U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin

February 6, 2020

Highlights of This Month's Edition

- **Bilateral trade:** In 2019, U.S. goods deficit with China decreased to $345.6 billion, the lowest since 2014; agricultural exports grew 700 percent year-on-year to the highest level in two years; in Q3 2019, U.S. surplus in service trade with China continued year-on-year decline.
- **Bilateral policy issues:** The United States and China reach a "Phase One" trade deal on January 15; the U.S. Department of the Treasury published final FIRRMA regulations that will take effect on February 13.
- **Policy trends in China's economy:** Annual births in 2019 fall to an historic low, anticipating pressure on pension funds and labor market.
- **Quarterly review of China's economy:** China's economy grew 6.1 percent year-on-year in 2019—the weakest annual pace since 1990—against a backdrop of external trade frictions and internal pressures on the financial system; growth in housing prices moderated toward the end of 2019, raising questions for many localities' continued reliance on land sales for revenue; 14 local governments revise 2018 GDP growth figures downward; local government double down on land sales and debt issuance to offset revenue losses.
- **In focus—the coronavirus outbreak:** As the coronavirus outbreak continues to unfold, its global economic impact is causing disruption in sectors from tourism to oil to auto manufacturing; analysts believe China's GDP growth could drop to between 2 and 5 percent in Q1 2020.

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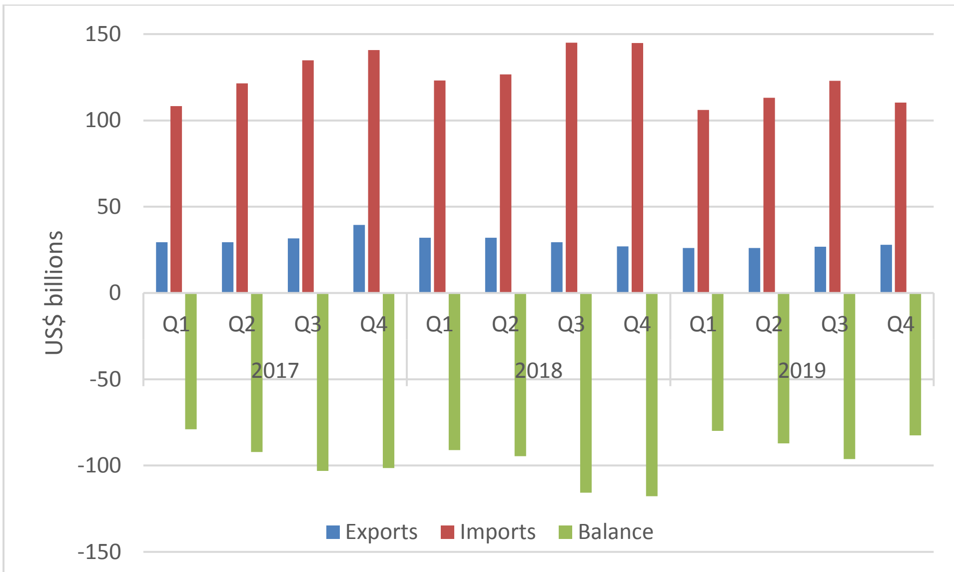
Bilateral Trade

U.S. Goods Deficit Decreases and Imports Fall in Fourth Quarter

U.S.-China goods trade declined in 2019 amidst ongoing trade tensions.[1] The U.S.-China aggregate goods deficit in 2019 totaled $345.6 billion, the lowest since 2014 ($342.6 billion).[2] Annual U.S. imports fell to $452.2 billion (lowest since 2013, $440.4 billion) and annual exports fell to $106.6 billion (lowest since 2011, $104.1 billion).[3]

Q4 2019 saw an irregular contraction in U.S. imports from China, which fell to $110.3 billion, down 23.8 percent year-on-year. In previous years, imports seasonally peaked at the end of the year (see Figure 1).[4] Quarterly exports to China rose each quarter in 2019, from $26 billion in Q1 2019 to $27.9 billion in Q4 2019.[5]

Figure 1: Quarterly Trade with China, Q1 2017 – Q4 2019



Source: U.S. Census Bureau, *Trade in Goods with China*, February 5, 2020. *https://www.census.gov/foreign-trade/balance/c5700.html.*

U.S. Agricultural Exports Peaked in November 2019

In Q4 2019, U.S. agricultural exports rose over 700 percent year-on-year to $3.8 billion (see Table 1).[6] In anticipation of a Phase One trade deal, agricultural exports peaked in November 2019 to $1.8 billion—the highest level of monthly exports in nearly two years (see Figure 2).[7] The only top U.S. export to experience a year-on-year decrease during the fourth quarter was transportation equipment, which fell 37.28 percent to $4.6 billion.[8] Four out of five U.S. top import sectors saw year-on-year decline during Q4 2019, with the exception of miscellaneous manufactured commodities which rose 9.1 percent to $10.9 billion.[9]

Table 1: U.S. Trade with China Top Five Exports and Imports

U.S. Trade with China, December 2019

U.S. Top-Five Exports to China

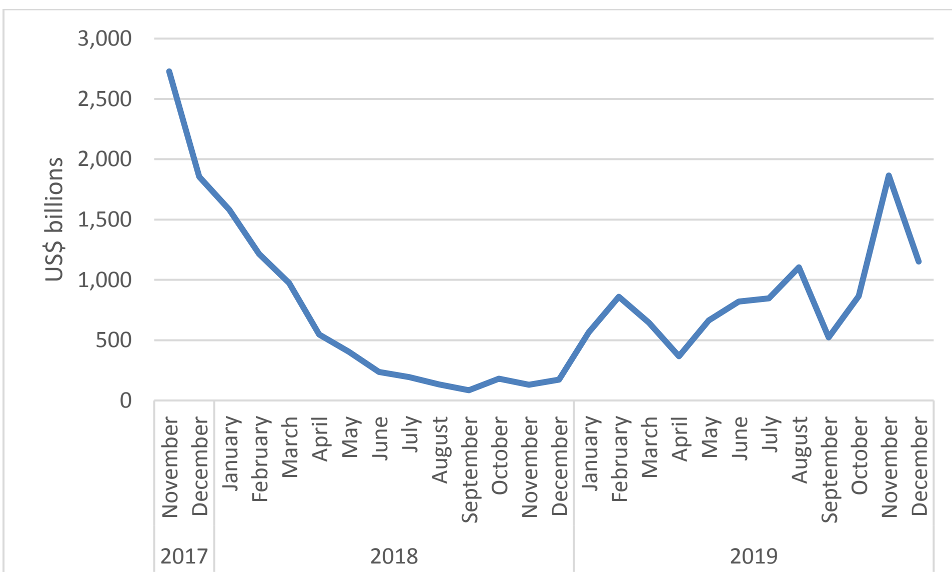
	Exports (in US$ millions)	Share of total (%)	Change over Q4'18 (%)
Quarter 4 (Oct-Dec'19)			
Computer & Electronic Products	$5,060	18.2%	3.98%
Transportation Equipment	$4,615	16.6%	-37.28%
Chemicals	$4,248	15.2%	14.59%
Agricultural Products	$3,879	13.9%	700.71%
Machinery, Except Electrical	$2,702	9.7%	7.76%
Other	$7,360	26.4%	
Total	$27,865	**100%**	
2019 Year-to-Date			
Transportation Equipment	$19,768	18.5%	-25.9%
Computer & Electronic Products	$19,028	17.8%	6.4%
Chemicals	$16,053	15.1%	-5.0%
Machinery, Except Electrical	$10,450	9.8%	-9.7%
Agricultural Products	$10,270	9.6%	19.0%
Other	$31,059	29.1%	
Total	$106,627	**100%**	

