

# China and the world: Inside a changing economic relationship

As flows of trade, technology, and capital have shifted, China's exposure to other countries has declined, while the world's exposure to China has increased.

Jonathan Woetzel, Jeongmin Seong, Nick Leung, Joe Ngai, James Manyika, Anu Madgavkar, Susan Lund, and Andrey Mironenko



China has changed itself—and changed the world. By 2017, China accounted for 15 percent of world GDP. It overtook the United States to become the world’s largest economy in purchasing-power-parity terms in 2014, according to International Monetary Fund (IMF) data—for the first time since 1870.<sup>1</sup> In nominal terms, China’s GDP was 64 percent that of the United States in 2017, making it the second largest economy in the world. China is a considerable player on a global stage—and the strategic choices it makes could be pivotal for global growth. We freely acknowledge that there are many other dimensions than the economic to China’s global impact; however,

in this article, we focus on China’s economic relationships with the world.

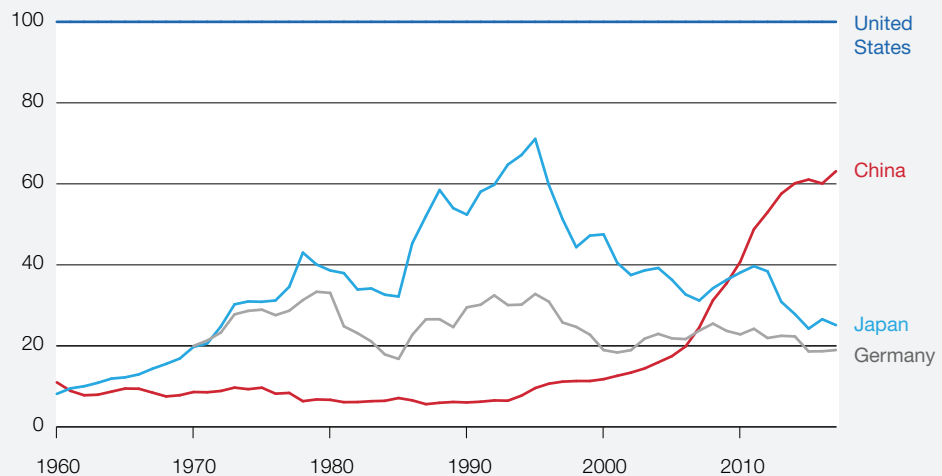
### China’s growth story is far from over

There is every prospect of China continuing its impressive growth path with powerful domestic tailwinds, including urbanization and plenty of scope to boost per capita GDP and productivity (Exhibit 1).

Comparison with Japan as it stood in the 1990s—when it was the world’s second-largest economy behind the United States—is instructive. At that

**Exhibit 1** China has strong domestic tailwinds to propel economic growth.

GDP evolution by country 1960–2017, United States = 100; current \$ basis



Per capita GDP,  
% of United States

96

151

15

Urbanization rate,  
%

73

78

58

Germany 1979

Japan 1995

China 2017

McKinsey&Company | Source: World Bank; McKinsey Global Institute analysis

point, Japan's per capita GDP was already around 50 percent above that of the United States (about 20 percent lower on a purchasing-power-parity basis); China's nominal per capita GDP remains only around 15 percent of the US level (28 percent on a purchasing-power-parity basis). In addition, Japan's urbanization rate was already 78 percent; China's today is 58 percent, still 20 to 30 percentage points below that of high-income economies. Since the mid-1990s, Japan has struggled to achieve significant growth momentum. China is different. It has a large population on relatively low incomes, and plenty of room for further urbanization and productivity gains enabling further income growth. If realized, these gains could propel China to become not only the world's largest economy and manufacturer, but also its largest investor and market.

### China and the world are not as close as they once were

China's relationship with the world seems to be at a turning point. The changing dynamics of global political leadership are pivotal, but beyond the scope of this article.

Consumers around the world have been benefiting from trade with China. For example, it is estimated that Chinese imports have cut US consumer-goods prices by an estimated 27 percent.<sup>2</sup> China is today a major market for multinational companies seeking new growth—the revenue of foreign invested enterprises increased 12-fold between 2000 and 2017, according to China's National Statistics Bureau.

However, the nature of China's rise is coming under scrutiny. Criticism has been voiced about, for instance, China's policies to support technology transfer from foreign to local firms, weak intellectual-property (IP) protection, and industrial policies that favor domestic players. And China's foreign investment is being examined closely amid fears that foreign deals are facilitating large-scale technology transfer.

