



RICHARD H.K. VIETOR

HAVILAND SHELDAHL-THOMASON

China: the New “New Normal”

Hold high the banner of socialism with Chinese characteristics . . . and work tirelessly to realize the Chinese Dream of national rejuvenation.

— Xi Jinping, 19th National Congress, October 2017

Confronted with drastic changes in the international landscape, especially external attempts to blackmail, contain, blockade, and exert maximum pressure on China, we have put our national interests first.

— Xi Jinping’s Report to the Party Congress, October 2022

Introduction

“Western countries — led by the U.S. — have implemented all-round containment, encirclement and suppression against us, bringing unprecedentedly severe challenges to our country’s development,” President Xi Jinping commented at the opening session of the National People’s Congress in March, 2023.¹ This was important, since six months earlier, the Congress had elected Xi (by a vote of 2,952 to 0) to an unprecedented third term as President.

Three years earlier, the outbreak of the COVID pandemic in Wuhan had isolated had worsened ill-feelings towards China. While the pandemic had led to the deaths of 6.9 million people worldwide, China remained unwilling to share documentation regarding its outbreak.² The world economy had tanked, dropping an expected 4.9% in 2020, and recovered only gradually over the next several years.

Xi’s idea of a New Normal, the strategy he had adopted in 2013, had now permanently changed --- and not only due to the pandemic. Relations with the United States had deteriorated steadily since the inauguration of President Donald Trump. China’s incredible success over the past three decades had precipitated a trade war with the United States. Technology friction, cybersecurity, China’s cultural genocide of its Uighur population in the Xinjiang Autonomous Region, heightened political control over Hong Kong, military friction over access to the South China Sea and the sovereignty of Taiwan, support for Russia in Ukraine and a balloon-spying incident had disrupted dialogue between the two economic giants. Only in mid-June 2023 was the U.S. Secretary of State Anthony Blinken allowed to visit Beijing, to begin defusing tensions. What issues could the United States and China mitigate, and what issues would continue to cause conflict – but *peaceful* conflict?

Professor Richard H.K. Vietor and Research Associate Haviland Sheldahl-Thomason prepared this case. This case was developed from published sources. Funding for the development of this case was provided by Harvard Business School and not by the company. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Copyright © 2016, 2017, 2018, 2019, 2020, 2023 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

History

The Maoist Era, 1949–1976

After emerging from World War II and conflict between dominant factions within China, the Chinese Communist Party (CCP) gained power in 1949 under Mao Zedong, who declared the founding of the People’s Republic of China. “Mao Zedong thought” became the party’s central ideology and was based on Marxism-Leninism combined with the practice of the Chinese revolution. It emphasized “seeking truth from fact,” or using information from the current situation to guide decisions in an environment of continuous change. While setting the foundation for the CCP’s rule and developing the socialist state, Mao structured society into collective organizations and set production quotas and prices.

Mao’s term was marked by contradictory campaigns and unsuccessful revolutions that resulted in millions of deaths and almost universal poverty. The Hundred Flowers Campaign of 1956 was officially meant to facilitate discussion of the communist regime by “letting a hundred flowers bloom,” but was immediately followed by the 1957 Anti-Rightist Campaign, a crackdown on those critical of the party. Private property was abolished in 1957, and the Great Leap Forward, whereby rural collectives were enlarged and efforts to improve agricultural and industrial production were implemented, was launched in 1958. The policies were inefficient, harvests were exaggerated, and it became a man-made disaster amplified by natural disasters and the withdrawal of Soviet support. The Great Leap Forward eventually led to the deaths by starvation of 30–40 million Chinese peasants. This failure led Mao to leave many responsibilities to senior leaders such as Deng Xiaoping, who thereafter took the initiative to institute economic reforms, in 1961. However, when Mao regained authority in 1963, he was critical of Deng’s liberal economic reforms. He then launched the Cultural Revolution, a decade-long period of violent civil strife meant to purge China of impure elements and revive the revolutionary spirit.³ The Cultural Revolution resulted in widespread fear and the removal of accused reformers, including Deng Xiaoping, who was exiled under house arrest to undergo re-education for four years.

“To Get Rich Is Glorious”^a

Deng Xiaoping became China’s paramount leader in 1978, following Mao’s death in 1976. Deng inherited a poor, unsuccessful communist state whose citizens were beginning to lose faith in the government. He instituted economic and political reforms while relying on a more consultative-oriented governing process, utilizing the practice of “seeking truth from fact.” Under his leadership the country undertook an export-led development strategy, and the high growth period in China began.

In 1980, 90% of China’s population was rural, and agricultural productivity sorely needed improving. To help the agricultural collectives increase their output after the failed Great Leap Forward and Cultural Revolution, Deng supported the household responsibility system, which allowed rural citizens to lease land from the state and to sell their surplus produce in the market. Market incentives more than doubled agricultural output as the reform spread, affected most of the country by 1983, and made China self-sufficient in feeding its rapidly growing population for the next decade. Local governments directed their increased resources into Township and Village Enterprises (TVEs), which were socialist organizations that produced simple manufactured goods, especially for export. TVEs grew 9% annually between 1978 and 1996, starting with 28 million employees in 1978 and eventually employing 135 million people.⁴ Deng also introduced a two-tier system for the pricing and distribution

^a Quote attributed to Deng Xiaoping in the early 1980s. Dexter Roberts and Frederik Balfour, “In China, To Get Rich Is Glorious,” *Bloomberg Businessweek*, February 6, 2006.

of coal, steel, and other goods that required firms to sell their mandated production to the state at fixed prices but allowed them to sell their above-plan output at market prices.⁵

Following the autarkic policies that had been pursued by the previous administration, after 1992 Deng focused on opening up to foreign investment and becoming more active in the global arena. Special Economic Zones (SEZs) organized in the South provided cheap labor, affordable infrastructure, and tax incentives to promote foreign investment. A patent law was enacted in 1993, but enforcement was arbitrary. Deng also supported joint ventures with foreign firms, and these reforms led foreign investment to grow to \$250 billion in total by the time of Deng's death in 1997.⁶

Deng's desire to join the WTO was a powerful motivating force behind the currency and tax reforms that took place in the mid-1990s. Prior to 1994, China had two currencies: the yuan, which acted as the foreign trade currency, and the renminbi, which was the domestic currency. This system changed when the government unified the two currencies in 1994, setting the exchange rate at 8.7 renminbi/dollar (it was changed to 8.3 renminbi/dollar in 1995, which lasted until 2005), and within 18 months current account convertibility was achieved.⁷ China also sought to establish a uniform taxation system by classifying taxes as central, local, or shared, setting up a national tax system that would collect central taxes, and enacting personal income taxes, corporate taxes, and a value-added tax that largely went to the central government.⁸ Beijing's revenue more than doubled in 1994 in response to the reforms, while local governments saw their share of tax revenue decrease dramatically.⁹

WTO Entry

After the Tiananmen Square massacre in 1989, where hundreds of pro-democracy protestors were killed, the political leadership in China was reordered. Jiang Zemin became the General Secretary, and then served as President from 1993–2003. He expanded the role of foreign capital in China, lowered tariffs and the number of products exposed to tariffs, and privatized or closed many of the most inefficient SOEs (state-owned enterprises). FDI (foreign direct investment) briefly fell after the 1989 suppression, but it quickly recovered and became more diversified.¹⁰ In 2001, after 15 years of negotiations, China was admitted to the WTO after agreeing to reforms that would facilitate foreign enterprise, free trade, and increased transparency of China's laws.¹¹

The terms that China agreed to in order to join the WTO were stricter than those imposed on other developing nations in terms of tariff and subsidy limits, and several disciplinary precautions were put in place to protect foreign countries in their dealings with China. To facilitate foreign enterprise, China lifted restrictions on the sale of goods and services while opening up industries such as telecommunications and insurance. By 2006, China provided full national treatment to foreign banks, though their share of the market would remain small. China had to increase transparency in terms of laws and regulations that were used to block imports, as well as increase the protection of property rights. These restrictions, however, did not impede China's evolution to become the world's largest exporting country by 2009.

While China officially passed legislation lowering tariffs and subsidies and protecting intellectual property, implementation was haphazard. The new rules were often not enforced until foreign firms litigated or complained to the WTO.¹² The government implemented non-tariff barriers to trade, such as unwarranted health regulations that discriminated against foreign food products. Additionally, theft of intellectual property continued after accession to the WTO, and was apparent by the prevalence of counterfeit goods. A 2016 study found that China was the largest producer of counterfeit goods and that it mainly copied foreign patents, which could undermine the country's attempt at increasing innovation if companies rely on copied knowledge-based capital.¹³ However, China became the third-

largest international patent filer in 2014. China still lagged in terms of creativity, largely due to low levels of inclusion.¹⁴

China adopted an unconventional approach toward export growth, relying not on the usual strategies of free markets, openness to trade, and reliance on comparative advantages, but on a planned economy, a protected domestic market, and a range of rudimentary and advanced exports. China’s export composition was found to be unusually sophisticated for a country at its stage of development: by 2019, its export bundle was that of a much richer country, with exports concentrated in electronics and manufactured goods (see **Exhibit 8** for recent trade information).¹⁵ Export growth averaged 15% annually from 2001–2018, resulting in China becoming both the world’s largest exporter and home to the world’s largest trade surplus—\$576 billion in 2015 (**Exhibit 4**).¹⁶ However, this increase in surplus was not just due to higher exports; China’s imports had fallen the previous year, resulting in a 55% increase in the trade surplus in 2014 and 2015.¹⁷ Stagnation of the world economy also contributed to China’s slowing growth.

Capital Controls

In 2001, the IMF (International Monetary Fund) reported that China had capital controls in almost all capital-account transactions, including transactions regarding capital market securities, commercial and financial credits, real estate transactions, and direct investment.¹⁸ China had historically supported FDI inflows and regulated FDI outflows, portfolio flows, and most external debt.¹⁹ In the 10 years after joining the WTO, FDI in China increased six-fold, growing to nearly \$232 billion in 2011. FDI in China ranged from multinational companies operating in China to equity shares in companies that offered them.²⁰ China’s massive trade surplus, large volume of capital inflow, and limited capital outflows resulted in a buildup of foreign exchange reserves, significantly invested in U.S. treasury bills. Foreign exchange reserves had reached \$4 trillion by early 2015, before the failed opening of capital markets led to capital flight of \$1 trillion.

The government had made efforts to open the economy to capital flows shortly after joining the WTO. China launched the Qualified Foreign Institutional Investor (QFII) scheme in 2002, allowing qualified foreign institutions to convert their currency to renminbi and invest in Chinese equities. In 2006, the Qualified Domestic Institutional Investor (QDII) scheme was implemented, allowing domestic financial firms to invest in foreign financial products.²¹ Individuals were allowed to exchange only \$50,000 worth of renminbi for foreign currency each year. Yet despite these changes, the IMF reported in 2014 that China still had restrictions in 14 out of 15 capital inflow categories and 15 out of 16 capital outflow categories.²² The Chinn-Ito Index, a measure of financial openness, was -1.19 for China. (The index ranged from -1.89 to 2.39, with a higher number indicating more openness.)²³

In 2015, the government had initiated new capital-account-opening schemes such as the Shanghai-Hong Kong Stock Connect, new free trade zones (FTZs), and the Mutual Fund Connect. The Shanghai-Hong Kong Stock Connect was launched in 2014, leading to fewer restrictions between shares targeted at local investors and those available to international investors. The Mutual Fund Connect allowed qualified funds in mainland China and Hong Kong to be distributed in each other’s markets through a streamlined selection process. The Shanghai FTZ was launched in 2013, and the Guangdong, Tianjin, and Fujian FTZs were launched in 2015. The FTZs adopted a “negative list” approach to regulate foreign investment, where items not on the list were subject to fewer restrictions. Cross-border capital transactions and establishment of financial institutions within the zones were liberalized.²⁴

In August 2015, the People’s Bank of China (PBoC), China’s central bank, allowed the renminbi to devalue, allegedly to better align its value with market forces (see **Exhibit 5**). Following the

depreciation, China’s foreign exchange reserves fell by \$513 billion in six months—the largest decline on record as the country sold treasuries to defend the value of the renminbi. In 2016, by the time the State Administration of Foreign Exchange withdrew its liberal initiatives, another \$500 billion had fled the country. Chinese real estate purchases, in Australia and California, were awesome.

The Hu-Wen Administration

Hu Jintao and Wen Jiabao came into power in 2002 as the President and the Premier of China, respectively. Their terms would be notable for their response to the financial crisis of 2008, the implementation of reforms aimed at reducing inequality, and Wen’s promotion of a consumption-led economy. The financial crisis, which was spurred by the U.S. subprime mortgage market that instigated a global recession, resulted in a sharp decline in global demand for China’s exports. Approximately 20 million people, mostly migrants, lost their jobs in the coastal areas, and tens of thousands of factories were closed.²⁵ In response, the Chinese government cut key interest rates, halted the appreciation of the currency at 6.8 renminbi/dollar, and increased the export-tax rebate on labor-intensive goods.²⁶ The government quickly unleashed a massive \$586 billion stimulus program that invested heavily in infrastructure projects, social welfare, and technology advancement, among others. The stimulus package was introduced to mitigate the negative impact of the crisis and to promote domestic consumption,²⁷ though it also led to an increase in local governments’ debt levels and asset bubbles.²⁸ Stimulus spending was described by some as “swapping from the left hand to the right hand,” or the state lending to the state.²⁹ Yet these efforts were successful in achieving a growth rate of 8.7% in 2009, which exceeded the targeted rate of 8%.

The Hu-Wen administration declared the creation a “new socialist countryside,” which entailed increasing investment in village services and infrastructure and removing agricultural taxes in rural China to address high inequality levels.³⁰ This was under the overarching plan of creating a “harmonious society,” a phrase first announced in 2005, to quell social unrest and strengthen the power of the party. Efforts toward building a harmonious society heightened following the financial crisis, as social discord increased with the number of unemployed citizens, and spending on social stability surpassed spending on national defense beginning in 2011.

After describing economic growth in China as “unsteady, unbalanced, uncoordinated and unsustainable” in 2007, Wen endorsed the transition of the economy toward increased domestic consumption to support sustainable longevity of the country.³¹ The government conceded that relying exclusively on investment- and export-driven growth was not a long-term formula for economic growth, and that in order to sustainably develop, it needed to focus more on domestic consumption and services. However, the share of private consumption to GDP growth continued to fall (45.3% of GDP in 2002 down to 37.1% by 2012), while investment increased, suggesting that more structural changes were needed.