U.S. Top-Five Imports from China

	Imports (in US$ millions)	Share of total (%)	Change over Q4'18 (%)
Quarter 4 (Oct-Dec'19)			
Computer & Electronic Products	$40,541	36.8%	-25.2%
Miscellaneous Manufactured Commodities	$10,922	9.9%	9.1%
Electrical Equipment, Appliances & Components	$10,140	9.2%	-14.0%
Machinery, Except Electrical	$7,375	6.7%	-4.6%
Fabricated Metal Products	$5,318	4.8%	-10.8%
Other	$35,987	32.6%	
Total	$110,283	**100%**	
2019 Year-to-Date			
Computer & Electronic Products	$146,490	32.4%	-22.0%
Miscellaneous Manufactured Commodities	$42,855	9.5%	-10.7%
Electrical Equipment, Appliances & Components	$42,733	9.4%	3.7%
Machinery, Except Electrical	$32,981	7.3%	-12.5%
Apparel & Accessories	$26,920	6.0%	-2.2%
Other	$160,266	35.4%	
Total	$452,243	**100%**	

Source: U.S. Census Bureau, *USA Trade Online*, February 5, 2020. *https://usatrade.census.gov/*.

Figure 2: U.S. Agriculture Product Exports to China, January 2018 – December 2019



Source: U.S. Census Bureau, *USA Trade Online*, February 5, 2020. *https://usatrade.census.gov/*.

Advanced Technology Deficit Continues to Shrink to 2019

The U.S. annual deficit with China in advanced technology products (ATP) in 2019 totaled $102.7 billion, a decline of 23.68 percent compared to 2018 (see Table 2).[10] In Q4 2019, the deficit fell 15.7 percent year-on-year to $35.9 billion.[11] Information & communications technology remained the largest U.S. ATP import sector from China during the fourth quarter; however, imports fell 15.7 percent year-on-year to $35.6 billion.[12] U.S. imports of advanced materials fell over 100 percent year-on-year to $53 million.[13] U.S. exports of biotechnologies and flexible manufacturing both increased over 100 percent year-on-year to $682 million and $1.1 billion, respectively.[14]

Table 2: ATP Trade, 2019

U.S. Trade with China in ATP (in US$ millions)

Quarter 4	Quarterly					Cumulative year-to-date			
	Exports	Imports	Balance Q4'2019	Balance Q4'2018	Balance YOY	Exports	Imports	Balance 2019	Balance 2018
TOTAL	**$8,171**	**$38,431**	**-$30,260**	**-$35,912**	**-15.7%**	**$33,912**	**$136,670**	**-$102,758**	**-$134,633**
(01) Biotechnology	$682	$61	$621	$300	106.8%	$2,286	$216	$2,070	$808
(02) Life Science	$1,139	$620	$519	$302	72.0%	$3,905	$2,526	$1,379	$1,226
(03) Opto-Electronics	$149	$714	-$565	-$1,957	-71.1%	$564	$4,059	-$3,495	-$4,643
(04) Information & Communications	$828	$35,626	-$34,798	-$41,264	-15.7%	$3,356	$124,119	-$120,763	-$153,130
(05) Electronics	$2,367	$816	$1,551	$1,160	33.7%	$8,996	$3,321	$5,675	$1,803
(06) Flexible Manufacturing	$1,086	$222	$864	$321	168.9%	$3,911	$895	$3,016	$2,442
(07) Advanced Materials	$64	$53	$11	-$28	-139.8%	$261	$261	$0	-$154
(08) Aerospace	$1,826	$282	$1,544	$5,281	-70.8%	$10,504	$1,132	$9,372	$17,121
(09) Weapons	$1	$34	-$33	-$42	-22.1%	$2	$126	-$124	-$136
(10) Nuclear Technology	$29	$3	$26	$14	85.6%	$127	$15	$112	$30

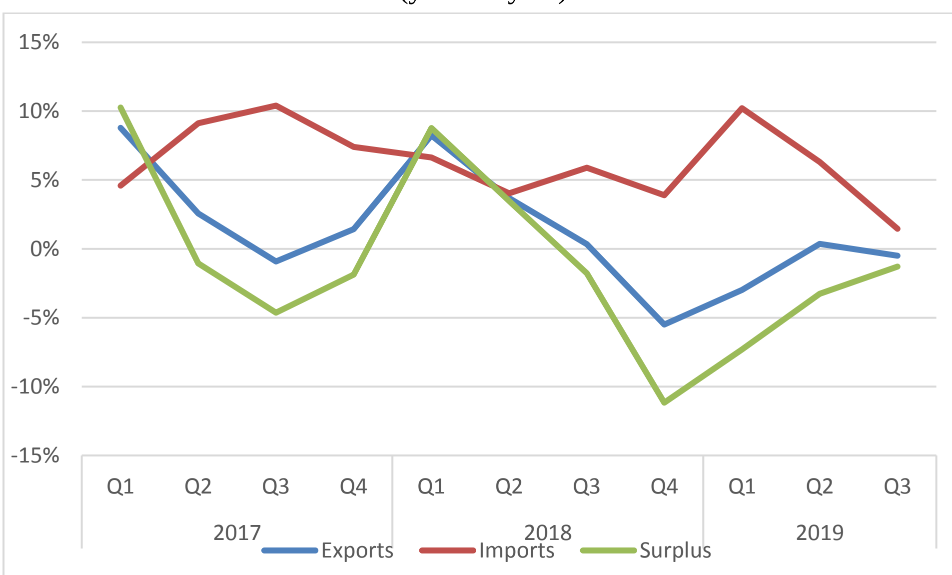
Source: U.S. Census Bureau, U.S. Trade with China in Advanced Technology Products, February 5, 2020. *https://www.census.gov/foreign-trade/statistics/product/atp/2019/12/ctryatp/atp5700.html.*