There are concerns, as noted, about the “China shock” displacing manufacturing jobs in advanced economies such as the United States, although automation technologies have also played a role.<sup>3</sup> One study estimates that at least two million US manufacturing jobs were displaced between 1999 and 2011, a period when imports from China were surging.<sup>4</sup> However, correlation should not be confused with causation. When China joined the World Trade Organization (WTO) in 2001, the dynamics of US trade with Asia changed. The United States has historically run large trade deficits with Asia. After China's accession to the WTO, a great deal of assembly and trade was consolidated in China. By importing inputs from other Asian economies and exporting finished goods to the United States, China became the consolidated trading hub for the US–Asia trading relationship.<sup>5</sup>

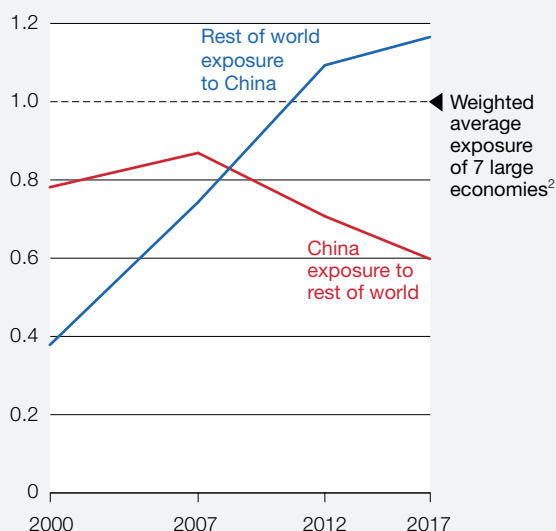
More fundamentally, the past decade appears to have ushered in a new context for China and the world. China's exposure to the world (measured by the magnitude of flows with the rest of the world relative to its economy) has declined over the past decade. At the same time, the world's exposure to China (the magnitude of flows with China relative to the global economy) has increased since 2000.

The McKinsey Global Institute (MGI) analyzed the mutual exposure of China and the rest of the world on trade, technology, and capital. On trade, we measured the importance of China as a market and as a supplier of goods and services to the global economy.<sup>6</sup> On technology, we measured the importance of Chinese technological exports to global R&D spending.<sup>7</sup> On capital, we measured the importance of China as a supplier of financing and as a destination for investments.<sup>8</sup> We found that from 2000 to 2017, the world's exposure to China has increased on all three dimensions, and the aggregate index rose from 0.4 in 2000 to 1.2 in 2017.<sup>9</sup> In contrast, China's exposure to the world peaked at 0.9 in 2007 and had declined to 0.6 by 2017 (Exhibit 2).<sup>10</sup>

## Exhibit 2

China has been reducing its exposure to the world while the world has been increasing exposure to China.

China and the world exposure indices over time,<sup>1</sup> index



<sup>1</sup>Includes trade, technology, and capital exposure metrics.

<sup>2</sup>China, France, Germany, India, Japan, United Kingdom, and United States.

Source: IHS Global Insight; International Monetary Fund; Organisation for Economic Co-operation and Development; World Input-Output Database; McKinsey Global Institute analysis

McKinsey&Company

China has increased its role in global trade since its accession to the WTO. Consider that 2.6 percent of consumption in the rest of the world is imported from China today, compared with only 0.8 percent in 2000. Chinese imports now account for 2.0 percent of the gross output of the rest of the world, compared with 0.4 percent in 2000. However, China has become far more reliant on its domestic economy to drive growth. As recently as 2008, China's net trade surplus accounted for 8 percent of GDP; by 2017, that figure was only 1.7 percent—less than either Germany or South Korea, where net trade surpluses amount to

between 5 and 8 percent of GDP. Between 2010 and 2014 (the latest available data), China's gross exports amounted to 34 percent of real GDP growth; using the domestic value-added measure (measuring exports by subtracting imports used in the production of goods and services that are subsequently exported), the share was about 25 percent.

On technology, China has been increasing domestic R&D capacity and is now the second largest R&D spender in the world, after the United States. China today leads key segments of the digital economy such as e-commerce and on-demand services. However, it is not yet a major technology supplier and exporter of R&D. China's intellectual property exports account for about 1.8 percent of R&D spending by the rest of the world. China's imports of technology in the form of IP and tech services and equipment grew significantly from just over \$11 billion in 2007 to \$48 billion in 2017, according to the IMF. However, these imports declined as a share of domestic R&D spending from 24 to 16 percent.

