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## Chapter 6: The Rivalry between the United States and China

In China today, Bill Gates is Britney Spears. In America today, Britney Spears is Britney Spears—and that is our problem.

—*Thomas Friedman*

### The Return of Great Power Competition

Throughout much of the 19th and 20th centuries, global politics was characterized by a rivalry between great powers for influence. In fact, the term “great power” is typically defined in this context as a country that can exert its military or economic influence everywhere in the world. In the second half of the 19th century, the two dominating great powers of the world were the British Empire and the French Empire, with Germany, Austria-Hungary, the Ottoman Empire, and Russia challenging those two nations in continental Europe and neighboring regions. The rivalry between these great powers led to constantly shifting alliances and a fragile balance that finally collapsed in the early 20th century at the outbreak of World War I.

After the two world wars, great power competition shifted away from the European colonial empires toward a rivalry between the United States and the Soviet Union. But with the fall of the Soviet Union, the United States emerged in the 1990s as the sole great power. No country on the planet could challenge the military or economic power of the United States, and great power competition was pronounced dead. Francis Fukuyama famously even went as far as to call for an “End of History,” wherein liberal democracy would be the only relevant political system on Earth (Fukuyama 1992).

But the status of the United States as the sole great power turned out to be short-lived. Although one can argue that militarily, Russia remained a great power because its large nuclear arsenal allowed it to intervene militarily wherever it wished, the country had nowhere near the economic influence of the United States. Meanwhile, in economic terms, China has emerged over the past two decades as another great power and the main challenger of US economic hegemony in the world.

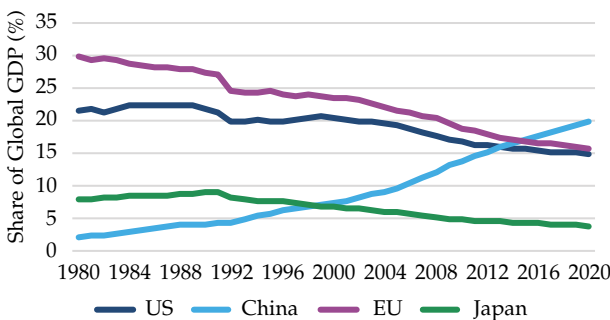
This chapter is from the book *Geo-Economics: The Interplay between Geopolitics, Economics, and Investments* by Joachim Klement, CFA. For more chapters, go to <https://www.cfainstitute.org/en/research/foundation/2021/geo-economics>.

**Exhibit 1** shows the GDP of the United States and China together with that of the European Union and Japan since 1980. GDP is expressed in US dollars adjusted for purchasing power parity (PPP), which is why the chart shows China having superseded the United States as the largest economy in the world in 2014. At market exchange rates, the United States is still the largest economy. I use PPP-adjusted GDP in Exhibit 1 because in this discussion, I am concerned with the potential of a country’s people to purchase goods and services and to invest their savings. And because most consumption and investing are done locally (especially in the case of China), a PPP-adjusted comparison of the size of different economies is more relevant in this context.

Given that China’s GDP rivals and eventually supersedes that of the United States, the country has clearly become a challenger for the United States in not only economic terms but also political terms. That living standards in China are still much lower than in the United States, Europe, and Japan is true (China’s PPP GDP per capita is approximately one-quarter of that of the United States), but as a market for global goods and services, China has become a major player. And this economic power has led over time to a more confident political style, particularly under President Xi Jinping. China is demanding its rightful place in the existing world order.

At first, China’s emergence as a leading member of the global economic and political elite was welcomed, particularly because after the 9/11 terrorist attacks, the United States believed China would help the West in its efforts to fight global terrorism (Zoellick 2005). But over time, the United States and other leading economies in the world became more skeptical about the Chinese government’s increasing political assertiveness (Deng 2014). After the election of Donald Trump as president of the United States, China

**Exhibit 1. Share of World GDP (at PPP Exchange Rates)**



Note: GDP in PPP-adjusted US dollars.

Source: International Monetary Fund (IMF).

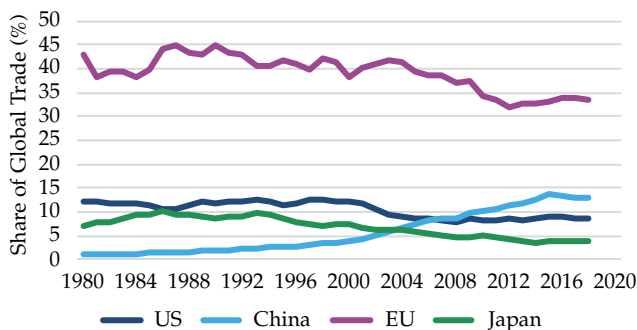
increasingly drew the ire of the administration, and tensions between the United States and China escalated drastically, something we will discuss in more detail later in this chapter.

**China's Ascent to Economic Superpower.** Before we discuss the recent tensions between the United States and China, however, we should review the current state of affairs and the rise of China in a global context. Over the past 30 years, China has gradually opened its economy to the world. It followed in the footsteps of so many emerging markets, most notably the Asian developed economies of South Korea and Japan, which managed to emerge from poverty through the 1960s and 1970s and today have some of the highest living standards in the world.

Just as Japan was in the 1960s and South Korea was in the 1970s, China was competitive thanks to a large labor force that could produce manufactured goods at much lower costs than its Western competitors could. In the beginning, the labor force was largely uneducated, and China gradually became the workshop of the world as it integrated its manufacturing base into the global supply chains of companies from advanced economies. This integration of China into global supply chains led to a massive increase in trade with China. Today, trade flows of goods to and from China amount to 12.9% of global trade, surpassing those of both the United States and Japan, as shown in **Exhibit 2**.

The perception of China as a hub for the production of cheap goods that do not require a lot of skilled labor to manufacture is still widespread in the West. But this view has long been outdated. Consumption as a share of GDP has been rising quickly since 2010 and was 53.6% in 2017. Processing

**Exhibit 2. Share of Global Trade in Goods**



*Note:* The high share of global trade for the European Union is partly due to intensive trade between EU member countries, particularly in the eurozone.

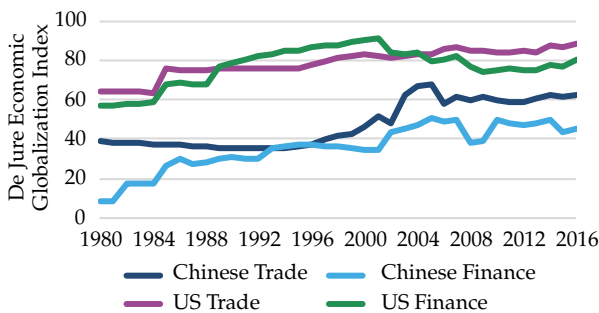
*Source:* IMF.

exports—where parts and raw materials are imported into China, assembled into finished goods or inputs for further processing in other countries, and then exported—have declined from 50% of Chinese exports in 2007 to 34% in 2017. Two-thirds of Chinese exports today are goods developed, produced, and finished in China. Processing imports in China—goods and raw materials are imported into China for further processing—have declined even more and today account for just 24% of all Chinese imports (Ahmed 2017). While the country remains the workshop of the world, the part of the Chinese economy consisting solely of assembly is becoming less and less important. Instead, China is increasingly becoming a consumption economy. In 2013, services as a share of GDP overtook manufacturing for the first time ever and now account for more than 50% of China’s GDP.

But China is not just integrated into global manufacturing supply chains and the trade of consumption goods; it has also become more integrated into the global financial network. **Exhibit 3** shows the KOF Globalisation Index for trade and financial globalization of the United States and China.

Although the US economy remains far more globalized than the Chinese economy, both Chinese trade and financial services are catching up quickly. Chinese banks are the largest in the world in terms of assets and are now present around the globe. Meanwhile, international banks are increasingly active in China. According to the Bank for International Settlements, US banks had claims against Chinese citizens and businesses totaling \$170 billion as of mid-2018. That amounts to 10% of the existing Tier 1 capital of US banks. Banks in the United Kingdom and Singapore are even more exposed to China, with claims amounting to 95% and 277% of Tier 1 capital, respectively. In short, if the Chinese economy gets into trouble, the global trade

**Exhibit 3. Globalization in China and the United States Measured by the KOF Globalisation Index**



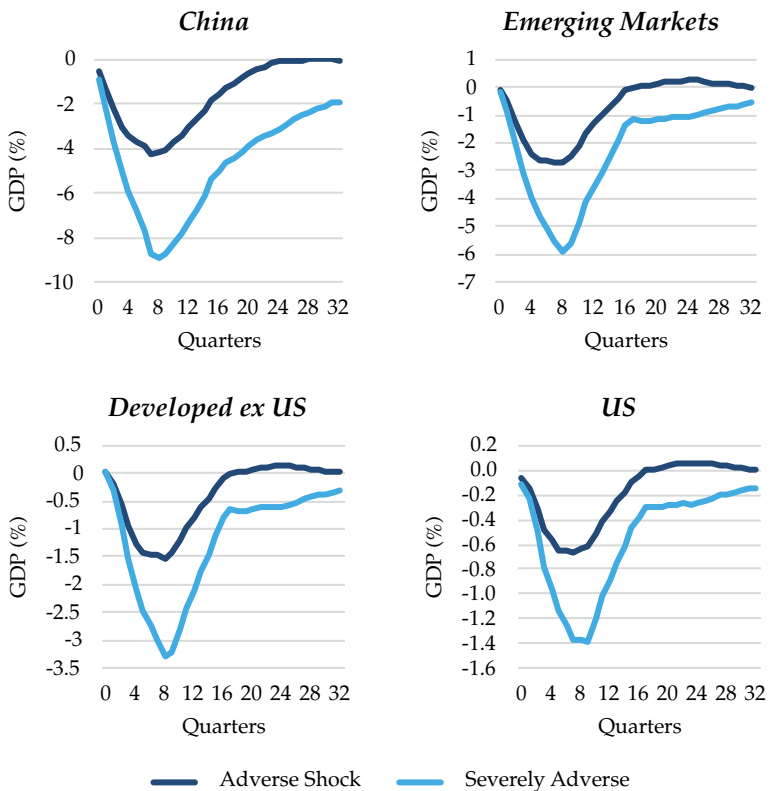
Source: Gygli, Haelg, Potrafke, and Sturm (2019).

in goods is not all that will suffer. We realistically have to expect a financial crisis that could likely spread to Western banks.