The Chinese Dream

Xi Jinping took office as President of the Chinese Communist Party in December 2012. Along with Prime Minister Li Keqiang, Xi was the first Chinese ruler since Deng that Deng had not selected, leaving some to doubt his legitimacy.³² However, Xi ruled with an activism both within China and abroad that contrasted with the prior regime, and was described as the “most authoritarian leader since Chairman Mao” in *The New Yorker*. He announced his vision for China’s future shortly after becoming party chief: the “Chinese dream”—a “rejuvenation of the nation” that would result in prosperity, unity, and

strength.³³ Similar to Mao, Xi promoted ideology as a mechanism of reform and set forth to amass as much power as he could.

Early in 2013 he laid out a series of principles for the “New Normal.” First, and perhaps foremost, the Communist Party would assert complete control over the polity of China. It planned to push economic growth at 6.5% annually, to effectively double the size of China’s economy by 2020. It would do this by driving investment and technological leadership, fostering domestic consumption, reducing poverty, and increasing the sustainability of the environment. President Xi intended to eliminate poverty by 2021, build a world-class military by 2050, and establish an economic sphere of influence with 60 countries in Asia and East Asia through his “One Belt One Road” (OBOR) initiative.³⁴

The New Normal would necessitate extraordinary changes in Chinese culture and in the country’s institutional structure. After growing at more than 9% annually for almost three decades, China’s growth had slowed to 6.1% by 2019, before collapsing during the COVID19 pandemic in 2020. (See **Exhibit 1**). The economic benefit of China’s miracle growth had largely been captured by private business on the coast, or by corrupt politicians. Workers and consumers in Western and rural China benefitted far less. Thus, income inequality had become severe. Some institutional reforms, such as healthcare and pensions, had at least begun. But the key reforms intending to transition the economy to a more sustainable development path had first been undercut by financial market instability in 2015. By 2020, debt, fueled primarily by real estate investment and “shadow banks,” had reached a level of nearly 300%. The renminbi had further depreciated since 2015, reaching 7.1/\$1 by mid-2023 (see **Exhibit 3**). The Bank of China was stabilizing the renminbi’s rate, but with veiled threats to let it depreciate if U.S.-Chinese relations continued to worsen.

Xi’s approach was illustrated by his launch of an anticorruption campaign upon taking office. The campaign targeted “tigers and flies” —the “tigers” being high-ranking Chinese officials, including Politburo member Bo Xilai and former security chief Zhou Yongkang, while the “flies” were tens of thousands of lower-ranking officials.³⁵ The campaign created an atmosphere of fear, and some believed it put further pressure on the slowing economy as officials ceased contact with businesses, leading to the halt of some investment projects. The campaign was also seen as a consolidation of power by Xi, as he targeted political opponents to dilute their influence. The shrouded anticorruption campaign aimed to achieve economic reform, though it paradoxically inhibited the implementation of reforms by local officials who feared being accused of corruption.

In 2013, Xi also launched the OBOR initiative, which aimed to increase trade, heighten exports, provide China with more access to natural resources, and relieve overcapacity by investing in infrastructure projects in 60 countries of Eurasia.³⁶ [See **Exhibit 9**]. China also announced the creation of the Asian Infrastructure Investment Bank (AIIB) in 2013 to finance these investment initiatives. The AIIB had 57 founding members, though these did not include the U.S. or Japan. The AIIB was planned to have authorized capital worth \$50 billion, while OBOR was planned to be a \$1.4 trillion investment.³⁷

Beneath the macroeconomic operations of China’s economy lay a host of noneconomic problems, yet with huge economic consequences. Perhaps first among these were environmental issues. The world’s second-largest economy was an environmental mess. There was too much coal, too much air pollution, 30% of the world’s carbon emissions, soil and pesticide contamination, water pollution and limited water availability, and deforestation. As the world’s largest country (1.34 billion people), 30 years of state policies restricting births had left a demographic divide (between young and old) that continued to worsen thru 2023.

Under the umbrella of transitioning to a “New Normal” of slower but more sustainable growth, with increased levels of innovation, consumption, and services, the proposed reforms included opening

up weak SOEs, increasing the scope of social security coverage and benefits, liberalizing the financial markets, land reform, addressing overcapacity, and loosening controls on capital flows and the exchange rate. However, the vested interests of groups that benefitted from the status quo were complicating the reform process.

Xi Jinping was committed to accumulating as much political power as possible. Xi had named himself the head of foreign policy, Taiwan, the economy, internet oversight, government restructuring, national security, and military reform, and he effectively took over the courts, the police, and the secret police.³⁸ This accrual of power broke from the post-Mao system of consensus ruling among senior leaders.³⁹ He embarked on a ruthless anticorruption campaign to purge corrupt officials as well as political opponents, and focused on extending the Chinese military. In March, 2018, the National People’s Congress had enacted a constitutional amendment removing the two-term limit on the presidency, “effectively allowing Xi to remain in power for life.”⁴⁰ This consolidation of power led outsiders to question whether the “supply-side structural reforms” could survive under an increasingly authoritarian state.

By 2023, Xi Jinping had systematically curtailed once-major private enterprises, set up regulations that upended private education, cracked down on video gaming and made the situation for foreign firms much bleaker. Xi had called for a new international order, in which relations with China, in Europe, the Middle East and Africa would match or exceed those with the United States. And he had substantially increased military spending, including ballistic missile capabilities. His role, in China, had become “Chairman of Everything.”⁴¹

China’s Context

Demography and Inequality

The world’s most populous economy, home to 1.39 billion people in 2023, was facing demographic headwinds as its population aged while its birth rate remained low. The size of China’s working-age population began to fall in 2012; by 2019, it had declined by 4.7%.⁴² The government’s 35-year “one-child” policy, enforced with fines, sterilization and even forced abortions, had facilitated the decline of the country’s fertility rate from 2.5 in 1981 to 1.6 By 2015 (well below the replacement rate of 2.1).⁴³ The one-child policy, credited by the CCP as having prevented 400 million births in total and therefore contributing to China’s economic takeoff, was loosened in 2015, when couples were allowed to have two children. Many doubted whether this would have a lasting demographic impact, because 56% of families impacted by the policy were reluctant to have more than one child due to the perceived high costs and the constraints of urbanization.⁴⁴ Despite changes to a 2-child policy, and then 3, the fertility rate had continued to fall to 1.3 by 2021 (**Exhibit 12a**).

China’s aging population resulted in a decline in productive labor and a significant increase in the average wage level.⁴⁵ While unemployment was not expected to grow, the increase in labor costs had begun eroding manufacturing and export competitiveness.⁴⁶ Furthermore, the aging of the population would create enormous costs for society and the government, as resources shifted to provide the services the elderly would require.⁴⁷ See **Exhibit 12b**.

The sharp increase in the elderly population would likely contribute to greater income inequality in China, where the official Gini coefficient had risen from .30 during the 1980s to .465 in 2019, a level indicative of severely unequal income levels (see **Exhibit 10**).⁴⁸ This mal-distribution occurred despite Xi Jinping’s 2014 claim that the mantra “don’t worry about the amount; worry that all have the same amount” had long been a value of Chinese society.⁴⁹ Inequality in China was shaped by geography, a

large and persistent informal sector, disparities in access to education, barriers to employment (particularly for rural migrants), corruption, and entrepreneurship.⁵⁰ Gaps in social protection also impacted inequality because salaried retirees received higher pension benefits than their non-salaried counterparts.⁵¹ As workers grew scarce they demanded more, illustrated by the doubling of labor strikes by 2014.⁵² Due to the growing internal unrest, China’s internal security budget surpassed its military budget beginning in 2011.⁵³ One study by a Chinese university estimated the Gini coefficient to be .60 in 2014, falling from .61 in 2010,⁵⁴ although UNICEF estimated GINIs in the high 40s (**Exhibit 10**). The urban-rural income gap had not fallen (from 3.3 in 2009 to 3.6 in 2018) as urban incomes rose sharply.⁵⁵

Paralleling the income inequality, differences between the Chinese provinces were also growing. While the economy grew at a rapid rate, gaps between the 23 provinces became more pronounced. Between 2012 and 2013, 80% of the decline in real growth was attributable to six provinces, which themselves accounted for only 15% of GDP.⁵⁶ Provinces that were defined as mining or heavy industry areas—areas associated with the older growth model—slowed more than other provinces in 2014.⁵⁷ Provinces in the East and the coastal cities were the richest areas, while rural areas in the center and West were the poorest—thus the rural-urban divide. Average annual family income was approximately \$6,051 in urban areas in 2019, while just \$2,288 in rural areas.⁵⁸ Social welfare coverage also varied between urban and rural areas, with only 34.5% covered by retirement insurance in rural areas as opposed to 87% in urban areas.

Hukou

The rural-urban divide was cemented by the *hukou*, a household registration system implemented by Mao to block rural migration into cities. It was established in the 1950s to maximize food production by keeping rural workers active on their farms. Described as a “pernicious legacy” and compared to apartheid by many, this system resulted in discrimination against rural citizens, the denial of welfare benefits to those who migrated to cities without a *hukou*, and the enlargement of a group of urban “second-class citizens,” as these migrants had officially been referred to (see **Exhibit 11** for *hukou* qualifications by city size).⁵⁹

Premier Li Keqiang announced during the Third Plenum (2013) that plans to reform the *hukou* and land systems would be implemented in an attempt to increase urbanization in China. There were currently 260 million migrants without urban *hukou* living in cities in China, and the reform aimed to provide urban *hukou* and the corresponding social benefits to 100 million people by 2020. However, this easing focused on small and medium-sized cities in central and western provinces, not on larger coastal ones to which many more migrated. Rural land reform was also targeted; village collectives would still own rural land, but farmers who leased the land would have more property rights to avoid coercive expropriation.⁶⁰ The reform would also allow farmers to lease and mortgage their land to third parties.

Healthcare

The development of healthcare in China post-1949 was substantial and resulted in a rapid decrease in infant mortality rates and a corresponding increase in life expectancy. The decline in infant mortality from 30 to 15 per 1000 live births took only seven years,⁶¹ and life expectancy increased from 69 to 75 years from 1990–2010, though both were still below the OECD average in 2012. China had achieved nearly universal healthcare in 2015, but the quality was poor and the costs high for most of its population. However, while most urban and rural residents were covered, China’s large migrant population remained mainly uninsured, with only 1 in 5 having health insurance access through formal employment.⁶²

Public hospitals were the most utilized supplier of healthcare, accounting for 90% of healthcare consumed in China in 2015, and medical resources were mostly concentrated in urban areas.⁶³ Doctors were generally underpaid, and received a large portion of their income from the sale of prescription drugs. The sale of prescription drugs accounted for 40% of total healthcare spending in 2011, much higher than the 16% average for OECD countries.⁶⁴ Drugs were sold to increase profit, incentivizing many hospitals to use expensive drugs and to overprescribe: the average Chinese person took 10 times the amount of antibiotics as an American counterpart in 2011.⁶⁵ Under universal coverage, citizens were allowed to choose their own doctors, but the phrase “difficult to see a doctor, expensive to see a doctor” was common, and frustration with high costs and corruption sometimes prompted violence against medical employees.⁶⁶

In 2008, the Chinese government introduced the Healthy China 2020 program, which planned to provide equal access to public healthcare to all of its citizens by 2020. Healthcare reforms were enacted to expand access in rural areas, improve medical services, and make publicly provided medical services more affordable (see **Exhibit 12**). Public hospitals that were a part of the reform were required to sell prescription drugs at the price they bought them. The annual government medical insurance subsidy for rural and unemployed urban residents was planned to increase 10.5% to over \$64 per person, covering around 70% of health-related costs.⁶⁷ And to stimulate the growth of private hospitals, China opened them up to more foreign investment in 2012.⁶⁸

Pensions

Pensions were a highly politicized issue in China due to their relation to the socialist legacy.⁶⁹ China’s pension system had provided a dual-track system whereby urban corporate employees were required to pay while government employees were exempt, leading to contention in the country. The pension system had required corporate employees to contribute 8% of their income and employers to contribute 20% of wages. There had also been differing pensions between rural and urban areas, where rural contributions were voluntary and benefits were usually lower and unevenly distributed because citizens of different ages and classes were unable to pay the same amount.⁷⁰ Local governments had been diverting funds from individual pension accounts for many years to cover the pension payments that were due at the time. This borrowing undermined Chinese workers’ trust in the pension system, and caused some to adopt higher personal savings rates (and lower participation in pension schemes).

The government implemented reforms beginning in 2013 to improve the system. It provided tax incentives to promote the use of voluntary occupational pensions, called Enterprise Annuity plans. Reforms progressed in 2014, when the rural pension system was merged with the urban pension plan to create a new, noncontributory pension that was subsidized by varying levels of government and was not related to personal payments, pension contributions, or career.⁷¹ And in 2015, the government, in an effort to mitigate future costs and promote fairness, announced that the approximately 40 million government employees would be required to contribute 8% of their salaries into the national pension plan.⁷² [See **Exhibit 14a**.]

