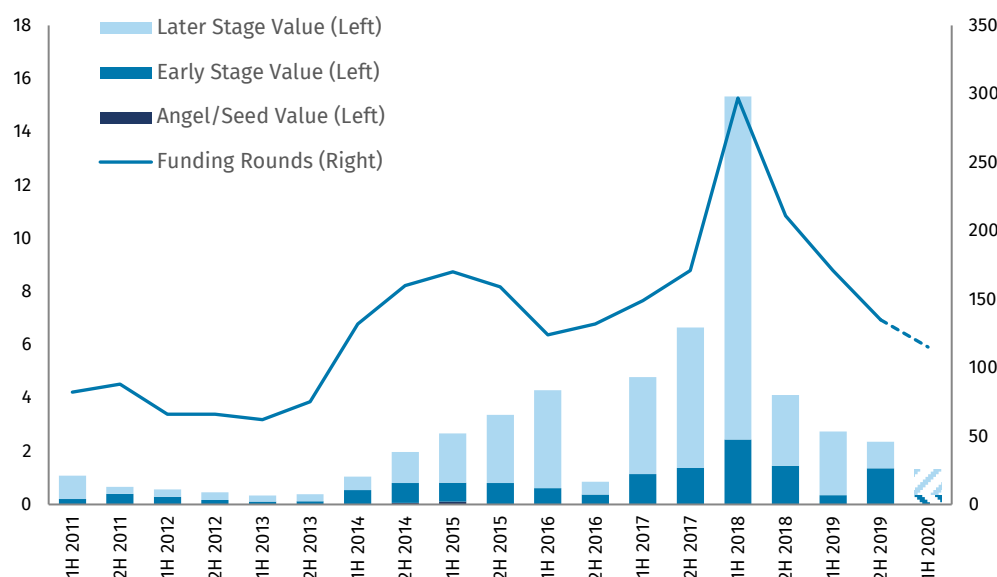
Source: Rhodium Group based on Bloomberg, Pitchbook and other sources. 1H 2020 data are preliminary only.

US VC IN CHINA FURTHER DECLINED AMIDST A BROADER TECHNOLOGY INVESTMENT SLOWDOWN

In 1H 2020, venture capital investment by US firms in China fell for a fourth consecutive six-month period both by transaction count and investment value (Figure 11). We estimate that US investors contributed \$1.3 billion as part of 115 unique funding rounds. Early stage venture investment experienced the most notable contraction compared to 2H 2019. While figures for 1H 2020 are still preliminary, data from the first six months of the year show the lowest venture investment levels since 2016.

Figure 11: Completed US VC Investment in China

USD billion, number of transactions



Source: Rhodium Group based on Bloomberg, Pitchbook and other sources. Pro-rata value determined as US proportional share of each funding round's value based on the number of participating investors. 1H 2019 data are preliminary only.

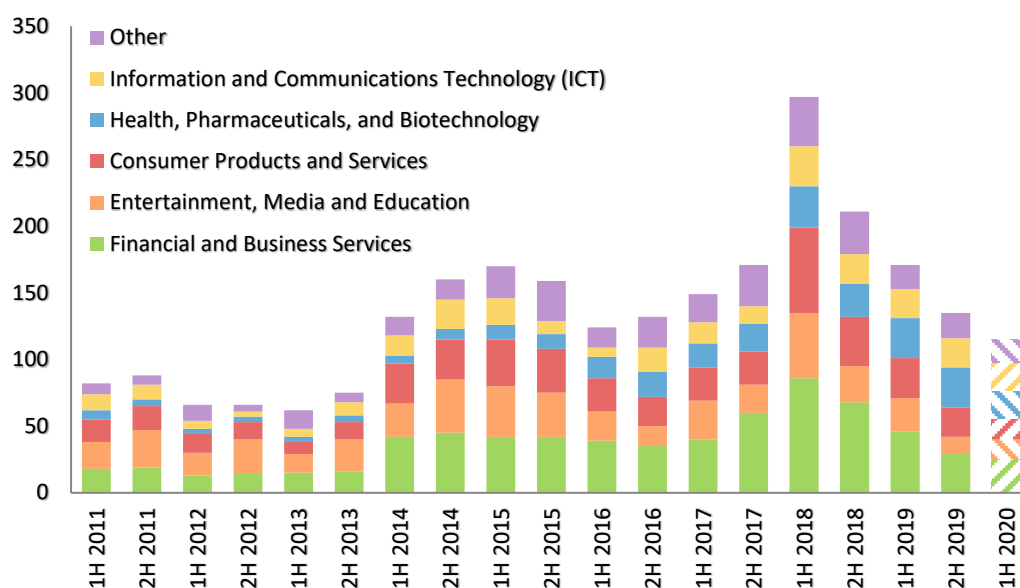
Many US venture investors remain interested in the opportunities offered by China's startup universe. However, over the past two years investors have become more selective in the face of increasing economic uncertainty and the growing perception that parts of China's tech ecosystem had become overheated after years of rapid growth. This broader slowdown in venture activity in China (also dubbed "Capital Winter") was exacerbated by the COVID-19 pandemic in 1H 2020, with domestic and foreign investors slowing their participation in new fundraisings.

