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CHINA'S RISE AS ECONOMIC & STRATEGIC POWER GAUTAM SEN

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Spreading Awareness Building Capapcity Promoting Resilience



CHINA'S RISE AS ECONOMIC & STRATEGIC POWER:

GAUTAM SEN

Emeritus Professor, Perspective Policy Foundation

I believe the single, great challenge of our age is the rise of China and its impact on the current international order.... and President Xi Jinping is very much a man in a hurry.

Kevin Rudd, Former Prime Minister of Australia 2013

Special Note from the Author

I have extensively reproduced the contents of Congressional Research Services Report 2010, written by Wayne M Morrison, "China's Economic Rise, History, Trends, Challenges, and Implications for the United States". While doing so, I have examined every reference and restructured them as footnotes (and not endnotes) as they were in the original report.

The future readers and researchers will hence have an authenticated script as a referral piece for their own research.

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Preface

I have an immense pleasure in presenting our readers the latest PPF Working Paper on 'China's Rise as Economic and Strategic Power.' This is the last of a series of working papers on various aspect of China's spectacular growth during the last few decades. Author Gautam Sen, Professor Emeritus, PPF brings his remarkable analytic power and encyclopaedic knowledge to show in bold relief a story of an almost audacious growth with its strengths and vulnerabilities of China, the neighbour of India.

The working paper cited above deals with the growth of China as an Economic as well as strategic power. Usually, a nation aspiring for global power status promotes responsible behaviour and avoid unpredictable impulsive responses by the nations in dealing with each other. Multifaceted growth of China delights India. It in fact one of the largest trade partners.

China has, of late, been adopting strange approaches that disturbed the decades long peace and quiet at the border with India.

While admiring the nature of growth, it is noteworthy that there are areas of concern for China as it surges ahead. Some challenges are internal like environmental and demographic and persisting inequality etc., while there are others that emanate as it expands its role and influence globally. The conflicts and war between are undergoing transformation both in form and its origin – rendering both 'why' and 'how' of it more complex and often intractable.

The series of working papers in general and this one particularly will provide the raw material for a full-fledged publication later this year from Prof Sen to meet a felt need of the strategic community in India.

India must chart a course after due considerations to safeguard its interest by engaging China on her own terms. The author suggests 'securitisation' of communication, health, education, defence production and even hospitality and tourism. His suggestions need due attention by the scholars.

P C Haldar

President
Policy Perspectives Foundation

NOTES

INTRODUCTION

The spectacular rise of China is of global concern geo-strategically, impact on the International Political Economy and even on global power equation. The Chinese financial investments under the Belt and Route program have already started making nation states fall in debt traps. Chinese deployment of skilled manpower around the world has reached an alarming level. Hence it will be folly to underestimate China's political leadership and their ambitions to make China great again and reinstate the validity of the "Middle Kingdom" as the centre piece of their strategic outlook with a view to replacing Russia and become the second superpower. Apart from economic, technological, infrastructural, and international outreach strategy to dominate the countries in South and Southeast Asia, Africa and the Middle East, AI is a central driver in the calculus of power for President Xi to achieve the world status of a superpower. China is well ahead to compete for if not the poor second position but certainly the third most advanced country in manned space programs, deep space related research, quantum communication, maritime technology, aviation industry and is simultaneously developing a "Think Tank" culture to develop the required soft power in international diplomacy but also employ the best of her manpower for providing policy oriented documents and facilitate the Chinese leadership to formulate her strategic and global policies to achieve her ultimate aim as stated above. Today China has 1413 think tanks with US having 2203 think tanks and India with 612 think tanks at the third spot².

China has in the past two decades undoubtedly emerged as the "full spectrum peer competitor of the US in commercial and national security applications of AI". China has developed the technology of the AI to maintain a complete surveillance of her citizens in a way that the political leadership can have full control to thwart any possible dissent. The use of such a technology can have enormous risks on human rights, freedom of speech and ultimately create a nation state to be led by political masters acquiring dictatorial powers of an unprecedented nature and convert the country from merely being a communist country to that of a closed totalitarian state. However, it will be useful at this stage to record that Cyber at this point of time is highly overrated in the arena of deterrence theory. It will be quite an achievement to find its place theoretically. As of today, whether the application of AI in cyber domain can possibly be crystal gazed about the umbilical relationship between deterrence and cyber capability.

The COVID-19 crisis which spread globally and has been attributed to China's irresponsible behaviour to kick start a global pandemic. The ruthless means adopted by China to contain the pandemic and ability to keep the death causality figures under a vail of secrecy and achieving a positive GDP growth rate as compared to the worldwide down plunge of the GDP can be seen as a remarkable achievement. Graham Allison ...writes:

"The implications of China's rise are still being absorbed in multiple domains, in trade, technology and geopolitics. But the most significant impact may be in how China's Communist Party-led government is changing global governance more in its own image rather than the other way around. COVID-19 has helped reinforce this trend in the short term. After the initial disastrous cover-up of

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¹ See James G. McGann, 2020 Global Go To Think Tank Index Report

² Ibid

³ See Graham Allison in his latest paper from Harvard University.

the outbreak of the virus in Wuhan, the Chinese party-state's unparalleled, and unchallenged, state capacity has driven infection rates down. With little debate, the government was able to lockdown hundreds of millions of people in their homes, seal internal and international borders, shut factories while commandeering the output of some businesses to supply medical equipment, mobilize the military, build hospitals and track the movements of citizens through mobile phone apps. Many governments have looked on with envy at this display of state capacity, even if a number of democracies have been successful in corralling rising infections without wielding authoritarian powers. The crisis has also been a reminder of China's dominance of supply chains for essential medical supplies, like protective masks and pharmaceutical ingredients, leaving even advanced democracies exposed. As a result, the kinds of political ideas which had struggled to find an audience in the U.S., including advanced industrial policy and the need to protect and nurture strategic sectors, are making a comeback, largely to compete against similar policies in China. But it's the intensifying tech war with the West, particularly the U.S., that has, paradoxically, really underscored Beijing's far-reaching influence."

China has also taken full advantage of her population dividend, her size, and her ability to collect data on every aspect by fair, unfair or in-ethical ways. This will pose a serious threat to modus operandi in the realm of digitised information and its impact on business and strategic affairs at global levels. It is almost clear that for China to achieve the status, her actions will indicate that it is ends which matter and not the means. This can be illustrated by the military actions that China has been pursuing since 2019 Doklam incidence followed by the Galwan situation in Eastern Ladakh. By taking advantage of the LAC paradigm whose maintenance is based on interpretation by the local military commanders positioned on ground, China has acted in the most inappropriate way. This will affect the geostrategic and geopolitical paradigm between the India and China as never before. The Indian political structure and leadership has undergone significant change in post 2014 period. Significant paradigm shift has taken place in India's strategic thinking which has resulted in the beginning of a new strategic culture to contain China in her military endeavours in the Sino Indian border stretching 3,488 Km across the Himalayan ranges from Ladakh to the Northeast⁴. China is poised for adventurism against India at a time when India presently is

⁴ Details of Indian Border with her neighbouring states will be useful to understand the pre independence baggage that India carries and continues to carry:



India has 15, 106.7 Km of land border and a coastline of 7,516.6 Km including island territories. The length of our land borders with neighboring countries is as follows: (a) Bangladesh: 4026.7 Km, (b) China: 3,488 Km; (c) Pakistan: 3323 Km, (d) Nepal:1751Km, (e) Myanmar: 1643 Km, (f) Bhutan: 699 Km; Afghanistan:106Km Creation of Department of Border Management. In pursuance of Group of Ministers recommendations on Border Management, the Department of Border Management was created in the Ministry of Home Affairs in January 2004 to pay focused attention to the issues relating to management of international land and coastal borders, strengthening of border policing & guarding, creation of infrastructure like roads, fencing & flood lighting on the borders and implementation of Border Area.

nowhere near the overall military capability of China or her technological and economic achievements in the last four decades.

China's military modernisation program embarked during the last seven years has been unprecedented. It has overshot every known parameter. President Xi's ability to consolidate the entire command structure of the PLA and integrate them with the Naval and Airforce capabilities as well as the reorganisation of the Seven Military Zones to Five Theatre Commands has made even India look like an insignificant competitor – this when India can boast of possessing the third largest Armed Forces in the world and a nuclear-powered state. China's involvement and expansionist ideas on disputed and undermarketed land borders with India, the speed of recolonise border villages on the LAC with India, create newer incursion in the Northeast even after the explosive situation created in Eastern Ladakh shows what amount of calculated risk China can take against India which in the past one year has made the military of China and India come to an Eyeball-to-Eyeball situation. China has made it clear (by non-resolving the issue of border) that she has arrived with enormous strategic as well as non-strategic assets which India will find hard to compete with her present military strength and military diplomatic endeavours. India's Defence Budget 2021-22 is an empirical proof of the precarious position of India at strategic levels against China. India with her present military capability, negative GDP because of the COVED-19 and

Continued Foot Note No, 4: Development Programme. In the course of time, the D/o Border Management has also been given the responsibility of construction of 13 Integrated Check Posts (ICPs) along the international borders. The functions/responsibilities of Border Management Department inter-alia include the following All matters relating to management of land borders (excluding LOC in J&K sector).

All matters relating to coastal border including island territories of Andaman & Nicobar and Lakshadweep, etc. Matters relating to fencing and floodlighting of Indo-Bangladesh and Indo-Pak borders.

Strengthening of border policing, surveillance and patrolling in all land and coastal borders.

Creation of infrastructure including construction of motorable roads, provision of communication facilities, etc. in the border belt.

Creation of infrastructure in coastal belt.

Analysis of intelligence reports and sharing of actionable intelligence with concerned agencies relating to international borders.

MHA's input in regard to demarcation of international borders.

Composite strategy defining complementary roles of State Governments and of the Centre in border management.

All matters relating to implementation of Border Area Development Programme.

Development of Integrated Check Posts (ICPs) on the land borders of the country including setting up of Land Ports Authority of India (LPAI).

Initiatives of Department of Border Management

As a part of the strategy to secure the borders as also to create infrastructure in the border areas of the country, several initiatives have been undertaken by the Department of Border Management. These include the following:

Expeditious construction of fencing, floodlighting & roads along Indo-Bangladesh, Indo-Pakistan and Indo-Myanmar borders.

Construction of strategic roads along India-China, Indo-Nepal & Indo-Bhutan borders.

Deployment of hi-tech electronic surveillance equipment on international borders (through border guarding forces concerned).

Construction of additional 509 Border Outposts (BOPs) for BSF (383 on Indo-Bangladesh border and 126 on Indo-Pakistan border)

Implementation of the Coastal Security Schemes.

Development of Integrated Check Posts (ICPs) at various locations on the International Borders of the country and setting up of the Land Ports Authority of India (LPAI) to administer/ manage the ICPs

In addition, various developmental works in the border areas have been undertaken by the Department under the **Border Area Development Programme**, which is being funded by M/o Finance as a part of the comprehensive approach to border management.

incapacity to find means to enhance her defence budget can hardly match China or even engage China numerically or structurally at the military level. However, India has no other options but to engage China to safeguard her national interest, national integrity, and strategic autonomy. If China really believes that to regularise the international borders which for reasons of history has remained unresolved, can be by following what Brahma Chellani said famously as "what is ours(China's) is ours while what is yours is negotiable", also that "three steps forward in adversaries territory must be followed by the strategy of taking two steps backward to gain one step" and that "salami slicing is the way to expand the strategic territorial advantage" then India is left with no other options but to pre-empt each of these strategies with innovative strategic thinking.

This entails that soft power developed in Indian think tanks, the corporate sector and in Indian Universities must be utilised at conceptual levels and not rely on domain experts who have in the past seventy years have reduced critical thinking requirement to transactional behaviour, diplomacy into an art of appeasement. The Prime Minister has also stated⁵ about the Indian Bureaucracy as a hurdle to India's development by making the private sector weigh down first under licence raj, then approval raj and now control the country by appropriating every decision-making position from national security, economic/fiscal areas, agriculture nuclear etc. etc.

To engage China on our own terms must be our first objective. This is to Ensure that each of their decision which is detrimental to India's national security and national interest is countered in a way that it increases the cost of Chinese involvement in Indian affairs more costly. India must segregate the strategic military affairs and military diplomacy from the much larger mercantile interest of trade, commerce, infrastructural development, self sufficiency in consumer requirement. India must embark to "Securitise" the areas of communication, health, education, defence production and even hospitality and tourism. Lastly, China's attempt to do "salami slicing" in our border areas must be countered by preemptive move to make China vulnerable along the 3,700 Km of international border with India. India understands very well that despite the massive deployment of the Chinese PLA supported by their huge infrastructure credibility, and / or their superior economic power cannot look after every inch of the long border with India.

By making China negotiate military matters with military and segregating the political matters to negotiate with the Indian political leaders will make Chinese efforts to be divided. It is important that it must be understood that the politics of communication should be assisted by astute diplomacy to influence the world opinion against Chinese actions. If China is sensitive and worried about anything in the 21st Century, then it is the adverse world opinion towards any of their hopes and aspirations. In essence China, 'Has to be managed" as stated by the US President Biden and therefore the aspiration of the US as the regulatory power needs to be assisted by India in the sphere of interests of China. Essentially it will involve India's effort to tiedown China in the Himalayan zone, collective security measures to securitise the Indian Ocean Region, the South China Sea, reduce the furtherance of Belt and Route and deny them access to Arabian Sea.

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⁵ See in Print: http://theprint.in/india/governance/babu-samjho-ishare-modis-critique-of-ias-evokes-shock-but-many-also-call-for-introspection/603341/

For the purposes of record, it does not take much effort to understand why the Chinese meeting their Indian counter parts to discuss the possible way to disengage during the latest 13th round of military talks failed.

Agreeing to the Chinese rationale that the first set of action to disengage will only be confined to the specific area and not cover the entire Eastern Ladakh does not leave India in a very advantageous position tactically or strategically. However, this agreement may be able to lower the ambient temperature of confrontation. This action or step indicates subtlety a political maturity on the part of India. The series of events confirms the opinion expressed by many global observers that China has time and again proved to be unreliable and a nation which cannot be trusted. However, the outcome of this posture taken by India will only be known with the passage of time. This may prove to be taking a calculated risk for of India unless careful vigilance is maintained. India has a task of making a road map to begin the process of engaging China effectively to safeguard her national interest and national security.