**What if China Slows Down?** China’s global integration, together with the sheer size of the country’s economy, means that an economic crisis in China will quickly spread around the globe. **Exhibit 4** shows the impact a Chinese growth shock would have on the global economy. The model used here by Ahmed, Correa, Dias, Gornemann, Hoek, Jain, Liu, and Wong (2019) simulates two kinds of Chinese growth shocks: an adverse growth shock and a severely adverse growth shock.

First, a decline in Chinese growth that is in line with the average financial crisis in history (using the experience of both advanced economies and emerging economies as the historical sample) would reduce China’s GDP by 4% relative to baseline growth in approximately two years. Exhibit 4 shows

**Exhibit 4. Impact of a Chinese Growth Shock**



Source: Ahmed et al. (2019).

that such an “adverse growth shock” in China would hit emerging economies the hardest. Emerging markets as a group would suffer a decline in GDP of 2–3 percentage points (pps), whereas advanced economies outside the United States would see their GDP decline by approximately 1.5 pps.

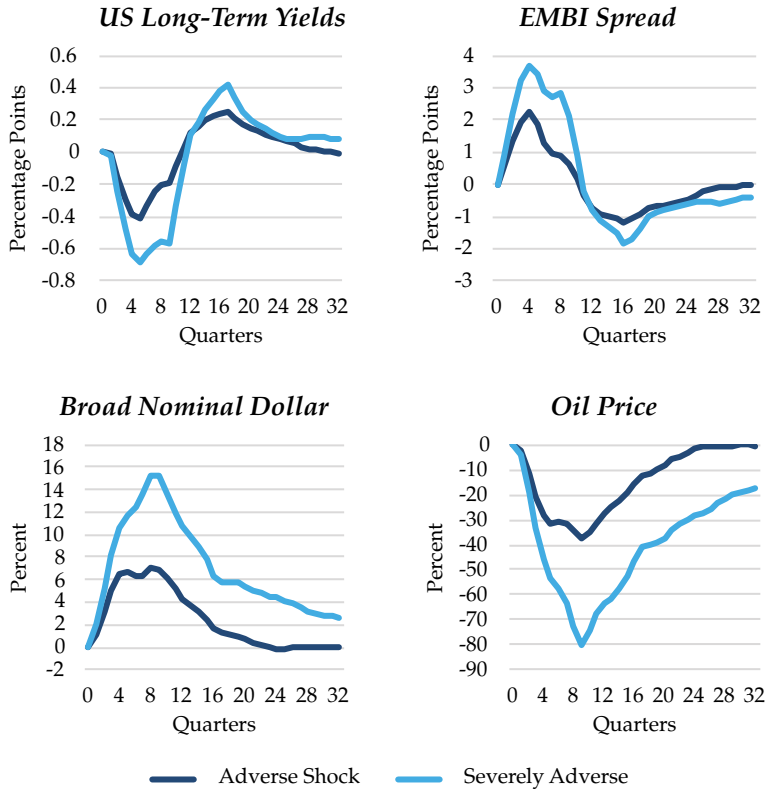
However, countries with greater dependency on exporting to China would be harder hit. Ahmed et al. (2019) estimated that commodity-exporting emerging markets would see their GDP decline by more than 3 pps in two years whereas commodity-importing emerging markets would see their GDP decline by approximately 2 percentage points. And among commodity importers, such countries as South Korea, Germany, and Japan seem likely to be the harder hit advanced economies because of their close export links with China. Given the low trend growth rates of advanced economies in Europe and developed Asia, the impact of such a Chinese growth shock could easily trigger a recession in these countries.

Because the United States exports little to China and depends much less on Chinese demand than other economies do, it would suffer much smaller losses in output, approximately 0.6% of GDP. Normally, such losses would not be enough to cause a recession in the United States, but they could be sufficient if the US economy were already growing at a slow pace when the shock happened.

However, the situation could worsen if China’s economy experiences not an average financial crisis but one that is similar to the one the United States experienced after the housing bubble burst in 2006. In this “severely adverse scenario,” the Chinese economy would decline by 8.5 pps in two years, a shock that would have much larger ramifications globally.

Exhibit 4 shows that in such a severely adverse scenario, emerging market economies overall would see their GDP decline by approximately 6 pps, while advanced economies outside the United States would suffer GDP reductions on the order of 3–3.5 pps. Again, the United States would be among the least affected countries in such a scenario, but the financial ties between US banks and Chinese borrowers would imply a decline in US GDP that is approximately twice as severe as in the case of the adverse scenario. In short, the economic impact of such a severe financial crisis in China on advanced economies outside the United States and emerging markets would be comparable to the Global Financial Crisis (GFC) of 2008. Now imagine if this happened while the Western economies were still trying to recover from the long-term damage of the Covid-19 pandemic.

Correspondingly, the impact of a growth shock on financial markets ranges from bad to truly horrifying, as shown in **Exhibit 5** (Ahmed et al. 2019):

**Exhibit 5. Impact of a Chinese Growth Shock on Financial Markets**

Source: Ahmed et al. (2019).

- Long-term US Treasury yields are expected to decline by 40 bps in the adverse scenario and 60 bps in the severely adverse scenario.
- Emerging market bond spreads (measured as the average spread of the J.P. Morgan Emerging Markets Bond Index [EMBI] Global versus US Treasuries) are expected to jump by 200 bps (adverse scenario) to 300 bps (severely adverse scenario).
- The US dollar is expected to rally by 6% to 12% versus principal developed market currencies over two years. Emerging market currencies would weaken significantly more against the dollar than developed market currencies would. Furthermore, developed market currencies would recover within four years, whereas emerging market currencies might remain weak for much longer.

- Oil prices are expected to drop up to 40% in two years for the adverse scenario and more than 70% in two years for the severely adverse scenario. Industrial metal prices are expected to drop 20% and 50%, respectively.
- Last but not least, stock markets would experience severe bear markets. The S&P 500 Index is expected to drop 15% over two years in the case of a regular China growth shock and up to 40% over two years in the severely adverse scenario. European stock markets are expected to drop 20% and 50%, respectively, whereas emerging market stocks are expected to drop 25% and 55%.

Although such simulations are by no means perfect and are subject to significant estimation errors, they show that a crisis in China would likely trigger a bear market in equities and push Europe and many emerging markets into recession. Meanwhile, a severe financial crisis in China would feel like the GFC for most countries around the world.

Above all, these simulations show that efforts by the United States to hurt China economically are likely to cause significant harm to US and global investors, which, in turn, could lead to even bigger reductions in GDP growth than the ones shown here because adverse sentiment might lead to declining consumption in a second round—something indicated by additional modeling results in Ahmed et al. (2019). A US–China trade war taken to the extremes would sink global financial markets. And investors would take years to recover from such losses.

**The Competition between China and the United States Will Be the Dominant Theme.** We can, therefore, conclude that denying China its seat at the table of the great powers of the 21st century is impossible. Unfortunately, great power competition has often led to war and economic crises. The rivalry between Germany and Austria-Hungary, on the one hand, and between France and the British Empire, on the other, in the early 20th century led to the outbreak of World War I. The rivalry between the United States and the great powers in Europe led to a trade war that deepened the Great Depression at its onset and sowed the seeds for World War II. And the great power competition between the United States and the Soviet Union after World War II did not end in a great power war, but we came quite close several times.

Great power competition in the 21st century has to find new solutions to these challenges. In the age of nuclear weapons, we cannot allow great power competition between the United States and China to escalate into an all-out military conflict. If we do, the investment implications of such a military conflict will be the last thing on our minds. Thus, we do not have to ponder this outcome as a serious possibility here.



But great power competition between the United States and China could lead to economic war and economic crises. As the discussion thus far has shown, because the network of global connections is so dense, in terms of both trade and financial services, such economic warfare would be an enormously destructive force that would be felt everywhere. The costs for the global economy as well as for any individual country (including the United States) would likely be much bigger than the potential benefits.

That the great power competition between the United States and China will continue to escalate indefinitely seems unlikely. Readers should remember Rule 2 of forecasting from the previous chapter. Making extreme forecasts does not pay off because they almost never come true, and investment strategies that are based on such extreme scenarios can lead to very costly mistakes, indeed. Furthermore, as Rule 3 of forecasting states, mean reversion is a powerful force. The president of the United States faces checks and balances from Congress and the Supreme Court and must run for reelection after four years in office. And the electorate, when given the chance to correct a mistake, does so quite frequently.

At the time of writing, campaigning for the US presidential election is underway, and quite possibly, Donald Trump will not be reelected; if not, he will be succeeded by Joe Biden, who is a more moderate politician. Furthermore, the Phase 1 deal between the United States and China was enacted in January 2020 and has at least temporarily halted the spiral of ever-increasing tariffs. To expect an all-out economic war between the United States and China in the coming years would, therefore, be foolish. What seems more likely is that the trade war between the United States and China will eventually enter a steady state—something I will discuss in more detail later in this chapter.

## **Made in China 2025 and Beyond**

Beyond the current trade tensions between the United States and China, another development is on the horizon that might lead to geopolitical tensions between China and developed countries around the world—one that has garnered much less attention. Although China has become a great power, it remains a middle-income country. The initial gains from a cheap labor force and rapid urbanization have been made. Wages in China have risen to levels that create a competitive disadvantage relative to other emerging markets. According to the Economist Intelligence Unit, the average monthly wage of a Chinese worker in 2018 was \$990, compared with \$383 for Mexico and \$238 for Vietnam (all numbers at current exchange rates). This difference in wages might not lead to a competitive disadvantage if Chinese workers are

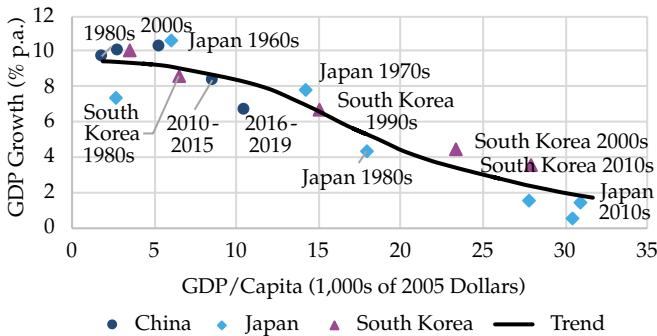
more productive, but even if the higher productivity of Chinese workers is taken into account, unit labor costs in China are still 57% higher than in Vietnam and 277% higher than in Mexico. And China’s pool of cheap labor is declining rapidly. Today, more than one-half of all Chinese citizens live in cities, and the poverty rate in rural China was 3.4% in 2013, down from 48.8% just 10 years earlier (World Bank 2017).