U.S. Services Surplus with China Continues to Decline Year-on-Year

In Q3 2019, the United States maintained a trade surplus in services of $11.4 billion.[15] This marks the fifth consecutive quarter for a year-on-year decline in U.S. surplus in services with China since the second half of 2018, although the pace of surplus decrease has been slowing (see Figure 3).[16] U.S. services exports to China were $16.2 billion, 0.5 percent less than during Q3 2018.[17] Imports of services rose for the third consecutive quarter, reaching $4.8 billion, a 1.5 percent increase compared to the previous year (see Figure 4).[18]

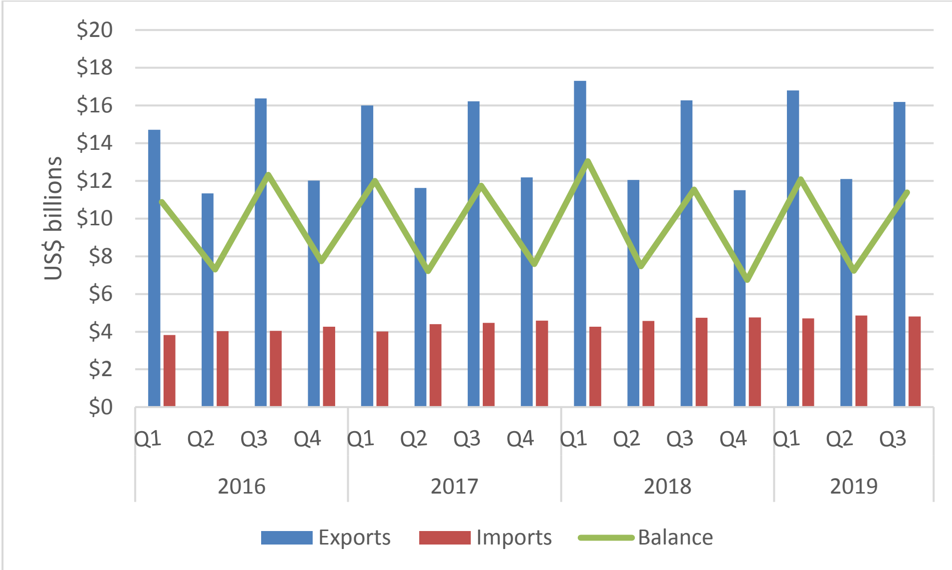
Figure 3: U.S.-China Trade in Services, Q1 2017–Q3 2019

(year-on-year)



Source: U.S. Department of Commerce – Bureau of Economic Analysis, *U.S. Trade in Goods and Services by Selected Countries and Areas, 1999-Present*, U.S. Department of Commerce, Foreign Trade Division, January 30, 2020.

Figure 4: U.S.-China Trade in Services, Q1 2016–Q3 2019



Source: U.S. Department of Commerce – Bureau of Economic Analysis, *U.S. Trade in Goods and Services by Selected Countries and Areas, 1999-Present*, U.S. Department of Commerce, Foreign Trade Division, January 30, 2020.

Among the top services exports from the United States to China, value for transportation ($13.1 billion) and travel ($9.67 billion) declined 5.3 percent and 4.1 percent, respectively, compared to the previous year.[19] Charges for intellectual property (IP) usage, which sharply declined in Q3 2018, continued to recover, reaching $25.51 billion in Q3 2019—a year-on-year increase of 37.9 percent (see Figure 5).[20] Among the top U.S. services sector imports from China, miscellaneous business services underwent a year-on-year double-digit percentage increase for the fourth quarter in a row, reaching $15.86 billion in Q3 2019 compared to $13.65 billion in Q3 2018.[21] Travel ($11.05 billion) and transportation ($12.63 billion) underwent year-on-year declines of 0.6 and 2.2 percent, respectively.[22]

Figure 5: U.S. Major Services Sector Exports to China, Q1 2017–Q3 2019

(year-on-year)

Source: U.S. Department of Commerce – Bureau of Economic Analysis, *U.S. Trade in Goods and Services by Selected Countries and Areas, 1999-Present*, U.S. Department of Commerce, Foreign Trade Division, January 30, 2020.

Bilateral Policy Issues

United States and China Reach a "Phase One" Trade Deal

On January 15, 2020, President Donald Trump and China's Vice Premier Liu He signed a "Phase One" trade agreement. It forms part of an effort to resolve trade tensions that have been ongoing since March 2018, when the Office of the U.S. Trade Representative (USTR) published its Section 301 investigation into China's trade-distorting practices.[23] The deal includes commitments by China to purchase an additional $200 billion worth of U.S. products over 2017 levels in four sectors (manufactured goods, services, agricultural products, and energy) over the next two years.[24] China also made new promises to not manipulate its currency, to protect foreign IP, and to refrain from forcing foreign companies to transfer technology.

- For an in-depth assessment of China's commitments and their implications for the United States, see U.S.-China Economic and Security Review Commission, *The U.S.-China "Phase One" Deal: A Backgrounder*, February 4, 2020.

Treasury Issues Final CFIUS Regulations

On January 13, the U.S. Department of the Treasury issued final regulations for implementing the 2018 Foreign Investment Risk Review Modernization Act (FIRRMA), significantly expanding the jurisdiction of the Committee on Foreign Investment in the United States (CFIUS). The regulations, which address public comments on the draft CFIUS regulations issued in September 2019, will become effective on February 13.*

The draft regulations issued in September broadened CFIUS jurisdiction in two different areas. The first set of regulations expanded CFIUS's jurisdiction over certain types of noncontrolling investments in "TID [technology, infrastructure, and data] businesses." Under the regulations, the majority of CFIUS disclosures remain voluntary, although parties filing a voluntary notice may receive a "safe harbor" letter, meaning CFIUS will not subsequently investigate a transaction except under limited circumstances.[25] The second set of draft regulations established CFIUS's jurisdiction over certain real estate transactions, including airports or maritime ports as well as property near certain military installations. Disclosure of real estate transactions to CFIUS is voluntary in all cases, though parties may also receive a "safe harbor" letter. The draft regulations also included a list enumerating certain military installations and other facilities subject to the regulations.[26]

Although the final regulations closely resemble the draft regulations, they also incorporate several changes, based largely on public comments. These changes include:

- *Definition of "excepted investor":* The draft regulations stipulated that "excepted investors" from certain "excepted foreign states" are exempt from the expanded CFIUS jurisdiction established in the two sets of regulations. The final regulations established Australia, Canada, and the United Kingdom as initial "excepted foreign states." CFIUS will continue to monitor this list for possible expansion and to ensure states on the list continue to meet requirements for inclusion.[27] Excepted investors will still be subject to CFIUS jurisdiction for any transaction that involves gaining control of any U.S. business.[28]
- *Definition of "sensitive personal data":* As established in the draft regulations, businesses that collect or maintain "sensitive personal data" of U.S. citizens are one type of TID business. However, many of the public comments to Treasury viewed the draft definition of "sensitive personal data" as overly broad and expressed concern it would result in more businesses being defined as TID businesses than was necessary to protect national security. Critics worried this regulatory burden could discourage foreign investment in those companies, thereby hindering technological advancements in areas such as artificial intelligence.† In

* For analysis of the draft CFIUS regulations, see U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, October 9, 2019, 4–5. *https://www.uscc.gov/sites/default/files/2019-10/October%202019%20Trade%20Bulletin_1.pdf*.