The present study has deliberated on "China's Economic Rise" and "China As a Strategic Power". It has been architectured in a way for the forthcoming study to subsequently analyse the Sino Indian Strategic Parity as it exists presently, reduce the almost immoral difference in defence budget outlay between India and China to ensure that India can confront China in a way to increase the cost of escalation when attempted by China after the present move by China to a falsified move in Ladakh done presently in military negotiations at the latest 13th round of talk. China by making India believe that Sector wise de-escalation will pave the way for rest of Ladakh de-escalation. China has no intentions to do the same. China has merely brought time to reorganise, refurbish and recalibrate her tactical manoeuvres to augment her strategic moves to outsmart and completely the Indian defence credibility in Ladakh to ensure that her \$62 billion CPEC is safe to achieve a success to open a window to the Arabian Sea. India has just about six months to call the Chinese bluff by not allowing her guards down in Ladakh, create feasible alternative plans to ensure China understand that she will be prone to venerable points at more points along the Indo China border where the Chinese cannot reinforce or react to Indian military moves which may be able to upset the strategic balance in favour of India.

India in this scenario has had to allocate emergency budgetary provisions far beyond what has been done officially in the financial outlay of 2021-22. India has lost enough territorial space and in post Galwan period functionally without any hopes to rectify the tactical or strategic anomaly which has led to an asymmetry of military balance and credibility which is beyond the visibility band. One of the radical measures that can be attempted if the political will is there to understand the desperate situation is to take the Pension Funds out of the Defence Budget and use the vast amount thus available as capital fund to finance the operational needs to contain China and avert the possible situation that may arise in Ladakh in the next six months.

Xi's statement of only a few days back to the PLA to be fully ready to confront the Indian Army is not a rhetoric but a clear indication of how the Chinese political thinking of consolidating strategically is integrated with the military power that they are willing to unleash in Ladakh region. China knows her immense difficulty to find a toehold of permanent nature in the Indian Ocean Region (IOR), the pressure to navigate unchallenged in the South China Sea(SCS) and unmanageable sea route for replenishment through the Malaccan Strait, unsustainable cooperation of Myanmar as a client state and the absolute necessity to find an safe and strategic corridor to the Arabian Sea.

Part I China's Economic Rise

Introduction

Prior to the initiation of economic reforms and trade liberalization nearly 40 years ago, China maintained policies that kept the economy very poor, stagnant, centrally controlled, vastly inefficient, and relatively isolated from the global economy. Since opening to foreign trade and investment and implementing free-market reforms in 1979, China has been among the world's fastest-growing economies, with real annual gross domestic product (GDP) growth averaging 9.5% through 2018, a pace described by the World Bank as "the fastest sustained expansion by a major economy in history." Such growth has enabled China, on average, to double its GDP every eight years and helped raise an estimated 800 million people out of poverty. China has become the world's largest economy (on a purchasing power parity basis), manufacturer, merchandise trader, and holder of foreign exchange reserves. This in turn has made China a major commercial partner of the United States. China is the largest U.S. merchandise trading partner, biggest source of imports, and third-largest U.S. export market. China is also the largest foreign holder of U.S. Treasury securities, which help fund the federal debt and keep U.S. interest rates low.

As China's economy has matured, its real GDP growth has slowed significantly, from 14.2% in 2007 to 6.6% in 2018, and that growth is projected by the International Monetary Fund (IMF) to fall to 5.5% by 2024. The Chinese government has embraced slower economic growth, referring to it as the "new normal" and acknowledging the need for China to embrace a new growth model that relies less on fixed investment and exporting, and more on private consumption, services, and innovation to drive economic growth. Such reforms are needed for China to avoid hitting the "middle-income trap," when countries achieve a certain economic level but begin to experience sharply diminishing economic growth rates because they are unable to adopt new sources of economic growth, such as innovation.

The Chinese government has made innovation a top priority in its economic planning through several high-profile initiatives, such as "Made in China 2025," a plan announced in 2015 to upgrade and modernize China's manufacturing in 10 key sectors through extensive government assistance in order to make China a major global player in these sectors. However, such measures have increasingly raised concerns that China intends to use industrial policies to decrease the country's reliance on foreign technology (including by locking out foreign firms in China) and eventually dominate global markets.

In 2017, the Trump Administration launched a Section 301 investigation of China's innovation and intellectual property policies deemed harmful to U.S. economic interests. It subsequently raised tariffs by 25% on \$250 billion worth of imports from China, while China increased tariffs (ranging from 5% to 25%) on \$110 billion worth of imports from the United States. Such measures have sharply decreased bilateral trade in 2019. On May 10, 2019, President Trump announced he was considering raising tariffs on nearly all remaining

products from China. A protracted and escalating trade conflict between the United States and China could have negative consequences for the Chinese economy.

China's growing global economic influence and the economic and trade policies it maintains have significant implications for the United States and hence are of major interest to Congress. While China is a large and growing market for U.S. firms, its incomplete transition to a free-market economy has resulted in economic policies deemed harmful to U.S. economic interests, such as industrial policies and theft of U.S. intellectual property. This report provides background on China's economic rise; describes its current economic structure; identifies the challenges China faces to maintain economic growth; and discusses the challenges, opportunities, and implications of China's economic rise for the United States.

China's rise from a poor developing country to a major economic power in about four decades has been spectacular. From 1979 (when economic reforms began) to 2017, China's real gross domestic product (GDP) grew at an average annual rate of nearly $10\%^6$. According to the World Bank, China has "experienced the fastest sustained expansion by a major economy in history—and has lifted more than 800 million people out of poverty⁷." China has emerged as a major global economic power. For example, it ranks first in terms of economic size on a purchasing power parity (PPP) basis, value-added manufacturing, merchandise trade, and holder of foreign exchange reserves.

China's rapid economic growth has led to a substantial increase in bilateral commercial ties with the United States. According to U.S. trade data, total trade between the two countries grew from \$5 billion in 1980 to \$660 billion in 2018. China is currently the United States' largest merchandise trading partner, its third-largest export market, and its largest source of imports. Many U.S. companies have extensive operations in China to sell their products in the booming Chinese market and to take advantage of lower-cost labour for export-oriented manufacturing⁸. These operations have helped some U.S. firms to remain internationally competitive and have supplied U.S. consumers with a variety of low-cost goods. China's large-scale purchases of U.S. Treasury securities (which totalled \$1.1 trillion as of April 2019 have enabled the federal government to fund its budget deficits, which help keep U.S. interest rates relatively low⁹.

However, the emergence of China as a major economic power has raised concern among many U.S. policymakers. Some claim that China uses unfair trade practices (such as an undervalued currency and subsidies given to domestic producers) to flood U.S. markets with low-cost goods, and that such practices threaten American jobs, wages, and living standards. Others contend that China's growing use of industrial policies to promote and protect certain domestic Chinese industries or firms favoured by the government, and its failure to take

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⁶ China's economic reform process began in December 1978 when the Third Plenum of the Eleventh Central Committee of the Communist Party adopted Deng Xiaoping's economic proposals. Implementation of the reforms began in 1979.

⁷ World Bank, China Overview, March 28, 2017, available

at http://www.worldbank.org/en/country/china/overview

⁸ Some companies use China as part of their global supply chain for manufactured parts, which are then exported and assembled elsewhere. Other firms have shifted the production of finished products from other countries (mainly in Asia) to China; they import parts and materials into China for final assembly.

⁹ See CRS Report RL33536, <u>China-U.S. Trade Issues</u>, by Wayne M. Morrison.

effective action against widespread infringement and theft of U.S. intellectual property rights (IPR) in China, threaten to undermine the competitiveness of U.S. IP-intensive industries. In addition, while China has become a large and growing market for U.S. exports, critics contend that numerous trade and investment barriers limit opportunities for U.S. firms to sell in China or force them to set up production facilities in China as the price of doing business there.

The Chinese government views a growing economy as vital to maintaining social stability. However, China faces several major economic challenges that could dampen future growth, including distortive economic policies that have resulted in overreliance on fixed investment and exports for economic growth (rather than on consumer demand), government support for state-owned firms, a weak banking system, widening income gaps, growing pollution, and the relative lack of the rule of law in China. The Chinese government has acknowledged these problems and has pledged to address them by implementing policies to increase the role of the market in the economy, boost innovation, make consumer spending the driving force of the economy, expand social safety net coverage, encourage the development of less-polluting industries (such as services), and crack down on official government corruption. The ability of the Chinese government to implement such reforms will likely determine whether China can continue to maintain relatively rapid economic growth rates or will instead begin to experience significantly lower growth rates.

China's growing economic power has led it to become increasingly involved in global economic policies and projects, especially infrastructure development. China's Belt and Road initiative (BRI) represents a grand strategy by China to finance infrastructure throughout Asia, Europe, Africa, and beyond. If successful, China's economic initiatives could significantly expand export and investment markets for China and increase its "soft power" globally.

This report provides background on China's economic rise; describes its current economic structure; identifies the challenges China faces to maintain economic growth; and discusses the challenges, opportunities, and implications of China's economic rise for the United States.

The History of China's Economic Development

China's Economy Prior to Reforms

Prior to 1979, China, under the leadership of Chairman Mao Zedong, maintained a centrally planned, or command, economy. A large share of the country's economic output was directed and controlled by the state, which set production goals, controlled prices, and allocated resources throughout most of the economy. During the 1950s, all of China's individual household farms were collectivized into large communes. To support rapid industrialization, the central government undertook large-scale investments in physical and human capital during the 1960s and 1970s. As a result, by 1978 nearly three-fourths of industrial production was produced by centrally controlled, state-owned enterprises (SOEs), according to centrally planned output targets. Private enterprises and foreign-invested firms were generally barred. A central goal of the Chinese government was to make China's economy relatively selfsufficient. Foreign trade was generally limited to obtaining those goods that could not be made or obtained in China. Such policies created distortions in the economy. Since most aspects of the economy were managed and run by the central government, there were no market mechanisms to efficiently allocate resources, and thus there were few incentives for firms, workers, and farmers to become more productive or be concerned with the quality of what they produced (since they were mainly focused on production goals set by the government).

According to Chinese government statistics, China's real GDP grew at an average annual rate of 6.7% from 1953 to 1978, although the accuracy of these data has been questioned by many analysts, some of whom contend that during this period, Chinese government officials (especially at the subnational levels) often exaggerated production levels for a variety of political reasons. Economist Angus Maddison puts China's actual average annual real GDP growth during this period at about 4.4%10. In addition, China's economy suffered significant economic downturns during the leadership of Chairman Mao Zedong, including during the Great Leap Forward from 1958 to 1962 (which led to a massive famine and reportedly the deaths of up to 45 million people¹¹) and the Cultural Revolution from 1966 to 1976 (which caused widespread political chaos and greatly disrupted the economy). From 1950 to 1978, China's per capita GDP on a purchasing power parity (PPP) basis 12, a common measurement of a country's living standards, doubled. However, from 1958 to 1962, Chinese living standards fell by 20.3%, and from 1966 to 1968, they dropped by 9.6%. In addition, the growth in Chinese living standards paled in comparison to those in the West, such as Japan, as indicated in.

In 1978, (shortly after the death of Chairman Mao in 1976), the Chinese government decided to break with its Soviet-style economic policies by gradually reforming the economy according to free market principles and opening trade and investment with the West, in the hope that this would significantly increase economic growth and raise living standards. As

¹⁰ The Organization for Economic Cooperation and Development, Chinese Economic Performance in the Long Run, 960-2030, by Angus Maddison, 2007.

¹¹ New York Times, Mao's Great Leap to Famine, December 15, 2010.

¹² Purchasing power parities are a method used to measure and compare the economic data of other countries expressed in U.S. dollars. That method adjusts the data to reflect differences in prices across countries.

Chinese leader Deng Xiaoping, the architect of China's economic reforms, put it: "Black cat, white cat, what does it matter what color the cat is as long as it catches mice¹³?"

Economic Reforms

Beginning in 1979, China launched several economic reforms. The central governmentinitiated price and ownership incentives for farmers, which enabled them to sell a portion of their crops on the free market. In addition, the government established four special economic zones along the coast for the purpose of attracting foreign investment, boosting exports, and importing high technology products into China. Additional reforms, which followed in stages, sought to decentralize economic policymaking in several sectors, especially trade. Economic control of various enterprises was given to provincial and local governments, which were generally allowed to operate and compete on free market principles, rather than under the direction and guidance of state planning. In addition, citizens were encouraged to start their own businesses. Additional coastal regions and cities were designated as open cities and development zones, which allowed them to experiment with free-market reforms and to offer tax and trade incentives to attract foreign investment. In addition, state price controls on a wide range of products were gradually eliminated. Trade liberalization was also a major key to China's economic success. Removing trade barriers encouraged greater competition and attracted FDI inflows. China's gradual implementation of economic reforms sought to identify which policies produced favourable economic outcomes (and which did not) so that they could be implemented in other parts of the country, a process Deng Xiaoping reportedly referred to as "crossing the river by touching the stones¹⁴."

China's Economic Growth and Reforms: 1979-the Present

Since the introduction of economic reforms, China's economy has grown substantially faster than during the pre-reform period, and, for the most part, has avoided major economic disruptions¹⁵. From 1979 to 2018, China's annual real GDP averaged 9.5%. This has meant that on average China has been able to double the size of its economy in real terms every eight years. The global economic slowdown, which began in 2008, had a significant impact on the Chinese economy. China's media reported in early 2009 that 20 million migrant workers had returned home after losing their jobs because of the financial crisis and that real GDP growth in the fourth quarter of 2008 had fallen to 6.8% year-on-year. The Chinese government responded by implementing a \$586 billion economic stimulus package, aimed largely at funding infrastructure and loosening monetary policies to increase bank lending ¹⁶. Such policies enabled China to counter the effects of the sharp global fall in demand for Chinese products. From 2008 to 2010, China's real GDP growth averaged 9.7%. However,

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¹³ This reference appears to have meant that it did not matter whether an economic policy was considered to be "capitalist" or "socialist," what really mattered was whether that policy would boost the economy and living standards.

¹⁴ Many analysts contend that Deng's push to implement economic reforms was largely motivated by a belief that they would boost economic growth and thus strengthen the power of the Chinese Communist Party.

¹⁵ China's economic growth slowed significantly followed the aftermath of the Tiananmen massacre that occurred in June 1989. Several countries, including the United States, imposed trade sanctions against China, and Chinese economic reforms were essentially put on hold. China's real GDP growth rate fell from 11.3% in 1988 to 4.2% in 1989 and declined to 3.9% in 1990. In 1991, economic reforms were restarted and foreign sanctions against China were reduced or removed, and real GDP grew by 9.2%.

¹⁶ Xinhua net, "20 million jobless migrant workers return home," February 2, 2009.

the rate of GDP growth declined slowed for the next six consecutive years, falling from 10.6% in 2010 to 6.7% in 2016. Real GDP ticked up to 6.8% in 2017, but slowed to 6.6% in 2018, (although it rose to 6.8% in 2017). The IMF's April 2019 World Economic Outlook projects that China's real GDP growth will slow each year over the next six years, falling to 5.5% in 2024¹⁷. Many economists warn that China's economic growth could slow further if the United States and China continue to impose punitive economic measures against each other, such the tariff hikes that have resulted from U.S. action under Section 301 and Chinese retaliation. The Organization for Economic and Cooperation and Development (OECD) projects that increased tariffs on all trade between the United States and China could reduce China's real GDP in 2021-2022 by 1.1% relative to the OECD's baseline economic projections ¹⁸.