On financing and capital, China has become an increasingly important source of global capital and remained a significant destination for investment. China accounted for about 10 percent of global outbound foreign direct investment (FDI) in 2017, up from just about one percent in 2000. However, relative to the domestic economy, FDI has been relatively stable and may even have declined somewhat. In 2007, inbound FDI amounted to 9 percent of domestic investment; by 2017, that number had shrunk to 8 percent. Although exposure to Chinese capital is growing abroad, growth in domestic investment has reduced China's exposure to overseas capital and investment opportunities.

China's declining exposure to the world is also evident in its trade policies related to imports. Since joining the WTO, China has halved tariffs from an average of 16 percent in 2000 to 8 percent in 2008. But since then, the average tariff rate has edged

up to 9.6 percent as of 2016—which is more than double the US and EU average. China has opened up doors to foreign capital, but barriers still persist. On the Organisation for Economic Co-operation and Development’s (OECD’s) FDI restrictiveness index in manufacturing, China’s restrictiveness has declined from 0.38 to 0.1 over the past two decades. However, the index for services remains at 0.39 (down from 0.74 in the same period), far higher than the 0.08 OECD average. In addition, China’s government is promoting the growth of local companies in key industries. In the Made in China 2025 plan, China indicated guidelines for domestic companies’ market share of 40 to 90 percent in 11 of 23 subsectors prioritized by the government.

If trade isn’t driving China’s economy, what is? The answer, in a nutshell, is Chinese people. In ten of the 15 quarters since 2015, consumption contributed more than 60 percent of total GDP growth. In the first half of 2018, the ratio increased to 80 percent. In many consumer categories, China is the largest market in the world. For instance, China overtook the United States as the world’s largest box office in the first quarter of 2018. Today, China accounts for 30 percent of global auto sales, 43 percent of unit sales of electric vehicles, and 42 percent of global retail e-commerce transaction values.

### Further unraveling the China connection poses significant risks to China and the world

Recent trade tensions between the United States and China dissipated somewhat since the G20 meeting in early December but raise questions about whether we are set for a new era of trade disputes, new investment barriers, protectionism—particularly in the case of technology—and limits to the supply of essential inputs such as rare earths.

It could be that trade tensions are far from temporary. Major economic powers have recently put in place policies that signal a potential shift in their behavior toward foreign countries. In August 2018, the US

Foreign Investment Risk Review Modernization Act expanded the jurisdiction of the Committee on Foreign Investment in the United States to include nonpassive minority investment in companies with critical technologies or industries and sensitive personal data of US citizens, joint ventures that would result in the transfer of technologies overseas, and real-estate investment near military facilities. The EU has approved a proposal that expands the list of critical sectors to include election infrastructure, biomedicine, and automobiles. It is also increasing its scrutiny of investments made with state influence or technology transfer to third countries. In October 2017, Japan amended its Foreign Exchange and Foreign Trade Act to allow for involuntary divestment of unreported foreign ownership in Japanese companies that may result in national security risks.

In the short term, the profile of both the US and Chinese economies suggests that the risk that either will be derailed by higher tariffs and a slowdown in trade may be relatively limited. Both economies are large and domestically driven. China’s exports to the United States amount to 4 percent of GDP, while imports account for 1 percent. Even as advanced economies suffered from the 2008 global financial crisis, China’s robust, domestically fueled growth continued. The story is similar for the United States, whose exports to China are equivalent to 1 percent of its GDP and imports are equivalent to 3 percent.

As a result, current simulations by various institutions suggest that the current trade dispute could reduce GDP in China by between 0.1 percent and 0.8 percent in 2019, and GDP in the United States by 0.1 percent to 0.4 percent (estimates from UBS, Merrill Lynch, and JP Morgan). According to the IMF, a full-blown trade war could have a cumulative negative impact on China’s GDP of 1.6 percent by 2020 and 1 percent on US GDP.<sup>11</sup>

However, if China’s relationship with the rest of the world sours, it risks access to many forms of

technology given the highly concentrated nature of its technology imports. Around half of its foreign R&D purchases are from just three countries: 27 percent from the United States, 17 percent from Japan, and 11 percent from Germany between 2011 and 2016—and these numbers have been largely stable over the past 20 years.

