

MIZUHO CHINA MONTHLY

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December 2018 Edition

Mizuho Bank, Ltd.
Mizuho Bank (China), Ltd

China Business Promotion Department
Advisory Department

- Executive Summary -

China's Economy	The Chinese Economy Has Entered a Recessionary Phase
<p>The business cycle clock confirms that China's economy entered a recessionary phase in August 2018. The downswing was caused by the weak performance of retail and corporate earnings as a result of sluggish automobile sales and infrastructure investment. Automobile sales were hit when a tax break on small vehicles came to an end, with sales also potentially pushed down by a growing housing loan burden. Infrastructure investment is showing signs of a quick recovery thanks to government stimulus measures, but the recession in China will probably continue as exports swing lower on intensified US/China trade frictions.</p>	
Industrial and Regional Policies	The expansionary trend in China's outbound FDI under the Belt and Road strategy and the outlook for the future Part 3: China's Outbound FDI by Industry
<p>Ranked the world's second largest foreign direct investment (FDI) recipient after the United States, China, which has accepted large amounts of foreign investment, has also seen rapid increases in outbound FDI and in 2015 it reached the number-two position in global rankings. Whilst it slipped to third place in 2017, it leaped from sixth to second place in the investment balance league table, with outbound FDI topping inbound FDI for the third year running (all figures are based on Chinese government statistics). This report offers an overview of the expansionary trend in China's outbound FDI against the progress on its Belt and Road strategy and escalating trade friction with the United States, examines the investment trends of Chinese companies in major regions of the world, considers background factors and the orientation of corporate investment strategies and, having elucidated the outcomes and issues involved, explores adjustments to and future directions for Chinese outbound FDI strategies in its transition to sustainable economic growth.</p>	
News from the China Advisory Department	Chinese Monetary Policy
<p>The Chinese government has shifted its monetary policy to "moderate" from "moderate and neutral," while the People's Bank of China carried out its fourth deposit reserve requirement ratio cut in 2018. The inter-bank capital market interest rates have now fallen to the same level as the interest rates for fund supply operations. While concerns persist over the trade frictions between the U.S. and China along with the impact of such on the real economy, further economic stimulus measures and interest rate cuts are possible, aiming to lower lending interest rates for companies.</p>	

The Chinese Economy Has Entered a Recessionary Phase

Government stimulus is acting as a buffer, but the adjustment phase could drag on into the long term depending on the direction of US/China trade frictions

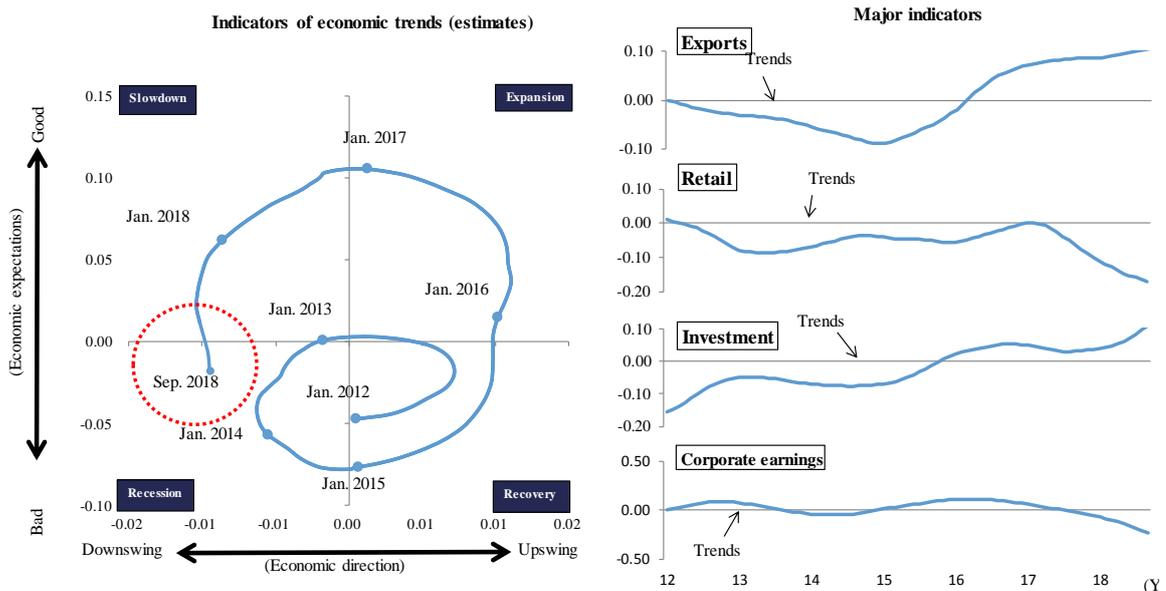
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1. China's GDP growth slowed for the second straight quarter; the business cycle clock suggests China has entered a recessionary phase

At +6.5% y-o-y, China's real GDP growth rate slowed for the second straight quarter in July–September 2018. A glance at contribution levels by demand item shows the contribution of investment in fixed assets falling into negative territories on sluggish infrastructure investment, with a retail slump also contributing to the downswing. The contribution of external demand remained negative, though the figure improved as exports grew at a faster pace than imports.

Though growth has slowed, it has done so at a gentle pace, with the growth rate remaining at the 6% mark, so it is difficult to assess the economic situation in China. To this end, we prepared a 'business cycle clock' (BCC) that shows a business cycle of Chinese economy based on methods used by Statistics Netherlands. A BCC looks at economic indicators and separates the trend component pointing to long-term trends from the seasonal component indicating short-term movements. The vertical axis of the BCC shows the divergence of the seasonal component from the trend line (economic expectations) while the horizontal axis measures the month-on-month increase or decrease (economic direction). A BCC usually has four phases that move in an anti-clockwise direction: (1) 'Expansion,' when economic expectations are heading upwards and performing well compared to the trend line, (2) 'Slowdown,' when the economy starts to slow while remaining in a healthy state (economic expectations remain above the trend line), (3) 'Recession,' when the economy is slowing and economic expectations have deteriorated compared to the trend line, (4) 'Recovery,' when the economy is picking up while remaining in an unhealthy state (economic expectations fell below the trend line), then finally back to 'Expansion.'

Figure 1: China's business cycle clock (until September 2018)



Note: The diffusion index is comprised of six indicators: value-added industrial production, total retail sales of consumer goods (real), investment in fixed assets, exports, the jobs-to-applicants ratio, and corporate earnings. These indicators are given similar weightings after standardization, the removal of trend components, and the processing of outliers, for example. The y-axis shows the divergence above or below the trend line; the x-axis shows the time series variation of seasonal components (m-o-m).

Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China and the General Administration of Customs

We used a diffusion index (DI) of six key economic indicators (production, investment, retail, imports, the jobs-to-applicants ratio, and corporate earnings; all Mizuho Research Institute estimates) for the BCC. A glance at this DI BCC shows China entering a slowdown phase at the start of 2017 and a recessionary phase in August 2018 (Figure 1). Compared to the previous slowdown, the 2017 slowdown was up sharply compared to the trend line, with corporate and consumer sentiments remaining healthy. From mid-2018, though, domestic and overseas attention started to focus on a shift in the economic situation in China. This occurred as: private enterprises faced cash flow problems as a result of stricter financial regulations; investment and consumption slowed; and uncertainty about the future grew following an intensification of US/China trade frictions. The BCC reconfirmed that China's real economy has entered a new phase.

2. The background to the economic recession

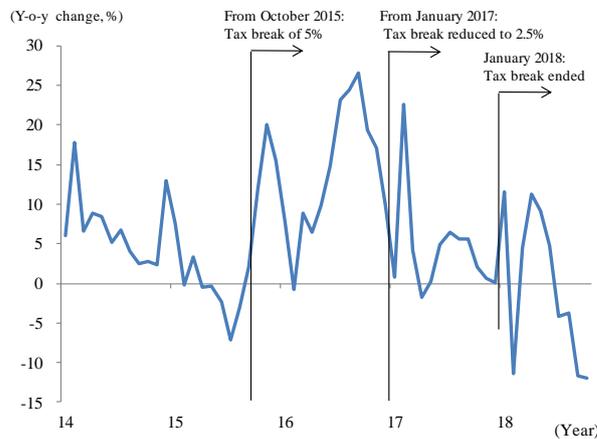
In order to ascertain why the BCC has entered a recessionary phase, we examined the movement of the seasonal components of the DI constituent indicators after discounting the trend components. This shows exports moving firmly and investment trending upwards at present, with the downswing caused by the weak performance of retail and corporate earnings (Figure 1, right). We will now look more closely at the factors behind this economic recession.

(1) The fall in retail sales was mainly due to sluggish automobile sales

The retail slowdown is mainly due to weak automobile sales. Automobile sales dipped on the previous year from July 2018 before suffering a double-digit y-o-y slump over September–October (Figure 2). A

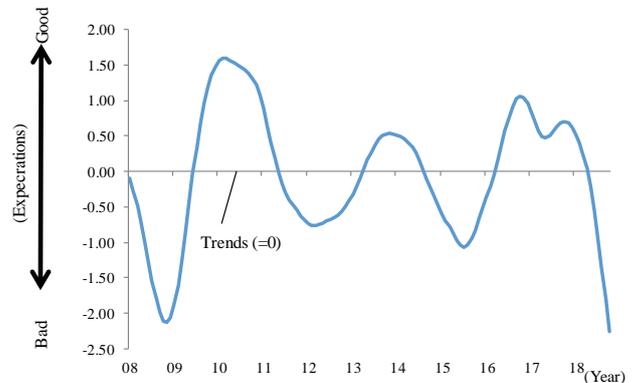
glance at the seasonal component of automobile sales (discounting the trend component, as with the DI) shows sales starting to slide at the end of 2017 before dipping below the trend line in May 2018, with sales subsequently falling below the level that obtained during the slump that followed the 2008 financial crisis (Figure 3).

Figure 2: Automobile sales



Source: Prepared by Mizuho Research Institute based on the materials from the China Association of Automobile Manufacturers

Figure 3: The seasonal component of automobile sales



Note: The seasonal component was identified using the HP filter.