Causes of China's Economic Growth

Economists generally attribute much of China's rapid economic growth to two main factors: large-scale capital investment (financed by large domestic savings and foreign investment) and rapid productivity growth. These two factors appear to have gone together hand in hand. Economic reforms led to higher efficiency in the economy, which boosted output and increased resources for additional investment in the economy.

China has historically maintained a high rate of savings. When reforms were initiated in 1979, domestic savings as a percentage of GDP stood at 32%. However, most Chinese savings during this period were generated by the profits of SOEs, which were used by the central government for domestic investment. Economic reforms, which included the decentralization of economic production, led to substantial growth in Chinese household savings as well as corporate savings. As a result, China's gross savings as a percentage of GDP is the highest among major economies. The large level of domestic savings has enabled China to support a high level of investment. In fact, China's gross domestic savings levels far exceed its domestic investment levels, which have made China a large net global lender.

Several economists have concluded that productivity gains (i.e., increases in efficiency) have been another major factor in China's rapid economic growth. The improvements to productivity were caused largely by a reallocation of resources to more productive uses, especially in sectors that were formerly heavily controlled by the central government, such as agriculture, trade, and services. For example, agricultural reforms boosted production, freeing workers to pursue employment in the more productive manufacturing sector. China's decentralization of the economy led to the rise of non-state enterprises (such as private firms), which tended to pursue more productive activities than the centrally controlled SOEs and were more market-oriented and more efficient. Additionally, a greater share of the economy (mainly the export sector) was exposed to competitive forces. Local and provincial governments were allowed to establish and operate various enterprises without interference from the government. In addition, FDI in China brought with it new technology and processes that boosted efficiency.

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¹⁷ IMF, World Economic Outlook Database, April 2019.

¹⁸ OECD, Economic Outlook, May 2019, available at https://www.oecd-ilibrary.org/docserver/b2e897b0-en.pdf?expires=1561458758&id=id&accname=oid011901&checksum=40A52BB1E685ADAB80433EDD227A4D65

However, as China's technological development begins to converge with major developed countries (i.e., through its adoption of foreign technology), its level of productivity gains, and thus, real GDP growth, could slow significantly from its historic levels unless China becomes a major centre for new technology and innovation and/or implements new comprehensive economic reforms. Several developing economies (notably several in Asia and Latin America) experienced rapid economic development and growth during the 1960s and 1970s by implementing some of the same policies that China has utilized to date to develop its economy, such as measures to boost exports and to promote and protect certain industries. However, at some point in their development, some of these countries began to experience economic stagnation (or much slower growth compared to previous levels) over a sustained time, a phenomenon described by economists as the "middle-income trap¹⁹." This means that several developing (low-income) economies were able to transition to a middle-income economy, but because they were unable to sustain high levels of productivity gains (in part, because they could not address structural inefficiencies in the economy), they were unable to transition to a high-income economy²⁰. China may be at a similar crossroads now. The World Bank classifies development of economies using a per capita national gross methodology²¹. According to the World Bank, China went from a low-income economy to a low-middle-income economy in 1997, and in 2010, it became an upper-middle-income country. China's 2017 per capita GNI (at \$8,690) was 38.7% below the level China would need to obtain to become a high-income economy. The Chinese government projects that China can cross the high-income threshold by 2025. It hopes to achieve this largely by making innovation a major source of future economic growth. Sceptics contend that innovation growth in China will be hard to achieve, especially if it is mainly state-driven and imposes new restrictions on foreign firms,

The Economist Intelligence Unit (EIU) projects that China's real GDP growth will slow considerably over the next several decades, eventually converging on U.S. growth rates by the year 2037 (U.S. and Chinese real GDP growth rates are both projected at 1.9%). For some years thereafter, EIU projects U.S. GDP growth to be greater than China's²² The Chinese government has indicated its desire to move away from its current economic model of fast growth at any cost to more "smart" economic growth, which seeks to reduce reliance on energy-intensive and high-polluting industries and rely more on high technology, green energy, and services. China also has indicated it wants to obtain more balanced economic growth.

Measuring the Size of China's Economy

The rapid growth of the Chinese economy has led many analysts to speculate when China will overtake the United States as the "world's largest economic power." The "actual" size of

¹⁹ Japan was able to become a high-income economy, but since the mid-1980s, its economic growth has been relatively stagnant.

²⁰ These designations are based on World Bank per capita GDP measurements.

²¹ The classifications are determined by per capita income ranges (the thresholds of which are adjusted annually). These include low-income economies, lower-middle-income economies, upper-middle-income countries, and high-income countries.

²² Long-term economic projections should be interpreted with caution.

China's economy has been a subject of extensive debate among economists. Measured in U.S. dollars using nominal exchange rates, China's GDP in 2018 in nominal U.S. dollars was \$13.4 trillion, which was 65.3% of the size of the U.S. economy, according to estimates made by the IMF. China's 2018 per capita GDP in nominal dollars was \$9,608, which was 15.3% of the U.S. per capita level.

Many economists contend that using nominal exchange rates to convert Chinese data (or those of other countries) into U.S. dollars fails to reflect the true size of China's economy and living standards relative to the United States. Nominal exchange rates simply reflect the prices of foreign currencies vis-à-vis the U.S. dollar, and such measurements exclude differences in the prices for goods and services across countries. To illustrate, one U.S. dollar exchanged for local currency in China would buy more goods and services there than it would in the United States. This is because prices for goods and services in China are generally lower than they are in the United States. Conversely, prices for goods and services in Japan are generally higher than they are in the United States (and China). Thus, one dollar exchanged for local Japanese currency would buy fewer goods and services there than it would in the United States. Economists attempt to develop estimates of exchange rates based on their actual purchasing power relative to the dollar to make more accurate comparisons of economic data across countries, usually referred to as purchasing power parity (PPP).

The PPP exchange rate increases the (estimated) measurement of China's economy and its per capita GDP. According to the IMF (which uses price surveys conducted by the World Bank), prices for goods and services in China are about half the level they are in the United States. Adjusting for this price differential raises the value of China's 2018 GDP from \$13.4 trillion (nominal dollars) to \$25.3 trillion (on a PPP basis²³ IMF data indicate that China overtook the United States as the world's largest economy in 2014 on a PPP basis²⁴.

China's share of global GDP on a PPP basis rose from 2.3% in 1980 to an estimated 18.3% in 2017, while the U.S. share of global GDP on a PPP basis fell from 24.3% to an estimated 15.3% ²⁵. This would not be the first time in history that China was the world's largest economy (see text box below). China's economic ascendency as the world largest economy has been impressive, especially considering that in 1980, China's GDP on a PPP basis was only one-tenth that of the United States. The IMF predicts that by 2024, China's economy will be 56% larger than the U.S. economy on a PPP basis.

²³ PPP data reflect what the value of China's goods and services would be if they were sold in the United States.

²⁴ The United States remains the world's largest economy when using nominal U.S. dollars.

²⁵ IMF, World Economic Outlook, October 2017, projections

Table below Compares Chinese, and U.S. GDP and Per Capita GDP in Nominal U.S. Dollars and a Purchasing Power Parity Basis: 2018

	China	United States
Nominal GDP (\$ billions)	13,407	20,494
GDP in PPP (\$ billions)	25,270	20,494
Nominal Per Capita GDP (\$)	9,608	62,606
Per Capita GDP in PPP (\$)	18,110	62,606

Source: IMF, World Economic Forum.

The Decline and Rise of China's Economy

According to a study by economist Angus Maddison, China was the world's largest economy in 1820, accounting for an estimated 32.9% of global GDP. However, foreign, and civil wars, internal strife, weak and ineffective governments, natural disasters (some of which were manmade), and distortive economic policies caused China's share of global GDP on a PPP basis to shrink significantly. By 1952, China's share of global GDP had fallen to 5.2%, and by 1978, it slid to 4.9%. The adoption of economic reforms by China in the late 1970s led to a surge in China's economic growth and helped restore China as a major global economic power.

Source: The Organization for Economic Cooperation and Development, Chinese Economic Performance in the Long Run, 960-2030, by Angus Maddison, 2007.

Figure 7. U.S. and Chinese GDP (PPP Basis) as a Share of Global Total: 1980-2018 (%)

Source: IMF, World Economic Outlook, April 2019.

The PPP measurement also raises China's 2018 nominal per capita GDP (from \$9,608) to \$18,110, which was 28.9% of the U.S. level. Even with continued rapid economic growth, it would likely take many years for Chinese living standards to approach U.S. levels.

China as the World's Largest Manufacturer

China has emerged as the world's largest manufacturer according to the World Bank. It estimated that in 2016, the value of China's manufacturing on a gross value-added basis was 49.2% higher than the U.S. level. Manufacturing plays a considerably more important role in the Chinese economy than it does for the United States. In 2016, China's gross valued added manufacturing was equal to 28.7% of its GDP, compared to 11.6% for the United States²⁶.

²⁶ The World Bank, Data, at https://data.worldbank.org/indicator/NV.IND.MANF.CD.

In its 2016 Global Manufacturing Competitiveness Index, Deloitte (an international consulting firm) ranked China as the world's most competitive manufacturer (out of 40 countries), based on a survey of global manufacturing executives, while the United States ranked second (it ranked fourth in 2010). The index found that global executives predicted that the United States would overtake China by 2020 to become the world's most competitive economy, largely because of its heavy investment in talent and technology (e.g., high levels of R&D spending and activities, the presence of top-notch universities, and large amounts of venture capital being invested in advanced technologies). On the other hand, while China was expected to remain a major manufacturing power because of its large R&D spending levels, movement toward higher-valued, advanced manufacturing, government policies to promote innovation, and a large pool of graduates in science, technology, engineering and mathematics, it was viewed as facing several challenges, including a slowing economy, a decline in value-added manufacturing and overcapacity in several industries, rising labour costs, and a rapidly aging population. As a result, China was projected to fall to the second-most competitive manufacturer by 2020²⁷.

More broadly, the World Economic Forum (WEF) produces an annual report that assesses and ranks (based on an index) the global competitiveness of a country's entire economy, based on factors that determine the level of productivity of an economy, which in turn sets the level of prosperity that the country can achieve. The WEF's 2018 Global Competitive Index ranked China as the world's 28th-most competitive economy (out of 140 economies), while the United States ranked first²⁸.

Changes in Wage and Labour Cost Advantages

The decline in China's working age population may have contributed rising wages in China. China's average monthly wages (converted into U.S. dollars) in 1990 were \$55, compared with \$32 for Vietnam and \$221 for Mexico²⁹. However, in 2018, China's average monthly wages (at \$990) were 316% higher than Vietnam's wages (\$238) and 158.5% higher than Mexico's (\$383). From 2007 to 2018, China's average monthly wages rose by 263%. The American Chamber of Commerce in China (AmCham China) 2019 Business Climate survey listed rising labour costs as the second-biggest challenge facing U.S. firms in China (56% of recipients cited them as their largest concern)³⁰. In 2000, China's unit labour production costs were 42.3 of U.S. levels and by 2018 they rose to 75.5% of U.S. levels³¹.

²⁷ Deloitte, 2016 Global Manufacturing Competitiveness Index, 2016, available

at https://www2.deloitte.com/content/dam/Deloitte/us/Documents/manufacturing/us-gmci.pdf

²⁸ World Economic Forum, The Global Competitiveness Report, 2016–2017, September 2016.

²⁹ The Economist Intelligence Unit, Data Tool, accessed in June 2019.

³⁰ AmCham China, 2018 Business Climate Survey Report, January 2017, available at http://www.amchamchina.org/

³¹ The Economist Intelligence Unit, Data Tool, accessed in June 2019.

Foreign Direct Investment (FDI) in China

China's trade and investment reforms and incentives led to a surge in FDI beginning in the early 1990s. Such flows have been a major source of China's productivity gains and rapid economic and trade growth. There were reportedly 445,244 foreign-invested enterprises (FIEs) registered in China in 2010, employing 55.2 million workers or 15.9% of the urban workforce³². As indicated in Figure 11, FIEs account for a significant share of China's industrial output. That level rose from 2.3% in 1990 to a high of 35.9% in 2003 but fell to 25.9% in 2011³³. In addition, FIEs are responsible for a significant level of China's foreign trade. At their peak, FIEs accounted for 58.3% of Chinese exports in 2005 and 59.7% of imports, but these levels have subsequently fallen, reaching 41.7% and 43.7%, respectively, in 2018.

The United Nations Conference on Trade and Development (UNCTAD) reports that China has become a both a major recipient of global FDI as well as a major provider of FDI outflows (see Figure 13)³⁴. China's FDI inflows in 2018 were \$139 billion, making it the world's second-largest recipient of FDI after the United States³⁵. China's FDI outflows grew rapidly after 2005 and exceeded FDI inflows for the first time in 2015. China's FDI outflows reached a historic peak of \$196.1 billion in 2016, but declined in 2017 and 2018, reflecting a crackdown by the Chinese government on investment deemed wasteful and well as greater scrutiny by foreign governments of China's efforts to obtain advanced technology firms and other strategic assets. Still, China was the world's second-largest source of FDI outflows (after Japan).

The sharp increase in China's global FDI outflows in recent years appears to be largely driven by several factors, including Chinese government policies and initiatives to encourage firms to "go global." The government wants to use FDI to gain access to IPR, technology, knowhow, famous brands, etc., in order to move Chinese firms up the value-added chain in manufacturing and services, boost domestic innovation and development of Chinese brands, and help Chinese firms (especially SOEs) to become major global competitors³⁶. China's slowing economy and rising labour costs have also encouraged greater Chinese overseas FDI in order to help firms diversify risk and expand business opportunities beyond the China market, and, in some cases, to relocate less competitive firms from China to low-cost countries. China's Ministry of Foreign Trade (MOFCOM) reports that in 2018, Chinese nonfinancial FDI in BRI countries totalled \$15.6 billion, up 8.9% over the previous year³⁷. Additionally, increased FDI outflows may be the result of the Chinese government attempting to diversify its foreign exchange reserve holdings (which totalled \$3.1 trillion as

³² China 2012 Statistical Yearbook

³³ Industrial output is defined by the Chinese government as the total volume of final industrial products produced and industrial services provided during a given period. Source: China 2012 Statistical Yearbook
³⁴ U.N.FDI data differ from Chinese data, in part because Chinese data are limited to nonfinancial FDI and UN data includes financial-related FDI. UNCTAD reports Hong Kong FDI data separately.