Continuing trade disputes could have a substantial impact on specific players, value chains, and regions with high exposure to tariff changes. About half of the \$250 billion tariffs during the initial two rounds imposed by the United States on China are on electronics or machinery—and foreign firms produce 87 percent of electronics in China, and 60 percent of machinery. Economic shocks such as targeted tariffs may have a disproportionate impact on certain Chinese provinces and US states. Of 100,000 closures of Chinese factories in 2008, more than 62,000 were in Guangdong alone, for example. Chinese tariffs on American goods are highly concentrated: more than 20 percent of affected goods are in agriculture and food manufacturing, which could have direct impact on Alaska and Louisiana, for instance.

US economic players already rely on the China market. Among the firms listed in the MSCI USA index, the information-technology sector has 15 percent revenue exposure to China, materials has 7 percent, and industrials has 6 percent. In 2017, US companies were estimated to have generated around \$450 billion to \$500 billion revenue in China through a mix of exports and revenue from Chinese subsidiaries.<sup>12</sup>

Multinational corporations (MNCs) with substantial Chinese operations and joint ventures between foreign and Chinese firms could be damaged. The total number of foreign enterprises operating in China increased from 203,000 in 2000 to 481,000 in 2015. In that year, they employed around 14 million workers, up from just three

million in 2000. About 40 percent of China's exports are from foreign-owned enterprises and joint ventures (Exhibit 3).

MNCs operating in China are already considering a shift in strategy. A survey conducted by the American Chamber of Commerce in China found that 31 percent of US respondents were already delaying or canceling investment decisions, 18 percent were considering relocating some or all of their manufacturing outside China, and 3 percent were even thinking about exiting the China market altogether.<sup>13</sup>

Higher tariffs might affect firms in the United States, too, given that 77 percent of China's exports to the United States are intermediate and capital goods used to produce finished goods. The tariffs may therefore increase the cost of US production, increasing prices for consumers or lowering profits of US companies producing final goods (Exhibit 4).

Trade disputes between the world's two largest economic powers are also bound to have an impact on other trading nations. OECD analysis finds that Malaysia, Singapore, and South Korea are highly exposed, with an expected estimated negative impact on GDP of between 0.5 and 1.5 percent due to a China–United States dispute. These economies are reacting by making trade deals among themselves and with new partners around the world and pursuing new business opportunities to benefit from supply-chain relocation.

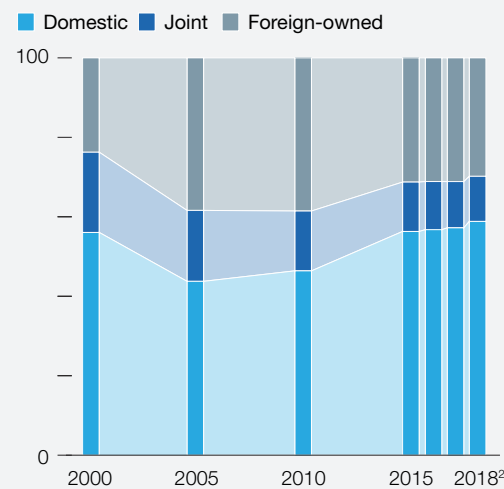
### Out of crisis can come new opportunities

Trade tensions often spur an instinctive response to protect and fight back. But stepping back to look at the actual issues at stake reveals a bigger opportunity. Continuing to reform the Chinese economy can deliver benefits to both China and the world. Resisting the temptation to respond in kind to tariffs requires strong and concerted leadership. China can help itself and others if it shows such leadership. Economics is only one part of the challenge but

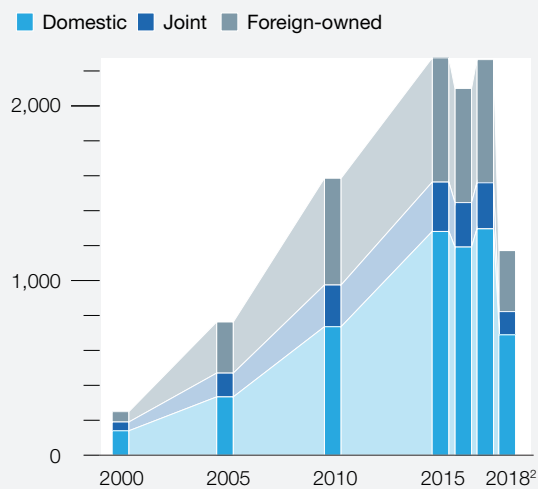
### Exhibit 3

China's value chains are global—more than 40 percent of exports are from foreign-owned enterprises or joint ventures.

