
**[Scenarios]
China 2035:
The Chances of Success**

EXPLAINER - JANUARY 2025



Institut Montaigne is a leading independent think tank based in Paris. Our research and ideas aim to help governments, industry and societies to adapt to our complex world. Institut Montaigne's publications and events focus on major economic, societal, technological, environmental and geopolitical changes. We aim to serve the public interest through instructive analysis on French and European public policies and by providing an open and safe space for rigorous policy debates.

EXPLAINER - January 2025

[Scenarios] China 2035: The Chances of Success



Institut Montaigne's Explainers are analytical short-reads, setting out key facts and figures to make sense of the world we live in and how it is evolving



This paper is part of a series of short and medium-term scenarios that outline potential trajectories for certain countries, with the aim of supporting decision-making.

Explainer

To understand the world in which we operate

Issue Paper

To break down the key challenges facing societies

Policy Paper

To provide practical recommendations

Exclusive Insights

Unique data-driven analyses and practical scenario exercises

Report

Deep-dive analyses and long-term policy solutions

	Introduction	8
1	The Variables	20
	1.1. Unchangeable Politics, Shifting Policies?	20
	a. (Dis)continuities with China’s Modern History	20
	b. A Political and Bureaucratic Elite Reshaped by Xi Jinping	21
	c. Can Political Change Only Come from Xi Jinping?	25
	1.2. Demographics: Their Role In Shaping China’s Future	29
	a. One-Child Policy, Many Consequences	29
	b. The Aging Population’s Short-Term Impacts on the Economy and the Labor Force	30
	c. Beyond 2035: A Demographic Implosion	38
	d. The “Techno-Futuristic” Approach	40
	1.3. The Economy: The Impossible Shift from Supply to Demand	42
	a. An Unbalanced and Internationally Contested Economic Model	44
	b. China’s Economic Culture Plays a Role of Its Own	48
	c. A Competitive Outward-Facing Economy until 2035?	51
	1.4. Energy: from Liability to Global Power Provider	57
	a. Grid Deficiency and Energy Imports: The Legacy	57
	b. A Leader in Renewables and Coal	58
	c. How China May Lead the Global Energy Transition in the Coming Decade	62
	1.5. Innovation: China’s Pulse and its International Constraints	66

- a. The Decisive Technology and Knowledge Transfers of the 20th Century 66
- b. Xi Jinping: Technology Acquisition on Overdrive 68
- c. Techno-Futurism: Xi Jinping’s “New Quality Productive Forces” 73
- 1.6. Military: a Rise in Capabilities and the Issue of China’s Intentions 80**
 - a. A Fast-Track Path toward China’s Military Modernization 81
 - b. Relations with Neighbors: Tumultuous or Cooperative? .. 85
 - c. Caution Dictates the Real Possibility of a Conflict in the Next Decade 89
 - d. China’s Prowess in Adapting 92

2 The Scenarios 96

- Scenario n°1: An Unstoppable China on Top of the World 101**
- Scenario n°2: A China Still in the Top Tier Leaders 105**
- Scenario n°3: The End of China’s Economic and Technology Miracle 110**
- Scenario n°4: The Return of Regime and Systemic Questions 115**
- Conclusion 120**
- Appendix 130**
- Acknowledgements 142**

François Godement

François Godement is Institut Montaigne's Special Advisor and Resident Senior Fellow – Asia and America. He is also a Nonresident Senior Fellow of the Carnegie Endowment for International Peace in Washington, D.C. and was, until the summer of 2024, an external consultant for the Policy Planning Staff of the French Ministry for Europe and Foreign Affairs. He was the Director of ECFR's Asia & China Program and a Senior Policy Fellow at ECFR before leaving in December 2018.

A long-time professor at France's National Institute of Oriental Languages and Civilisations (INALCO) and Sciences Po, he created Centre Asie IFRI at the Paris-based Institut français des relations internationales (1985-2005) and Asia Centre in 2005. In 1995 he co-founded the European committee of the Council for Security Cooperation in the Asia-Pacific (CSCAP), which he co-chaired until 2008. He is a graduate of the École normale supérieure de la rue d'Ulm (Paris), where he majored in history, and was a postgraduate student at Harvard University.

His last published books are *Les mots de Xi Jinping*, Dalloz (2021) and *La Chine à nos portes – une stratégie pour l'Europe* (with Abigaël Vasselier), Odile Jacob (2018). For Institut Montaigne, he most recently published the following policy papers: *Europe Needs a Systemic Response to China's Car Offensive* (April 2024), *Making European Economic Security a Reality* (March 2024), *China's Disappointing Economic Figures and the Crisis of Confidence* (September 2023), *Cross-border Data Flows: the Choices for Europe* (April 2023, with Viviana Zhu).

Pierre Pinhas

Pierre Pinhas joined Institut Montaigne in February 2023 as a Project Officer within the Asia Program. He is in charge of the quarterly publication *China Trends*, which seeks to understand China, from geopolitical, economic or energy perspectives, among others, on the basis of Chinese sources. His research and work further focus on European and Asian countries' food security policies and their approaches to the stockpiling of strategic commodities.

Before joining Institut Montaigne, he was a consultant in economic and strategic intelligence within the China desk of the *Agence pour la diffusion de l'information technologique*. He then joined France's Ministry of Interior as a project manager on international and digital issues. Pierre holds a double master's degree from Sciences Po's School of Public Affairs and from Fudan University's School of International Relations and Public Affairs.

To speak of China's future over the coming decade is also to speak of the future of Europe. Our fates have become increasingly intertwined – not just because of global economic integration but also due to the competition between political systems that the European Union correctly refers to as a “*systemic rivalry*.” With the advent of the digital age, the scale of communication and propaganda has changed, and **China has emerged as the most determined actor in this respect internationally**. Before the turn of the twenty-first century, no one would have thought of China's military as a genuine global challenge to the United States or even to Japan, but now military parity – and with it the possibility of war – is within sight.

On these fronts – economic integration and systemic rivalry, digital propaganda and cyberspace conflict, war and peace – **any scenario planning for China must take account of how China's partners are likely to respond**. Therefore, in looking to China's future, it is vital to take the state of affairs in democracies into consideration. In recent years, how China is perceived compared to its more democratic partners has changed. Xi Jinping dominates the system like no one has since Mao Zedong, and even in democracies, the view that autocratic systems provide stability as a by-product of control is increasingly popular.

Meanwhile, these same **democracies are riddled with uncertainty** to a much greater extent than during the Cold War era. Political campaigns now start long before major elections, while term limits make elected leaders lame ducks. The devolution of power is undercut by inflated promises and clashes of ideologies. At the same time, the rise of social media has enabled a **freedom of expression that knows fewer limits** but it has also fostered widespread discontent as trusted sources of information have declined in influence.

In contrast, China – which surpasses all other authoritarian regimes in terms of social control – stifles discontent and has successfully eliminated any appearance of political debate, whether inside the ruling Chinese Communist Party (CCP) or in society at large. And the **track record of central authoritarian regimes**, even when the economy is not doing good, **seems to play in China's favor**.

However, a look in the rearview mirror would suggest that both **the European Union, the United States**, and the other major democracies have, overall, **weathered the events of recent decades relatively smoothly**. Financial crises have been absorbed, and political crises or protests have not ended in upheaval. There have been shocks – mostly external, as in the case of Russia's invasion of Ukraine – and challenges, mostly from the so-called populist movements, some of which are ebbing and flowing (Poland), while others are still advancing (France). This is still far from enough to upend the European political landscape, not to mention Japan and the other East Asian democracies.

India, which is sometimes described as being on the way to a personalized version of populist politics, has a functioning electoral system. The US political system also seems to be a test case as it faces the challenge of the MAGA movement, the origins of which – from the Goldwater presidential challenge to the Tea Party movement – long predate Donald Trump's success on the Washington scene. In Europe, the United States, and Israel, there are challenges associated with the role of constitutional courts – challenges that could imperil the principle of checks and balances that is at the heart of democracy. But there has been no U-turn away from electoral democracy, no revolution, and no lasting break from the rule of law.

Nor have the economies of Europe or the United States reversed themselves. Unfortunately, **Europe continues on a path of tepid growth that has been ascribed to various causes**: overregulation, declining demographics, an increasingly costly redistributive system, and a lack

of support for innovation. These are all structural factors, and none is surprising. Meanwhile, Japan is aging gracefully but with a diminished financial capacity. In contrast, the United States has seen almost continuously higher rates of growth. What about China?

Xi Jinping: “It’s the Politics, Stupid”

China’s growth has long been much stronger (and more consistent) than that of the United States or Europe,¹ but it has weakened in the years since 2010. We are now in new territory, not just economically but also demographically – despite the end of the one-child policy in 2015, China’s birth rate declined by 56 percent from 2018 to 2023.² A drop of this magnitude was not predicted.

In the last fifteen years, **autocratic and “stable” China has also seen major policy surprises that coincide nearly with the ascension of one man: Xi Jinping.** It was in 2009, one year after the Beijing Olympics, that nationalism and the cult of the People’s Liberation Army (PLA) were cranked up several notches. At the time, it was believed that Li Keqiang – who was better educated and had written his PhD on the rule of law – rather than Xi Jinping was headed for the leadership of the CCP. Second in line was supposed to be either Xi Jinping or perhaps Li Yuanchao, an organization man who had contributed much to Deng Xiaoping’s decades of reform. Li Keqiang ultimately ended up as Premier under Xi Jinping – when exactly the switch took place within the CCP leadership is unknown. When Xi Jinping effectively ascended to the top position in 2012, literally no expert accurately predicted what the coming years would bring or anticipated China’s policy turnaround since then.³

¹ Growth measured by the World Bank at local currency prices in constant 2015 US dollars

² Mandy Zuo, “China population: teachers face uncertain future with falling birth rate set to create 1.9 million surplus by 2035,” *South China Morning Post*, February 13, 2024, <https://www.scmp.com/economy/china-economy/article/3251486/china-population-teachers-face-uncertain-future-falling-birth-rate-set-create-19-million-surplus>.

So far, the political changes have included a reinforced dictatorship and a cult of personality, ideological totalitarianism, population control and political manipulation through social media platforms, and recentralization of decision-making and political institutions under the control of the CCP. To the list may be added: ending Hong Kong's autonomy thirty years before its formal expiration date, mass imprisonment in Xinjiang, a shrill anti-American and anti-Western public diplomacy and propaganda, and renewed conflict or hybrid warfare with neighbors from Japan to India. All of this took place under Xi's watch.

The man was – and sometimes still is – underrated. His initial declarations immediately after ascending to power were largely ignored, reflecting the **outside world's bias toward continuity and confidence that the course once set for China under Deng Xiaoping was bound to continue**. The priority given to growth was supposed to converge, if slowly, with the establishment of a market economy, ensuring that China would maintain its so-called “*low profile*” (韬光养晦) on the global scene.⁴ Even if ongoing reform was less evident, there was still faith in the idea that the reform process would not be reversed – “*If it ain't broke, don't fix it,*” as the saying goes. Then, Xi Jinping arrived and broke the paradigms that had previously served to explain China internationally.

Historians will certainly quibble with the above summary of recent developments in China. The CCP's formidable domestic intelligence and control apparatus never disappeared – it just retracted some of its claws. Indeed, **most Chinese people had become used to enjoying areas of personal freedom, provided they did not wade into politics** – or, if so, tilting only toward the nationalist right or the communist left.

³ One of the authors wants to believe however that he came close: François Godement, “Xi Jinping's China,” July 17, 2013, European Council on Foreign Relations, https://ecfr.eu/publication/xi_jinpings_china212/.

⁴ Deng Xiaoping's full quote was “calmly observe, keep your footing, deal with it calmly, hide your capabilities and bide your time, be good at being humble, never take the lead, and make achievements”: “邓小平外交思想永放光华” [Deng Xiaoping's diplomatic thought shines forever], 12371.cn, August 15, 2014, <https://news.12371.cn/2014/08/15/ART11408082493450926.shtml>.

Societal freedoms have not completely disappeared. However, events such as the coronavirus pandemic and lockdowns have coincided with an unprecedented drop in foreign travel, including to Hong Kong. This kind of travel had been a vacation from the system for at least one-tenth of the population. Private education has been curtailed, and countless private entrepreneurs or executives at state-owned enterprises (SOEs) have been detained and often forced to abandon their companies.

China's support for SOEs and technology – a major hallmark of Xi Jinping – predates his rise to power. A degree of market competition, often supported by local subsidies as well as government policies toward innovation, still exists. Private companies still hold a large share of industrial production and services. However, legal and personal insecurity has become the rule – rather than the exception it seemed to have become during the reform decades. By and large, **the Party-state has staged a phenomenal comeback to an extent that no one predicted**, accompanied by the insistence on self-sufficiency for China and dependency for China's partners being pursued under Xi Jinping.

Neither would anyone have anticipated the wave of cutting-edge developments in key new industrial niches that were often highly marketable, leading to another wave of Chinese exports to the world. This time, however, these developments have been based on technology and subsidies, rather than cheap labor and foreign capital. China's search for an electric vehicle industry started in 2001, going completely unnoticed except by Warren Buffett, who bought shares in BYD in 2008 – the same year the first Tesla hit the road.⁵ The surge in solar panel exports came in 2013.⁶ Many other similar cases have followed. Major support for large technology and scientific projects began much earlier than Deng Xiaoping – Xi's exponents trace them back to the late 1950s and Mao Zedong.

⁵ Warren Buffett's investment trend is now reversing however: Lionel Lim, "Warren Buffett's Berkshire Hathaway cuts its stake in EV giant BYD to under 5%, dropping below Hong Kong's disclosure threshold," *Fortune*, July 23, 2024, <https://fortune.com/asia/2024/07/23/warren-buffett-berkshire-hathaway-cuts-byd-stake-china-ev/>.

However, by 2018, the **consensus among international economists was that China was at last moving toward a consumption- and service-based economy**. As imports for Chinese consumers grew, China's trade balance was meant to even out, and the current account surplus was supposed to disappear in 2019. In fact, the opposite has happened. Before, during, and after the coronavirus pandemic, China's external balances surpluses rose.⁷ Today, exports are the mainstay of China's gross domestic product (GDP) growth, while deflationary trends stalk the domestic economy.⁸

The Domestic and External Limits of an Excessive Trade Surplus

Domestic imbalances show up in a massive external imbalance with China's partners in the global economy – this is not a novel situation. The country has been running trade surpluses for decades, and although former Prime Minister Wen Jiabao announced every year that these surpluses would be reduced,⁹ Xi Jinping certainly never made such a promise. China has also been piling up foreign currency reserves for decades,¹⁰ a move often ascribed to geopolitical insecurity. There was a forgotten episode when these reserves shrank to nearly zero during the first reform decade (1984-85), with Japan's central bank coming to

⁶ The European Union introduced tariffs on Chinese solar panels that same year: "EU imposes provisional anti-dumping tariffs on Chinese solar panels," European Commission, June 4, 2013, https://ec.europa.eu/commission/presscorner/detail/en/IP_13_501; Ben McWilliams, Simone Tagliapietra and Cecilia Trasi, "Smarter European Union industrial policy for solar panels," Bruegel, February 8, 2024, <https://www.bruegel.org/policy-brief/smarter-european-union-industrial-policy-solar-panels>.

⁷ Brad W. Setser, "China's imaginary trade data," Council on Foreign Relations, August 14, 2024, <https://www.cfr.org/blog/chinas-imaginary-trade-data>.

⁸ "National economy was generally stable with steady progress in the first half year," National Bureau of Statistics, July 15, 2024, https://www.stats.gov.cn/english/PressRelease/202407/t20240715_1955620.html.

⁹ "China's Premier promises steps to boost UK trade," BBC, June 26, 2011, <https://www.bbc.com/news/uk-politics-13918113>.

¹⁰ Brad W. Setser, "How to hide your foreign exchange reserves – A user's guide," Council on Foreign Relations, June 29, 2023, <https://www.cfr.org/blog/how-hide-your-foreign-exchange-reserves-users-guide>.

the rescue in support of a reformist China. This, and the experience of pre-World War II hyperinflation, means that Chinese leaders are aware that there can always be a run on the bank.

Trade and current account surpluses have declined since their peak in 2003. Their substantial rebound since 2019 is now underestimated, thanks to various accounting changes. As a result, China is a major lender to the rest of the world and, above all, to its supposed archenemy – the United States, from which it purchases Treasury bonds – and to its proxies. **Unchanged percentages in imbalances are also now much more consequential**, as they apply to the world's second largest economy, which is still growing at a pace that remains faster than its main counterparts.

Is this asymmetric monetary and financial integration sustainable in an unpredictable geopolitical environment? The question is not necessarily for China to answer but rather for its counterparties. How much is too much in terms of the trade deficit for Europe, the United States, and large emerging economies? What is the cost-benefit equation, given that Chinese products are notoriously cheap and of increasingly high quality? **How much reliance or dependence can others accept when facing a top-down and ambitious China?**

For China, how likely is it to exercise its economic leverage for geopolitical gain or in the event of an international conflict? Inversely, how much could a combination of hard-line politics internally and risks from a major conflict externally scare China's own economic and financial actors? Thereafter, hot money outflows reflect two things: *“one, the simple reality that US interest rates are now higher than Chinese rates, second, a desire by some in China to hedge against a shift in Xi's policies and the risk of an anti-corruption campaign by holding assets abroad.”*¹¹ Could these outflows become more than a footnote, as they are today under China's capital controls and important inflows?

¹¹ Interview with Brad W. Setser.

The Unsolved Structural Issues

There are many other outstanding issues that call for the necessary precaution of conducting a scenario planning exercise for China. One is the **need to assess the viability of current policies over the span of more than a decade**. There are the so-called “*structural issues*” often cited by analysts: demographic trends; educational needs; the necessary greening of the economy; budgetary and financial resources for some sectors that have failed to or must adapt; what appears to be a savings glut and a bias toward guided investments in a state-controlled economy; large defense spending for new equipment and the related issue of future maintenance, etc. In spite of Xi’s professed reluctance, public indebtedness has never stopped increasing relative to GDP, while the rapid aging of the population will also increase implicit debt.

In addition, several imbalances must be considered. One is, of course, lagging household income and consumption trends in comparison with China’s overall GDP. China has reached an economic level at which more income redistribution would occur in countries where people have a say. **Can large inequalities in income and socio-educational welfare be sustained politically**, and if so, will they harm the economy?

Prospects for War or Peace

Other uncertainties relate to China’s international and foreign policy ambitions, and to the risk of a major conflict. **How much does economic integration and its benefits weigh against more geopolitical goals such as territorial irredentism?** China’s sovereignty claims are not limited to the paramount issue of Taiwan, which it regards as a renegade province. Even if China’s claims against Russia are dormant, they are active on all maritime frontiers, as well as with Vietnam and India.

The East and South China Seas are the scene of a military buildup and hybrid warfare not unlike what is going on in the Taiwan Strait. China's navy, which operates 234 warships,¹² evidently aims at qualitative parity with the US fleet and dominance over all other navies. The perennial border conflict with India has flared up. China has become more assertive in its claims against the entire Indian province of Arunachal Pradesh, which borders Tibet, and military fighting has occurred in Ladakh, even if on a limited scale.

Could these potential flashpoints lead to war in the next decade? Are China's current tactics of wearing out adversaries and building up strength while avoiding major risks viable? **Fundamentally, who does the passage of time favor?** The answer to this question, which is paramount in judging the risks of war over Taiwan, also depends on the responses of China's neighbors that are being challenged and their allies. Is the rearmament and repositioning that happened in Japan, along with the rising defense budgets all over East Asia, enough? Does a US posture implying regional reinforcement, arms transfers to allies including India, and so far unambiguous statements on the will to defend Taiwan create sufficient deterrence against a conflict?

Scenario Exercises about China Are a Risky Proposition

In developing these perspectives, we therefore intend to signal that China's future is directly linked to its interactions within the international system and by perceptions of relative strength and weakness.

¹² *This is more than the United States or Britain, France, South Korea and Japan combined: Alexander Palmer, Henry H. Carroll and Nicholas Velazquez, "Unpacking China's naval buildup," Center for Strategic and International Studies, June 5, 2024, <https://www.csis.org/analysis/unpacking-chinas-naval-buildup>; "Asia-Pacific naval and maritime capabilities: The new operational dynamic," The International Institute for Strategic Studies, May 2023, <https://www.iiss.org/en/publications/strategic-dossiers/asia-pacific-regional-security-assessment-2023/aprsa-chapter-3/>; "Welcome to the new era of global sea power," The Economist, January 11, 2024, <https://www.economist.com/international/2024/01/11/welcome-to-the-new-era-of-global-sea-power>.*

Perceptions can, of course, be misleading and can be overtaken by future events. Why should it be necessary to look more deeply into recent history for a scenario exercise? Because it is more than likely that Chinese academics and think tanks do not have a clear vision of what China will look like in 2035 or 2049. Political constraints act as a limit on the imagination, outside the one area of techno-futurism favored by the supreme leader. This calls for modesty in attempting to chart China's course until 2035.

For instance, a **scenario for 2024 created in 2009**, right after the subprime crisis, **might have missed the mark by underrating America's economic future and failing to predict the coming European debt crisis.** For the United States, simply replicating the 1998-2008 growth curve for the 1999-2023 period would have generated an accurate growth scenario.¹³ Applying the same exercise approach to a scenario for the European Union at that moment would have predicted positive growth, but it would have overestimated its extent by 50 percent.¹⁴

Coming back to China's course, 2035 may feel like only a stone's throw away, but it would mark Xi's twenty-third year in power and fifth five-year mandate at the helm of the one Party-state. By that time, *"Xi Jinping might be a ruler with a lot of powers but not much vigor."*¹⁵ **Certainly, there is no shortage of official targets for precisely that year** [see *Appendix*]. The year 2035 is a key date in the calendar of Xi Jinping and the CCP, starting with the core objective of achieving *"socialist modernization"* (社会主义现代化) –¹⁶ that is, significantly improving *"China's economic and technological strength,"* the *"rights of the people,"* *"social etiquette and civility,"* standards of living, the *"social governance system,"*

¹³ Norman C. Saunders and Betty W. Su, *"The U.S. economy to 2008: A decade of continued growth,"* Bureau of Labor Statistics, November 1999, <https://www.bls.gov/mlr/1999/11/art2full.pdf>.

¹⁴ "GDP (constant 2015 US\$) - European Union," World Bank, <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD?locations=EU>.

¹⁵ Interview with Minxin Pei.

and the “*environment*.” 2035 is, therefore, no random time horizon. On the contrary, it is a consistent target for Xi Jinping, since this pivotal year should also see the country embark on its 2049 path toward becoming a “*great modern socialist country that is prosperous, strong, democratic, culturally advanced, harmonious, and beautiful*.”¹⁷

Xi Jinping has done away with the two-term limit for the People’s Republic of China (PRC) presidency instituted under Deng Xiaoping. Even though high office takes a toll on all “*super-agers*” – people above eighty with strong memory performance in the medical sense – Xi Jinping will only be eighty-one in 2035. Mao Zedong, known for his bad health, died at eighty-two, while Deng Xiaoping died at ninety-two. In addition, Xi’s two rumoured potential successors under the previous collective leadership, Sun Zhengcai and Hu Chunhua, were quickly purged – among many other cadres. Therefore, **it is possible that China’s future politics until 2035 could be charted by merely extending present trends.**

Doing so could, nevertheless, be yet another case of confirmation bias, which has plagued many previous attempts to chart China’s future by **allotting too much continuity to CCP factions or to the personality in power.** Without undue fixation on the past, we must still look for any portent of political continuity or for the possibility of policy changes. The main factor is simply Xi Jinping himself. Is he one to change course?

¹⁶ “奋力谱写社会主义现代化新征程的壮丽篇章——从十九大报告看新时代中国特色社会主义发展战略安排” [Strive to write a magnificent new chapter in the new journey of socialist modernization – an arrangement of the development strategy of socialism with Chinese characteristics for a new era from the report of the 19th National Congress of the Communist Party], Government of the People’s Republic of China, October 21, 2017, https://www.gov.cn/zhuantu/2017-10/21/content_5233414.htm; “中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要” [The 14th Five-Year Plan for national economic and social development and the long-range objectives through the year 2035 of the People’s Republic of China], Government of the People’s Republic of China, March 13, 2021, https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm.

¹⁷ “Secure a decisive victory in building a moderately prosperous society in all respects and strive for the great success of socialism with Chinese characteristics for a New Era,” Xinhua, October 18, 2017, http://www.xinhuanet.com/english/download/Xi_Jinping's_report_at_19th_CPC_National_Congress.pdf.

To what extent might he do so? Would this be politically feasible for him while sustaining his personal power?

All of the questions on structural issues mentioned above require an approach that involves a scenario exercise. But in the end, in a volatile international environment and with centralized and authoritarian leadership, these scenarios must be put into perspective against major policy choices. **War over Taiwan will only come if Xi Jinping chooses it, but if his power were to wane or to crumble, the range of outcomes would expand.** Such a war would represent the biggest shock since the end of World War II, with global repercussions much larger than the Korean War or the conflicts in Southeast Asia. Nothing can be excluded. Although domestic political variables must also be explored, they are not a key concern in building our central hypothesis.

This explainer will therefore focus on six key variables (politics, demographics, the economy, energy and the environment, science and technology, military) before moving to credible scenarios on how China's partners – from the already industrialized to the emerging and developing economies – are likely to respond to China's policies and leverage at the 2035 horizon.

1 The Variables

1.1. UNCHANGEABLE POLITICS, SHIFTING POLICIES?

a. (Dis)continuities with China's Modern History

Chinese history, including after 1949, moves in cycles, with phases of uncontested power followed by interludes of chaos. Engineered by Mao himself, the Great Leap Forward and the Cultural Revolution were such events. His **death led to a succession struggle**, the outcome of which was unpredictable at the time. Tiananmen in 1989 and the democratic wave were followed by repression under Deng Xiaoping but had been preceded by some predictive signals in the years before. The event can also be linked to uncertainty about the future in Deng's waning years, however, and to the **fear of a political reversal**. It is in fact that fear which proved to be a self-fulfilling prophecy.

We must also look at the mood inside the elites and, more generally, assess the potential formation of new factions among insiders, and their potential public reception. These are two notoriously difficult tasks at present. **The only faction one can detect is Xi's, even if there is competition among various bureaucracies.** The control of information has reached unprecedented levels. Even under Mao, thanks to the "*struggle between two lines*" and to less advanced methods of control, more information leaked out and ended up in open-source materials. Strikingly, this type of information was very often disregarded outside China because it had often passed through either Taiwan or the US government and was therefore regarded as anti-communist propaganda. Gauging the level of actual control over behaviors and of hearts and minds is a tall order.

On the international scene, **Xi Jinping appears to be both unmovable in his strategic goals and more pragmatic when it comes to timing.** This differs from both Mao and Stalin, Xi Jinping's most likely role models. Mao Zedong was exceedingly versatile in both strategy and tactics, changing alliances, launching ultra-leftist policies and reversing them, playing factions and personalities inside the political elite against each other, and purging cadres from top to bottom. Internationally, he appeared to shift alliances, breaking with the Soviet Union and starting a phase of rapprochement with the United States. Joseph Stalin was more focused on long-range state planning, coercion by the organs of the state, and physically controlling an international communist movement. But he could also be exceedingly tactical, as evidenced by his endorsement of wide "*popular fronts*" in the democracies of the 1930s and the signing of the 1939 Molotov-Ribbentrop Pact, a move that caught Britain and the United States off guard.

In contrast, Xi Jinping does not display the versatility or opportunism of either tyrant. **He does not have a reset button for his objectives.** The dates for his targets on the economy, on greening, and on achieving military parity with the United States are set rather late – the record being held by carbon neutrality, where the needle is set for 2060.

b. A Political and Bureaucratic Elite Reshaped by Xi Jinping

In twelve years of increasing power and control over the Party-state, Xi Jinping has remodeled the political and bureaucratic elite, created insecurity for the managerial public and private strata, and exacted nearly total compliance from public intellectuals, including scientists and academics. It is impossible to distinguish any factional alignment in the top leadership, with **differences lying mostly in the leader's backgrounds and supposed degree of proximity to Xi Jinping.** Notably, he has also achieved considerable recentralization of decisions. This

goes against the previous trend, which was often seen by observers as one of *“fragmented authoritarianism.”*¹⁸

In Xi’s era, unlike during the Deng decades, the cat can be of any color, provided it is red.¹⁹ Moreover, while the technological elite is often beholden to Xi Jinping, *“business and intellectual elites appear very nostalgic of the Deng area’s pragmatism”.*²⁰ Yet, unlike under Mao, this intellectual elite suppressed under Xi Jinping is not in reeducation camps at least and still has relative access to foreign news or the outside world.

The centralization of power has been achieved at the expense of the diversification (and rejuvenation) of Party-state cadres at both the central and provincial levels. The custom was to exclude cadres older than sixty-seven from a new mandate. Beyond the removal of the two-term limit for the PRC president, age limits have been waived in many cases. At the 20th Party Congress (2022), more than 40 percent of the delegates were older than 55, a 10 percent rise compared to the 19th Congress (2017), and a 15 percent rise compared to the 18th Congress (2012).²¹ Over the same time span, the average age of members of the Politburo has risen from 56.1 to 63.4 years. This means that no younger successors have been put in place for the future. The Central Committee is a bit younger, with an average age of fifty-seven in 2022 – but this is still four years older than under Xi’s predecessor. This is all the more impressive, as there was a turn-over of 67 percent of the members of the Central Committee at the same 2022 Congress.