Source: Prepared by Mizuho Research Institute based on the materials from the China Association of Automobile Manufacturers

This fall in sales is probably a backlash to a surge in demand before a tax break on small vehicles (implemented in October 2015) wound down at the end of 2017. There are several opinions as to the duration or extent of this backlash, but a glance at what happened the last time a tax break on small vehicles came to an end (January 2009–December 2012) shows the below-trend adjustment period lasting for around two years, which suggests this adjustment could last until 2019.

However, this cyclical downturn is more pronounced than the last one. This suggests there are other factors at play besides the end of the tax break. Since 2016, the burden of household mortgages (as a percentage of GDP) has climbed as house prices have risen at a faster pace (Figure 4). There are concerns this is acting as a drag on consumption. Some observers believe the wealth effect vis-à-vis consumption is traditionally not that pronounced in China. With the economy slowing, though, expectations for a faster pace of income growth are likely to remain subdued, so the growing housing loan burden may have started to hit consumption. In fact, retail sales growth also fell sharply in October once automobiles were removed from the equation. This suggests the consumption downswing is not only limited to automobile sales.

(2) Corporate earnings were pushed down by weak automobile sales and sluggish infrastructure investment

The weak performance of corporate earnings is one more reason why China has entered a recessionary phase. In addition to the aforementioned slump in automobile sales, it seems corporate earnings were also hit by sluggish infrastructure investment. A glance at the contribution of each industry to corporate earnings

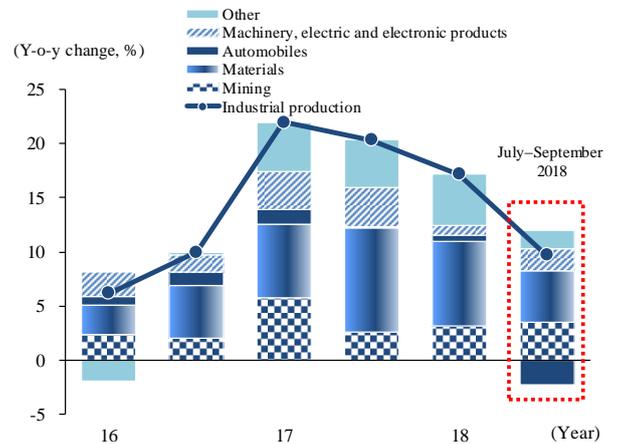
(industrial) in July–September 2018 shows profits in the automobile manufacturing sector falling compared to the first half of 2018, with profit growth also slowing when it came to industries involved in raw materials, particularly nonmetallic mineral products (cement, etc.), ferrous metals and non-ferrous metals (all sectors with a high ratio of infrastructure investment). All this pushed overall earnings down (Figure 5).

Figure 4: The housing loan balance to GDP



Source: Prepared by Mizuho Research Institute based on the materials from the People's Bank of China and the National Bureau of Statistics of China

Figure 5: The contribution of each industry to corporate earnings



Note: The most recent data show the same-period previous-year contribution levels for July–September 2018.

Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

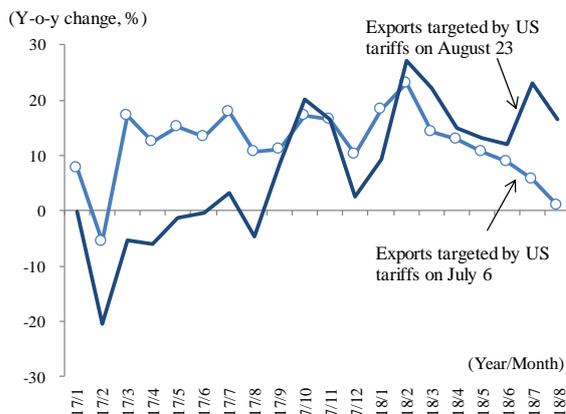
The slump in infrastructure investment was apparently because local governments found it harder to raise funds following a crackdown on the shadow banking sector (including wealth management products) and a deterioration in the bond issuance environment (as a result of rising interest rates). The situation was also exacerbated as investment stalled on an ongoing review of PPP projects. However, the government has already switched tack and is now ratcheting up its economic stimulus, so the profit slump in infrastructure-related sectors looks set to ease off. Infrastructure investment had remained down on the previous year from May onwards, but the scale of this contraction eased in September and investment returned to positive territories for the first time in six months in October. With the BCC suggesting the Chinese economy has entered a recessionary phase, infrastructure investment is starting to alleviate the economic slowdown.

(3)The impact of US/China trade frictions on exports is becoming more apparent

Though the US has hit Chinese products with high tariffs, Chinese exports continue to grow firmly on the whole. However, a glance solely at the items targeted by the US moves shows the impact of the punitive tariffs steadily growing more pronounced. On July 6, the US invoked Section 301 of the US Trade Act in order to hike tariffs on select Chinese imports to the US (equivalent to \$34 billion a year). The Chinese authorities do not release detailed statistics about exports to the US, but US data paints a clearer picture. It reveals that the growth rate for these targeted exports had already started to dip slightly from March. It then picked up slightly from July before dropping down to around zero (+0.9% y-o-y) in August (Figure 6). The Manufacturing PMI's new export orders indicator has moved below the key 50 mark since June, with new orders falling at a faster pace since September after the US placed further tariffs on exports worth \$200

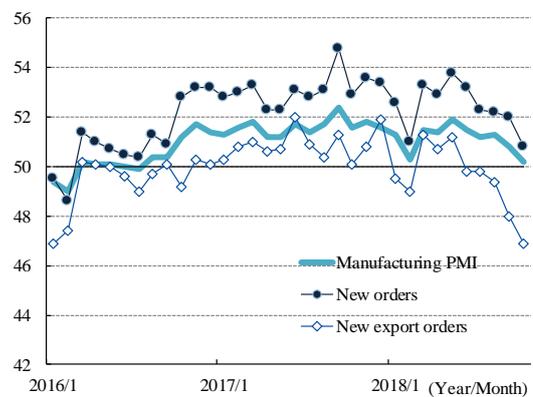
billion (Figure 7). This slide also suggests that exports as a whole might start to swing lower from here on.

Figure 6: The value of Chinese exports targeted by US tariffs



Note: The target export data was tabulated using the HS six-digit code system.
 Source: Prepared by Mizuho Research Institute based on the materials from the United States Department of Commerce

Figure 7: The Manufacturing PMI



Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

3. The economic downturn will be eased by further government stimulus, but the adjustment phase could drag on into the long term depending on the direction of US/China trade frictions

Amid growing concerns about a downswing in domestic and external demand, the government announced measures to boost its fiscal and monetary stimulus at the July State Council executive meeting and Central Politburo of the Communist Party meeting. As outlined above, these have already started to boost infrastructure investment. Furthermore, the PBOC has already lowered the required deposit reserve ratio three times (or four times if a targeted cut is included) in 2018 in order to respond to the cash flow difficulties of small and medium-sized enterprises (SMEs). Nonetheless, there have been no improvements when it comes to the cash flow of private companies (many of which are SMEs), with the total social financing balance continuing to grow at a slower pace in October too, for example. As a result, from mid-October onwards the financial authorities announced a series of new measures to support private-company financing. The supply of funds to private firms looks set to increase from here on as financial institutions are mobilized and a variety of means are employed.

Though the Chinese economy has entered a recessionary phase on sluggish automobile sales and infrastructure investment, from here on a major factor will be the weakness of exports, with the recession likely to continue. Government stimulus will act as a shock absorber to a certain extent, but the real GDP growth rate is still expected to fall from +6.5% y-o-y in 2018 to +6.2% y-o-y in 2019. China could still hit its goal of doubling GDP in 2020 compared to 2010, despite this ongoing gentle slowdown, but if intensified US/China trade frictions hit investment and consumption as well as exports, the government will probably have to introduce more stimulus measures to achieve this goal and avoid a long period of adjustment. If this happens, it could hamper structural reform (deleveraging and so on). As such, the direction of US/China trade frictions and the policies of the Chinese government will require even more attention from here on.

The Expansionary Trend in China's Outbound FDI under the Belt and Road Strategy and the Outlook for the Future

Part 3: China's Outbound FDI by Industry

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1. An overview of China's outbound FDI in major industrial sectors

The previous two installments of this report have examined the current status of China's outbound FDI, and this final part aims to highlight the distribution of these FDI by industry and to throw light on corporate investment trends, and will close with a look at future directions in industry development and the potential for a shift in China's outbound FDI strategy.

The first task is to look at these industrial FDI statistics in light of trends in outbound FDI stock (cumulative) and flows as given in the "2017 Statistical Bulletin on China's Outward Foreign Direct Investment"¹ that was released at the end of October this year.

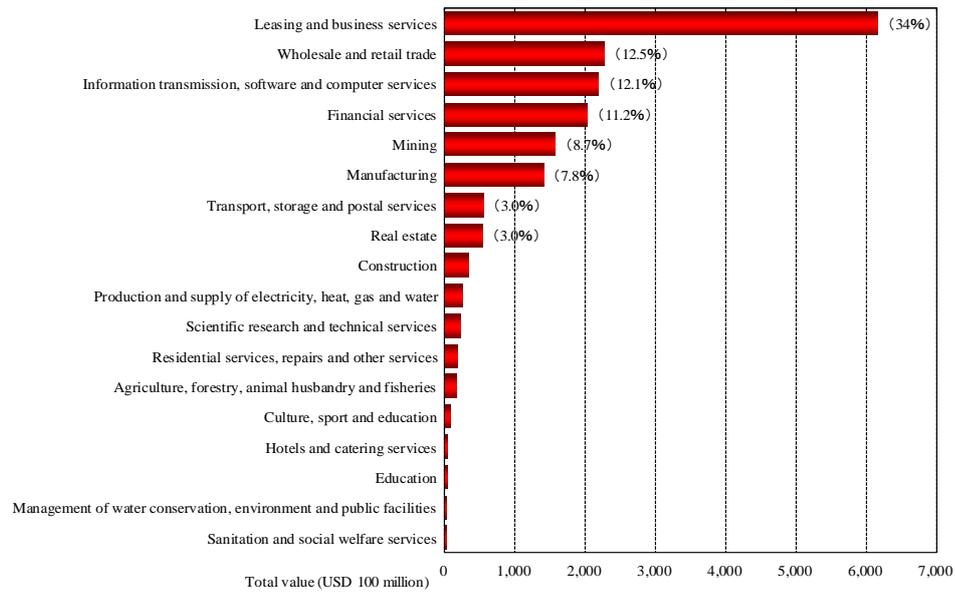
As of the end of 2017, China's accumulated outbound FDI had reached over USD 1809.04 billion. Of this, leasing and business services accounted for some 34 percent (or USD 615.77 billion) of total, followed by wholesale and retail trade, information transmission, software and computer services, and financial services (with each of these three sectors accounting for more than 10%), mining (in fifth place at 8.7%), and manufacturing (in sixth place at 7.8%). On a flow base, however (see **inset to Figure 1**), whilst leasing and business services continue to top the 2017 rankings in terms of value, it is worth noting that investment in manufacturing leaps up the rankings to second place, accounting for 18.6 percent of the total. Again, the two sectors of agriculture, forestry, animal husbandry and fisheries and scientific research and technical services, which were both at the lower end of the rankings in terms of accumulated FDI stock, achieved significantly higher rankings in terms of FDI outflows. The following paragraphs look at the characteristics of China's outbound FDI by industry in different sectors over time in terms of the importance of respective sectors and the weighting by FDI value.