† To view the comments on the draft FIRRMA regulations containing the definition of "sensitive personal data," see Regulations.gov, "Provisions Pertaining to Certain Investments in the United States by Foreign Persons." *https://www.regulations.gov/docketBrowser?rpp=25&po=25&dct=PS&D=TREAS-DO-2019-0008&refD=TREAS-DO-2019-0008-0002*.

response to the comments, the final regulations narrowed the scope of "sensitive personal data" in several ways. For instance, to account for datasets used in research, the final rule exempts genetic testing data derived from databases maintained by the U.S. government and routinely provided to private parties for purposes of research.[29]

- *Jurisdiction over certain real estate transactions:* Based on feedback from commenters, the final regulations expand the list of exceptions to include certain real estate transactions, such as certain leases or concessions by certain foreign air carriers, which will not fall under CFIUS's jurisdiction. The final regulations also removed one site from the list of covered military installations.[30]

The final regulations also adopt a pilot program launched by Treasury in October 2018 for critical technologies, which included a mandatory filing requirement for certain transactions with U.S. businesses involved in certain industries (specifically, 27 industries identified in the regulation by their North American Industry Classification System [NAICS] codes).[*] The final regulations adopt this pilot program in most respects, including the mandatory filing requirement. However, the regulations also state that Treasury anticipates revising the mandatory filing requirement to apply to industries based on export control licensing requirements instead of NAICS codes.[31]

Additionally, the final regulations contain an interim rule providing a definition for "principal place of business." Treasury will receive written comments on the proposed definition until February 18.[32]

Policy Trends in China's Economy

Births Face Historic Low with Elder Population Expected to Increase

In 2019, 14.6 million babies were born in China, the lowest number since 1961[†] (11.8 million).[33] Proportionally, the birthrate fell to 10.48 children per thousand, with a fertility rate of 1.6 births per woman in her lifetime,[‡] the lowest since the founding of the People's Republic of China.[34] According to current projections, China's population likely will begin contracting around 2026.[35]

This decline comes despite China's government efforts to encourage childbearing by allowing families to have up to two children.[36] According to surveys conducted by Chinese think tanks, relaxation of the "one-child" policy in 2013 and 2015[§] has had limited impact on China's birthrate due to declining desire among Chinese citizens to have children compared to previous generations.[37] Many young couples are choosing to focus on careers or leisure rather than building families.[38] Were government childbirth restrictions lifted to allow families to have more than two children, there would be little effect on birthrates.[39]

China's eldercare needs are expected to increase as life expectancy continues to improve. At the end of 2018, approximately 18 percent of China's population was over 60, the normal retirement age for men.[**] [40] According to a report released last year from the Chinese Academy of Social Sciences, China's primary government pension fund will shrink starting in 2027 and be depleted by 2035.[41] Though the working-age population is expected to decline, it is also expected to for proportionally more people. China's dependency ratio,[††] which stood at 34.4 dependents

[*] For a list of the industries that are covered by the pilot program, see Appendix B to Part 800 of U.S. Department of the Treasury, "Provisions Pertaining to Certain Investments in the United States by Foreign Persons," *Federal Register* 85:12 (January 17, 2020). *https://home.treasury.gov/system/files/206/Part-800-Final-Rule-Jan-17-2020.pdf*.

[†] China's low birthrate in 1961 is widely attributed to widespread famine in 1959–1961, sometimes referred to as the "Great Chinese Famine" or "Three Years of Famine."

[‡] Population replacement fertility rates are 2.1 births per woman in her lifetime.

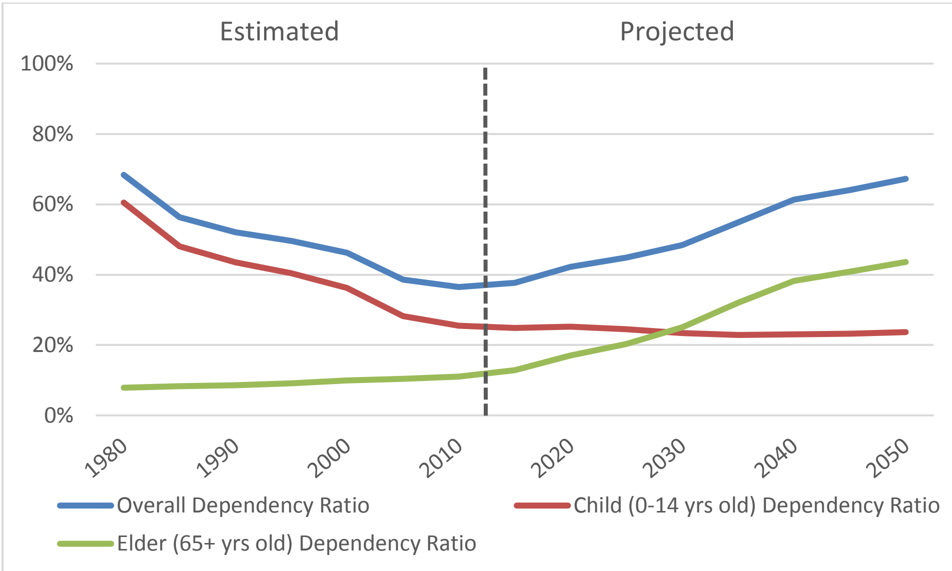
[§] China's one-child policy was relaxed in 2013 to allow couples without siblings to have two children. The policy was further relaxed in 2015 to allow all families to have two children. Steven Lee Myers, Jin Wu, and Claire Fu, "China's Looming Crisis: A Shrinking Population," *New York Times*, January 17, 2020. *https://www.nytimes.com/interactive/2019/01/17/world/asia/china-population-crisis.html*.

[**] Currently, the normal retirement age in China is 60 for men and 55 for women. Frank Tang, "China's State Pension Fund to Run Dry by 2035 as Workforce Shrinks Due to Effects of One-Child Policy, Says Study," *South China Morning Post*, April 12, 2019. *https://www.scmp.com/economy/china-economy/article/3005759/chinas-state-pension-fund-run-dry-2035-workforce-shrinks-due*.

[††] The ratio of persons both above and below working age in a population. This ratio includes both children and retirement-age persons. United Nations Department of Economic and Social Affairs, "Glossary of Demographic Terms." *https://population.un.org/wpp/GlossaryOfDemographicTerms/*.

to 100 working-age persons in 2011 (the latest data available) and is estimated by the UN to have risen to 37.7 in 2015, is predicted to rise until 2060, with elder dependents expected to exceed child dependents in 2028 (see Figure 6).[42] While these demographic trends will have limited effects in the short term, they are expected to create pressure as China's pensions and healthcare infrastructure require more support, and as population decline leads to reduced overall consumption and less productivity from younger generations.