¹⁸ Kjeld Erik Brødsgaard, *“Chinese politics as fragmented authoritarianism: Earthquakes, energy and environment,”* Routledge, 1st edition, 2016, <https://doi.org/10.4324/9781315629896>.

¹⁹ Interview with Malcom Turnbull.

²⁰ Interview with Minxin Pei.

²¹ Lisa Zhao, *“China’s 19th Party Congress,”* *The Metric*, November 24, 2017, <https://thetric.org/articles/chinas-19th-party-congress>; Wei Changhao, *“Demographics of the 13th NPC (Updated),”* *NPC Observer*, March 10, 2018, <https://npcobserver.com/2018/03/demographics-of-the-13th-npc/>; Wei Changhao, *“(Still) mostly Han men: Demographics of the 14th NPC,”* *NPC Observer*, February 25, 2023, <https://npcobserver.com/2023/02/china-14th-npc-demographics/>.

On average, older members are being selected. As one astute observer noted, this is creating a long Brejnevian cycle in Chinese politics.²² There are many reasons for this: one is the eclipse of the Communist Youth League, which was the antechamber for activists and future leaders; another is Xi Jinping's selection of loyalists and people who happen to be previous acquaintances. But the main factor has been that, despite the recurring purges under pretexts of corruption or disloyalty, **security for mid-level cadres is the best way to ensure stability at the top**. The greying of top Party cadres is not the result of ageism but the product of a policy that prioritizes loyalty and compliance: *"There's no such thing as age for age's sake, only age for the sake of sticking with known-quantity peers."*²³

Although gender representation is constant at the level of delegates to the Congress, women represent only 26 percent of the legislative body – and 11 out of 205 Central Committee members. They are notably absent from the current Politburo. **Xi's extolling of women starts with their "irreplaceable role" (不可替代的作用) in upholding Chinese traditional values and family virtues,**²⁴ but there are only three women among government ministers and none among vice premiers or provincial Party secretaries.

As for **expert qualifications and factional alignment** (or expected loyalty to Xi Jinping), the **numbers require some interpretation**. Much has been made of Xi's promotion of top cadres with backgrounds in the high-tech sectors. Seven out of twenty-four of Politburo members come directly from industry and technology sectors, including the PLA. Defense Minister Li Shangfu had an important aerospace background before moving on to procurement responsibilities – but he was purged

²² Jérôme Doyon, "Rejuvenating Communism: Youth Organizations and Elite Renewal in Post-Mao China," University of Michigan Press, February 2023, <https://press.umich.edu/Books/R/Rejuvenating-Communism2>.

²³ Interview with Jérôme Doyon.

²⁴ "Xi stresses organizing, motivating women to contribute to Chinese modernization," Xinhua, October 31, 2023, <https://english.news.cn/20231031/2d38b8241a39479cb29a1a7199c52e3b/c.html>.

in 2023.²⁵ These engineers have replaced leaders with some economic background, but they have more often moved up the ranks through managerial rather than engineering roles.

As often cited, the number of leaders with personal connections to Xi Jinping and his past career is ever greater. In one analyst's harsh words, they are often "*incompetent midgets*,"²⁶ albeit with good political instincts. **Many come from propaganda and organization departments** – they may not be the most skillful, but they are good apparatchiks and are useful for Xi's political campaigns. Many, such as Prime Minister Li Qiang himself, do not hold college degrees. Li Keqiang's successor in 2023 appears to have won his promotion by strictly enforcing the 2022 COVID confinement in Shanghai – in the face of local public opinion.

Loyalty prevails over expertise. Thus, "*his protégés are both his strength and his weakness.*"²⁷ Xi likely knows this, and the recurring purges no longer spare his reputed cronies. Such was the fate of Foreign Affairs Minister Qin Gang, a former chief of protocol, who suddenly disappeared in 2023.²⁸ Xi's first anti-corruption campaigns (2013-14) heavily targeted the energy sector and the PLA's political commissars. Then came public and state security, followed by the financial sector. The former coincided with the waning of its godfather, Wang Qishan, who had been Xi's main supporter and executor at the head of the CCP's Central Commission for Discipline Inspection. SOEs and private firms have followed. More recently, the PLA's procurement system has been hit. Not many have escaped the purges – but this is still the case for combatant units, scientists, and engineers. It is **an apparent paradox that longevity in office and the aging of cadres coincide with the ever-present possibility**

²⁵ To this day, two (and most likely three) defense ministers have been purged, as well as the ranking navy official in the Central Military Commission.

²⁶ Interview with Minxin Pei.

²⁷ Interview with Steve Tsang.

²⁸ Qin Gang is now said to hold a minor position in the publishing sector, mainly to answer questions about his whereabouts.

of being purged – the range of targeted behavior includes corruption but also personal lifestyle. In reality, cadres ensure their future through conformity and by following as well as they can the precepts, ideologies, and policies that are prescribed from the top.

As for dissidents and critics (or even lawyers defending these critics), **prosecution and penalties have become harsher.** The most extreme treatment meted out to the Uyghur minority and other groups in Xinjiang serves as a notice to others that the regime can extend its repression at will. Outbreaks of public protest, most notably during the COVID lockdown period and sporadically after major industrial accidents, are well reported abroad.²⁹ Less publicized is the dragnet that snares activists or occasional demonstrators after protest events have come to an end. Some might have expected technologies of communication in their early stages to benefit the expression of civil society – it actually turned in the central power's favour, at the expense of everything else.

c. Can Political Change Only Come from Xi Jinping?

In the absence of extraordinary events such as a lost war or an economic meltdown, **Xi Jinping is therefore a classic case of a dictator in total political control for the years to come**, with no apparent succession plan. *“The opposition has mostly left China because, even if fear is strong, Xi cannot be toppled. The last occurrences of debate are maybe within the security apparatus itself. If debates within the security circles come out, only then may Xi be threatened.”*³⁰ In addition, *“Xi’s control is not frozen, it is a dynamic process that explains his lasting anti-corruption drive and Party rectification campaign.”*³¹

²⁹ “China Dissent Monitor 2024, Issue 9: July – September 2024,” Freedom House, November 2024, <https://freedomhouse.org/sites/default/files/2024-11/CDM-9-Report-1-22-2024.pdf>

³⁰ Interview with Volker Stanzel.

³¹ Interview with Steve Tsang.

The top leadership has been tilted in Xi Jinping's favor. But, as previously noted, this top leadership is also aging. In 2027, the current Politburo will have an average age above sixty-eight. Should they be renominated then, the average age of Politburo members would be above seventy-three on the eve of the next Party Congress and Current Central Committee members are not far behind. Their time horizon will become shorter, and as long as no potential successor appears to have been groomed, their political position will become increasingly vulnerable. **Unless Xi Jinping changes his basic formula to ensure support and discourage any line debate, his power will become brittle, and the likelihood of a succession crisis will increase.** All schemes to ensure institutionalization and a planned succession process have been reversed, and legal debates have been censored.³²

This does not mean that Xi Jinping has complete control of policy implementation or even policy design. For a decade, he has been nicknamed the "*chairman of everything*" for the number of institutions he has chosen to lead,³³ and he clearly has a commanding hand in many sectors, including industry, technology, and innovation. But **Chinese bureaucracies also work in silos**, with much infighting among rival institutions and competition among individuals. Moreover, **princelings might yet determine China's future** – as they infuse the management of SOEs and financial firms – as might the armed forces' officer classes. Therefore, "*the next ruler may not be a princeling, but clans may be king-makers.*"³⁴ The huge role given to the security services may also allow for opaque fights among themselves.

In some cases, **Xi's policies have come up against walls** – some may call this a "*pullback pattern*" or a "*rear-view mirror approach*,"³⁵ whereby

³² Neil Thomas, "Xi Jinping's succession dilemma," *Asia Society*, February 14, 2024, <https://asiasociety.org/policy-institute/xi-jinpings-succession-dilemma>.

³³ Graham Allison, "The Chairman of everything," *New Statesman*, Vol. 146, No. 5395, pp. 20-25, December 2017, <https://www.hks.harvard.edu/publications/chairman-everything>.

³⁴ "How China's political clans might determine its future," *The Economist*, April 4, 2024, <https://www.economist.com/china/2024/04/04/how-chinas-political-clans-might-determine-its-future>.

damage is assessed only after a policy is imposed. The most prominent example is the COVID lockdowns, but there have also been other occurrences, such as the 2015 stock market crisis, the 2020 real estate crash, and the trade conflict with the United States that started under Donald Trump's first presidency. The lesson from these episodes is that **Xi Jinping can reverse himself while saddling colleagues with public responsibility and eventual blame.** In some areas, Xi Jinping is rigid until he is not. *"Xi is a risk taker, but he is not reckless"* – the judgment applied to him by one international affairs analyst might also apply to domestic policies.³⁵ The ebb and flow of support to real estate since 2020 is a case in point. Xi Jinping initially took a strong negative view of bailouts, claiming that *"housing is for living, not for speculation"* (房子是用来住的, 不是用来炒的).³⁷ He has since increasingly allowed for support for the real estate sector, albeit heavily premised on local financing. Likewise, in mid-2024, he apparently toned down his long-standing opposition to fiscal stimulus.³⁸

So far, this flexibility has not extended to the key features of Xi's dogma. **The reinforcement of ideology, focused around his personality and key slogans, never abates.** The promotion of *"struggle"* (斗争) – alternatively understood as *"fight"* but also sometimes *"strive"* – is ever-present, as is the possibility of a major international conflict. Xi Jinping does, however, have a pause button, and some policies can recede in prominence. Such was the case for the Belt & Road Initiative's outward investments and loans, which achieved global fame. At the end of 2024, in the context of the new Trump II presidency, a tentative reset is also

³⁵ Interview with Sam Hogg.

³⁶ Interview with Steve Tsang.

³⁷ “中央经济工作会议明确楼市发展方向：‘房子是用来住的，不是用来炒的’” [The Central Economic Work Conference clearly defined the direction of development of the property market: “Houses are for living in, not for speculation”], Government of the People's Republic of China, December 16, 2016, https://www.gov.cn/zhengce/2016-12/16/content_5149066.htm.

³⁸ “中共中央关于进一步全面深化改革 推进中国式现代化的决定” [Decision of the Central Committee of the Communist Party of China on further deepening overall reform and promoting Chinese-style modernization], Government of the People's Republic of China, July 21, 2024, https://www.gov.cn/zhengce/202407/content_6963770.htm.

occurring in China's relations with India, Japan,³⁹ and even the United Kingdom to some extent.

Key Takeaways

- *Fear of power reversal* – Xi's centralized and disciplinary grip on power is one of the two historic patterns of the Chinese state. It is made possible by digital control tools and a huge internal security apparatus and could hold until 2035. Without an anticipated succession plan, factional strife and suppressed discontent could suddenly open up the game.
- *Occasional policy reversals amid rigid ideology* – Xi's long-term objectives appear to be non-negotiable (socialist modernization, military parity, reunification of Taiwan, carbon neutrality by 2060, etc.). Yet reversals on issues such as the COVID lockdowns and the 2015 stock-market crisis suggest that a pivot on tactics or a pause are possible.
- *Intensified control and single-faction rule* – Ongoing purges targeting the security apparatus, the financial sector, or military officials reflect a governance model centered on loyalty over expertise. Blanket censorship and suppression of dissent further reinforce Xi's dominance but stifle diverse policy inputs.
- *An aging elite* – Xi's reshaping of the CCP favors loyal older cadres and limits rejuvenation. In turn, this may block fresh ideas and fuel bureaucratic inertia.

³⁹ A consensus is growing, visible in recent visits by Japanese officials to Beijing, that Japan needs China in terms of trade and that sole reliance on the United States is not possible.

1.2. DEMOGRAPHICS: THEIR ROLE IN SHAPING CHINA'S FUTURE

a. One-Child Policy, Many Consequences

In contrast with the political outlooks, demography is full of certainties derived from present trends – but with strongly diverging scenarios as to their consequences. Since the founding of the PRC in 1949, the country's population has reflected both the well-known worldwide demographic transition and represented a unique case of (shifting) government policy shaping its outcomes. **Demographic events have an echo at least one generation away, if not two, much like ripples from a pebble ricocheting over water.** The catastrophic 1958 Great Leap Forward resulted in the worst famine known in human history: the deficit from combined excess deaths and reduced births approached eighty million people.⁴⁰

Mao's push for a larger population resumed unabated until the early 1970s, the decade during which the use of contraceptives was authorized. In 1978, the birth control pill appeared in China, while a decade later, in 1986, the imposition of the one-child policy came with major disincentives for offenders. Although somewhat less effective in the countryside, the policy lasted until 2016, when the government reversed its policy and even promoted three-child families, starting in 2021.

During most of the reform boom after 1981, before any demographic impacts were felt, a very low old-age dependency ratio and large abundant workforce remained.⁴¹ This period also witnessed education and

⁴⁰ Zhongwei Zhao and Anna Reimondos, "The demography of China's 1958–61 famine. A closer examination," *Population*, Vol. 67, No. 2, 2012, pp. 281-308, <https://shs.cairn.info/journal-population-2012-2-page-281>.

⁴¹ The old age dependency ratio is defined by the OECD as the number of individuals aged 65 or older per 100 people of working age, defined as those aged between 20 to 64 years old.

health needs in the countryside being largely overlooked and underfunded. It is on these premises that China became the world factory, capturing an ever-larger share of low-end manufacturing with initially cheap labor costs. **The demographic dividend was combined with hard work conditions, no unions, infrastructure investments, and a subsidized environment for foreign and local state firms alike.** Even so, one should not exaggerate the low wages. Real urban wages grew 13.8 percent per year between 1997 and 2010, on average, with manufacturing wages above those in Indonesia, India and Thailand.⁴²

This environment began to shift in 2011-13, when the effects of the 1986 one-child policy began to manifest themselves. China's labor-age population has been shrinking at an even faster rate in recent years, in parallel with a steep decline in birth and fertility rates⁴³. But as China's soaring population fascinated the world, this second demographic turn often resulted in simplistic and dark predictions about the immediate future. In reality, **most of the larger consequences of the new demographic shock are about a decade away, starting to hit precisely around 2035** but not much sooner.

b. The Aging Population's Short-Term Impacts on the Economy and the Labor Force

First, the facts. If China is almost as stingy in releasing population data as releasing economic figures, and if there are clouds above official numbers, it is likely that births went undercounted for decades. In contrast, they are now over estimated, although to a lesser degree.

⁴² Hongbin Li, Lei Li, Binzhen Wu and Yanyan Xiong, "The end of cheap Chinese labor," *The Journal of Economic Perspectives*, Vol. 26, No. 4, 2012, pp. 57-74, <https://www.aeaweb.org/articles?id=10.1257/jep.26.4.5>.

⁴³ "王萍萍: 人口总量降幅收窄 人口素质持续提升" [Wang Pingping: The decline in the total population has narrowed, and the quality of the population continues to improve], National Bureau of Statistics, January 17, 2025, https://www.stats.gov.cn/sj/sjtd/202501/t20250117_1958337.html.

China's **fertility rate has fallen in a decade from 1.4 to about 1**, which is less than half the replacement rate.⁴⁴ Only South Korea has an even lower ratio, but fertility in major Chinese cities is now down to the same level as Korea, between 0.6 and 0.8.⁴⁵ The fall in the birth rate is even worse – simply because the number of women within child-bearing age has shrunk each year by around 4-5 million since 2012.⁴⁶ This is an effect of the one-child policy combined with a preference for boys and the availability of ultrasound scanning. A similar trend existed in Taiwan (and South Korea), apart from the official natalist policy. China's population is, therefore, already declining.

Life expectancy has, meanwhile, reached a very high level, a tribute to China's improved access to food and preventive health-care services. Life expectancy at birth in 2023 varies according to sources but remains within a 77-79-years range.⁴⁷ As a result, the divergence between fertility and longevity trends ensures a fast aging of China's population: the age dependency ratio increased from 10 percent in 1998 to 21 percent in 2023.^{48, 49}

⁴⁴ Jacob Funk Kirkegaard, "China's population decline is getting close to irreversible," Peterson Institute for International Economics, January 18, 2024, <https://www.piie.com/research/piie-charts/2024/chinas-population-decline-getting-close-irreversible>.

⁴⁵ Luna Sun, "Thousands of Chinese kindergartens close as falling birth rate takes its toll," South China Morning Post, October 27, 2024, <https://www.scmp.com/economy/china-economy/article/3284049/thousands-chinese-kindergartens-close-falling-birth-rate-takes-its-toll>.

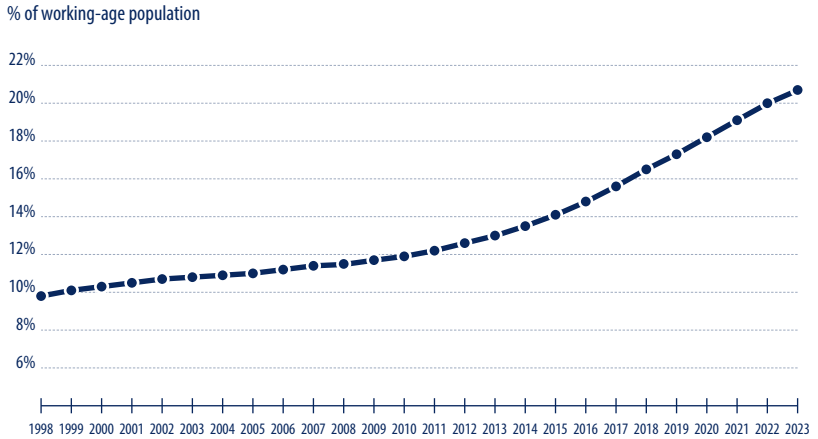
⁴⁶ "The Demographic Drag Deepens," Gavekal Dragonomics, January 22, 2024.

⁴⁷ Bai Ruhai, Liu Yunning, Zhang Lei, Dong Wanyue, Bai Zhenggang and Zhou Maigeng, "Projections of future life expectancy in China up to 2035: A modelling study," *The Lancet*, March 30, 2023, [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(22\)00338-3.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(22)00338-3.pdf).

⁴⁸ The age dependency ratio is the ratio of dependents (people younger than 15 or older than 64) to the working-age population (those aged 15 to 64). The larger the ratio, the larger the burden on the working population.

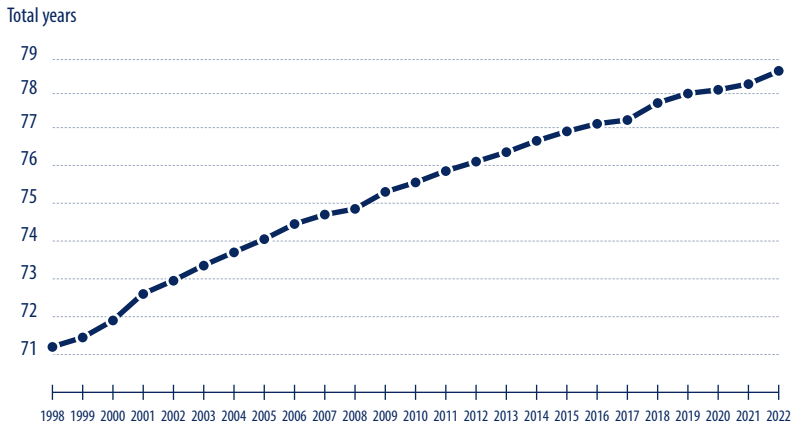
⁴⁹ "Age dependency ratio, old (% of working-age population) – China," World Bank, <https://data.worldbank.org/indicator/SP.POP.DPND.OL?locations=CN>.

Figure 1: China's age dependency ratio since 1998



Source: World Bank Data.

Figure 2: China's life expectancy at birth since 1998



Source: World Bank Data.

Beyond absolute numbers on birth trends and aging, other changes come into play. Are there likely to be major tensions from labor shortages? The migration trend is both local, intra-provincial, inter-regional, and sometimes intra-city. Simply put, **a large proportion of China's population floats toward areas and sectors where there are employment opportunities and higher wages.** These flows are largest toward the booming industry and export macro-regions that are the Yangtze and Pearl River deltas. The 2020 census estimated the floating population at 376 million, of which 88 percent had moved into cities.⁵⁰

In the persistent absence of a major *hukou* (户口) reform,⁵¹ migrants receive fewer social, health, or education benefits,⁵² and do not have a fixed employment status. It is all the more important to remember that **almost 70 percent of Chinese children have a rural hukou,**⁵³ meaning both the quantity of births and the expected level of education are going down. Besides, informal urban employment rose from 40 percent to 60 percent for all non-agricultural workers between 2004 and 2019.⁵⁴ They therefore provide an informal labor force where it is most needed while being less costly than registered urban residents.

However, a five-year action plan on urbanization issued in July 2024 and guidelines published in November enjoined ministries and local governments to better protect and serve the migrant population.⁵⁵ **Labor flows to coastal and urban areas explain China's high urbanization**

⁵⁰ "Main data of the seventh national population census," National Bureau of Statistics, May 11, 2021, https://www.stats.gov.cn/english/PressRelease/202105/t20210510_1817185.html.

⁵¹ The *hukou*, or household registration system, has long linked social benefits to an individual's birthplace, limiting millions of rural migrants from fully accessing urban opportunities.

⁵² He Yiping, Xu Shengsheng, Fu Tingping and Zhao Danna, "The impact of China's family floating population on the participation of medical insurance in the inflow areas," *Journal of Multidisciplinary Healthcare*, March 2024, pp. 949–957, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10921892/>.

⁵³ Henry Storey, "Is China finally getting serious about hukou reform?," Lowy Institute, September 7, 2023, <https://www.lowyinstitute.org/the-interpreter/china-finally-getting-serious-about-hukou-reform>.

⁵⁴ Ilaria Mazzocco, "How inequality is undermining China's prosperity," *Big Data China*, May 26, 2022, <https://bigdatachina.csis.org/how-inequality-is-undermining-chinas-prosperity/>.

rate, which is above that of countries with the same development level. They also explain, along with the productivity gains from migration and sector employment change, why household income remains at a low ratio relative to GDP. Household consumption has increased, but not as much as China's GDP per capita.

Can China take further lessons from other countries in its vicinity in terms of financial incentives? Singapore, with a 0.97 fertility rate in 2023,⁵⁶ has been the global standard in terms of incentives since 1996 (cash, maternity leave, housing subsidies).⁵⁷ Chinese results, on the other hand, are disappointing. The costs of education, often private, and the difficulty for women in combining work with a traditional family role are cited by some interviewees as factors.⁵⁸ In China, **the cost of education represents 17 percent of household income but an incredible 57 percent for the bottom quartile**, an amount that also testifies to the value China's population attaches to education.⁵⁹ However, China's population can be segmented in more ways than simply income inequality.⁶⁰

⁵⁵ “国务院关于印发《深入实施以人为本的新型城镇化战略五年行动计划》的通知” [Notice of the State Council on printing and distributing the Five-Year Action Plan for the in-depth implementation of the people-oriented New Urbanization Strategy], Government of the People's Republic of China, July 28, 2024, https://www.gov.cn/zhengce/zhengceku/202407/content_6965543.htm; “人力资源社会保障部等10部门关于进一步加强农民工服务保障工作的意见” [Opinions of 10 departments including the Ministry of Human Resources and Social Security on further strengthening the service and protection of migrant workers], Ministry of Human Resources and Social Security of the People's Republic of China, November 15, 2024, https://www.mohrss.gov.cn/xxgk2020/fdzdgknr/zcfg/gfxwj/jy/202411/t20241122_530511.html.

⁵⁶ “Infographic – Total fertility rate,” Singapore Department of Statistics, May 7, 2021, https://www.singstat.gov.sg/-/media/files/visualising_data/infographics/population/total-fertility-rate.ashx.

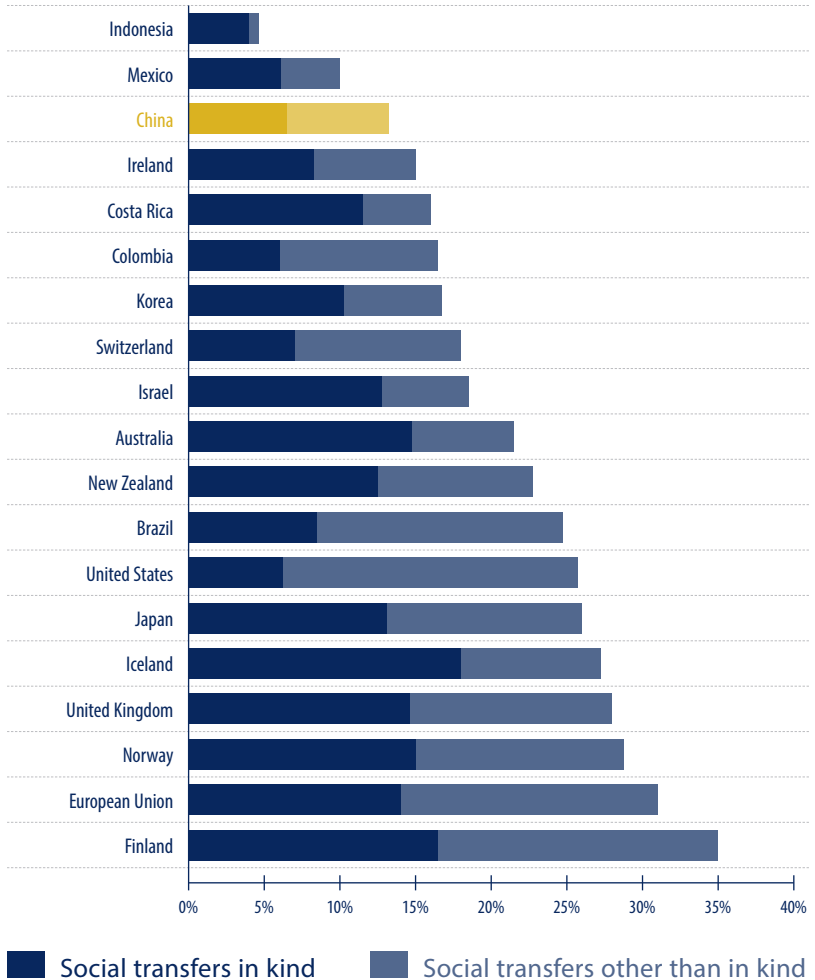
⁵⁷ Jolene Tan, “Perceptions towards pronatalist policies in Singapore,” *Journal of Population Research*, Vol. 40, No. 14, May 10, 2023, <https://link.springer.com/article/10.1007/s12546-023-09309-8>.

⁵⁸ At 60.5 percent, the participation of women in the labor force is at a quite high level: “Gender Data Portal – China”, World Bank, <https://genderdata.worldbank.org/en/economies/china#:~:text=In%20China%2C%20the%20labor%20force.labor%20force%20participation%20has%20decreased.>

⁵⁹ Hu Dezhuang, Li Hongbin, Li Tang, Meng Lingsheng and Binh Thai Nguyen, “The burden of education costs in China: A struggle for all, but heavier for lower-income families,” SSRN, August 31, 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4558282.

⁶⁰ Nevertheless, at the international level, household income may be undercounted in official statistics, especially in the form of housing subsidies and social transfers.

Figure 3: Social transfers in kind and other social benefits
(as a share of GDP, in selected countries)



Source: OECD, China's National Bureau of Statistics, Rhodium Group.

Urban areas may appear to be an exception, but **some traditional aspects of the household persist, with impacts for retirees.** To marry, the groom must provide a home, consistent with the heritage of the customary dowry process, while children are traditionally seen as an insurance policy for one's old age. This is less evident today with stored savings and the better-funded retirement of post-Mao boomers in cities and in the rich countryside. But in many far-flung areas, the elderly are left behind as the younger generations move to the cities. Additionally, one factor that is seldom cited may become more important in the next decade: China's marriage rate could mitigate some of the challenges of an aging population. Indeed, although observers note that the marriage ratio is declining, it is still estimated at 75 percent, whereas it now hovers around or below 50 percent in Hong Kong, Japan, South Korea, and Taiwan.⁶¹

Another figure that should not be neglected is the unemployment rate, which must also be treated with caution, particularly when it comes to figures for urban youth (16-24 years old). Indeed, while the unemployment rate peaked at 21 percent in the summer of 2023 and has now declined to 15.7 percent in December,⁶² total urban unemployment remained steady at around 5.1 percent.⁶³ The youth unemployment spike reflected the arrival on the market of new graduates and competition from migrant labor, categories not counted in unemployment statistics. Youth unemployment statistics were then manipulated, including by delaying the granting of graduation degrees and therefore the head count for new graduate entrants on the job market! Finally, since the COVID pandemic and with the real estate crisis, **new employment**

⁶¹ Carl Minzner, "China's marriage rate bounces back after COVID – But only temporarily," Council on Foreign Relations, March 25, 2024, <https://www.cfr.org/blog/chinas-marriage-rate-bounces-back-after-covid-only-temporarily>.

⁶² "全国城镇不包含在校生的16-24岁劳动力失业率(%)" [National urban unemployment rate of the labor force aged 16-24 not in school (%)], National Bureau of Statistics, <https://data.stats.gov.cn/easyquery.htm?cn=A01>.