Trends in investment growth in respective sectors suggests that the distribution of China's outbound FDI by industry can be divided into two groups: namely the five top-ranking sectors and five middle-ranking sectors².

¹ On October 29, approximately a month after the press release on the 2017 Statistical Bulletin on China's Outward Foreign Direct Investment, which was mentioned in Part 2 of this report, the Statistical Bulletin was made available for browsing on the Ministry of Commerce website, thus this installment focuses on industry-related statistics whilst using the latest data to supplement trends in China's FDI by industry and region. There are limitations, however, since his bulletin does not provide time-series data for FDI outflows for respective manufacturing sectors.

² These two classifications are given here for the purposes of convenience, with the former (the five top-ranking sectors) being those sectors that account (or accounted) for around 10 percent of total FDI outflows annually, and the latter (the five middle-ranking sectors) being those that account for around 5 percent of the total. Since all other sectors account for a mere fraction of the total and are considered to be low-

Figure 1: A breakdown of China’s cumulative outbound FDI in 2017 by industry



[Inset] China’s outbound FDI flows by sector

China’s outbound FDI flows by sector	Value (USD 100 million)	Ratio to total
Leasing and business services	542.7	34.3%
Manufacturing	295.1	18.6%
Wholesale and retail trade	263.1	16.6%
Financial services	187.9	11.9%
Real estate	68	4.3%
Construction	65.3	4.1%
Transport, storage and postal services	54.7	3.5%
Information transmission, software and computer services	44.3	2.8%
Agriculture, forestry, animal husbandry and fisheries	25.1	1.6%
Scientific research and technical services	23.9	1.5%
Production and supply of electricity, heat, gas and water	23.4	1.5%
Residential services, repairs and other services	18.7	1.2%
Sanitation and social welfare services	3.5	0.2%
Culture, sport and education	2.6	0.2%
Management of water conservation, environment and public facilities	2.2	0.1%
Education	1.3	0.1%
Hotels and catering services	-1.9	-0.1%
Mining	-37	-2.3%
Total	1582.9	100.0%

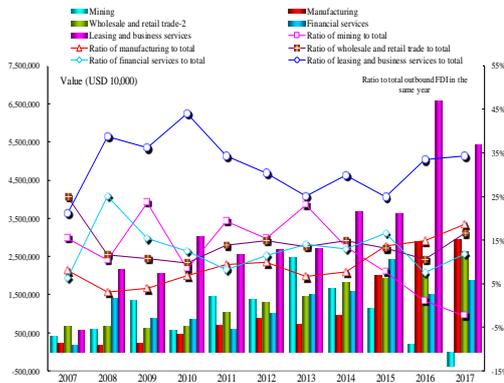
Source: Both the chart and its inset were compiled from the 2017 Statistical Bulletin on China’s Outward Foreign Direct Investment. Figures in parenthesis are the ratios to accumulated outbound FDI.

Figure 2 plots trends in outbound FDI in the five top-ranking sectors (mining, manufacturing, wholesale and retail trade, financial services, and leasing and business services) since 2007. Generally speaking, the main current of China’s outbound FDI towards tertiary industry sectors such as wholesale and retail trade, financial services and real estate, rather than manufacturing, but investment in manufacturing has increased in recent years. China recorded negative growth in mining FDI outflows in 2017, a sector that had previously accounted for a substantial share of the total, a figure that throws into sharp relief the rapid

ranking they are excluded from the analyses in this report.

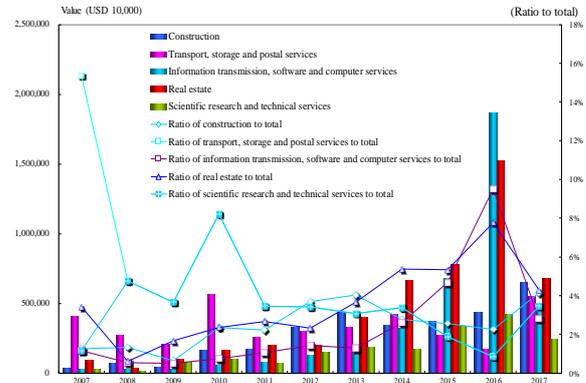
growth in Chinese investment in the information transmission, software and computer services sector. **Figure 3** shows trends for the five middle-ranking sectors (construction, transport, storage and postal services, information transmission, software and computer services, real estate, and scientific research and technical services) over the same period.

Figure 2: Trends in China's outbound FDI in the five top-ranking sectors



Source: Compiled from the **Statistical Bulletin on China's Outward Foreign Direct Investment** of each year published by the Ministry of Commerce, National Bureau of Statistics, State Administration of Foreign Exchange. The ratios given are estimates.

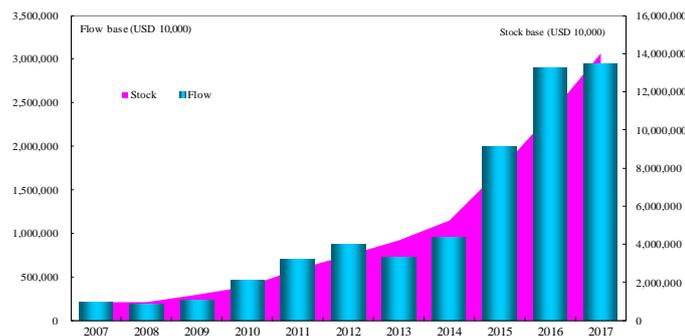
Figure 3: Trends in China's outbound FDI in the five middle-ranking sectors



Source: As for Figure 2.

Figure 4 gives the value of China's outbound FDI in manufacturing, a sector that is of particular significance, in terms of both flows and stock for respective fiscal years. It reveals a sharp increase in manufacturing FDI beginning in 2015.

Figure 4: Trends in China's outbound manufacturing FDI by flows and stock



Source: As for Figure 1

In 2017, manufacturing accounted for the largest number of M&A transactions, which in turn account for a large proportion of China's outbound FDI, in terms of both the number and value of deals (**Table 1**), with the major technologically advanced nations of Switzerland, the United States and Germany emerging as the top three destinations for outbound M&A transactions (**Figure 5**). **Figure 6** gives a breakdown of manufacturing FDI in 2017 by industry, and shows the chemical industry accounting for the largest percentage (push factors are multiple and include the scale and extent of industry development and China's environmental crackdown,

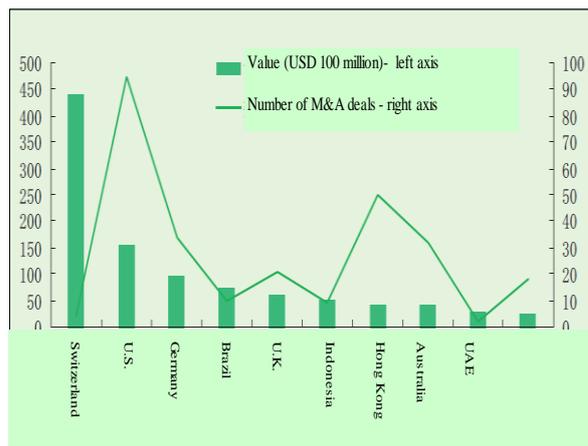
etc.), followed by automobiles, computers, communications and electronic equipment and pharmaceuticals, etc.

Table 1: A breakdown of China’s outbound M&A transactions by sector in 2017

Industry classification	Number of deals	Value (100 million USD)	Ratio to total (%)
Manufacturing	163	607.2	50.8
Mining	22	114.1	9.5
Production and supply of electricity, heat, gas and water	30	101.9	8.5
Hotels and catering services	1	65	5.4
Leasing and business services	38	63.1	5.3
Information transmission, software and computer services	42	61.2	5.1
Transport, storage and postal services	13	55.8	4.7
Financial services	4	34.2	2.9
Wholesale and retail trade	45	31.2	2.6
Real estate	9	25.2	2.1
Sanitation and social welfare services	5	11.7	1
Scientific research and technical services	28	11.2	0.9
Agriculture, forestry, animal husbandry and fisheries	13	8.1	0.7
Culture, sport and education	5	5.8	0.5
Sanitation and social welfare services	3	0.3	-
Construction	3	0.2	-
Residential services, repairs and other services	4	0.1	-
Education	3	0.1	-
Total	431	1196.2	100

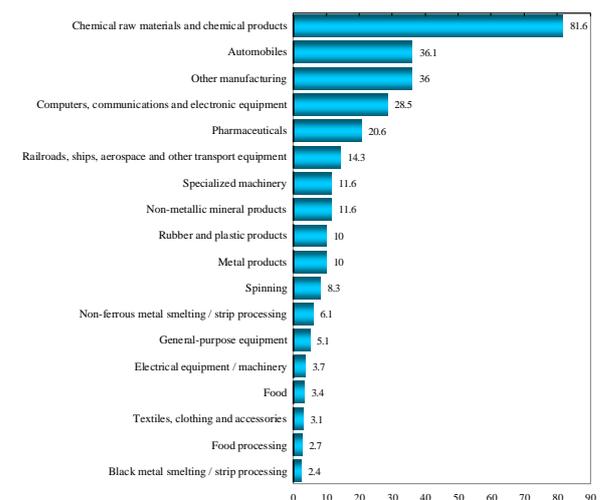
Source: Excerpted and adapted from the “2017 Statistical Bulletin on China’s Outward Foreign Direct Investment”

Figure 5: Top 10 destinations for Chinese outbound M&A transactions in 2017



Source: Compiled and edited from the 2017 Statistical Bulletin on China’s Outward Foreign Direct Investment

Figure 6: A breakdown of China’s outbound manufacturing FDI to manufacturing by industry in 2017



Source: As for Figure 5

FDI in leasing and business services remains the biggest growth sector for Chinese corporations, though investment in manufacturing, wholesale and retail trade, and financial service is also increasing, with the growth in manufacturing FDI being particularly conspicuous (increasing from 6.8% of the total in 2010 to 18.6% in 2017, with manufacturing also seeing the largest number of overseas incorporations by Chinese companies). Investment in mining, formerly the leading sector for outbound FDI, began decreasing in 2015, dropping into negative growth in 2017, which marks a major shift. Moreover, investment in modern emerging industries and other service sectors is also showing steady growth. These trends are underpinned by structural changes in China's manufacturing industry, policies aimed at promoting emerging industries, and by the growth and market strategies of rising and new-comer multinationals, and the following section will thus explore investment trends and the development of strategy with a focus on these main industries.