Energy and the Environment

As home to approximately 20% of the world population, China evolved to become the top global consumer of energy and the top contributor to carbon emissions. The vast amount of manpower in China was not matched by an abundance of raw materials, however. China was limited by a scarcity of natural resources such as water, iron ore, copper, natural gas, and petroleum, though it did have an abundance of coal, which was its primary source of power. Although China was the world’s top producer of coal, it was also its top importer, leaving it far from self-sufficient in meeting its domestic

energy demand. This high level of coal consumption (approximately half of the world’s consumption level) resulted in China becoming the world’s largest contributor to carbon emissions after 2007; in 2021 it emitted 12 billion tons of CO₂—30% of the world’s total (**Exhibit 18**).⁷³

Rapid growth in China’s economy, averaging 9% for 25 years, intensified demand for raw material, as the country’s export- and investment-driven growth strategy depended upon them. China became the world’s largest importer of oil in 2014, using it primarily for diesel fuel and gasoline.⁷⁴ Imports of iron ore were substantial: China’s steel industry accounted for half of global production in 2013, making it a primary export. But slower growth and weaker overall demand for commodities in China contributed to the commodity price crash in 2014, whereby the price of steel, oil, copper, gas, and others fell drastically.⁷⁵ The majority of coal companies in China were unprofitable after 2014.⁷⁶

China was notorious for its high levels of pollution, a downstream result of its heavy investment in the power infrastructure.⁷⁷ Already scarce resources such as water and soil were contaminated. Chemical spills and industrial waste were the primary reasons that one-third of China’s surface water (and 60% of its underground water) was deemed unfit for human contact by Beijing’s environment ministry and 20% of its arable land was contaminated by heavy metals.⁷⁸ Twelve million tons of grain were tainted by heavy metals every year.⁷⁹ Massive chemical explosions and spills exacerbated the problem; in 2015 an explosion at Tianjin’s Industrial Zone, catalyzed by 3,000 tons of stored unsafe chemicals, killed 150 people and released noxious pollutants into the surrounding area.⁸⁰ China’s air was also heavily polluted with particulates and ozone, and associated health problems were estimated to cause 4,000 deaths per day.⁸¹ Beijing had implemented a four-color alert system in 2013 to indicate the level of pollution and the corresponding precautionary measures. Further problems included desertification, which affected one-third of China’s land mass, and deforestation, which contributed to ozone depletion and glacial melting, which were occurring at rapid rates. These factors combined caused one Chinese scholar to declare that “China’s environment is the world’s worst.”⁸²

Amid public controversy over emissions and pollution’s negative effect on public health, the Chinese government focused on strategies to reduce emissions and engage in a greener development strategy. China’s environment was governed by the Environmental Protection Law (EPL), which had been revised multiple times and was the precursor to more than 40 environmental provisions and many state regulations. In 2014 an amendment to the EPL was approved that held local government officials accountable for “serious environmental events” and allowed some NGOs to initiate public-interest lawsuits against polluters.⁸³ The 13th Five-Year Plan included greener development as one of its five main tenets, with the goals of reducing emissions per unit of GDP by 40% (lowering to 45% from 2005 levels), increasing the share of non-fossil fuel energy to 15%, and banning commercial logging in natural forests by 2020.⁸⁴ China was a party to the Paris Agreement, a global pact with the goal of reducing greenhouse gas emissions signed in December 2015, and pledged to reach peak CO₂ emissions by 2030. However, the government admitted to underreporting its coal consumption by up to 17% a year since 2000, leading some to believe that the peak would be much higher than anticipated.⁸⁵

In an effort to maintain political stability, Premier Li Keqiang declared a “war on pollution” in 2014. China focused on investing more into renewable energy sources to assist in transitioning to a more environmentally healthy country. In addition to implementing stricter energy-efficiency standards and environmental regulations, the country invested in the solar and wind sectors, and planned to increase the number of nuclear plants from 13 to 40. China became the top producer of photovoltaic cells in 2007, and the top producer of wind turbines in 2009. China’s slower growth and transition toward services helped lead to a decline in steel production and coal consumption in 2015. Notably, the Third Plenum called for implementing a paid-for, resource-use system that could lead to deregulated prices for energy, which would make doing business costlier for heavy industry.⁸⁶

Steel firms, facing tougher environmental regulations and overcapacity, slowed production and closed mills. In 2015, China’s steel firms reduced production for the first time since 1981.⁸⁷ Additionally, China announced that it would halt the building and approval of new coal plants in many provinces. Issues with overcapacity led China to announce the closure of 1,000 coal mines in 2016.⁸⁸ Consequently, 1.8 million coal and steel workers were expected to lose their jobs. The government also targeted the energy sector in its anticorruption campaign; nearly one-fifth of those prosecuted were energy executives, and this crackdown resulted in offshore investment in energy declining in 2014.⁸⁹ Despite these new regulations, dozens of new coal-fired power plants had become operational annually – some 33 gigawatts, or more than twice the rest of the world, in 2021 alone.⁹⁰

The “Going-Out” Strategy

Three major national oil companies (NOCs) were created in the 1980s—CNPC, Sinopec, and CNOOC—to be in charge of upstream and downstream activities and the exploration and development of oil and gas assets offshore. The National Development and Reform Commission (NDRC) planned and regulated the electricity sector, and the National Energy Administration was established in 2008 to act as the key regulatory body, but there was no independent regulator. In 1999, the Chinese government launched its “going out” strategy to encourage businesses to expand overseas, and the three NOCs were among the most active firms under this approach. These NOCs increasingly bought concessions worldwide, and by 2013 they were producing 2.1 mb/d (million barrels per day) of oil in other countries, about equal to Brazil’s total oil production that year.⁹¹ The NOCs, looking outward, invested in places like Angola and Sudan, which Western firms had largely avoided.⁹² In 2010, Chinese overseas oil production was largely concentrated in Kazakhstan, Sudan, Venezuela, and Angola.⁹³ Ten Chinese companies, under the purview of the three NOCs, had production in 42 countries, and their international portfolios were diversified to include more of the Americas in 2014.

China’s quest to secure resources abroad involved offering trade, aid, and investment deals to resource-rich countries, deals that were amplified by China’s ability to provide cheap financing and labor for infrastructure projects.⁹⁴ Xi Jinping announced this Belt and Road Strategy (originally One Belt, One Road) in 2013. China was already Africa’s largest trading partner, and shortly became its largest source of investment – in roads, schools, rails, ports and other infrastructure – with a goal of \$1 trillion in financing by 2025. Yet Chinese investment in Africa was not seamless; many countries complained of China’s poor compliance with safety and environmental standards, disregard for local laws, and unfair labor and business practices.⁹⁵

China had also become the largest trading partner to Latin America, but its primary Latin American imports were commodities, for which demand waned as growth slowed. In 2015, China announced a \$50 billion investment deal with Brazil, primarily meant for industry and infrastructure, and a \$20 billion investment in Venezuela, purportedly for energy, housing, and infrastructure.⁹⁶ China also became the top trading partner to Southeast Asia in 2009, and the Association of Southeast Asian Nations (ASEAN)-China Free Trade Area, the largest free-trade area in terms of population implemented in 2010, encouraged further trade growth between the regions.⁹⁷

The “going out” policy was spurred by a sense of geopolitical insecurity and a desire to increase China’s global competitiveness.⁹⁸ Yet the U.S. navy controlled the Strait of Malacca, through which about 85% of China’s oil passed.⁹⁹ China, concerned about access to natural resources and control over trade routes, claimed sovereignty over the East and South China Seas. In 2012, Beijing asserted control of the South China Sea by asserting a historic “nine dash line,” penetrating the territorial waters of Taiwan, the Philippines, Malaysia, Vietnam and Indonesia (as well as separate islands over which Japan claimed control. (see **Exhibit 13a**). “We will keep walking on the peaceful development road,”

said Xi, “but we must not forsake our legitimate rights and interests, must not sacrifice core national interests.”¹⁰⁰ China began building and militarizing reefs in the area and threatening the fishing fleets and oil explorations of adjacent countries.

In 2016 however, the International Tribunal in The Hague issued a sweeping rebuke, declaring these international waters. Xi Jinping, however, was defiant, claiming sovereignty “since ancient times.”¹⁰¹ To enforce the court’s decision, the United States Navy began sending military vessels through the South China Sea, invariably stirring a military response by Chinese jet fighters or coast guard ships. Several times, observation aircraft of the United States were dangerously buzzed by Chinese aircraft. Even more dangerously, ships passing through the Straights of Taiwan were harassed (**Exhibit 13b**).

Foreign Policy and Military Buildup

We are strongly committed to safeguarding the country’s sovereignty and security, and defending our territorial integrity.

— Xi Jinping¹⁰²

China does not see itself as a rising, but a returning power

— Henry Kissinger, 2012¹⁰³

Chinese leaders believed that a strong military would protect its interests and ensure stability, and progressively invested in it as the country grew. Though officially describing its military policy as “active defense,” China had exerted much effort in projecting its power abroad.¹⁰⁴ In the 10 years since 2013, Chinese defense spending had doubled, to about \$230 billion.¹⁰⁵ Large military parades displayed various weapons and aircraft, including the “carrier killer” DF21D and intercontinental ballistic missiles that could reach Chicago.¹⁰⁶ Xi Jinping planned to transform the military from a defensive unit to a modern force able to project power elsewhere.¹⁰⁷ A cut in personnel would bring the number of soldiers to almost 2 million, still maintaining China’s army as the largest worldwide.

Previously referred to as “the world’s largest military museum,” China’s investment in its military resulted in rapid growth. China sent its first aircraft carrier, purchased from Ukraine in 1998, to sea in 2012. By 2020, China was operating two other large carriers, while several more were under construction, or planned. Its submarine fleet of about 70 boats, included mostly diesel power attack ships. Its current generation of subs included a few ballistic missile submarines.¹⁰⁸ China could produce sophisticated ballistic, cruise, air-to-air, and surface-to-air missiles, and had been testing hypersonic glide vehicles since 2014.

Business Structure

China, the fastest-growing nation in the world, was unprecedented in terms of the pace and scale of its development. While China’s initial growth was aided largely by SOEs, the private sector accounted for two-thirds of output and nearly all of the increase in employment since 1978.¹⁰⁹ Policies regarding the treatment of firms evolved to become nearly the same for domestic state and private companies, and China’s economic model blended government control with free markets. However, SOEs were still active, guided by the government’s “visible hand” and controlled by the CCP’s Organization Department. SOEs strategically dominated the energy, transportation, banking, telecommunications, defense, aerospace, and power-generation sectors. They also dominated some non-strategic sectors, such as tobacco. The approximately 150,000 central and local SOEs accounted for 17% of urban employment, 22% of industrial income, and 38% of China’s industrial assets by 2015.¹¹⁰

SOEs enjoyed a cozy relationship with the four largest state-owned banks; they received 85% of corporate loans in 2009.¹¹¹ SOEs also benefitted from price controls, though these controls had gradually loosened since reforms began in 1978.

The 1990s saw vast SOE reform, during which the central government “grasped the big and let go of the small” to increase the efficiency of large SOEs while many small SOEs were closed, with millions laid off. Township and Village Enterprises (TVEs), market-oriented public enterprises, were largely privatized in the late 1990s as their profits fell and the government became more supportive of private industries. In 2003, the government created the State-owned Assets Supervision and Administration Commission (SASAC) to act as an investor for the state. SASAC owned most of the large industrial SOEs and oversaw their assets and reform in order to create “national champions.” The central SASAC was supported by subnational SASACs at the provincial, municipal, and county levels. SASAC attempted to introduce modern corporate governance institutions such as supervisory boards, but this effort was undermined by the fact that the board chairman was also the Party Secretary in most companies.¹¹² Firms controlled by SASAC saw rapid growth in profits up until 2007, after which profit growth slowed, and the profits of central SASAC firms as a share of profits of all nonfinancial firms eventually fell below pre-2003 levels.¹¹³ Additionally, the return on assets of SASAC firms fell post-2007 to levels below the cost of capital.

While SOEs were a strong and complex force, they lagged behind the private sector in terms of efficiency and profitability. Between 2003 and 2013, private firms undertook a higher share of national investment and experienced increased efficiency in terms of higher returns on assets. Private firms evolved to become the main driver of employment, economic growth, and exports in China, and began to participate in outbound FDI. China began ceding space to private firms in areas such as natural gas, oil refining, construction, and water supply.

The Third Plenum of 2013 asserted that SOEs were to be reformed. In an attempt to increase SOE productivity and competitiveness, the government planned to reinforce state control over SOEs, separate SOEs into commercial and public interest enterprises, expand mixed ownership of SOEs, and create “global players” through megamergers.¹¹⁴ The declaration that “the market was to play a decisive role in allocating resources and to give better play to the role of the government” implied somewhat contradictorily that the government would remain strictly in control, but private firms could be given more room.¹¹⁵ This increased space for private firms, and other reforms could be delayed due to the state’s reliance on SOE revenues and resistance from vested interest groups. Additionally, the NDRC dropped 80% of the products it usually priced as part of more market-based reforms, though natural gas, electricity, tap water, and anesthetics would still be priced by the state.¹¹⁶

Foreign Initiatives in China

China was also infamous for its discrimination against foreign firms, though it participated avidly in the economies of other countries and frequently sought foreign intellectual property. As one Chinese scholar noted, “China remains an inward-looking country. It is essentially not interested in the outside world, except to make money.”¹¹⁷ After the five-year period of WTO-mandated market-opening reforms ended in 2006, foreign firms noticed an increase in discriminatory practices and more difficulty in getting licenses and approvals.¹¹⁸ China began an “indigenous innovation” policy in 2006 that laid out technology goals with the intent of dominating the technology market by 2050. Indigenous innovation was defined as “enhancing original innovation through co-innovation and re-innovation based on the assimilation of imported technologies.”¹¹⁹ Foreign firms thought this strategy could be an attempt to obtain innovative patents from them, similar to the requirements of a joint venture in China,

where the foreign firm had to provide some patent-licensing powers to Chinese companies in order to enter the market.¹²⁰

China publicly investigated many foreign firms for violating their Anti-Monopoly Law, which some felt was an effort to protect domestic industries.¹²¹ In 2016, American companies reported feeling less welcome in China than in previous years, though those involved with the consumer and services sectors were more optimistic than those associated with the older growth industries. Over 80% of the companies surveyed reported negative consequences from China’s internet censorship, known as the Great Firewall,¹²² and challenges with inconsistent regulatory interpretation and unclear laws persisted. The 2015 National Security Law, which outlawed threats to its economy, government, and cyber interests, among others, presented a potential for discouraging foreign business in China. Other areas of concern included a draft counterterrorism law that could require foreign companies to turn over their encryption keys and a law passed in 2016 that limited the operations of foreign NGOs in China, which many thought would further stifle civil society.¹²³ However, foreign firms in China remained profitable, and corruption was reportedly less of an issue than before.

Economic Transition

The release of the 13th Five-Year Plan (FYP) in March 2016 for the 2016–2020 period heralded the next steps in transitioning the economy from the practiced investment-driven and manufacturing-for-export growth model to a new consumption-driven and services-oriented growth model. This FYP built on reforms mentioned during the Third Plenum in 2013 and focused on five main principles: innovation, openness, green development, coordination, and inclusive growth. To achieve its goals of doubling its 2010 GDP and per capita income levels by 2020, China would have to grow by 6.5% annually. Amid slowing growth and increasing doubts, the country continued on its credit-driven path of leveraging its debt in order to finance these reforms and uphold a rapid growth rate. These actions led some to think that, despite its claims, China might still be more interested in preventing an economic slowdown and higher unemployment in the near term than implementing reforms that might lead to a new, albeit lower, equilibrium GDP growth rate and more stable, innovative development. [See **Exhibit 14b**.]

The 14th Five-Year Plan, covering 2021–2025, stressed continuity, with a few innovations and scaled-up ambitions. For the first time, no explicit growth target was presented. It emphasized improvements in quality and efficiency while setting new targets for energy and food security. Targets for green development were actually reduced, to five from ten. As to the Belt and Road Strategy, the “principle of debt sustainability” was introduced, emphasizing the financial sustainability of overseas investments. Finally, two enabling drivers were strengthened: (1) effective coordination among different government levels and strengthened capacities of local governments, and (2) and better coordination of the country’s sustainable development goals.¹²⁴

Exchange Rate

Long notorious for controlling the exchange rate and attracting foreign critique that it was keeping the renminbi undervalued to enhance exports, China began loosening the peg against the U.S. dollar in 2005, allowing the renminbi to appreciate. This loosening entailed fixing the currency at a set rate every day and allowing it to fluctuate within a narrow band. In August 2015, China allowed the currency to depreciate 2% against the USD and announced that the renminbi would be fixed within a narrow band of the previous day’s market close.¹²⁵ These attempts at reducing controls helped persuade the IMF to add the renminbi to its Special Drawing Rights (SDR) basket in November 2015.