⁶³ "2024年经济运行稳中有进 主要发展目标顺利实现" [In 2024, the economy will be stable and progressing, and the main development goals will be successfully achieved], National Bureau of Statistics, January 17, 2025, https://www.stats.gov.cn/sj/zxfb/202501/t20250117_1958332.html.

has shifted from construction to services – which often means low-paid jobs in China’s vast gig economy.

Another gap is increasingly being pointed out by seasoned observers of China’s society: education levels.⁶⁴ We are accustomed to the perception of an increasingly large and trained labor force. China is indeed the world’s largest source of engineers and IT workers. But **there is a large left-behind population where education levels remain very low** – 35 percent of China’s labor force has only received one year of middle school education. Education spending in rural areas is much lower on a per capita basis than in urban ones, with implications for many aspects of rural education, from school infrastructure to teacher quality.⁶⁵

Again, the consequences of educational divergences are hard to assess. These might range from the need to preserve low-end manufacturing in a full-set industry perspective to the optimistic note that a shrinking but renewed labor force will be better educated. In addition, a smaller budget for education will be needed, from local primary and middle school to higher education. China may have a surplus of 1.5 million primary school teachers and 370,000 middle school teachers by 2035.⁶⁶ On top of this, the average level of education for new entrants into the labor force has increased from seven to twelve years,⁶⁷ and China’s student population expanded by 40 percent from 2019 to 2021.⁶⁸

⁶⁴ Scott Rozelle and Natalie Hell, “Invisible China. How the urban-rural divide threatens China’s rise,” *The University of Chicago Press*, 2020, <https://press.uchicago.edu/ucp/books/book/chicago/I/bo61544815.html>.

⁶⁵ “Scott Rozelle testimony,” U.S.-China Economic and Security Review Commission, February 24, 2023, https://www.uscc.gov/sites/default/files/2023-02/Scott_Rozelle_Testimony.pdf.

⁶⁶ Mandy Zuo, “China population: teachers face uncertain future with falling birth rate set to create 1.9 million surplus by 2035,” *South China Morning Post*, February 13, 2024, <https://www.scmp.com/economy/china-economy/article/3251486/china-population-teachers-face-uncertain-future-falling-birth-rate-set-create-19-million-surplus>.

⁶⁷ “Statistical report on China’s educational achievements in 2022,” Ministry of Education of the People’s Republic of China, April 3, 2023, http://en.moe.gov.cn/documents/reports/202304/t20230403_1054100.html; “Chapter 3: Potential risks to China’s future economic competitiveness,” U.S.-China Economic and Security Review Commission, November 2023, https://www.uscc.gov/sites/default/files/2023-11/Chapter_3_Section_1--China_Educating_and_Training_Its_Next_Generation_Workforce.pdf.

Will Xi Jinping’s recent acknowledgment of demographics as a national security priority under the concept of “*high-quality population development*” (人口高质量发展), **change things around and further accelerate the introduction of pro-natalist measures?**⁶⁹

c. Beyond 2035: A Demographic Implosion

By 2035, the country can expect a population decline of twenty million people per year,⁷⁰ an elderly population of more than 400 million (a third of the total population),⁷¹ a life expectancy of eighty-one (close to the current EU average),⁷² and an elderly dependency ratio of 34 percent.⁷² Regarding the latter number, it is equivalent to the projection for the United States but still much lower than the EU’s average ratio. Inevitably, this will create an issue for pensions that will become more critical after 2035. **Therefore, reforms are basically needed on many fronts, but their importance differs from one hypothesis to another.**

Funding retirement is the most glaring need, but is it a political priority? After all, the main consequences of China’s fertility decline will kick in after, not before, 2035. In 2019, a much-discussed study by the China

⁶⁸ “Statistical report on China’s educational achievements in 2021,” Ministry of Education of the People’s Republic of China, September 24, 2022, http://en.moe.gov.cn/documents/reports/202209/t20220924_664436.html.

⁶⁹ Wang Pei’an, “以人口高质量发展支撑中国式现代化” [Support Chinese-style modernization with high-quality population development], Qiushi, November 19, 2024, http://www.qstheory.cn/qshyjx/2024-11/19/c_1130220750.htm.

⁷⁰ “China’s demographic outlook and implications for 2035,” The Economist Intelligence Unit, January 30, 2024, <https://www.eiu.com/n/chinas-demographic-outlook-and-implications-for-2035/>.

⁷¹ “国家卫生健康委员会2022年9月20日新闻发布会文字实录” [Transcript of the National Health Commission’s press conference on September 20, 2022], National Health Commission of the People’s Republic of China, September 20, 2022, <http://www.nhc.gov.cn/xcs/s3574/202209/ee4dc-20368b440a49d270a228f5b0ac1.shtml>.

⁷² Bai Ruhai, Liu Yunning, Zhang Lei, Dong Wanyue, Bai Zhenggang and Zhou Maigeng, “Projections of future life expectancy in China up to 2035: A modelling study,” *The Lancet*, March 30, 2023, [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(22\)00338-3.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(22)00338-3.pdf).

⁷³ “How severe are China’s demographic challenges?,” *China Power*, March 6, 2023, <https://chinapower.csis.org/china-demographics-challenges/>.

Academy of Social Sciences (CASS) predicted that the pension system for urban enterprise employees would break by 2035.⁷⁴ If we fast-forward another fifteen years, the ratio of pensioners to the active population would meanwhile fall to 1, according to the Chinese research institute.⁷⁵ This is a systemic change compared to the beginning of the twenty-first century, when ten working-age people supported each retiree. Published under Prime Minister Li Keqiang, the CASS report advocated for pension reform and for raising the retirement age. But this is only part of the picture.

The current pension system perpetuates the urban-rural divide.

A pension system that is often said to give more to urban retirees (about €500 per month) and even more in richer areas grants much less to rural retirees (under €100 per month). In response, private retirement funds and the rechanneling of investment could change the picture in cities, while the countryside will continue to lose its population. On the other hand, were China's elderly to have the same labor force participation as Japan by 2035, some forty million additional people would be at work.⁷⁶

Yet the need for pension reform is a certainty, as the working-age population from which contributions are drawn is declining. So is the fact that declining fertility trends are unlikely to reverse by 2035. Even if they did, the impact on the labor force and its costs would, of course, be delayed. **Solutions to the demographic decline are unlikely to be found in reforms based on social change.** Increasing the retirement age, which is currently at an extremely low 50-55 for women and 60 for men, has been discussed for years. It was seriously contemplated again in 2024, during the Third Plenum, but this clearly has a limited political appeal. Planned to start in January 2025, is the announced statutory retirement age reform therefore really a change of mindset?⁷⁷

⁷⁴ *This pension system for urban enterprises is based on employers and employees contributions.*

⁷⁵ Zheng Bingwen, “《中国养老金精算报告2019-2050》” [China pension actuarial report 2019-2050], China Labor and Social Security Publishing House, April 2019, <http://cisscass.com/yanjiucginfo.aspx?ids=26&fl=3SOURCE>.

⁷⁶ Bert Hofman, “China's demography is not destiny,” *Bert's Newsletter*, January 19, 2023, <https://berthofman.substack.com/p/chinas-demography-is-not-destiny>.

Increasing health-care expenditures (6.5 percent of GDP in 2021)⁷⁸ and shifting state funds or increasing company contributions toward pensions are the kinds of redistributive measures that Xi Jinping is known to stand against. On the rise, **health care expenditures are set to remain a challenge, since they are no longer financially negligible.** As a result, Xi Jinping may be inflecting his position by looking at the measures introduced in October 2024 to build a “*birth-friendly society*” (生育友好社会), including more direct support for caregivers.⁷⁹

d. The “*Techno-Futuristic*” Approach

The key variable for demographic scenarios is, therefore, the **extent of productivity and efficiency gains.** These can be achieved through better education, shifts in employment across sectors and regions, and more broadly, through the impact of automation, IT, and funding from sizable external surpluses. Notably, a shift from industry to services jobs is traditionally believed to reduce productivity. Massive shifts from low-end jobs to capital-intensive activities will occur at the same time.⁸⁰ This is true even if China clearly has not renounced low technology exports,

⁷⁷ “全国人民代表大会常务委员会关于实施渐进式延迟法定退休年龄的决定” [Decision of the Standing Committee of the National People’s Congress on implementing a gradual increase in the statutory retirement age], Government of the People’s Republic of China, September 13, 2024, https://www.gov.cn/yaowen/liebiao/202409/content_6974294.htm.

⁷⁸ Arendse Huld, “Understanding China’s rapidly growing healthcare market,” China Briefing, June 12, 2023, <https://www.china-briefing.com/news/understanding-chinas-rapidly-growing-healthcare-market/>.

⁷⁹ “国务院办公厅印发《关于加快完善生育支持政策体系推动建设生育友好型社会的若干措施》的通知” [Notice of the General Office of the State Council on issuing the “Several measures for accelerating the improvement of the fertility support policy system and promoting the construction of a child-friendly society”], Government of the People’s Republic of China, October 19, 2024, https://www.gov.cn/zhengce/content/202410/content_6983485.htm.

⁸⁰ In one striking instance, employment in coal mining declined from 5.3 to 2.6 million between 2014 and 2021, even as coal production advanced: “Managing the social consequences of the transition away from coal: the case of job losses in Shanxi Province, China,” The Oxford Institute for Energy Studies, August 2022, <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2022/08/Insight-121-Managing-the-social-consequences-of-the-transition-away-from-coal-the-case-of-job-losses-in-Shanxi-Province.pdf>.

and Artificial Intelligence is expected to boost the country's labor productivity by 27 percent at the 2035 horizon⁸¹ – a much welcome trend as **Total Factor Productivity is currently stagnating if not going down**. The consequences of demographic trends for the economy and society must, therefore, be assessed – and there are competing opinions on this question.

In the next decade, favoring “*new quality productive forces*” (新质生产力), Xi's new landmark slogan to accelerate advances in the manufacturing industry via state power,⁸² will also be an answer to the coming depletion of the labor force and to its rising cost. South Korea, with the same shrinking labor force perspective and innovative capacity, indicates the way ahead for China. In terms of repercussions, **the outcome of labor shortages and the pace of future innovation will influence any demographic scenario**. In a nutshell and in the words of a famous expert with insightful on-the-ground experience, “*demographics will therefore be a challenge in 2035 but a problem in 2050*.”⁸³

Taking one further step and extending current trajectories to the end of the century leads to the popular prediction of China's population falling back to 700 million by 2100. We will not venture into that territory except to note that **a reversal in the birth rate achieved by totalitarian control on the downside is infinitely harder to manage on the upside**. In other words, you can prevent people from having children but you cannot force people to have them.

⁸¹ “Artificial Intelligence poised to accelerate China's annual growth rate from 6.3 percent to 7.9 percent by 2035, finds new research from Accenture,” Accenture, June 26, 2017, <https://news-room.accenture.com/news/2017/artificial-intelligence-poised-to-accelerate-chinas-annual-growth-rate-from-6-3-percent-to-7-9-percent-by-2035-finds-new-research-from-accenture>.

⁸² The “platform economy” (平台经济) is the latest addition to this innovation push: “李强主持召开国务院常务会议 研究推动平台经济健康发展有关工作等” [Li Qiang presided over the State Council executive meeting to study work related to promoting the healthy development of the platform economy], Ministry of Human Resources and Social Security of the People's Republic of China, November 25, 2024, https://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/shizhen-gyaowen/202411/t20241125_530717.html.

⁸³ Interview with Scott Rozelle.

Key Takeaways

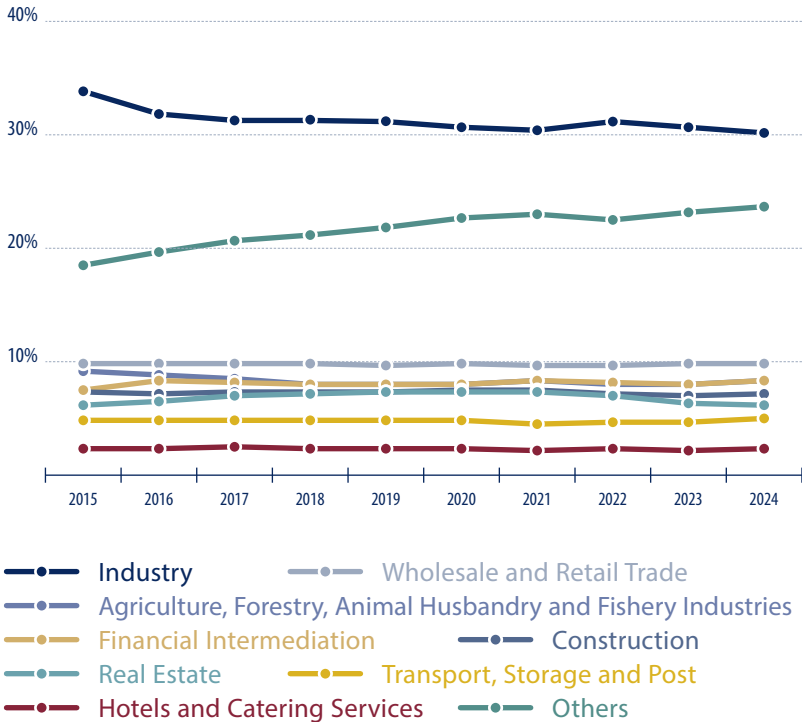
- *Legacy of the one-child policy* – China’s fertility rate is below the replacement level, a trend that will create a retirement funding crisis by severely reducing the share of the working age population. Such effects will only intensify after 2035.
- *Pension and retirement dilemmas* – With the elderly set to account for a third of the total population in 2035, the pension system requires the retirement age to be raised and funding mechanisms to be overhauled. Xi’s reluctance to expand redistributive policies complicates recently announced reforms.
- *The urban-rural divide and migrant labor* – Inequitable access to social, health, and education benefits persists, preventing migrants from fully integrating and limiting household consumption. Large-scale migration to coastal cities still sustains growth.
- *“Techno-futuristic” solutions vs demographic reality* – Automation, advanced manufacturing, and AI may compensate for labor shortages, reducing the need for lower-end manufacturing, but they will in turn deepen social divides.

1.3. THE ECONOMY: THE IMPOSSIBLE SHIFT FROM SUPPLY TO DEMAND

The **prevailing assumptions about China’s economy have changed radically since 2019**. Even before then, Xi’s reforms had shifted toward greater control, with a policy preference for state enterprises, although most international economists still believed that global market integration and the rise in GDP meant a turn toward more consumption, with a service-based economy around the corner. Few would have predicted

the reversal of trends for the foreign trade and current accounts that ensued from 2019 onwards.

Figure 4: Composition of China's GDP by industry since 2015



Sources: China's National Bureau of Statistics, Bruegel.

It is important to note that this economic reversal predated the COVID pandemic, a pandemic often cited as creating exceptional opportunities for China's exports and depressing domestic consumption. However, it did create the perfect circumstances to reduce the inward flow of

foreign goods and services (and to shut down openings to the outside world for the Chinese population). China already reached a 10 percent current account surplus in the past,⁸⁴ and, looking at its domestic characteristics, nothing precludes it from replicating this feat considering the large degree of freedom a \$5 trillion surplus offers. In reality, *“it is the lack of trade-offs which make China’s economy uncertain.”*⁸⁵ **Because China’s economy is now the world’s second largest, its surplus in absolute numbers dwarfs every other case in absolute numbers and creates an even bigger challenge.**

The priority given to the production side over the demand side, the enthusiasm for *“big projects”* (重大工程) such as the infrastructure projects witnessed after the 2008 financial crisis, and the search for self-sufficiency are not purely Xi Jinping’s doing alone. **China’s “rate of accumulation,” the Marxist equivalent of investment, only fell substantially in 1984-85.** Then, the targeted share of “accumulation” of GDP was 25 percent, with a shift to small enterprises and private initiative. That has never repeated itself, and an average 40 percent savings rate for households and businesses is now customary.⁸⁶

a. An Unbalanced and Internationally Contested Economic Model

By now, a new consensus has taken hold regarding China. Even if it is not accepted by China’s officialdom, many available numbers support it. While domestic growth is faltering by previous Chinese standards, manufacturing and exports have been on a roll since 2019.

⁸⁴ In comparison, Germany’s surplus stood at 5.8 percent in 2023, in part because of inclusion into the eurozone: “German balance of payments in 2023 – Monthly report,” Bundesbank, March 2024, <https://publikationen.bundesbank.de/publikationen-en/reports-studies/monthly-reports/monthly-report-march-2024-926792?article=german-balance-of-payments-in-2023-926814>.

⁸⁵ Interview with Brad W. Setser.

⁸⁶ “Urban depositor survey report (Q2 2024),” The People’s Bank of China, August 9, 2024, <http://www.pbc.gov.cn/en/3688247/3688981/3709408/5444431/2024082916411993627.pdf>.

These, in turn, have created unprecedented surpluses in foreign trade and current accounts, along with major imbalances for China's economic partners [see *Appendix, Figures 9 to 14*]. The latter have taken notice, but the extent of the imbalance is still underestimated, considering that China's manufacturing export surplus is now 2 percent of the world GDP, or \$2 trillion in 2024.⁸⁷

In a nutshell, **China now represents 13 percent of global consumption, but 25 percent of global GDP and 38 percent of global manufacturing.**⁸⁸ Meanwhile, the share of foreign firm joint ventures or subsidiaries in China's manufacturing exports has fallen by more than half since 2012 and is now estimated to be between 25 percent and 28 percent, according to various sources.⁸⁹

Incredibly, this performance has been achieved with almost no inflation for domestic consumers (Consumer Price Index) and deflation for producers (Purchasing Price Index). **Unparalleled internationally, China avoided any inflationary cycle that went with the COVID pandemic.** It has now gone through twenty-seven consecutive months of producer price deflation. This means that exports have increased even more in volume than in value.⁹⁰ For example, in the first seven months of 2024, the number of containers shipped to the European Union increased by 11 percent while the number of containers going in the other direction declined by 5 percent.⁹¹ Low Chinese export value prices crush the value of goods.

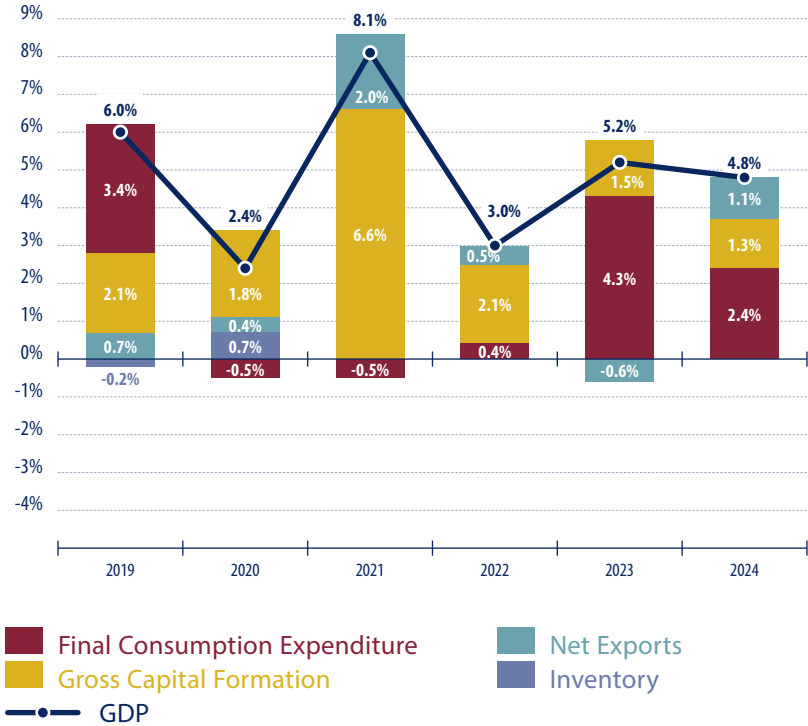
⁸⁷ Brad W. Setser, Michael Weilandt and Volkmar Baur, "China's record manufacturing surplus," Council on Foreign Relations, March 10, 2024, <https://www.cfr.org/blog/chinas-record-manufacturing-surplus>.

⁸⁸ *Ibid.*

⁸⁹ This is not only true for low-end manufacturing, but also for high technology exports: Scott Kennedy, "Data dive: The private sector drives growth in China's high-tech exports," Center for Strategic and International Studies, April 28, 2022, <https://www.csis.org/blogs/trustee-china-hand/data-dive-private-sector-drives-growth-chinas-high-tech-exports>.

⁹⁰ "前11个月我国货物贸易进出口增长4.9%" [In the first 11 months of the year, China's import and export of goods grew by 4.9%], General Administration of Customs of the People's Republic of China, December 10, 2024, <http://www.customs.gov.cn/customs/xwfb34/302425/6251916/index.html>.

Figure 5: Engines of Growth of China's GDP since 2019
(constant price, year-on-year change)



Sources: China's National Bureau of Statistics, Rhodium Group, China Leadership Monitor.

Much of this was due to high savings and low consumer demand, as well as to a large real estate crisis that also depressed the price of materials and housing fixtures. Excess savings were always a feature of China's political economy, but since 1949, the CCP's central goal for the economy has been to harness those savings for development. **Economies of scale should also be mentioned as a factor of success in**

the world's largest manufacturing economy, as well as the much discussed government subsidies.⁹² While these subsidies matter greatly in the key industries targeted for export, they are not so significant relative to GDP as a whole.

China is cooking the books on its external trade and payment accounting to a greater extent than in the past.⁹³ For example, sales abroad from special economic zones, including by foreign multinationals, are not counted as exports. Likewise, insurance and freight costs are not included in the figures, while imports are counted in the services account.⁹⁴ As a result, China's current account surplus is probably massively underestimated by a margin that some say is as high as \$700 billion (€639 billion), or 3.7 percent of its GDP!⁹⁵ This is on top of the 1.3 percent surplus already reported to the International Monetary Fund.

Foreign currency reserves are also undercounted in China's books. While they appear to have dipped since 2015 from \$4 trillion (€3.68 trillion) to slightly above \$3 trillion (€2.76 trillion), there have been additional purchases by state banks, companies, and investment funds – mainly of dollar-denominated instruments.⁹⁶ Were these included, China would be shown to have increased its reliance on the currency of its

⁹² Frank Bickenbach, Dirk Dohse, Rolf J. Langhammer and Wan-Hsin Liu, "Foul play? On the scale and scope of industrial subsidies in China," Kiel Institute for the World Economy, Policy Brief No. 173, April 2024, <https://www.ifw-kiel.de/publications/foul-play-on-the-scale-and-scope-of-industrial-subsidies-in-china-32738/>.

⁹³ The current account is a record of a country's international transactions with the rest of the world, meaning the sum of its net trade in goods and services, net earnings from abroad, and net transfer payments. If the current account balance is positive, the nation is a net lender to the rest of the world, if not, it is a net borrower.

⁹⁴ Sales by Chinese subcontractors to foreign firms based in China are also counted as exports. But if the same foreign firm resells the goods in China at a marked-up price, it is counted this time as an import even though it never left China.

⁹⁵ Brad W. Setser, "China's imaginary trade data," Council on Foreign Relations, August 14, 2024, <https://www.cfr.org/blog/chinas-imaginary-trade-data>.

⁹⁶ Brad W. Setser, "How to hide your foreign exchange reserves – A user's guide," Council on Foreign Relations, June 29, 2023, <https://www.cfr.org/blog/how-hide-your-foreign-exchange-reserves-users-guide>.

arch-competitor: the United States. **The yuan is informally pegged to the dollar, although it tends to crawl slowly downwards.** China has been able to shield itself from accusations of currency manipulation by the fact that the Japanese yen, Korean won, and New Taiwan dollar have gone into a much stronger decline. But when the US dollar starts to weaken, as was the case for most of 2024, the competitiveness of Chinese goods becomes even more flagrant.⁹⁷

b. China's Economic Culture Plays a Role of Its Own

We should not jump to immediate conclusions regarding the necessary responses from China's international counterparts. Yes, twisted numbers do exist, as do massive government subsidies and induced household savings. But **is it all the work of the Party-state?** A side look at Taiwan provides a form of answer. In the first quarter of 2024, Taiwan's current account surplus reached a massive 15.4 percent of GDP – and the CCP is not in charge there.⁹⁸

Equally, cycles of over-investment in specific industries, leading to overproduction, along with local state battles for subsidies or internal customs, are also a feature of China's traditional economy. This results in crashes that start a new cycle. It is not evident that Chinese entrepreneurs, if left to themselves, would adopt a different behavior. **Herd instincts and massive competition around specific goods or services are sociocultural traits as much as features encouraged by China's top-down command system.** Xi Jinping has simply intensified the policy bias toward investment and production-side measures.

⁹⁷ For example, the 15 percent rebound of the euro against the dollar – from 0.96 in September 2022 to 1.11 in September 2024 – is nearly equivalent to the additional duties sought by the European Commission on Chinese electric vehicles.

⁹⁸ "Balance of payments," Central Bank of the Republic of China, May 20, 2024, <https://www.cbc.gov.tw/en/cp-448-169725-d0db9-2.html>.

The **turn toward self-reliance, decoupling by China in effect, is omnipresent and a key driver of industry and innovation policies** – a trend some refer to as techno-utopian growth.⁹⁹ It has become the priority over international opening or the other face of the ambiguous “*dual circulation*” (双循环) concept launched in 2020.¹⁰⁰ There is no longer a stated policy of reducing the trade surplus. Prime Minister Wen Jiabao often made the promise in his speeches at the spring sessions of the National People’s Congress that he would reduce it, arguing that China’s economy was running on unsustainable trends.¹⁰¹ This would not be said today. In talks with the European Union, China denies the very existence of overproduction capacities,¹⁰² while they are self-evident in a growing list of sectors and are occasionally mentioned by Chinese economists themselves.¹⁰³

One area where Xi Jinping steadily emphasizes security and increasing self-reliance is the availability of food. **China is the world’s largest agricultural importer**,¹⁰⁴ a dependency closely linked to new consumption habits. It is only for soybeans used for animal feed that China is critically

⁹⁹ Interview with Arthur Kroeber.

¹⁰⁰ “China Trends #7 – The shrinking margins for debate,” Institut Montaigne, October 2020, <https://www.institutmontaigne.org/en/publications/china-trends-7-shrinking-margins-debate>.

¹⁰¹ James Pomfret, “China to stimulate domestic demand, reduce surplus,” Reuters, June 26, 2011, <https://www.reuters.com/article/business/china-to-stimulate-domestic-demand-reduce-surplus-wen-idUSL6E7HQ04P/>.

¹⁰² “Xi says there is no such thing as ‘China’s overcapacity,’” Government of the People’s Republic of China, May 7, 2024, https://english.www.gov.cn/news/202405/07/content_WS66391c1fc-6d0868f4e8e6cb6.html; “Global cooperation in energy transition, climate change fight urged at Summer Davos,” Xinhua, June 26, 2024, <https://english.news.cn/20240626/43bd4f87bef4543a8bf-4392f73f85466f/c.html>.

¹⁰³ “财经十一人 | 十问民营经济” [Eleven financial players / Ten questions for the private economy], China Digital Times, December 13, 2023, <https://chinadigitaltimes.net/chinese/703177.html>; “卢锋：新一轮产能过剩特点及对外影响” [Lu Feng: Characteristics of the new round of overcapacity and its external impact], March 25, 2024, Weixin, https://mp.weixin.qq.com/s/5jF6ieE4ls3yl-Zhp3_mjGg.

¹⁰⁴ Kevin Dong, Mallie Prytherch, Lily McElwee, Patricia Kim, Jude Blanchette and Ryan Hass, “China’s food security: Key challenges and emerging policy responses,” Center for Strategic and International Studies, March 15, 2024, <https://www.csis.org/analysis/chinas-food-security-key-challenges-and-emerging-policy-responses>; Zongyuan Zoe Liu, “China increasingly relies on imported food. That’s a problem,” Council on Foreign Relations, January 25, 2023, <https://www.cfr.org/article/china-increasingly-relies-imported-food-thats-problem>.

dependent on imports. From a strategic point of view, *“In the event of a conflict or faced with sanctions, Chinese might need a few diet changes but a 1960s-like famine will not happen again.”*¹⁰⁵ Meanwhile, arable land has been protected in recent years, and the **current priority is to increase the yield rather than the surface of cultivated land.**¹⁰⁶ China is the world’s largest holder of grain stocks, with available storage for more than a year’s production in 2023!¹⁰⁷ A recently published decade-long action plan will further accelerate efforts to boost consumption of cereal grains and improve production standards, along with the emergence of a group of leading whole-grain food processing enterprises and high-quality cereal grain industry clusters.¹⁰⁸

Xi Jinping also strongly criticizes “welfarism” or policies of redistribution to “lazy people” (懒人), seeking to avoid any Western-like indolence.¹⁰⁹ He has opposed any demand-side stimulus apart from some purchase vouchers. Price deflation is, therefore, the result of producers adjusting themselves to low domestic demand while simultaneously increasing China’s competitiveness abroad. A worsening of the domestic economy, especially from the real estate sector and looking at local debts, or **an export slowdown would likely increase the temptation to change China’s monetary policy** – probably meaning more fiscal support and efforts to lower the renminbi’s exchange rate. What has prevented this until now is the likelihood that this would increase money outflows.