2. Trends in China's outbound FDI in traditional and key industries (primarily the automobile, heavy machinery, textile and apparel, and steel industries)

Due to the limitations on statistical data, it is not possible to address chronological trends in outbound FDI in the various manufacturing sectors, but the following section focuses on the Ministry of Commerce's "Report on Developments in China's Outward Investment Cooperation 2017" to offer an overview of China's manufacturing FDI, along with its outcomes and the challenges China faces in this area.

Let's start with auto manufacturing. According to a Chinese government report, Chinese overseas expansion efforts in the automotive sector have been hugely successful. The aforementioned Ministry of Commerce report for 2017 cites 69 outward investment deals in the automobiles and auto parts industry during 2016, which is the highest number in four years. The expansionary trend now favors greenfield investments over buyouts (with Chinese companies closing a total of 18 deals worth USD 3.03 billion in 2016), with the rise in investment in regions associated with the Belt and Road being particularly conspicuous. It should be noted, however, that the investment strategies evidenced by the outbound M&A deals of Chinese corporations suggest that the acquisition of promising technologies is the key driver of Chinese investment in the United States, whilst many of China's acquisitions in Germany are of auto parts manufacturers, with the buyers being private enterprises. Again, the primary goal of Chinese outbound M&A activity is the acquisition of prominent foreign management assets (including products, technologies, patents, brands, sales networks and human resources, etc.).

Table 2 offers an overview of representative crossborder M&A deals by Chinese corporations in the automobile industry. Surprisingly, all the buyers are private enterprises. Unlike China's state-owned auto manufacturers, which have formed ties with the world's biggest automobile companies through mergers and so forth, private enterprises lack technological capabilities and other management assets and appear to be adopting a quick acquisition

strategy in an effort to strengthen their capabilities. Looking ahead, investment in the global auto industry by Chinese corporations, with their established competitive advantage, is expected to increase with ongoing vehicle electrification and the introduction of connected cars (cars equipped with Internet access).

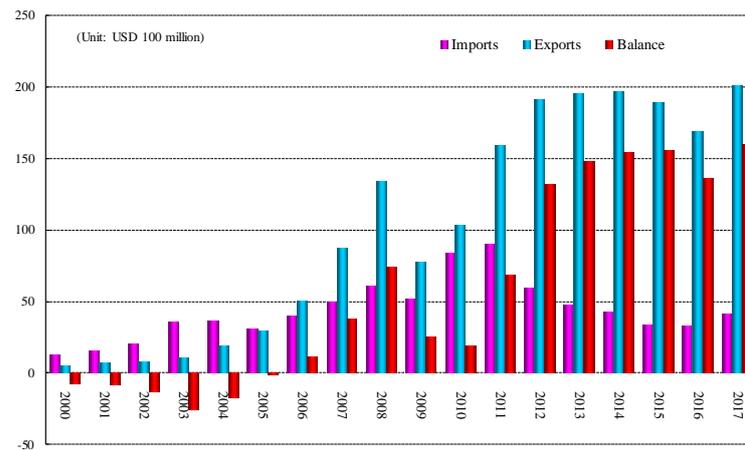
Table 2: Examples of crossborder M&A deals by Chinese auto industry companies in 2016

Buyer	Type of company	Company acquired	Country of location	Cost of acquisition (USD million)	Affiliated sector
Ningbo Joyson	Private	Key Safety Systems, Inc.	US	1444.8	Automotive safety systems
Zhejiang Wanfeng Technology	Private	The Paslin Company	US	302.0	Robotic welding
Ningbo Joyson	Private	TechniSat Automotive	Germany	236.5	In-vehicle information systems, vehicle navigation systems, IoV
Anhui Zhongding	Private	Tristone Flowtech	Germany	180.2	Engine cooling systems, vehicle navigation systems
Anhui Zhongding	Private	AMK Holding GmbH & Co.KG	Germany	146.8	Motor battery control systems, driver assistance devices, electronic chassis control
Fuxin Dare Automotive Parts	Private	Carcoustics International GmbH	Germany	122.9	Car interiors
China International Marine Containers	Private	Retlan Manufacturing Ltd.	UK	122.0	Trailer manufacturing
ZYNP	Private	Incodel Holding LLC	US	101.2	Power systems
Wuxi Gissing Auto Parts	Private	Conform Automotive	US	100.0	Car interiors
Chongqing Sokon Industry Group Stock	Private	AC Propulsion Inc.	US	95.0	Electric vehicle powertrain systems

Source: Compiled from the “Report on Developments in China’s Outward Investment Cooperation 2017” published by the Ministry of Commerce, and other sources

Chinese investment in heavy machinery, which, like the automobile industry, belongs to the machinery sector, is also extremely vigorous. As a major industry reflecting the progress and growth of Chinese industrial technologies, heavy machinery has attracted considerable attention, but as **Figure 7** shows, beginning in 2005 when imports and exports of heavy machinery came into balance with each other (with both valued at around USD 3 billion), foreign exports increased rapidly pushing this sector into a trade surplus (i.e. a “foreign exchange earner”, with 17 models becoming staple exports for China). More recently, the extent of the surplus has stabilized (narrowing significantly in 2016. In 2016, Chinese exports of heavy machinery to Belt and Road countries totaled USD 7.41 billion, accounting for 43.7 percent of total exports. This growth in exports has led to a spurt of global expansion within the industry that is helping to strengthen technological and corporate capabilities. Currently, there are eleven Chinese manufacturers amongst the world’s 50 largest heavy machinery manufacturers, many of which are actively investing in overseas markets.

Figure 7: Trends in Chinese exports and import of heavy machinery (2000-2017)



Source: Compiled from the “Report on Developments in China’s Outward Investment Cooperation 2017” published by Ministry of Commerce, and other sources

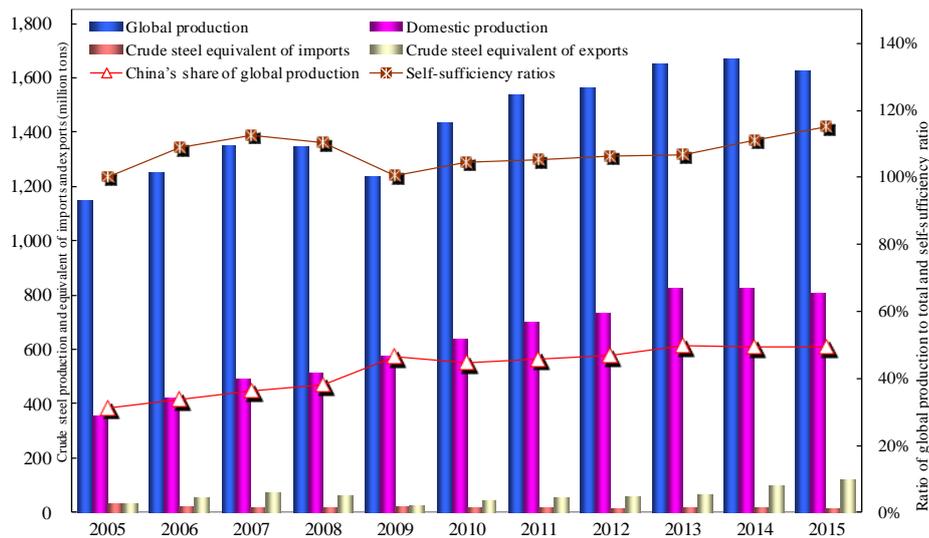
Chinese heavy machinery manufacturers have expanded into 170 countries worldwide and export to 200 countries and regions around the globe, with operating income from overseas businesses and export earnings accounting for around 25 percent of total revenue. Xuzhou Construction Machinery Group, Zoomlion Heavy Industry Science and Technology, Guangxi LiuGong Machinery, Shantui Construction Machinery, Anhui Forklift Truck Group Co., Ltd., Sinomach Heavy Industry Corporation, CRRC Corporation and other major industry players are investing heavily in overseas markets and are actively expanding into Europe, North America, South America, Russia, the ASEAN region, and the Middle East, investing in regional headquarters and R&D centers, the acquisition of other companies in the same industry, and the establishment of foreign sales and marketing networks. XCMG, for example, boasts eight foreign production plants, ten parts supply centers, five offshore R&D centers, and a business network that covers 176 countries and regions worldwide. Sany Heavy Industry Company, meanwhile, acquired CIFA in 2009 and the German engineering group Putzmeister in 2011 in a bid for expanded operations and global business expansion. LiuGong has also invested heavily in global expansion and in 2016 its foreign sales accounted for 30 percent of business revenue. This growth in overseas investment is generally attributed to the industry’s comparative advantage in technological capabilities, increasing demand from related industries in foreign markets, and the proactive global expansion strategies of industry players.