Furthermore, in December 2015, China announced that it was relaxing its peg from solely against the USD to a basket of currencies.

Loosening restrictions on the renminbi yielded some immediate negative impacts, including a stock market crash, financial market fluctuations worldwide, and an increase in capital outflows. These repercussions led to the PBoC reportedly resuming fixing the renminbi's daily value in January 2016, ending the trend toward freeing the exchange rate. China fought against downward pressure on its currency by selling off some of its vast amount of foreign reserves; observers estimated that China sold \$513 billion of foreign reserves to support the renminbi in 2015 (see **Exhibit 15**).¹²⁶ SOEs benefitted from this return to keeping the currency closer to USD levels, because a large portion of their huge debt was in USD and a weakening of the renminbi would make servicing their debt more expensive.¹²⁷ Affluent Chinese citizens, fearing further depreciation, also moved dollar assets to real estate in the U.S. By mid-2023, the Renminbi had fallen to 7.17/U.S. dollar.

Financial Leveraging

Credit-driven growth fueled a buildup of total debt, which approached 300% of GDP by 2023. A combination of real-estate lending and an upsurge in lending to local government financing vehicles (LGFVs)^b drove increasing debt levels beginning in 2007, and by the end of 2014, China's debt ratio was larger than that of developed countries such as the U.S. and Australia.¹²⁸ Nearly half of China's debt went to real estate, mainly to property developers and construction-related firms such as steel and cement, while individual mortgages accounted for only 8% of debt, a lower fraction compared to other countries (see **Exhibit 16**).¹²⁹

While China's central government debt was just 22% of GDP in 2022—low compared to international standards—local governments accounted for much more. Local debt in China was often financed by LGFVs, which used land mainly as collateral, and an analysis of provincial debt indicated that most provinces had debt-to-revenue ratios of over 100%.¹³⁰ Many LGFVs struggled to service their existing debts, as around 20% of new loans were used to pay off older ones, leading to less credit availability for productive use. LGFV financing came primarily from the four largest state-owned banks, followed by city commercial banks and shadow banks. In 2014, the Ministry of Finance allowed local governments to participate in public-private partnerships to use private funds for public services. In 2015, the government set forth a program whereby local governments could swap debt for cheaper bonds, which could further lighten their debt-service burden.

While the distribution and amount of debt were worrisome, the sources and composition of debt were also troubling due to the rise of shadow banking and the prevalence of nonperforming loans (NPLs). Shadow banking, or loans provided by non-bank institutions, accounted for 30% of debt in China and had increased by 36% annually between 2007 and 2014. Entrepreneurs were attracted to shadow banking because it offered higher returns than state-set deposit rates would allow, and regulators tolerated them because, after bank lending was limited in 2010, they funded the completion of many projects.¹³¹ Local governments raised more than a third of their finances from shadow banks to supplement the limited amount they could acquire from banks due to their perceived risk levels.¹³²

NPLs, or loans that borrowers were unable to repay, doubled from 2013–2015 and amounted to \$1.5 trillion dollars by 2020.¹³³ However, many believed that the published figures pertaining to bad debt were underestimated, since China classified NPLs differently than the rest of the world. Many banks

^b LGFVs were state-owned entities that helped raise off-balance sheet funds for local governments in China, because most local governments were prohibited from borrowing money directly until recent reforms.

utilized an “extend and pretend” method where they did not force companies to make their debt payments.¹³⁴ NPLs were concentrated in capital-intensive industries that faced overcapacity issues following the boom in investment the 2008 stimulus package had provided. To address the rise of NPLs in China, the government proposed a securitization plan that would allow banks to issue up to \$50 billion renminbi of asset-backed securities (where NPLs would be the asset) and also proposed that banks swap NPLs for equity stakes in indebted firms.¹³⁵ These proposals were met with skepticism: Eswar Prasad, a prominent China scholar, remarked that “the program amounts to a sleight of hand that beautifies bank balance sheets but hardly comes to grips with the basic problems of bad loans.”¹³⁶

Real Estate Bubbles

Increased bank lending and the 2008 stimulus led to a surge in property construction, which was accompanied by rising housing and land prices from 2005–2013. However, simply building housing did not attract a sufficient amount of people to move in, and overcapacity became increasingly apparent as ghost towns and unfinished projects marked the real estate landscape. This excess housing was particularly noticeable in smaller cities: the IMF found that China’s residential floor space per capita in small cities exceeded the average for advanced economies.¹³⁷ The overheated market began declining in 2012, and by 2014 the property market had fallen by 25%.¹³⁸ While demand for property remained relatively high in large cities, nearly 22.4% of sold urban homes were vacant in 2013, and 13 million homes remained unsold.

Housing prices rose by 17% annually in 35 major cities between 2003 and 2013, a faster rate than that exhibited by incomes in the selected cities (11%) or GDP growth (10%), on average.¹³⁹ However, the increase in prices was not universal: housing prices increased by much more in tier-one cities such as Shanghai and actually fell in smaller cities in 2014. In 2016, 90% of Chinese families at least partially owned properties, and 21% had more than one.¹⁴⁰ These ratios were high due partly to the fact that Chinese citizens viewed housing as an investment option, because capital controls, financial market instability, and other government regulations limited other investments.¹⁴¹ In the past few years, the government cracked down on developers’ reliance on debt. The crisis of Eversource – among the largest developers, had forced the government to crack down on speculation and strengthen regulation of the real estate market.

Fiscal Reform

The slowdown in growth caused China’s revenue growth to lag its expenditure growth. The financial burden fell primarily on local governments, which received 53% of tax revenue from the central government but were required to fund 85% of mandated programs. Having previously used land sales as a way to make up the difference, local governments found themselves unable to service their debts amid the property market slowdown. The State Council released plans for fiscal restructuring in 2014, aiming to alleviate the debt burden and prevent further debt buildup while introducing new sources of local government revenue.¹⁴² To alleviate the debt local governments had already accumulated, the central government permitted local governments to swap approximately half of their high-risk debt for bonds with lower interest payments and allowed the state security fund to invest in local government debts.

The government announced revenue reforms in 2014 meant to stimulate funds for government spending. The reforms included transitioning from a business tax to a value-added tax (VAT) for the service industry, implementing a national property tax, lowering social security contributions and increasing environmental taxes. The transition to a VAT in the services sector slowly provided tax relief

for businesses, and the central government stated that it would ensure that an appropriate amount of VAT revenue went to local governments.¹⁴³ A property tax system was tested in two cities in 2011, though the lack of enforcement and large number of exemptions led most to deem it a failure. However, the central government began a nationwide property registration system in 2015 to prepare for the launch of the national property tax. Despite the fact that Xi Jinping wanted it, a property tax was still a proposal in 2022.

China-United States Relations

Throughout the Trump administration, relations between China and the United States had steadily worsened. Ever since Deng’s shift in 1992 to open China, the United States had hoped that globalization and capitalism would help shift Chinese autocracy towards more political openness and democracy. Unfortunately, this had not happened, and under Xi Jinping, China had become, if anything, more autocratic.

Initially, Trump tried to relate to China on a personal basis, befriending Xi Jinping. Yet Trump’s campaign rhetoric, and concern for American manufacturing jobs, immediately pushed the United States towards trade war. Even before his inauguration in 2017, Trump had complained about the imbalanced trade between the two countries: “We can’t continue to allow China to rape our country, and that’s what they’re doing. It’s the greatest theft in the history of the world.”¹⁴⁴ Once president, Trump began imposing tariffs on China – first on solar panels and washing machines, then steel and aluminum, then on hundreds of items and higher and higher tariffs. China retaliated, although its imports from the USA were far smaller.

After prolonged negotiations, sharp drop-offs in exports and imports and collapsing prices for agricultural commodities, an agreement was reached in mid-December, 2019. China agreed to a number of process reforms for intellectual property, technology transfer and financial services, and a sharp hike of imports - \$200 billion above the 2017 levels. This increase focused on agricultural produce, since Trump counted Midwest farmers among his political base. However, by the target date of 2022, this goal was still not achieved. Meanwhile, penalty tariffs in both the United States and China contributed in higher prices and lower consumption.

During the trade war, technology issues also intensified. Huawei, China’s giant telecommunications firm, was spurting ahead of western companies with 5G cellular service. Fearing electronic eavesdropping, the Trump administration decided that Huawei couldn’t be trusted. [Its founder, a deputy regimental chief in the People’s Liberation Army,” remained very close to the government.] In May of 2019, the Trump administration imposed export restrictions for components on which Huawei depended. In June 2020, the U.S. Federal Trade Commission designated Huawei a national security threat. The government urged allies – Australia, the UK and Germany, to similarly restrict Huawei.

China, meanwhile, was tightening its grip on Taiwan and Hong Kong. Over the past few years, China had successfully forced any number of trade partners to withdraw recognition of Taiwan as a semi-independent country. China demanded that the flag not be recognized, and that Taiwan was viewed as a “province” of China. Since 1949, two Chinas had existed, at least from the Taiwanese and U.S. perspective. However, from the People’s Republic of China’s perspective, the island territory was part of China. When the United States sold advanced, F-16 fighter jets to Taiwan in 2019, the PRC expressed outrage and intensified its bomber flights over Taiwanese waters. In January 2020, Tsai Ing-wen won a second term as President of Taiwan, on a platform that opposed closer ties with China.

Another concerning situation had developed in Hong Kong. Once a British Colony, Hong Kong became a special administrative region of the PRC in 1999. With its own currency, a democratic government and a major capitalist-service economy (“one country, two systems”), Hong Kong too was a target of Chinese expansionism. The Governor, Carrie Lam, increasingly clashed with student demonstrators throughout 2020. After several months of violent demonstrations, the National People’s Congress enacted a HK national security law, which gave China the right to enforce its law in Hong Kong. The United States, the United Kingdom and other western powers expressed dismay at China’s unilateral assertion of control.

Finally, a growing wedge in diplomatic relations was China’s treatment of the Uighurs – a Muslim ethnic minority residing mostly in Xinjiang Autonomous Region in Northwest China. Some 12 million Uighur’s live mostly in the Tarim Basin; about 20% live in Urumqi, the capital of Xinjiang. Since 2015, more than one million Uighurs have been detained in “education camps,” designed to instill adherence to national ideology. Recent reports also point to sterilization and other forced birth-control to limit the growth of the Uighur population.¹⁴⁵ After the U.S. Congress enacted the Uighur Human Rights Act by near unanimous support, President Trump signed it into law on June 17 – requiring the U.S. government to impose sanctions on officials responsible for the abuses.¹⁴⁶

Amidst all of these bilateral points of contention, the pandemic had added critical pressure. Trump and his base were accustomed to calling COVID-19 the “China virus,” which spurred xenophobia in the U.S. and implied that it was a biological weapon, rather than a natural outbreak. Amid thousands of deaths, China acted aggressively, shutting down the economy to flatten the curve of the spread and bring the disease under control. This they managed to do. However, economic growth had dropped nearly 40% in the first quarter, leaving China’s annual growth recovering slowly at about 1%. Even as Chinese businesses re-opened, their customer base – in Europe and the United States – was not recovering, leaving their export markets in disarray and compelling China again to focus inward. As Xi Jinping increasingly flexed his nation’s muscles, and Donald Trump attacked to mobilize his supporters ahead of his re-election campaign in 2020, the potential for conflict loomed.

By the time Joe Biden became President in 2021, relations were already at a low point. The two presidents met in March that year, in Bali, and said nice things about each other and about working through various issues.¹⁴⁷ Since then, however, relations only worsened. Biden showed little interest in ending the Trump tariffs. Indeed, he significantly strengthened controls on technology exports to China. Xi Jinping’s warm embrace of Vladimir Putin, despite the latter’s invasion of Ukraine, really put China on the side of the bad guys. The military encounters in the South China Sea and the Straights of Taiwan only worsened, and the visit to Taiwan by Nancy Pelosi, U.S. Speaker of the House, really irritated China. America’s drug problem worsened, with deaths rising due to fentanyl (for which the base chemicals were manufactured in China), and finally, the Chinese spy balloon shot down over the USA in February 2023 had sunk relations to a low point.

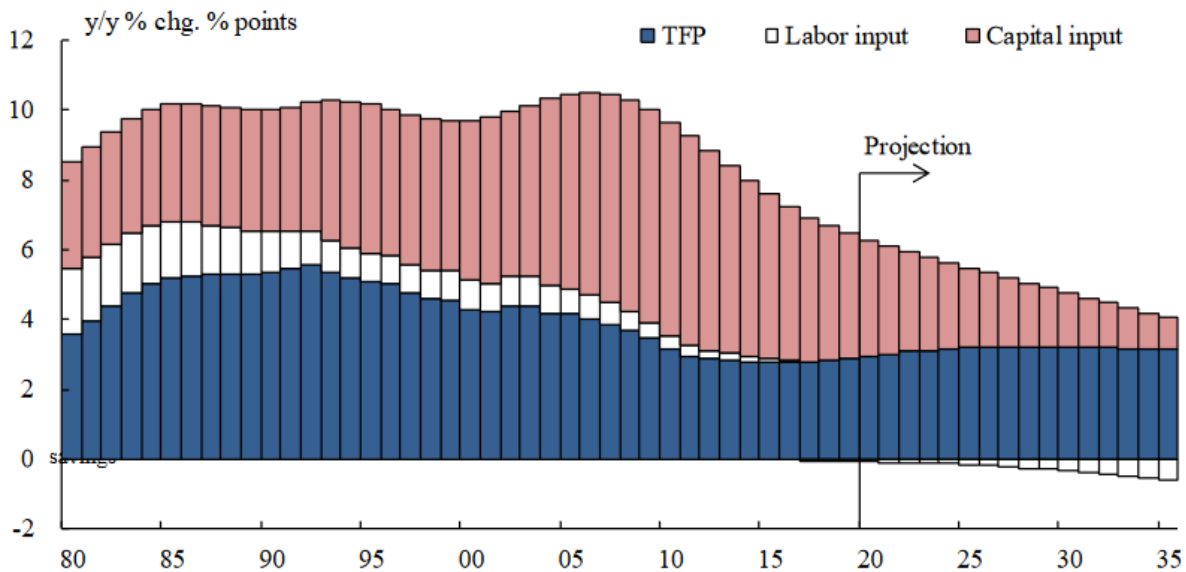
In June of 2023, the Chinese welcomed U.S. Secretary of State Antony Blinken for a two-day visit in an effort to reopen attenuated channels of communication. The theme of “responsibly managing competition” was central. Xi said that “China respects the interests of the United States and will not challenge or replace the United States....Similarly, the United States must also respect China and not harm China’s legitimate rights and interests.”¹⁴⁸

Would this be possible?