Figure 6: Trends in China's Elder and Child Dependency Ratios, 1980–2050



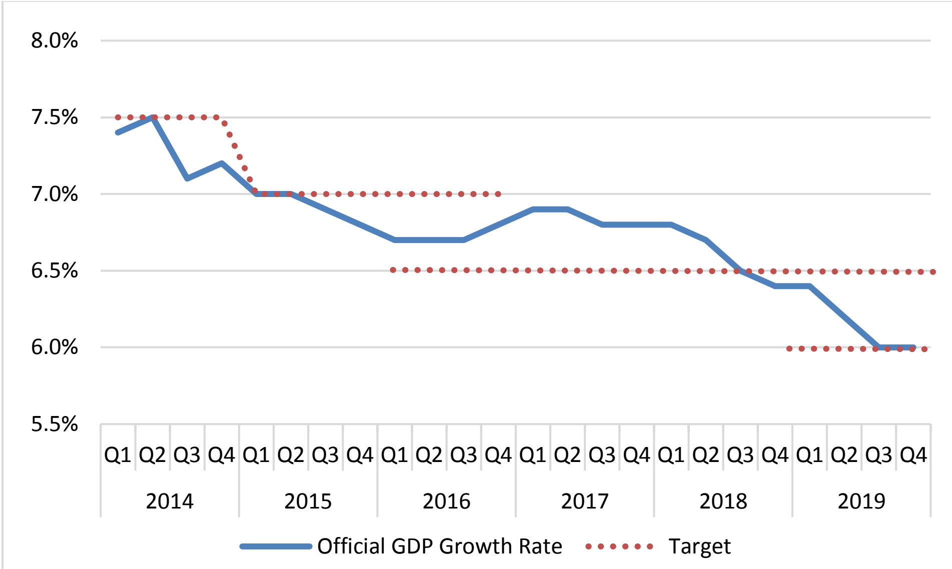
Note: The UN releases a range of possible estimates for future demographics. This chart was made using the medium variant predictions within datasets "Total Dependency Ratio 1," "Child Dependency Ratio 1," and "Old-Age Dependency Ratio 1."
The UN's population estimation methodology reports approximate figures in five-year increments. Most recent estimates released are for 2015.
Source: United Nations Department of Economic and Social Affairs, "World Population Prospects 2019 Standard Projections (Estimates and Projection Variants)." *https://population.un.org/wpp/Download/Standard/Population/*.
United Nations Department of Economic and Social Affairs, "Frequently Asked Questions (What is the estimation period for the 2019 revision of the World Population Prospects?)." *https://population.un.org/wpp/FAQs/*.

Quarterly Review of China's Economy

China GDP Growth Slows to 29-Year Low in 2019, Stabilizes in Fourth Quarter

In 2019, China's officially reported gross domestic product (GDP) growth decelerated to 6.1 percent year-on-year—the weakest annual expansion since 1990, and on the lower end of the government's growth target of between 6 and 6.5 percent (see Figure 7).[43] Though on a clear decline in the first nine months of 2019, growth stabilized at 6 percent year-on-year in the fourth quarter on the back of an improvement in economic activity, notably in fixed asset investment and industrial output. An uptick in overall business sentiment also contributed to the stabilization, as momentum toward a Phase One trade agreement between the United States and China picked up in the last months of 2019 and spurred industrial activity in China's economy. However, growth is expected to take a sharp hit heading into 2020 as the coronavirus outbreak disrupts consumption and slows industrial activity amid extended business and factory closures (for more on the economic impacts of the coronavirus, see the section on "The Coronavirus Outbreak's Economic Contagion" on page 11).

Figure 7: China's Official GDP Growth, 2014–2019
(year-on-year)

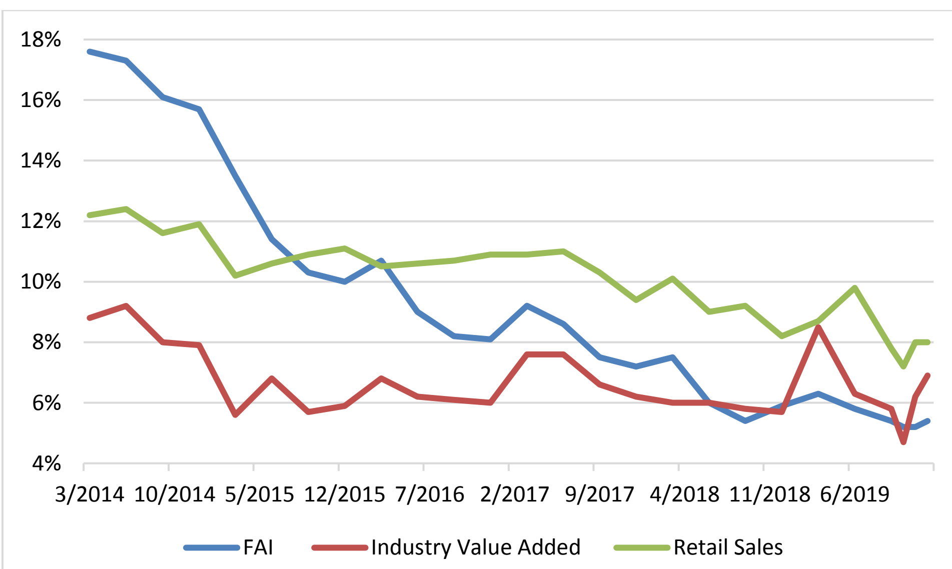


Note: In 2019, the target was set at a range of 6.0–6.5 percent GDP growth.
Source: China's National Bureau of Statistics via CEIC database.

Key Economic Indicators Rebound in Closing Months of 2019

Key indicators of China's economic health such as fixed asset investment (FAI), industrial activity, and retail spending all registered decelerations in 2019 as trade frictions and domestic pressures took a toll, though there was a mild recovery in the last months of the year (see Figure 8).[44] FAI—a traditional driver of China's growth that measures investment in physical assets such as buildings, machinery, and equipment—rose 5.4 percent year-on-year for the whole of 2019 from a 5.2 percent pace for the first 11 months of the year.[45]

Figure 8: China's Key Economic Indicators, 2014–2019
(year-on-year)



Source: China's National Bureau of Statistics via CEIC database.