¹⁰⁵ Interview with Scott Rozelle.

¹⁰⁶ “中共中央 国务院关于学习运用“千村示范、万村整治”工程经验有力有效推进乡村全面振兴的意见” [Opinions of the CPC Central Committee and the State Council on learning and applying the experience of the “Thousand villages demonstration and ten thousand villages remediation” project to effectively and vigorously promote the comprehensive revitalization of rural areas], Government of the People’s Republic of China, February 3, 2024, https://www.gov.cn/zhengce/202402/content_6929934.htm.

¹⁰⁷ “China’s grain storage capacity exceeds 700m tons by end of 2023,” China Daily Hong Kong, June 2, 2024, <https://www.chinadailyhk.com/hk/article/584685>.

¹⁰⁸ “关于印发《国家全谷物行动计划（2024-2035年）》的通知” [Notice on issuing the National Action Plan for whole grains (2024–2035)], National Food and Strategic Reserves Administration, December 24, 2024, https://www.lswz.gov.cn/html/tzgg/2024-12/24/content_285634.shtml.

¹⁰⁹ Xi Jinping, “正确认识 and 把握我国发展重大理论和实践问题” [Correctly understand and grasp major theoretical and practical issues in China’s development], Qiushi, May 15, 2022, http://www.qstheory.cn/dukan/qs/2022-05/15/c_1128649331.htm.

c. A Competitive Outward-Facing Economy until 2035?

These are the basic financial and economic variables that inform the scenarios up to 2035. Is China's debt load manageable without major changes?¹¹⁰ Can exports, China's main growth engine, be maintained? Much of the answer depends on the outside world's response. 2035 is also the year many economists predicted that China would overtake or get closer to the size of the US economy.¹¹¹ Some experts, including Chinese scholars, now believe that the gap might actually be widening.¹¹² Does the present reality therefore reflect the future?

Even without considering the geopolitical risks implied by overdependence on Chinese sourcing, the imbalances create a zero-sum game rather than a win-win situation. China's manufacturing and export gains are more and more at the expense of other producers, whether emerging economies or mature industrialized societies whose products are increasingly challenged by Chinese competitors.¹¹³ Nowhere is that as evident as in green trade. Thanks to forward planning, subsidies, and economies of scale, China has leapfrogged ahead of all competitors in this area.

¹¹⁰ Michael Pettis, "The evolution of Chinese debt in 2024," *Carnegie Endowment for International Peace*, July 31, 2024, <https://carnegieendowment.org/posts/2024/07/the-evolution-of-chinese-debt-in-2024>.

¹¹¹ "The global economy in 2025: Growth slows as Asia rises," *Goldman Sachs*, December 8, 2022, <https://www.goldmansachs.com/intelligence/pages/the-global-economy-in-2025-growth-slows-as-asia-rises.html>; "China's 'sorpasso': Will China's economy overtake the US?," *Capital Economics*, 2022, <https://www.capitaleconomics.com/will-china-economy-overcome-us#download-report>.

¹¹² Kawala Xie, "The next 10 years: Tsinghua's Yan Xuetong talks Trump, Taiwan and what it means for China," *South China Morning Post*, July 22, 2024, <https://www.scmp.com/news/china/diplomacy/article/3271304/next-10-years-tsinghuas-yan-xuetong-talks-trump-taiwan-and-what-it-means-china>.

¹¹³ Camille Boullenois and Charles Austin Jordan, "How China's overcapacity holds back emerging economies," *Rhodium Group*, June 18, 2024, <https://rhg.com/research/how-chinas-overcapacity-holds-back-emerging-economies/>.

“De-risking” and “decoupling” – the first officially condoned by the European Union and the United States, the second officially rejected – **are therefore possibilities in the coming decade.** Decoupling is, in fact, happening to some extent in the United States, where, on top of restrictions on technology in some sectors, imports have been diversifying away from China since 2018, as have China’s imports from the United States.¹¹⁴ Taiwan’s exports to China have slumped back to their 2014 level, and the island’s first export destination is now the United States.¹¹⁵ In the same way, Japan’s exports to China have fallen by 11 percent since 2018.¹¹⁶ On the contrary, the reverse trend is evident between the European Union and China, which rely more on each other than before 2018.¹¹⁷

Overall, **foreign direct investments (FDIs) into China have declined for fourteen consecutive months**, by nearly 30 percent between January and July 2024.¹¹⁸ An European Union Chamber of Commerce (EUCCC) poll of its members shows a clear decline in future investment intentions – although Germany and high-tech firms keep the momentum going toward China.¹¹⁹ In the January-June period of 2024, German

¹¹⁴ Mary E. Lovely and Jing Yan, “While the US and China decouple, the EU and China deepen trade dependencies,” *Peterson Institute for International Economics*, August 27, 2024, <https://www.piie.com/blogs/realtime-economics/2024/while-us-and-china-decouple-eu-and-china-deepen-trade-dependencies>.

¹¹⁵ Didi Tang, “Taiwan is selling more to the US than China in major shift away from Beijing,” *Associated Press*, May 17, 2024, <https://apnews.com/article/china-taiwan-us-exports-investment-308c4efe8e54bef3b65f68db565437f3>; “Latest trade statistics summary, 2024/12 (Unit: Billion US\$; %),” *Taiwan’s Customs Statistics Database Query*, <https://portal.sw.nat.gov.tw/APGA/GA28E#t3>.

¹¹⁶ “Trade statistics of Japan,” *Ministry of Finance of Japan*, <https://www.customs.go.jp/toukei/srch/indexe.htm?M=23&P=0>.

¹¹⁷ “China-EU – International trade in goods statistics,” *Eurostat*, February 2024, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=China-EU_-_international_trade_in_goods_statistics.

¹¹⁸ “2024年1-7月全国吸收外资5399.7亿元人民币” [From January to July 2024, China attracted foreign investment of 539.47 billion yuan], *Ministry of Commerce of the People’s Republic of China*, August 16, 2024, https://www.mofcom.gov.cn/xwfb/rcxwfb/art/2024/art_d8476a0f316349d1b4dac2a2e12fe03a.html.

¹¹⁹ “Business confidence survey 2024,” *The European Union Chamber of Commerce in China*, May 10, 2024, <https://www.europeanchamber.com.cn/en/publications-business-confidence-survey>.

companies invested €7,28 billion, more than during the same period in 2023.¹²⁰ *“German companies are in China for China. Some are even considering friendshoring to other Asian countries with their Chinese partners.”*¹²¹ Some are, in addition, very much aware that **expropriation of foreign companies is possible within a mercantilist approach** – especially when they are not seen as useful anymore to China’s economy. In some way, Nokia, Volkswagen and many others went from a *“darling”* to a *“squeezed”* company on the Chinese market.

The same applies for other like-minded countries. For the first time in its history, the American Chamber of Commerce in China reported in February 2024 that less than 50 percent of its members rated China as one of the top three global destinations for investment.¹²² A similar poll of Japanese companies in October shows that 64 percent believe the Chinese economy will worsen.¹²³ Even more strikingly, a poll of 3,000 mid-level Japanese businessmen shows that 42 percent advise against any business trips to China, with an additional 21 percent applying this to management level employees!¹²⁴ In this case, security concerns and the anti-espionage law explain these numbers. According to a Japanese scholar, the wake-up call for Japanese companies on the need for contingency plans most likely came in 2022, when Taiwan was surrounded by PLA deployments.¹²⁵

¹²⁰ Nik Martin, *“German firms ignore calls to shrink China investments,” Deutsche Welle, August 26, 2024, <https://www.dw.com/en/germanys-investments-in-china-increase-despite-warnings/a-69957810#:~:text=The%20German%20central%20bank%20figures,the%20total%20figure%20for%202023>*.

¹²¹ Interview with Volker Stanzel.

¹²² *“China business climate survey report,” AmCham China, February 1, 2024, <https://www.amcham-china.org/china-business-climate-survey-report/>*.

¹²³ *Only 16 percent will increase investment, while 44 percent will either cut or decrease their spending: “Japanese businesses grow more pessimistic on China’s economy,” The Japan Times, November 20, 2024, <https://www.japantimes.co.jp/business/2024/11/20/companies/japanese-firms-in-china/>*.

¹²⁴ *Only 9 percent estimate that trips can be made as usual: “Survey on China-Japan relations in 2024 – Interim Report,” Mt. Fuji Dialogue Young Forum, October 2024.*

¹²⁵ Interview with Naoko Eto.

The trade issue is important enough that it was the opening topic in the Harris-Trump presidential debate of September 2024.¹²⁶ While the incoming President defended an overall increase in custom fees by citing China and the threat to employment in the United States, Kamala Harris described this as equivalent to an overall tax increase for consumers, leading to price inflation. Specific increases for Chinese goods have been hotly disputed ever since the first increases were made in 2018, but the tariffs were never rescinded by the Biden administration. **Some import substitution from other sources does indeed happen.** However, Chinese exports calculated by volume, and not by value, have increased considerably more. Donald Trump's promise of a 60 percent import duty on all Chinese imports could reverse this trend regarding the United States, but inversely, **China is already weighing the benefits of unilateral tariff cuts on imports from non-US trading partners.**¹²⁷ The first indications for the second Trump presidency is that tariffs and China will be at the top of the administration's agenda.¹²⁸

In other words, scenarios for China's economy to 2035 will need to consider the possibility of global trade and geoeconomic fragmentation.¹²⁸ **The emergence of two main blocks involving the West against China and their respective preferential trade partners or a more isolated Chinese economy remains a possibility.** But that is by far not the only scenario, even if arguments about economic security and geopolitics may reinforce it.

¹²⁶ Riley Hoffman, "Harris-Trump presidential debate transcript," ABC News, September 11, 2024, <https://abcnews.go.com/Politics/harris-trump-presidential-debate-transcript/story?id=113560542>.

¹²⁷ Lingling Wei and Kim Mackrael, "China courts U.S. allies as defense against Trump's protectionism," *The Wall Street Journal*, November 10, 2024, <https://www.wsj.com/world/china/china-courts-u-s-allies-as-defense-against-trumps-protectionism-e574714e>.

¹²⁸ They may be used for varied purposes, including the burning issue of Chinese fentanyl sales to Mexico.

¹²⁹ Shekhar Aiyar, Jiaqian Chen, Christian H. Ebeke, Roberto Garcia-Saltos, Tryggvi Gudmundsson, Anna Ilyina, Alvar Kangur, Tansaya Kunaratskul, Sergio L. Rodriguez, Michele Ruta, Tatjana Schulze, Gabriel Soderberg and Juan P. Trevino, "Geoeconomic fragmentation and the future of multilateralism," *International Monetary Fund*, January 15, 2023, <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2023/01/11/Geo-Economic-Fragmentation-and-the-Future-of-Multilateralism-527266>.

It is important to note that the main battleground over economic and trade issues will also be outside the West, even with the addition of the North-East Asian powerhouses. China's export drive is eviscerating industry in developing and emerging economies, which have started to raise trade barriers before the United States or Europe. Any industry and trade strategy by Europe (or the United States) must also consider the interests of these economies, yet the Biden administration failed to garner support for its de-risking agenda among emerging countries. By 2035, the West's share of the global economy will have declined further. **Trade strategies that avoid designating China are thought to be more compatible with World Trade Organization (WTO) rules – but they also antagonize emerging economies.** In some cases, such as the carbon border adjustment mechanism (CBAM), China's export sector may in fact be more able than others to create specific supply chains to avoid penalties.

China's attractiveness in terms of the quality of goods, logistics, and pricing above all, does mean there is no win-win scenario with diversification or decoupling. Rather, there is a **lose-lose risk whereby seeking alternative suppliers or investment sites away from China results in large increases in living costs for consumers.** Present calls for reindustrialization, whether in the United States or Europe, imply a turn toward more subsidies for innovation and manufacturing. Economic security has a price that can be viewed as an insurance premium but which degrades competitiveness. This could crowd out other priorities for China's partners without succeeding in countering China's reliance on exports. That, at least, seems to be China's strategic gamble over its economy. So far, *"China would be wrong to renounce its overcapacity strategy since it is working,"* in the words of a former European diplomat.¹³⁰ **China would rather wait for the proof of the success of these countering strategies before changing its own policy.**¹³¹

¹³⁰ Interview with Volker Stanzel.

¹³¹ Recent announcements at the Central Work Economic Conference in December show that China is not completely deaf to the issue of clean technologies overcapacities: "中央经济工作会议在北京举行 习近平发表重要讲话" [*The Central Economic Work Conference was held in Beijing, and Xi Jinping delivered an important speech*], Government of the People's Republic of China, December 12, 2024, https://www.gov.cn/yaowen/tiebiao/202412/content_6992258.htm.

Key Takeaways

- *Export-driven growth and underestimated surpluses* – China’s manufacturing exports have again skyrocketed since 2019, fueling massive trade surpluses. But this also favors protectionist measures and decoupling policies from major global partners. Official figures underestimate the country’s capital account or dollar reserves, and therefore the degree of integration and external reliance of the economy.
- *Weak domestic demand and deflation* – Low consumer spending, high savings, and the real estate crisis keep prices down. This, in turn, continues to benefit China’s export competitiveness but feeds private reluctance to invest.
- *Public investment and overcapacity* – Xi Jinping prioritizes “*big projects*”, overinvestment, and lending, disregarding the Chinese and global supply gluts that they create. Much hope is now placed on the “*new quality productive forces*” to support the economy and capture leadership in new sectors.
- *Global fragmentation and long-term risks* – Decoupling trends, already at play among several of China’s key partners, were in fact initiated by China itself. At a great cost for the global economy, they could derail China’s economy, which is increasingly based on external growth.

1.4. ENERGY: FROM LIABILITY TO GLOBAL POWER PROVIDER

a. Grid Deficiency and Energy Imports: The Legacy

One space where China has been – and continues to be – highly reliant on imports is energy. Traditionally, China’s growth prospects have been limited by bottlenecks. **In spite of China’s abundance of coal, energy has been one of these bottlenecks, in addition to food, foreign currency, and technology.** Historically, China’s railway lines were clogged with coal brought from the north to fulfill the needs of the booming southern coast as the country was opening up. The exploitation of this resource has never stopped – China’s coal usage grew from 3.7 billion tons in 2015 (the year of the Paris Agreement to limit emissions) to 4.7 billion tons in 2023,¹³² a figure even expected to reach 4.9 billion in 2024.¹³³

Meanwhile, China became increasingly dependent on oil imports over time, and **electricity production was handicapped by the lack of a unified national power grid** – which is still an on-going challenge and topic of policy discussions,¹³⁴ although the Energy Law that just came into effect could lay the groundwork for such a systemic reform.¹³⁵ Shortages and seasonal power cuts were therefore the norm. And, of course, past episodes of disastrous air pollution were also a result of massive coal use.

¹³² “China coal production,” CEIC, <https://www.ceicdata.com/en/indicator/china/coal-production>.

¹³³ “World coal use to hit record high in 2024: IEA report,” December 18, 2024, Deutsche Welle, <https://www.dw.com/en/world-coal-use-to-hit-record-high-in-2024-amid-climate-concerns-iaea-report/a-71089984>.

¹³⁴ “全国人民代表大会常务委员会关于实施渐进式延迟法定退休年龄的决定” [Decision of the Standing Committee of the National People’s Congress on implementing a gradual increase in the statutory retirement age], Government of the People’s Republic of China, September 13, 2024, https://www.gov.cn/yaowen/liebiao/202409/content_6974294.htm.

¹³⁵ “中华人民共和国能源法” [Energy Law of the People’s Republic of China], Government of the People’s Republic of China, November 8, 2024, https://www.gov.cn/yaowen/liebiao/202411/content_6985761.htm.

b. A Leader in Renewables and Coal

This situation has been reversed over the last two decades. This is the result of massive investment in several directions: from cleaner thermal plants to alternative energies, including nuclear power and improvements in the connection of China's grids. **Flexibility is nowhere as apparent as with energy policies, which are at the heart of Xi's domestic priorities.** Over the long term, Xi Jinping has given an enormous push toward alternative energies. But he has also wavered between discouraging coal production and increasing it again in order to preserve the competitiveness of state and provincial industries.

Energy in China is a three-fold issue. The first aspect of this issue, which is often underestimated, is the availability and cost of energy. The second, toward which interest has peaked and is now receding, is China's role in deepening or alleviating the emissions and climate change crisis – *“for various reasons including awareness of climate change's tangible effects or potential industrial opportunities.”*¹³⁶ The third, which has suddenly shot to the fore, is China's new global role as the number one supplier of goods and infrastructure fit for the energy transition. China alone accounts for more than 80 percent of global solar PV module manufacturing capacity, 95 percent for wafers, and two-thirds of new wind power capacity.¹³⁷

The availability and cost issue was never absolute. Cheap coal remains an available resource throughout the country. Coal production went from 1.2 billion tons in the mid-1990s to 4.7 billion tons nowadays, with additional coal imports from abroad.¹³⁸ To put these numbers into perspective, India, the next largest coal producer, only reached 1 billion

¹³⁶ Interview with Michal Meidan.

¹³⁷ “Advancing clean technology manufacturing,” International Energy Agency, May 2024, <https://www.iea.org/reports/advancing-clean-technology-manufacturing>.

¹³⁸ “China coal production,” CEIC, <https://www.ceicdata.com/en/indicator/china/coal-production>.

tons in 2023.¹³⁹ **Even the most pessimistic assessments of China's climate commitments failed to predict such a steep rise.** Moreover, the policy has always been biased toward cheap energy supply, including for petrol. In the past decade, retail gasoline prices have hovered between RMB 5.5 and RMB 9 per liter (€0.70 to €1.15), prices sometimes set below production prices.

However, electricity production and distribution remain challenges. As seen previously, China's coal mines are in the northwest, while a large proportion of consumers are in the central, southern, and coastal areas. There is a similar challenge with the transmission of electricity from renewable sources. Even for natural gas (excluding liquified natural gas), solar, and wind resources, the main production centers have been in the distant west of China, resulting in long electricity lines. Today, most of the grid has been interconnected, and the glut of thermal plants ensures a more adequate supply. **Grid issues have moved in the other direction, since many power lines are not multidirectional** and only work one-way. The intermittency of solar and wind electricity therefore poses a challenge, as some of the grid cannot cope with it.

The energy sector accounts for almost 90 percent of China's greenhouse gas emissions, making energy policies a key driver of the transition to carbon neutrality.¹⁴⁰ There is no question anymore that China's continuous use of coal, including through imports, is matched by the world's most dynamic energy transition. While raw coal consumption continues to increase (+5.6 percent YoY in 2023; +1 percent YoY in 2024) and will not peak in the coming months,¹⁴¹ the fastest-growing sources of energy are from non-fossil sources, which now account for

¹³⁹ *At its peak in the early 1960s, France produced about 60 million tons per year.*

¹⁴⁰ "An energy sector roadmap to carbon neutrality in China," International Energy Agency, September 2021, <https://www.iea.org/reports/an-energy-sector-roadmap-to-carbon-neutrality-in-china/executive-summary>.

¹⁴¹ "Coal 2024 – Analysis and forecast to 2027," International Energy Agency, December 2024, <https://www.iea.org/reports/coal-2024>.

about 17.9 percent of total primary energy consumption.¹⁴² According to the China Energy Transformation Program, the total installed power generation capacity of wind and solar power were to overtake that of coal in 2024.¹⁴³ For 2023 alone, renewable energy already accounted for 52 percent of installed capacity and more than 77 percent of annual power investment.¹⁴⁴ However, **installed capacity should not be confused with effective rates of utilization**. Still, if the share of clean electricity in energy consumption is taken as a yardstick, it has stagnated at around 10 percent in the United States since 2010,¹⁴⁵ and at around 23 percent (excluding nuclear) in the European Union since 2013,¹⁴⁶ while it is on track to reach 40 or 50 percent in China by 2030, allowing the country to sell itself as the first “*electrostate*.”¹⁴⁷

¹⁴² “Summary of China’s energy and power sector statistics in 2023,” China Energy Transformation Program, March 18, 2024, <https://www.cet.energy/2024/03/18/summary-of-chinas-energy-and-power-sector-statistics-in-2023/>.

¹⁴³ In 2024, new solar capacity reached a record 277.2 GW, while that of new wind capacity culminated at 79.3 GW, here again a new high: “国家能源局发布2024年全国电力工业统计数据” [NEA releases national electricity industry statistics for 2024], National Energy Administration, January 21, 2025, <https://www.nea.gov.cn/20250121/097bfd7c1cd3498897639857d86d5dac/c.html>.

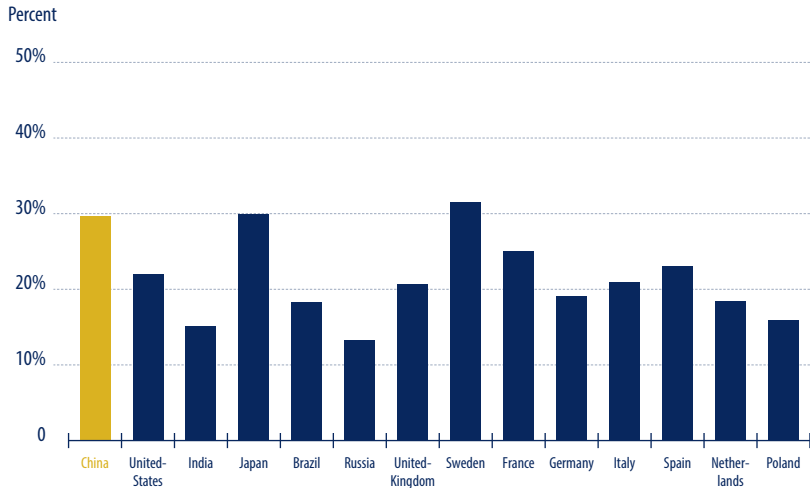
¹⁴⁴ These figures are bound to grow with the National Development and Reform Commission plan announced in October 2024 to boost renewable energy consumption in 2025, a plan that not only focuses on energy capacities but also on relocating energy-intensive industries to renewable-rich regions: “关于大力实施可再生能源替代行动的指导意见(发改能源〔2024〕1537号)” [Guiding opinions on vigorously implementing alternative actions for renewable energy (NDRC Energy [2024] No. 1537)], National Development and Reform Commission, October 30, 2024, https://www.ndrc.gov.cn/xxgk/zcfb/tz/202410/t20241030_1394119.html.

¹⁴⁵ “Share of electricity in total final energy consumption,” Enerdata, <https://yearbook.enerdata.net/electricity/share-electricity-final-consumption.html>.

¹⁴⁶ “Energy statistics – An overview,” Eurostat, May 2024, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview#:~:text=Oil%20and%20petroleum%20products%20accounted,by%20electricity%20\(23.0%20%25\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview#:~:text=Oil%20and%20petroleum%20products%20accounted,by%20electricity%20(23.0%20%25)).

¹⁴⁷ “China – Electricity,” International Energy Agency, <https://www.iea.org/countries/china/electricity>.

Figure 6: Share of electricity in energy consumption in 2023



Source: Enerdata Yearbook.

At the same time, energy intensity, a proxy for energy efficiency, also maintained a slow downward trend at 0.5 percent per year.¹⁴⁸ On account of the expanding economy, so far, **marked improvements in energy efficiency have not resulted in a decreased energy consumption or carbon emissions.** For the first time, slower (or stagnating) economic growth in the industry and construction sectors may be changing this equation. Meanwhile, regulations and subsidies are geared toward reducing consumption based on fossil fuels in the power sector, the transportation sector (except aviation), new housing, and key industries. China is also a leader in designing small modular reactors (SMRs) – which remain at the demonstration stage so far. It is shifting to “grey”

¹⁴⁸ Energy intensity is defined as the quantity of energy required per unit output or activity: the less energy used to produce a product, the lower the intensity.

or green hydrogen, planning gigantic offshore wind energy parks after a massive continental effort, and expanding the use of solar energy in a setting where its price fell massively because of the overproduction of panels. Will this be enough to guarantee the country's future energy security?

China's **energy security became an important issue with the rise of the oil-based economy**. From the opening of the economy to 2020, oil imports rose continuously. Still, China was less dependent on outside energy sources than all other East Asian economies. Regarding fossil fuels, however, China has achieved limited diversification from its dependence on the Middle East. Thanks in part to the war in Ukraine, Russia has displaced Saudi Arabia as China's top oil supplier, and more than half of its gas exports now go to China.¹⁴⁹

c. How China May Lead the Global Energy Transition in the Coming Decade

The main factor for energy substitution in China may not be energy security, although this is also invoked as a reason. Explanations are rather to be found in a tenacious ambition to take the lead and turn this sector into an important export niche as well as a means of cutting emissions across China. Indeed, **by 2035, China could be earning more from clean technology exports than the combined oil export revenues of Saudi Arabia and the United Arab Emirates today**.¹⁵⁰ Conversely, since many of the new energy-related companies are private and make their profits in foreign markets, "a closure of overseas markets would be a serious issue for them."¹⁵¹

¹⁴⁹ Petras Katinas, "June 2024 – Monthly analysis of Russian fossil fuel exports and sanctions," Center for Research on Energy and Clean Air, July 12, 2024, <https://energyandcleanair.org/june-2024-monthly-analysis-of-russian-fossil-fuel-exports-and-sanctions/>.

¹⁵⁰ "Energy technology perspectives 2024," International Energy Agency, October 2024, <https://www.iea.org/reports/energy-technology-perspectives-2024>.

¹⁵¹ Interview with Michal Meidan.

If China manages to sustain its clean energy trends, the country's carbon emissions could be cut by 30 percent by 2035.¹⁵² A word of caution is in order here: this reduced carbon emissions level would still be almost twice that of the United States in 2023, and nearly four times that of the European Union.¹⁵³ Based on the country's current pledges, **China's carbon emissions are still rising, but a peak before 2030 is definitely in sight.** China has an incentive for this in order to make the 2060 objective easier to achieve.¹⁵⁴ The International Energy Agency even estimates that energy demand for low-carbon sources will overtake that for fossil fuels in 2039, thanks to a recent growth in solar capacity and with hydroelectricity also playing a key role.^{155, 156}

On the latter source of energy, China just announced the construction of the world's largest ever hydroelectric dam (and the largest infrastructure project in history) on the upper reach of the river best known internationally as the Brahmaputra. At a projected €134 billion over the next decade, it is expected to fulfill the electricity needs of 300 million people. Advertised as an energy project rather than a water-use project, this development will have obvious implications for Sino-Indian relations.¹⁵⁷

¹⁵² Lauri Myllyvirta, Belinda Schaepe and Qiu Chengcheng, "China's clean energy trends could cut emissions by 30% in 2035 if sustained," Center for Research on Energy and Clean Air, October 3, 2024, <https://energyandcleanair.org/publication/chinas-clean-energy-trends-could-cut-emissions-by-30-in-2035-if-sustained/>.

¹⁵³ "CO2 emissions in 2023 – The changing landscape of global emissions," International Energy Agency, March 2024, <https://www.iea.org/reports/co2-emissions-in-2023/the-changing-landscape-of-global-emissions>.

¹⁵⁴ The targeted amount for carbon emissions is established at 200 million tons of oil and gas equivalent: "中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要" [The 14th Five-Year Plan for national economic and social development and the long-range objectives through the year 2035 of the People's Republic of China], Government of the People's Republic of China, March 13, 2021, https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm.

¹⁵⁵ "OIES China Energy Monthly: No.4," The Oxford Institute for Energy Studies, August 15, 2024, <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2024/08/OIES-China-Energy-Monthly-Issue-4.pdf>.

¹⁵⁶ Solar-power generation in China alone will exceed today's total electricity demand in America by 2035.

¹⁵⁷ Elizabeth Roche, "Chinese dam on transboundary river raises concern in Delhi," *The Diplomat*, January 6, 2025, <https://thediplomat.com/2025/01/chinese-dam-on-transboundary-river-raises-concern-in-delhi/>.

Oil imports increased massively until 2020 and in fact pushed up global prices. The **trend for the next decade will clearly depend on the pricing factor, as well as on China's successes in the downstream energy transition.** As of 2024, the surge in electric vehicles and the slowdown in household consumption have toned down China's need for oil.¹⁵⁸ Past and present investment in solar panels and wind energy results not only in much lower prices for these energy sources but also in Chinese low-cost exports. Other energy components such as a nationwide smart grid, electricity storage facilities, and nuclear power have yet to be fully developed,¹⁵⁹ but they could very well tilt the balance further in the direction of non-fossil energy. Even before looking ten years ahead, China already leads the world in every one of these technologies and in their adoption.

The status of renewable energy manufacturing is less advanced in Europe and the United States,¹⁶⁰ with higher overall costs for energy in Europe and for substitutes for oil and gas in the United States. As a result, opposition to greening policies is rising in these established democracies. This may not always stifle future innovations, but it will hinder their adoption across the board. In the next decade, it is therefore **a safe bet to predict that China, after having been the villain on**

¹⁵⁸ *The prominence of electric vehicles is bound to continue as 9 out of 10 cars sold in China are expected to be NEVs by 2035:* “《中国动力电池产业面向2035发展框架研究报告》：到2035年全球动力电池装机量接近4TWh, 储能电池规模将达到1.6TWh” [“China power battery industry development framework research report for 2035”: By 2035, the global installed capacity of power batteries will reach nearly 4TWh, and the scale of energy storage batteries will reach 1.6TWh], Bjx.com.cn, June 4, 2024, <https://m.bjx.com.cn/mnews/20240604/1380893.shtml>.