Manufacturing is also a traditional industry and the pictures for China’s steel and textile and apparel industries – both representative key industries, are slightly different. China’s steel industry was slow to take on outbound FDI and it lags behind the textile and apparel industry in this area. Its position at the tail end of the outbound manufacturing FDI rankings in 2017 (**Figure 6**) is symbolic.

China’s steel industry has the highest self-sufficiency rate for supply and the strongest industrial technology capabilities (**Figure 8**), but faces a major challenge due to falling equipment capacity, making it an industry with powerful global expansion capabilities and

internal factors. It currently exports primarily to Korea, Vietnam, Indonesia, Thailand and other countries within Asia and outbound FDI is not particularly large scale, but responses to trade friction in particular suggest that future growth is a possibility. The Chinese government report also cites various challenges that this industry will face in its bid for global expansion³. The potential for growth in foreign investment by the steel industry could be an option for the Chinese government.

Figure 8: Trends in China’s steel production and self-sufficiency ratios (2005-2015)

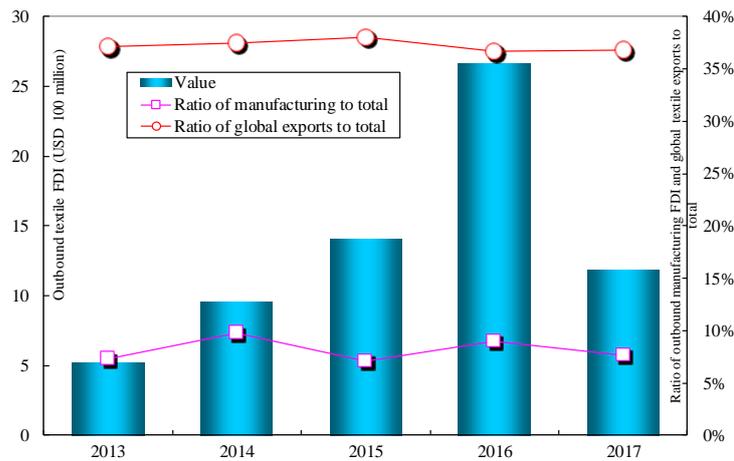


Source: Compiled from Haimin Liu and Ligang Song “Issues and Prospects for the Restructuring of China’s Steel Industry” (<http://press-files.anu.edu.au/downloads/press/n1906/pdf/ch14.pdf>). “Crude steel equivalent of imports and exports” are corresponding values based on imports and exports of steel materials.

By way of contrast with the steel industry, China’s textile and apparel industry – an industry that is both labor intensive and in which the construction and introduction of new equipment is relatively easy – is making steady progress in its global expansion efforts (**Figure 9**). Outbound investment by textile and apparel enterprises roughly doubled in 2016, the year in which China’s outbound FDI reached record levels, which is seen as a response to rising domestic labor costs and ongoing global expansion in a bid to tap into local markets.

³ The report points, for example, to underdeveloped systems for overseas investment, a lack of ties with related companies and manpower shortages.

Figure 9: Trends in outbound FDI and exports in China’s textile industry



Source: Compiled from the China National Textile and Apparel Council (CNTAC) “Survey Report on the Status Quo and Corporate Social Responsibility Risks of Chinese-invested Overseas Textile and Apparel Enterprises”.

Foreign investment by these traditional, key industries offers advantages such as employment growth in the destination countries and opportunities to nurture and develop industry technologies, and it is hoped that these industries – the steel industry included, will steadily expand their investment in traditional manufacturing in the developing countries along the Belt and Road and promote the transfer of technology.

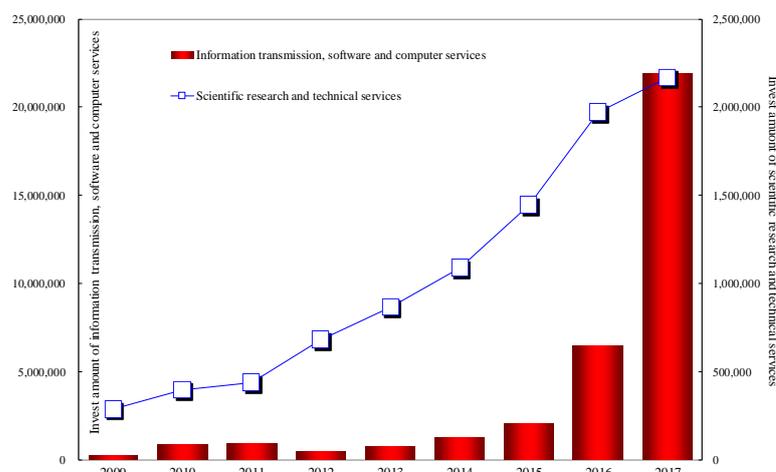
3 . Trends in China’s outbound FDI in modern, emerging industries (primarily telecommunications, scientific research and technical services)

In addition to the traditional manufacturing sector discussed in the previous section, Chinese corporations are investing aggressively in two major industries that belong to modern emerging industries or the so-called “strategic emerging industries”⁴, namely telecommunications (given in statistics as “information transmission, software and computer services”) and “scientific research and technical services”, which is worthy of note.

Figure 10 plots outbound FDI stock into these two sectors and shows a marked increase in recent years (since the 2015 release of the “Made in China 2025” strategy). China’s strategy for the globalization of its information industry, a strategy that is in line with the rising tide of the Fourth Industrial Revolution, is thus being steadily reflected in the overseas ventures of its corporations.

⁴ The “next-generation information technology” (next-generation telecommunications networks, IoT, 3G, high-performance integrated circuits, high-end software, and AI, etc.) sector named by the Chinese government in its policies aimed at promoting “strategic emerging industries” (the 13th Five-year Plan on the Development of Strategic Emerging Industries”, that was issued by the State Council on December 19, 2016, etc.), offers the closest approximation to these two industries (i.e. information transmission, software and computer services, and scientific research and technical services), but since the match is not exact the tentative term “modern emerging industries” is used here.

Figure 10: Trends in outbound FDI in the telecommunications and scientific research and technical services sectors



Source: Compiled from the 2017 Statistical Bulletin on China's Outward Foreign Direct Investment. Data are based on outbound FDI stock figures. All figures given in units of USD 10,000.

Many world-renowned corporations are active in these sectors and they are ushering in a new wave of outbound FDI from China. **Table 3** gives the ratios of overseas business earnings to total revenue for Chinese telecommunications companies operating at a global level. In 2016, Lenovo Corporation recorded the highest ratio of overseas business earnings at 72 percent, followed by newcomer Cheetah Mobile at 58.7 percent, and Huawei Technologies at 54.2 percent, whilst ZTE Corporation (42.2%) and Xiaomi (21.1%) had ratios of over 20 percent, which puts them in the globalized company rankings, though there were also numerous companies that recorded ratios of just a few percentage points, which argues that there will be an even greater push towards globalization from this sector over the coming years.

Table 3: Degree of globalization among Chinese telecom and tech industry companies (2016)

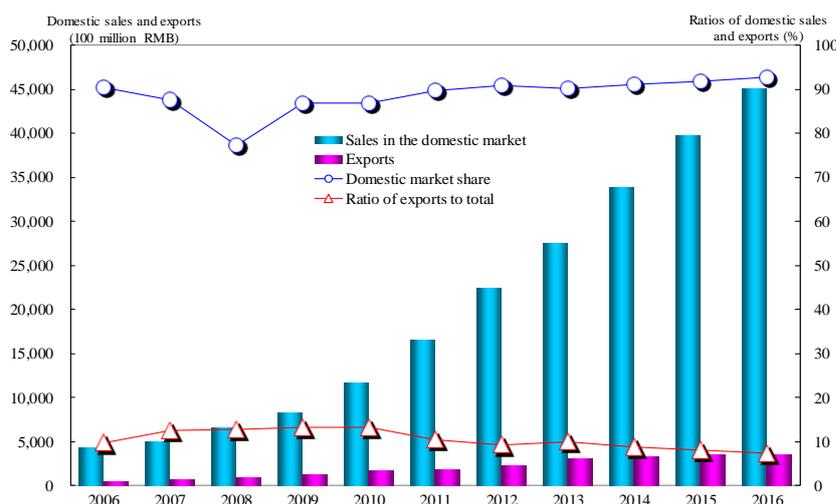
No.	Company	Overseas business earnings (100 million RMB)	Total revenue (100 million RMB)	Ratio of overseas earnings to total
1	Huawei Technologies	2,851	5,261	54.2%
2	Lenovo Corporation	2,149	2,985	72.0%
3	ZTE Corporation	427	1,012	42.2%
4	Guangdong OPPO Mobile Telecommunications Corp (OPPO)	189	895	21.1%
5	Beijing Xiaomi Tech	148	700	21.1%
6	China Mobile Communications Corp	134	7,084	1.9%
7	Alibaba Group Holdings	133	1,583	8.4%
8	China Telecom Corporation Ltd.	90	3,523	2.6%
9	Vivo Mobile Communications	80	696	11.5%
10	Shenzhen Tencent Computer	76	1,519	5.0%

	Systems					
11	China United Network Communications Group			30	2,410	1.2%
12	Cheetah Mobile			27	46	58.7%

Source: Compiled from You Intelligence, China Enterprise Confederation, China Enterprise Directors Association, etc. data.

As is also evidenced by the expanding domestic market for Chinese software and IT services and the sluggish growth in export share (Figure 11), there is still room for further outbound FDI from companies associated with these sectors. Investment based on partnerships with corporations from Japan and elsewhere would likely be fruitful, and an increase in outbound investment in the emerging strategic enterprises of third countries (primarily those associated with the Belt and Road Initiative) is anticipated from both China and Japan over the coming years.