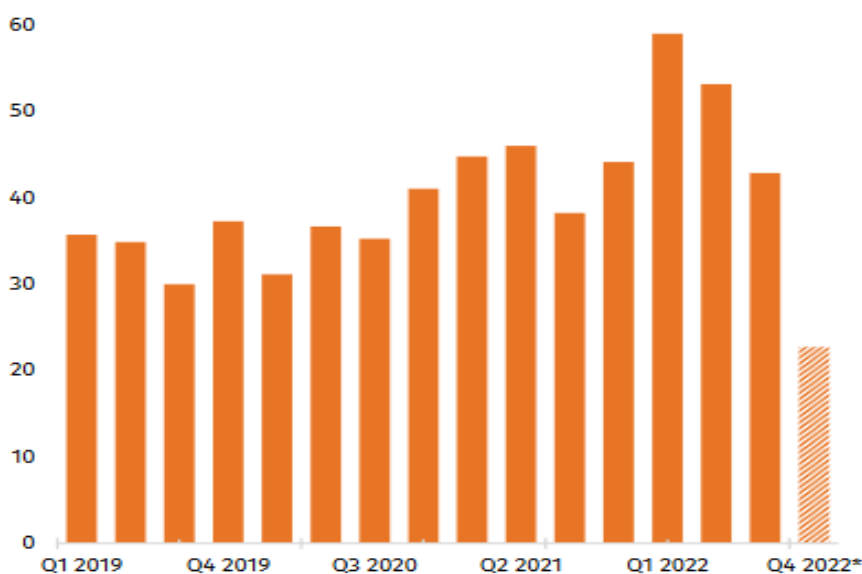
Exhibit 1 China's Economic Performance, 1997-2022

	1997	2001	2007	2010	2015	2016	2017	2018	2019	2020	2021	2022
Nominal GDP (USD, billions)	961	1339	3550	6087	11061	11233	12310	13894	14279	14687	17734	18160
Real GDP Growth (%)	9.24	8.34	14.23	10.64	7.04	6.85	6.95	6.75	5.95	2.24	8.11	3
GDP per capita (USD)	782	1053	2694	4550	8016	8094	8817	9905	10144	10409	12556	13001
GDP per capita, PPP (USD)	2267	3208	6819	9255	12898	13483	14244	15496	16652	17189	19338	21580
C/GDP	46	46	36	34	38	39	39	39	39	38	38	37.4
I/GDP	36	36	40	47	43	43	43	44	43	43	43	42.1
G/GDP	14	16	15	15	16	16	16	17	17	17	16	17
X/GDP	19	20	35	27	21	20	20	19	18	19	20	21
M/GDP	15	18	27	24	18	17	18	18	17	16	17	17.3
Agriculture (% of GDP)	18	14	10	9	8	8	7	7	7	8	7	7.4
Industry (% of GDP)	47	45	47	46	41	40	40	40	39	38	39	43.5
Services (% of GDP)	35	41	43	44	51	52	53	53	54	54	53	49.1
Population (millions)	1230	1271	1317	1337	1379	1387	1396	1402	1407	1411	1412	13997
Life Expectancy	71	73	75	76	77	77	77	78	78	78	78	78.6
Unemployment Rate (%)	3.1	3.6	4	4.1			3.9	4.93	5.15	5.61	5.11	5.6
Gini Coefficient				44	39	39	39	39	38			
Overall Fiscal Balance (% of GDP)	-0.73	-2.6	0.06	-0.36	-2.79	-3.7	-3.84	-4.65	-6.34	-11.39	-9.6	-8.74
Primary Fiscal Balance (% of GDP)	0.01	-1.87	0.45	0.09	-2.28	-3.02	-3.08	-3.85	-5.49	-10.42	-8.7	-7.78
Income share held by highest 10%				33	29	29	30	29	30			
Inflation Rate (% CPI)	2.79	0.72	4.82	3.18	1.44	2	1.59	2.07	2.9	2.42	0.98	1.97
Lending Interest Rate (%)	8.64	5.85	7.47	5.81	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Central Government Debt (% of GDP)												
Current Account Balance (% of GDP)	3.84	1.3	9.95	3.91	2.65	1.7	1.53	0.17	0.72	1.69	1.79	
Nominal Exchange Rate (LCU per USD)	8.29	8.28	7.61	6.77	6.23	6.64	6.76	6.62	6.91	6.9	6.45	6.74
Real Exchange Rate	93	97	89	100	130	124	120	122	121	124	127	126
Foreign Reserves (current USD, millions)	146448	220056	1546364	2913711	3405253	3097658	3235681	3168216	3222894	3357240	3427931	3306839
Nominal Exchange Rate (% Change)	-0.3	0	-4.6	-0.9	1.4	6.7	1.7	-2.1	4.4	-0.1	-6.5	4.5

Source: The World Bank, updated 7 June 2023.

Exhibit 2 Total Factor Productivity Growth Rate Necessary for future growth target

Source Bank of Japan Working Papers Series, Takatoshi Sasaki et al, “China’s Long Term Growth Potential: Can Productivity Convergence be Sustained?” No. 21-E-7, June 2021; https://www.boj.or.jp/en/research/wps_rev/wps_2021/data/wp21e07.pdf, using data from Penn World Table 10.0, United Nations, Haver Analytics, IMF, CEIC, Herd (2020).

Exhibit 3 China’s Capital Inflows, 2019-2022

Source: Rhodium Group, “Five Stories in China’s Economy,” January 2023, 12; https://cmr.rhg.com/wp-content/uploads/2023/01/5-Stories_Q4-2022_24Jan23_final.pdf, using MOFCOM utilized FDI data.

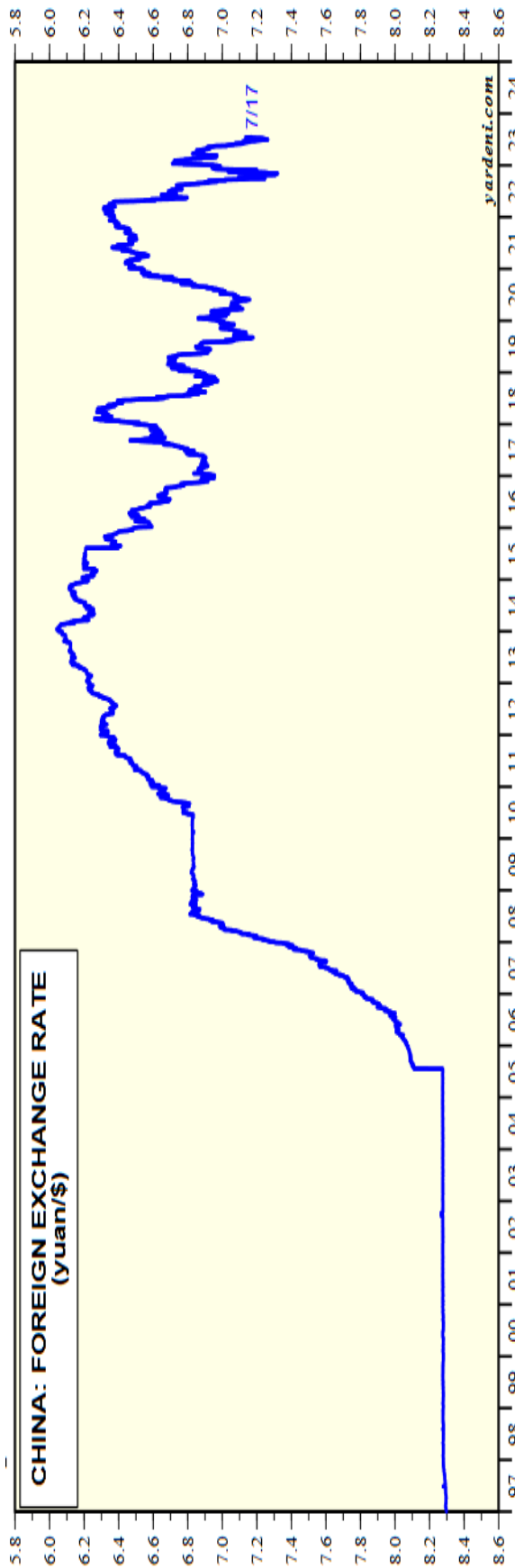
Note: Q4 2022 data only through November.

Exhibit 4 China's Balance of Payments (millions USD)

	1997	2001	2007	2010	2015	2016	2017	2018	2019	2020	2021	2022
Current Account Balance	36963	17401	353183	237810	293022	191337	188676	24131	102910	248836	352886	401855
Net Balance on Goods	13552	-22568	302846	238086	576191	488883	475941	380074	392993	511103	562706	668633
Exports of Goods	82983	118463	1122737	1478073	2142753	1989519	2216214	2417443	2386640	2510015	3215838	3346875
Imports of Goods	69431	141031	819891	1239986	1566562	1500636	1740272	2037369	1993647	1998912	2653132	2678242
Net Balance on Services	29272	50652	5190	-15063	-218320	-233146	-258932	-292168	-261149	-152530	-101212	-92303
Exports of Services	57550	90109	135320	178339	217399	208404	213064	233567	244359	228883	339393	368953
Imports of Services	28278	39457	130130	193401	435719	441550	471995	525735	505508	381414	440605	461256
Net Primary Income	-11005	-19175	8044	-25899	-52199	-54880	-16478	-61365	-39184	-118192	-124476	-193607
Primary Income Receipts	5710	9388	83476	142424	223816	226654	289698	268496	273514	245502	327316	190246
Primary Income Payments	16715	28563	75432	168324	276015	281533	306176	329861	312699	363695	451792	383853
Net Secondary Income	5144	8492	37102	40686	-12649	-9520	-11856	-2410	10250	8455	15868	19132
Capital Account	0	0	3099	4630	316	-344	-91	-569	-327	-76	94	-310
Financial Account	14820	12615	369519	189424	91521	-27555	-18011	-153806	-26596	89130	219873	314175
Net Foreign Direct Investment	-41674	-37357	-139095	-185750	-68099	41675	-27791	-92338	-50260	-99375	-165277	-30475
FDI Outbound (Assets)	3765	9696	17155	57954	174391	216424	138293	143027	136910	153721	178798	149692
FDI Inbound (Liabilities)	45439	47053	156249	243703	242489	174750	166084	235365	187170	253096	344075	180167
Net Portfolio Investments	-6943	19405	-16443	-24038	66470	52271	-29498	-106874	-57948	-95539	-51366	281113
Outbound (Assets)	899	20654	4522	7643	73209	102770	94803	53507	89419	151236	125262	173193
Inbound (Liabilities)	7842	1249	20965	31681	6739	50499	124301	160381	147366	246775	176628	-107920
Net Financial Derivatives	0				2087	5384	-354	6153	2355	10821	-10237	5812
Net Other Investments	27580	-16880	64405	-72446	434004	316741	-51894	20376	98545	245239	257240	-45422
Change in Reserves	35857	47447	460651	471659	-342941	-443625	91526	18877	-19288	27984	189513	103147
Errors and Omissions	-22143	-4786	13237	-53016	-201817	-218547	-206595	-177368	-129178	-159629	-133106	-87370
Total Reserves (USD)					3406111	3097845	3235895	3167993	3222932	3356529	3426908	3306530

Source: Created by casewriter using IMF BMP6 Methodology, updated on 7 Jun 2023.

Note: Millions of USD.

Exhibit 5a China's Foreign Exchange Rate

Source: Copyright © Yardeni Research, Inc. 2023, www.yardeni.com, with data from Morgan Stanley Capital International.; https://www.yardeni.com/pub/chinacb_bb.pdf, downloaded July 27, 2023.

Exhibit 5b Fiscal Balance and Domestic Credit

	1997	2001	2003	2007	2010	2012	2015	2016	2017	2018	2019	2020	2021	2022
Budget balance (% of GDP)	-0.73	-2.28	-2.14	0.57	-1.67	-1.63	-3.37	-3.8	-3.7	-4.1	-4.9	-9.72	-6.04	-7.54
Budget revenue (% of GDP)	10.85	14.81	15.80	19.04	20.44	21.93	28.13	28.5	28.9	28.4	29.2	29.7	26.6	25.46
Budget expenditure (% of GDP)	11.58	17.08	17.93	18.47	22.11	23.55	31.5	32.3	32.6	32.5	34.1	39.4	32.7	33
R&D expenditure (% of GDP)	0.64	0.95	1.13	1.38	1.73	1.93	2.06	2.10	2.12	2.14	2.24	2.41	2.44	2.56
Public debt (% of GDP)	7.62	26.93	26.6 ^a	19.32	16.61	34.4	39.9	41.5	54.8	56.6	60.4	70.1	71.8	82.4
Stock of domestic credit (% of GDP)	99.75	121.89	150.07	126.04	144.45	150.65	190.63%	214.40%	219.49%	230.1	249%	278%	282%	-----

Source: Created by casewriter using data from the Economist Intelligence Unit, accessed January 2018, and data from the OECD development indicators database, accessed May 25, 2016. 2015 figure for R&D is from <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>.

Exhibit 6 Provincial Debt-to-GDP Ratios, 2013

Source: MIT Center for Finance and Policy, Policy Brief, January 2016.

Exhibit 7 U.S.-China Goods Trade Balance, 2000-2022

US\$ billions



Source: U.S. Census, “Foreign Trade: Trade in Goods with China:” <https://www.census.gov/foreign-trade/balance/c5700.html>.

Exhibit 8 U.S. Trade with China – Exports and Imports 2022

Imports from China By Sector	China Commodity Trade 2022	US Exports to China by Sector
\$536,754,091,696	Total Value All Commodities	\$153,837,091,085
1.2%	Agriculture Products (Chapters 01-24)	23.1%
0.1%	Oils, Minerals, Lime, Cement (Chapters 25-27)	9.7%
12.0%	Chemicals, Plastics, Rubber, Leather Goods (Chapters 28-43)	19.5%
1.6%	Wood, Cork, Paper, Printed Books (Chapters 44-49)	2.9%
10.0%	Textiles, Footwear, Headgear (Chapters 50-67)	2.4%
1.7%	Stone, Glass, Metals, Pearls (Chapters 68-71)	2.3%
5.8%	Base Metals, Iron, Steel, Tools (Chapters 72-83)	3.0%
46.4%	Machinery & Mechanical Appliances (Chapters 84-85)	20.1%
3.7%	Transportation Equipment (Chapters 86-89)	8.4%
2.7%	Optical, Measuring, Medical, Other Instruments (Chapters 90-92)	7.1%
0.0%	Arms & Ammunition (Chapter 93)	0.0%
12.9%	Miscellaneous Manufactured Items (Chapters 94-96)	0.2%
0.0%	Art, Collectors' Pieces, Antiques (Chapter 97)	0.1%
1.0%	Special Classification Items (Chapter 98)	1.1%
0.8%	Temporary Legislation (Chapter 99)	0.0%

Source: U.S. Census Bureau USA Trade Portal April 24, 2023

Source: U.S. Department of Commerce, Bureau of Industry and Security, “U.S. Trade with China 2022; <https://www.bis.doc.gov/index.php/country-papers/3268-2022-statistical-analysis-of-u-s-trade-with-china/file>

Exhibit 9 China’s One Belt One Road Map

Source: U.S.-China Economic and Security Review Commission, 2015 Report to Congress, November 2015, p. 17.