¹⁵⁹ *Regarding nuclear power generation, it is planned to account for 10 percent of electricity generation by 2035:* “国家发展改革委 国家能源局 关于印发《“十四五”现代能源体系规划》的通知” [National Development and Reform Commission and National Energy Administration – Notice on Issuing the “14th Five-Year Plan” Modern Energy System Plan], National Development Reform Commission, January 29, 2022, https://www.ndrc.gov.cn/xxgk/zcfb/ghwb/202203/t20220322_1320016.html.

¹⁶⁰ *The penetration rate of renewable energies is higher in most European countries than China though:* “Share of energy consumption from renewable sources in Europe,” European Environment Agency, January 16, 2025, <https://www.eea.europa.eu/en/analysis/indicators/share-of-energy-consumption-from/~:text=Estimated%20at%2024.1%25%20in%202023,up%20the%20clean%20energy%20transition.>

climate and emissions control, will become the global champion of the energy transition. Restrictive policies in countries trying to protect their domestic non-fossil energy industries will come with higher costs to consumers, and China will win the day in those third countries that want to shift away from fossil fuels. China could thus lead the energy transition in these emerging or developing countries, even if challenges in terms of deployment will persist (pricing, grid system, etc.).¹⁶¹

Key Takeaways

- *Reliance on coal and grid deficiencies* – Despite huge renewable investments, coal use is still increasing, with power grid bottlenecks hindering the distribution of renewables.
- *A two-faced energy and emissions policy as both top polluter and clean energy champion* – Both coal and renewables are favored, revealing a policy tension between cheap supply and green transition. Thanks to massive technological efforts and pressure on the demand side, renewables are poised to overtake coal, potentially driving down carbon emissions even before the 2030 objective.
- *Energy security through diversification* – Oil imports remain substantial at 80 percent of consumption but are more diversified, notably in favor of Russia. Meanwhile, expanded renewables, the diffusion of EVs, and new hydroelectric, nuclear, and hydrogen capacities will lessen fossil-fuel imports, improving China's long-term energy independence.

¹⁶¹ Interview with Michal Meidan.

- *Global leadership in clean tech exports* – China dominates EVs, batteries, solar, and wind manufacturing, exporting low-cost solutions that undercut Western producers. Clean-tech exports could further rival Middle East or American oil revenues, making China a pivotal force in the worldwide energy transition.

1.5. INNOVATION: CHINA'S PULSE AND ITS INTERNATIONAL CONSTRAINTS

a. The Decisive Technology and Knowledge Transfers of the 20th Century

Xi Jinping has been deepening policies that pre-existed his rule. A look at history indeed reveals an affinity with the Self-Strengthening Movement of the Qing empire, summed up by the famous maxim: *“Chinese learning as the essence, Western learning for practical use”* (中学为体, 西学为用). Republican China sought help from Germany to modernize its arms industry and sent students on scholarships to the United States. The best-known case is that of the rocket scientist Qian Xuesen who, after leaving the United States in 1955, led China’s ballistic development, and whose influence stretches to this day.¹⁶²

After the founding of the PRC, the **1950 Sino-Soviet Treaty was the basis for what has been called the largest technology transfer in history.** Much of this focused on industry and infrastructure, but it also involved education and the training of scientists, including in the nuclear field. The Sino-Soviet rift inaugurated a period of closure, but Mao Zedong nonetheless launched several *“big projects”* during the

¹⁶² Qian Xuesen mentored the two aerospace scientists who became Politburo members in 2023.

Great Leap Forward. They are recalled nowadays to justify the present large-scale policies. At the end of the Cultural Revolution, Zhou Enlai, followed by Deng Xiaoping, hailed the “*four modernizations*” (四个现代化) that put the accent on big science again.¹⁶³ Since the early 1960s, **the PLA** has never ceased from engaging in research and development on new weapons, **servicing as a harbour for scientists in times of political turmoil** or during more recent anti-corruption campaigns.

A chief aim of China’s normalization with the United States was to acquire key technologies. From Richard Nixon to Jimmy Carter’s presidency, which was the heyday of the US convergence with China against the Soviet Union, supercomputers (supposedly for climate predictions), nuclear knowledge, radar installations, and many other dual-use technologies were shared. Large contingents of Chinese students underwent education and training abroad, mainly in the United States.

It is therefore a mistake to look for the origins of the present self-strengthening and self-sufficiency policies in science and technology in Xi Jinping alone. But just as undeniably, he has given top priority to these policies, which earlier coexisted with separate economic policies and narratives such as “*the world is strangling China*.”¹⁶⁴ China’s post-1978 economic rise was not based primarily on science and technology policies,¹⁶⁵ but on “*reform and opening up*” (改革开放). China became the world’s first FDI destination and allowed a private economy to expand from agriculture to small businesses, services, and increasingly large private companies. The **emphasis on policies focused on innovation and the massive funds for science, technology, and new industrial sectors came after 2003**, under Hu Jintao’s leadership, in the context of what was already slower economic growth.¹⁶⁶

¹⁶³ Besides science and technology, the fields of agriculture, industry, and defense were to be modernized.

¹⁶⁴ Interview with Tai Ming Cheung.

¹⁶⁵ Barry Naughton, “The rise of China’s industrial policy, 1978 to 2020,” Lynne Rienner Publishers Website, 2021, <https://www.rienner.com/uploads/6061eb686a892.pdf>.

b. Xi Jinping: Technology Acquisition on Overdrive

Xi's mark on industrial policy has been to increase funding massively in order to give top priority to these historical developments and to mesh technological development with national security aims.¹⁶⁷ This trajectory is further drawn with the 2035 objective of becoming an “S&T powerhouse” (科技强国) in mind.¹⁶⁸ Meanwhile, the turn toward an ever-expanding national security perimeter has caused Chinese science and technology to turn inwards in search of self-reliance in fear of foreign spying or sabotage and ultimately with the stated goal of making others more dependent on China than it is on them. Institutionally, the **Party has been put in control here, too**, with the creation in March 2023 of a Central Science and Technology Commission under the CCP auspices.

Innovation policies combine top-down processes, closure, and ideological compliance with the ambition to siphon off and **emulate global frontline research**. Indeed, Chinese IT companies have had close links with Silicon Valley, and American venture capital has been the most important source of investment for Chinese start-ups,¹⁶⁹ but this funding path has dried up.¹⁷⁰

¹⁶⁶ Ling Chen and Barry Naughton, “An institutionalized policy-making mechanism: China’s return to techno-industrial policy,” *Research Policy* 45, No. 10, December 2016, pp. 2138-52, <https://www.sciencedirect.com/science/article/abs/pii/S0048733316301482>.

¹⁶⁷ Tai Ming Cheung, “Inside China’s Techno-Security State,” *Escholarship.org*, September 8, 2022, <https://escholarship.org/uc/item/5f61c958>.

¹⁶⁸ “中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要” [The 14th Five-Year Plan for national economic and social development and the long-range objectives through the year 2035 of the People’s Republic of China], Government of the People’s Republic of China, March 13, 2021, https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm.

¹⁶⁹ Erin Griffith, “Silicon Valley venture capitalists are breaking up with China,” *The New York Times*, February 21, 2024, <https://www.nytimes.com/2024/02/21/technology/silicon-valley-vc-china.html>.

¹⁷⁰ Chinese regulators’ hope that SOEs can ramp up venture capital funding will most likely prove insufficient, even if they have successfully incubated some unicorns in the aviation, green hydrogen or batteries sector: “两部门: 支持中央企业发起设立创业投资基金” [Two departments: support central enterprises in initiating the establishment of venture capital funds], Government of the People’s Republic of China, December 2, 2024, https://www.gov.cn/zhengce/202412/content_6990606.htm.

Meanwhile, foreign companies in China have provided important technological transfers, either willingly or unwillingly. Purchases such as that of Sweden's Volvo by Geely (2010) or of the German industrial robot manufacturer Kuka by Midea (2016) are the best-known examples of a **concerted Chinese drive to gain foreign technology by acquiring key foreign industrial firms**. The door has been wide open for Tesla and its giga presses in Shanghai since 2018. Safran, the leading French jet engine manufacturer associated with General Electric, has suffered security breaches at its Chinese production site.¹⁷¹

China has further made a **strong push on chokehold technologies**, with the Dutch ASML being a case in point. Its extreme ultraviolet (EUV) lithography process remains the missing ingredient for China's production of the most advanced chips. The firm has thus seen the rest of its technologies appropriated in China as it sells a record amount of foundry equipment. America, giving up most semi-conductor production, remains ahead in design, and even more in cutting-edge Artificial Intelligence (AI) Large Learning Models (LLMs).¹⁷² The balance could tilt even further in China's favor for apps or application programming interfaces (APIs),¹⁷³ where the market scale from a huge customer base is an asset.

Returnees to China, encouraged by policies of which the best-known example is the Thousand Talents campaign and with pay packages that are attractive by US standards (and far exceed what European governments or companies pay), are also a contributing factor. Thus far, the United States and China have avoided outright decoupling, but the **securitization of trade and investment is creating new barriers**.¹⁷⁴

¹⁷¹ "China, France, how Chinese hackers infiltrated Western aerospace companies," *Intelligence Online*, November 14, 2018, <https://www.intelligenceonline.com/government-intelligence/2018/11/14/how-chinese-hackers-infiltrated-western-aerospace-companies>.

¹⁷² In 2023, America produced sixty-one notable machine-learning models, Europe twenty-five and China fifteen: "Data on large-scale AI models," *Epoch AI*, June 19, 2024, <https://epoch.ai/data/large-scale-ai-models>.

¹⁷³ An API is a set of programming tools that enables a program to communicate with another program or an operating system, and that helps software developers create their own applications.

China's rigidities have downsides – they may stifle creativity and international exchanges and are now downgrading the contributions of market sector companies and start-ups compared with SOEs. Foreign financing of start-ups, local government resources, and private Chinese equity and lending capacity are down. Moreover, start-ups are very much concentrated in specific sectors (AI, fintech, and semiconductors) as well as geographically (Beijing, Shanghai, Shenzhen).¹⁷⁵

Politically, five of the twenty-four members of the Politburo have strong scientific backgrounds. Three of these five leaders, who tend to be among the youngest members, were partly educated in the West or benefited from a later stay in a Western scientific environment. But their direct involvement in research ended long ago. **Successful managerial experience within the Party-state is now a more decisive factor** in their careers, as is their personal affiliation with Xi Jinping. In the words of an observer who looks at the rise of scientists inside China's leadership, *"Homegrown innovation cannot be achieved only by appointing scientists to the Politburo or by creating a new central science commission directly controlled by the Party."*¹⁷⁶

Still, the **old paradigm that scientific breakthroughs and innovations require freedom of thought and international exchange is put in doubt by China's successes:** *"In China, products are kept out but ideas – at least technical or product ideas – are let in. China is growing less dependent on its returnees for technical know-how, while a very large portion of top-tier technical talent in the United States still comes from China."*¹⁷⁷

¹⁷⁴ Scott Kennedy, "U.S.-China scholarly recoupling advancing mutual understanding in an era of intense rivalry," Center for Strategic and International Studies, March 2024, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2024-03/240327_Kennedy_Scholarly_Recoupling.pdf?VersionId=ILG9fBcZY2L.php86GMbSh0zwmjDWS3V.

¹⁷⁵ Coco Feng, "China now home to 369 unicorns, with an average value of US\$3.8 Billion," South China Morning Post, April 30, 2024, <https://www.scmp.com/tech/tech-trends/article/3260831/china-now-home-369-unicorns-average-value-us38-billion-led-ai-and-semiconductor-firms-report-says>.

¹⁷⁶ Yu Jie, "China's new scientists," Chatham House, July 24, 2023, <https://www.chathamhouse.org/sites/default/files/2023-07/2023-07-24-china-new-scientists-yu.pdf>.

¹⁷⁷ Interview with Matt Sheehan.

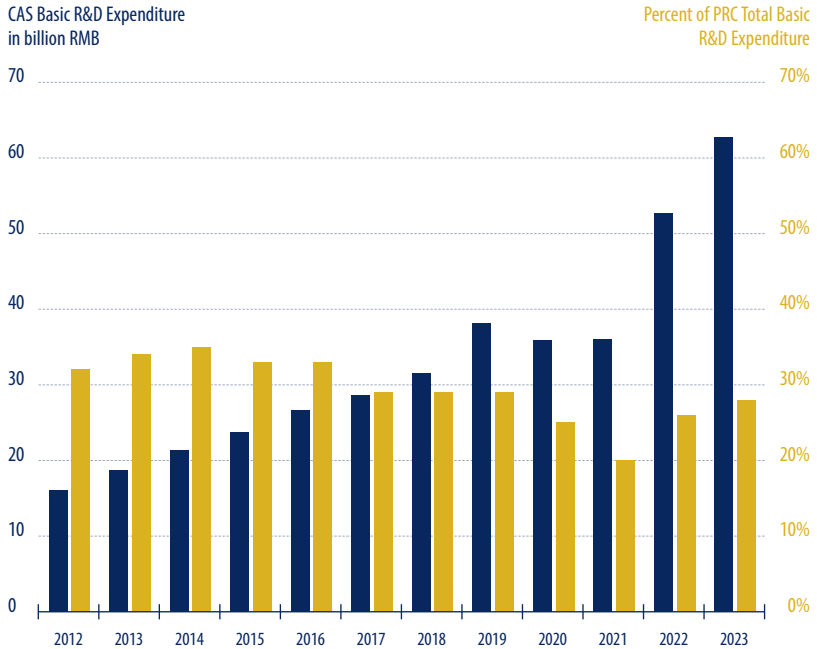
There is no shortage of scientific success stories in China. Indeed, the **latest accepted international estimate points to a massive leap forward for China’s innovative industries.** According to one alarmist study, China led in just three of sixty-four technologies in 2003–07 but emerged as the lead country for fifty-seven of them during the 2019–2023 period. There is even a risk of Chinese monopoly in twenty-four of them. These technologies cover the full spectrum from advanced information and communication technologies, advanced materials and manufacturing, biotechnology, gene technologies, and vaccines to defense, space, robotics, transportation, sensing, timing, and navigation and even to the trendy AI and quantum fields.¹⁷⁸ Furthermore, China has a specific policy of supporting “*hidden champions*” and “*little giants*” (小巨人) in industry, explicitly emulating Germany’s famous *Mittelstand* of small and medium-sized firms.¹⁷⁹ Simplistically put, “*Xi decides and provinces follow up on the industries to promote, along with a hefty dose of subsidies.*”¹⁸⁰ This **process of selecting winners is similar to Japan’s METI approach but can at times be more nuanced.**

¹⁷⁸ As mentioned in the study, there is however one caveat to these results: “While publication-rate parity can be an indication that two countries are publishing at the same rate, it is not an indication that the countries are on par in terms of their scientific knowledge base. At times, China is ahead in high-impact research because it’s actually behind in the development and commercialization of that technology and is making major investments in S&T to try to catch up to the advances made by other countries over previous decades”: Jennifer Wong Leung, Stephan Robin and Danielle Cave, “ASPI’s two-decade Critical Technology Tracker,” Australian Strategic Policy Institute, August 28, 2024, <https://www.aspi.org.au/report/aspi-two-decade-critical-technology-tracker>.

¹⁷⁹ Alexander Brown, François Chimits and Gregor Sebastian, “China’s ‘Little Giants’ turn up the heat on Europe’s hidden champions,” MERICS, January 11, 2024, <https://merics.org/en/comment/chinas-little-giants-turn-heat-europes-hidden-champions>.

¹⁸⁰ Interview with Liu Wan-Hsin.

Figure 7: Share of basic R&D in overall R&D spending in China since 2012



Source: Chinese Academy of Science, National Bureau of Statistics, Center for Security and Emerging Technologies.

Digging into the specifics of these sectors, China’s progress has notably occurred in quantum sensors, high-performance computing, gravitational sensors, space launch, and advanced integrated circuit design and fabrication, including semiconductor manufacturing. **One key actor stands out in this success: the Chinese Academy of Science.** Modeled on the Soviet Academy of Sciences, its importance for China’s technological ambitions cannot be overstated. Its basic R&D expenditures (€8 billion) accounted for 28 percent of all basic R&D spending in China

in 2023, a share that has oscillated between 20 percent (2021) and 35 percent (2014) over the last decade.¹⁸¹ Another indicator of China's priorities can be found in Premier Li Qiang's domestic visits and trips. Indeed, since taking his position in March 2023, more than two-thirds of his inspections have been dedicated to tech companies (semiconductors, autonomous driving, renewable energy, AI, etc.).

It should also be said that if China's regulations are often reached through a process of consultation with industry, this is less effective today, as large private companies and their CEOs have been cowed into submission. Still, in many areas, **regulatory requirements are less omnipresent than in the European Union** and its Member States' regulatory maze or precautionary principles. Today, the latter are designated as one of the main causes, along with underinvestment, of the lag in European innovation. The Chinese government has no qualms in pushing industrial policies that would be faced with hesitation and reservations in Europe. However, the country's rigid political climate, threats to private entrepreneurs, and reduction in international education exchanges create the possibility that **epoch-making inventions, as opposed to the development of applied research, are less likely to appear.**

c. Techno-Futurism: Xi Jinping's "New Quality Productive Forces"

Is Xi Jinping's all-out bet on "new quality productive forces" sustainable, and is it likely to keep delivering by 2035, closing on the 16th Five-Year Plan? At any rate, Xi Jinping seems determined to shield future technologies, innovation, and, to some extent, revamp state firms from the

¹⁸¹ Cole McFaul, Hanna Dohmen, Sam Bresnick and Emily S. Weinstein, "Fueling China's innovation: The Chinese Academy of Sciences and its role in the PRC's S&T Ecosystem," Center for Security and Emerging Technology, October 25, 2024, <https://cset.georgetown.edu/publication/fueling-chinas-innovation-the-chinese-academy-of-sciences-and-its-role-in-the-prcs-st-ecosystem/>.

consequences of the current domestic economic downturn. As long as he is in charge, **the line that further places global dominance and national security over standard economic growth is likely to prevail: “Xi Jinping is not prepared to sacrifice political purity for economic development.”**¹⁸²

China’s development of industrial robots and automation is at the forefront of maintaining this dynamic. There is still a need for the quantitative estimates to be nuanced by more qualitative assessments, since statistics differ between absolute and relative numbers. China’s stock of operational robots exceeded that of all other economies in 2015,¹⁸³ but a recent study puts China’s ratio of robots to industrial workers a notch below that of the world leader, South Korea, and below Singapore but in front of Japan or Germany.¹⁸⁴ Yet China remains ahead of the United States,¹⁸⁵ and, for the first time, robot exports overtook imports in August 2024.¹⁸⁶ Already, China’s low-cost manufacturing of electric vehicles is ascribed as much to robotization as to subsidies or low wages.¹⁸⁷ Still, in many of the new sectors, pricing is as much an advantage as it was for labor-intensive industries.

¹⁸² Interview with Malcom Turnbull.

¹⁸³ Hong Cheng, Ruixue Jia, Dandan Li and Hongbin Li, “The rise of robots in China”, *Journal of Economic Perspectives*, Vol. 33, No. 2, 2019, pp. 71-88, https://fsi-live.s3.us-west-1.amazonaws.com/s3fs-public/the_rise_of_robots_in_china.pdf, “World Robotics 2023 Report: Asia ahead of Europe and the Americas,” IFR International Federation of Robotics, September 26, 2023, <https://ifr.org/ifr-press-releases/news/world-robotics-2023-report-asia-ahead-of-europe-and-the-americas>.

¹⁸⁴ “Global Robot Density in Factories Doubled in Seven Years,” *International Federation of Robotics*, November 20, 2024, <https://ifr.org/ifr-press-releases/news/global-robot-density-in-factories-doubled-in-seven-years>.

¹⁸⁵ Robert D. Atkinson, “How innovative is China in the robotics industry?,” *Information Technology & Innovation Foundation*, March 11, 2024, <https://itif.org/publications/2024/03/11/how-innovative-is-china-in-the-robotics-industry/>.

¹⁸⁶ “Record 1.7 million robots working in China’s factories,” *International Federation of Robotics*, September 24, 2024, https://ifr.org/downloads/press2018/2024-SEP-24_IFR_press_release_World_Robotics_2024_-_China.pdf.

¹⁸⁷ The electric vehicle sector has become the best-known case: Xiaomi’s launch in China of a car that roughly matches a top-level Porsche electric vehicle at a quarter of the price, or Xpeng’s new midsize electric vehicle retailed in China at €13,000 graphically illustrate a gap that is not only due to subsidies or even scale.

The astute support for new industrial sectors that hope to become export niches is paying off, especially in every area of energy transition. *“By default, China can dominate a technology due to its size and even if it is not the optimal technology”*¹⁸⁸ – on LFP and solid-state batteries, polysilicon solar panels, or hydrogen electrolyzers, for instance.¹⁸⁹ This also requires the development or acquisition of critical mineral materials relevant to the energy transition, along with their transformation and processing. One could add that **dominating a technology will also allow China to position itself at the forefront of future technical standards** – and China already has a ten-year public policy plan coordinated by the Standards Administration of China (SAC) for this.¹⁹⁰

In a long first phase, China had captured a global lead in low-cost industrial goods. It has not renounced all these sectors and intends to remain a full-set industrial producer. This is why **keeping part of the labor force at low wage levels while pushing robotization is so important. But there is now a “second China shock.”**¹⁹¹ Some sectors, such as shipbuilding, span both “*shock*” eras, and the list of “*future industries*” presented by government ministries in January is very informative in that regard.¹⁹² In addition to the best-known cases of solar and wind energy, semiconductors (and the many products that use them),

¹⁸⁸ Interview with Michal Meidan.

¹⁸⁹ An LFP battery is a type of lithium-iron-phosphate battery, known for its low cost, high safety, low toxicity and long cycle life that explain their strong use in vehicle manufacturing. And lithium-powered submarines are even considered to be the next frontier.

¹⁹⁰ “中共中央 国务院印发《国家标准化发展纲要》” [The Central Committee of the Communist Party of China and the State Council issued the “National Standardization Development Plan], Government of the People’s Republic of China, October 10, 2021, https://www.gov.cn/zhengce/2021-10/10/content_5641727.htm.

¹⁹¹ Aaron L. Friedberg, “Stopping the next China shock,” *Foreign Affairs*, August 20, 2024, <https://www.foreignaffairs.com/china/stopping-next-china-shock-friedberg>; Paul Krugman, “Opinion | Here’s how Trump could lose the coming trade war,” *The New York Times*, November 15, 2024, <https://www.nytimes.com/2024/11/14/opinion/trump-china-tariffs.html>.

¹⁹² “工业和信息化部等七部门关于推动未来产业创新发展的实施意见” [Implementation of the Opinions of seven departments including the Ministry of Industry and Information Technology on promoting the innovative development of future industries], Ministry of Culture and Tourism of the People’s Republic of China, January 31, 2024, https://zwgk.mct.gov.cn/zfxgkml/kjyy/202401/t20240131_951102.html.

household goods and ultra-high voltage power lines, electric vehicles and batteries, one also finds nuclear energy, biomedicine, logistics, photonic computing, and digital twins. Few realize that many of China's ports are fully automated with 5G technology, becoming the world's most efficient for container transshipment.

Comparing China's success with the United States in terms of research, the former will accelerate its dominance in areas such as high-specification machining processes (trailed by India), electric batteries, and advanced radio-frequency communication.¹⁹³ **At the 2030 horizon, the United States will most likely maintain a lead in advanced integrated circuit design and fabrication, natural language processing, quantum computing, and genetic engineering.** But on cloud computing hubs, for instance, China already dominates in five of twelve Asian countries and is neck and neck with the United States on two.¹⁹⁴

Meanwhile, the very nature of cloud computing may create heightened threats of "leakages" to China.¹⁹⁵ Future scenarios factoring the science, technology, and innovation variable must therefore include the following possibility: **does China's absolute success in many areas of R&D nonetheless have limits?** Vertical integration, which allows for more control, is a weakness of Chinese R&D. Yet "*scientific consortiums have recently emerged as a horizontal response to past failures.*"¹⁹⁶ Another aspect of this question is related to foundational technologies and scientific breakthroughs. This applies particularly to Generative Artificial Intelligence (GAI).

¹⁹³ Jennifer Wong Leung, Stephan Robin and Danielle Cave, "ASPI's two-decade Critical Technology Tracker," Australian Strategic Policy Institute, August 28, 2024, <https://www.aspi.org.au/report/aspi-two-decade-critical-technology-tracker>.

¹⁹⁴ James Lewis, "Cloud computing in Southeast Asia and digital Competition with China," Center for Strategic and International Studies, August 2023, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-08/230807_Lewis_Cloud_SEAsia.pdf?VersionId=d609MUjrksGTVKc-mqcpJL7T8ISReiI.

¹⁹⁵ "U.S.-China competition in emerging technologies," U.S.-China Economic and Security Review Commission, November 2024, https://www.uscc.gov/sites/default/files/2024-11/Chapter_3--U.S.-China_Competition_in_Emerging_Technologies.pdf.

¹⁹⁶ Interview with Tai Ming Cheung.

In what could be a leap of faith, China's Ministry of Industry and Information Technology predicts that GAI will produce RMB 30 trillion (€3.9 trillion) in economic value (or 1/3 of global value) over the next twelve years.¹⁹⁷ China has the electricity resources to fuel these gigantic operational needs, but GAI also requires huge quantities of data, implying a huge computer capacity and, most crucially, open interaction with individual users to become effective. Moreover, regarding the quest for a credible AI financing model, *"Between millions of individual people paying little to use chatbots or some apps making high revenue through business applications, the Chinese government favors the latter option."*¹⁹⁸

For political reasons, the government wants to retain control over algorithms and answers for queries in large AI models – as it has done in the social media sector. Promoting open source models, as China does, in fact helps the government control these algorithms and, therefore, the answers users are given. But **a distinction is to be made between AI policies and AI regulations**. The central government is now inclined, for instance, to encourage more horizontal cooperation and competition since various companies fight to reach the frontier. It will still not let individual companies, whether private or public, control the process without complete transparency to the Party-state. Also, can shaping a GAI industry be achieved with chips that are less cutting-edge but in greater quantity? This question does not extend to APIs with defined uses, for which China's skills in applied technology are likely to prove once again dominant because they require less basic research.

Another issue is **how much China will remain dependent on chokehold technologies** while creating its own counter-dependencies among partners. Indonesia's response to iron ore mining was a good example of how to exploit a Chinese strategic dependency. Another concrete example is **China's dependence on software patented**

¹⁹⁷ "China's Generative AI market to exceed \$1.4 trillion in 2023: Report," *Global Times*, December 14, 2023, <https://www.globaltimes.cn/page/202312/1303654.shtml>.

¹⁹⁸ Interview with Matt Sheehan.

abroad, typically in the United States, Europe or Japan. It is, of course, a key obsession of Xi Jinping in a geopolitical context of acute rivalry and also the chief motivation for the United States (and, to some extent, the European Union) to control investments and exports to China. Full US controls on critical chips technology started having an impact in October 2023. Before that date, loopholes allowed companies such as Nvidia or ASML to sell large quantities of equipment to China. *"The country is facing a bottleneck in chip supply now and for the medium term, but they may well be able to break that bottleneck, potentially around 2030."*¹⁹⁹ The Biden administration, in its final weeks, had ramped up export restrictions to China at an unprecedented level.²⁰⁰

Answers to these technological issues lie as much within China's decisions as within the policies and development directions in the United States (and, to some extent, from key partners). **Will AI develop in the direction of GAI and large-scale models that fall under the scaling law or rather toward more diversified APIs?** Will Japan and the European Union accept the need for joint policies and restrictions? Conversely, is a storm in transatlantic relations, for example due to trade conflicts, likely to derail this cooperation?

There are even larger questions regarding these S&T challenges. **Can China's partners successfully "de-risk" their relations with China by reducing their own material, trade, and technology dependencies?**²⁰¹ Just as with the trade challenge from China's export onslaught,

¹⁹⁹ Interview with Matt Sheehan.

²⁰⁰ "Commerce strengthens export controls to restrict China's capability to produce advanced semiconductors for military applications," Bureau of Industry and Security, December 2, 2024, <https://www.bis.gov/press-release/commerce-strengthens-export-controls-restrict-chinas-capability-produce-advanced>.

²⁰¹ François Chimits, "Growing asymmetry: Mapping the import dependencies in EU and US trade with China," MERICS, October 1, 2024, <https://merics.org/en/report/growing-asymmetry-mapping-import-dependencies-eu-and-us-trade-china>.

the answer cannot merely be regulatory and restrictive.²⁰² It requires successful innovation and industrial policies on their part, as the recent Draghi report shows conclusively for Europe.²⁰³ Yet that outcome is far from given, looking at European divisions and the lack of an effective private-public cooperation mechanism. On the contrary, Japan has established such a mechanism in some key sectors, as has the United States in a more contested fashion. The successes or failures of China's competitors, in addition to the security implications of their interactions with China, therefore shape any Chinese scenario.