Given these constraints, growth in China is slowing. After decades of double-digit real GDP growth, it dropped to 6.1% in 2019 and will likely drop significantly in 2020 as a result of the Covid-19 pandemic. Excluding 2020, the slowdown in Chinese growth is in line with the experience of Japan and South Korea from the 1970s to the 1990s, as **Exhibit 6** shows.

But China is at risk of falling into the “middle-income trap.” Most emerging economies have not managed to achieve what Japan and South Korea did. After an initial stage when Japan and South Korea caught up with more developed economies thanks to cheap labor, the two countries transformed their economies and increasingly specialized in high-tech manufacturing that allowed them to raise their wealth beyond the levels of middle-income countries. If China wants to keep its seat at the table of great economic powers, it needs to emulate these examples and transform its economy toward higher-value-added industries.

**Escaping the Middle-Income Trap.** To escape the middle-income trap, China launched its “Made in China 2025” (MIC25) strategy in 2015. It was billed as a signature economic project for the next 10 years and a step closer to the country’s ultimate goal of becoming a leading global economic superpower by 2049—the 100th anniversary of the People’s Republic of China. This strategy defines 10 industries, including robotics, next-generation

**Exhibit 6. China’s Growth Slowdown in Context**



Source: Ahmed (2017).

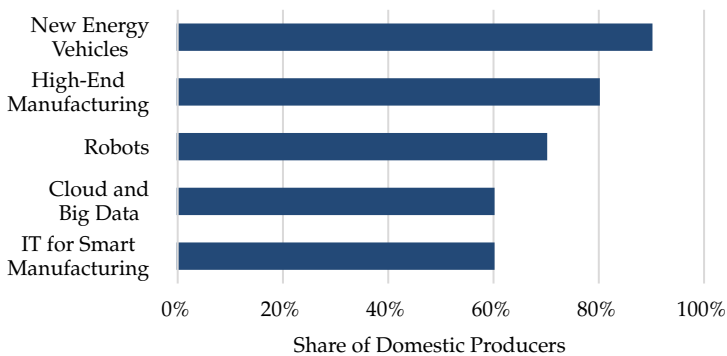
information technology (IT), energy equipment, and new energy vehicles, in which China wants to develop world leading businesses that dominate their global competition. Currently, many Chinese businesses in traditional high-tech industries, such as aerospace and software engineering, lag behind their Western counterparts. Here the goal is to close the gap, but the country has no ambition to rapidly develop these industries. Being second best seems good enough in these cases, as long as the gap with the West closes gradually.

MIC25 focuses instead on next-generation high-tech industries that are part of the so-called Fourth Industrial Revolution, which include robotics, artificial intelligence, and other fields. MIC25 aims to enable Chinese companies to leapfrog Western competitors and watch them try to catch up.

To achieve the goals of MIC25, China's government has defined a whole range of metrics along which progress is measured. One unofficial key metric is the share of domestic products in key industries. For example, 90% of electric and other new energy vehicles should be from Chinese manufacturers in 2025, and 70% of robots used in China in 2025 should be domestically made, as should 60% of cloud-computing and big data applications. **Exhibit 7** delineates these aspirations.

Additionally, the government has defined more than 100 other measures to assess progress toward the MIC25 goals. These measures range from innovation indicators such as R&D spending, through digitization metrics (broadband penetration is scheduled to rise from 50% to 82%), to environmental goals (CO<sub>2</sub> emissions should be reduced by 40% from 2015 levels). But these goals are not fixed. The government and regional authorities constantly adapt these objectives to a changing environment, accelerating progress where possible and providing more time for development where needed.

#### Exhibit 7. Unofficial Targets for Products under MIC25



Sources: Wübbecke, Meissner, Zenglein, Ives, and Conrad (2016); Zenglein and Holzmann (2019).

The MIC25 strategy has caused quite a bit of irritation in developed countries because it directly attacks the foundation of economic growth in many of them. Wübbecke et al. (2016) analyzed which developed countries are most threatened by MIC25. Based on the importance of the local manufacturing sector in the overall economy and the importance of high-tech manufacturing in the manufacturing sector, the five countries that face the greatest competitive threats from MIC25 are as follows:

1. South Korea
2. Germany
3. Ireland
4. Hungary
5. Czech Republic

But such countries as Japan, the United States, and the United Kingdom are not far behind. Add to that the idea that China is providing enormous financial resources to companies involved in MIC25 through state-owned banks (in 2016, the China Development Bank pledged \$42 billion in financing over five years) as well as a network of more than 1,800 government industrial investment funds (with funds of approximately \$420 billion), and one can understand that Western countries are very nervous. In comparison, Germany's Industrie 4.0 program, which was launched with very similar goals in 2011, has total government funding of EUR200 million (\$220 million or approximately 5% of the funding of MIC25).

Another cause for concern in the West is the fact that access to the Chinese market remains restricted in many of these next-generation high-tech fields. Facebook and Twitter notably do not operate in China, and Google's search engine is unavailable there as well (though the company maintains a research facility and sells Android smartphones there). In 2015, China adopted a new National Security Law that restricts foreign access to the information and communication technology market on national security grounds. The 2015 Counter-Terrorism Law requires telecom and internet service providers to provide technical support assistance to security organizations investigating terrorist attacks. Finally, China's 2017 Cybersecurity Law further restricts sales of foreign information and communication technology in China and requires foreign technology to be subjected to government security reviews, data to be stored on Chinese servers, and government approval to be granted if data are to be transferred outside China (Office of the Security of Defense 2019). In essence, any modern information and communication technology

provider operating in China must provide government authorities access to all its data if it wants to operate in the country.

This criticism of MIC25, together with demands from the United States to drop the plans for MIC25 as part of the resolution of the US–China trade war, led to press reports in late 2018 that China might abolish the program. However, MIC25 appears to be here to stay, though public references to the program have been toned down. **Exhibit 8** shows the changes in wording of major themes of MIC25 that occurred between the public announcement of MIC25 in 2015 and the Government Work Report 2019 (Zenglein and Holzmann 2019).

**Laying the Groundwork to Become a High-Tech Nation.** China has long laid the groundwork for the transformation of its economy into a high-tech economy. **Exhibit 9** shows that R&D spending has increased from 1.0% of GDP in 2001 to 2.2% of GDP in 2017, overtaking that of the European Union. The number of patent applications is growing exponentially, particularly in such crucial areas as artificial intelligence, but the quality of these patents and the results of the R&D efforts so far seem to be worse than the output of Western countries.

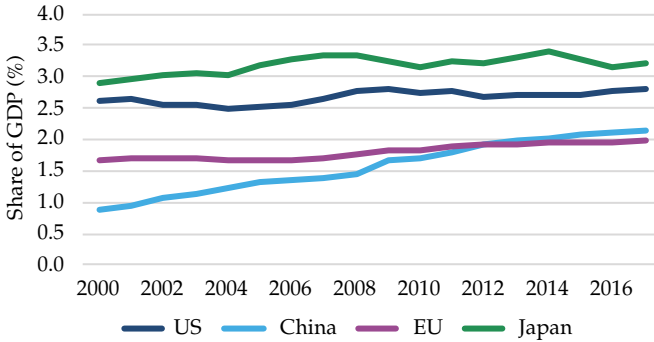
Nevertheless, the pool of highly educated specialists in China is growing fast. The epigraph at the beginning of this chapter from *New York Times* columnist Thomas Friedman alludes to the high social standing of engineers and scientists in China and the reverence provided to them by the public. **Exhibit 10** shows that in 2014, 1.6 million Chinese students graduated from university with a bachelor’s degree in a science or engineering field, compared with 742,000 in the United States and 780,000 in the European Union. Expressed as a percentage of the overall population, this is still only approximately one-half the rate seen in the United States but is on par with the European Union. And many of these highly educated engineers and scientists will work in local

**Exhibit 8. The Changing Face of MIC25**

Theme	MIC25 (2015)	Government Work Report 2019
Manufacturing superpower	Turn China into a manufacturing superpower with a world-leading manufacturing industry.	Accelerate the establishment of a manufacturing superpower.
Smartification	Make smart manufacturing the major direction to follow.	Expand “smart+.”
Quality	By 2025, substantially upgrade the quality of the manufacturing industry.	Promote high-quality development of the manufacturing industry.

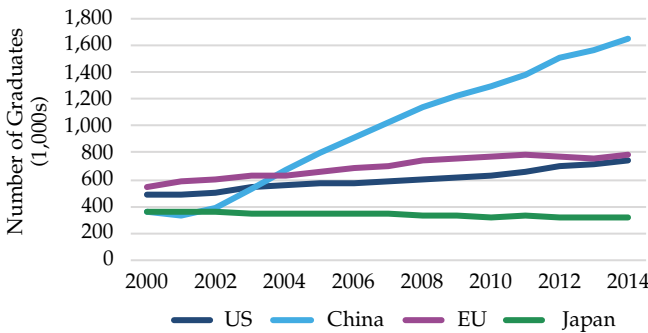
Sources: State Council, Xinhua; Zenglein and Holzmann (2019).

**Exhibit 9. R&D Spending**



Source: OECD.

**Exhibit 10. Graduates with a Bachelor’s Degree in a Science or Engineering Field**



Sources: National Science Foundation; OECD.

factories and research labs to create the technologies of the future. Even if the average level of education of these scientists and engineers is lower than that for the United States and Europe, their sheer number guarantees that China is bound to have the required number of “geniuses” to revolutionize a field.