Figure 11: Market trends for China’s software and IT service industries



Source: Compiled from the Report on Developments in China’s Outward Investment Cooperation 2017 published by the Ministry of Commerce

Table 4 lists the industries and sectors (present and future) that are being targeted for Chinese outbound FDI and overseas construction contracts by region according to a research report published by Ministry of Commerce agency (as of 2015). Asia, Africa, North America, Latin America, Europe and Australia are seen as key regions both now and for future investment, but there can be no doubt that regions associated with the Belt and Road will be a focus for China’s outbound FDI given the levels of economic and industrial development in Belt and Road countries and their geographical proximity to China. An analysis of this report suggests that the sectors presented in Figure 12 (iron and steel, non-ferrous metals, building materials, railways, power, chemical engineering, light industry, spinning, automobiles, telecommunications, machine tools, aerospace, shipbuilding and marine engineering) as derived from the “Guiding Opinions on Promoting Cooperation in International

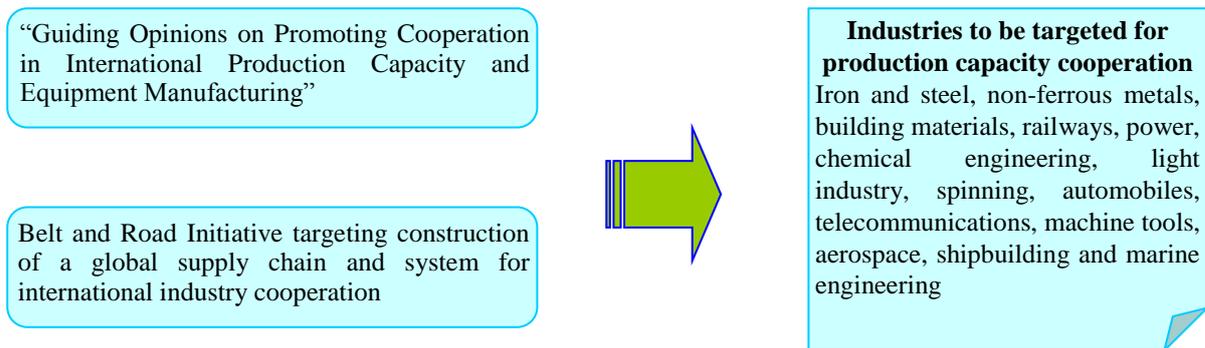
Production Capacity and Equipment Manufacturing” that was unveiled by the State Council in October 2015, and the Belt and Road Initiative, which aims to build a global value chain and a system for international industry cooperation, are to be targeted for overseas investment cooperation in the coming years. The industries and sectors that are to be targeted for overseas investment cooperation under the Belt and Road initiative have also been identified and are given in the bottom section of **Figure 12**. It is clear from this that China intends to expand even further into numerous industries throughout the world.

Table 4: Industries and sectors slated for overseas investment cooperation by region

	Sectors targeted for overseas investment cooperation by method of investment		
	Outbound FDI	Overseas construction contracts	Areas with future potential
Asia	Leasing and business services, wholesale and retail trade, financial services, mining, transport, storage and postal services	Petrochemicals, transportation, construction, power construction, housing construction	Development and construction of roads, railways, ports, oil pipelines, bridges, transport networks, optical fiber transmission lines and other social infrastructure, plus oil, natural gas, offshore oil, etc.
Africa	Construction, mining, financial services, manufacturing, scientific research and technical services	Transportation, housing construction, power construction	Aviation, financial services, tourism, marine economy, green economy
Latin America	Leasing and business services, wholesale and retail trade, financial services, mining, transport, storage and postal services	Power construction, transportation, construction, telecommunications construction, petrochemicals, housing construction	Energy resources, basic infrastructure, agriculture, manufacturing, innovation and IT
North America	Financial services, mining, manufacturing, leasing and business services, real estate	Housing construction, transportation, construction, telecommunications construction, manufacturing and processing facility construction, petroleum processing	Natural resources, high-end manufacturing, real estate, hi-tech, social infrastructure, biopharmaceuticals, the cyber industry
Europe	Leasing and business services, financial services, manufacturing, mining, wholesale and retail trade	Telecommunications construction, transportation construction, power construction, housing construction	New energy, new materials, IT, biotechnology, aerospace
Australia	Mining, financial services, real estate, agriculture, forestry, animal husbandry and fisheries, manufacturing	Housing construction, transportation construction, telecommunications construction	Development of ports, power, telecommunications, transport and other social infrastructure; infrastructure construction based on the development of the agriculture, food product and tourism industries, and high-end services

Source: Compiled from the “Research on Promoting Strategic Investment for the Belt and Road Initiative” (2017), published by the MOFCOM Department of Foreign Investment Administration and China Outsourcing Institute. Data are from 2015.

Figure 12: Industries likely to be targeted for international cooperation under the Guiding Opinions on Promoting Cooperation in International Production Capacity and Equipment Manufacturing and the Belt and Road Initiative



Industries selected for overseas investment cooperation under the Belt and Road Initiative

Sector	Related industries				
Emerging competitive industries	Basic transport infrastructure	Power construction	Telecommunications construction and services	Modern agriculture	Hi-tech and innovation
Industries with excess capacity	Steel	Building materials	Housing construction	Mineral resource development	Petroleum processing and natural gas resources
Supporting industries	Financial services	Business services	Transport networks and wholesale / trade logistics centers		

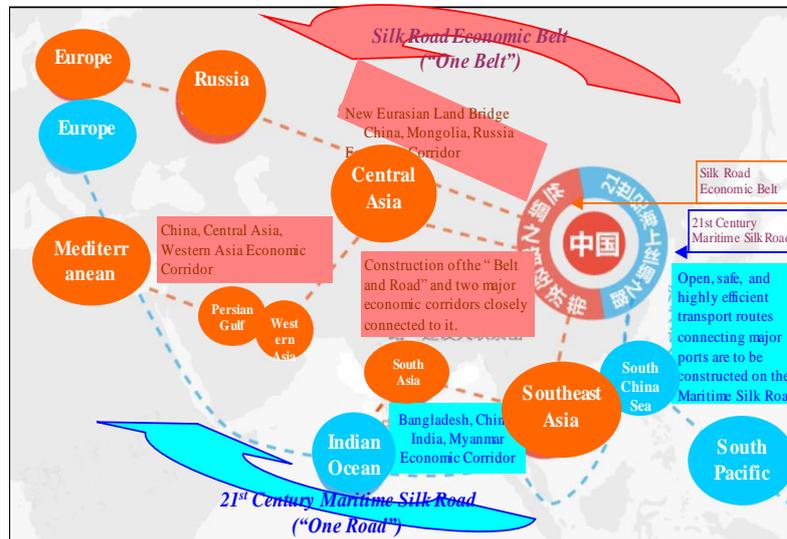
Source: As for Table 4

4. Challenges to China’s outbound FDI as trade friction intensifies and the prospects for the future

Parts 1, 2 and 3 of this report have examined the current status of China’s outbound FDI. The limitations of statistical data and space mean that this analysis is inadequate, particularly in regard to the international business operations of Chinese corporations and the effects of outbound M&A investment. Nonetheless, the considerations and analyses presented herein have made it abundantly clear that China’s outbound FDI is accelerating rapidly and that it spans a wide cross-section of industry in countries throughout the world. Both the multinationalization of Chinese corporations and M&A activity funded by Chinese capital are progressing at a vigorous pace, and further development is anticipated through international production capacity cooperation and efforts to promote the Belt and Road Initiative (**Figure 13**). Moreover, given the current focus on industrial advances, service industry development and the development of strategic emerging industries in China, outbound FDI in traditional manufacturing and new industries (including both manufacturing and the service industry) will continue to expand over the long term, and the potential and necessity for cooperation between Chinese corporations and their counterparts elsewhere in the world will likely increase as further progress is made on multinationalization. Put another way, economic and industrial development in China and the rest of the world gives China’s outbound FDI both long-lasting momentum and enormous

potential, and Chinese capital and technologies are expected to have a major impact in terms of promoting the development of the world economy in general and the economies and industries of developing and emerging countries in particular.

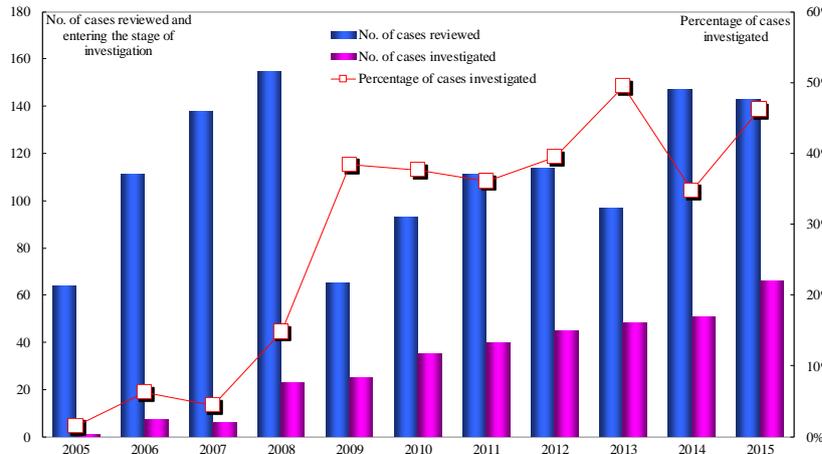
Figure 13: Construction Plan for China’s Belt and Road Initiative



Source: Compiled and edited from “Research on Promoting Strategic Investment for the Belt and Road Initiative”, published by the MOFCOM Department of Foreign Investment Administration and China Outsourcing Institute. Where (1) is China and Pakistan and (2) is Bangladesh, China, India and Myanmar.

At the same time, as symbolized by the intensifying trade friction between Washington and Beijing this year, China’s outbound FDI, like its trade with the United States, is now facing fierce headwinds. As was touched upon in a white paper entitled “The Facts and China’s Position on China-US Trade Friction” that was released by the Chinese government (the State Council Information Office) in September this year, the percentage of foreign investment transactions that have been subject to special investigation by the American government has increased in recent years (Figure 14), and the past two years (2016-2017) have seen the largest number of overseas acquisitions transactions vetoed and blocked, several of which have involved Chinese corporations. This trend is expected to continue and could well have an impact on strategies promoting FDI in Europe and other developed nations, in addition to the United States.

Figure 14: Trends in the number of overseas investment transactions reviewed and investigated by the US government



Source: Excerpted from “The Facts and China’s Position on China-US Trade Friction” White Paper, the State Council Information Office (September 2018). Data are sourced from annual reports released by the Committee on Foreign Investment in the United States (CFIUS).