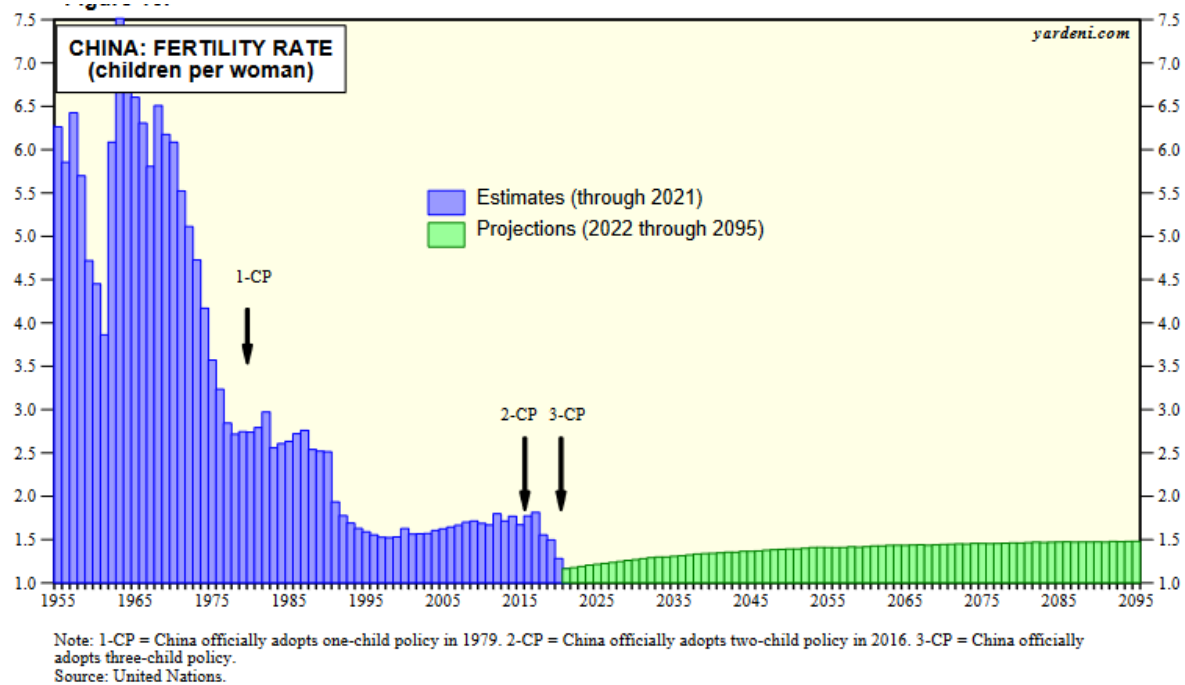
Exhibit 10 Gini Coefficient for China, 2003-2017

Source: NWCCW, NBS, UNICEF, *Children in China: An Atlas of Social Indicators*, 2018, <https://www.unicef.cn/en/figure-27-national-gini-index-20032017>.

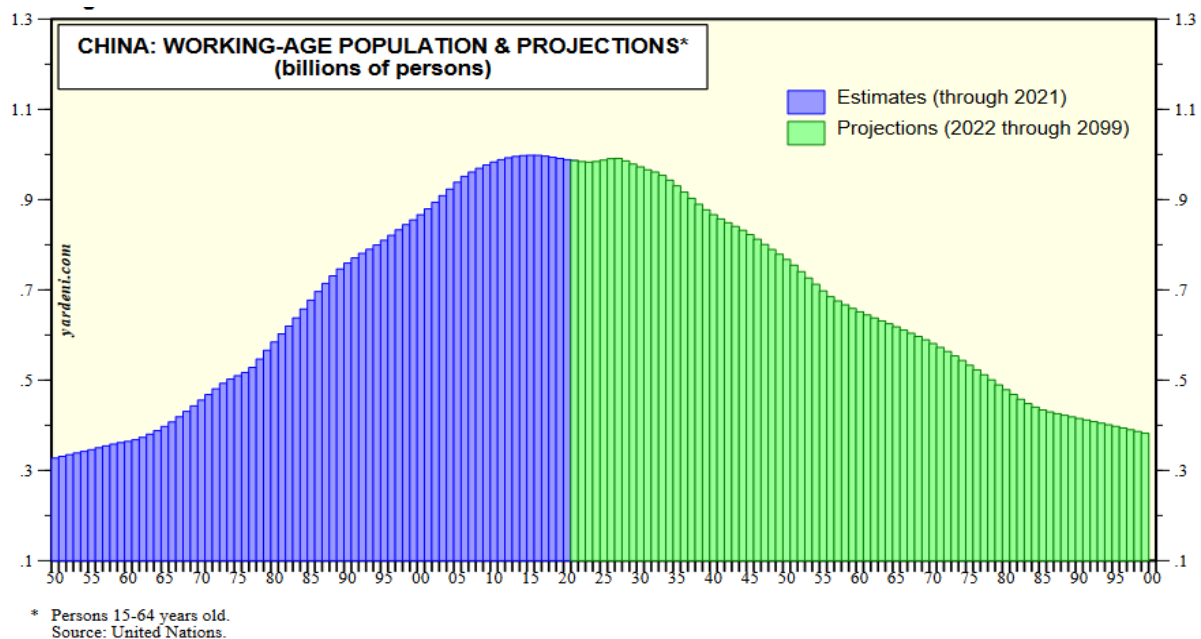
Exhibit 11 Qualifications for a Hukou

	County-level cities and other small towns (e.g. Dunhuang)	Population 500,000 to 1 million (e.g. Dandong)	Population 1 million to 5 million (e.g. Qingdao)	Population 5 million and above (e.g. Beijing)
Stable accommodation	✓	✓	✓	✓
Steady job		✓	✓	✓
Paid into local social security for minimum time		✓	✓	✓
Steady job for minimum time			✓	
Minimum continuous residency				✓
Other, unspecified requirements				✓

Source: “China’s Hukou Reform Plan Starts to Take Shape,” *The Wall Street Journal*, August 4, 2014.

Exhibit 12a China Fertility Rate

Source: Yardeni Research, Inc., Global Demography: China; Copyright © Yardeni Research, Inc. 2023, www.yardeni.com, created from United Nations data; <https://www.yardeni.com/pub/chinapop.pdf>; downloaded July 27, 2023.

Exhibit 12b China Working-age Population & Projections

Source: Yardeni Research, Inc., Global Demography: China; Copyright © Yardeni Research, Inc. 2023, www.yardeni.com, created from United Nations data; <https://www.yardeni.com/pub/chinapop.pdf>; downloaded July 27, 2023.

Exhibit 13a Outposts in the Spratly Islands

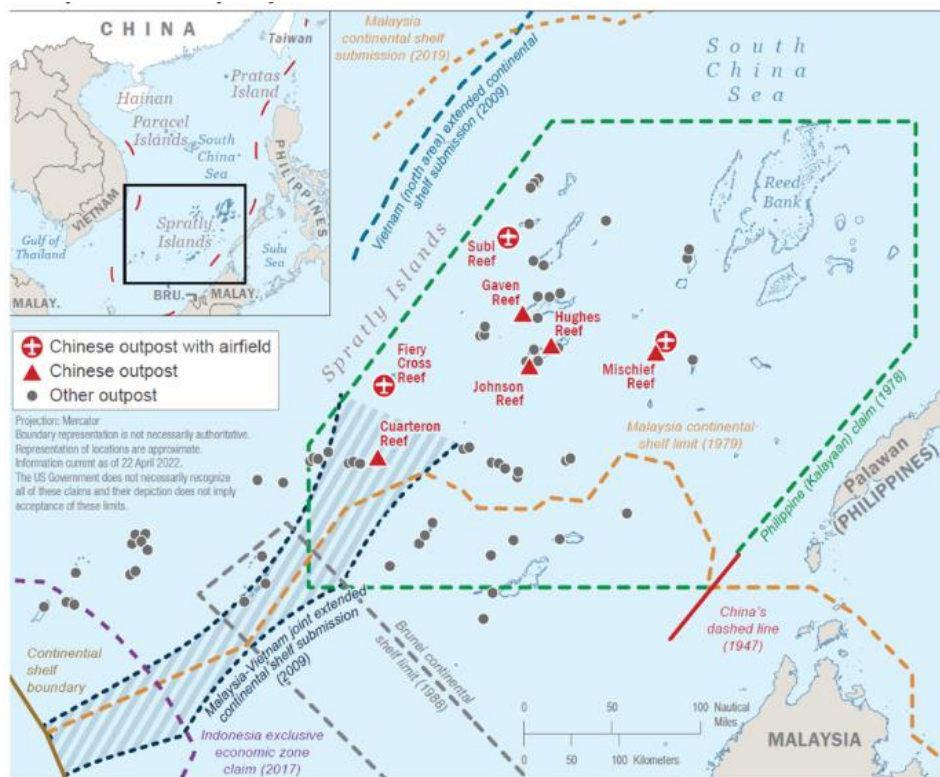
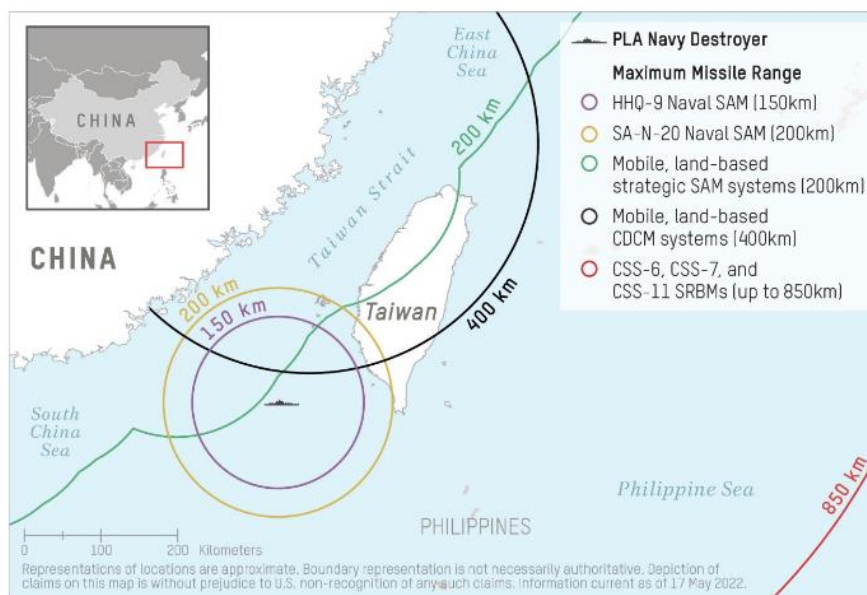


Exhibit 13b Taiwan Straits



Source: U.S. Department of Defense, "Annual Report to Congress, Military and Security Developments involving the People's Republic of China 2022," pp. 113,128.

Exhibit 14a Components and Characteristics of China’s Public Pension Scheme

Scheme	Basic Old Age Insurance system (BOAI)		Resident Pension (Unified in 2014)	
	Basic Old Age Insurance system (BOAI)	Public Employee Pension (PEP)	2011 Urban Resident Pension Scheme (URP)	2009 New Rural Resident Pension Scheme (NRP)
Establishment	Established in 1951; Current Practices Finalized in 1997	Established in 1953 ; Practices Finalized in 1978; Merged into BOAI in 2015		
Participants	Urban employees in enterprises	Urban employees in public sectors	Urban non-employed 16 years or above	Rural residents 16 years or above
Contribution	Pay-as-you-go: 20% of payroll (depending on locality)	Individual accounts: 8% of individual wage	No contribution required	Individual accounts: government subsidy +Individual contribution
Benefit	Social pooling: Minimum 15 years of contribution. 1-year accrual rate 1%; 35% based on 35 years of contribution	Individual accounts: Replacement ratio: 24.2% Total replacement ratio from both:59.2%	Average Replacement ratio: 80-90%	Basic Pension+ Individual account Pension
Mandatory	Yes	Yes	No	No

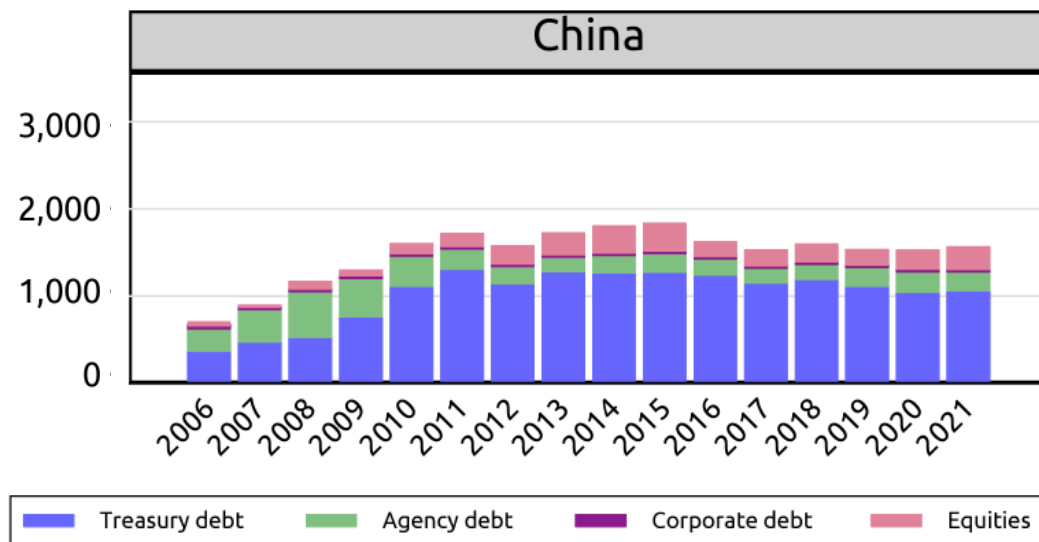
Source: Hamming Fang and Jin Feng, “The Chinese Pension System,” September 12, 2018; PRC WP2019-6, Pension Research Council Working Paper, Pension Research Council; The Wharton School, Philadelphia, PA.

Note: ROA stands for “return on assets.”