Key Takeaways

- *Knowledge and tech transfers pre-existed self-reliance and now continue* – China's tradition of importing technology (from the Soviet Union historically, from the West later) allowed it to achieve quick gains in defense and industry. Further innovation may be strained if China is cut off from foreign partners. Extensive national security imperatives prevail above all others.
- *Massive innovation push* – Ever-higher funding for science and technology, channeled through state-led projects, and also by encouraging R&D competition among smaller and local firms, are Xi's landmark policies. If economic headwinds persist, sustaining the big-tech agenda will constrain these capacities, but the national security lens is here to stay.

²⁰² François Godement, "Making European economic security a reality," Institut Montaigne, March 2024, <https://www.institutmontaigne.org/en/publications/making-european-economic-security-reality>

²⁰³ Mario Draghi, "EU competitiveness: Looking ahead," European Commission, September 9, 2024, https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead_en.

- *Chokehold technologies and Generative Artificial Intelligence* – Gaps in chip design and production persist, while the importance of China’s surging AI, semiconductors, and robotics sectors is undeniable. If China cracks top-tier chip barriers, AI leadership could be more contested. External dependencies will otherwise continue under intensifying export restrictions.
- *Geopolitical constraints and global competition* – “De-risking” measures in the US, EU, and Japan inevitably challenge China’s tech rise. Full-scale blockages or closed technology alliances may shape global R&D, testing China’s capacity to innovate under strategic isolation. Thus far, these measures and cooperation frameworks remain at a nascent stage.

1.6. MILITARY: A RISE IN CAPABILITIES AND THE ISSUE OF CHINA’S INTENTIONS

Military and defense developments within China run along an almost straight line. **Major increases in defense expenditures began under Deng Xiaoping** after China’s largely failed aggression against Vietnam in 1979. They were extended soon after to a very long-term modernization plan for China’s navy run by Admiral Liu Huaqing. With notably few exceptions, China’s military rise has surpassed its spectacular economic growth over these decades.

China’s military expenditures have risen consecutively for twenty-nine years, and the last decade was no exception. **Chinese defense spending increased by 60 percent between 2014–23**, compared to a world average of 27 percent. Such an increase is only matched by countries at war such as Ukraine (1,272 percent!) or Russia (57 percent) or close

neighbors to this European conflict (Poland, Romania, the Scandinavian countries) – but such comparisons neglect the sheer volume of spending due to the size of China’s GDP.²⁰⁴

a. A Fast-Track Path toward China’s Military Modernization

Within the larger target of modernizing China’s armed forces by 2035,²⁰⁵ current figures confirm this exponential trend. In 2023, China’s official figures put its defense budget at \$224 billion (€207 billion), a level generally believed to be an underestimate.²⁰⁶ The American Department of Defense places it between \$330 and \$450 billion (€314-428 billion),²⁰⁷ the Stockholm International Peace Research Institute (SIPRI) at \$296 billion (€275 billion),²⁰⁸ and the International Institute for Strategic Studies (IISS) at \$220 billion (€202 billion).²⁰⁹ The US military intelligence agency even has a \$711 billion (€654 billion) estimate that factors in the purchasing power factor.²¹⁰ Indeed, weapons procurement and military pay

²⁰⁴ Nan Tian, Diego Lopes da Silva, Xiao Liang and Lorenzo Scarazzato “Trends in world military expenditure, 2023,” Stockholm International Peace Research Institute, April 2024, https://www.sipri.org/sites/default/files/2024-04/2404_fs_milex_2023.pdf.

²⁰⁵ “习近平：决胜全面建成小康社会 夺取新时代中国特色社会主义伟大胜利——在中国共产党第十九次全国代表大会上的报告” [Xi Jinping: Winning the decisive battle to build a moderately prosperous society in all respects and achieving a great victory of socialism with Chinese characteristics for a new era – report at the 19th National Congress of the Communist Party of China], Government of the People’s Republic of China, October 27, 2017, https://www.gov.cn/zhuanti/2017-10/27/content_5234876.htm.

²⁰⁶ “Report on the execution of the central and local budgets for 2022 and on the draft central and local budgets for 2023 – First session of the 14th National People’s Congress of the People’s Republic of China – Ministry of Finance,” NPC Observer, March 5, 2023, <https://npcobserver.com/wp-content/uploads/2023/03/2023-MOF-Report.pdf>.

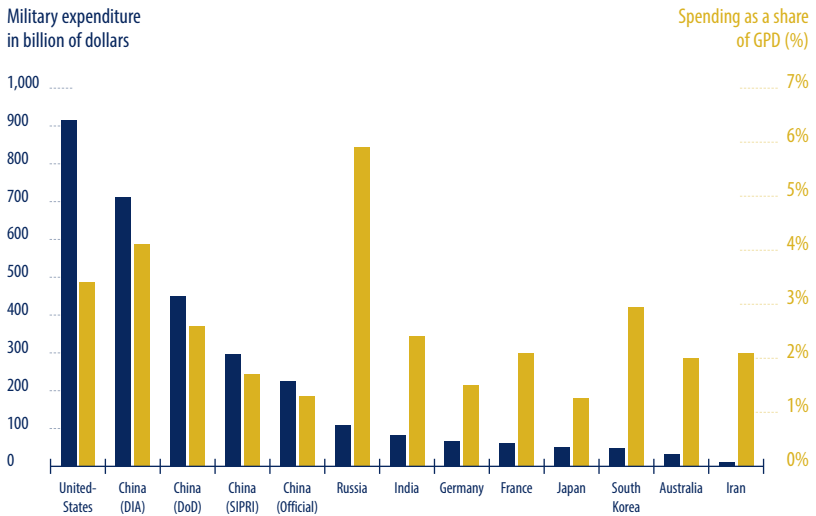
²⁰⁷ “Military and security developments involving the People’s Republic of China – Annual report to Congress,” U.S. Department of Defense, December 2024, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>.

²⁰⁸ Nan Tian, Diego Lopes da Silva, Xiao Liang and Lorenzo Scarazzato “Trends in world military expenditure, 2023,” Stockholm International Peace Research Institute, April 2024, https://www.sipri.org/sites/default/files/2024-04/2404_fs_milex_2023.pdf.

²⁰⁹ “The Military Balance 2024,” International Institute for Strategic Studies, February 2024, <https://www.iiiss.org/publications/the-military-balance/>.

levels are lower in China, and one does not see why the steady fall in the value of China’s exported goods would not be matched by its defense industry. **Even using China’s own estimate, which is the lowest of all, this budget was 3.5 times that of India and 4 times that of Japan** – though both of these countries have a higher share of defense spending as a share of GDP than China.²¹¹ Only the United States surpasses this level.

Figure 8: Military spending and share of GDP for 2023



Source: Chinese official statistical yearbooks, Stockholm International Peace Research Institute, International Institute for Strategic Studies, Department of Defense and Defense Intelligence Agency of the United States.

²¹⁰ “Proceedings and debates of the 118th Congress – First session,” U.S. Senate, June 1, 2023, <https://www.congress.gov/118/crec/2023/06/01/169/95/CREC-2023-06-01-senate.pdf#page=9>.

²¹¹ SIPRI estimates China’s defense spending as a share of GDP to only be 1.7 percent in 2023, compared to 3.4 percent in the United States or 2.4 percent in India.

Should one have any doubt about this level of military expenditures, one only needs to look at China's military forces by the numbers and the addition of new equipment across the board. **China has the world's largest navy** at 370 ships,²¹² excluding Coast Guard boats, and the most recently built,²¹³ with a growth up to 400 ships expected by 2025. The list goes on: three aircraft carriers,²¹⁴ including one with magnetic catapults, a capacity for autonomous deployment beyond China's first islands chain, nuclear-powered submarines with surface and air missiles, the DF-21 mobile ballistic missile (dubbed the "aircraft carrier killer"), and an amphibious fleet, including with the newly unveiled Sichuan amphibious assault ship,²¹⁵ that **makes a landing in Taiwan a distinct possibility**. To this, one should add hybrid forces, the ubiquitous Chinese Coast Guard fleet with large and weaponized units and spy boats, and a RoRo (Roll-on Roll-off) ferry fleet – that also happens to be perfect for a Taiwan operation.

Looking up in the sky, even with the largest number of planes in Asia and the new J-15 multipurpose fighter, **China's air force remains less impressive, particularly for long-range deployment**. It nonetheless includes long-range bombers with nuclear capacities: the third leg of a nuclear triad. Recently, and symbolically, on the day of Mao Zedong's birthday, the new J-36 new stealth aircraft with a large payload capacity was also unveiled.²¹⁶ Moreover, since significant portions of the navy's

²¹² "Military and security developments involving the People's Republic of China – Annual report to Congress," U.S. Department of Defense, December 2024, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>.

²¹³ Seventy percent of Chinese warships were launched after 2010, compared with a quarter for the United States: Alexander Palmer, Henry H. Carroll and Nicholas Velazquez, "Unpacking China's naval buildup," Center for Strategic and International Studies, June 5, 2024, <https://www.csis.org/analysis/unpacking-chinas-naval-buildup>.

²¹⁴ China aims to have six aircraft carriers by 2035, including two nuclear-powered aircraft carriers: Anil Chopra, "Six aircraft carriers by 2035 – China's ambitious plan for PLAN as it looks to counter US, cut Indian influence," Eurasian Times, March 10, 2024, <https://www.eurasiantimes.com/six-aircraft-carrier-by-2035-chinas-ambitious-plan/>.

²¹⁵ "China launches new generation assault ship 'Sichuan,'" Deutsche Welle, December 27, 2024, <https://www.dw.com/en/china-launches-new-generation-assault-ship-sichuan/a-71166860>.

shore-based, fixed-wing combat aviation units, facilities, air defense, and radar units were transferred to the air force in 2023, a better command and control over the integrated air defense systems can be expected in the coming years.²¹⁷

All of the above must be viewed with one major reservation. Past and present wartime experiences legitimately raise doubts. The recent experiences of Russian weapons, whether on the Ukrainian front or in Iran, and particularly of its missile defence systems that Russia has also sold to China (and India) must give some pause. In addition, the **PLA is regularly purged, supposedly for corruption**. At the time of writing, two defence ministers (Wei Fenghe and Li Shangfu) and possibly a third one (Dong Jun) have been purged, and the highest-ranking military members of the CCP's Central Military Commission (CMC) have also been purged. The navy is particularly targeted, as has been China's strategic missile force. This can be construed as an attempt by Xi to make the PLA stronger by rooting out corruption, but it also testifies to deep mistrust.

Before even mentioning its nuclear force, China is also developing conventional armed long range ballistic **missiles, seen as the weapon of the future**: cost-effective, fast, useful for attacks against strategic targets, and hard to defend against. And **it is indeed for nuclear forces that Xi's era is the most striking**. Three hundred solid-fuel nuclear silos have been built, mostly in Western China. China's nuclear arsenal is said to have expanded to six hundred weapons in 2024 and is scheduled to reach a target of one thousand by 2030 and to keep expanding until 2035. Technically, civilian nuclear fast breeders and reprocessing

²¹⁶ Benjamin Jensen, "China's J-36 fighter jet substitutes military signaling for economic statecraft," *Foreign Policy*, January 16, 2025, <https://foreignpolicy.com/2025/01/16/china-new-fighter-jet-military-capabilities/>.

²¹⁷ "Military and security developments involving the People's Republic of China – Annual report to Congress," U.S. Department of Defense, December 2024, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>.

facilities will make this possible. China has not reported its fissile material data since 2017, and the sheer quantity of short- and mid-range missiles based along China's coast puts in doubt the “no first use” principle that China has always claimed internationally. Overall, expanding China's nuclear power is an instruction that came from the very top, “Driven by the political belief it was time to demonstrate strategic power since Western countries only recognize power.”²¹⁸

China's nuclear posture is inching toward the possibility of “launch-on-warning” (LOW),²¹⁹ while “the no-first use policy remains a diplomatic position, as much as a declaratory policy and a military doctrine.” Sources in the United States further claim it provides for nuclear use in case of a major conventional setback, regarding Taiwan for example.²²⁰ The same sources describe China as having embarked on a **low-yield tactical weapons program**.²²¹ Nuclear-armed hypersonic high altitude gliders, as tested around the globe in 2021, along with anti-satellite weapons, tested back in 2007 and resulting in much debris in the higher atmosphere, complete the picture.

b. Relations with Neighbors: Tumultuous or Cooperative?

On the cooperation side, **new basis agreements, weapon sales, and joint maneuvers** – particularly with Russia – over land, sea, and air **further strengthen the picture**. Although China has refrained from joint

²¹⁸ Interview with Tong Zhao.

²¹⁹ Henrik Stålhane Hiim, M. Taylor Fravel and Magnus Langset Trøan, “The dynamics of an entangled security dilemma: China's changing nuclear posture,” *International Security*, No. 4, 2023, pp. 178-79, <https://direct.mit.edu/isec/article/47/4/147/115920/The-Dynamics-of-an-Entangled-Security-Dilemma>.

²²⁰ Interview with Tong Zhao.

²²¹ “The growing capabilities of strategic competitors and regional rivals – Nuclear challenges the growing capabilities of strategic competitors and regional rivals,” U.S. Defense Intelligence Agency, October 2024, http://www.andrewerickson.com/wp-content/uploads/2024/10/DIA-Nuclear-Challenges_20241023.pdf.

sea maneuvers with Russia around Europe since 2017, it has, on average, more naval units deployed in the Mediterranean than the French navy. In September 2024, it conducted a joint naval maneuver with Russia from Vladivostok to southwest Japan. Almost simultaneously, it launched its first naval encirclement of Taiwan with the participation of Coast Guard units to signify sovereignty over the island. This gives **credibility to the hypothesis of a semi-blockade of Taiwan** that would first include selective spot checks of ships. On a side note, military cooperation with Latin American countries still mostly consists of visits or Memorandums of Understanding on defense cooperation – tangible weapons sales are yet to materialize.²²²

There is a difference, however, between the continuous expansion of China's defense efforts and fielding of new weapons and the stop-and-go nature of China's assertive or aggressive postures toward its neighbors. **China never pulls back, but it can pause.** Its moves can be quasi-simultaneous toward many neighbors in the South and East China seas and overland with India, or calibrated differently. The reasons for the latter usually remain unspoken but are clearly related to focusing pressure on specific partners (or adversaries) while decoupling others from a potential anti-China front. **Divergences on China have always existed within ASEAN**, or in the words of an academic, *"Southeast Asia is free-riding. They are hoping for not just the United States, but also Japan, South Korea, and Australia to provide more of a deterrence against China and to carry the real burden should there be any crisis."*²²³

Regarding territorial disputes, incursions into the territorial waters of the Senkaku (Diaoyu) Islands, claimed by both Japan and China, have occasionally ceased, most recently in October 2020,²²⁴ but they later

²²² Interview with Jorge Malena.

²²³ Interview with Ja-ian Chong.

²²⁴ "Trends in China Coast Guard and other vessels in the waters surrounding the Senkaku Islands, and Japan's response," Ministry of Foreign Affairs of Japan, January 1, 2025, https://www.mofa.go.jp/region/page23e_000021.html.

rebounded to their highest levels in 2023 and 2024. Shortly after meeting with Joe Biden and Japan's Premier Fumio Kishida in November 2023, Xi Jinping visited the East China Sea headquarters of China's Coast Guard and is quoted as saying: *"We can only move forward, not backward. We will never let even 1 millimeter of our territory be taken."*²²⁵ Toward others, it depends. Thus, in the spring and fall of 2023, before the Xi-Biden summit in San Francisco, harassment of Taiwan by flights and sailing across the Strait or around the island abated. Along with promises that were not followed by much effect on checking fentanyl exports to the United States, the meeting seemed to indicate a period of "no surprises", at least for the presidential campaign of 2024.

Regarding India, although PLA forces never ceased making incremental advances in India's Ladakh after their 2020 offensive in Ladakh and Sikkim, consolidation of gained positions seems a better way to describe the present situation.²²⁶ And in October 2024, **two weeks before the US presidential election, China signed a border patrol agreement with India** that lowered local tension and allowed for some pull-back. Evidently, China signaled a strategic priority before the US election, and made some efforts to disengage India from a strengthening coalition with the United States.

Interpreting this checkered, stop-and-go pattern is important. It means the **China of Xi Jinping**, in continuity with its predecessors, **is able to grade the pressure it applies on its neighbors and to use at least temporary tactical pauses to divide them.** This is also consistent with the avoidance of major risk-taking, perhaps related to political developments in the United States. In no way does it indicate the possibility of compromise or significant negotiation.

²²⁵ "China plans to keep ships near Senkakus 365 days in 2024," *Kyodo News*, December 30, 2023, <https://english.kyodonews.net/news/2023/12/eb55266c4a9f-china-plans-to-keep-ships-near-senkakus-365-days-in-2024.html>.

²²⁶ "Thin ice in the Himalayas: Handling the India-China border dispute," *International Crisis Group*, November 14, 2023, <https://www.crisisgroup.org/asia/south-asia/india-china/334-thin-ice-himalayas-handling-india-china-border-dispute>.

One important aspect of China's geopolitical posture is its **ability to wage cyberwar**. This is true whether through known influence operations via social media, trolls, and bots or through the penetration of digital systems worldwide – capturing data and sabotaging or manipulating infrastructures and, more broadly, the Internet of Things (IoT). Through its domination of chip manufacturing, progress in software, and systematic use of unattributed hacking networks, China has achieved some prowess. This is all the more strategic **as information operations are perceived as a means of achieving information superiority early in a conflict**, and the concept of “*intelligentized warfare*” (智能化战争) is omnipresent in Chinese military doctrine.²²⁷ It remains uncertain, however, whether the PLA has the in-house tech talents to create future world-class machine-learning models – not to mention the limitations of centralized decision-making for AI-based decision support systems.

The targets for cyberattacks range from the most obvious to the fairly remote. According to sources from Taiwan, the island experiences an average of thirty million cyberattacks per day, including the highly visible capture of railway stations display screens! In the United States, the latest Salt Typhoon operation involves penetration of all telecom operators in the United States!²²⁸ Taiwan's supporters are not spared from this cyber-pressure.²²⁹ During tense moments with India, Mumbai's electricity has experienced sudden failures due to Chinese hacking. The European Parliament and French administrations and hospitals have also been targeted.

²²⁷ Paul Charon and Jean-Baptiste Jeangène Vilmer, “Chinese influence operations,” IRSEM, October 2021, <https://www.irsem.fr/en/report.html>.

²²⁸ Max Colchester and Daniel Michaels, “Scale of Chinese spying overwhelms Western governments,” *The Wall Street Journal*, October 14, 2024, https://www.wsj.com/politics/national-security/scale-of-chinese-spying-overwhelms-western-governments-6ae644d2?mod=article_inline, David E Sanger, Julian E. Barnes, Devlin Barrett and Adam Goldman, “Emerging details of Chinese hack leave U.S. officials increasingly concerned,” *The New York Times*, November 22, 2024, <https://www.nytimes.com/2024/11/22/us/politics/chinese-hack-telecom-white-house.html>.

²²⁹ Shaun Turton, “Palau says China exerting ‘new level’ of pressure,” *Nikkei Asia*, July 16, 2024, <https://asia.nikkei.com/Editor-s-Picks/Interview/Palau-says-China-exerting-new-level-of-pressure>.

It is very hard to gauge the extent of all of these cyber operations, including potential future ones, since they are obviously denied by China and only become known if their targets choose to reveal the source of the problem. But the potential is large. This is why the Biden administration banned Chinese software from cars sold in America. Ultra-high voltage lines, all made in China, generally run with Huawei chips, as does much of the port logistics equipment, such as cranes. The average wind turbine, increasingly exported by China, incorporates three hundred sensors that relay data on its operation.

In sum, even outside the issue of judging whether the military or geopolitical balance is set to favor China in the coming decade, the present situation is one that presents much instability and friction within the status quo.

c. Caution Dictates the Real Possibility of a Conflict in the Next Decade

When we look at a 2035 horizon, we should focus on the trend, not on the zigzags. This is also consistent with the tradition from Mao's era of focusing on a main strategic direction. *"Restraint, in this light, is not the result of a benign foreign policy, as Chinese diplomats might claim, but rather the product of a system designed to set priorities."*²³⁰

The question remains open, however, of **how much risk Xi Jinping and the CCP are willing to take and what deterrent to their actions can prove useful.** This is what informs the likelihood of a conflict in the next decade or beyond. Arguments can go both ways,²³¹ and both

²³⁰ Isaac B. Kardon and Wendy Leutert, "Pier competitor: China's power position in global ports," *International Security*, Vol. 46, No. 4, Spring 2022, pp. 9-47 <https://www.belfercenter.org/publication/pier-competitor-chinas-power-position-global-ports>, Joel Wuthnow, "Getting to world class: Can China's military persevere?," *China Leadership Monitor*, February 29, 2024, <https://www.prcleader.org/post/getting-to-world-class-can-china-s-military-persevere>.

²³¹ *Ibid.*

the debate and the information originate from the United States. This seems to reflect the lag in the rest of the world in PLA assessment or, in rare cases, in disclosing what is known.

For a conflict – which will probably come sooner rather than later and will most likely be over Taiwan – **China’s military modernization drive will increasingly be hampered by low economic growth.** The huge quantity of hardware introduced in recent years will create more maintenance costs as time goes by. Demography itself could weigh in, as China’s assumed indifference to human losses has not been tested since the Korean War. The PLA’s more than one million strong land army, a tiny fraction of the corresponding age group currently and the available reserve, will dwindle. In the words of one expert, *“If China recognizes that its power is about to peak, the chances of a conflict might grow. For Xi Jinping, leaving an important political legacy in China’s history means making progress on national unification.”*²³²

The general **consensus that Xi Jinping has based part of his historical legitimacy on the unification of Taiwan with China can be challenged.** With the advent of Trump II, Xi Jinping is faced with an American executive branch with more power than any of its predecessors since the late 1950s – and one that largely perceives China as a challenge and a threat. Inversely, he knows that the new president himself will always be looking for a deal. In one former Australian Prime Minister’s words, *“It is easier to make a quick pivot on international strategies or tactics than on domestic ones.”*²³³

Efforts by the United States and its allies to constrain Chinese innovation in areas critical for defense will slow down the pace of innovation. Ominously, in his last meeting with President Biden, Xi Jinping cited **“four red lines” (四条红线) that must not be crossed or challenged: the**

²³² Interview with Tong Zhao.

²³³ Interview with Malcom Turnbull.

Taiwan question, democracy and human rights, China's path and system, and China's development right.²³⁴ These boundaries go far beyond the “*core interests*” that China has traditionally defined. “*Development right*” is a reference to the possible heightening of trade and technology measures by the United States that might create genuine decoupling and harm for China.

Increases in defense spending by all of China’s neighbors, from South Korea to India, would also place them in a better position for the future. The added value of rekindled defense cooperation, such as that pushed for within the Quad and by AUKUS, is also to be mentioned. These arguments, and the perception that Xi Jinping has repeatedly asserted that reunification cannot be postponed to the future, weigh in the direction of a **very large short-term risk. To this, one might add the possibility of a junction between several conflicts and fronts.** Could China seize the occasion of multiple conflicts involving the US military to move ahead on Taiwan? Xi Jinping and the frequent Chinese perception that America and Western democracies are in deep decline and unable to stick to unified and long-term strategic decisions should be factored in.

China may not run out of financing capabilities for its military programs because, as it is, **its defense spending to GDP ratio is low** (1.3 percent) and in fact much lower than that of both the United States and the USSR during the Cold War, or that of Putin’s Russia today. True, the official figures are clearly underestimated, but civil-military fusion (军民融合) and numerous uses of the high-tech civilian industry or logistics add to the available resources without as much financial burden as direct defence expenditures.

²³⁴ “Xi says U.S. must not cross four red lines,” Xinhua, November 17, 2024, <https://english.news.cn/20241117/a147be58d8264d95bee354335ff35154/c.html>.

d. China's Prowess in Adapting

Just as importantly, it is **difficult to assess the net effect of technology restrictions** by the United States and its allies on future Chinese defense developments. The very mixed record of sanctions against Russia, the work-arounds that can be found, and the scale of China's self-sufficiency efforts put this in doubt.²³⁵ Just as a recent test case, it is interesting that Huawei's new Ascend 910 chip, meant to obviate US export restrictions on components, actually embeds core circuitry from TSMC, which is supposed to fall within the scope of US export restrictions.²³⁶ Likewise, Deepseek's chatbot demonstrates remarkable performances in spite of American sanctions on certain Graphics Processing Units (GPUs) and with limited financial investments compared to its competitors.²³⁷ Recent disagreements are also shown in the extraordinary surge in ASML sales to China before a more extensive ban took effect.

These gaps, like many others, may now be plugged, but they illustrate the practical difficulties of preventing technology exports. Slowing down, rather than arresting development, may be the appropriate term there. Increasingly, China is leading in some dual-use technologies that can be used in cyberwarfare: 5G, fintech, autonomous driving, and drones. **Much of military hardware still does not rely on the most advanced chips**, and Russian offensives in Ukraine show that quantity can make up for quality.

²³⁵ Georgi Kantchev and Lingling Wei, "China is studying Russia's sanctions evasion to prepare for Taiwan conflict," *The Wall Street Journal*, December 1, 2024, <https://www.wsj.com/world/china/china-is-studying-russias-sanctions-evasion-to-prepare-for-taiwan-conflict-5665f508>.

²³⁶ Yang Jie and Joyu Wang, "Mystery surrounds discovery of TSMC tech inside Huawei AI Chips," *The Wall Street Journal*, November 5, 2024, <https://www.wsj.com/tech/mystery-surrounds-discovery-of-tsmc-tech-inside-huawei-ai-chips-7d922a01>.

²³⁷ Chen Xiaowei, "How a top Chinese AI model overcame US sanctions," *MIT Technology Review*, January 24, 2025, <https://www.technologyreview.com/2025/01/24/1110526/china-deepseek-top-ai-despite-sanctions/>.

The main known unknown may be the actual capability of the PLA beyond hardware capacities. The PLA has not engaged in a major conflict since the 1979 war with Vietnam's border divisions, an army very similar to its own. The dismal failure of Saddam Hussein's Russian-equipped army was a wake-up call for Chinese leaders. The setbacks of the Russian army in Ukraine and the instant destruction of Iran's Russian-provided missile air defenses are also lessons that Xi Jinping must keep in mind. They may, in fact, be a **reason why the Chinese strategy includes more and more of a likely capacity for nuclear deterrence**, just as Russia has leveraged its nuclear force against a direct Western intervention.

An attempted landing in Taiwan would involve what some US military officials have called the *"hundred mile swim,"* the *"death trench"* or the *"black ditch,"* as the Taiwan Strait was once called in Chinese.²³⁸ With an average depth below 60 meters, the **Taiwan Strait lends itself perfectly to using sensors and prepositioning weapons on the ocean floor.**²³⁹ A supposedly fictional story in the US Naval Institute's authoritative journal describes how ADDER systems operating from the sea-floor with the help of AI and without human intervention could detect and destroy enemy ships and submarines.²⁴⁰ PLA forces would probably try to target infrastructure from the air, but there would be no viable way to seize an island as large as Taiwan without troops shipped by sea, according to a representative from the US military in the Pacific.²⁴¹ Still, other works of fiction by renowned professionals describe a wider maritime conflict in the Pacific or a drawn-out land war on Taiwan itself.²⁴²

²³⁸ Joel Wuthnow, "Getting to world class: Can China's military persevere?," *China Leadership Monitor*, February 29, 2024, <https://www.prcleader.org/post/getting-to-world-class-can-china-s-military-persevere>.

²³⁹ Andrew S. Erickson, Conor M Kennedy and Ryan D. Martinson, "Study No. 8, Chinese amphibious Warfare: Prospects for a cross-strait Invasion," *U.S. Naval War College*, November 2024, <https://digital-commons.usnwc.edu/cmsi-studies/8>.

²⁴⁰ James A. Winnefeld, "AI surprise in the black ditch," *U.S. Naval Institute*, January 23, 2021, <https://www.usni.org/magazines/proceedings/2021/january/ai-surprise-black-ditch>.

²⁴¹ Helene Cooper and Kenny Holston, "The U.S. Army prepares for war with China: New vehicles, face paint and a 1,200-foot fall," *The New York Times*, October 29, 2024, <https://www.nytimes.com/2024/10/29/us/politics/us-military-army-china.html>.

An alternative or intermediate scenario to invasion, therefore, includes coercion, semi-blockade, and demoralization. This seems closer to the traditional motto of winning a war without fighting it. This would take the form of a **“flash quarantine” to prove or demonstrate that the PLA can exert jurisdiction over Taiwan’s nearshore waters** and then, over time, a much broader quarantine or even a blockade – technically an act of war.²⁴³ Over the summer of 2024, China certainly massively increased its activities related to the island: it put 152 vessels at sea, including 3/4 of its amphibious forces, brought forty-three brigades into military operations in urban terrain, and launched two major air and maritime cooperative exercises with Russia.²⁴⁴

What China is preparing for is still an asymmetric war. Its army is still disproportionately a regional one, while distance makes US involvement more costly and risky. Since Xi Jinping himself extols the arrival of a *“once in a hundred years change”* (百年未有之大变局), it seems wise to build that possibility into scenarios to 2035. Overall, these developments leave no doubt that by that time, China will have achieved a fully modernized military force. It will be predominant regionally directed against all but the United States – with **large questions as to the tyranny of distance** for the latter – and will also have achieved a degree of global deterrence and areas of global force projection.