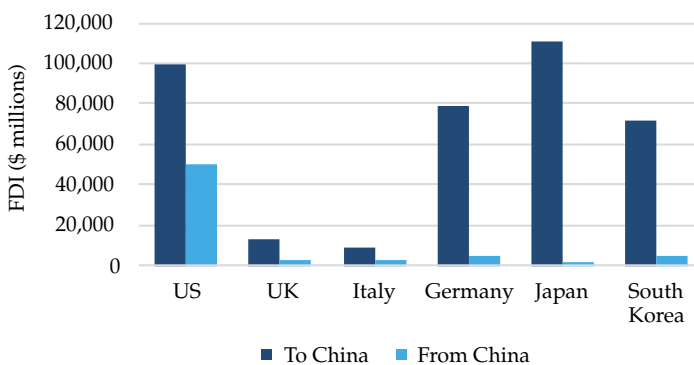
Finally, China uses restricted access to its market as a bargaining chip to obtain foreign know-how and technologies. Foreign investors are given access to industries that China considers of low strategic importance, such as consumer goods and the automotive industry, and hurdles for joint ventures with Chinese companies and state-owned enterprises are reduced. In return, China aims to gain access to desirable high-tech industries or to attract these industries to China. For example, in the consumer electronics industry, China no longer simply assembles parts that were manufactured abroad but increasingly

produces computer chips and other components locally. This means that in recent decades, Chinese companies could upgrade local production with foreign know-how. As a consequence, such companies as Lenovo, Huawei, Haier, and DJI have become well-known brands around the world.

However, some foreign know-how remains elusive for Chinese companies because the businesses that possess it are unwilling to transfer that know-how to China. For example, the elevator company Schindler and the industrial conglomerate Siemens refuse to sell certain high-tech products to China and instead only offer products that are not at the cutting edge of modern technology. In these cases, China tries to get access to this know-how through foreign direct investment (FDI—i.e., acquiring foreign companies with the required knowledge) by hiring specialists from foreign businesses to work in China, by collaborating with Western research institutes and universities where barriers to entry are lower, and via other means (Zenglein and Holzmann 2019).

Western countries react to these efforts very differently. Many Western countries with a strong free-market tradition, such as the United States and the United Kingdom, and countries with limited experience in dealing with Chinese investors tend to welcome Chinese investments. As a result, investment flows from China into these countries tend to be lower but not that much lower than flows from these countries into China (Exhibit 10). Countries that have more experience in dealing with Chinese investors and have more to lose from a loss of local know-how tend to resist Chinese investments much more. The FDI flows between Germany, South Korea, and Japan on one side and China on the other are essentially one-way streets. **Exhibit 11** compares FDI into and from China for some leading industrial countries.

**Exhibit 11. FDI Flows with China**



*Note:* In millions of US dollars, average for 2015–2017.

*Source:* OECD.

In addition, attempts by Chinese companies to acquire Western high-tech businesses are increasingly the subject of political scrutiny. The 2016 takeover of the world's largest robotics company, KUKA, by China's Midea Group caused significant concern among the German political elite, given KUKA's place at the heart of the Industrie 4.0 initiative. The takeover of Swiss agribusiness company Syngenta by ChemChina in 2017 almost failed because of regulatory concerns in the United States and Europe. And in 2016, the takeover of Western Digital by Tsinghua Unigroup failed after the Committee on Foreign Investment in the United States threatened an investigation.

But Chinese companies' push to become global leaders in next-generation technology will not stop because of such political scrutiny. With a protected home market that generates massive cash flows, many Chinese companies can gradually expand throughout Asia and the rest of the world, where they will compete directly with Western businesses. The impact on Western businesses will be diminishing profit margins and lower sales and earnings growth as well as a gradual diversion of R&D spending from the West to China:

- The Commercial Aircraft Corporation of China, a state-owned aerospace company, will launch its narrow-body C919 aircraft in 2021 and its wide-body C929 aircraft in 2026, putting it in direct competition with Airbus and Boeing. At first, the company will not likely make inroads in Europe and North America, but Chinese and East Asian airlines will increasingly switch to these aircraft.
- Alibaba has begun offering its Alipay payment system in the United States and other countries, giving itself a foothold in the countries dominated by such electronic payment systems as Apple Pay and Google Pay. Additionally, the company allows US retailers to sell their goods on its Chinese e-commerce site, thereby providing them a way to circumvent competition from Amazon. While Americans buy consumer goods made in China, Chinese consumers will in the future increasingly buy goods made in the United States.
- Chinese carmakers that produce electric vehicles are expanding into Europe and the United States. Geely, through its Volvo brand, started selling the Polestar 2 electric car in 2020. This car is in direct competition with the Tesla Model 3. Meanwhile, other Chinese electric car manufacturers, such as BYD, already sell electric buses in the United States and electric cars in Bahrain and Ukraine.
- Seven of the 10 largest companies that produce batteries for electric cars are Chinese, and their combined global market share is 53%. The planned



expansion of Chinese battery manufacturing capacity amounts to three times that of the rest of the world. China's leadership in electric vehicles and batteries is so pronounced that Western carmakers, such as BMW and Groupe PSA, have diverted R&D efforts from Europe to China and opened facilities in China to gain access to local know-how—effectively reversing the traditional flow of know-how.

## **Regional Expansion: The World's Largest Free Trade Zone**

Although MIC25 is primarily domestically oriented, a local Chinese high-tech industry clearly needs access to essential raw materials and intermediate goods. Similarly, China, as an export-oriented nation with a growing domestic market, will need easy access to foreign markets for its finished goods. In short, the Chinese high-tech industry has the best chance of succeeding if it is integrated into a global supply chain.

To do this, China needs to ensure that it has easy access to markets. This goal is easier to achieve with regional partners than on a global scale or through global institutions. With respect to partners in Southeast Asia and the Pacific region, China is simply the most desirable bride. When the United States withdrew from the proposed Trans-Pacific Partnership (TPP) in 2017, China was handed a strategic opportunity to enhance its economic influence in the region through its own network of free trade agreements.

Since 2012, the member states of the Association of Southeast Asian Nations (ASEAN), together with their free trade partners (China, India, Japan, South Korea, Australia, and New Zealand), started efforts to harmonize trade agreements between these countries. These efforts, under the title Regional Comprehensive Economic Partnership (RCEP), initially progressed slowly, but with the withdrawal of the United States from the TPP, China and ASEAN countries increased their efforts to develop this loose partnership into a more integrated set of free trade agreements (Tostevin 2019). In late 2019, the members of ASEAN, together with five of their free trade partners—India pulled out at the last minute but is invited to join at any time—agreed to transform the RCEP into the world's largest free trade zone in 2020. Once established, the RCEP will cover 15 countries, with 46% of the world's population and 32% of global GDP. (In comparison, the European Union covers 7% of the world's population and 16% of global GDP, and the North American Free Trade Agreement/United States–Mexico–Canada Agreement [NAFTA/USMCA] covers 6% of the world's population and 18% of global GDP.)

However, the trade liberalization within the RCEP is less pronounced than it is for the European Union or NAFTA/USMCA. Although RCEP

member states are expected to gradually lower their tariffs on goods traded between them and other member states, tariffs are not harmonized across the RCEP but are agreed on individually between member states. Also, the RCEP does not cover such sensitive issues as the liberalization of agriculture, workers' rights, and environmental protection (Tostevin 2019). Nevertheless, with the establishment of the RCEP in 2020, Chinese companies will have an incentive to expand their supply chains toward Southeast Asia while developed countries such as Japan, Australia, and South Korea will gain easier access to China. And this will, in the medium to long run, pull these developed countries in the Pacific basin closer to China and farther away from the United States.

## **Global Connections: The Belt and Road Initiative**

But regional expansion of Chinese companies' supply chains and easier access to consumers in Asia are not the end goals of China's ambitious plans. In its efforts to become a global high-tech hub, China aims to expand its reach beyond its neighbors and toward the West. The Belt and Road Initiative (BRI) is meant to do just that. Announced in 2013 and integrated into the constitution of the Chinese Communist Party in 2017, the project is intended to build a global infrastructure network that connects participating countries with China and facilitates trade.

Furthermore, China also offers the possibility of linking the financial institutions of participating countries with Chinese banks and investment companies to provide cheaper financing and a more globalized financial system centered on Chinese banks. In the most ambitious cases, participating countries could even coordinate their economic development policies with China, though so far, no country involved in the BRI has taken this step (Eder 2018).

While the official goals of the BRI include cultural, societal, and economic cooperation, in its final form, the BRI will clearly increase China's economic and political influence significantly in Asia, Europe, and Africa. This prospect of rising Chinese influence in emerging economies and increasingly also in Western Europe has led to some irritation in the United States and other countries as China's BRI investments have come closer and closer to Western Europe and North America. For example, in 2018, Greece became a member of the BRI, and the Chinese company COSCO renovated and began to run Greece's largest port, in Piraeus. And in March 2019, Italy became the first G-7 country to join the BRI, in hopes of attracting substantial Chinese investments in its infrastructure.

What started as a regional initiative among emerging markets has been constantly expanding in terms of both member states and infrastructure projects. In 2017, for example, an Arctic maritime route between China and Europe was included in the BRI, and China intends to expand its BRI to Latin America in the future, as shown in **Exhibit 12**.

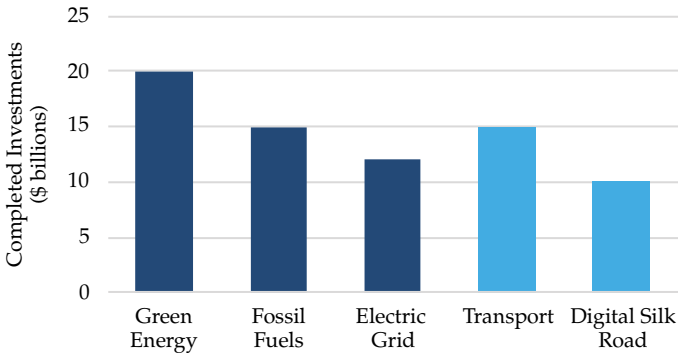
Though the BRI was officially announced in 2013, it is still in its early days. As Eder and Mardell (2019) reported, China is seemingly following a phased approach to the development of the BRI. In the first stage, the country was focusing primarily on investments in energy generation and power transmission projects. In the first six years of the BRI, two-thirds of investments (close to \$50 billion) were made in the power infrastructure sector, but only \$15 billion in transport infrastructure projects and \$10 billion in the Digital Silk Road, which is meant to establish a better information and communication infrastructure in participating nations, as shown in **Exhibit 13**.