³⁵ UNCTAD, 2019 World Investment Report, available

at https://unctad.org/en/PublicationsLibrary/wir2019 en.pdf

³⁶ The composition of Chinese FDI sectors has changed over the past few years. For example, according to AEI/Heritage Foundation, in 2010, 67% of Chinese FDI outflows were in energy and metals sectors, but by 2015, this level dropped to 29%, caused in part by large levels of Chinese FDI in transportation, finance, real estate, and technology sectors.

³⁷ Xinhuanet, "China's ODI sees stable development in 2018," January 16, 2019, available at http://www.xinhuanet.com/english/2019-01/16/c_137749000.htm

of April 2019—by far the world's largest holder). The largest foreign investors in China (based on FDI stock through 2017) were Hong Kong (52.6% of total)³⁸, the British Virgin Islands (10.6%), Japan (6.1%), Singapore (4.0%), and Germany (3.2%) (see Table 2).

Table 2. Chinese Data on Top Ten Sources of China's FDI Inflows to China: 1979-2017

(\$ billions and percentage of total)

Country	Estimated Cumulative Utilized FDI: 1979-2017	
	Amount	% of Total
Total	2,688	100
Hong Kong	1,241	46.2
British Virgin Islands	286	10.6
Japan	165	6.1
Singapore	108	4.0
Germany	87	3.2
S. Korea	73	2.7
U.S.	72	2.7
Cayman Islands	49	1.8
The Netherlands	37	1.4
Taiwan	33	1.2

Source: IMF Coordinated Direct Investment Survey.

Factors Driving China's FDI Outflow Strategy

A key aspect of China's economic modernization and growth strategy during the 1980s and 1990s was to attract FDI into China to help boost the development of domestic firms. Investment by Chinese firms abroad was sharply restricted. However, in 2000, China's leaders initiated a new "go global" strategy, which sought to encourage Chinese firms (primarily SOEs) to invest overseas. One key factor driving this investment is China's massive accumulation of foreign exchange reserves. Traditionally, a significant level of those reserves has been invested in relatively safe but low-yielding assets, such as U.S. Treasury securities. On September 29, 2007, the Chinese government officially launched the China Investment Corporation (CIC) in an effort to seek more profitable returns on its foreign exchange reserves and diversify away from its U.S. dollar holdings³⁹. The CIC was originally

³⁸ Much of the FDI originating from Hong Kong may originate from other foreign investors, such as Taiwan. In addition, some Chinese investors might be using these locations to shift funds overseas in order to re-invest in China to take advantage of preferential investment policies (this practice is often referred to as "round-tipping"). Thus, the actual level of FDI in China may be overstated.

³⁹ See CRS Report RL34337, China's Sovereign Wealth Fund, by Michael F. Martin

funded at \$200 billion, making it one of the world's largest sovereign wealth funds⁴⁰. Another factor behind the government's drive to encourage more outward FDI flows has been to obtain natural resources, such as oil and minerals, deemed by the government as necessary to sustain China's rapid economic growth⁴¹. Finally, the Chinese government has indicated its goal of developing globally competitive Chinese firms with their own brands. Investing in foreign firms, or acquiring them, is viewed as a method for Chinese firms to obtain technology, management skills, and often, internationally recognized brands, needed to help Chinese firms become more globally competitive. For example, in April 2005, Lenovo Group Limited, a Chinese computer company, purchased IBM Corporation's personal computer division for \$1.75 billion⁴². The largest destinations of cumulative Chinese FDI outflows through 2017 were Hong Kong (54.2% of total), the Cayman Islands (13.9%), the British Virgin Islands (6.7%), and the United States (3.7%) (see Table 3).

Table 3. Major Destinations of Chinese Nonfinancial FDI Outflows by Stock through 2017 (\$ billions and percent of total)

Destination	Stock of FDI through 2017	Share of FDI Stock through 2017 (%)
Total	1,809	
Hong Kong	981	54 .2
Cayman Islands	251	13 .9
British Virgin Islands	122	6 .7
United States	67	3 .7
Singapore	45	2 .5
Australia	36	2 .0
United Kingdom	20	1 .1

Source: China Natural Bureau of Statistics.

Note: Ranked according to the top seven destinations of the stock of Chinese FDI outflows through 2017.

A significant level of Chinese FDI that goes to Hong Kong, the British Virgin Islands, and the Cayman Islands likely is redirected elsewhere. The American Enterprise Institute (AEI) maintain the China Global Investment Tracker (CGIT), a database that has been developed to

 $^{^{40}}$ At the end of 2015, CIC's assets totalled \$810 billion.

⁴¹ Chinese oil and mineral companies are dominated by SOEs.

⁴² The Chinese government is believed to be Lenovo's largest shareholder

track the actual flows (from the parent company to the final destination) of Chinese investment globally. The CGIT database tracks FDI valued at \$100 million or more (which it refers to as "China's outward non-bond investment")⁴³. These data differ significantly from official Chinese FDI outflow data. The CGIT data on the top destinations of total Chinese outward non-bond outward investment from 2005 to 2017 included the United States (\$172.7 billion), Australia (\$103.7 billion), the United Kingdom (\$75 billion), Brazil (\$61.2 billion), and Russia (\$53.8)⁴⁴.

China's Merchandise Trade Patterns

Economic reforms and trade and investment liberalization have helped transform China into a major trading power. Chinese merchandise exports rose from \$14 billion in 1979 to \$2.5 trillion in 2018, while merchandise imports grew from \$18 billion to \$2.1 trillion (see Table 4). China's rapidly growing trade flows have made it an increasingly important (and often the largest) trading partner for many countries. According to China, it was the largest trading partner for 130 countries in 2013⁴⁵. From 2000 to 2008, the annual growth of China's merchandise exports and imports averaged 25.1% and 24.2%, respectively. However, China's exports and imports fell by 15.9% and 11.2%, respectively, due to the impact of the global financial crisis. China's trade recovered in 2010 and 2011, with export growth averaging 25.8% and import growth averaging 31.9%. However, since that time, China's trade growth slowed sharply. From 2012 to 2014, China's exports and imports grew at an average annual rate of 7.2% and 4.1%, respectively. From 2015 to 2016 exports and imports fell by an average rate of 4.7% and 11.6%, respectively, reflecting a sluggish global economy and a decline in commodity prices (such as oil and ores). However, in 2017, China's exports and imports rose by 6.7% and 17.4%, respectively. Exports and imports in 2018 rose by 9.3 and 17.8%, respectively. However, during the first three months of 2001, China's exports grew by 1.0%, while imports fell 1.1% year-over-year. China's merchandise trade surplus grew sharply from 2004 to 2008, rising from \$32 billion to \$297 billion. That surplus fell each year over the next three years, dropping to \$158 billion in 2011. However, it rose in each of the next four years, reaching a record \$679 billion in 2015 before falling to \$611 billion in 2016, \$489 billion in 2017, and \$382 billion in 2018. In 2009, China overtook Germany to become both the world's largest merchandise exporter and the second-largest merchandise importer (after the United States). In 2012, China overtook the United States as the world's largest merchandise trading economy (exports plus imports). China's share of global merchandise exports grew from 2.0% in 1990 to 14.1% in 2015 but fell to 13.4% in 2016 and to 13.2% in 2017.

⁴³ AEI/Heritage Foundation's methodology do not use the standard measurement of FDI, which generally includes foreign ownership or control of at least 10% share or control of an entity.

⁴⁴ The CGIT also estimates the flow of Chinese FDI to the United States in 2017 at \$24.5 billion (compared to \$54.6 billion in 2016), making the United States the largest destination of Chinese outward FDI. China's largest U.S. acquisition in 2017 was HNA's purchase of CIT Group's aircraft leasing business for \$10.4 billion.

⁴⁵ China.org.cn, "Promoting China-Japan relations through Culture," June 18, 2014, at http://www.china.org.cn/opinion/2014-06/18/content 32690843.htm.

Table 4. China's Global Merchandise Trade: 1979-2018 (\$ billions)

Year	Exports	Imports	Trade Balance
1979	13.7	15.7	-2.0
1980	18.1	19.5	-1.4
1985	27.3	42.5	-15.3
1990	62.9	53.9	9.0
1995	148.8	132.1	16.7
2000	249.2	225.1	24.1
2001	266.2	243.6	22.6
2002	325.6	295.2	30.4
2003	438.4	412.8	25.6
2004	593.4	561.4	32.0
2005	762.0	660.1	101.9
2006	969.1	791.5	177.6
2007	1,218.0	955.8	262.2
2008	1,428.9	1,131.5	297.4
2009	1,202.0	1,003.9	198.2
2010	1,578.4	1,393.9	184.5
2011	1,899.3	1,741.4	157.9
2012	2,050.1	1,817.3	232.8
2013	2,210.7	1,949.3	261.4
2014	2,343.2	1,963.1	380.1
2015	2,280.5	1,601.8	678.8
2016	2,135.3	1,524.7	610.6
2017	2,279.2	1,790.0	489.2
2018	2,491.4	2,109.0	382.4

Source: Global Trade Atlas and China's Customs Administration.

China's Major Trading Partners

Table 5 lists official Chinese trade data on its seven largest trading partners in 2018 (based on total trade). These include the 28 countries that make up the European Union (EU28), the United States, the 10 nations that constitute the Association of Southeast Asian Nations (ASEAN), Japan, South Korea, Hong Kong, and Taiwan⁴⁶. China's top three export markets

⁴⁶ ASEAN members include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand, and Vietnam.

were the United States, the EU28, ASEAN⁴⁷, while its top sources for imports were the EU28, ASEAN, and South Korea. According to Chinese data, it maintained large trade surpluses with the United States (\$282 billion), Hong Kong (\$274 billion) and the EU28 (\$129 billion) and reported large trade imbalances with Taiwan (\$112 billion) and South Korea (\$74 billion). China's trade data differ significantly from those of many of its trading partners. These differences appear to be largely caused by how China's trade via Hong Kong is counted in official Chinese trade data. China treats a large share of its exports through Hong Kong as Chinese exports to Hong Kong for statistical purposes, while many countries that import Chinese products through Hong Kong generally attribute their origin to China for statistical purposes, including the United States⁴⁸.

Table 5. China's Major Merchandise Trading Partners in 2018

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Country	Total Trade	Chinese Exports	Chinese Imports	China's Trade Balance
European Union	681	408	273	135
United States	631	477	154	323
ASEAN	575	318	257	61
Japan	327	147	180	-33
South Korea	313	109	204	-95
Hong Kong	310	302	8	294
Taiwan	225	48	177	-129

Source: China's Customs Administration.

Notes: Rankings according to China's total trade in 2018. China's bilateral trade data often differ from that of its trading partners.

Major Chinese Trade Commodities

China's abundance of low-cost labour has made it internationally competitive in many low-cost, labour-intensive manufactures. As a result, manufactured products constitute a significant share of China's trade. A substantial amount of China's imports is comprised of parts and components that are assembled into finished products, such as consumer electronic products and computers, and then exported. Often, the value-added to such products in China by Chinese workers is relatively small compared to the total value of the product when it is shipped abroad.

⁴⁷ Much of Chinese exports to Hong Kong are later re-shipped elsewhere.

⁴⁸ See CRS Report RS22640, What's the Difference?—Comparing U.S. and Chinese Trade Data, by Michael F. Martin.

China's top 10 imports and exports in 2018 are listed in Table 6 and Table 7, respectively, using the harmonized tariff system (HTS) on a two-digit level. Major imports included electrical machinery and equipment⁴⁹; mineral fuels; nuclear reactors, boilers, and machinery (such as automatic data process machines and machines to make semiconductors); ores; and optical, photographic, medical, or surgical instruments. China's biggest exports were electrical machinery and equipment; nuclear reactors, boilers, and machinery; furniture; plastics; and vehicles.

Table 6. Major Chinese Merchandise Imports in 2018

HS Code	Description	\$ Billions	Percentage of Total Exports	2018/2017 % Change
	Total Commodities	2,117	100	18.3
85	Electrical machinery and equipment	522	24.6	14.2
27	Mineral fuel, oil etc.	348	16.4	41.5
84	Nuclear reactors, boilers, and machinery	202	9.6	18.8
26	Ores, slag, and ash	135	6.4	8.3
90	Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	103	4.8	5.2
87	Vehicles, except railway, and parts trucks, and bicycles)	81	3.9	2.9
71	Precious stones and metals	61	2.9	328.6
74	Copper and articles thereof	48	2.3	15.5
12	Oil seeds, misc. grain, plants, and fruit	43	2.1	-2.7
30	Pharmaceutical products	28	1.3	10.8

Source: *World Trade Atlas*, using official Chinese statistics.

Note: Top 10 imports in 2018, two-digit level, harmonized tariff system.

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⁴⁹ This includes electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles

Table 7. Major Chinese Merchandise Exports in 2018

HS Code	Description	\$ Billions	Percentage of Total Exports	2017/2016 % Change
	Total Commodities	2,489	100	9 .2
85	Electrical machinery	664	26.7	10 .6
84	Nuclear reactors, boilers, and machinery	429	17.3	12 .0
94	Furniture and bedding	96	3.9	5 .6
39	Plastics and articles thereof	80	3.2	12 .1
87	Vehicles, except railway, and parts	75	3.0	11 .4
61	Apparel articles and accessories, knit or crochet	74	3.0	1 .9
62	Apparel articles and accessories, woven	71	2.9	-3 .3
90	Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	71	2.9	0 .8
73	Articles of iron or steel	65	2.6	13 .0
29	Organic chemicals	60	2.4	20 .3

Source: World Trade Atlas, using official Chinese statistics.

Note: Top 10 exports in 2018, two-digit level, harmonized tariff system.

Major Long-Term Challenges Facing the Chinese Economy

China is currently undergoing a major restructuring of its economic model. Policies that were employed in the past to essentially produce rapid economic growth at any cost were very successful. However, such policies have entailed several other costs (such as heavy pollution, widening income inequality, overcapacity in many industries, an inefficient financial system, rising corporate debt, and numerous imbalances in the economy) and therefore the

old growth model is viewed by many economists as no longer sustainable. China has sought to develop a new growth model ("the new normal") that promotes more sustainable (and less costly) economic growth that puts greater emphasis on private consumption and innovation as the new drivers of the Chinese economy. Implementing a new growth model that sustains healthy economic growth could prove challenging unless China is able to effectively implement new economic reforms. Many analysts warn that without such reforms, China could face a period of stagnant economic growth and living standards, a condition referred to by economists as the "middle-income trap" (Several of these challenges are discussed below.

China's Incomplete Transition to a Market Economy

Despite China's three-decade history of widespread economic reforms, Chinese officials contend that China is a "socialist-market economy." This appears to indicate that the government accepts and allows the use of free market forces in a few areas to help grow the economy, but the government still plays a major role in the country's economic development.