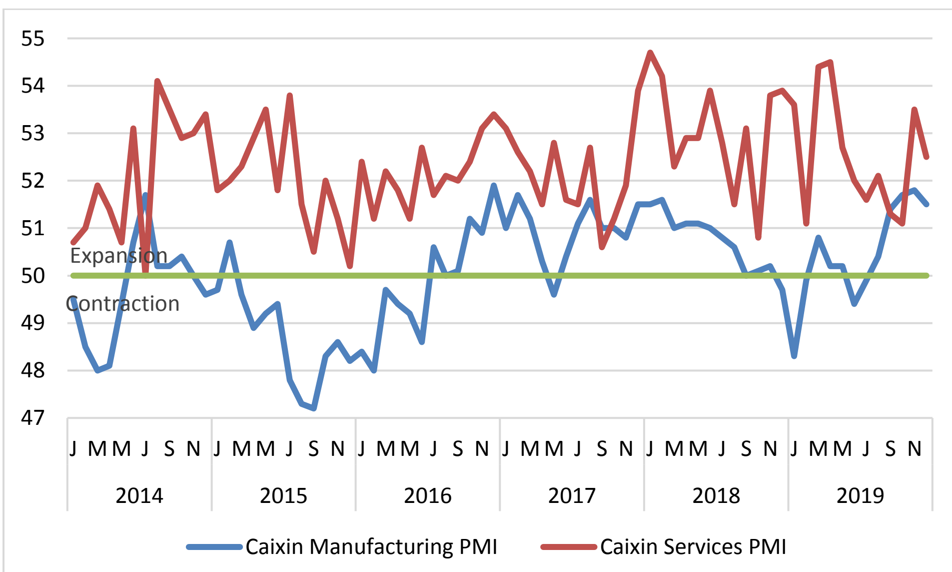
Growth in China's valued-added industrial output, which measures production at factories, mines, and utilities, slowed from 6.2 percent in 2018 to 5.7 percent in 2019, though still within the government's target of 5.5 to 6 percent.[46] However, industrial output picked up in the fourth quarter, registering 6.9 percent year-on-year growth in December, up from 6.2 percent in November and 4.7 percent in October—and the strongest pace in nine months—as Washington and Beijing neared a trade agreement.[47]

Retail sales growth slowed from 9 percent in 2018 to 8 percent in 2019 amid weak wage growth* and high inflation.[48] The fallout from African swine fever, which devastated China's pork supply, pushed up consumer prices, with the consumer price index (CPI) growing 2.9 percent year-on-year in 2019—an eight-year high—compared to 2.1 percent in 2018.[49] Retail sales growth rebounded to 8 percent year-on-year in November and December from 7.2 percent in October due to the earlier than usual observance of the Lunar New Year holiday.[50] However, consumption's overall share of GDP fell from 76.2 percent in 2018 to 57.8 percent in 2019, suggesting policymakers continue to struggle to reorient economic activity away from investment-led manufacturing and toward domestic consumption.[51] In addition to slowing wage growth, a study from the Mercator Institute for China Studies suggests the drop in consumption's share of GDP may be due to continued volatility in automobile sales—which account for 10 percent of total retail sales—given incoherent policy guidance for emission standards.[52]

Expansion Slows in Manufacturing and Services Sectors

Unofficial estimates by the Chinese financial media firm Caixin found China's manufacturing Purchasing Managers' Index (PMI)† stood at 51.5 in December (see Figure 9).[53] Though slower than the 51.8 and 51.7 expansions in November and October, respectively, the reading reflects sustained expansion in China's manufacturing sector as domestic demand and business sentiment improved in Q4 2019.[54] China's services sector—which accounts for more than half of China's economy—slowed more markedly from a seven-month high of 53.5 in November to 52.5 in December.[55]

Figure 9: Caixin Services and Manufacturing PMIs, 2014–2019



Note: A reading above 50 indicates expansion; a reading below 50 shows contraction.

* Disposable income levels in China's urban areas, key regions of consumer activity, grew only 5 percent in 2019, and national per capita income levels grew 5.8 percent year-on-year in 2019, both below China's 6.1 percent annual growth rate for the year. The divergence suggests growth in income levels is not keeping up with broader growth in the economy. China's National Bureau of Statistics via CEIC database.

† The PMI measures the production level, new orders, inventories, supplier deliveries, and employment level to gauge the economic activity level in the services and manufacturing sector. The global financial information services provider Markit Economics compiles the CaixinMarkit China services and manufacturing PMI from monthly questionnaires to more than 500 purchasing executives (including small and medium-sized enterprises). By comparison, China's official manufacturing PMI tracks larger state-owned companies, generally leading to a stronger reading than private PMIs.

Source: Caixin and IHS Markit, "Caixin China General Manufacturing PMI," January 2, 2020. *http://pmi.caixin.com/upload/CN_Manufacturing_ENG_2001_PR.pdf*; Caixin and IHS Markit, "Caixin China General Services PMI," January 6, 2020. *http://pmi.caixin.com/upload/CN_Services_ENG_2001_PR.pdf*.

Price Growth Moderates in Property Markets as Demand Slows

As local governments face increasing financial stress, housing prices in real estate markets—a key source of local fiscal revenue—are no longer growing as quickly. Beijing's crackdown on off-balance-sheet credit sources cut off many localities' ability to finance themselves through loans packaged as investment products, leaving many localities dependent on growth in the property market through land sales[56] and property developers dependent on cash raised by breaking new ground.[57] Growth in real estate prices had slowed by November of 2019, even decreasing in some localities as local developers and some local governments took steps to encourage demand.[58] This slowdown in growth is anticipated to continue in 2020. A November *Reuters* survey of ten real estate analysts and economists suggested property values are predicted to grow by only 3.1 percent in 2020, the slowest pace since 2015.[59] As price growth loses momentum,[60] some local governments may face challenges meeting their fiscal obligations.

Given their lack of access to other forms of credit, many Chinese property developers are raising funding and encouraging buyers by lowering prices to increase sales. A survey by the Chinese Academy of Social Sciences found that housing prices in September had declined 12 percent month-on-month across 24 major cities, the first decline of 2019.[61] In October 2019, business media outlet *Caixin* reported developers including China Evergrande Group, China Vanke Co. Ltd., and Country Garden Holdings had started offering large discounts to increase demand in some cities.[62] Rhodium Group assesses these discounts were enough to increase housing sales at the end of 2019, but prices could begin to fall across China if breaking ground on new housing projects continues to outpace housing sales.[63]

Slowing growth in housing prices may leave some smaller localities in a weak fiscal position, as local governments often depend on land sales for revenue.[64] According to data from the China Ministry of Finance, year-on-year growth in government revenue from land sales slowed to 8.1 percent in the first eleven months of 2019, relative to 28.9 percent in 2018 and 35.3 percent in 2017.[65] In addition, in 2020 the central government shantytown redevelopment program[*] will expire, which is likely to decrease demand for housing.[66] The program had supported the property market by providing financial support for relocated residents to purchase homes.[67] In response, some localities have curtailed developers' ability to cut prices by more than a specified amount.[68] Others have stepped in to provide cash subsidies. In specific areas of Fushun county, southwestern Sichuan Province, homebuyers can apply for a housing allowance of renminbi (RMB) 200 per square meter if they purchase newly constructed homes through June 2020.[69]