With respect to energy infrastructure projects, China seems to have a preference for green energy (which includes hydroelectric power plants as well as wind and solar plants). This segment has attracted the most contracts and the biggest investments, particularly in Africa and Scandinavia. However, China also finances and builds a large number of coal power plants and other fossil fuel power plants. The financing of coal power plants seems to be a way of supporting the domestic coal industry. Because a goal of MIC25 is to reduce the CO<sub>2</sub> intensity of the Chinese economy by 40% between 2015 and 2025, coal plants are rapidly being phased out in China. The Chinese

**Exhibit 12. The BRI**



Source: Mercator Institute for China Studies (MERICS).

**Exhibit 13. BRI Investments Completed by Mid-2019**

Source: Eder and Mardell (2019).

coal industry is, therefore, under significant economic stress, and exporting this energy source to other emerging markets can help mitigate this stress. Nevertheless, one should not expect China to promote fossil fuels too much in its BRI. The word “coal,” for example, appears only once in the BRI’s two foundational documents (Eder and Mardell 2019).

The efforts to finance energy infrastructure in BRI member countries imply that Western companies that are trying to operate in these countries face tremendous competitive pressures. Thanks to ample government and bank financing for such projects, Chinese companies are often able to offer cheaper financing and less restrictive conditions on such projects than Western sponsors can offer. As a result, the market share of Chinese companies in BRI member countries is growing slowly but steadily at the expense of Western providers.

So far, this has happened primarily in the energy and energy infrastructure sector, but these investments will lay the foundation on which to expand into transport infrastructure and industrial projects in the future. In fact, the investments in energy infrastructure projects in the first phase of the BRI will allow China to boost the local industrial capabilities of BRI member countries that will gradually become part of the global supply chains centered on Chinese high-tech companies built under MIC25.

**BRI’s Sometimes Controversial Financing.** One of the main questions for the BRI is how to finance the massive investments planned in the coming decades. Identifying the total investments made in the BRI so far or in the future is virtually impossible because China has a multitude of channels through which financing is funneled, some of which are highly opaque

to outsiders. **Exhibit 14** summarizes what we currently know about the four main financing channels of the BRI.

The biggest investments are typically made via loans from Chinese commercial banks, which are expected to provide loans of \$60 billion per year to companies and countries participating in the BRI. The largest official lender is the Asian Infrastructure Investment Bank (AIIB), which I will discuss in more detail in the next section. The AIIB has paid-up capital of \$100 billion and is expected to provide loans in the range of \$10 billion to \$15 billion per year throughout the 2020s. The New Development Bank (NDB), founded in 2015 and formerly known as the BRICS Development Bank, also has \$100 billion in paid-up capital and will be able to provide loans in the range of \$5 billion to \$7 billion per year in the 2020s. Because the member states of the NDB are Brazil, Russia, India, China, and South Africa only, these investments will focus on these five countries (or rather four, given that China will likely not request any loans from the NDB). Finally, the Silk Road Fund was established in 2014 and is the Chinese government's official investment fund for sponsoring BRI projects. As is clear from Exhibit 14, it is only a secondary funding source compared with the AIIB or Chinese commercial banks.

Of course, both the West and existing global economic institutions, such as the International Monetary Fund (IMF) and the World Bank, have been worried about the expansion of the BRI and the sometimes lax financing conditions of BRI projects. The main criticism of the BRI is that it is a form of “debt diplomacy,” wherein loans are provided to BRI member countries and companies for projects that are not economically feasible. Once a project fails, the country involved then has to default on its debt to China, at which point China might take control of vital local infrastructure or make other demands.

The most prominent example of this risk is the Hambantota port project in Sri Lanka. This port, which is close to the country's main port in Colombo, was shopped around by the Sri Lankan government for years. Nobody wanted to take it on because it was not considered economically feasible. In the end,

#### Exhibit 14. Financing Capacity for the BRI

Institutions	Authorized Capital (\$ billions)	Possible Lending in Early 2020s (\$ billions per year)
AIIB	100	10–15
New Development Bank	100	5–7
Silk Road Fund	40	2–3
Commercial banks		ca. 60

Source: He (2017).

China offered financing for the project with an annual interest rate of 6%–7%. The port was built and eventually failed, as predicted, so that Sri Lanka had to default on the Chinese loans. In 2017, 70% of the port was refinanced in a debt-to-equity swap with China Merchants Port Holdings Company (CMPort), which provided the Sri Lankan government with \$1.4 billion to repay its Chinese debt. In return, Sri Lanka maintains ownership of the port but has leased it for 99 years to CMPort, which will invest \$700 million to \$800 million in the port to modernize and revitalize it.

The Hambantota port project acts as a warning to other BRI members accepting Chinese loans, but it also shows that China has remarkable flexibility in accepting payments. In fact, the sale of a project to a Chinese company seems to be the exception rather than the rule. When a debtor gets into distress, Chinese lenders are typically willing to accept payments other than cash, such as commodities or leases of existing infrastructure, as in the case of the Hambantota port. This makes Chinese loans more interesting in the eyes of many emerging markets than loans from the World Bank and other Western institutions because the borrowers are often asset rich but cash poor. As a result, they would have to ask for debt forgiveness or debt restructuring if they received loans from the World Bank or Western countries, whereas they could avoid these situations with loans from China. What the West, therefore, sees as a threat to emerging markets is often perceived as an advantage in these countries.

And in the long run, we have to admit that, despite the risks of excessive debt financing, the BRI will likely be beneficial not just for China but also for the participating member states. Remember from Chapter 4, “International Economic Cooperation,” that increased trade provides a clear boost to economic growth through increased exports and increased productivity. But emerging markets often lack the vital energy and transportation infrastructure to take full advantage of the benefits of free trade.

This is where the BRI will be able to help. Because of the lack of data and the relatively small number of infrastructure projects completed outside the energy sector, assessing the economic benefits of the BRI for member countries is difficult. In 2018, researchers from the RAND Corporation made initial efforts to estimate the projected benefits of the buildout in transport infrastructure. Because transport infrastructure is relatively clearly defined, its benefits can be modeled more easily than those of energy infrastructure or communication technology.

The researchers estimated that the existence of a rail connection between two participating BRI countries could increase exports by 2.8% for these countries. The reduction of air distance by 10% (e.g., through modernized

airports) increases trade by 0.4%, and a 10% reduction in maritime distance increases trade by 0.1%. Taking all planned transport infrastructure measures together, the expected gains amount to 7.3% of GDP for BRI member countries, or a total of \$329 billion. Even EU member states would benefit because they are neighbors of many BRI members and face increased demand from these countries. The expected boost to EU GDP would be 2.6%, or \$133 billion (Lu, Rohr, Hafner, and Knack 2018).

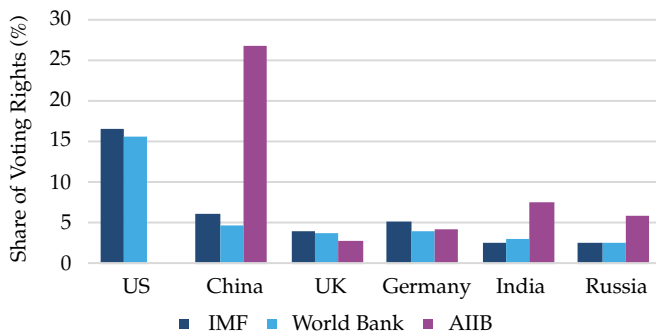
## Expanding the Existing World Order: The AIIB

A major component of the BRI that warrants a separate analysis is the AIIB, which became operational in January 2016 and provides financing for infrastructure projects to enhance the connectivity between economies. But wait, is that not the job of the World Bank? Indeed, the AIIB is in direct competition with the World Bank, the Asian Development Bank, and other existing institutions of the current economic world order. China is a member of all these institutions but has very little influence compared with the United States and other Western countries, as **Exhibit 15** illustrates. Thus, China has had difficulty influencing decision making in the World Bank and IMF.

As Exhibit 15 shows, China is willing to take on a bigger leadership role in the emerging new world order, but with its rise as a great economic power, it no longer has to play by the rules of the West if it does not want to. If the World Bank and the IMF are unable to reform themselves and grant China more influence, the country can increasingly go it alone and create rival institutions under its leadership.

In an interview with the *Financial Times* in 2015, former Fed chairman Ben Bernanke even claimed that the refusal of the US Congress to accept

**Exhibit 15. Voting Rights in the IMF, World Bank, and AIIB**



Sources: IMF, World Bank, AIIB.



a higher voting share for China in the IMF might have been a trigger for the creation of the AIIB (Pilling and Noble 2015). In this respect, China has done with the AIIB what great powers have done for decades. It is an active member of institutions it deems beneficial for its political and economic interests and refuses to become a member of those institutions it considers not helpful or even dangerous to its interests. The United States has done the same in the past and increasingly so under President Donald Trump (e.g., the withdrawal of the United States from the TPP and the Paris Agreement).

As Ikenberry and Lim (2017) pointed out, the AIIB is an element of geo-economic policy that sits on one end of the spectrum of options ranging from active membership in Western-led international institutions to Chinese-dominated rival institutions. Within the AIIB, China calls the shots because it has 26.6% of voting rights. Additionally, the president of the AIIB, Jin Liqun, is Chinese. With the AIIB's help, China can demonstrate to the world that it is willing to take on more responsibility on a global stage and prove that it can do so responsibly. And the AIIB shows the West that the country can work successfully outside the existing institutions if it is not granted more rights and influence within them.

The AIIB also has many economic advantages for China. The People's Bank of China has the world's largest foreign exchange reserves, predominantly held in US Treasuries. Since the GFC, these Treasuries have had very low yields, and when yields will rise to levels that are commensurate with the returns available in global infrastructure projects is unclear. The AIIB, therefore, allows China to recycle some of its reserves into higher-yielding international projects while keeping control over the timing, size, and destination of the funds. Meanwhile, China does not bear the risks of these projects alone but shares them with the other AIIB member states. Furthermore, the AIIB allows China to provide an outlet for the international expansion of Chinese companies within the BRI. In the long run, the AIIB might even be helpful in expanding the global reach of the renminbi, but so far, this seems to be far off in the future.

The risk the AIIB poses for emerging markets and the West is that China might be tempted to undercut the lending standards of the World Bank or even use the potential recall of AIIB funds as a threat to borrowers to enhance China's political influence in emerging markets. In the long run, such aggressive behavior would undercut China's aim of establishing itself as a responsible great power alternative to the United States.