²⁴² P.W. Singer and August Cole, *“Ghost fleet: A novel of the next world war”* (2015); Mick Ryan, *“White sun war: The campaign for Taiwan”* (2023).

²⁴³ James Crabtree, *“The hardliner,”* *Mekong Review Asian Literature*, November 6, 2024, <https://mekongreview.com/the-hardliner/>.

²⁴⁴ *“A conversation with Commander of US Indo-Pacific Command Admiral Samuel Paparo,”* *Brookings*, November 19, 2024, <https://web.archive.org/web/20241124200606/https://www.brookings.edu/events/a-conversation-with-commander-of-us-indo-pacific-command-admiral-samuel-paparo/>.

Key Takeaways

- *Rapid military modernization and spending* – China’s soaring defense budgets – twenty-nine consecutive years of constant increases – now equip the PLA with cutting-edge naval and missile systems. But modernization also entails future maintenance costs, and China’s neighbors are boosting their own military capacities.
- *Expanding the nuclear arsenal and long-range capabilities* – New missile silos, tactical nuclear programs, and hypersonic gliders are transforming China into a nuclear power of the first order. A fully modernized arsenal, including a likely “*launch-on-warning*” posture and a shift away from “*no first use*”, will solidify China’s deterrence and intensify global arms race fears.
- *Cyberwarfare and information operations* – Frequent cyberattacks target critical infrastructure worldwide, with advanced AI-driven cyber tools magnifying threats. “*Intelligentized warfare*” (智能化战争) is indeed seen as strategically decisive and omnipresent in Chinese military doctrine.
- *Regional coercion and territorial disputes* – “*Stop-and-go*” pressure on neighbors, especially Taiwan, signals an ability to calibrate aggression, but allies such as the US, Japan, and India are also increasingly coordinating their responses. Attempting to win a war without fighting a fully modernized force may initially involve more assertive blockades or semi-blockades. China’s global maritime, missile, and space push and its moves in the Arctic further aim to deter any outside intervention in this process.

- *Strategic ambiguity vs. potential conflict* – Xi’s focus on “national reunification” raises the risk of a Taiwan crisis, although economic headwinds could discourage outright conflict. A confident PLA and sustained territorial claims will lead to flashpoints if deterrent efforts have failed, creating a major global security concern.

2 The Scenarios

When one considers the variables that could create different scenario outcomes, it is evident that they do not all possess the same potential to change China’s courses. For instance, in the most difficult area of political prediction, it is prudent to assume that **Xi’s dominance will still be the key factor in 2035**. Indeed, barring a health-related issue, his control and his age would still place him in power by that threshold – even if succession politics will intensify greatly by that time. It is certainly true that China has surprised observers in the past when political campaigns or a succession completely changed the course of the country, although still under the Party. A major setback for the country could also occur, whether caused by an economic clash with its partners or by an armed conflict. Even in this case, Xi’s unwavering policy of capturing legitimacy makes it difficult to consider a major domestic upheaval as anything but a modest possibility.

Demographics, where trends have fixed consequences over decades, **are less of an unknown variable than is often assumed**. Massive aging is beyond the 2035 goalpost. Meanwhile, the cost–benefit balance is a fairly even one. China’s automation and digitalization policies, even if they do not match the breadth they have in South Korea or the leading-edge developments in the United States, simply place

China ahead of every other region in the world. With the exception of Africa and the Middle East, there has been an earlier demographic fall in births around the world. Still, the side effects of a Chinese demographic decline on other variables, such as the economy or the military, should not be ignored.

Energy gives China an advantage in almost any scenario, even if some of these may result in the continuation of dramatic levels of emissions. We cannot be sure exactly what the shares of coal, oil, solar, wind, hydro-power and nuclear will be in 2035. But we know at least two things: there are **plenty of energy resources under development and projects now underway**, and by and large **China's energy costs in all sectors are below those of its industrial competitors**. An international conflict involving sanctions or a counter-blockade would create great difficulties. But shifts between energy sectors can still prevent a crash. Along with energy security, Xi Jinping has made food security a top issue – as it was in Mao's days. Feeding livestock is still an external liability, but China has otherwise made excellent progress in this area.

Economic trends have a greater potential for different outcomes. We discount the recurring predictions of a domestic debt or consumption meltdown. Even with doubts about the current reliability of GDP statistics, recession or real stagnation are not in sight. Analysts rightly point to the example of Japan's "*lost decade(s)*," with its "*debt trap*" and deflation. They forget that, even under these circumstances, Japan's average GDP growth exceeded that of the European Union.²⁴⁵ A low-equilibrium trap may indeed ensue, whereby a mismatch between production and demand, aggravated by a savings glut, creates a permanent deflationary trend. This gives even more importance to exports as a major source of growth. Past investments and subsidies, along with making innovation a long-term priority, ensure China's competitiveness.

²⁴⁵ "World Development Indicators – Japan," World Bank, <https://databank.worldbank.org/Japan-data/id/7ba505f7>.

The key factor for the economic variable is not China itself. It is about the degree of acceptance by China's partners of a lopsided policy whereby China grows at the expense of the world without reciprocity. It also depends on **how long the quid pro quo that China exports massive savings and excess currency reserves will hold with its partners**. In theory, they have much agency over this. In practice, diverging interests and disunity, coupled with China's bilateral plays, may restrict or even prevent coordinated countermoves by China's partners.

Innovation is a key variable. The remarkable achievements that are now highly prominent have resulted from different policies in the past – whereby China was able to absorb foreign capacities while shielding its own industry and filtering outward flows. Under Xi's rules, China would very much like to combine its own decoupling policies with a continued opening of the world to China. Control is intruding over human and scientific exchanges. **Regarding R&D and innovation policies, our estimate is that China is doing much better than often predicted** – although admittedly on the development part rather than on the fundamental research itself. Quantity was assumed by many observers to prevail over quality, but today quality is apparent in many sectors, where China captures the lead and in fact becomes a necessary source of innovation for competitors in many industries. In an overall context in which trade and investment deglobalization, although not yet a statistical reality, is on everybody's mind, the essential variable is therefore the extent of de-risking or decoupling policies by China's partners, and who suffers the most from these policies.

Geopolitics, security, and the military – the areas most affected by human decisions, even more so in a personalistic dictatorship – **are of course key determinants for future scenarios**. But they may also be influenced by the economic policies and decisions of China's partners. These partners are faced with what amounts to an inflexible and thus far unstoppable drive to dominate the world's economy in an increasing number of sectors, from critical and other primary materials to a

number of key advanced industrial sectors for future growth. Even if one leaves aside the CCP's strategic views on the decline of democracies and capitalism, a containment of China's external growth would encourage a geopolitical counteroffensive from China. It is therefore very **difficult to separate trade from politics in future scenarios**. There will be interactions – some from China's partners along the line of decoupling in order to more fully de-risk, others from China trying to reclaim the terrain that might be lost because of new barriers to China's economic dominance by using geopolitical leverage.

The **scenarios for war may be the hardest to describe or predict**, in spite of several well-known works of fiction that seek to portray a winning PLA with superiority over its aging rival, the United States.²⁴⁶ China is said to hold an edge in quantity regarding total numbers of combatants, ships, and jet fighters and is the world's largest builder of dual-use drones. But it is not a global military power, in spite of efforts to acquire foreign bases (Djibouti, Cambodia) and extensive port rights. Except in the maritime domain, it is far from possessing the projection capacities of the United States. The latter's aircraft carrier groups, although increasingly vulnerable to missiles and attacks by drone swarms, still create huge deterrence capacities, and regional navies such as Japan's provide additional muscle.

War scenarios therefore rest on the Chinese leadership's willingness to take massive risks, on the possible coincidence of conflicts in other theaters, on an element of surprise, and ultimately on the American calculus: **is it worth the fight once a secured landing on Taiwan makes an American intervention a harder task, and do regional commitments or strategic interests prevail over the unavoidable loss of life?** Increasingly, China's recent rise on the nuclear ladder will also create a form of deterrence, if not parity.

²⁴⁶ Elliot Ackerman and Admiral James Stavridis, "2034: A novel of the next world war" (2021).

Xi Jinping himself has made that clear, not only by placing national security and increasing self-reliance at the heart of his geoeconomic strategies but also by citing “*development rights*” (发展权) as one of the “*four red lines*” that China’s partners must not cross. Restricting technology transfers – in overt deals or by fighting stealthy acquisition – challenging China’s exports with trade barriers, or sanctioning some of China’s actions, as done with Russia, could be seen as crossing that new red line.

China is building a web of support in international organizations and non-Western countries that may offer alternative markets. It links its bilateral trade, investment, and lending relations to political conditions. The days when China capitalized on the conditionality of Western aid and lending to advance its own offers are over. China’s conditionality is, of course, different from that of democracies, as it is based on its direct interests and on preventing criticism of its policies.

Our scenarios therefore have to deal with interactions between the Chinese leadership’s future designs, the policies of China’s partners to defend their economic interests or prevent it from achieving strategic supremacy, and China’s own reactions and countermoves to containment and deterrence policies. **So far, we have not seen a chain reaction unfold because China’s export drive has been succeeding, creating an incentive for Xi Jinping to avoid any major direct international confrontation.** Ominously, since 2015, China has started replicating much of the extraterritorial legislation that the United States possesses. While national security laws are ever more extensive, especially in Hong Kong, China’s own coercive actions toward its international partners do not really follow this lawfare model. Rather, they are based on informal threats and sanctions.²⁴⁷

²⁴⁷ Mathieu Duchâtel and Georgina Wright, “China’s extraterritoriality: A new stage of lawfare,” Institut Montaigne, December 2024, <https://www.institutmontaigne.org/en/publications/chinas-extraterritoriality-new-stage-lawfare>.

Should China's future rise be boxed in, including by ensuring the security of Taiwan in a longer-term perspective, the Chinese calculus might well of course change. The issue of regime legitimacy, still resting on the twin pillars of “*common prosperity*” (共同富裕) and nationalism,²⁴⁸ would then only rely on nationalism. The case of Putin's Russia, an economic failure that survives through militarization and confrontation, should serve as a warning. In short, **scenarios cannot just be about graphs and curves. People and intentions matter in what is an exceedingly unstable world.**

SCENARIO N°1: AN UNSTOPPABLE CHINA ON TOP OF THE WORLD

This scenario does not necessarily posit that China “*leads*” the world in the sense that the United States largely did in the post-World War II era. The US projection on the planet and its role in fostering the world's international institutions and international law twice, in 1918 and 1945, will remain unique. Whatever one thinks about the evident interests the United States had in its long internationalist phase, China has never shouldered such responsibilities, neither financially nor militarily. **The trope “*when China rules the world*” remains a fantasy of self-deprecating foreigners.**²⁴⁹ One might imagine the possibility of an accidental empire – China being sucked into conflicts to defend an expanded version of its interests or responding to challenges of its irre-dentist views. None of this would constitute a law-based international order. China's professed multilateralism is essentially tied up with the possibility of saying “*no*” rather than in achieving positive outcomes or responses.

²⁴⁸ Xi Jinping, “*扎实推动共同富裕*” [*Solidly promote common prosperity*], Qishi, October 15, 2021, http://www.qstheory.cn/dukan/qs/2021-10/15/c_1127959365.htm?ref=neican.org.

²⁴⁹ Martin Jacques, “*When China rules the world*,” *Martinjacques.com*, 2019, <http://www.martinjacques.com/books/when-china-rules-the-world/>.

But **Chinese leaders have had every opportunity to observe the rise and decline of previous empires.** Already, a popular twelve-part documentary produced by China Central Television (CCTV) in 2006, focused on the rise and fall of nine empires, from that of the Dutch to the American, as well as the British Empire and the Soviet Union.²⁵⁰ Economic or military overreach and failure to adapt were among the factors cited for decline. Even if China’s ideological climate has since undergone a profound transformation, caution remains a feature of China’s strategic decisions. The **country also shares as little of global public burdens as possible** – in spite of its rhetoric.

The **optimal scenario from the PRC’s** perspective is, therefore, not one of outright domination. It is that of an unstoppable China, which has the **ability to deny any partner the possibility of contesting what it deems to be a major national interest,** while letting the world shoulder the consequences of Chinese superiority. We are already getting a taste of that scenario, with China currently making the bulk of global trade increases and successfully dividing nations where it matters, from Asia to Europe.

This scenario also supposes the **alignment of several planets in terms of economics and innovation.** Domestically, the boom in digital and AI technologies has given an authoritarian regime unprecedented knowledge and control of events and individuals, from microeconomics to political profiles. Nothing here clashes with the CCP’s previous ambitions and achievements. It is just that technological progress without checks and balances has immensely strengthened its hand. In terms of macroeconomic trends, the start of a major demographic decline is actually balanced by the success of “*new quality productive forces*” – meaning digitalization, AI, and a host of new technologies. A peaking and slowly declining population can afford lower growth rates while educational and environmental costs also go down.

²⁵⁰ “大国崛起” [The Rise of the Great Powers], China Central Television, 2006, <https://www.youtube.com/playlist?list=PLYPMNvsBjfyYiBwxynSXT29zDYoH-OSRP>.

One should add that in spite of massive top-down control and political repression, China's system incorporates important feedback loops from society that allow the Party-state to adapt and innovate in governance. The space for debate has disappeared, but in some rare cases, it reappears in the field of the economy and occasionally on environmental issues.²⁵¹ **If one takes a pessimistic view of democracies** torn by social media-enhanced conflicts, **it is likely that China's actual governance** and the public goods it delivers to its citizens **will far outstrip those of democracies by 2035**. This may be the case not only for infrastructure but also for areas such as urban planning and health – the twenty-first century version of the old argument from the 1930s that the “trains run on time” in fascist regimes.

Some of the above will happen regardless of moves by China's partners, barring a major conflict. Trends favoring global political fragmentation among China's partners could make its superiority even more evident. Nationalist and populist trends inside Western democracies make coordination and cooperation much more difficult beyond short-term convergences of interests. In the words of one expert, “Xi is keeping the advantage, not because his policies are correct but because we are getting ours wrong.”²⁵²

The impossible reform of the WTO, coupled with the paralysis of its arbitration court, might accelerate a protectionist spiral. This **WTO reform is particularly improbable because China and some emerging economies have zero interest in additional requirements or verifications**. China, an immense buyer of natural resources and the least costly provider of export goods, would certainly have to tread carefully. It would still come out ahead of other industrial nations if no order can be found.²⁵³ And the scale of its domestic market alone is a global asset.

²⁵¹ See for example the popular 2024 TV series “Above the Rivers” (江河之上), an eco-judicial tale that mixes anti-corruption themes with the clash between environment and farmers' interest.

²⁵² Interview with Steve Tsang.

²⁵³ Joe Weisenthal and Tracy Alloway, “Almost 10 years later, China's ‘Made in 2025’ has succeeded,” Bloomberg, October 31, 2024, <https://www.bloomberg.com/news/articles/2024-10-31/almost-10-years-later-china-s-made-in-2025-has-succeeded>.

In this scenario, even if China does not have proven military superiority over the United States by 2035, it **will have achieved effective military parity** thanks to two factors: the “*tyranny of distance*,” which implies additional efforts by the United States to hold its ground, and, possibly, an American reluctance to engage in a bloody international conflict over Taiwan, which could be termed a regional issue. **How much Taiwan remains by then the strategically irreplaceable “Silicon Island” for the world is debatable.** Winning that conflict without firing a shot is still China’s preferred option. “*Building economic resilience does not mean going to war, it is rather a pre-war thinking.*”²⁵⁴ One should also note that, in this scenario, China’s industrial capacity, already surpassing that of the United States, could be mobilized to an unprecedented extent for war production.

The scenario can include a **new strategic situation for Europe and East Asian countries.** Europe would have come under direct Russian pressure after the amputation of Ukraine and would also have to accept a “*division of work*” in which the United States has left the European theater in all but defense procurement. In the Asia-Pacific region, **Europe would focus its energy on searching all avenues to avoid conflict.** Japan, occasionally tempted since the late 1970s by a form of entente with China, would also shirk from conflict.

This **scenario requires a great deal of pessimism regarding democracies.** Almost as importantly, in order to divide and rule, it requires that the PRC is able to control its own ambitions. But a key aspect of the CCP’s hold over its own population is based on the notion of foreign encirclement of China and on a national security agenda that has replaced much of the ideology of communism.

China’s feeling of foreign encirclement and omnipresent security agenda tend to come to the fore in case of economic difficulties. They have also been felt when international economic integration, its benefits, and the

²⁵⁴ Interview with Tai Ming Cheung.

huge growth the country enjoyed until the twenty-first century created new demands from China's society and risked making the Party's system obsolete. Xi Jinping's counterrevolution was first and foremost a stop to domestic economic and political liberalization dressed up as a nationalist revival. **Paradoxically, global Chinese success endangers the CCP's narrative of victimization and encirclement.**

The woes of democracies, the weakening of international institutions and law, and the fragmentation of national interests give some possibility to this scenario. But our estimate is that the international rigidity of China's current leadership, which is closely tied to its domestic political imperatives, is very likely to remain until 2035. This makes **a 100 percent win without serious responses**, as envisioned in scenario n^o1, **a low-probability case.**

SCENARIO N^o2: A CHINA STILL IN THE TOP TIER LEADERS

This is a **scenario that is close to a continuation of the status quo.** It follows the proclaimed ambition of Chinese leaders in some areas, such as entering the first ranks of the innovation-oriented economies or achieving the PLA's full modernization by 2035 – although the goal of being a “*world-class military power*” is set for 2049.²⁵⁵ More ominously, a long-term Chinese development plan mentions “*a peaceful and reunited China*” as a goal for the next decade.²⁵⁶ China only grudgingly admits today that it is among the “*more developed of the developing nations,*”

²⁵⁵ “习近平：决胜全面建成小康社会 夺取新时代中国特色社会主义伟大胜利——在中国共产党第十九次全国代表大会上的报告” [Xi Jinping: *Winning the decisive battle to build a moderately prosperous society in all respects and achieving a great victory of socialism with Chinese characteristics for a new era – Report at the 19th National Congress of the Communist Party of China*], Government of the People's Republic of China, October 27, 2017, https://www.gov.cn/zhuanti/2017-10/27/content_5234876.htm.

²⁵⁶ “中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要” [The 14th Five-Year Plan for national economic and social development and the long-range objectives through the year 2035 of the People's Republic of China], Government of the People's Republic of China, March 13, 2021, https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm.

seeking to protect the trade and financial benefits of avoiding a reclassification as a developed economy.

It is easier, however, to list the targets China has already achieved to become a top-tier nation than to identify what remains to be done to reach this general objective, even as it appears increasingly credible. We can try. Education beyond basic literacy skills remains deficient, particularly in rural areas. Retirement pay in rural areas and for the floating migrant population is minimal, even within a universal retirement system. The success of preventive health care, which has raised life expectancy to the level of the most advanced societies, is balanced by the cost of specialized treatment for individuals. The lack of a reliable financial and insurance system for individuals means that Chinese households oversave – a practice that suits the overinvestment and poor payback in many public projects perfectly.

Where else could one find a 48,000-kilometer bullet train network that performs perfectly but has generated a debt level for China's public operator of around \$800–900 billion (€712–801 billion)?²⁵⁷ The same situation prevails for real estate and major export niches where huge investments and debt have been used as leverage. One should recall that China's economic model was described by its own then prime minister as *"unsustainable"* as early as 2009.²⁵⁸ Yet this **model endures, but for how long?** China's financial system and its largely closed capital markets, with a currency mostly pegged to the dollar, are clearly under par. And even if there is a light shift away from the dollar toward more multipolarity in this currency realm, *"it is unlikely that the dollar is going to be replaced by any other currency in the near future."*²⁵⁹

²⁵⁷ Kohei Fujimura, "China high-speed rail operator forced to hike fares as debt balloons," *Nikkei Asia*, August 22, 2024, <https://asia.nikkei.com/Business/Transportation/China-high-speed-rail-operator-forced-to-hike-fares-as-debt-balloons>.

²⁵⁸ Wen Jiabao delivers a special message at the World Economic Forum annual meeting 2009," Ministry of Foreign Affairs of the People's Republic of China, January 29, 2009, https://www.mfa.gov.cn/mfa_eng/xw/zyjh/202405/t20240530_11340045.html.

²⁵⁹ Interview with Viking Bohman.

In the international arena, China scores resounding successes thanks to its ability to quickly build major infrastructure, including the digital web that physically enables the internet,²⁶⁰ and to sell products from new industries. A unique focus on low-tech exports is long gone, while sales from these past industries remain. **The return on investment abroad is much more debatable, especially when looking at FDI or real estate and vanity acquisitions.** In fact, Xi's administration has already clamped down on some of these. It has also blocked the semi-internationalization of many of China's foremost companies by limiting their ability to list freely on international markets. Control, as well as a well-founded fear of irrational exuberance from China's capitalists – state managers and supposedly private entrepreneurs alike – are explanatory factors.

China's much-vaunted new soft power also faces limits globally. It resides mainly in the impressive display of China's own (breathtaking) industrial and urban prowess. With developing nations and particularly in Africa, China has a significant infrastructure, mining, agriculture, health, and urban development offer at a price that is without competition. This Chinese offer is all the more evident for African countries when there is no credible alternative and when *"Chinese entrepreneurs and managers are willing to endure arduous and often risky living and working circumstances that Western professionals are mostly unwilling to accept."*²⁶¹ In addition, **China is quite good at adapting and experimenting its policies** on the ground, according to local realities.

Meanwhile, Western aid and loans come with environmental and other conditions that are not well received. The commercial benefits are less convincing, while the contrast between win-win rhetoric and hardball

²⁶⁰ Maximilian Mayer and Yen-Chi Lu, "Digital autonomy? Measuring the global digital dependence structure," *Social Science Research Network*, April 13, 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4404826, Vivi Lehdonvirta, "Cloud empires' physical footprint: How geopolitics and trade shape the global expansion of U.S. and Chinese data centre infrastructures," *Oxford Internet Institute*, March 6, 2024, <https://www.oii.ox.ac.uk/news-events/videos/cloud-empires-physical-footprint-how-geopolitics-and-trade-shape-the-global-expansion-of-u-s-and-chinese-data-centre-infrastructures/>.

²⁶¹ Interview with Raoul Bunschoek.

commercial negotiations is increasingly visible to partners. They, too, have undergone a learning curve, and one of the **most frequent statements about relations with China is that the era of naivety is over.** But offers by Chinese companies increasingly address feedback from complaints, and they offer very different terms when they are challenged.

China's rigid control over its diplomats, including an obsessive priority given to "*discourse power*" (话语权) on Chinese terms, limits its ability to reach to its interlocutors and to the general public. This is true in advanced democracies but less so in the "*Global South*," where Western hypocrisy and post-colonial memories are a common trope.²⁶² "*In the Global South, modernization and Westernization are no longer synonymous.*"²⁶³ The **reality of China's soft power and of its public diplomacy will still rely on the ability to say "no" and to coalize others in this refusal.** Positive movement engineered by China remains minimal.

All of Xi's global strategies,²⁶⁴ even if they lack substance, bring some optimism and ultimately rely not only on China's economic dynamism but also on **its indispensability as a supplier or trade partner.** They also assume that China can maintain a delicate balance between undermining international institutions – mirroring these with alternative creations sometimes – and preserving what is indispensable to the world's largest exporter with huge foreign currency reserves: free trading, including logistically, and capital market liquidity.

This scenario, which would probably suit many countries wishing to avoid the consequences of an acute Sino-American rivalry and who would like to steer a path between those two superpowers, presupposes that China does not rock the boat. In particular, **should a conflict**

²⁶² *Global public opinion on China*, "Asia Society, December 2024, <https://asiasociety.org/policy-institute/global-public-opinion-china>.

²⁶³ *Interview with Eric Olander.*

²⁶⁴ *Belt & Road Initiative, Global Development, Global Security and Global Civilization Initiatives*

over Taiwan erupt, it supposes that it would not entail a major interruption to global trade. The Taiwan Strait is a major trading route, as is the Strait of Malacca, and 90 percent of China's international trade is seaborne!²⁶⁵

"Divide and rule," with a surface respect for international institutions but a steady bilateral practice, is nothing new for China. Its economic leverage now extends much further. Global trade is fragmenting as **some companies are willing to pay an extra cost to re-route their supply chains** but not decreasing – except for China's own imports. Genuine difficulties in de-risking for other highly industrialized countries promise, at best, checkered counter-policies to China's unbalanced economy. Where to draw the line and, most importantly, how to enforce de-risking? Reforming the WTO is not part of the plan, as **China has no interest in adopting new rules** – and already poorly respects existing rules. Yet *"China may still appear as a better promoter of international trade rules than Trump."*²⁶⁶ There will be sectoral alignments and coalitions on specific Chinese exports and about restraining sensitive exports to China, but they will not be universally accepted.

Again, China's own stakes in the international economy preclude the outbreak of a major military conflict around Taiwan. It would not exclude, however, maximum pressure around the island and the steady erosion of the Taiwanese people's will to remain separate from China. The efforts of many countries to ramp up the physical production of semi-conductors would in themselves weaken Taiwan's strategic value as the world's *"Silicon Island."*

²⁶⁵ Isaac B. Kardon and Wendy Leutert, "Pier competitor: China's power position in global ports," *International Security*, No. 46, 2022, pp. 9-47, https://doi.org/10.1162/isec_a_00433.

²⁶⁶ Interview with Naoko Eto.

In this scenario, **China enjoys a partial win, and others lose, but gradually** and not to such a catastrophic degree as to create the kind of unity on display after Russia invaded Ukraine. On balance, this scenario n°2 for **a controlled Chinese win has therefore a much higher degree of probability** than scenario n°1.

SCENARIO N°3: THE END OF CHINA'S ECONOMIC AND TECHNOLOGY MIRACLE

The extent of China's international trade and investment integration, along with the resulting dependence of its partners, may be exaggerated. Key chokeholds on high technology, especially on design rather than physical production, remain in the hands of the United States. This is also true for the capacity to persuade or coerce important partners to follow suit. Trade barriers go up and threaten China's export drive. In fact, **its past export success has become a vulnerability**, since demand from China's most important trading partners has become a not-so-secret weapon.

Emerging economies from Turkey, which is in *"an underdeclared competition with China in Africa and Central Asia,"*²⁶⁷ to Brazil and Indonesia, which draw China's attention on coveted commodities to deflect its positions rather than constrain them, **have always had fewer qualms than industrialized economies in preventing harm to their trade surpluses and protecting their industries.** The dividing line is often the supply of raw materials or energy they export against the goods they import from China. Many protectionist measures have been launched directly at China, with barriers to trade and sometimes investment.²⁶⁸ The *"Global South"* narrative, which China has now embraced after two years of hesitation, is a fig leaf when it comes to trade policies.

²⁶⁷ Interview with Soli Özel.

²⁶⁸ *Developing countries often prefer to push back through currency devaluation rather than through highly visible trade measures.*

Abroad, the **usefulness as shields for China of Russia and Iran has greatly diminished**, with Putin's future in a dismal demographic and financial context²⁶⁹ and Iran cut down to size by resolute actions on the part of Israel and the United States. North Korea remains an ally, but it is as much an *"agent provocateur"* taking advantage of opportunities as a genuine help for China. Alliances such as AUKUS or the Quad and rising regional defence budgets begin to redress a balance in which China currently enjoys an advantage over its neighbors.

Moreover, members of BRICS tend to use the forum for what resembles a platform *"airing grievances"* against the West,²⁷⁰ and also as a bargaining chip with China, including on the internationalization of the renminbi. With an even more pessimistic outlook and in the words of a former ambassador: *"Concrete changes to the international order are a challenge, meaning the BRICS will most likely have disappeared in ten years from now."*²⁷¹ It may, therefore, soften the tangible prospects of this organization and the sincerity of their solidarity. In this scenario, **China has to reduce its ambitions, which also requires some ideological change at home.**

China excels at publicizing its international offerings, but the reality is often far behind. The six Western Balkan states and the ASEAN members may be cases in point. In the former, China has leveraged its loans, particularly with Serbia and Montenegro.²⁷² But one reason why the 16+1 initiative with Central and Eastern Europe has failed is

²⁶⁹ Michel Duclos and Camille Le Mitouard, "[Scénarios] La Russie, une puissance crépusculaire ?" [[Scenarios] Russia, a twilight power?], Institut Montaigne, March 2024, <https://www.institut-montaigne.org/publications/scenarios-la-russie-une-puissance-crepusculaire>.

²⁷⁰ Interview with Eric Olander.

²⁷¹ Interview with Volker Stanzel.

²⁷² There have been visible successes in contracting for infrastructure (bridges and plants in Serbia, a superhighway in Montenegro). In one case, a major sea bridge in Croatia, the entire project is actually paid by the European Union. More generally, European FDI accounts for 70 percent of foreign investment in the Western Balkans, China only 10 percent. 81 percent of the region's exports go to the European Union and 58 percent of imports come from the EU, while only 11 percent of imports come from China: Private communication in Budapest on November 15.

that actual investments have never followed the rhetoric. With ASEAN, while China is the top trade partner for each member, all ten countries trade more with each other than with China.²⁷³ The European Union also remains the first source of FDI for ASEAN economies, followed by the United States and Japan. China comes only fourth, closely followed by South Korea and Taiwan.²⁷⁴ Such figures do not contest the fact that **China has meanwhile tried to take the upper hand regionally** in recent years,²⁷⁵ notably to rebalance its stock of investment with that of the United States, while competing as much on quality as on quantity.