Industrial Policies and SOEs

According to the World Bank, "China has become one of the world's most active users of industrial policies and administrations⁵⁰." China's State Council has said that there are currently 150,000 SOEs at the central and local government level⁵¹. China's SOEs may account for up of 50% of non-agriculture GDP⁵². In addition, although the number of SOEs has declined sharply, they continue to dominate a number of sectors (such as petroleum and mining, telecommunications, utilities, transportation, and various industrial sectors); are shielded from competition; are the main sectors encouraged to invest overseas; and dominate the listings on China's stock indexes⁵³. One study found that SOEs constituted 50% of the 500 largest manufacturing companies in China and 61% of the top 500 service sector enterprises⁵⁴. Not only are SOEs dominant players in China's economy, but

⁵⁰ The World Bank, China: 2030, February 27, 2012, p. 114.

⁵¹ The State Council of the People's Republic of China, "Why is China reforming State-owned enterprises?," February 16, 2017, available at http://english.gov.cn/news/video/2017/02/16/content_281475569025065.htm
⁵² U.S.-China Economic and Security Review Commission, An Analysis of State-owned Enterprises and State Capitalism in China, by Andrew Szamosszegi and Cole Kyle, October 26, 2011, p. 1.

⁵³ The nature of China's SOEs has become increasing complex. Many SOEs appear to be run like private companies. For example, and a number of SOEs have made initial public offerings in China's stock markets and those in other countries (including the United States), although the Chinese government is usually the largest shareholder. It is not clear to what extent the Chinese government attempts to influence decisions made by the SOE's which have become shareholding companies.

⁵⁴ Xiao Geng, Xiuke Yang, and Anna Janus, State-owned Enterprises in China, Reform Dynamics and Impacts, 2009, p. 155.

many are also quite large by global standards. Fortune's 2016 list of the world's 500 largest companies include 103 Chinese firms (compared to 29 listed firms in 2007)⁵⁵. Of the 103 Chinese firms listed, Fortune identified 75 companies (73% of total) where the government owned 50% or more of the company. Together, these 75 firms in 2016 generated \$7.2 trillion in revenues, had assets valued at \$20.7 trillion, and employed 16.2 million workers. Of the 28 other Chinese firms on the Fortune 500 list, several appear to have financial links to the Chinese government.

China and Global Steel Overcapacity

China has become a major global producer of steel. From 2001 to 2016, China's production of raw steel rose from 152 million metric tons to 805 million metric tons, an increase of 459.9%. During this period, China's share of global production rose from 17.9% to 50.3% and China accounted for 87.1% of the increase in global steel production⁵⁶. While much of China's increased steel capacity has been in response to domestic demand (resulting from China's large-scale fixed investment), it is also a major exporter. In 2015, China was the second-largest exporter of semi-finished and steel products (after the EU) at 111.6 million metric tons, or 24.1% of global total.

Concerns have been raised over the past few years over the effects of increased global steel production despite falling global steel demand. Following an EU Symposium on Excess Capacity and Structural Adjustment in the Steel Sector in April 2016, then-U.S. Secretary of Commerce Penny Pritzker and then-USTR Michael Frohman issued a joint statement that said that the "U.S. steel industry is in a crisis driven in large part by global excess capacity.... led by unsustainable expansion in steelmaking capacity by China," and noted that global steel overcapacity had impacted the U.S. industry through price declines, decreased profitability, and over 13,000 jobs lost⁵⁷.

Many analysts contend that China's steel industry is heavily supported by government entities at the central and local government level through low-cost credit and subsidies. These enable many Chinese steel firms to operate, even when they are unprofitable and heavily in debt—these are termed by some as "zombies." The government is reluctant to allow such firms to go bankrupt due to concerns over effects layoffs could have on social stability. One study by Renmin University estimated that half of Chinese steel firms were "zombie enterprises⁵⁸." In April 2016, the USTR released a list of 86 government subsidies from 2011 to 2014 given to Hebei Iron & Steel Company, one of the largest steel companies in China, which was obtained from the company's annual reports⁵⁹.

In February 2016, the Chinese government announced plans to shut 100 million to 150 million metric tons of crude steel capacity over the next five years and cut 500,000 jobs⁶⁰. The USTR's 2016 report on China's WTO compliance stated that China had committed to "ensure that no central government plans, policies, directives, guidelines, lending or subsidization targets the net expansion of steel capacity," and to take steps to reduce existing capacity, including "actively and appropriately dispose of 'zombie enterprises' through bankruptcies and other means⁶¹."

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⁵⁵ The listing can be found at http://beta.fortune.com/global500/

 $^{^{56}}$ Data from World Steel Association, at $\underline{\text{https://www.worldsteel.org/steel-by-topic/statistics/Steel-Statistical-Yearbook-.html}$

⁵⁷ USTR, *Press Release*, April 16, 2016, available at https://ustr.gov/about-us/policy-offices/press-office/press-releases/2016/april/statement-secretary-pritzker-and-ustr#

⁵⁸ The Wall Street Journal, China Steels Its Resolve, But 'Zombies' Abound, July 29, 2016, available at http://blogs.wsj.com/chinarealtime/2016/07/29/csteel0729/

⁵⁹ Inside U.S. Trade, China Trade Extra, U.S. Lays Out Subsidies To Chinese Steel Firm In 'Room Document' Circulated At WTO Meeting, April 29, 2016.

⁶⁰. Bloomberg News, China Expects 1.8 Million Coal, Steel Layoffs on Capacity Cuts, February 29, 2016, available at https://www.bloomberg.com/news/articles/2016-02-29/china-expects-1-8-million-coal-steel-layoffs-on-capacity-cuts

⁶¹ USTR, 2016 Report to Congress On China's WTO Compliance, January 2017, p. 6.

A State-Dominated Banking Sector, Excess Credit, and Growing Debt

China's banking system is largely dominated by state-owned or statecontrolled banks. According to one analyst, the mangers of China's state banks are drawn from the ranks of the Chinese Communist Party cadre system, which "enables the party and government leaderships to exert influence over bank lending⁶²." In 2015, the top five largest banks in China in terms of assets were state-owned entities⁶³. The percentage share of assets held by stateowned commercial banks (including the five large state-owned banks), the three government policy banks⁶⁴, and joint-stock commercial banks (where government entities are a major stockholder), together accounted for 68.5% of total bank assets in China⁶⁵. Foreign participation in China's banking system is relatively small, accounting for 1.6% of total bank assets⁶⁶. SOEs are believed to receive preferential credit treatment by government banks, while private firms must often pay higher interest rates or obtain credit elsewhere. According to one estimate, SOEs accounted for 85% (\$1.4 trillion) of all bank loans in 2009⁶⁷. It is believed that oftentimes SOEs do not repay their loans, which may have saddled the banks with an ever-increasing amount of nonperforming loans⁶⁸. Many analysts contend that one of the biggest weaknesses of the banking system is that it lacks the ability to ration and allocate credit according to market principles, such as risk assessment.

The Chinese central government uses the banking system to boost credit to help meet its GDP growth objectives and to, when needed, offset the impact of global economic downturns, such as after the 9/11 terrorist attacks and the global financial crisis. From 2007 to 2016, China's domestic credit increased in dollar terms by 218%, and as a share of GDP, the level rose from 125% to 212%. As indicated, China's combined household, corporate, and government debt levels as a percentage of GDP as of mid-2016 are comparable to those of the United States and South Korea and lower than those of Japan and the

⁶² Mercator Institute for China Studies, China's Political System, 2017, p. 213.

⁶³ These were the Industrial & Commercial Bank of China, China Construction Bank, Agricultural Bank of China, Bank of China, and Bank of Communications

⁶⁴ These include Export Import Bank of China, Agricultural Development Bank of China, and China Development Bank.

⁶⁵ Bejkovsky, Ing. Jan, State Capitalism in China: The Case of the Banking Sector, August 2016, available at http://globalbizresearch.org/IAR16 Vietnam Conference 2016 Aug/docs/doc/PDF/VS611.pdf
⁶⁶ Ibid.

⁶⁷ The Economist, State Capitalism's Global Reach, New Masters of the Universe, How State Enterprise is Spreading, January 21, 2012.

⁶⁸ According to Chinese officials, the ratio of nonperforming in China of commercial banks at the end of 2016 was 1.7% (\$220 billion), although some analysts contend that this figure could be much higher. See, Reuters, "Chinese commercial banks' NPL ratio at 1.74 pct. –regulator," January 25, 2017, available at http://www.reuters.com/article/china-banks-npl-idUSB9N1FA01A

European Union. However, China's debt levels (in both dollars and as a percentage of GDP) have risen sharply within a relatively short time, which, some have speculated, could spark an economic crisis in China in the future. From 2006 year-end to mid-2016, China's total nonfinancial sector debt as a percentage of GDP increased from 143% to 254% (up 111 percentage points). Much of the rise in that debt came from the corporate sector, which, as a percentage of GDP, rose from 107% in 2006 to 171% in mid-2016 (up 64) percentage points). In dollar terms, China's corporate debt rose from \$3 trillion to \$17.8 trillion (up \$14.8 trillion) and currently greatly exceeds U.S. corporate debt levels. Several observers have warned that China's credit growth may be too extensive and could undermine future growth by sharply boosting debt levels, causing overcapacity in many industrials (especially extending credit to firms that are unprofitable to keep them operating), contributing to bubbles (such as in real estate), and reducing productivity by proving preferential treatment to SOEs and other government-supported entities.

Figure 18. Annual Change in the Stock of China's Domestic	c Credit 2001-2016
(\$ billions)	
Source: Economist Intelligence Unit.	
Figure 19. Core Debt of Nonfinancial Sectors in 2016* as a for Selected Economies	Percentage of GDP
(percentage)	
Source: Bank for International Settlements.	
Note: * As of second quarter 2016.	
Figure 20. U.S. and Chinese Corporate Debt: 2006-2016*	
(\$ billions)	
Source: Bank for International Settlements.	
Note: *As of second quarter 2016.	

Local government debt is viewed as a big problem in China, largely because of the potential impact it could have on the Chinese banking system. During the beginning of the global financial slowdown, many Chinese subnational government entities borrowed extensively to help stimulate local economies, especially by supporting infrastructure projects. In December 2013, the Chinese National Audit Office reported that from the end of 2010 to mid-year 2013, local government debt had increased by 67% to nearly \$3 trillion⁶⁹. The Chinese government reported that local government debt rose to \$4.3 trillion as of 2015. Efforts have been made over the past few years by the central government to restructure local government debt and restrict local government borrowing, with mixed success, according to some press reports, because of pressures on local governments to maintain rapid economic growth⁷⁰.

Many economists blame China's closed capital account for much of China's debt problems. The Chinese government has maintained restrictions on capital inflows and outflows for many years, in part to control the exchange of its currency, the renminbi (RMB), against the dollar and other currencies to boost exports. Many argue the Chinese government's restrictions on capital flows have greatly distorted financial markets in China, preventing the most efficient use of capital, such as overinvestment in some sectors (such as real estate) and underinvestment in others (such as services).

Environmental Challenges

China's economic growth model has emphasized the growth of heavy industry in China, much of which is energy-intensive and high polluting. The level of pollution in China continues to worsen, posing serious health risks to the population. The Chinese government often disregards its own environmental laws to promote rapid economic growth. China's environmental challenges are illustrated by the following incidents and reports.

- A 2018 report by ExxonMobil estimated that China contributed about 60% of the growth in global CO2 emissions from 2000 to 2016, and that its emissions would surpass the combined CO2 levels of the United States and EU by 2025^{71} .
- A 2017 OECD report estimated the health costs of China's air pollution in 2015 at \$1.4 trillion, equivalent to 7.8% of its GDP^{72} .

⁶⁹ The Wall Street Journal, Xi Faces Test over China's Local Debt; Risks From Debt are Still Controllable, Audit Office Says, December 30, 2013.

⁷⁰ See for example, the Financial Times, "China local governments revive off-budget fiscal stimulus," September 21, 2016, available at https://www.ft.com/content/b303f280-7f14-11e6-8e50-8ec15fb462f4

⁷¹ ExxonMobil, 2018 Outlook for Energy, A View to 2040, 2018, p. 60, available

at http://cdn.exxonmobil.com/~/media/global/files/outlook-for-energy/2018/2018-outlook-for-energy.pdf

⁷² OECD, The Rising Cost of Ambient Air Pollution thus far in the 21st Century, Results from the BRIICS and the OECD Countries, July 2017, p. 22, available at http://www.oecd-ilibrary.org/docserver/download/d1b2b844-

en.pdf?expires=1517681542&id=id&accname=guest&checksum=9B43144FCF78931DCE50EBEC9B8F84E8

- A 2015 study by the Rand Corporation estimated that the costs (in terms of health impact and lost productivity) from China's air pollution were equal to 6.5% of GDP each year from 2000 to 2010. It further estimated the costs as a percentage of GDP of water pollution and soil degradation at an additional 2.1% and 1.1%, respectively 73 .
- On August 12, 2015, a series of large explosions in several warehouses containing chemicals occurred in the Chinese port city of Tianjin, claiming the lives of at least 163 people. Some press reports have blamed poor government enforcement of environmental regulations for the disaster. For example, some in China have questioned why dangerous chemicals were warehoused so close to residential areas and have raised concerns over the extent of chemical contamination in the area that may have resulted from the explosions.
- The U.S. Embassy in Beijing, which monitors and reports air quality in China based on an air quality index of particulate matter (developed by the U.S. Environmental Protection Agency) considered to pose a health concern, reported that the air quality in Beijing for a majority of the days in January 2013 ranged from "unhealthy" to "hazardous" (based on 24-hour exposure) and, on a few days, it recorded high readings that were "beyond index⁷⁴." The level of poor air quality in Beijing was termed by some in China as "Airpocalypse," and reportedly forced the government to shut down some factories and reduce the level of official cars on the road⁷⁵. On December 9, 2013, China's media reported that half of China was blanketed by smog⁷⁶. The U.S. Consulate General in Shanghai reported that were several days in December 2013 where its measurement of the air quality in Shanghai was hazardous or very unhealthy, and during some time periods on December 5, 2013, its readings were "beyond index." According to the U.S. Embassy in Beijing, from 2008 to 2015, nearly two-thirds of the days in Beijing had air pollution considered to be unhealthy⁷⁷.
- In February 2013, China's Geological Survey reportedly estimated that 90% of all Chinese cities had polluted groundwater, with two-thirds having "severely polluted" water⁷⁸.
- According to a 2012 report by the Asian Development Bank, less than 1% of the 500 largest cities in China meet the air quality standards

⁷³ The Rand Corporation, Cost of Selected Policies to Address Air Pollution in China, 2015, p. 3, available at http://www.rand.org/content/dam/rand/pubs/research reports/RR800/RR861/RAND RR861.pdf

⁷⁴ Hazardous is the worst category for air quality used by the U.S. embassy, based on a numerical value of its index ranging from 301 to 500. A measurement of below 50 is considered good. On several occasions, the air quality index in Beijing has surpassed 500, and on January 12, 2013, it reportedly hit 755

⁷⁵ National Public Radio, "Beijing's 'Airpocalypse' Spurs Pollution Controls, Public Pressure," January 14, 2013.