New national-level policies may also help to bolster real estate demand, though not through providing credit. In April 2019, the National Development and Reform Commission (NDRC) released plans that would eliminate residency permit restrictions in cities with populations of one million to three million, and ease residency permit restrictions in cities with populations of three million to five million.[70] The NDRC's plans were reinforced by a similar policy issued by China's State Council in late December 2019.[71] HSBC and Credit Suisse analysts argue this relaxation will support property markets in smaller cities in 2020.[72]

Provincial Governments Revise 2018 GDP Figures

In January, all 31 of China's provinces and provincial-level municipalities revised calculations of their 2018 GDP as part of an economic census conducted by the China's National Bureau of Statistics (NBS).[73] Although the census concluded that China's economy was 2.1 percent larger than estimated in 2018, 14 provinces revised GDP calculations downward (see Figure 10).[74]

[*] Beijing's shantytown redevelopment program allowed local governments access to low-interest financing for urban development projects, primarily through the China Development Bank. The China Development Bank reportedly helped relocate 20 million households in 2017. Frank Tang, "Is China Cutting the Financial Lifeline for Its Massive City Revival Schemes?" *South China Morning Post*, June 29, 2018. *https://www.scmp.com/news/china/economy/article/2153132/china-cutting-financial-lifeline-its-massive-city-revival-schemes*.

Figure 10: Revisions to Provincial GDP

Source: Guo Yingzhe, "Nearly Half of Chinese Local Governments Revise 2018 GDP Down After Economic Census," *Caixin*, January 22, 2019.

Overall, the revisions show a clear geographic split, with southern and far western provinces revising GDP higher, and northern provinces calculating lower than estimated GDP.[75] This trend highlights already poor economic performances among China's northern provinces, many of which missed their 2018 growth targets according to previous GDP estimates prepared by provincial governments.[76] Among the largest downward revisions, Tianjin reduced its 2018 GDP 29 percent from its estimate; Heilongjiang by 25.3 percent, and Jilin by 21.5 percent.[77] The latter two provinces are both part of China's northeastern industrial base, which has suffered from declining economic activity as the importance of heavy industry has diminished in China's economy.[78]

Changes in provincial data as part of the economic census are part of an effort by NBS to address falsification of data by local officials.[79] Because career advancement depends on fostering economic growth in their jurisdiction, local officials are incentivized to inflate GDP calculations. As a result, aggregate regional GDP estimates have often outstripped China's national estimate for GDP.[80] Under the new system, NBS will calculate provincial level data, but provinces will continue to calculate city-level data.[81]

Despite the adoption of the new system, skepticism over the accuracy of China's data remains. The NBS routinely revises China's economic data based on census results and changes in methodology, almost always resulting in improvements to China's economic performance. For instance, the last four revisions from the economic census—in 2004, 2008, 2013 and 2018—all found the economy to be larger than previously estimated.[82] NBS's most recent upward revisions could help ease calls for stimulus as China faces slowing growth.[83]

Local Governments Sell of Land and Issue More Bonds to Fill Revenue Shortfall

Governments 50 major Chinese cities reported record land sales of $601.6 billion during 2019, according to calculations through December 26, 2019 from Hong Kong property research firm Centaline Property Agency Ltd.[84] The new record, which marks 17.6 percent growth from the same period in 2018, follows a series of tax cuts announced March 2019.[*] [85]

Land sales revenue in the 50 major cities grew substantially faster than for the entire country, which only grew 8.1 percent through November.[86] Notably, some major Chinese cities sold land at lower prices per unit of area, apparently in order to generate sufficient revenue. For instance, Hangzhou, capital of the prosperous eastern province Zhejiang, sold land with 32.5 percent more floor space but only obtained 11 percent more land sales revenue through December 26, 2019 than during the same period in 2018, according to data from Centaline. Similarly, Guangzhou, capital of Guangdong province sold land with 53.6 percent more floor space but only drew 8.1 percent more in land sales revenue.[87] The March 2019 tax cuts aimed to shore up economic growth by boosting consumption without engaging in overt monetary stimulus and worsening China's mounting debt risks. To offset losses in fiscal revenue from the tax cuts, China's local governments have leaned on increased issuance of special purpose bonds[†] and selling land to property developers[‡] as alternate sources of income. In addition to record land sales revenue noted above, China's Ministry of Finance authorized local governments to issue $142.3 billion worth of special purpose bonds initially earmarked for 2020 in November 2019.[88] The early issuance constituted 47 percent of local governments' annual quota.

These local government workarounds to generate revenue perpetuate a development model Chinese policymakers sought to replace, in which local economic growth is driven by property development and policy-directed infrastructure projects. Compounding this trend, in January 2020 China's Ministry of Finance eliminated proportion of tax receipts versus other forms of fiscal revenue as a metric to evaluate local officials' fiscal management. This metric was implemented in part to discourage local officials from selling land or levying administrative fees to meet revenue targets.[89]

In Focus: The Coronavirus Outbreak's Economic Contagion

As the new coronavirus (labelled 2019-nCoV)[§] continues to strain China's public health system, its impacts are felt around the world[**] and are taking a toll on the global economy. Though a complete assessment is not yet possible,

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[*] For more information on the tax cuts, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 1, "Year In Review: Economics and Trade," in *2018 Annual Report to Congress*, November 2019, 59-60.

[†] China's government distinguishes between "special purpose bonds" in which funding is earmarked for a particular project and payment of coupons and principal is tied to the success of a project, versus "general bonds," which are not tied to specific projects. China's 2014 Budget Law revision sought to eliminate an implicit guarantee China's central government would rescue insolvent local governments, but has not succeeded. U.S.-China Economic and Security Review Commission, *Hearing on China's Quest for Capital: Motivations, Methods, and Implications*, oral testimony of Zhiguo He, January 23, 2020; Barry Naughton, "Local Debt Restructuring: A Case of Ongoing Authoritarian Reform," *China Leadership Monitor* 47, Summer 2015. *https://www.hoover.org/research/local-debt-restructuring-case-ongoing-authoritarian-reform*.

[‡] Private ownership of land is not permitted under Chinese law. Urban land used for commercial, residential, and industrial purposes may be leased from the government for set time periods, while rural land is collectively owned and only usage rights may be transferred. Local governments may zone land as "urban" or "rural" at their discretion, and because urban land may be leased, local governments generate fiscal revenue by rezoning rural land as urban and selling the development rights.

[§] As of midnight on February 4, China's National Health Commission had received reports of a total 24,324 confirmed cases, 892 recoveries, and 490 deaths from the virus, with an additional 23,260 suspected cases. China National Health Commission, *Feb 5: Daily Briefing on Novel Coronavirus Cases in China*, February 5, 2020. *http://en.nhc.gov.cn/2020-02/05/c_76219.htm*.