This is the reason we have not, so far, seen an erosion of lending standards by the AIIB relative to the World Bank or the Asian Development Bank. The AIIB received a AAA rating from the three major credit rating agencies within 18 months of being established, and it relies on the membership of



Western democracies to lend it legitimacy and provide expertise in project due diligence. (Most of the vice presidents of the AIIB are Westerners with extensive knowledge of international project finance.)

Because the AIIB finances most of its activities by borrowing in international debt markets with the contributions of member states as collateral, it must retain a high credit rating and be seen in international markets as a high-quality borrower. Otherwise, the institution would quickly face rising borrowing costs that would undermine the profitability of the financed projects and the AIIB's reputation as a valid alternative to the World Bank. In short, the AIIB is constrained by its Western members because it needs them to provide legitimacy to the institution, and thus it cannot deviate too far from established institutions' lending practices. Although the AIIB is in its early days and still in the process of building its portfolio of projects, Ikenberry and Lim (2017) have empirically analyzed its lending activities and found little difference, so far, between its lending standards and those of the World Bank.

## The Reaction of the United States under Donald Trump

As we have seen throughout this chapter, China's increased economic influence globally, together with the country's ambitious plans to escape the middle-income trap, has caused concern in the West. This concern is understandable, given that China's emergence as a great power undercuts the economic influence of Western countries and reduces the profits of Western businesses. No country feels more threatened by the rise of China than the United States because the latter has been the sole leader of the global economy and promoted liberal democracy and a neoliberal economic model for the past three decades. The benefits for the United States in the years since World War II have been significantly higher than the costs, as we saw in Chapter 4.

With China's rise, the United States and its Western allies have lost influence and now fear that the core values on which the existing world order has been built—freedom of expression, democracy, and free markets—will be undermined by China's state capitalist system. That system restricts certain liberties that are taken for granted in the West. On top of that are rising concerns that some business practices of Chinese companies are in violation of international rules. Plenty of accusations that Chinese companies engage in intellectual property (IP) theft have been made, which has led to the slogans that China operates both a “B2B” and a “C2C” business model: “back to Beijing” and “copy to China.”

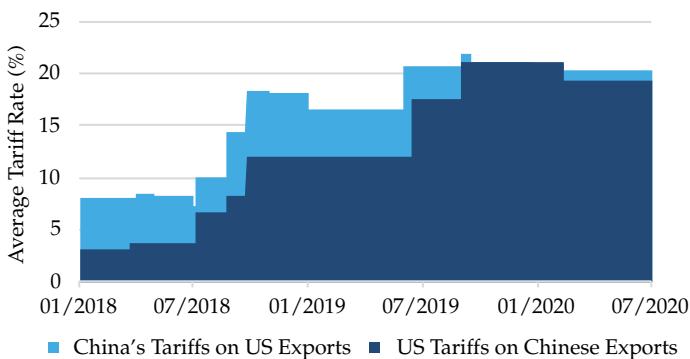
Most Western countries have tried to resolve these challenges with China through existing institutional channels, such as the World Trade Organization (WTO), and through restrictions on Chinese investments in

their own countries. With the election of Donald Trump as US president, however, the dispute between the United States and China quickly escalated. Driven by a belief that such protectionist measures as tariffs and quotas can be beneficial for economic growth and create jobs in the United States that had previously been outsourced to emerging markets, the Trump administration started a trade war that escalated throughout 2018 and 2019. **Exhibit 16** shows the value-weighted average import tariffs for Chinese goods into the United States and for US goods into China until mid-2020.

**Starting a Trade War.** The trade war started with US Section 201 tariffs on solar panels and washing machines imported from China. Section 201 of the Trade Act of 1974 allows the US president to temporarily introduce tariffs and other non-tariff barriers on foreign goods to protect domestic producers of like goods. This rule is in accordance with General Agreement on Tariffs and Trade and WTO rules, but it was rarely used until US solar module producer Suniva fell into bankruptcy in April 2017 and filed a Section 201 complaint with the US government.

On 23 March 2018, the United States introduced additional tariffs on imports of Chinese steel and aluminum under Section 232 of the Trade Expansion Act of 1962, which allows the institution of tariffs if imports of certain goods threaten the national security of the United States. In reaction to the steel and aluminum tariffs, China retaliated with tariffs of its own on 1 May 2018. At that point, the trade war was underway, and it escalated until it caused tariffs of 25% and higher to be imposed on virtually all Chinese imports to the United States and an equivalent amount of tariffs on Chinese imports from the United States, as Exhibit 16 shows.

**Exhibit 16. US–China Tariffs**



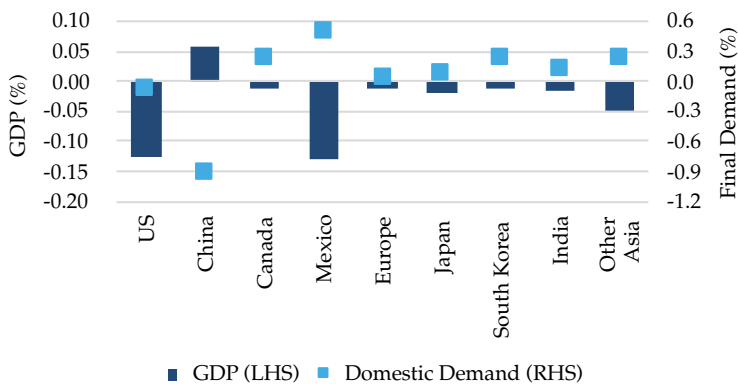
Source: Brown (2019).

With the introduction of the Phase 1 deal, which came into effect on 14 February 2020, the escalation process has come to a halt as of this writing (August 2020). The analysis of Robinson and Thierfelder (2019) can provide a good estimate of the economic impact of the trade war as of the end of 2019. Their analysis assumed that all the tariffs that are in place and announced for the end of 2019 will remain in place throughout 2020 and beyond, which is more or less what the Phase 1 deal stipulates.

**Little or No Economic Impact So Far.** Given these assumptions, Robinson and Thierfelder (2019) calculated the impact of the trade war on GDP growth in various regions and the change in domestic demand (defined as GDP plus imports minus exports). Their analysis showed that GDP growth will experience a small decline from the trade war in 2020, with US and Mexican GDP reduced by 0.13%, while low-income Asian countries will experience a decline in GDP of approximately 0.05%. This effect is so small that even if the Covid-19 pandemic had not caused the deepest recession in 80 years, it would be hardly visible in the growth statistics of these countries, as **Exhibit 17** illustrates.

The first reason for these small effects is that China did not unilaterally escalate the trade war with the United States but instead restricted its retaliatory actions to the same amount as the US tariffs on Chinese imports. The second reason is that other countries around the world chose not to get involved whenever possible. The Trump administration's proposal to impose tariffs on Canadian and Mexican steel imports created such an outrage that these countries were quickly given exemptions. Ever since, the Trump administration has threatened to introduce tariffs on Western imports (e.g., on European cars),

**Exhibit 17. Estimated Impact of US–China Trade War**



Source: Robinson and Thierfelder (2019).

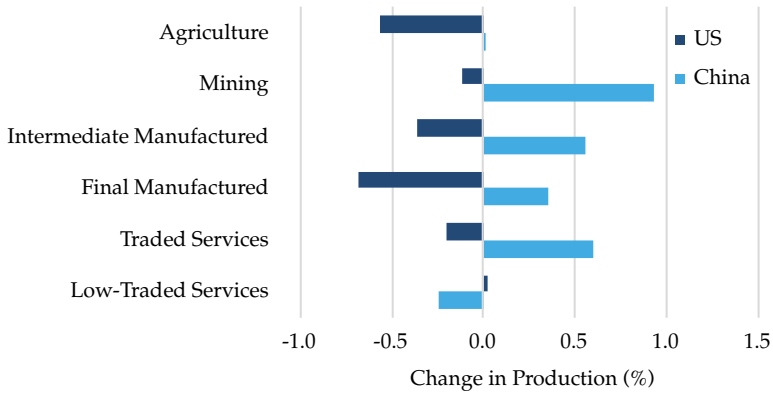
but with the exception of tariffs sanctioned by the WTO in response to the Airbus subsidies, it has so far not acted on these threats. As a result, the share of global trade affected by the trade war has been relatively small.

This asymmetry in tariffs also creates the seemingly counterintuitive effect of the trade war on China's GDP. According to the model of Robinson and Thierfelder (2019), China's GDP could get a small boost in the order of 0.06% of GDP from the trade war. This effect results from the country's ability to shift exports from the United States to the rest of the world. Robinson and Thierfelder estimated that because of the tariffs, Chinese exports to the United States declined by 14.6% and US exports to China declined by 9.7%. But China can divert its exports to Europe (+6.6%) and Asia (+5.1%), which more than compensates for the loss of exports to the United States. As the rest of the world ignores the US–China trade war, China has an incentive to increase its trade links with the rest of the world and export its products at cheaper prices than those of local competitors in Europe and Asia.

Thus, the price advantage of Chinese goods, together with efforts by the rest of the world to increase trade ties with China and gain access to its market, leads to lower tariff barriers between China and other countries. China has already opened its markets for cosmetics, cars, and other consumer goods to imports from Europe and Japan to dampen the negative effect of higher prices on US imports. In return, Chinese exporters gained better access to these markets.

But this increase in exports also leads to a significant decline in domestic demand (and thus welfare) in China. The increase in exports means that production shifts away from domestic consumption and toward international markets, thus creating a decline in domestic consumption on the order of 0.9%. In the United States, domestic consumption declines because imports from China become more expensive and the United States has little opportunity to substitute these imports with goods from other countries. The decline in imports, therefore, leads to a slight drop in domestic US demand, 0.07%. The true winners seem to be the countries in the rest of the world because they all face higher domestic demand thanks to the improved terms of trade. One can even say that the losers of the US–China trade war are the United States and China, while everyone else wins. One can see this in Exhibit 17.

Because the tariffs raised in the US–China trade war predominantly affect those industries that have globally integrated supply chains, the impact of the trade war on domestic production in China and the United States can vary dramatically from industry to industry. **Exhibit 18** shows that in the United States, the agriculture sector and the manufacturers of final goods are hit the hardest, seeing their production decline by an estimated 0.6%–0.7%.

**Exhibit 18. Estimated Impact on Domestic Production**

Source: Robinson and Thierfelder (2019).