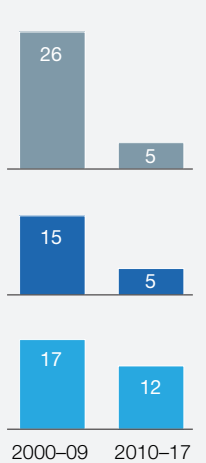
China exports of goods by enterprise type, %



China exports of goods by enterprise type, \$ billion



CAGR<sup>1</sup> for China exports, %



<sup>1</sup>Compound annual growth rate.  
<sup>2</sup>First half of year.

McKinsey&Company | Source: CEIC; McKinsey Global Institute analysis

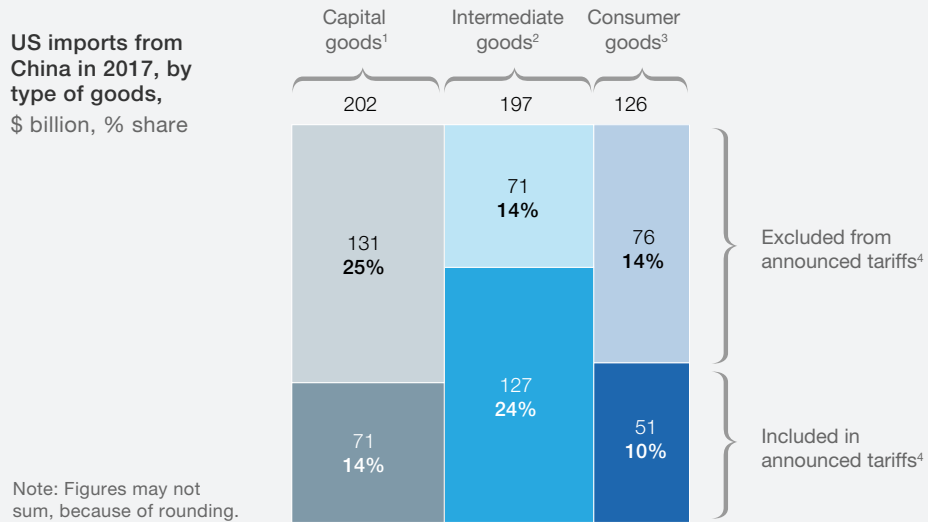
may be one tangible area on which China and others can make progress together—and for the common benefit.

For China, stronger connections to the world are a critical element of a productivity-driven growth model that can enable more and better innovation.<sup>14</sup> MGI has found that going global can help China's companies grow and boost productivity by gaining access to new markets, tapping new sources of talent and strategic assets, and creating competitive pressure in domestic industries. The research found that globalization could lift the labor productivity of Chinese companies by 10 to 15 percent by 2030. Transitioning from the current investment-led growth toward a productivity-driven model could net China \$5.6 trillion of additional GDP and

\$5.1 trillion of additional household income by 2030.

For the rest of the world, China's growth can be a tremendous opportunity. Access to the Chinese market can continue to be a strong driver of MNCs' revenue growth. Emerging markets can benefit from increased investment and increased transfer of know-how from China, and China could become an increasingly important destination for their labor-intensive imports. MGI research has found that countries that are more open to inflows and outflows of goods, services, finance, people, and data grow faster than those that are closed; globally, these flows accounted for 15 to 25 percent of world GDP growth over the past decade.<sup>15</sup>

**Exhibit 4** US companies are likely to be affected by trade tensions given that the majority of imports from China are capital and intermediate goods.



<sup>1</sup>Durable goods that are used for the production of other goods in the United States.  
<sup>2</sup>Goods that are used as inputs for further processing to produce final goods in the United States.  
<sup>3</sup>Goods that are bought and used by consumers.  
<sup>4</sup>As of October 2018.

**Source:** Peterson Institute for International Economics; McKinsey Global Trade Database; McKinsey Global Institute analysis

McKinsey&Company

**Four win-win opportunities stand out for China and the world:**

**1. Become an anchor import destination**

China’s consumers will continue to be an engine for global growth. Of nine consumer groups that MGI expects to generate 75 percent of consumption growth through 2030, two are Chinese—contributing 28 percent of total urban consumption growth.<sup>16</sup> From now until 2030, China’s consumption growth could match that of the United States and Western Europe, presenting new export opportunities for all exporting economies (Exhibit 5).