⁷⁶ Xinhua, December 9, 2013.

⁷⁷ The BBC, "China pollution: First ever red alert in effect in Beijing," December 8, 2015, available at http://www.bbc.com/news/world-asia-china-35026363

⁷⁸ New York Times, "Concerns Grow About 'Severely Polluted' Water in China's Cities," February 20, 2013

recommended by the World Health Organization, and 7 of these are ranked among the 10 most polluted cities in the world⁷⁹.

The Chinese government has indicated that it is taking steps to reduce energy consumption, boost enforcement of environmental laws and regulations, reduce coal usage by expanding the use of cleaner fuels (such as natural gas) to general power, and relocate high-polluting factories away from large urban areas, although such efforts have had mixed results on the overall level of pollution in China⁸⁰. In addition, China has become a major global producer and user of clean and renewable energy technology. In January 2017, the Chinese government said it would spend \$361 billion on renewable energy power generation by 2020⁸¹.

Corruption and the Relative Lack of the Rule of Law

The relative lack of the rule of law in China has led to widespread government corruption, financial speculation, and misallocation of investment funds. In many cases, government "connections," not market forces, are the main determinant of successful firms in China. Many U.S. firms find it difficult to do business in China because rules and regulations are generally not consistent or transparent, contracts are not easily enforced, and intellectual property rights are not protected (due to the lack of an independent judicial system). The relative lack of the rule of law and widespread government corruption in China limit competition and undermine the efficient allocation of goods and services in the economy. A *New York Times* article reported that (former) Chinese Premier Wen Jiabao's family-controlled assets worth at least \$2.7 billion⁸². One study estimates that between 2001 and 2010, China was the world's largest source of illicit capital outflows at \$3.8 trillion⁸³. A 2012 survey by the Pew Research Centre's Global Attitudes Project reported that 50% of respondents said that corrupt officials are a very big problem (up from 39% in 2008)84. Chinese officials often identify government corruption as the

⁷⁹ The Asian Development Bank, Toward an Environmentally Sustainable Future, Country Environmental Analysis of the People's Republic of China, 2012, p. xviii.

⁸⁰ Bloomberg, "China Is Winning Its War on Air Pollution, at Least in Beijing," January 11, 2018, available at https://www.bloomberg.com/news/articles/2018-01-11/china-is-winning-its-war-on-air-pollution-at-least-in-beijing

⁸¹ Reuters, "China to plow \$361 billion into renewable fuel by 2020," January 4, 2017, at https://www.reuters.com/article/us-china-energy-renewables/china-to-plow-361-billion-into-renewable-fuel-by-2020-idUSKBN14P06P

⁸² New York Times, "Billions in Hidden Riches for Family of Chinese Leader," October 25, 2012.

⁸³ Global Financial Integrity, Chinese Economy Lost \$3.79 Trillion in Illicit Financial Outflows Since 2000, Reveals New GFI Report, October 25, 2012. It is not known how much of the illicit financial outflows in China are directly linked to government corruption.

⁸⁴ Pew Research Global Attitudes Project, Growing Concerns in China about Inequality, Corruption, October 16, 2012.

greatest threat to the Chinese Communist Party and the state. The Chinese government's anticorruption watchdog reported that 106,000 officials were found guilty of corruption in 200985. Since assuming power in 2012, Chinese Xi Jinping has carried out an extensive anticorruption drive. China has reportedly sought cooperation with the United States to obtain extradition of 150 alleged corrupt officials who have fled to the United States⁸⁶. However, many analysts contend that government anticorruption campaigns are mainly used to settle political scores with out-of-favour officials. Some analysts contend that President's Xi anticorruption drive is more about consolidating his own political than instituting reforms⁸⁷ . In addition, there are some indicators that the current anticorruption campaign may be having a negative impact on the Chinese economy, due to hesitancy by some local officials to pursue projects they feel will lead to scrutiny from the central government⁸⁸. Many observers argue that meaningful progress against government corruption cannot occur without greater government transparency, a system of checks and balances, a free press, Internet freedom, and an independent judiciary⁸⁹. In October 2014, China held its fourth Plenum of the 18th Party Conference. The meeting focused on the need to enhance the rule of law in China but emphasized the leading role of the Communist Party in the legal system⁹⁰.

China maintains a weak and relatively decentralized government structure to regulate economic activity in China. Laws and regulations often go unenforced or are ignored by local government officials. As a result, many firms cut corners to maximize profits. This has led to a proliferation of unsafe food and consumer products being sold in China or exported abroad. Lack of government enforcement of food safety laws led to a massive recall of melamine-tainted infant milk formula that reportedly killed at least four children and sickened 53,000 others in 2008. Transparency International's

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⁸⁵ BBC News, "Corruption Up Among China Government Officials," January 8, 2010.

⁸⁶ The Atlantic Monthly, How to Discipline 90 Million People, April 2015, available at http://www.theatlantic.com/international/archive/2015/04/xi-jinping-china-corruption-political-culture/389787/

⁸⁷ The Washington Post, China's Leader, Xi Jinping, Consolidates Power with Crackdowns on Corruption, Internet, October 3, 2013.

⁸⁸ A study by Bank of America Merrill Lynch estimated that China's current antigraft campaign would cost the Chinese economy more than \$100 billion. See, BBC, China Blog, the Real Costs of China's Anti-Corruption Crackdown, April 2, 2014, available at http://www.bbc.com/news/blogs-china-blog-26864134

⁸⁹ New York Times, "Chinese Officials Find Misbehavior Now Carries Cost," December 25, 2012.

⁹⁰ The Diplomat, "4 Things We Learned from China's 4th Plenum," October 23, 2014, available at http://thediplomat.com/2014/10/4-things-we-learned-from-chinas-4th-plenum/

Corruption Perception Index for 2016 ranked China 79^{th} out of 176 countries and territories, up from 72^{nd} in 2007^{91} .

Demographic Challenges

Many economists contend that China's demographic policies, particularly its one-child policy (first implemented in 1979), are beginning to have a significant impact on the Chinese economy. For example, according to a McKinsey Global Institute study, China's fertility rate fell from about 5.8 births per woman in 1964 to 1.6 in 2012⁹². This is now affecting the size of the Chinese workforce.

The existence of a large and underemployed labour force was a significant factor in China's rapid economic growth when economic reforms were first introduced. Such a large labour force meant that firms in China had access to a nearly endless supply of low-cost labour, which helped enable many firms to become more profitable, which in turn led them to boost investment and production. Some economists contend that China is beginning to lose this labour advantage. According to the Chinese government, the size of its working age population (ages 16 to 59) peaked at 925 million in 2011, but then fell for seven consecutive years to 897 million in 2018. The Chinese government projects that its working age population will drop to 830 million by 2030 and to 700 million by 2050. If these projections prove accurate, the Chines working age population could drop by 225 million individuals (2011-2050)⁹³.

The one-child policy has also resulted in a rapidly aging society in China⁹⁴. According to the Brookings Institute, China already has 180 million people aged over 60, and this could reach 240 million by 2020 and 360 million by 2030. The population share of people aged over 60 could reach 20% by 2020, and 27% by 2030⁹⁵. With a declining working population and a rising elderly population, the Chinese government will face challenges trying to boost worker productivity (such as enhancing innovation and high-end technology development) and expanding spending on health care and elderly services.

⁹¹ Transparency International, Corruption Perceptions Index 2016, January 2017, available at https://www.transparency.org/news/feature/corruption perceptions index 2016

⁹² McKinsey Global Institute, Can Long-Term Global Growth be Saved?, January 2015, available at http://www.mckinsey.com/~/media/McKinsey/dotcom/Insights/Growth/Can%20long-term%20global%20growth%20be%20saved/MGI Global growth Full report February 2015pdf.ashx

⁹³ Caixing, Chart of the Day: China's Shrinking Workforce, January 29, 2019, available athttps://www.caixinglobal.com/2019-01-29/chart-of-the-day-chinas-shrinking-workforce-101375782.html

⁹⁴ Some analysts contend that because of it demographics, China will grow old before it grows rich.

⁹⁵ Brookings Institute, Racing Towards the Precipice, by: Feng Wang, June 2012, available at http://www.brookings.edu/research/articles/2012/06/china-demographics-wang

China's Hukou (household registration) system also poses challenges to the government.

China's Hukou System⁹⁶

First introduced in 1951, the Chinese Hukou (household registration) system is a categorization of its citizens based on both their place of residence and eligibility for certain socioeconomic benefits. Hukou is issued through a registration process administered by local authorities and solidified into inheritable social identities⁹⁷. The classification of the system is composed by two related parts: socioeconomic eligibility (agricultural/non-agricultural); and residential location (living in urban/rural areas). The Chinese government imposed the system with the purpose of regulating population distribution, especially regarding cities. Since economic reforms were begun in 1979, hundreds of millions of people have been allowed to leave their hometowns to work in urban areas, such as Shanghai. The number of rural laborers working in China's cities was 274 million in 2014, over one-third (36%) of the total workforce.⁹⁸ Although such workers are allowed to reside in the cities where they work, they are generally denied access to social entitlements, such as pensions, medical insurance, and basic education for children. This forces such workers to save a very high level of their income to pay for these services. Due to China's desire to increase the urbanization of its population, combat demographic disparities, and boost domestic consumption, the Chinese government is currently considering implementing new reforms to the Hukou system.

Economic Goals of the 19th Party Congress of the Communist Party

President Xi's report to the 19th Party Congress in November 2017 stated that socialism with Chinese characteristics had entered a new era. He stated that China would work to become a "moderately prosperous society in all respects" by 2050. Major goals include boosting living standards for poor and rural people, addressing income disparities (e.g., rich-poor, and urban-rural), making private consumption the driver of the economy, boosting services, reducing pollution, promoting innovation and economic modernization, and improving overall living standards⁹⁹. For example, the report states the following:

We will work faster to build China into a manufacturer of quality and develop advanced manufacturing, promote further integration of the internet, big data,

Prepared by Candy Meza, Research Associate, Foreign Affairs, Defense, and Trade Division.

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⁹⁷ Congressional-Executive Commission on China, Special Topic Paper: China's Household Registration System: Sustained Reforms Needed to Protect China's Rural Migrant.

⁹⁸ Annual survey of migrant workers conducted by the National Bureau of Statistics, 2014. http://www.stats.gov.cn/tjsj/ndsj/2014/indexeh.htm

⁹⁹ China's goals are to achieve average annual GDP growth of 4.8% from 2020 to 2035 and 3.4% from 2030 to 2050. It seeks to achieve per capita GDP of \$20,000 by 2025 (making China a high income country), \$45,000 by 2035 (35% of U.S. levels), and \$120,000 by 2050 (half of U.S. levels).

and artificial intelligence with the real economy, and foster new growth areas and drivers of growth in medium-high end consumption, innovation-driven development, the green and low-carbon economy, the sharing economy, modern supply chains, and human capital services. We will support traditional industries in upgrading themselves and accelerate development of modern service industries to elevate them to international standards. We will move Chinese industries up to the medium-high end of the global value chain and foster a number of world-class advanced manufacturing clusters.

The report indicated that China would continue to pursue trade and investment reforms, noting the following:

We will adopt policies to promote high-standard liberalization and facilitation of trade and investment; we will implement the system of pre-establishment national treatment plus a negative list across the board, significantly ease market access, further open the service sector, and protect the legitimate rights and interests of foreign investors. All businesses registered in China will be treated equally.

However, the report emphasized the continued importance of the state sector and the government's continued role in various economic sectors:

We will improve the systems for managing different types of state assets, and reform the system of authorized operation of state capital. In the state-owned sector, we will step up improved distribution, structural adjustment, and strategic reorganization. We will work to see that state assets maintain and increase their value; we will support state capital in becoming stronger, doing better, and growing bigger, and take effective measures to prevent the loss of state assets. We will further reform of state-owned enterprises, develop mixed-ownership economic entities, and turn Chinese enterprises into world-class, globally competitive firms.¹⁰⁰

China's Belt and Road Initiative

China's Belt and Road initiative (BRI), also called "One Belt, One Road" (OBOR), was launched in 2013 to boost economic integration and connectivity (such as infrastructure, trade, and investment) with its neighbours and various trading partners in Asia, Africa, Europe, and beyond¹⁰¹. At the APEC summit in November 2017, President Xi said the following:

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¹⁰⁰ Xinhua, "Full text of Xi Jinping's report at 19th CPC National Congress," November 3, 2017, available at http://news.xinhuanet.com/english/special/2017-11/03/c 136725942.htm

¹⁰¹ It comprises the Silk Road Economic Belt and the 21st Century Maritime Silk Road.

The Belt and Road Initiative calls for joint contribution and it has a clear focus, which is to promote infrastructure construction and connectivity, strengthen coordination on economic policies, enhance complementarity of development strategies and boost interconnected development to achieve common prosperity. This initiative is from China, but it belongs to the world. It is rooted in history, but it is oriented toward the future. It focuses on the Asian, European and African continents, but it is open to all partners. I am confident that the launch of the Belt and Road Initiative will create a broader and more dynamic platform for Asia-Pacific cooperation 102.

Many U.S. analysts view the BRI differently than how Chinese leaders describe it. For example, Nadège Rolland, senior fellow with the National Bureau of Asian Research states the following:

The Belt and Road Initiative (BRI) is generally understood as China's plan to finance and build infrastructure projects across Eurasia. Infrastructure development is in fact only one of BRI's five components which include strengthened regional political cooperation, unimpeded trade, financial integration and people-to-people exchanges. Taken together, BRI's different components serve Beijing's vision for regional integration under its helm. It is a top-level design for which the central government has mobilized the country's political, diplomatic, intellectual, economic, and financial resources. It is mainly conceived as a response to the most pressing internal and external economic and strategic challenges faced by China, and as an instrument at the service of the PRC's vision for itself as the uncontested leading power in the region in the coming decades. As such, it is a grand strategy¹⁰³.