Services that are typically not internationally traded, in contrast, will hardly see any impact from the US–China trade war. Chinese production in these sectors tends to grow because of the trade war as China successfully diverts its exports to Europe and Asia.

**What Is the End Game?** How will this trade war play out over time? Will it escalate more and more, dragging other countries into it and eventually causing significant damage to the global economy? Will it end in a stalemate in which the current tariffs remain in place for a long time and neither side makes a move? Or are we heading to a resolution of the trade war and an eventual reduction of tariffs back to the lower levels seen in 2017?

To answer these questions, the Center for Strategic and International Studies, a nonpartisan think tank in Washington, DC, ran a series of simulations of the trade war (commonly known as “war games”) in which trade experts took on the roles of the various parties and were asked to act in their self-interest (Goodman, Gerstel, Risberg, Kennedy, and Reinsch 2019).

The participants in the war games behaved as follows:

- The simulations were based on game-theoretical approaches where each actor acts rationally and in her self-interest based on the incentives given to her. In essence, the rise of China as an economic great power creates a situation equivalent to the famous prisoner’s dilemma. Both the United States and China would be best off in the long run if they cooperated, but the United States is wary of Chinese influence in the world and thus has an incentive to block this increasing influence. Meanwhile, Beijing is

wary of constraints on its economic progress and is willing to defect from the cooperative optimum and establish economic policies outside existing systems, such as those of the AIIB. Thus, each side has an incentive to defect from cooperation, making both sides worse off in the end.

- To force the other side to take certain desirable actions or refrain from undesirable ones, both sides could use escalation and deterrence techniques. These techniques are well studied, particularly in the context of the Cold War, during which nuclear deterrence motivated both the United States and the Soviet Union to avoid starting a nuclear war. One core assumption is that both parties use escalation techniques intentionally, not accidentally.
- Both parties had incomplete information and did not know exactly where the other party's strengths and vulnerabilities were. This means that assessing the exact costs of economic actions before the fact was impossible, opening up the possibility of unintended consequences.
- Finally, within each round of the simulations, both sides could bargain with the other to create a mutually agreeable solution to the trade war. The simulations were run in several rounds, during which both sides were given more information and knowledge about the other. The game was repeated until either a stalemate or a resolution was achieved.

The start dates used in the simulations were 2021, a year after a hypothetical partial trade agreement had been reached between the United States and China, and 2025, after a long period of stasis where both sides stuck to the initial trade agreement but IP theft still occurred on the Chinese side.

Neither simulation ended in a positive resolution of the conflict. Despite the different settings and backgrounds, both parties escalated the trade conflict in a tit-for-tat sequence that led to the partial decoupling of the US and Chinese economies. In the 2021 scenario, both sides tried to escalate the trade war so as to be able to declare victory if the other side made only small concessions. In the 2025 scenario, both sides quickly gave up on achieving a cooperative solution and instead focused on creating alliances to encircle the other side (similar to what happened in the late 19th and early 20th centuries during the great power competition between the British Empire, France, Germany, and Russia).

In both instances, the United States tried to encircle China, though more aggressively so in the 2025 scenario, while China felt threatened by the US efforts to isolate it economically. In both instances, China played defense to retain other countries' willingness to invest in China. This meant that China

would typically react to US escalations only in a commensurate way and would use delay tactics to stall further escalations for as long as possible.

China's defensive strategy also meant that the country would, from time to time, agree on partial trade deals to placate the United States and other international investors but avoid structural reforms where possible. On the positive side, both sides increasingly refrained from using tariffs as a measure to escalate the conflict. Instead, the United States increasingly used targeted export bans to prevent the Chinese high-tech industry from acquiring crucial know-how, while China used informal tools to make doing business in China more difficult for US companies (e.g., targeted import checks or online censorship).

The key takeaway from both simulations was that trust increasingly broke down between the United States and China. Both sides were doubtful about the other side's actions, even if they were taken in good faith. As a result, discussions became increasingly difficult, and both sides had incentives to use domestic policy tools to dampen the negative effects of the escalating conflict and to form international relationships with third parties that excluded the opposing side. Furthermore, the need to dampen the negative effects of the conflict meant that the US and Chinese governments had to play an increasingly active role in their domestic economies through regulation, tax incentives, and other forms of government intervention. Thus, we learn that the ongoing trade war poses an increasing risk of market inefficiency and market failure domestically.

Private businesses and third-party countries will play a crucial role. With respect to determining economic and political ties, third-party countries will have to strike a balance between the United States and China and try to remain on each country's good side. But emerging markets especially will feel the pressure to take sides, thus escalating the conflict between the United States and China even further.

Private businesses globally (including those in China and the United States) will thus probably have to deal with a permanent state of heightened political uncertainty. As a result, supply chains will have to become more diversified internationally, which should, in a first step, benefit export-oriented businesses in Europe and the Asia-Pacific region. For example, one would expect some businesses to shift their supply chains from China to India, Vietnam, or Mexico, which could lead to a permanent loss of market share for businesses in China.

The Covid-19 pandemic of 2020 has shown very clearly how dependent Western businesses are on supply chains that originate in China. The rising geopolitical uncertainties, combined with Western companies' desire

to “pandemic-proof” their supply chains, will likely accelerate supply chain diversification in the future. The US agriculture industry, however, faces the opposite threat. As China gradually diversifies its supply of agricultural commodities, US farmers will likely lose business with China permanently and have to compete with other agricultural exporters around the globe.

## Are We Heading toward a Thucydides Trap?

The rather dire results of the war games on the US–China trade war remind one of the great power competition at the end of the 19th century between the British Empire, France, Germany, and Russia. Under the German chancellor Otto von Bismarck, Germany tried to isolate the British Empire through a net of public and secret alliances. This network of treaties created stability in Europe in the late 19th century and the early years of the 20th century, but it also led to World War I.

First, the British Empire tried to form alliances of its own to counterbalance Germany’s efforts. This situation led to an even more complex and fragile web of alliances and dependencies. Once Bismarck was relieved of his role as chancellor and replaced by a government under the leadership of Kaiser Wilhelm II, one that was less capable in international relations (to say the least), this network of alliances led to a fatal chain reaction. When the Austrian crown prince was assassinated by a Serbian in June 1914, Austria-Hungary threatened Serbia with war. Serbia could count on the help of the Russian Empire in case of war, but the Austro-Hungarian Empire, unable to go to war against Russia on its own, was forced to ask Germany for support.

This request meant that in case of war, Germany had to come to the help of Austria-Hungary. When Austria ultimately declared war on Serbia, Russia immediately declared war on Austria, which, in turn, triggered a declaration of war by Germany against Russia. Knowing that the Russian Empire had a military alliance with France, the Germans tried to attack France via a detour through neutral Belgium. Belgium, in turn, could rely on the British Empire as a protector of its neutrality, thus dragging the British Empire into the war. What started as a minor event on the outskirts of Europe spiraled into World War I within a couple of weeks in August 1914. And this war would become the deadliest war up to that point, leaving an estimated 9.5 million soldiers and 8 million civilians dead.

Could an unwanted escalation of a political and economic great power rivalry between the United States and China lead to another world war? As I have discussed, the existence of nuclear weapons means that an escalation of the conflict between these two countries is unlikely to end in outright war, but if it does, we will all have problems bigger than looking after our portfolios.



However, a more limited military confrontation between the United States and China seems at least possible, though not likely. Over the past couple of years, the concept of the “Thucydides Trap,” first coined by the historian Graham Allison, has regained popularity. It is named after the ancient Greek historian Thucydides, who claimed that the rise of Athens instilled fear in dominant Sparta and made war inevitable. According to Allison, the past 500 years have seen 16 instances of the rise of a new great power, 12 of which ended in war. The four instances that did not end in military conflict were Spain overtaking Portugal in the 15th century, the United States overtaking the British Empire in the early 20th century, the rise of the Soviet Union during the Cold War, and the rise of Germany as an economic great power in Europe in the 1990s (Allison 2017).

We might be able to take some solace from the fact that three of these four instances of peaceful resolution happened in the 20th century, so we might have learned a lesson from the past to avoid the Thucydides Trap. But as we all know, we learn from history that we do not learn from history and should, therefore, not get too hopeful. Instead, a better approach would be to look for signs of the rising great power undermining the status quo.

As Schweller and Pu (2011) noted, before a rising great power can so much as threaten a military conflict, it must first undermine the authority and dominance of the existing great power. This delegitimization of the existing great power happens through the establishment of a new political or economic order that proves to be stable and prosperous for the members of these new institutions.

If the existing great power resists this new order, all the better for the rising great power, because doing so undermines the existing great power’s legitimacy in the eyes of those countries that sympathize with the rising great power. Why align yourself with the existing great power if it is unreliable as a partner and insists on cutting potentially profitable ties with the rising great power? What smoothed the transition from the British Empire to the United States as a global economic superpower and the rise of Germany as a great power in Europe was that in both instances, the rising power had open trade relationships with the existing great power, and this relationship ensured that both the rising great power and the existing great power benefited. Furthermore, these open relationships meant that third parties were not forced to choose one side or the other but could join both at the same time, thus maximizing their benefits.

In short, globalization ensured that the rise of a new great power did not lead to military conflict. Only when globalization broke down did military conflict become inevitable.

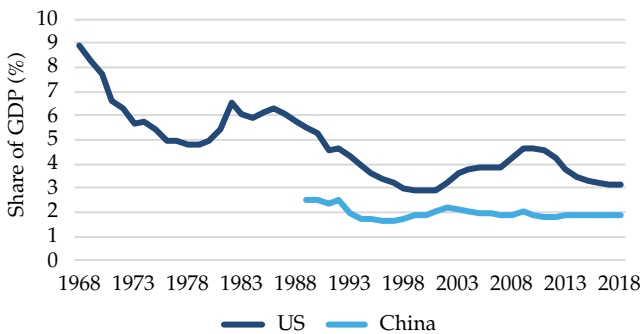
These insights also reveal that we should not look for an imminent buildup in military spending by China or the United States. Yes, China is expanding its military capacities, but as a share of GDP, China’s military spending remains well below that of the United States, and the military might of the United States is not even remotely threatened by the People’s Liberation Army, as shown in **Exhibit 19**. However, as China rises as an economic great power, it not surprisingly also becomes more assertive as a regional military power, putting it in direct conflict with such neighbors as South Korea, Japan, and Vietnam. And because both South Korea and Japan are in a military alliance with the United States, the risk is that unwanted escalation could lead to an armed conflict in East Asia that involves both the United States and China.