The overall transaction distribution by industry in 1H 2020 was similar to previous years. Health, Pharmaceuticals, and Biotechnology played a much less important role in US investment in China than it did in the other direction (Figure 12). Instead, Entertainment, Media, and Education saw some of the largest transactions in 1H 2020, including online education platform Yuanfudao's \$1 billion series G funding round and another online education company Zuoyebang's \$750 million series E funding round.

Other sectors with notable investments in the first half of 2020 included Financial and Business Services (JD industrial Products), ICT (Eswin, a semiconductor company), and Consumer Products and Services (YatsenGlobal and Guoquan Shihui).

Figure 12: Completed US VC investment in China by Industry

Number of transactions



Source: Rhodium Group.

OUTLOOK

Chinese investors have faced heavy 2020 US headwinds and election politics won't make things easier. The political environment, stepped-up enforcement of FIRRMA rules and a meager deal pipeline will keep investment subdued in 2H 2020, at or below levels seen in the first half of the year. The electoral outcome is unlikely to change the trend toward more stringent security restriction, but may reduce alarmism enough to prevent decoupling overreach, and maybe even make a recovery in plain-vanilla flows in non-strategic sectors possible again (think consumer goods and services, entertainment, healthcare, commercial property and passive stakes). Unless Beijing demonstrates serious commitment to market reform and at least some political liberalization, the systematic concerns driving caution on Chinese investment in high technology, critical infrastructure and personal data assets will not subside.

US investment in China has been more resilient. Companies are sticking with large projects already underway before the coronavirus pandemic and escalation in US-China tensions. However, some firms are re-evaluating investment plans in light of slower consumption growth, concerns about over-reliance on Chinese supply chains, and political pressure to diversify. US investor appetite for venture capital and other portfolio investments remains high, but technology sector volatility and growing White House pressure on institutional investors to shun China holdings are getting in the way. Beijing's response to greater US restrictions on Chinese capital has so far been measured, but if a harder US line persists, US firms in China are likely to be taken hostage. China's leaders are once again trumpeting self-reliance, under a new "internal circulation" campaign. This strongly suggests that Beijing reads the writing on the wall to mean less two-way engagement with the world, especially the US, in the years ahead.

APPENDIX: DATASETS AND COMPILATION METHODOLOGY

Direct Investment

Foreign Direct Investment (FDI) is a specific category of cross-border capital flows within the system of National Accounts, which is an internationally agreed upon standard set of principles for measuring economic activity used by the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) and other international organizations. By definition, FDI entails cross-border capital flows that achieve significant influence over the management of an invested entity and a long-term investment relationship. The common threshold for a direct investment is 10% of equity or voting shares. The other four categories of cross-border investment flows are portfolio investment, derivatives, other investments and reserves.

Most countries maintain official statistics on both FDI flows (the value of cross-border investments made during a specific period) and stocks (the total value of aggregate direct investment at a given time adjusted for valuation changes and exchange rate movements). Several international organizations also compile FDI data, including the IMF, United Nations Conference on Trade and Development (UNCTAD) and the OECD.

Traditional FDI data are known to be subject to a number of distortions, which makes them problematic to use for policy analysis. FDI data are not only released with a significant time lag, they may also be distorted by companies' usage of holding companies, offshore vehicles and other complex accounting structures to take advantage of favorable tax policies. The extent of "round-tripping" and "trans-shipping" investments through a third location makes it increasingly difficult to track flows accurately. Those practices and complicated deal structures with "indirect" holdings also make it difficult for statistical agencies to correctly separate FDI from portfolio investment stakes.

This situation has encouraged economists and other analysts to find ways of working around existing gaps and distortions. One way of doing so is to compile alternative datasets that are based on tracking FDI transactions for specific countries or industries. The US-China Investment Project is based on proprietary datasets compiled by Rhodium Group based on such a transactional approach. The dataset includes FDI transactions that lead to significant ownership of assets of a long-term nature by US companies in Mainland China and vice versa.

Specifically, the dataset captures three types of transactions: (1) acquisitions of existing assets that results in at least 10% ownership stakes; (2) greenfield projects with at least 10% ownership stake (newly built facilities such as factories, warehouses, offices and R&D centers); (3) the expansion of existing FDI operations. The general threshold for transactions to be included in the two-way databases is \$1 million. The US-China Investment Project's data on direct investment only counts completed acquisitions and greenfield projects and expansions that have broken ground. Announced, rumored or pending transactions are not included. Similarly, we do not include portfolio investment transactions (debt or equity stakes of less than 10%). Reverse merger transactions, flows related to Chinese firms listing their assets in US securities markets, cooperation agreements and procurement contracts are not recorded.