Many aspects of the BRI initiative remain unclear, including which (and how many) countries will participate, how much China will spend to finance the initiative, and what projects will fall under the BRI. For example, the government's China Belt and Road Portal currently lists profiles of 70 countries on its website¹⁰⁴. However, China's official media in December 2017 stated that 86 countries and international organizations had signed 100 cooperation agreements with China under the BRI¹⁰⁵. Nadège Rolland said China pledged would trillion \$1.3 that it spend \$1 to

¹⁰² Xinhuanet, "Full text of Chinese President Xi's address at APEC CEO Summit," November 11, 2017, available at http://www.xinhuanet.com/english/2017-11/11/c 136743492.htm

¹⁰³ Testimony of Nadège Rolland, Senior Fellow, The National Bureau of Asian Research, before the U.S.-China Economic and Security Review Commission Hearing on: "China's Belt and Road Initiative: Five Years Later, January 25, 2018, available

at https://www.uscc.gov/sites/default/files/Rolland USCC%20Testimony 16Jan2018.pdf

¹⁰⁴ See https://eng.vidaiyilu.gov.cn/info/iList.jsp?cat id=10076&cur page=1

¹⁰⁵ Xinhuanet, "China signs cooperation agreements with 86 entities under Belt and Road," available at http://www.xinhuanet.com/english/2017-12/23/c_136846221.htm

trillion, *The Economist* reports that China put the figure at \$4 trillion¹⁰⁶, and the World Economic Forum estimates that China could ultimately spend \$8 trillion on BRI¹⁰⁷.

The initiative could provide a big boost to China's economy and soft power image. China hopes to gain a better return on its foreign exchange reserves, create new overseas business opportunities for Chinese firms, create new markets for industries currently experiencing overcapacity, and stimulate economic development in poorer regions of China¹⁰⁸. However, the initiative could pose financial risks if borrowers do not repay loans or if recipient countries do not view Belt and Road as benefiting them. U.S. Secretary of State Rex Tillerson criticized certain aspects of Belt and Road initiative in remarks made in October 2017:

We have watched the activities and actions of others in the region, in particular China, and the financing mechanisms it brings to many of these countries which result in saddling them with enormous levels of debt. They don't often create the jobs, which infrastructure projects should be tremendous job creators in these economies, but too often, foreign workers are brought in to execute these infrastructure projects. Financing is structured in a way that makes it very difficult for them to obtain future financing, and oftentimes has very subtle triggers in the financing that results in financing default and the conversion of debt to equity¹⁰⁹.

China has undertaken other major financial initiatives as well. In July 2014, China, along with Brazil, Russia, India, and South Africa, announced the creation of a \$100 billion "New Development Bank," which is headquartered in Shanghai, China. The new bank aims to fund infrastructure projects in developing countries. In October 2014, China launched the creation of a new \$100 billion Asian Infrastructure Development Bank (AIIB), aimed at funding infrastructure projects in Asia¹¹⁰. Fifty-seven nations joined as founding members. The AIIB, headquartered in Beijing, announced it was open for business in January 2016. To date, the United States has chosen not to join the AIIB.

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¹⁰⁶ The Economist, "Our bulldozers, our rules, China's foreign policy could reshape a good part of the world economy," July 2, 2016, available at https://www.economist.com/news/china/21701505-chinas-foreign-policy-could-reshape-good-part-world-economy-our-bulldozers-our-rules

¹⁰⁷ World Economic Forum, "China's \$900 billion New Silk Road. What you need to know," June 26, 2017, available at https://www.weforum.org/agenda/2017/06/china-new-silk-road-explainer/.

¹⁰⁸ On October 24, 2017, the 19th Chinese Communist Party Congress passed a resolution to include the Belt and Road Initiative into the Chinese Constitution.

¹⁰⁹ U.S. Department of State, Remarks on "Defining Our Relationship with India for the Next Century," October 18, 2017, available at https://www.state.gov/secretary/remarks/2017/10/274913.htm

¹¹⁰ See CRS In Focus IF10154, <u>Asian Infrastructure Investment Bank</u>, by Martin A. Weiss.

Made in China 2025

The "Made in China 2025" initiative, announced in 2015, is one of several aimed announced ambitious projects at increasing competitiveness of Chinese industries, fostering Chinese brands, boosting innovation, and reducing China's reliance on foreign technology by making China a major or dominant global manufacturer of various technologies¹¹¹. According to Chinese media, the initiative intends to "transform China from a manufacturing giant into a world manufacturing power" by 2049¹¹². For example, the plan states a goal of achieving 40% of domestically manufactured basic components and basic materials by 2020 and 70% by 2025. An updated version of the plan released in January 2018 said China aimed to become the world's leading manufacturer of telecommunication, railway, and electrical power equipment by 2025, and that China's robotics. high-end automation, and new energy vehicles industries would globally rank second or third by 2025¹¹³. The methods the Chinese government plans to use to achieve its goals have raised concerns among U.S. firms and policymakers because they appear to involve large subsidies, protection of domestic industries, directed policies to purchase technology and IPR from abroad, increased pressure on foreign firms to transfer technology to do business in China, and what appears to be a goal of deliberately reducing foreign participation in China's markets.

In an interview on November 3, 2017, U.S. Trade Representative Robert Lighthizer stated that China's Made in China 2025 initiative was "a very, very serious challenge, not just to us, but to Europe, Japan and the global trading system. The USTR's 2017 annual report on China's WTO compliance focused heavily on the initiative, stating that Made in China 2025 differed from industry support by other WTO members in the level of ambition and scale of resources dedicated to obtaining its goals, and the USTR report warned that "even if the Chinese government fails to achieve the industrial policy goals set forth in Made in China 2025, it is still likely to create or

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¹¹¹ The 2015 "Made in China 2025" document identified these 10 for support These ten key sectors are (1) next-generation information technology, (2) high-end numerical control machinery and robotics, (3) aerospace and aviation equipment, (4) maritime engineering equipment and high-tech maritime vessel manufacturing, (5) advanced rail equipment, (6) energy-saving and new energy vehicles, (7) electrical equipment, (8) agricultural machinery and equipment, (9) new materials, and (10) biopharmaceuticals and high-performance medical devices

 $^{^{112}}$ Xinhuanet, "Made in China 2025" Plan Unveiled, May 19, 2015, at http://www.xinhuanet.com/english/2015-05/19/c 134251770.htm

¹¹³ China Daily, "Made in China 2025 roadmap updated," January 27, 2018,

at http://www.chinadaily.com.cn/a/201801/27/WS5a6bb8b9a3106e7dcc137168.html

¹¹⁴ The interview is available at https://www.youtube.com/watch?v=L03Np5ZLvM8

exacerbate market distortions and create severe excess capacity in many of the targeted industries.¹¹⁵"

Challenges to U.S. Policy of China's Economic Rise

China's rapid economic growth and emergence as a major economic power have given China's leadership increased confidence in its economic model. Many believe the key challenges for the United States are to convince China that (1) it has a stake in maintaining the international trading system, which is largely responsible for its economic rise, and should take a more active leadership role in maintaining that system; and (2) further economic and trade reforms are the surest way for China to grow and modernize its economy. Lowering trade and investment barriers would boost competition in China, lower costs for consumers, increase economic efficiency, and spur innovation. However, many U.S. stakeholders are concerned that China's efforts to boost the development of indigenous innovation and technology could result in greater intervention by the state (such as subsidies, trade and investment barriers, and discriminatory policies), which could negatively affect U.S. IP-intensive firms.

Opinions differ as to the most effective way to deal with China on major economic issues. Some support a policy of engagement with China using various forums. Others support a somewhat mixed policy of using engagement, when possible, coupled with a more aggressive use of the WTO dispute settlement procedures to address China's unfair trade policies¹¹⁶. Others, who see China as a growing threat to the U.S. economy and the global trading system, advocate a policy of trying to contain China's economic power and using punitive measures, such as increased tariffs under Section 301, to either counter the negative impact of China's industrial policies on U.S. firms or push China to modify distortive and discriminatory policies (such as the Made in China 2025 initiative). Responding to China's BRI is viewed by some as a major challenge to U.S. global economic interests. While China's financial support of infrastructure projects in numerous countries could produce positive economic results, U.S. policymakers have expressed concerns that China will use BRI to mainly benefit its own firms, that the process of implementation of projects will not be transparent, that BRI participation could saddle countries with large debts, and that China will use the BRI to spread its economic system to other countries.

¹¹⁵ USTR, 2017 Report to Congress on China's WTO Compliance, January 2018, p. 10, available at https://ustr.gov/sites/default/files/files/Press/Reports/China%202017%20WTO%20Report.pdf

¹¹⁶ It is significant to note that the Trump Administration had not brought any WTO dispute settlement cases against China.

Assessment

From the above presentation and narrative of China's economic rise, it can be deduced that the first, the 30 years between 1949 and 1978, was dedicated to the practical tasks of the political establishment of the People's Republic.

The second, from 1979 until 2012, is seen as the great period of domestic economic reform, and the internationalisation of the Chinese economy.

The third, now described as a 'new era', will be dominated by the transformation of China's economic growth model, as agreed at the 2013 Party Plenum, which is deemed to be necessary for China to achieve its dual-centenary goals.

The previous growth model, based on high levels of state investment in State Owned Enterprises, combined with low wage, labour-intensive manufacturing for export, has served China well for three decades but rising wage levels now render it increasingly redundant.

The new growth model, by contrast, is based on private domestic consumption rather than public fixed capital investment, as the major driver of growth.

Part II China As Strategic Power

China's World View

It is essential to understanding the world China seeks to create by 2049, when the PRC turns 100. As China becomes more powerful and influential in international relations, Xi and his cohorts will fundamentally change the international system created by the comity of post-Cold War nation states led primarily by the United States after the demise of the former Soviet Union in 1991. The main issues that need to be addressed by the global community and need to be factored in are:

- What kind of world does China seek to create by 2049 the centenary of the People's Republic of China (PRC).
- Will China sustain the present liberal system or forge another anchored on its ambitions, culture, and desires? Centuries of past Chinese history strongly suggests the latter.
- In the Part I we have elaborately discussed China's Economic rise. This needs to be seriously noted and critically introspected and examined.
- Conceiving of what type of world China will create is significant for three reasons.
- First, it is critical for the world to understand so that the full scope of China's strategic ambitions and direction may be understood.
- Second, as China grows in power and influence, it is essential to comprehend what China will sustain of the present global order versus what it will replace.
- Universally and globally decision-makers must accept that the world China would like to create by 2049 will be fundamentally different.
- The economic order will be a curious mix of hyper-capitalism and neomercantilism.
- The political order will be authoritarian.
- Third, understanding China's ambition and grand strategic objectives will allows the global community to develop policies and undertake measures to contain China
- However, whether the global comity of nation states can maintain its
 position collectively as the pre-eminent force for free and open societies
 in the face of a rising challenge from China is likely to be a defining
 element of international politics in the 21st century and will be of

immediate national interest/national security policy for all countries especially for India.

If the rise of China continues as is being witnessed today, then the world by 2049 will be defined by the actuality of Chinese power. China will then surely emerge as the world's greatest economic and political force, including alliances and global presence. While its power will make it the dominant state in international politics, the central issue is how China will use its power. Will China join the liberal world order, or will it transform free world rules, norms, and institutions?

China's grand strategic vision is primacy and China will and could be the dominant force in international politics. Presently, China's vision is defined by Xi Jinping's phrase "One World, One Dream," This is a modern form of tianxia, or "all under heaven." This concept serves as the foundation of old China's imperial ideology — the Chinese conceptualisation of how the world should be ordered.

The concept of "all under heaven" is the genesis of the Chinese world view with respect to how China ought to be ruled, its position in international politics, and the subordinate role required of other states. It implies, first, an ethnic Han polity, which is inherently authoritarian. Second, it requires that a single powerful monarch, the Chinese emperor ("Son of Heaven") should rule the entire civilized world — which should be unified under the emperor's control so that disorder and chaos may be avoided, and reason and just rule may triumph.

As Thayer and Friend writing in 2018, have observed that

"The fundamental ideas and values that forged China's political culture remains as is today. What China will want in 2049 dovetails with what China wants today or wanted in its imperial past. There is a profound continuity in the Chinese worldview, its imperial ideology, including why its political leaders sincerely believe its domination provides the best outcome for its denizens and for all states in international politics for most of its history, China was the epitome of power and held a dominant position in East Asia. Its relationship with neighboring countries was based on a hierarchical tribute system that provided China will vast amounts of power, influence, and prestige. Thus, we can appreciate why a resurgent China with an emboldened leadership desires to recapture a modern form of this position".

China's Economic Goals

In the economic realm, China is actively seeking to replace the liberal principles of the free democratic capitalist worlds' "Consensus Model" with its own development model which fuses in a hybrid fashion hyper-capitalism with neomercantilist policies. This "China Model" offers subsidized development to developing countries with no strings attached. This model is advanced as "value neutral," as it does not require governments to adopt democratic principles or uphold basic human rights. However, we have witnessed already as to how this model has led number of nation states in Asia and Africa to fall in the "Debt Trap" already.

Thayer and Friend further envisage that

"China's push towards the implementation of this model will follow a two-track process that has both short-term and long-term objectives. In the short term, China will aim to work within the present international trade regime, support established norms, and continue to manoeuvre within this system to accomplish its foreign policy objectives, which are primarily dependent on maintaining economic development and trade. Since the economic reforms of the Deng Xiaoping era, China has accepted many of the norms and rules of the liberal world order, joining the World Trade Organization (WTO) for example, and, over time, become more involved in key international organizations, such as the United Nations. This initial embrace of multilateralism was a combination of choice and necessity, as China's economic development was dependent upon global integration, expanding its political influence, and developing its soft power."

At the moment, China finds it nearly impossible to achieve the desired outcome. The following observations are pertinent:

- China is unable to overturn completely Western rules and institutions, as it does not have the capacity or incentive to transform the existing international order.
- Therefore, in the near term, China will continue to work within the Western-led multilateral institutions and tout its support for the established order.
- China's short-term strategy will be and continues to maintain the system that has made possible its economic growth and minimize resistance to its actions until its replacement is fully functioning.
- China will not directly challenging the global economic order; Beijing is able to sustain the "peaceful rise" ruse and attract the strong support of

- many Western academics and policymakers who believe that China will never replace the system responsible for its success.
- China presently has to incorporate multilateralism and become more involved in international institutions like the WTO.
- Beijing will simultaneously develop Chinese-led economic institutions like the Asian Infrastructure Investment Bank (AIIB) and the Belt and Road Initiative (BRI), which Chinese political elite argue uphold and deepen liberal values and principles.

With the decline of the United States in terms of influence especially after her withdrawal from Afghanistan China by the time her Centenary celebration in 2049, is bound to become more powerful. China will aspire do the following:

- Will push for reforms that promote hyper-capitalism and minimize liberal democratic principles within Western-led international institutions.
- Make more countries join Chinese-led institutions, Beijing will be able to use its economic power as leverage to persuade through a combination of sticks and carrots Western and non-Western governments to support and adopt these reforms.
- Despite opening to international trade, China will continue to pursue neomercantilist policies.
- China's involvement in multilateral institutions will be strategic in nature. China will seek to mute threat perception and establish a network of economic relations that it can use as leverage and a means to advance its own foreign policy agenda.
- Accept that her call for hyper-capitalism will be overshadowed by its mercantilist tendencies and cultural chauvinism.
- Employing neo-mercantilist tactics when convenient and use economic power to coerce and punish states that directly or indirectly challenge its authority, security interests, and foreign policies. For example, in response to the installation of the U.S. Terminal High Altitude Area Defense (THAAD) system in South Korea, Beijing strongly encouraged its citizens to boycott South Korean companies, such as Hyundai, Amore Pacific, and Lotte, and implemented a ban on tour groups visiting the country, all of which significantly impacted the South Korean economy and forced Seoul to negotiate with Beijing.