**The Churchill Trap Is More Likely Than the Thucydides Trap.**

However, beyond the limited risk of a Thucydides Trap, a much more realistic possibility is what Yang (2018) called the “Churchill Trap”—that the United States and China could repeat the mistakes that Churchill warned of during his famous Iron Curtain speech in March 1946. The United States and the Soviet Union, allies during World War II, quickly became mired in a long-term, low-level economic and political conflict after that war, marked by mutual mistrust and competition for influence among third parties. Such a “new Cold War” between the United States and China is highly likely, as the war games of Goodman et al. (2019) demonstrated.

As Exhibit 19 shows, military spending in the United States was more than twice as high during the Cold War with the Soviet Union as it is today, but what is more important to recognize is that all the participants were economically worse off. Clearly, economic growth was stymied in the socialist

**Exhibit 19. Military Spending of the United States and China**



Source: World Bank.

planning economies compared with the capitalist systems in the West, but Western economies were also constrained because they did not have access to the socialist economies and their consumers. They were also diverting resources to military expenditures that would not have been needed if no Cold War had happened. With the end of the Cold War, businesses in the West and the former Warsaw Pact countries could reap the peace dividend and economic growth accelerated for approximately two decades until the GFC.

Avoiding both the Churchill Trap and the Thucydides Trap has, therefore, become the paramount objective of international relations in the 21st century. But doing so is not easy. As Goodman et al. (2019) showed, the key challenge the United States and China face is a decline of trust in the good faith of the other. Goodman et al. emphasized that both sides need to reverse the tit for tat of escalating conflict and start moving in the opposite direction. Such a reverse toward de-escalation can be achieved if both sides show sincerity in their willingness to escalate and in their commitment to de-escalate.

Both the United States and China thus need to commit to unilaterally engaging in de-escalating steps as long as the other side refrains from escalating the situation further or even de-escalates themselves. For example, the United States could promise to reduce tariffs on Chinese steel if China did not cut its imports of US soybeans. If China then complied, the United States would need to follow through with the de-escalation as a sign of goodwill, which could then lead to a demand for a reduction in Chinese import tariffs, which would be met by an equal reduction in US import tariffs, and so on.

Parallel to such a de-escalation strategy, both the United States and China need to collaborate on global issues and become joint leaders of the global economic world order. Such a collaboration would, on the one hand, help build trust between the two parties and, on the other, allow China to play a more important role in the world while remaining aligned with the United States. Finally, such a collaboration between the United States and China on crucial global challenges such as climate change and cybersecurity would ensure that smaller countries would not have to choose between the US and Chinese spheres of influence and could instead work with both great powers at the same time (Yang 2018). Whether such cooperation between the United States and China is possible in the future remains to be seen.

## **Conclusion**

In this chapter, we have seen that China has become an economic great power over the past couple of decades. The sheer size of the Chinese economy and its integration into global supply chains and the global financial system mean that the effects of a severe slowdown of Chinese growth would no longer be

limited to China or its neighbors but would lead to a significant global slow-down and, in the worst case, to another financial crisis.

But the Chinese economy faces significant challenges over the coming years. China has tried to escape the middle-income trap by fostering a local high-tech industry that directly competes with high-tech businesses in Japan, Europe, and North America. Furthermore, China has attempted to build a global supply chain centered on Chinese businesses with the help of the BRI. These efforts to foster growth in China have led to significant irritation and concern in the West.

The pushback against Chinese efforts to modernize its economy had primarily come from within traditional political channels, until the United States under President Trump intensified the conflict with the help of unilaterally imposed tariffs. This US–China trade war has escalated, and currently, we see little hope for a de-escalation to the status quo ante. Instead, a long-term stalemate, during which partial agreements on trade will be made and no further escalation happens, seems the most likely outcome for the coming years.

But game-theoretical simulations show that such a stalemate is unlikely to persist for a long time. Instead, the risk of another escalation of the conflict persists, which would lead to a gradual decoupling of the US and Chinese economies and could trigger a new Cold War between the two countries. Such a new Cold War would make all participants worse off, so its avoidance should be the main concern of international relations between the two countries in the coming decades. In the end, a trend toward increased globalization in the 20th century is what has helped prevent the escalation of great power conflict into outright war, and international cooperation between the United States and China seems to be the best solution for the prevention of a new Cold War between the two countries.

## Bibliography

Ahmed, S. 2017. “China’s Footprints on the Global Economy: Remarks Delivered at the Second IMF and Federal Reserve Bank of Atlanta Research Workshop on the Chinese Economy.” Board of Governors of the Federal Reserve System.

Ahmed, S., R. Correa, D. A. Dias, N. Gornemann, J. Hoek, A. Jain, E. Liu, and A. Wong. 2019. “Global Spillovers of a China Hard Landing.” International Finance Discussion Papers 1260.

Allison, G. 2017. “The Thucydides Trap.” Foreign Policy (9 June). <https://foreignpolicy.com/2017/06/09/the-thucydides-trap/>.

Brown, C. P. 2019. “US–China Trade War Tariffs: An Up-to-Date Chart.” Peterson Institute for International Economics. [www.piie.com/research/piie-charts/us-china-trade-war-tariffs-date-chart](http://www.piie.com/research/piie-charts/us-china-trade-war-tariffs-date-chart).

Curran, E. 2019. “What’s the RCEP and What Happened to the TPP?” *Washington Post* (4 November).

Deng, Y. 2014. “China: The Post-Responsible Power.” *Washington Quarterly* 37 (4): 117–32.

Eder, T. S. 2018. “Mapping the Belt and Road Initiative: This Is Where We Stand.” MERICS. [www.merics.org/en/bri-tracker/mapping-the-belt-and-road-initiative](http://www.merics.org/en/bri-tracker/mapping-the-belt-and-road-initiative).

Eder, T. S., and J. Mardell. 2019. “Powering the Belt and Road: China Supports Its Energy Companies’ Global Expansion and Prepares the Ground for Potential New Supply Chains.” MERICS. [www.merics.org/en/bri-tracker/powering-the-belt-and-road](http://www.merics.org/en/bri-tracker/powering-the-belt-and-road).

Fukuyama, F. 1992. *The End of History and the Last Man*. New York: Free Press.

Goodman, M. P., D. Gerstel, P. Risberg, S. Kennedy, and W. A. Reinsch. 2019. “Beyond the Brink: Escalation and Conflict in US–China Economic Relations.” Center for Strategic and International Studies (September). [https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/190925\\_Goodman\\_BeyondBrink\\_WEB.pdf](https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/190925_Goodman_BeyondBrink_WEB.pdf).

Gygli, S., F. Haelg, N. Potrafke, and J.-E. Sturm. 2019. “The KOF Globalisation Index – Revisited.” *Review of International Organizations* 14: 543–74.

He, T. 2017. “One Belt, One Road: How Will Partners Profit?” Brink. [www.brinknews.com/one-belt-one-road-how-will-partners-profit/?utm\\_source=BRINK+Asia](http://www.brinknews.com/one-belt-one-road-how-will-partners-profit/?utm_source=BRINK+Asia).

Ikenberry, G. J., and D. J. Lim. 2017. “China’s Emerging Institutional Statecraft: The Asian Infrastructure Investment Bank and the Prospects for Counter-Hegemony.” Brookings Institution, Project on International Order and Strategy (April). [www.brookings.edu/wp-content/uploads/2017/04/chinas-emerging-institutional-statecraft.pdf](http://www.brookings.edu/wp-content/uploads/2017/04/chinas-emerging-institutional-statecraft.pdf).

Lu, H., C. Rohr, M. Hafner, and A. Knack. 2018. “China Belt and Road Initiative: Measuring the Impact of Improving Transportation Connectivity on Trade in the Region.” RAND Corporation.

Office of the Secretary of Defense. 2019. “Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2019.” [https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019\\_CHINA\\_MILITARY\\_POWER\\_REPORT.pdf](https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf).

Pilling, D., and J. Noble. 2015. “US Congress Pushed China into Launching AIIB, Says Bernanke.” *Financial Times* (2 June). [www.ft.com/content/cb28200c-0904-11e5-b643-00144feabdc0](http://www.ft.com/content/cb28200c-0904-11e5-b643-00144feabdc0).

Robinson, S., and K. Thierfelder. 2019. “Who’s Winning the US–China Trade War? It’s Not the United States or China.” Peterson Institute for International Economics, *Trade and Investment Policy Watch* (blog). [www.piie.com/blogs/trade-and-investment-policy-watch/whos-winning-us-china-trade-war-its-not-united-states-or](http://www.piie.com/blogs/trade-and-investment-policy-watch/whos-winning-us-china-trade-war-its-not-united-states-or).

Schweller, R. L., and X. Pu. 2011. “After Unipolarity: China’s Visions of International Order in an Era of U.S. Decline.” *International Security* 36 (1): 41–72.

Tostevin, M. 2019. “Explainer: World’s Biggest Trade Pact Shapes Up without India.” Reuters (5 November). [www.reuters.com/article/us-asean-summit-trade-explainer/explainer-worlds-biggest-trade-pact-shapes-up-without-india-idUSKBN1XF0XY](http://www.reuters.com/article/us-asean-summit-trade-explainer/explainer-worlds-biggest-trade-pact-shapes-up-without-india-idUSKBN1XF0XY).

World Bank. 2017. “China Systematic Country Diagnostic Report.”

Wübbecke, J., M. Meissner, M. J. Zenglein, J. Ives, and B. Conrad. 2016. “Made in China 2025: The Making of a High-Tech Superpower and Consequences for Industrial Countries.” MERICS Papers on China 2 (December). <https://merics.org/sites/default/files/2020-04/Made%20in%20China%202025.pdf>.

Yang, Y. 2018. “Escape Both the ‘Thucydides Trap’ and the ‘Churchill Trap’: Finding a Third Type of Great Power Relations under the Bipolar System.” *Chinese Journal of International Politics* 11 (2): 193–235.

Zenglein, M. J., and A. Holzmann. 2019. “Evolving Made in China 2025: China’s Industrial Policy in the Quest for Global Tech Leadership.” MERICS Papers on China 8 (July).

Zoellick, R. B. 2005. “Whither China: From Membership to Responsibility?” *NBR Analysis* 16 (4): 5.