As China moves up the value chain into higher value-added industries, it can import more labor-

intensive goods from emerging economies. And as its income grows, the consuming classes will import more from advanced economies. China is already the destination for 8 percent of the exports of advanced economies, up from 5 percent in 2007. Fast-growing emerging economies including Bangladesh, Cambodia, Indonesia, Thailand, Uzbekistan, and Vietnam also have been increasing labor-intensive exports to China.<sup>17</sup>

There is already evidence that China is making strides toward being the anchor economy for its region, and, at the same time, deepening economic links with emerging economies beyond Asia. As China’s share of emerging economies’ labor-intensive manufactured

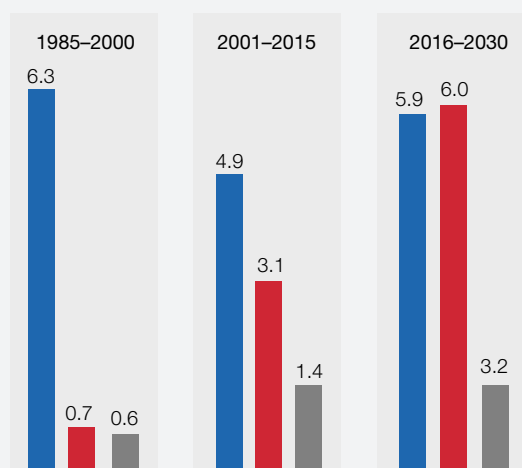


## Exhibit 5

China's consumption growth over the next 15 years might be comparable with the United States and Western Europe.

Incremental growth in consumption, \$ trillion

■ US and Western Europe ■ China ■ India and ASEAN<sup>1</sup>



<sup>1</sup>Association of Southeast Asian Nations.

Source: Oxford Economics; McKinsey Global Institute analysis

McKinsey&Company

exports has declined—by 3.0 percentage points between 2014 and 2016—those of emerging economies have risen: Vietnam by 1.5 percentage point, India by 0.7 percentage point, and Indonesia by 0.4 percentage point. China's trade with emerging economies around the world—China–South trade—rose 11-fold between 1996 and 2016. In comparison, North–North trade increased only twofold.

Digital technologies are another opportunity for China to boost imports.<sup>18</sup> Between 2012 and 2016, cross-border e-commerce in China grew at 61 percent per year; as e-commerce increases access to the Chinese consumer, micro-MNCs from both

emerging and advanced economies can participate in China's consumption growth.

## 2. Liberalize services

Services are a growing part of China's economy, accounting for 54 percent of GDP in the first half of 2018, compared with 44 percent in 2010. However, labor productivity in China's service sector is about 10 to 30 percent of OECD average, suggesting that there could be a big prize if China could boost growth in, and productivity of, its service sectors. A key way of achieving this is liberalizing trade in services. Forthcoming MGI research finds that services are growing faster than goods trade and are already more valuable in global trade than is commonly realized. Today, China's services remain highly protected, with regulations in place that forbid global participation in most of the fastest-growing parts of the economy (4.8 times more restricted than the OECD average, according to the OECD's FDI restrictiveness index). In AmCham's 2018 China Business Climate Survey, 46 percent of services firms indicated that foreign companies are treated unfairly compared with local companies, and 29 percent of respondents indicated that allowing firms to "enter business or product segments that are currently restricted" would be significant.

Supported by sufficient institutional capability and competition, an effort to liberalize China's service sectors could deliver a substantial boost to the Chinese economy through improved infrastructure, increased efficiencies, lower prices, and faster innovation. A wealth of research confirms the benefits that a liberalized service sector could have on China's economy. One study found that the liberalization of service trade could increase welfare and household income by 5.3 percent.<sup>19</sup> Another said that countries with fully liberalized telecom and financial sectors (through introducing competition, allowing FDI, and putting in place an independent regulator) experienced 1.5-percentage-point faster growth in GNP than in countries without

full liberalization.<sup>20</sup> Because services are often key inputs in manufacturing sectors, significant services liberalization led to a 9.2-percentage-point increase in firms' total factor productivity, one study found.<sup>21</sup>

The world could also benefit from a large, fast-growing liberalized Chinese service sector.

The value of its healthcare sector, which grew at 12 percent a year over the past decade, is \$479 billion, and the value of education (with 8 percent annual growth) is \$500 billion. If China were to continue globalizing, this would help promote healthy competition in the domestic economy, leading to savings to consumers and higher quality services, while providing firms from the rest of the world an opportunity to capture a large and growing need for services.

### 3. Globalize financial markets

China's financial system remains far from globalized. Foreign ownership in the Chinese banking system—the world's largest at \$33 trillion—is only about 1 percent, compared with about 13 percent in the United States. Foreign ownership in the Chinese stock market (the world's second largest) is less than 3 percent, compared with 22 percent in the United States and 32 percent in Japan. Finally, foreign ownership in China's bond market—the world's third largest—is less than 3 percent, compared with 41 percent in the United States.