[**] Internationally, 28 locations have reported confirmed coronavirus cases: China, Hong Kong, Macau, Taiwan, Australia, Belgium, Cambodia, Canada, Finland, France, Germany, India, Italy, Japan, Malaysia, Nepal, Philippines, Russia, Singapore, Spain, Sri Lanka, Sweden, Thailand, South Korea, United Arab Emirates, the United Kingdom, the United States, and Vietnam. Within the United States, a total of 11 confirmed coronavirus cases have been reported in Washington, California, Arizona, Illinois, and Massachusetts, with 82 unconfirmed cases. The CDC reported that, though person-to-person spread has occurred between close contacts, the virus "is NOT currently spreading in the community of the United States." U.S. Center for Disease Control and Prevention, *Confirmed 2019-nCoV Cases Globally*, February 3, 2020. *https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html*. U.S. Center for Disease Control and Prevention, *2019 Novel Coronavirus (2019-nCoV) in the U.S.*, February 3, 2020. *https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html*.

analysts believe the outbreak's hit to China's economy could be greater than that of the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003.[90] Estimates from Nomura and Rhodium Group suggest the SARS outbreak caused a 2 percentage point drop in GDP in the first quarter of 2003, but services and consumption rebounded quickly in subsequent quarters.[91] Yet while the 2003 SARS outbreak is the nearest historical point of comparison, China's economy has changed dramatically since then. It is no longer growing as quickly, and the service sector now accounts for 54 percent of China's GDP, relative to 42 percent in 2003, signaling a deeper impact.[92] China's GDP also accounts for a much larger share of global growth, rising from 4 percent in 2003 to 16 percent in 2019.[93] Shocks to both supply (e.g., manufacturing output) and demand (e.g., consumer spending and oil consumption) are already being felt outside of China.

In an effort to prevent the spread of the disease, Chinese officials have placed the city of Wuhan and other major cities in Hubei Province under quarantine, suspending transit links.[94] Areas not under quarantine are still affected by the impetus and authorities' direction to avoid crowded places.[95] In China overall, 14 provinces and cities have announced that businesses need not reopen until the second week of February, including the key production hubs of Henan, Jiangsu, and Guangdong.[96] According to *Bloomberg*, these 14 provinces and cities accounted for a combined 69 percent of China's GDP in 2019, as well as 78 percent of China's exports in December 2019.[97]

The outbreak's timing at the beginning of the Lunar New Year will also cut deeper into consumption and services.[98] While manufacturing output can recover, holiday spending that would have occurred during the Lunar New Year cannot be recouped later.[99] Chinese Academy of Social Sciences economist Zhang Ming stated the coronavirus could cause China's GDP growth rate to drop to 5 percent or below in the first quarter of 2020, and Chen Long of the private consultancy Plenum stated it could fall to as low as 2 percent.[100] Major sectors affected include:

- *Restaurants and entertainment:* Nearly all of China's cinemas have been closed[101] and sporting events have been delayed, with the Chinese Basketball Association suspending its season.[102] Restaurants such as McDonald's and KFC have announced restaurant closures,[103] and Starbucks closed more than half of its 4,292 cafes.[104]

- *Retail:* A number of companies have closed stores across the country in response to the outbreak, including Levi Strauss, whose largest retail outlet in China is located in Wuhan, and Ikea, which closed all of its 30 locations.[105] Retail spending is also expected to be hit by domestic and international travel restrictions.[106] The negative impact of a drop in consumption could be severe. Nomura Research Institute executive economist Takahide Kiuchi stated that during the height of the SARS outbreak, when consumption did not account for as great a share of the economy, growth in retail sales still dropped by 50 percent year-on-year.[107]

- *Outbound tourism:* The outbreak occurred just before the start of the Lunar New Year holiday—a peak season for tourism from China. The China Ministry of Culture and Tourism directed travel agencies to halt the sale of package tours, which accounted for more than half of tourism from China in 2018.[108] This move is likely to affect popular travel destinations like Thailand, where Chinese tourists numbered 11 million in 2019 and accounted for a quarter of the industry's revenues.[109] In addition, as of February 2, temporary travel restrictions on most nonresident arrivals from part or all of China have been imposed by countries including Australia, Indonesia, India, New Zealand, the Philippines, Singapore, and the United States.[110]

- *Inbound tourism:* Business travel and tourism to China have also been disrupted. Countries including Australia, Canada, Germany, India, the United States, and the United Kingdom have issued warnings against nonessential travel to China.[111] As of February 3, airlines including Air Canada, American Airlines, British Airways, Cathay Pacific Airways, Delta Air Lines, Lufthansa, and United Airlines have cancelled or suspended at least some flights to China.[112]

- *Supply chain disruptions:* Travel restrictions, quarantines, and the extended holiday period are causing supply chain disruptions, with production delayed and migrant workers yet to return from the Lunar New Year. Wuhan is a car manufacturing hub,[113] and car makers like Honda and General Motors with assembly plants there have already announced plant closures.[114] Due to these disruptions, car maker Hyundai announced it would suspend production in its home country of South Korea on February 4, with most factories "fully idled" beginning February 7.[115] The city, also one of the largest transportation hubs in China, has suspended transport linkages within and out of the city.[116] Production stoppages could be compounded by the city's transport freeze.[117]

- *Oil:* The outbreak has affected global oil prices as analysts anticipate a sharp decline in China's demand. Gary Ross, CEO of Black Gold Investors, estimated that China's oil demand dropped by 2.5 million barrels a day between mid-January and early February.[118] Since early January, Brent crude, the international oil price, fell to $54.45 per barrel from above $70, when it had spiked due to political tensions in the Middle East.[119] According to the *New York Times*, the fall in oil prices could lead the Organization of the Petroleum Exporting Countries (OPEC) to cut production.[120] Officials from OPEC will meet on February 4 and 5 to review the situation.[121]
- *Metals:* Copper and iron ore producers have experienced volatility in the immediate wake of the outbreak, as an anticipated slump in demand led to 10 percent cuts in the price of copper in the month of January[122] and 10 percent cuts in the price benchmark for Australian iron ore in the last week of January.[123] In China, areas that account for "90 percent of copper smelting, 60 percent of steel production, and 40 percent of coal output" have closed operations until February 10.[124] Since China consumed nearly 1.5 metric tons of iron ore in 2019 (70 percent of global seaborne supply),[125] this has affected related industries like freight shipping. Rates for ships that typically carry commodities like iron ore and coal dropped 90 percent in late January from their height in September 2019.[126]

To cushion the economic impact of the outbreak, on February 3 the People's Bank of China (PBOC) injected $171 billion (RMB 1.2 trillion) into financial markets.[127] Chinese regulators have also instructed banks to lower interest rates or roll over loans to companies affected by the outbreak.[128]

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