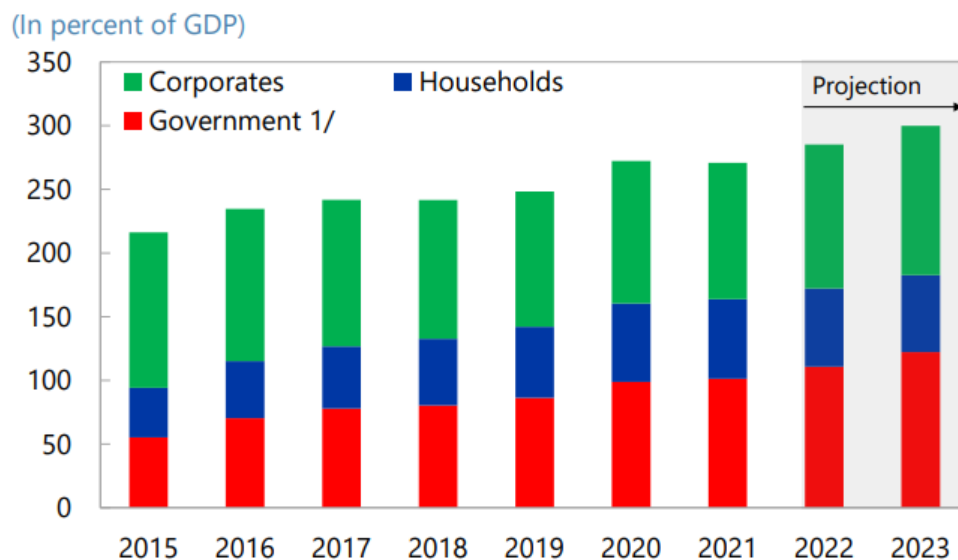
Exhibit 14b China’s Key Strategic Industries

Made in China 2025 (2015)	Strategic Emerging Industries (2010)	Strategic Industries (2006)	Heavyweight Industries (2006)
(1) Clean energy vehicles (2) Next-generation IT (3) Biotechnology (4) New materials (5) Aerospace (6) Ocean engineering and high-tech ships (7) Railway (8) Robotics (9) Power equipment (10) Agricultural machinery	(1) Clean energy technologies (2) Next-generation IT (3) Biotechnology (4) High-end equipment manufacturing (5) Alternative energy (6) New materials (7) Clean energy vehicles	(1) Armaments (2) Power generation and distribution (3) Oil and petrochemicals (4) Telecommunications (5) Coal (6) Civil aviation (7) Shipping	(1) Machinery (2) Automobiles (3) IT (4) Construction (5) Iron, steel, and non-ferrous metals

Source: U.S.-China Economic and Security Review Commission, 2015 Report to Congress, November 2015, p. 163.

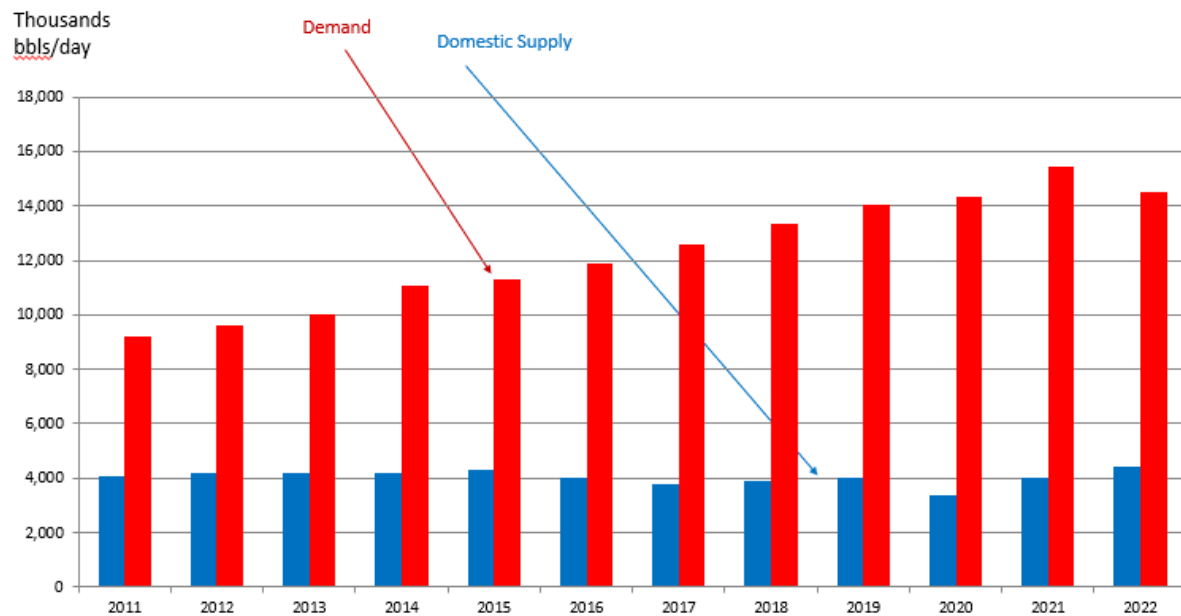
Exhibit 15 China Holding of U.S. Securities (billions USD), 2006-2021

Source: Department of the Treasury, Federal Reserve Bank of New York, *Foreign Portfolio Holdings of U.S. Securities*, June 30, 2021, 14; <https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/shla2021r.pdf>.

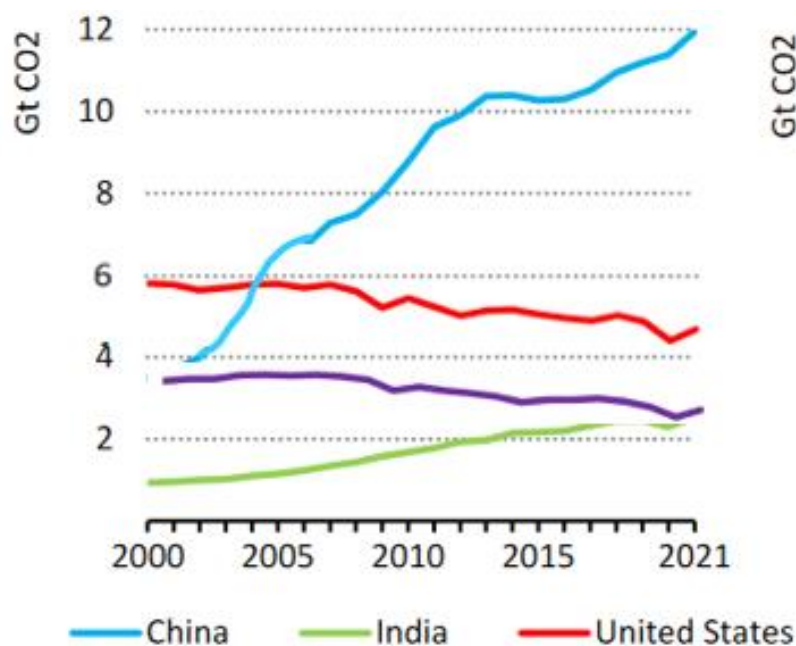
Exhibit 16 China’s Domestic Non-financial Sector Debt

Sources: Haver Analytics; CEIC Data Limited Company; and IMF staff estimates.
 1/ Government debt includes debt of central and local governments, government funds, and LGFVs.

Source: International Monetary Fund, *People’s Republic of China, 2022 Article IV Consultation*; Country Report No. 23/67, 39.

Exhibit 17 China’s Petroleum Balance

Source: Compiled by author from Statista, “Oil Industry in China – statistics & facts,” <https://www.statista.com/topics/9467/oil-industry-in-china/#topicOverview>.

Exhibit 18 CO₂ Emissions in Selected Countries, 2000-2021

Source: International Energy Agency, *Global Energy Review: CO₂ Emissions in 2021*, p.19, <https://iea.blob.core.windows.net/assets/c3086240-732b-4f6a-89d7-db01be018f5e/GlobalEnergyReviewCO2Emissionsin2021.pdf>. Licensed under [Creative Commons Attribution 4.0 International \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).

Endnotes

- ¹ Victor Nava, “China’s Xi Jinping blasts US for ‘suppression’ amid rising tensions,” *New York Post*, March 6, 2023.
- ² John Hopkins Coronavirus Resource Center, “COVID-19 Dashboard, 3/10/2023;
<https://coronavirus.jhu.edu/map.html>
- ³ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 101; and ‘Historic Figures: Mao Zedong (1893-1976)’, BBC.
- ⁴ Barry Naughton, *The Chinese Economy: Transitions and Growth* (MIT Press, 2006), p. 274.
- ⁵ Nicholas Lardy, *Markets over Mao: the Rise of Private Business in China* (Institute for International Economics, U.S., 2014), p. 14.
- ⁶ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010 (Boston: Harvard Business School Publishing), revised March 6, 2012.
- ⁷ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012; and Barry Naughton, *The Chinese Economy: Transitions and Growth* (MIT Press, 2006), p. 389.
- ⁸ Shaoguang Wang, ‘China’s 1994 Fiscal Reform: An Initial Assessment’, *Asian Survey* 37, No. 9, September 1997, pp. 801-817; and Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ⁹ Daniel H. Rosen and Beibei Bao, ‘China’s Fiscal and Tax Reforms: A Critical Move on the Chessboard’, Rhodium Group, July 11, 2014.
- ¹⁰ Lee Branstetter and Nicholas Lardy, ‘China’s Embrace of Globalization’, NBER Working Paper 12373, July 2006.
- ¹¹ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ¹² Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ¹³ OECD/EUIPO (2016), *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact* (Paris: OECD Publishing), <http://dx.doi.org/10.1787/9789264252653-en>.
- ¹⁴ Scott Kennedy and Christopher K. Johnson, ‘Perfecting China, Inc. The 13th Five-Year Plan’, the Center for Strategic and International Studies, May 2016.
- ¹⁵ Dani Rodrik, ‘What’s so special about China’s exports?’ *China & World Economy* 14, No. 5, 2006, Institute of World Economics and Politics, Chinese Academy of Social Sciences, pp. 1-19.
- ¹⁶ Aaron Back, ‘Why China’s Hefty Trade Surplus Is Dwarfed by Outflows’, *The Wall Street Journal*, January 13, 2016.
- ¹⁷ Aaron Back, ‘Why China’s Hefty Trade Surplus Is Dwarfed by Outflows’, *The Wall Street Journal*, January 13, 2016.
- ¹⁸ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ¹⁹ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ²⁰ Meg Rithmire, ‘The Chongqing Model and the Future of China’, HBS No. 713-028 (Boston: Harvard Business School Publishing), revised July 12, 2013.
- ²¹ Eswar S. Prasad, ‘China’s Efforts to Expand the International Use of the Renminbi’, U.S.-China Economic and Security Review Commission, February 4, 2016.
- ²² Eswar S. Prasad, ‘China’s Efforts to Expand the International Use of the Renminbi’, U.S.-China Economic and Security Review Commission, February 4, 2016, p. 10.
- ²³ Eswar S. Prasad, ‘China’s Efforts to Expand the International Use of the Renminbi’, U.S.-China Economic and Security Review Commission, February 4, 2016, p. 10.
- ²⁴ Eswar S. Prasad, ‘China’s Efforts to Expand the International Use of the Renminbi’, U.S.-China Economic and Security Review Commission, February 4, 2016, p. 14.
- ²⁵ Arjan de Haan, ‘The Financial Crisis and China’s “Harmonious Society”’, *Journal of Current Chinese Affairs* 39, No. 2 (January 2010): 70-99.

- ²⁶ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ²⁷ Arjan de Haan, ‘The Financial Crisis and China’s “Harmonious Society”’, *Journal of Current Chinese Affairs* 39, No. 2 (January 2010): 70-99.
- ²⁸ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 7.
- ²⁹ ‘The Long Arm of the State’, *The Economist*, June 23, 2011.
- ³⁰ Carl Riskin, *China’s Political Economy: the Quest for Development Since 1949* (Oxford University Press, May 28, 1987), p. 199.
- ³¹ ‘China’s Rise’, Peterson Institute for International Economics, September 2008, pp. 105-136.
- ³² Robert Lawrence Kuhn, ‘Xi Jinping’s Chinese Dream’, *The New York Times*, June 4, 2013.
- ³³ Evan Osnos, ‘Born Red’, *The New Yorker*, April 6, 2015.
- ³⁴ Xi Jinping’s Report at the 19th CPC National Congress, *China Daily*, October 18, 2017, http://www.chinadaily.com.cn/china/19thcpnationalcongress/2017-11/04/content_34115212.htm.
- ³⁵ Jonathan Fenby, ‘What the West should know about Xi Jinping, China’s most powerful leader since Mao’, *The New Statesman*, June 23, 2015.
- ³⁶ USCC 2015 Annual Report, U.S.-China Economic and Security Review Commission, November 2015, chapter 2.
- ³⁷ Zhiqun Zhu, ‘China’s AIIB and OBOR: Ambitions and Challenges’, *The Diplomat*, October 9, 2015.
- ³⁸ Evan Osnos, ‘Born Red’, *The New Yorker*, April 6, 2015.
- ³⁹ Steven Jiang, ‘China’s Xi Jinping: Reformer in Disguise?’ CNN, April 24, 2016.
- ⁴⁰ BBC News, ‘China’s Xi allowed to remain ‘president for life’ as term limits removed,’ March 11, 2018; <https://www.bbc.com/news/world-asia-china-43361276>.
- ⁴¹ James Palmer, *Foreign Affairs China Brief*, ‘China’s Economic Downturn,’ June 20, 2023;
- ⁴² World Bank, ‘Ae dependency Ratio – China,’ <https://data.worldbank.org/indicator/SP.POP.DPND.OL?locations=CN>.
- ⁴³ ‘The most surprising demographic crisis’, *The Economist*, May 5, 2011; and the CIA Factbook.
- ⁴⁴ Tom Phillips, ‘China ends one-child policy after 35 years’, *The Guardian*, October 29, 2015; and ‘China’s 13th Five-Year Plan, the Report’, Bloomberg Brief, November 10, 2015.
- ⁴⁵ Morgan Winsor, ‘China’s One-Child Policy Change Will Take Decades To Relieve Economic Pressures Of Aging Population, Experts Say’, *International Business Times*, October 29, 2015.
- ⁴⁶ ‘China’s One-Child Policy Backfires as Labor Pool Shrinks Again’, *Bloomberg*, January 20, 2015.
- ⁴⁷ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 78.
- ⁴⁸ ‘China income inequality among world’s worst’, *The Financial Times*, January 14, 2016.
- ⁴⁹ Hai Zhong, ‘The impact of population aging on income inequality in developing countries: evidence from China’, *China Economic Review* 22 (2011): 98-107; and ‘China income inequality among world’s worst’, *The Financial Times*, January 14, 2016.
- ⁵⁰ ‘China in Focus: Lessons and Challenges’, OECD, 2012.
- ⁵¹ David A. Lipton, ‘Preparing the Ground’, *Finance and Development* 53, No. 1, March 2016.
- ⁵² ‘China’s One-Child Policy Backfires as Labor Pool Shrinks Again’, *Bloomberg*, January 20, 2015; and Chun Han Wong, ‘China Labor Ties Fray as Grievances Rise, Economic Growth Slows’, *The Wall Street Journal*, February 9, 2015.
- ⁵³ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 63.
- ⁵⁴ ‘Up on the farm’, *The Economist*, May 14, 2016.
- ⁵⁵ Statista, ‘Annual per capita disposable income of rural and urban households in China from 1990 to 2018,’ <https://www.statista.com/statistics/259451/annual-per-capita-disposable-income-of-rural-and-urban-households-in-china/>.