Venture Capital

The venture capital data presented in this report come from a second proprietary Rhodium dataset on venture capital investments made by Chinese nationals, corporations and other entities in US-headquartered startups.

This dataset covers equity investments from the angel and seed stages through all later-stage, pre-IPO funding rounds. It includes direct transactions involving mainland Chinese investors as well as investments through mainland Chinese-owned subsidiary firms domiciled elsewhere. Where partnership structures are used as investment vehicles, investments are counted based on the ownership of the general partner, which is the entity with the decision-making authority over fund capital deployment.

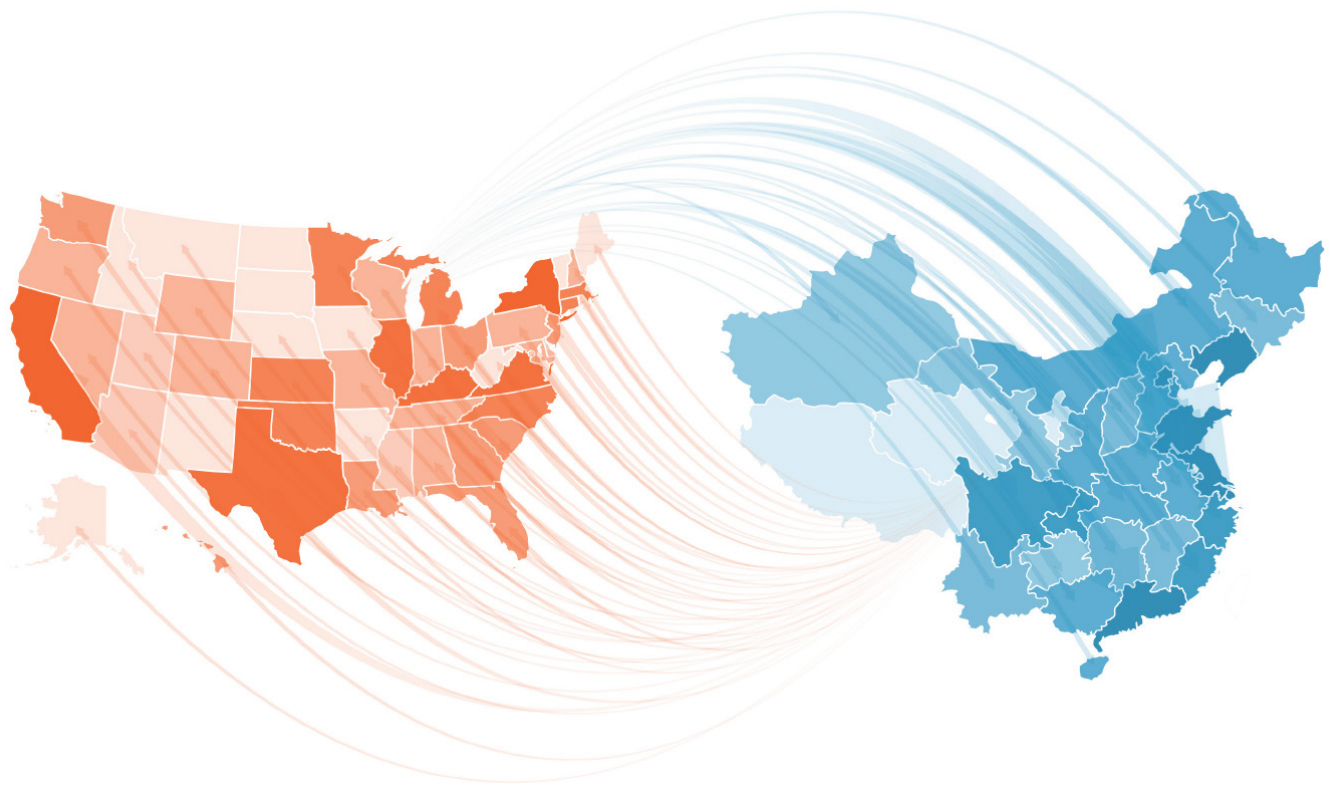
Venture capital investments are recorded at the closing date of the relevant investment or fundraising round, with each fundraising round comprising a single transaction having potentially multiple investors. Where only total fundraising round values are publicly disclosed and individual investment sizes are unknown, a Chinese investment total is estimated by assigning a pro-rata share of the total fundraising round value to all Chinese participants based on the total number of known fundraising round investors. Transactions with no known investment totals are included in the dataset at zero value.

The dataset does not include venture investments made by entities domiciled in mainland China that are ultimately non-Chinese owned. It does also not include investments in firms headquartered in other countries that have operations in the United States.

While venture investments sometimes include stakes of more than 10 percent in a target company and may therefore qualify as direct investments, to avoid double counting all venture capital investments are confined to this data set regardless of stake size.

Data Visualization

The US-China Investment Project database is constantly updated, even for previous time periods. More details on the data methodology, research reports and an interactive data visualization are available on the US-China Investment Project website (www.us-china-investment.org).



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