This lack of globalization insulates the Chinese economy from global volatility (and therefore limits the risk of contagion of China's risk to the global economy too). However, currency imbalances, caused partly by the accumulated trade surplus, and continuous injections of liquidity in domestic financial system while maintaining a closed capital account have led to asset bubbles in real estate and stock-market volatility. China's domestic debt has more than quadrupled over the past decade, leaving the economy vulnerable to speculation and excess

liquidity, and eventually a financial recession. Some observers believe such a collapse and consequent drawdown on global savings would have a knock-on effect on the global economy reminiscent of the 2008 financial recession.<sup>22</sup> It would also put China's long-term economic development at risk.

Moving more boldly ahead to integrate China's financial system with global markets would reduce the risk of excess domestic liquidity and relax the constraint of the so-called "impossible trinity"—that is, simultaneously seeking to control monetary policy, exchange rates, and capital movement. This would also have the benefit of developing a more global set of options for China's savers, including investment in OECD economies that are suffering from a savings gap. Domestic savers today continue to face a lack of investment options. Historically, Chinese households have tended to have lower rates of return on their financial investments than do their global counterparts.

Globalizing China's financial markets can mitigate the risk of a Chinese financial collapse and its impact on the rest of the world. It will also provide foreign savers new access to a wealth of investment opportunities by allowing direct participation of foreign banks and investment in public markets. By removing preferential access that Chinese banks have for domestic investment opportunities, foreign institutions could participate in the \$1.1 trillion Chinese financial-services sector, which grew at 9 percent a year between 2007 and 2017. Foreign savers and capital could benefit from the higher returns possible from high rates of productivity growth in China.

### 4. Collaborate to shape a new framework for global prosperity

The rules of the game underpinning the global economic system and governance are in flux, yet international cooperation is still vital to preserve and increase prosperity and sustainability. A consensus

among world economic powers on what constitutes fairness in competition, IP rights, data governance, inclusive growth, and environmental sustainability requires a new comprehensive deal, and China can use its weight to shape it. Among the many areas that need urgent attention are designing a new multilateral trade system, tackling global climate change, reaching consensus on digital governance (such as data sovereignty), and filling the world's estimated annual \$350 billion infrastructure investment shortfall.<sup>23</sup> China has already indicated its interest in playing a greater role in defining the new rules of the game by establishing new institutions, mobilizing capital, and participating in international climate agreements. However, much remains to be done and China's commitments will need to grow in line with its global impact.



China—and the United States—are broadly in sufficiently robust shape to weather trade tensions in the short term, but further unraveling the China relationship would clearly create risks in both economies and beyond. China can use its scale and leadership to contribute to forging a new approach for global prosperity by continuing to reform its domestic economy. Doing so will create opportunities for its own growth and for that of the world. China, the United States, and the rest of the world need the vision to look beyond the current dispute around trade and focus on winning together, rather than losing separately. ■

<sup>1</sup> *World Economic Outlook* data sets, International Monetary Fund, October 2018, [imf.org](http://imf.org); and Angus Maddison, *The World Economy: Historical Statistics*, Development Centre Studies, Paris: OECD Publishing, 2003.

<sup>2</sup> Lawrence J. Lau and Junjie Tang, *The impact of U.S. imports from China on U.S. consumer prices and expenditures*, Lau Chor Tak Institute of Global Economics and Finance, Chinese University of Hong Kong, working paper number 66, May 2018, [igef.cuhk.edu.hk](http://igef.cuhk.edu.hk).

<sup>3</sup> Daron Acemoglu and Pascual Restrepo, *Robots and jobs: Evidence from US labor markets*, National Bureau of Economic Research working paper, number 23285, March 2017, [nber.org](http://nber.org).

<sup>4</sup> Daron Acemoglu et al, "Import Competition and the Great US Employment Sag of the 2000s," *Journal of Labor Economics*, University of Chicago Press, Volume 34, Number S1, Part 2, January 2016, [journals.uchicago.edu](http://journals.uchicago.edu).

<sup>5</sup> "Trading myths: Addressing misconceptions about trade, jobs, and competitiveness," McKinsey Global Institute, May 2012, [McKinsey.com](http://McKinsey.com).