Should China’s corporations be forced to shift away from the M&A investment strategy they have favored when investing in developed nations, it will be necessary to pour additional energy into greenfield investment and to turn their attention away from America and Europe and begin focusing on the Belt and Road regions in earnest. The essentials necessary to a shift in investment policy are starting to fall into place and include regional cooperation and development strategies both at home and overseas. Moreover, China has already established numerous economic and trade cooperation zones primarily in Belt and Road countries (Table 5), which are expected to have similar effects to the domestic development zones and industrial zones that have played such a large role in facilitating inbound FDI from overseas.

Table 5: Establishment of Overseas Economic and Trade Cooperation Zones by China in Belt and Road Countries

No.	Name of cooperation zone	Year established	Location	Name of Chinese developer	Main industries
1	Suez Economic and Trade Cooperation Zone	1996	Egypt	中非泰達投資股份有限公司	New building materials, textiles and apparel, electrical equipment, oil equipment
2	Sino-Russian Modern Agriculture Industrial Cooperation Zone (Coastal zone)	2004	Russia	黑龍江東寧華信經濟貿易有限責任公司	Cultivation, culturing, processing of agricultural products
3	Thai-Chinese Rayong Industrial Zone	2005	Thailand	華立產業集團有限公司	Vehicle development, machinery, home appliances
4	Sihanoukville Port Economic Special Zone	2006	Cambodia	江蘇太湖柬埔寨國際經濟合作區投資有限公司	Textiles and apparel, metal processing equipment, light industry, home appliances
5	Haier & RUBA economic zone	2006	Pakistan	海爾集團電器產業有	Home appliances, cars,

				限公司	spinning, building materials, chemical engineering
6	LEKKI Free Trade Zone (China-Nigeria Economic Trade Zone)	2006	Nigeria	雲南省海外投資有限公司	Manufacturing, warehousing and logistics, municipal services, real estate
7	Ussuriysk Economic and Trade Cooperation Zone	2006	Russia	康吉國際投資有限公司	Textiles and apparel, metal processing equipment, light industry, home appliances
8	China-Indonesia JuLong Agricultural Industry Cooperation Zone	2006	Indonesia	天津聚龍集團	Light industry, home appliances, electronics, timber processing
9	Long Jiang Industrial Park (LJIP)	2007	Vietnam	前江投資管理有限責任公司	Oil palm cultivation and development, precision machining, purchasing, warehousing and logistics
10	Zambia China Economy and Trade Zone	2007	Zambia	中國有色鋁業集團有限公司	Trade, light industry, electronic machinery, building materials, chemical engineering
11	Sino-Indonesia Economic and Trade Cooperation Zone	2007	Indonesia	廣西農墾集團有限責任公司	Non-ferrous metals, modern logistics, business services, real estate, etc.
12	Sino-Russia Tomsk Timber Industry Trade Cooperation Zone	2008	Russia	中航林業有限公司	Vehicle assembly, machinery manufacture, home appliances, fine chemicals, etc.
13	Ethiopia Eastern Industrial Zone	2008	Ethiopia	江蘇永元投資有限公司	Forest cultivation and felling, timber processing, wholesale trade, logistics
14	Uzbekistan Pengsheng Industrial Park	2009	Uzbekistan	溫州市金盛貿易有限公司	Construction materials, light fixtures, electric appliances, agricultural machinery, light industry, spinning
15	Vientiane Saysetha Development Zone	2010	Laos	雲南省海外投資有限公司	Energy, chemical engineering, livestock processing, electrical appliance manufacture, feed processing, building materials, warehousing and logistics
16	Hungary Central European Trade and Logistics Zone	2011	Hungary	山東帝豪國際投資有限公司	Product exhibitions, transport, warehousing, collection and delivery, data processing, distribution processing
17	Kyrgyzstan-Asia Star Agricultural Industry Cooperation Zone	2011	Kyrgyzstan	商丘貴友食品有限公司	Cultivation, culturing, meat processing, food processing
18	China-Hungary BorsodChem Economy and Trade Cooperation Zone	2011	Hungary	煙台新益投資有限公司	Chemical industry, biochemical industry
19	Russian Longyue Forestry Economy and Trade Cooperation Zone	2013	Russia	黑龍江省牡丹江龍躍經貿有限公司	Logging, crude and precision processing, silviculture, forest product exhibitions, international transportation and logistics, etc.
20	China-Indonesia Integrated Industrial Park Morowali Park	2013	Indonesia	上海鼎信投資(集團)有限公司	Nickel-iron, stainless steel

Source: Excerpted from “Research on Development Modes of China’s Overseas Industrial Parks along the Belt and Road”, Chinese Academy of Sciences Bulletin (August 21, 2018) (Authors: Yeerkeen Wuzhati, etc.)
http://www.bulletin.cas.cn/zgkxyyk/ch/reader/view_news.aspx?id=20180821042424185

Further development of international projects with other countries and regions, such as Japan, is also expected to increase the transparency and reliability of China's outbound FDI. Approaches from China's regions to the various Belt and Road countries, insofar as the investment projects coincide with realities and demand in the target regions and cities, can be expected to contribute to economic development in the investment destinations and, given the growing importance of promoting outbound FDI and international cooperation at the regional and city levels down the line, will likely prove an effective response to trade friction and to promoting construction of the Belt and Road.

The globalization of corporations and industry is expected to gain additional speed as the Fourth Industrial Revolution gains traction, and given that the need to address international trade friction is already acting as a driver for international investment and corporate partnerships, China's outbound FDI can be expected to increase further as it leverages the industrial diversity and regional spread of its overseas investment, with the key roles played by the domestic consumer market and global economic development likely to bring about a more open domestic market and further economic globalization in China.

Chinese Monetary Policy

Recent trends and outlook regarding interest rates

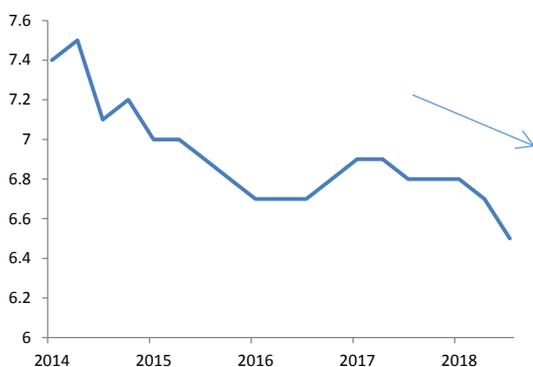
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1. Introduction

In 2017, the Chinese government and the People’s Bank of China (PBOC) shifted the country’s monetary policy to “moderate and neutral” from a policy of “moderate,” in terms of monetary tightening. Along with tightening regulations for the purpose of deleveraging for companies and mitigating structural risks in the monetary system, interest rates in the market have been rising, putting weight on economic growth. While slightly lowering the target growth rate, the Chinese government has been taking measures to support the real economy. However, now facing the unexpected outbreak of a trade war between the U.S. and China, the downward pressure on the economy has recently been strengthening.

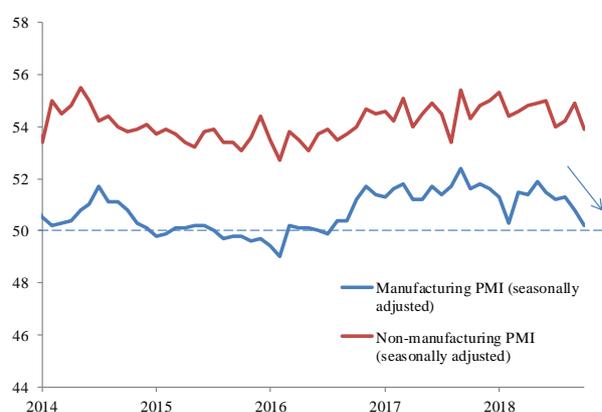
The actual GDP growth rate (year-on-year [YOY]) for the July–September 2018 quarter turned out to be 6.5% (Figure 1). Even though this rate remained at the level of the annual target set out by the government at 6.5%, the manufacturing PMI, the leading indicator of economic strength, recorded its lowest figure in approximately two years, at 50.2 (in October 2018) (Figure 2), approaching 50—the turning point for the assessment of either improvement or deterioration in the economy. It is possible for this index to fall below the 50 mark if the influence of the trade frictions between the U.S. and China becomes stronger in the times ahead. It should also be pointed out that other major economic indices have also declined (Figure 3).

Figure 1: Real GDP growth rate (YOY)



Source: Bloomberg

Figure 2: Purchasing Managers’ Index (PMI)



Source: Bloomberg

Figure 3: Other major economic indices



Source: Bloomberg

Under such circumstances, the Chinese government introduced a series of economic stimulus in order to mitigate the influence of the customs duties imposed by the U.S. against China, clearly expressing its intention at various conferences and meetings. With regard to monetary policy as well, at the Central Politburo of the Communist Party of China held in July 2018, the monetary policy was shifted to “moderate” from “moderate and neutral,” after maintaining the latter since 2017. It should also be mentioned that the PBOC cut the deposit reserve requirement ratio four times this year in order to stabilize the monetary policy through the supply of liquidity, while also cutting costs of fund procurement for companies.

This article will examine the current level of Chinese yuan interest rates and the future outlook, placing particular focus on changes in monetary policy and operations taken by the Chinese monetary authorities. In doing so, it should be emphasized that a large part of this article contains the personal views of the author, which the readers are asked to be aware of.

2. Monetary policy of the Chinese government and the central bank

(1) Major changes in monetary policy principles

Figure 4 show extracts of changes in the policy principles announced mainly at the Central Politburo of the Communist Party (government) as well as in a Chinese monetary policy report from the PBOC.