By 2049, Western-led institutions will remain, but their liberal principles will be diluted by reforms required by China. As China's economic power increases and more countries in both the developed and developing world become dependent on Chinese trade and investment, China will use its economic statecraft to pressure countries to downplay or abandon their democratic values and liberal policies. At same time, Chinese-created and led institutions will have

weakened traditional institutions, as over the long-term China will find it easier to advance its domination through its own institutions.

China's Political Objectives

In the political domain, China seeks the following which are important to understand the nuances of Chinese Political objectives:

- Authoritarianism in international politics.
- Hierarchy and status will continue to be the basis of China's view of International Relations. This hierarchical perception will remain always in Chinese Political psyche.
- Paternalism has always shaped China's relations with countries perceived as inferior, be it China's political approach in the South China Sea or its business practices in Africa and Latin America. Such actions make China look as the hegemon of Asia and, as a result, is sensitive to foreign influence in the region and quick to respond aggressively to territorial disputes with neighboring countries.
- President Xi Jinping statement on the "Chinese Dream," particularly his emphasis on "the great rejuvenation of the Chinese nation" and developing "socialism with Chinese characteristics" can easily be interpreted as China's imperial ideology.
- President Xi' consolidation of power within the Chinese Communist Party (CCP) following the 19th National Congress in October 2017, along with the comparison of "Xi Jinping Thought" with Deng's and Mao's thought among Chinese intellectuals and party officials, has many China watchers rightfully concerned that Xi is becoming too powerful.
- The cultural concept of "national rejuvenation" has been used since Sun Yat-Sen. However, Xi is the first to export the Chinese dream narrative to a global level. This can be a dangerous aspiration on the part of Chinese political leadership because if Xi's "Dream" is realized, then we can envision a world whereby the mid-21st century, democratic governments will only survive in the West, and China's political model will have the upper hand in the international system.
- Should the above happen it will pose serious threat for egalitarianism to remain the dominant ideal in international politics. We may be witnessing the real fault lines leading the re-emergence of singularity of political leadership and authoritarianism.
- Today China is offering authoritarian values that are appealing to dictatorial, fundamentalist or totalitarian governments whose hold on power is threatened by democratic principles such as the rule of law, free speech, democracy, and transparency and accountability in government. This is a matter of grave concern.

In the worst-case scenario if all goes politically the Chinese way then the observations made by Thayer and Friend is most pertinent as they state that

"By 2049, China will be ideationally self-confident and able to exert dominance more effectively in the economic, political, and military realms. Beijing will no longer integrate or negotiate but rather expect others to accept the China Order. Indeed, we are already witnessing the early stages of international politics under Chinese dominance. China's ongoing development of military bases in the South China Sea is a clear violation of international law and its attempts to suppress free speech, particularly criticism of the CCP, outside its own borders speaks volumes to its goal of supplanting liberal values with authoritarianism."

Impediments to China's Quest for Power

Three fundamental questions are key to China's quest for power, and which needs to be answered. They are:

- First, will China's economic and political rise be sustainable over the next third of a century, as it has proven to be over the last third; is China likely to obtain economic parity with the United States, and over the longer term, conventional military power parity as well; and where do these objectives lie within the competing priorities of Chinese Statecraft under President Xi Jinping;
- Second, does China have a strategic blueprint for the future political, economic and security architecture of the Asian hemisphere; if so, what is it?; if not, is it developing one; and how should we respond and
- Third, are we beginning to see the emergence of a Chinese strategic blueprint for how China might seek to change the global rules-based order in the future, for which what happens in Asia may represent a template; and how in turn should the international community respond?

These above core questions which should now be central to the preoccupation not only of planning staffs across the world but for India if China has to be contained for the Security of the Indian nation state.

What is therefore observable now is the largest geo-economic, geo-political and possibly geo-strategic change in the global distribution of power since the rise of the United States during the last third of the 19th Century.

Put more bluntly, when China in purchasing power parity terms surpasses the United States as the world largest economy during the next decade this will be the first time since George III that the world's largest economy will be non-English speaking, non-Western and non-democratic. Further it is a well-known

fact that the vitality and credibility of any nation state is achieved through its economic power in all its dimensions that ultimately shapes strategic power and, therefore, political power.

Chinese Political Power

China is a nation of anniversaries. 2014 will mark the 65th anniversary of the founding of the People's Republic of China. In 2021, China will celebrate the centenary of the founding of the Chinese Communist Party. And of course, 2049 will mark the centenary of People's China. The latter two anniversaries have become the focal point of what President Xi Jinping calls the 'dual-centenary goals'.

By 2021, the goal to 'complete the building of a moderately prosperous society in China in all respects has been achieved. Whereas for 2049, the goal is 'to have built a modern socialist country that is strong, prosperous, democratic, culturally advanced and harmonious'. Both these goals are in turn anchored in what President Xi Jinping describes as his 'dream' for China's future (Zhongguo Meng) - achieving the great renewal or renaissance (Fu Xing) of the Chinese Nation.

As President Xi's principal foreign policy adviser, State Councillor Yang Jiechi, wrote recently, 'Comrade Xi Jinping's comprehensive... description of the Chinese dream is a continuation and development of the important thinking of China's peaceful development (Heping Fazjhan) in the new era'.

In the Chinese conceptual world, 'peaceful development' is seen as the means by which to effect the realisation of the Chinese dream.

This concept of 'peaceful development' is designed to assuage China's neighbours and other international partners that China's rise will only be obtained by peaceful means.

This formulation is in turn also designed to specifically contrast with the non-peaceful rise of Japan over the half century from 1895-1945.

This concept is not only to provide comfort to the international community that China will only prosecute what is described as a 'win-win' strategy; it is also designed to deal with China's own strategic imperatives.

As State Councillor Yang writes elsewhere in his article entitled, 'Innovation in China's diplomatic theory and practice under new conditions': 'The Chinese dream requires a peaceful and stable international and neighbouring environment and China is therefore committed to realising its dream through

peaceful development'. In other words, China is communicating loudly and clearly, to both its military audience at home and the international community abroad, that its own development prospects would be derailed if it found itself, for example, in conflict with the United States.

The commercialisation, according to market principles, of China's SOE sector is to increase allocative efficiency within the economy, as well as providing greater space for private enterprise. These are then combines with a third pillar of the new growth model, the explosion of the services sector in urban China – China's cities now accounting for more than half of the country's population. Across Chinese political elites, there is also a palpable sense of 'ten lost years of economic reform' under the previous political duumvirate of Hu Jintao and Wen Jiabao. As a result, what has been quoted in the cover page is worth repeating that **President Xi Jinping is very much a man in a hurry.**

Within this framework, Xi Jinping has five key priorities for the decade ahead after the present CCP Conclave Meeting from 11November to 13 November 2021, elected him to occupy the Presidency.

First, Xi Jinping intends to rehabilitate the Communist Party as a viable, long-term governing force for China. He is a party idealist who wants to clean up Party corruption and restore public confidence in the Party as a credible political institution – not just the deliverer of economic growth, nor simply the enforcer of public order. Anyone who believes that Xi Jinping is China's Gorbachev is wrong. Similarly, anyone who believes there is some secret plan to incrementally democratise China (in the direction of elected, representative democracy) is also just plain wrong.

When Chinese leaders talk about democratic reform, they are essentially talking about administrative reform within the Party itself, or among the various departments of State, rather than anything more fundamental. Xi Jinping and those around him believe that a reformed party cannot only survive but prosper for decades to come.

As to whether Xi can ultimately resist what is commonly seen as the irreversible historic tide of economic liberalisation on the one hand, leading to political liberalisation on the other, remains to be seen. His direction, nonetheless, is clear.

Second, Xi Jinping has embarked upon the most vigorous consolidation of his personal political power that we have seen since the rise of Deng Xiaoping 35 years ago. Instead, through a combination of party rectification movements, the use of 'criticism and self-criticism' sessions, the incarceration of political opponents for corruption, and the concentration of economic, political and

strategic decision-making powers within his office, Xi has emerged as the single most powerful Chinese political leader since Deng. This concentration of power is designed to enable Xi to navigate some of the difficult political and policy shoals that lie ahead during the implementation of China's new economic growth model.

Third, the central political priority for Xi Jinping, as noted above, is the implementation of the new growth model itself. Xi is not a convert to economic neo-liberalism as a driving force of his personal political philosophy. Rather, Xi has concluded that the further deep reform of the Chinese economy across manufacturing, the financial services sector and a new approach to competition policy, together with a greater global role for the Chinese currency, are essential if China is to become a wealthy and powerful (Fu Qiang) nation. In this sense, Xi Jinping is not a neo-liberal. He is a Chinese nationalist. And he comes from a long line of Chinese nationalist reformers over the last 100 years.

Fourth, as noted above, for China to achieve its national economic objectives, it requires a further decade of strategic stability both in its immediate region and the wider world. Conflict or war would simply derail the successful implementation of the new Chinese growth model. Besides, Chinese military planners are sufficiently sophisticated to have concluded that any military engagement involving the United States at this stage would almost inevitably result in China losing. And such a loss would have devastating political consequences for China's leadership. At the same time, China will continue the large-scale modernisation of its military capabilities and doctrine against future strategic contingencies involving the United States and its allies, both within and beyond the so-called second island chain.

While in the past it was never formally written, but often spoken in Beijing that by 2021 (the first of Xi Jinping's anniversaries) China will have surpassed in PPP terms the United States as the world's largest economy. This as we see now in 2021has already happened and has been interpreted as the legitimation of long-term Communist Party rule. Similarly, though not written but has been occasionally spoken in Beijing that by the second national anniversary in 2049 it is hoped that China will have achieved conventional military parity with the United States.

Fifth, despite the economic imperative of maintaining strategic stability for the decade ahead, China nonetheless does not believe it has the domestic political flexibility in the years to come to compromise in any way on what it often articulates as its core territorial interests, namely:

- Secessionist tendencies in Tibet.
- Terrorist and secessionist activity in Xinjiang;

- Territorial disputes in the East China Sea, primarily with Japan but also with Korea.
- Any move away from the process of eventual reunification with Taiwan; and
- Outstanding territorial disputes in the South China Sea principally with Vietnam and the Philippines, but also with other ASEAN countries.

Each of these theatres has its individual complexities. But there is a deep belief across the Chinese political system that no Chinese political leader would be able to sustain a backwards step on any of them. Therefore, as we approach the decade ahead when Xi Jinping, barring political or natural disaster, will remain in office, it is important for all of us to think through carefully these core animating principals of Chinese politics and policy for the foreseeable future. However, to whether the juggernaut of Chinese growth will continue unabated, it is, of course, impossible to project with absolute certainty. So far despite COVID fiasco, the growth trajectory of China has continued unabated.

Nonetheless, we should be acutely conscience of how China has managed to come so far over the last 30 years, when so many in the Western analytical community had concluded that this would be impossible in the absence of fundamental political implosion or major systemic economic roadblocks. As we notice today, Chinese statecraft have successfully negotiated China through all of the above, to the extent now that it is difficult to point to a single economic, strategic, political or other policy domain in which China has objectively already become a major power by global standards.

It needs to be emphasised what the former Australian Prime Minister Kevin *Rudd*, stated prophetically in 2013 that

"Given recent history, however, it is both historically unempirical, and in policy planning terms totally imprudent, to agree with the so-called 'China collapse' theory.....and as the product of wishful thinking by some, rather than a dispassionate analysis of the trend lines, and the capacity of Chinese statecraft to respond before crises reach their tipping points. Beyond all these factors, however, it is simply bad policy to assume the probability of a worse-case scenario outcome for China's long term economic and military growth."

Conclusion

The present study has deliberated on "China's Economic Rise" and "China as a Strategic Power". It has been architectured in a way for the forthcoming study to subsequently analyse the Sino Indian Strategic Parity as it exists presently, reduce the almost immoral difference in defence budget outlay between India

and China to ensure that India can confront China in a way to increase the cost of escalation when attempted by China after the present move by China to a falsified move in Ladakh done presently in military negotiations at the latest 13th round of talk. It is hoped that the series commissioned by the Perspective Policy Foundation will be of use to the Researchers and China watcher alike.

Prof. Gautam Sen (Pune)

Author of this paper, Prof. Gautam Sen is an acclaimed expert on strategic issues and national security, is currently associated with several educational institutions and think tanks. Between 2017 & 2019, he has authored several books, his latest "National Interest and National Security Policymaking Prism for India", The Purpose of India's Security Strategy: Defence, Deterrence and Global Involvement and Anthology of Papers on National Security.

Presently: Professor Emeritus Policy Perspectives Foundation (PPF), Distinguished visiting fellow, Centre For Land Warfare Studies(CLAWS), Delhi and Editor-in-Chief CLAWS Journal ADJUNCT PROFESSOR: National Institute of Advanced Studies, Bangalore, FOUNDER MEMBER Centre For Advance Strategic Studies, Pune Formerly: Sawarkar Professor Defence & Strategic Studies(1981-2007) Head Department of Defence & Strategic Studies(1981-2001) Director, National Centre of International Security & Defence Analysis (2002-2007), at the University of Pune Member Board of Trustees & Honorary Director General, Indian Institute of Education, PUNE (2006-2011) Air Marshal Subroto Mukherjee Chair of Excellence (2018-19). Professor Sen joined McGill University, Montreal, Canada as a post graduate student for an MA degree in political science and read political philosophy. He then went on to complete a master's degree in IR as Peterson Fellow at the Norman Peterson School of International Affairs, Carleton University Ottawa. In 1977, Joined as Charles E Merium Fellow at the University of Illinois at Urbana Champaign, USA, for PhD degree program in Political Science. Member of Standing Committees of the UGC, Member of High-Power Committee of the UGC to evaluate the Status of the Discipline of Defence and Strategic Studies taught in Indian Universities, Member of UGC Task force on Five Year Plans and Perspectives and many other memberships of committees set up by various bodies like the Indian Council for Social Science Research etc. Prof Sen has been consulted by members of the Parliamentary Committee on Defence from time to time.

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Founded in 2005, Policy Perspectives Foundation (PPF) is a non-profit apolitical think tank. Its activities focus on complex and inter-connected challenges to internal peace, stability and development in India. It promotes debates and dialogues with scholars, development practitioners, civil society, government organisations and other stakeholders, and undertakes training, research and advocacy programmes on issues of national interest.

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