<sup>6</sup> On trade, McKinsey Global Institute considered exposure to a country's supply (country's exports divided by rest-of-world consumption) and demand (country's imports divided by rest-of-world production).

<sup>7</sup> On technology, McKinsey Global Institute considered exposure to a country's technology exports (country's exports of intellectual property and technology services and equipment divided by rest-of-world R&D spending).

<sup>8</sup> On capital, McKinsey Global Institute considered exposure to a country's capital (country's outbound foreign direct investment (FDI) divided by rest-of-world inbound FDI) and investment opportunities (country's inbound FDI divided by rest-of-world fixed-capital formation).

<sup>9</sup> We first measured the exposure between China and the world over the past two decades. We then calculated the exposure of other large economies (namely France, Germany, India, Japan, the United Kingdom, and the United States) to the world for comparison. We set a value of 1.0 as an average exposure index between the world and the seven large economies. A value greater than 1.0 suggests the world is more exposed to China than to the seven large economies, on average, whereas a value less than 1.0 suggests the world is less exposed to China than to the seven large economies.

<sup>10</sup> These are measures of economic inputs rather than outputs. We noted that, in absolute terms, flows between China and the rest of the world increased. McKinsey Global Institute constructed the exposure index by comparing the magnitude of flows relative to China's economy to the magnitude of flows relative to other large economies. As a result, the index declined due to the increasing magnitude of China's domestic economy (aspects of the Chinese economy that are not captured by the flows) and increasing globalization in most large economies.

<sup>11</sup> *World economic outlook, October 2018: Challenges to steady growth*, International Monetary Fund, [imf.org](http://imf.org).

<sup>12</sup> "America Inc and the rage against Beijing," *Economist*, June 28, 2018, [economist.com](http://economist.com).

<sup>13</sup> *Report: Impact of U.S. and Chinese tariffs on American companies in China*, American Chamber of Commerce, September 14, 2018, <https://www.amcham.org.hk>.

<sup>14</sup> "China's choice: Capturing the \$5 trillion productivity opportunity," McKinsey Global Institute, June 2016, [McKinsey.com](http://McKinsey.com).

<sup>15</sup> "Digital globalization: The new era of global flows," McKinsey Global Institute, February 2016, [McKinsey.com](http://McKinsey.com).

<sup>16</sup> "Urban world: The global consumers to watch," McKinsey Global Institute, April 2016, [McKinsey.com](http://McKinsey.com).

<sup>17</sup> "Outperformers: High-growth emerging economies and the companies that propel them," McKinsey Global Institute, September 2018, [McKinsey.com](http://McKinsey.com).

- <sup>18</sup>“Digital globalization: The new era of global flows,” McKinsey Global Institute, February 2016, McKinsey.com.
- <sup>19</sup>Denise Eby Konan and Keith E. Maskus, *Quantifying the impact of services liberalization in a developing country*, Policy Research working paper, World Bank, Washington, DC, number 3193, 2004, [openknowledge.worldbank.org](http://openknowledge.worldbank.org).
- <sup>20</sup>Aaditya Mattoo, Randeep Rathindran, and Arvind Subramanian, *Measuring services trade liberalization and its impact on economic growth: An illustration (English)*, Policy Research working paper, World Bank, number 2655, 2001, [openknowledge.worldbank.org](http://openknowledge.worldbank.org).
- <sup>21</sup>Oleksandr Shepotylo and Volodymyr Vakhitov, *Impact of services liberalization on productivity of manufacturing firms: Evidence from Ukrainian firm-level data*, discussion paper 45, Kyiv School of Economics, 2011.
- <sup>22</sup>Kenneth Rogoff, “The global impact of a Chinese recession,” Project Syndicate, November 7, 2018, [project-syndicate.org](http://project-syndicate.org).
- <sup>23</sup>“China’s role in the next phase of globalization,” McKinsey Global Institute, April 2017, McKinsey.com; and “Bridging global infrastructure gaps: Has the world made progress?,” McKinsey Global Institute and McKinsey’s Capital Projects and Infrastructure Practice, June 2016, McKinsey.com.

**Jonathan Woetzel** is a director of the McKinsey Global Institute, where **Susan Lund** and **Anu Madgavkar** are partners, **James Manyika** is chairman and a director, and **Jeongmin Seong** is a senior fellow; **Nick Leung** and **Joe Ngai** are senior partners in McKinsey’s Hong Kong office, and **Andrey Mironenko** is a consultant in the Sydney office.

Designed by Global Editorial Services.  
Copyright © 2018 McKinsey & Company.  
All rights reserved.