- ⁵⁶ 2015 Article IV Consultation (China), the International Monetary Fund, August 2015.
- ⁵⁷ 2015 Article IV Consultation (China), the International Monetary Fund, August 2015, p. 49.
- ⁵⁸ National Bureau of Statistics of China, « Household Income and Expenditure in 2019 ; http://www.stats.gov.cn/english/PressRelease/202001/t20200119_1723719.html.
- ⁵⁹ ‘The rural-urban divide: ending apartheid’, *The Economist*, April 19, 2014.
- ⁶⁰ U.S.-China Economic and Security Review Commission Staff Research Backgrounder, ‘Third Plenum Economic Reform Proposals: A Scorecard’, November 19, 2013.
- ⁶¹ United Nations, Interagency Group for Child Mortality Estimation, September 2018, <https://childmortality.org/?r=site/map>.
- ⁶² ‘The rural-urban divide: ending apartheid’, *The Economist*, April 19, 2014.
- ⁶³ Gabe Collins and Andrew Erickson, ‘China’s Public Hospital Governance Reforms are Setting the Stage for Corporatization’, *China Signpost*, January 26, 2015.
- ⁶⁴ ‘The cost of medicine: physician, heal thyself’, *The Economist*, January 30, 2014.
- ⁶⁵ ‘The rural-urban divide: ending apartheid’, *The Economist*, April 19, 2014.
- ⁶⁶ Michael Woodhead, ‘How much does it cost to go to the doctor in China?’ *China Medical News*, April 14, 2015.
- ⁶⁷ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, April 2016.
- ⁶⁸ ‘China’s Health Care Reforms’, *The Diplomat*, May 25, 2015.
- ⁶⁹ Tao Liu and Li Sun, ‘Pension Reform in China’, *Journal of Aging & Social Policy* 28, No. 1, 2016.
- ⁷⁰ Tao Liu and Li Sun, ‘Pension Reform in China’, *Journal of Aging & Social Policy* 28, No. 1, 2016.
- ⁷¹ Tao Liu and Li Sun, ‘Pension Reform in China’, *Journal of Aging & Social Policy* 28, No. 1, 2016.
- ⁷² ‘China Pension Reform Targets Civil Servant Privileges’, *The Financial Times*, January 15, 2015.
- ⁷³ CREA, “Global Energy Monitor, Briefing, February 2022; https://energyandcleanair.org/wp/wp-content/uploads/2022/02/EN-China-coal-and-steel-briefing-Feb_2022.pdf
- ⁷⁴ ‘China: International Energy Data and Analysis’, U.S. Energy Information Association, May 14, 2015.
- ⁷⁵ Clifford Krauss, ‘China’s Hunger for Commodities Wanes, and Pain Spreads Among Producers’, *The New York Times*, January 9, 2016.
- ⁷⁶ ‘China: International Energy Data and Analysis’, U.S. Energy Information Association, May 14, 2015.
- ⁷⁷ ‘Subsidies to Coal Production in China, GSI report’, International Institute for Sustainable Development, December 2015.
- ⁷⁸ ‘60% of China’s underground water “not fit for human contact” – Beijing’, RT, June 5, 2014, <https://www.rt.com/news/265186-china-water-air-pollution/>.
- ⁷⁹ ‘China’s Environment’, Goldman Sachs, July 2015.
- ⁸⁰ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 90.
- ⁸¹ ‘Air pollution in China is killing 4,000 people every day, a new study finds’, *The Guardian*, August 13, 2015.
- ⁸² David Shambaugh, *China’s Future?* (Polity Press, 2016), pp. 89, 91.
- ⁸³ David Shambaugh, *China’s Future?* (Polity Press, 2016), pp. 91, 92.
- ⁸⁴ ‘The 13th Five-Year Plan: Xi Jinping Reiterates his vision for China’, APCO Worldwide.
- ⁸⁵ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, January 6, 2016.
- ⁸⁶ U.S.-China Economic and Security Review Commission Staff Research Backgrounder, ‘Third Plenum Economic Reform Proposals: A Scorecard’, November 19, 2013.

- ⁸⁷ Yuan Yang, ‘China to shed 1.8m coal and steel jobs’, *The Financial Times*, February 29, 2016.
- ⁸⁸ Zachary Davies Boren, ‘China Stops Building New Coal-fired Power Plants’, *Greenpeace*, March 24, 2016.
- ⁸⁹ Jamil Anderlini, ‘China corruption purge snares 115 SOE “tigers”’, *The Financial Times*, May 18, 2015.
- ⁹⁰ CREA, “Global Energy Monitor, Briefing, February 2022; https://energyandcleanair.org/wp/wp-content/uploads/2022/02/EN-China-coal-and-steel-briefing-Feb_2022.pdf
- ⁹¹ ‘Update on Overseas Investments by China’s National Oil Companies: Achievements and Challenges since 2011’, International Energy Agency, 2014.
- ⁹² Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ⁹³ ‘Update on Overseas Investments by China’s National Oil Companies: Achievements and Challenges since 2011’, International Energy Agency, 2014.
- ⁹⁴ Christopher Alessi and Beina Xu, ‘China in Africa’, Council on Foreign Relations, April 27, 2015.
- ⁹⁵ Christopher Alessi and Beina Xu, ‘China in Africa’, Council on Foreign Relations, April 27, 2015.
- ⁹⁶ ‘China and Brazil confirm trade and investment deals worth billions’, *The Guardian*, May 19, 2015; and ‘China agrees to invest \$20bn in Venezuela to help offset effects of oil price slump’, *The Guardian*, January 8, 2015.
- ⁹⁷ ‘China’s Growing Ties with ASEAN Opens up New Opportunities for Foreign Investment’, China Briefing: Business Intelligence from Dezan Shira & Associates, August 7, 2015.
- ⁹⁸ Diego Comin and Richard H.K. Vietor, ‘China “Unbalanced”’, HBS No. 711-010, revised March 6, 2012.
- ⁹⁹ ‘Why Is The U.S. Desperate To OK Slavery In Malaysia?’, *The Huffington Post*, May 27, 2015.
- ¹⁰⁰ Jian Zhang, ‘China’s new foreign policy under Xi Jinping: towards “Peaceful Rise 2.0”’, *Global Change, Peace & Security* (formerly *Pacifica Review: Peace, Security & Global Change*), 2015, DOI: 10.1080/14781158.2015.993958.
- ¹⁰¹ Jane Perlez, “Tribunal Rejects Beijing’s Claims in South China Sea,” *New York Times*, July 12, 2016; <https://www.nytimes.com/2016/07/13/world/asia/south-china-sea-hague-ruling-philippines.html>.
- ¹⁰² ‘China’s Maritime Disputes’, The Council on Foreign Relations, May 27, 2016.
- ¹⁰³ Henry Kissinger, *On China*, 2nd edition (Penguin Press, 2011), p. 546.
- ¹⁰⁴ ‘Defense Policy’, Ministry of National Defense of the People’s Republic of China, accessed April 2016.
- ¹⁰⁵ China Power, CSIS.Org, “What Does China Really Spend on Its Military;” <https://chinapower.csis.org/military-spending/>
- ¹⁰⁶ John West, ‘China’s Japan-Bashing’, *The Globalist*, September 23, 2015.
- ¹⁰⁷ ‘China military revamp risks upsetting global balance of power’, *The Australian*, April 26, 2016.
- ¹⁰⁸ ‘China Submarine Capabilities’, Nuclear Threat Initiative, July 30, 2015.
- ¹⁰⁹ Nicholas Lardy, *Markets over Mao: the Rise of Private Business in China* (2014), pp. 3, 4.
- ¹¹⁰ ‘China: Reform unlocks the value of state-owned enterprises’, *Market Bulletin*, March 30, 2015, JPMorgan Chase and Co.; and Gabriel Wildau, ‘China cautiously embraces privatisation of state-owned enterprises’, *The Financial Times*, September 25, 2015.
- ¹¹¹ Eve Cary, ‘Reforming China’s State-Owned Enterprises’, *The Diplomat*, June 19, 2013.
- ¹¹² Joel Backaler, Testimony before the U.S.-China Economic and Security Review Commission, Hearing on U.S.-China Economic Challenges: Panel III: Chinese State-Owned Enterprises and Non-Market Economics – Competitive Challenges, February 21, 2014.
- ¹¹³ Nicholas Lardy, *Markets over Mao: the Rise of Private Business in China* (2014), p. 54.
- ¹¹⁴ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, April 2016.

- ¹¹⁵ U.S.-China Economic and Security Review Commission Staff Research Backgrounder, ‘Third Plenum Economic Reform Proposals: A Scorecard’, November 19, 2013.
- ¹¹⁶ ‘Beijing to end price controls for most products’, *The South China Morning Post*, May 8, 2015.
- ¹¹⁷ David Shambaugh, *China Goes Global* (Oxford University Press, 2013), p. 13; and Presentation by Jin Canrong at the New Zealand Institute of International Affairs, June 28, 2010.
- ¹¹⁸ ‘China Is Still Risky for Foreign Businesses – but the Rewards Are Too Great to Ignore’, *The Atlantic*, July 31, 2013.
- ¹¹⁹ ‘China’s Drive for “Indigenous Innovation” – A Web of Industrial Policies’, U.S. Chamber of Commerce, July 27, 2010.
- ¹²⁰ Steve Brachmann, ‘Chinese support of indigenous innovation is problematic for foreign IP owners’, IP Watchdog, April 9, 2015.
- ¹²¹ Oded Shenkar, Testimony before the U.S.-China Economic and Security Review Commission, Hearing on the Foreign Investment Climate in China, January 28, 2015.
- ¹²² Edward Wong, ‘Survey of Foreign Companies in China Finds Pollution a Growing Problem’, *The New York Times*, February 11, 2015.
- ¹²³ 2015 Report to Congress: Executive Summary and Recommendations, the U.S.-China Economic and Security Review Commission, November 2015.
- ¹²⁴ United Nations Development Programme, “China’s 14th Five-year Plan,” July 2021;
<https://www.undp.org/sites/g/files/zskgke326/files/migration/cn/UNDP-CN-v2Issue-brief-9--14th-5-year-plan.pdf>
- ¹²⁵ ‘China Trying to Allay Global Concerns About Its Currency Regime’, *The Wall Street Journal*, January 21, 2016.
- ¹²⁶ ‘China Foreign-Exchange Reserves Fall at Slower Pace’, *The Wall Street Journal*, March 7, 2016.
- ¹²⁷ ‘A Rare Look Inside China’s Central Bank Shows Slackening Resolve to Revamp Yuan’, *The Wall Street Journal*, May 23, 2016.
- ¹²⁸ Richard Dobbs, Susan Lund, Jonathan Woetzel, and Mina Mutaftchieva, ‘Debt and (not much) Deleveraging’, McKinsey Global Institute, February 2015.
- ¹²⁹ Richard Dobbs, Susan Lund, Jonathan Woetzel, and Mina Mutaftchieva, ‘Debt and (not much) Deleveraging’, McKinsey Global Institute, February 2015.
- ¹³⁰ Richard Dobbs, Susan Lund, Jonathan Woetzel, and Mina Mutaftchieva, ‘Debt and (not much) Deleveraging’, McKinsey Global Institute, February 2015.
- ¹³¹ ‘China’s CITIC Sec says wealth management product in danger of default’, Reuters, February 10, 2015.
- ¹³² Richard Dobbs, Susan Lund, Jonathan Woetzel, and Mina Mutaftchieva, ‘Debt and (not much) Deleveraging’, McKinsey Global Institute, February 2015; and Sarah Hsu, ‘The Rise and Fall of Shadow Banking in China’, *The Diplomat*, November 19, 2015.
- ¹³³ PWC, “The Chinese NPL market in 2020;” www.pwccn.com/.../the-chinese-npl-market-in-2020.pd.
- ¹³⁴ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, April 2016.
- ¹³⁵ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, April 2016.
- ¹³⁶ U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, April 2016.
- ¹³⁷ ‘Xi Jinping, Supply Sider?’ *The Wall Street Journal*, January 11, 2016.
- ¹³⁸ David Shambaugh, *China’s Future?* (Polity Press, 2016), p. 34.
- ¹³⁹ Kaiji Chen and Yi Wen, ‘The Great Housing Boom of China’, Research Division, the Federal Reserve Bank of St. Louis Working Paper 2014-022B, August 2014.
- ¹⁴⁰ Wade Shepard, ‘The Real Reasons The Chinese Love Throwing Money Into The Housing Market’, *Forbes*, March 29, 2016.

¹⁴¹ ‘China’s zombie war: can Xi Jinping win the battle to eradicate industrial overcapacity?’ *The South China Morning Post*, December 15, 2015.

¹⁴² USCC 2015 Annual Report, U.S.-China Economic and Security Review Commission, November 2015, chapter 1, section 3.

¹⁴³ ‘China Ahead of the 13th Five-Year Plan: Competitiveness and Market Reform’, hearing before the U.S.-China Economic and Security Review Commission, April 22, 2015.

¹⁴⁴ “Trump: We Can’t Allow China to ‘Rape Our Country.’” *NBC News*, accessed February 2019; <https://www.nbcnews.com/news/us-news/trump-we-can-t-allow-china-rape-our-country-n565766>.

¹⁴⁵ CBS, “China using Widespread forced birth control on Uighurs and other minorities, AP finds,” June 29,, 2020; <https://www.cbsnews.com/news/china-uighur-muslims-forced-birth-control-demographic-genocide-experts-tell-ap/>.

¹⁴⁶ “Trump signs bill for sanctions on China officials over Uighurs,” *Aljazeera*, June 17, 2020; <https://www.aljazeera.com/news/2020/06/trump-signs-bill-sanctions-chinese-treatment-uighurs-200617205702511.html>.

¹⁴⁷ The White House, “Readout of President Joe Biden’s Meeting with President Xi Jinping of the People’s Republic of China,” November 14, 2022; <https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/14/readout-of-president-joe-bidens-meeting-with-president-xi-jinping-of-the-peoples-republic-of-china/>

¹⁴⁸ *Foreign Policy*, China - US Focus, “A ‘Thaw’ In Frigid U.S.-China Relations: But for How Long?” June 23, 2023; A “Thaw” in Frigid U.S.-China Relations: But for How Long? - David Shambaugh - CHINA US Focus