Figure 4: Changes in policy principles

Major policy principles of the government	Major policy principles of the PBOC
April 23, 2018 (Central Politburo of the Communist Party) <ul style="list-style-type: none"> Maintained the “moderate and neutral” monetary policy Deleted a reference to deleveraging Promoted the expansion of domestic demand 	May 11, 2018 (Monetary policy report of China) <ul style="list-style-type: none"> Maintained the “moderate and neutral” monetary policy Referred to the growing uncertainty caused by the trade frictions, etc.
July 23, 2018 (State Council Meeting) <ul style="list-style-type: none"> Introduced a policy package including a tax cut for companies and support for bond issuance by local governments and banks for the expansion of domestic demand. 	<ul style="list-style-type: none"> Engaged in deleveraging and monetary risk aversion Engaged in maintaining a sufficient liquidity level Strengthened the control of monetary policy
July 31, 2018 (Central Politburo of the Communist Party) <ul style="list-style-type: none"> Shifted the monetary policy from “moderate and neutral” to “moderate” 	August 10, 2018 (Monetary policy report of China) <ul style="list-style-type: none"> Maintained a “moderate and neutral” monetary policy Maintained the measure for deleveraging
	November 9, 2018 (Monetary policy report of China) <ul style="list-style-type: none"> Maintained the “moderate and neutral” monetary policy

Major policy principles of the government	Major policy principles of the PBOC
<ul style="list-style-type: none"> Maintained the measure for deleveraging <p>October 31, 2018 (Central Politburo of the Communist Party)</p> <ul style="list-style-type: none"> Referred to the growing downward pressure on the domestic economy Pointed to the fact that some companies are finding management increasingly difficult Referred to long-accumulated risks becoming more visible Engaged in assertive fiscal policy and moderate monetary policy Deleted the reference to deleveraging 	<ul style="list-style-type: none"> Deleted the reference to deleveraging Referred to the growing downward pressure on the domestic economy

The government shifted its principle regarding monetary policy to “moderate” toward monetary easing in July, referring to changes in the economic environment such as the growing downward pressure on the domestic economy resulting from the trade frictions between the U.S. and China, while promoting the expansion of domestic demand. On the other hand, the PBOC maintained its monetary policy at “moderate and neutral” while sharing the same economic outlook with the Chinese government, and it supplied liquidity in the market by lowering the deposit reserve requirement ratio in order to stabilize the monetary market.

In both cases, it is no doubt that the monetary policy is being shifted toward monetary easing. However, this slight difference between the government and the central bank shows the intention of the Chinese monetary authorities to avoid fueling excessive concern over the depreciation of the Chinese yuan and causing capital outflow by implying an extreme monetary policy.

(2) Effect of the deposit reserve requirement ratio

Figure 5 shows the trend of liquidity supply by the PBOC mainly through deposit reserve requirement ratio cuts. The PBOC provides liquidity in the market normally through open-market operations (OMO) using the reverse repo as well as the medium-term lending facility (MLF). However, deposit reserve requirement ratio cuts contribute greater in raising the liquidity level. While one OMO provides funds of approximately CNY 10–200 billion and MLF around CNY 300–500 billion, when the deposit reserve requirement ratio is cut by 1%, although it depends on the target financial institution and the deposits held, approximately CNY 1.3 trillion can be supplied (when the rate was cut in April 2018) (source: website of the PBOC).

Figure 5: Liquidity supply by the PBOC

Decisions regarding deposit reserve requirement ratio cuts, etc.
<p>1. September 30, 2017 <u>Preferable treatment of 0.5% or 1.5% on the condition of lending balances to micro-, small-, and medium-scale enterprises</u> (applied in January 2018) * The deposit reserve requirement ratio was substantially cut by 2.0% on December 29, 2017 in order to temporarily respond to capital demand during the season of the Chinese New Year 2018.</p>
<p>2. April 17, 2018 <u>The deposit reserve requirement ratio was cut by 1.0% on the condition of partial repayment of the existing medium-term lending facility (MLF).</u> (Applied on April 25)</p>
<p>3. June 24, 2018 The deposit reserve requirement was cut by 0.5%. (Applied on July 5)</p>

Decisions regarding deposit reserve requirement ratio cuts, etc.	
* July 23, 2018	The all-time, largest medium-term lending facility (MLF) on a single operation base supplied CNY 502 billion in order to support loans for small- and medium-scale enterprises.
4. October 7, 2018	The deposit reserve requirement ratio was cut by 1.0% (applied on October 15).

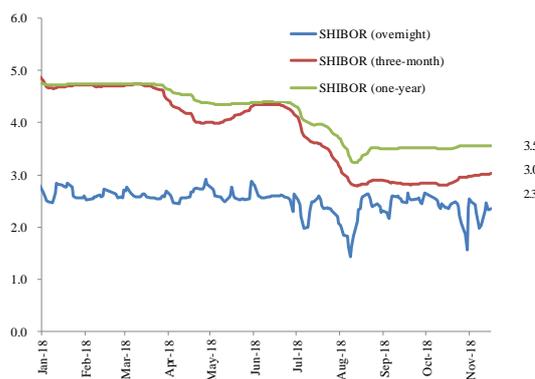
Furthermore, the PBOC has shown its intention not only to strengthen downward pressure on interest rates in the market but also to directly support the real economy by adding a condition to the loan balances for small- and medium-scale enterprises as was seen at the time of the deposit reserve requirement ratio cut announced in September 2017 (applied in January 2018).

At the time of the second deposit reserve requirement ratio cut of this year applied in April 2018, it was obligatory to use part of the deposit reserve made excess as a result of the cut for the repayment of the existing MLF. Out of approximately CNY 1.3 trillion in made excess, CNY 900 billion will be used for the repayment of the MLF. Even though this would not contribute to the liquidity of the market, it cut costs for target financial institutions by 1.68% (3.30%–1.62%), as financial institutions used to borrow the CNY 900 billion from the PBOC at the rate of 3.30% (one-year MLF interest rate) to receive interest of 1.62% (interest rate on deposit reserves). It can be said that the PBOC aimed to improve the conditions of financial institutions and to facilitate active loans through these cut costs.

3. Trends and outlook regarding Chinese-yuan interest rates

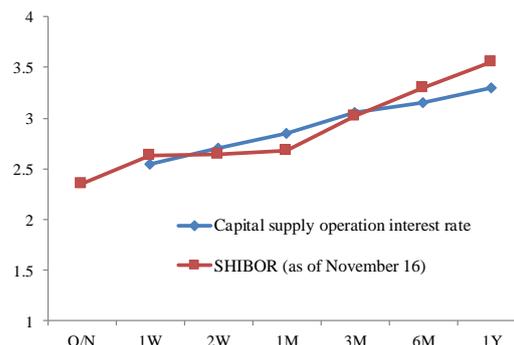
Thanks to these measures, the liquidity level in the capital market remained high and the interest rates started to slowly fall since the beginning of 2018. The SHIBOR, the base rate for inter-bank capital market interest rates, fell to approach the interest rate level for various fund supply operations,^{*1} after which the rate has been stable at the same level (Figure 6 and Figure 7).

Figure 6: SHIBOR



Source: Bloomberg

Figure 7: SHIBOR interest rate curve



Source: Bloomberg and estimates by the author

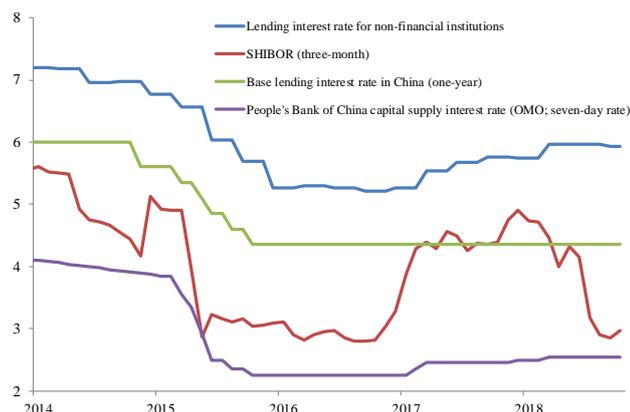
As the fund supply operations of the PBOC are used to control the liquidity level in the market, if the interest rate remains below the interest rate of such operations, market participants would stop using fund supply operations and the fund procurement cost of which would become higher. Those operations would thus lose their function in controlling the liquidity level. Market participants can use fund supply operations in order to prevent their liquidity-related indices from deteriorating, but this would create a negative spread, raising the cost significantly. This is the reason why the SHIBOR is currently being absorbed by the fund supply operation interest rates. In other words, if the operation interest rates are not cut,^{*2} the SHIBOR is expected to remain at the current level without any significant change.

^{*1} OMO (seven-day: 2.55%, 14-day: 2.70%, and 28-day: 2.85%), MLF (three-month: 3.05%, six-month: 3.15%, and one-year: 3.30%); however, the three-month MLF and the six-month MLF have not been used since August 2016 and June 2017, respectively, and the interest rate levels consist of estimates only.

^{*2} The operation interest rates are difficult to cut, as doing so could lead to an excessive depreciation of the Chinese yuan as well as concomitant capital outflow. Indeed, until March 2018, the fund supply operation interest rate was raised by 0.05% immediately after each interest rate hike in the U.S. in order to prevent or try to prevent the interest rate differentials between the U.S. dollar and the Chinese yuan from expanding (even though such has not been applied since June and as the focus has shifted to a low-interest-rate policy domestically).

If the SHIBOR falls due to a large-scale liquidity supply operation, financial institutions would be more active in lending to non-financial institutions, for better profits. As a result, lending interest rates start to fall among the overall financial institutions. As Figure 8 shows, in the past, the lending interest rates for non-financial institutions tend to follow the trends of the SHIBOR with a slight delay. However, the base lending interest rate has not been modified since October 2015, while its importance in terms of the interest rate policy is becoming obsolete. Therefore, if further downward pressure is required on lending interest rates in the times ahead, the fund supply operation interest rate is likely to be cut.

Figure 8: Lending interest rates for non-financial institutions, etc.



Source: Bloomberg

4. Conclusion

At the mid-term elections in the U.S. held on November 6, the Trump administration won the majority in the Senate, while the Democratic Party won a majority in the House of Representatives, resulting in Congress being controlled by opposing parties. However, as the Democratic Party and the Republican Party share the same attitude toward China regarding the trade frictions and as President Trump will maintain strong authority regarding diplomatic decision-making, there is unlikely to be significant impact on the outlook regarding the trade frictions between the U.S. and China.

China may intermittently continue introducing economic stimulus measures in order to reassure market participants if there is insufficient time to examine the effect of the already introduced measures. If that happens, it is still possible for China to carry out measures of monetary easing according to necessity, such as interest rate cuts for fund supply operations and further deposit reserve requirement ratio cuts, while focusing on the fiscal policy targeting particularly tax cuts and investment in infrastructure.

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