Although none of the above suggests that China's external trade or finances will crash, it does place a ceiling on expansion from the first quarter of this century. Without necessarily full coordination, **China's partners place barriers, whether for security, economic security, or protectionist motives.** Transatlantic ties are likely to survive the test of Trump's second mandate, and cooperative investment in the industries of the future (or to withstand Chinese competition in existing industries) has gotten off the ground. China's acquisition of technology from abroad has been curtailed by technology export controls and surveillance of human research and technology exchanges – measures already put in place by Canada and Japan.

In this scenario, the operative word of the cooperation format in vogue has been minilateralism rather than multilateralism. In the West's dealings with third parties, the **values that came to the fore after the fall of the Soviet Union more often take a second seat to interests.** This enables, for example, the European Union to sign more trade deals

²⁷³ "Exploring intra-ASEAN merchandise trade dynamics," ASEAN Statistical Brief, May 2024, <https://www.aseanstats.org/wp-content/uploads/2024/05/ASB-202405-03.pdf>.

²⁷⁴ "ASEAN Investment Report 2024 : ASEAN economic community 2025 and foreign direct investment," ASEAN, October 2024, <https://asean.org/book/asean-investment-report-2024-asean-economic-community-2025-and-foreign-direct-investment/>.

²⁷⁵ Susannah Patton and Hervé Lemahieu, "Asia has no hegemon: But U.S.-Chinese bipolarity is good for America and the region," Lowy Institute, September 13, 2024, <https://www.loyyinstitute.org/publications/asia-has-no-hegemon-us-chinese-bipolarity-good-america-region>.

with countries and regions whose primary products are critical or which can at least partly replace faltering demand from China. **No absolute choice is made between de-risking and decoupling.** Some requirements of partners such as the reduction of gas emissions, where Europe wanted to be the world's leader and source of inspiration, may take a second seat to interest- and economic security-based trade pacts. This would be dramatic. Certainly, Europe's own contribution to gas emissions is minimal, but its climate diplomacy leverage over others is still demonstrably weak.

Increasingly over the next decade, **China will be faced with the issue of its own domestic growth and structural obstacles.** The need to rebalance growth toward consumption has been repeated time and again by foreign analysts of China's economy and is in fact already acknowledged in words by some in China's economic leadership and expert circles.²⁷⁶ Social issues such as the increasing need for health services, social security, and retirement funding are beginning to crowd out the massive investments in infrastructure, defence, internal security and external lending to semi-client states. Meanwhile, private capital and entrepreneurs have been discouraged by Xi's strict policies and legal insecurity. **China's political rigidity,** understood first and foremost as the will to preserve a vast CCP structure well above any rising middle class with independent ideas, **is therefore an absolute barrier to a switch of support from production to demand.**

This does **not imply a financial crash landing.** With capital controls, China can print money, sustain existing demand, and eventually make up for it with monetary depreciation. But this tends to rekindle the complaints from China's partners regarding dumping and currency manipulation, increasing support abroad for protectionist measures. True, the global economy needs China's advanced and less costly inputs, but

²⁷⁶ Ding Feng and Han Wei, "China's stimulus policies now put emphasis on consumption, expert says," *Caixin Global*, November 12, 2024, <https://www.caixinglobal.com/2024-11-12/chinas-stimulus-policies-now-put-emphasis-on-consumption-expert-says-102256309.html>.

not at the expense of the rest of the world. Unlike Russia, **China has a financial, not physical, hold over many critical natural resources.**

This is a muddling-through scenario. As with scenario n°2, the **game changer is really in the policies of China's partners** and their ability (or lack thereof) to achieve a degree of coordination. The other assumption here is China's unwillingness to engage in a major international conflict that would overturn the table. This is more unlikely than the maintenance of a precarious balance between China and its partners, particularly given the harm a conflict would inflict on China's economy. Even today, **part of Chinese households' lack of trust in the future comes from the fear of an international conflict**, including the perception that China has gone out on a limb with an unreliable and underperforming Russia.

It is improbable that technology restraints and other barriers targeting unfair competition from China can be coordinated with emerging economies or among all members of an alliance. It is, however, **probable that political reluctance to reform under Xi Jinping will prevent the implementation of solutions** to low domestic growth. The path toward the "*Japanification*" of the Chinese economy will continue with price deflation, monetization of debt as a stimulus, etc. But China is the world's second economy – and, in fact, the first for industrial production. **It can be countered in some of its excesses, but it cannot be toppled by an economic crisis alone.** Assuming that Xi Jinping is not a major risk-taker and understands worrying signals, China will not launch a major conflict with an unpredictable endgame that would irreversibly tip the balance for its economy. Overall, we give this scenario a degree of **probability equivalent to scenario n°2**, meaning that it is likely.

SCENARIO N°4: THE RETURN OF REGIME AND SYSTEMIC QUESTIONS

Surprises can happen. **If one takes a bird’s-eye view of Chinese history, cycles close more often with a bang than with a whimper:** the overthrow of the Qing dynasty, the May Fourth Movement in 1919, the Communist Party’s victory in 1949, Mao Zedong’s overturning of the table against his colleagues and the fall of his associates after 1976. If one looks for simple explanations for these events, they are often external: the Qing’s humiliation at the hands of Britain and the other colonial powers, the Sino-Japanese War, and Mao’s break with the Soviet Union. Paradoxically, since it included much foreign inspiration, the 1919 Reform movement appeared more homegrown, as were the great decades of reform after Mao.

Unseating the CCP – in other words, regime change – does not appear to be on the cards. To reassure (or worry) oneself, one must simply look at the breadth of political and technological control, the disappearance of “*line struggle*” and of the resulting factions, and the indoctrination at all levels. Yet this is the system’s cardinal fear, feeding repression levels well above those of the Reform decades. **The unparalleled extent of Xi’s cult of personality and authority also means that power is brittle** and that there is a likelihood of a factional or personal struggle at succession time. Even more telling than the persecution of dissident views, including based on the rule of law, is the repeated purges of the PLA. Justified by an anti-corruption drive, they nonetheless signal a major disconnect and the impossibility of permanently establishing trust.

The CCP needs a strong army to achieve its goals. Like other Leninist regimes, it has seized on nationalism and resistance to what it calls strategic encirclement as the key narrative to bolster its legitimacy. But **nationalism is a cumbersome and unwieldy tool**. The years preceding Xi’s coronation in 2012 saw an out-of-control movement that was

meant to intimidate reformers, but it also antagonized almost all of China's neighbours in the Asia-Pacific region. Xi Jinping may have tamed the tiger, but he is still riding on its back.

Placing the return of Taiwan at (or close to) the top of China's objectives risks a backlash if reunification is perpetually delayed. This is all the more true if Taiwan were to continue succeeding in the world economy, even if it lacks much of a diplomatic presence. **The most likely factor to delegitimize the leader** – if not the regime itself – and lead to a rebalancing of intra-CCP politics **remains, therefore, a miscalculation around Taiwan**. The combination of a high level of defence spending above officially declared levels, the omnipresence of the PLA in propaganda, and a humiliating setback would discredit any leader, including Xi Jinping. On top of all this, China's physical military strength is increasingly vast but remains almost entirely untested.

This is not so much about the *"accidental war"* that might happen as a result of miscommunication and a fast escalation ladder. By all accounts, the PLA has never repeated the assertiveness and aggressivity it showed during the 1979 mistake of Vietnam. On the contrary, **incidents appear to be highly controlled and generally designed for messaging, not for any military win**. The erosion of positions has worked well in the South China Sea against a strategically irrelevant ASEAN – whose members have different perceptions of China, depending on whether they are mainland or maritime countries – and to a lesser extent on the border with India. With Taiwan, it amounts to steady harassment. With Japan, it is simply failing because Tokyo maintains its own presence just as steadily, particularly on territorial issues – the concept of an *"Asian NATO"* is, moreover, still not universally accepted by Japanese society or security experts.²⁷⁷

²⁷⁷ Interview with Naoko Eto.

Faced with rising **international barriers in terms of trade, investment, and technology transfers**, the regime's paramount leader might conclude that time is no longer working in China's favor. This also supposes that China's coalition partners – primarily Russia but also Iran and North Korea – provide suitable diversions from China and that America has isolated itself inside what was previously a successful alliance.²⁷⁸

In addition, in this scenario, **China's domestic economy would reach a breaking point**. The lack of trust from private actors, mounting public debts that would no longer be matched by large returns of money, and the persistent predominance of state enterprises relying on monopoly positions would erode the central government's financing capacity. **Fiscal stimulus does not work if there is no trust among consumers or investors**. A vast amount of China's prosperity lies abroad, whether by navigating the seas or stashing money inside the international system. Even with capital controls, the game must stop at some point. In this scenario, that point would be reached before 2035. Meanwhile, **an economically weaker China may already be a more volatile and aggressive China**.

There are arguments both for and against these hypotheses. As of 2024, despite short-term military gains against Ukraine, Russia's position appears increasingly unsustainable in the long term – and so does Iran's. North Korea takes opportunities from other conflicts to advance its own interests, but has never launched a genuine conflict itself. And **part of the attractiveness of a compromise with China for foreign multinationals, for Europeans disillusioned** with Washington or for regional economies, **lies in the dynamism of China's economy** as a production base and as a market. Even today's price deflation, which makes China's prices and logistics the most attractive on earth, is not enough to restart a foreign investment wave.

²⁷⁸ "China Trends #21 – China's balancing act with the 'axis of upheaval'," Institut Montaigne, October 3, 2024, <https://www.institutmontaigne.org/en/expressions/china-trends-21-chinas-balancing-act-axis-upheaval>.

However misinformed Xi Jinping may be by his subservient entourage, he must weigh the risks and the odds. **Unlike Vladimir Putin, he is not sitting on a treasure trove of natural resources, and, energy-wise, distrust is the prevailing mood among China’s neighbors:** *“Northeast Asian democracies are unlikely to plug themselves in to a Chinese UHV international grid, but this is maybe less the case for Central Asia.”*²⁷⁹ Whether a Chinese UHV worldwide-grid is both politically and physically possible therefore remains very much open to discussion. Meanwhile, China may accelerate its use of rare earth export denials for coercion or as countermeasures. But this has started a worldwide search for these critical materials, along with agreements among other countries to ensure diversification.

As for Chinese public opinion – if such even exists in an atmosphere of censorship and control – **it is hard to gauge.** Elites often seem dissatisfied with Xi Jinping and are prone to capital flight;²⁸⁰ they appear to be nostalgic for Deng Xiaoping’s past pragmatism. But opinion polls invariably show a population that maintains high levels of trust in the government.²⁸¹ Some of this is tied to control over respondents, some to China’s impressive gains over the last two generations. To the older population, this has indeed been a miracle. The younger set does not have that historical background, apart from propaganda, and faces more difficult circumstances.

²⁷⁹ Interview with James Webster.

²⁸⁰ Robin Brooks, “China’s Achilles’ heel – capital flight,” *Brookings*, July 4, 2024, <https://www.brookings.edu/articles/chinas-achilles-heel-capital-flight/>, Amy Hawkins, “China’s billionaires looking to move their cash, and themselves, out,” *The Guardian*, October 31, 2023, <https://www.theguardian.com/world/2023/oct/31/chinas-billionaires-looking-to-move-their-cash-and-themselves-out>.

²⁸¹ Erin Baggott Carter, Brett Carter and Stephen Schick, “Data shows the Chinese government is less popular than state media makes it seem,” *East Asia Forum*, October 29, 2024, <https://eastasiaforum.org/2024/10/29/data-shows-the-chinese-government-is-less-popular-than-state-media-makes-it-seem/>, Ilaria Mazzocco and Scott Kennedy, “Public opinion in China: A liberal silent majority?,” *Center for Strategic and International Studies*, February 9, 2022, <https://www.csis.org/analysis/public-opinion-china-liberal-silent-majority>.

Observing how China's international competitors will behave is equally important. The United States is still the only global military power, and, more broadly, democracies remain the main economic actors. Fragmentation of the international scene and multipolarity are indeed weakening the West's leverage. **Could China expect a significant military contribution by one of its coalition partners or even a simultaneous occurrence of conflicts that would divide its adversaries?** A positive answer presupposes the existence of a genuine alliance as opposed to a mere axis of convenience. However, all this would not matter much should there be a regional war around Taiwan, which would be the largest in history and would have global consequences. Rationally, this **scenario has a very low probability**. But not all leaders are rational, and therefore, it must also be anticipated. Ultimately, our dire scenario n°4 rests on Xi Jinping going for broke.

In many respects, China today seems far more predictable than the rest of the world. A centralized and personalized power structure, the suppression of internal factions through anti-corruption campaigns, and unchecked surveillance tools have made **speculation about the post-Xi Jinping era increasingly rare**. Xi Jinping himself is fairly transparent about his objectives for 2035 and sometimes even beyond: to complete the “*socialist modernization*” of the country and its military by prioritizing new technologies, self-sufficiency, and, above all, national security. This national security objective encompasses domestic order and the defense of the regime.

China’s ambition to become a major power is epitomized by the symbolic goal of “*reunifying*” with Taiwan. It seeks to make its partners dependent on China, whether for raw materials, technology, or financing. Furthermore, it aims to promote an authoritarian Chinese model that competes with democracy and the Western approach to development. **These official goals are not concealed**, nor is the omnipresent rhetoric framing China’s progress as a series of “*struggles*” and urging the country to prepare for a major war. Sometimes dictators should be taken at their word. It is the means China adopts in pursuit of its objectives – such as the inner workings of power at the top, certain strategic plans for scientific and military development, and the management of external accounts and monetary reserves – that raise questions.

By 2025 – to say nothing of 2035 – China will rely far more on its partners than it did at the start of the twenty-first century. This is inevitable given a trade surplus of nearly \$1 trillion in 2024,²⁸² including \$2 trillion in manufactured goods – a record unmatched in history. The

²⁸² “进出口商品总值表(美元值) B: 月度表” [Table of total value of imported and exported goods (United States dollar value) B: Monthly table], National Bureau of Statistics, January 15, 2025, <http://www.customs.gov.cn/customs/302249/zfxxgk/2799825/302274/302277/302276/6325041/index.html>.

world's second-largest military, which continues to grow both quantitatively and qualitatively, also stirs unease among China's partners. These same partners often view their interactions with China as a zero-sum game rather than the "win-win" relationship so frequently touted by the Chinese leaders but rarely actually practiced by China's hybrid economy.

Moving Beyond Preconceived Scenarios on China

Given its rise, predictions of China's imminent failure seem almost laughable. **Just as the dream of Leninism dissolving into free trade was misguided, the idea of an impending economic collapse is a delusion.** Any forecast of China's trajectory by 2035 must seriously consider the possibility of absolute success: a future marked by uncontested technological progress and unavoidable influence, achieved, if necessary, through coercion or open conflict. This is our **scenario n°1**, and it cannot be ruled out. Unlike the decades of Reform and Opening-up, this scenario does not involve greater integration with the rest of the world. It leaves little room for foreign partners in China, with the presence of foreign businesses and human exchanges reduced to the bare minimum. **This triumphant scenario is far from optimistic for China's partners, including Europe.**

China is no longer "a giant with feet of clay" but has its own inherent weaknesses. Demographic decline, which will have harsher repercussions after 2035, excessive saving and underconsumption, and the negative impacts of Xi's recentralization on private enterprises and individual morale are significant challenges. With domestic growth slowing (relatively speaking) since 2015, exports have become an increasingly vital engine of the Chinese economy alongside public investments and loans. In practical terms, **China is extracting more growth from the rest of the world than it contributes** – this is a zero-sum game.

However, as even a declining share of China's immense market remains attractive to some foreign partners, many companies still resist the conclusions increasingly drawn by their governments.

This diagnosis demands, if not persuading China to rebalance its growth, at least containing its most harmful effects on other nations, such as dumping, intellectual property theft, and the militarization of technology. This debate, centered on “*de-risking*” and “*decoupling*,” is now at its peak. An economy dominated by political factors that preclude market reforms, coupled with growing awareness among foreign partners of global imbalances, could lead to increasingly negative responses and retaliatory measures against China by 2035.

These responses will not be limited to the West. However, **diverging national or sectoral interests among China's partners may reduce the effectiveness of countermeasures**, turning them into mere irritants for China rather than barriers to its relentless rise. This is **scenario n°2**.

Scenario n°3, the one of a coordinated international response, **depends not only on Chinese missteps but also on more effective international coordination**. This could range from transatlantic alliances to multilateral coalitions and agreements involving emerging countries, middle powers, or the “*Global South*.” The decisions of China's partners will be a critical factor: China's trajectory through 2035 will depend as much on their capacity to coordinate and act as on Chinese policies themselves. This was certainly not the case twenty-five years ago, when global engagement – particularly by major industrialized nations and neighboring Chinese diasporas – fueled the rise of the “*world's factory*.”

Despite rhetoric from Chinese leaders about reorienting external relations and economic exchanges toward the rest of the world, this has not diminished China's dependence on the dollar or the markets of the industrialized democratic economies. While politically significant, the

“rest” of the world remains (almost) negligible in economic terms for China’s trade.

At the start of 2025, predicting the future of international balances – often and more accurately described as power struggles – is more difficult than ever. **The revisionist axis China supports is in poor shape.** Russia is suffering increasingly from sanctions, depleting its manpower and expertise in a war that kills conscripts and drives away talent. North Korea mirrors this absurd human drain, and Iran is facing historic setbacks after attempting to maintain its influence in the Middle East and beyond.

The US Trajectory

While democratic institutions in the West generally outlast political turbulence, and no discontented citizens or refugees seem to be heading toward China, **it is undeniable that Western political crises create collective challenges.** While the COVID-19 virus originated in China and vaccines came from the West, the United States’ progress in space exploration and weaponry – albeit in insufficient quantities – remains impressive. Europe, once home to the most devastating conflicts in the world, **now resolves disputes through flexible institutions,** even if they are not always respected. Western Europe, having enjoyed peace for eighty years, even came to believe it could “*exit history.*”

Since 1989, the United States has been interventionist on many foreign fronts, but it is now grappling with growing isolationist sentiment. The scenarios for China in 2035 are thus closely linked to Western “*responses*” that should, in fact, be framed as proactive initiatives. **Simply reacting to China or attempting to shield oneself against its rise is not enough.** Faced with the decline of the multilateral institutions in which Europe placed so much hope, finding new groupings, coalitions, and alliances that serve collective interests is becoming essential.

China's engagement with multilateralism remains limited, and even regional groupings often serve as mere echo chambers for its policies. Its interpretation of international law is even narrower, frequently rejecting binding enforcement. Following the Maoist tradition of claiming "*friends all over the world*," China's public diplomacy, social media presence, and occasional allies aim to deny the appearance of isolation in international opinion. Of course, diplomacy involves engaging with adversaries or those with opposing views, but such engagement will not suffice to influence China's strategic choices regarding one of the scenarios outlined earlier.

Developing viable alternatives to Chinese suppliers and unified levers of pressure is critical. Only by presenting China with a choice – either change its economic strategy or jeopardize its growth and, by extension, its social and political stability – can real influence be exerted.

However, the United States may also lean heavily on bilateral bargaining. Its tools, including the influential power of social media, are likely to be used unapologetically to weaken partners that are increasingly viewed as competitors rather than allies. While the defense of the "*free world*" or democracy has never been entirely devoid of self-interest, such motivations are now more transparent than ever. **Even those who champion the virtues of free markets over regulatory constraints are now engaging in geopolitics shaped by power dynamics with partners and allies.**

The shared will and ability to coordinate actions across the Atlantic and beyond are in doubt. Japan and South Korea are acutely aware of the risks posed by their proximity to China. Like the ASEAN countries, they are less economically integrated with China than often assumed but remain dependent on a vast US presence to act. **Caught between a volatile United States, an indecipherable Europe, and an imperial China,** they may explicitly or tacitly choose accommodation with Beijing. The same applies to many more distant nations. While they rightly

fear Chinese pressure, they do not view China as an existential threat or even a strategic challenge – a sentiment still shared by some European countries.

It is worth acknowledging that the **actions of the Trump administration could determine whether China follows scenario n°2 or n°3.**

Conversely, Xi Jinping's extensive powers enable radical strategic shifts, particularly in economic policy. However, this would require sacrificing some of his state-backed supporters – a move that would undermine his domestic legitimacy. **For now, China continues to thrive in its international economic expansion, so why would it change course?**

It is highly likely that Donald Trump will concentrate his efforts on pressuring China on multiple fronts, supported by many of his advisors. But, this would also require reduced US engagement in other conflicts, such as the Middle East and, most notably, Ukraine.

Europe's Position and Choices

In the short term, consolidating US economic hegemony by pressuring Europe – or Canada and Mexico – is easier and more profitable for the United States than directly confronting China. **Europe, meanwhile, has yet to demonstrate credible deterrent or retaliatory capabilities** and remains strategically dependent on the United States regarding Eastern European security. Access to the American market is even more critical for Europe than access to the Chinese market, creating a dual dependence – both strategic and commercial.

Strengthening European innovation and industry or achieving autonomy in defense are essential solutions to this strategic impasse. However, both paths are expensive and will only yield results after a decade. Unless it overhauls its regulatory framework, Europe will continue to implement projects more slowly than either China or the United

States. Simultaneously, US incentives such as likely tariffs, high interest rates, and benefits under the Inflation Reduction Act continue to attract European private capital across the Atlantic.

Ironically, Elon Musk, who is increasingly interfering in European affairs, is advocating for a *Make Europe Great Again* (MEGA) strategy, while Donald Trump is demanding defense spending equivalent to 5 percent of GDP. Unless Europe dismantles its social safety net for an aging population, these combined demands – alongside rising American protectionism – create an impossible dilemma for Europe. It would **need to defend itself independently in the short term while investing massively in future industries and services over the long term**. American competitors, particularly in the digital sector, maintain a leading position due to their access to vast capital markets. Simultaneously, Europe faces American protectionism on goods while enduring the rise of digital services and platforms without the ability to regulate them effectively.

What is impossible will not happen. The future of the Trump administration – and those that will follow it – remains uncertain. However, at this stage, **the new America is asking too much in too many areas from Europe**, while blatantly disregarding its European allies. Trapped in this bind, Europe will find it harder to resist Chinese pressures, particularly as it fails to establish a leading strategic role in Asia. **The rigidity of the Chinese regime in negotiations initially prompted Europe to shift its approach**. However, if Europe is forced to independently manage an existential conflict with Putin's Russia while enduring America's transactional negotiation tactics, transatlantic solidarity will inevitably unravel. A recent poll shows that only 21 percent of Europeans across nine major member states consider Trump's America an ally.²⁸¹ This sentiment

²⁸¹ Timothy Garton Ash, Ivan Krastev and Mark Leonard, "Alone in a Trumpian world: The EU and global public opinion after the US elections," European Council on Foreign Relations, January 15, 2025, <https://ecfr.eu/publication/alone-in-a-trumpian-world-the-eu-and-global-public-opinion-after-the-us-elections/>.

echoes that of South Korea, the country most dependent on the US security umbrella, and, as a result, the most anxious.

One of two things will happen: either **the new Trump administration will prove to be more rational and less greedy** – giving up, for instance, on replacing the income tax with tariffs on its partners – **or the very basis of transatlantic coordination will collapse**. This development may well encourage populists of the same vein to come to power across Europe. However, they will have no common strategy with their American counterparts. And China, the better-off supplier, as suave as America has become brutal, will have a pathway to realizing its strategic dream of dividing democracies, starting with those in Europe – this indecisive *“third world.”*

The time will then have come to reassess the chances of scenario n°1, that of China (alone) at the top. An isolationist, bluffing, and threatening America will also be a stand-alone America. As all American realists agree, **there is no longer the shadow of a doubt about the need for participation by US allies** – and even by other less-aligned countries – **to thwart China** in its most damaging projects. The example of sanctions against Russia shows just how difficult the task is. Xi Jinping's plan is, therefore, to make such participation simply impossible.

The Possibility of a Worst-Case Scenario for China

We must now turn to the scenario we have so far ignored: **scenario n°4. This is the scenario of a major conflict** – in other words, a war – **directly or indirectly triggered by Xi Jinping**. The obvious objective would be unification with Taiwan, but the battleground would not be limited to the island. In view of recent events such as the large-scale hacking of American networks, the sabotage of Baltic submarine cables, the development of space hyper-gliders, and the overall expansion of

China's nuclear and naval projection capabilities, this conflict would not remain local or even regional. As for the economic repercussions, they would be vast and on a global scale.

We have no firm judgement on the possible timing of such a war.

For some, the years up to 2027, before Asia rearms and structural weaknesses appear in China, are the ideal time. For others, China is not militarily ready but is working toward being so by 2035. Neither should we underestimate American capabilities. This conflict carries immense risks for both powers, as well as for the overwhelming majority of a world that depends on international trade.

What we do know is that scenario n°1 may lead to scenario n°4. **Any military undertaking could result in serious setbacks and call into question Xi Jinping's domestic legitimacy and that of the CCP.** From this perspective, it might be just as difficult for Xi Jinping to back down. This is what we might call the Putin scenario – one of a headlong rush into war.

Yet we cannot see inside Xi's head, who is generally regarded as a strategist weighing the pros and cons when undertaking any major decision. **At what point will the breakdown of alliances and interests that have structured the world since 1945 persuade him that more radical risk-taking is now possible?** A surprise offensive remains difficult, as demonstrated by the inconclusive invasion of Ukraine in February 2022. But given the state of public opinion, the rise of the national-populists, and the growing divisions between Western (and Asian) partners, Xi Jinping may find that defeating Taiwan without fighting is a realistic option. However, a strict blockade of the island would be a *casus belli* – all the more so since the majority of the world's semiconductor production is still concentrated on this “*Silicon Island*.”

The choice of scenario n°4 depends on Xi Jinping. The United States could turn it into scenario n°1 if it were to give in without a fight. Its allies, above all in East Asia, fear both outcomes, whether they result in fighting or surrender. Wisdom and recent historical and strategic experience dictate that the infernal duo of scenarios n°1 and n°4 should not be overlooked. Of course, **Europe must do its utmost to favor scenarios n°2 and n°3, with full knowledge of the fact that the direction taken by China will depend on the degree of understanding possible between America and its partners.** But the world in which we now find ourselves is one in which rationality does not seem to structure reality to the same extent as before.

Official Texts or Discourses with 2035 Objectives

Name in English	Name in Chinese	Date	Objective(s) for 2035
General			
<u>Strategic Arrangements for the Development of Socialism with Chinese Characteristics in the New Era from the Report of the 19th National Congress.</u>	十九大报告看新时代中国特色社会主义发展战略安排	10.2017	Basically achieve “socialist modernization” (基本实现社会主义现代化).
<u>14th Five-Year Plan for National Economic and Social Development of the People’s Republic of China and Long-Term Objectives for 2035.</u>	经济和社会发展的第十四个五年规划和2035年远景目标	03.2021	“Socialist modernization” will involve an expected sharp rise in economic, S&T and overall national strength, along with an economic output and per capita income of both urban and rural residents on the rise.
<u>“Solidly Promote Common Prosperity”: Xi Jinping’s speech at the 10th Central Financial and Economic Committee Meeting.</u>	扎实推动共同富裕	09.2021	The path toward “common prosperity” (共同富裕) – the ambition to raise the incomes of low-income groups, promote fairness, make regional development more balanced, and stress people-centered growth – will have substantially progressed.
Politics			
<u>Plan on Building the Rule of Law in China (2020–2025).</u>	法治中国建设规划(2020-2025年)	01.2021	Establish a “law-based country” (依法治国), meaning governing in accordance with the law at the country, government and society levels.

Name in English	Name in Chinese	Date	Objective(s) for 2035
Economy			
<u>14th FYP and Long-Term Objectives for 2035</u> [Economic aspects].	经济和社会发展第十四个五年规划	03.2021	<i>"Social modernization"</i> of China, meaning <i>"new-type industrialization, informatization, urbanization, and agricultural modernization,"</i> to keep the country's economy open to the outside world, promote the dual circulation system, position it at the level of the middle ranks of developed countries (in terms of per-capita GDP), give importance to the domestic industrial and manufacturing system, including for new emerging and strategic sectors, and increase domestic demand.
<u>New Energy Automobile Industry Plan (2021-2035)</u> .	新能源汽车产业发展规划 (2021-2035年)	11.2020	Make electric vehicles the mainstream of vehicles sold, with public vehicles fully electrified, fuel cell vehicles commercialized and automated driving vehicles applied on a large scale.
<u>Strategic Plan to Expand Domestic Demand (2022-2035)</u> .	扩大内需战略规划纲要(2022-2035年)	12.2022	<i>"Expansion of domestic demand"</i> , mentioned in the 14th FYP, to be achieved by improving supply's quality, smoothing economic circulation, developing the services sector, finding new forms of consumption and encouraging low-carbon green consumption.
<u>Green Aviation Manufacturing System Outline (2023-2035)</u> .	绿色航空制造业发展纲要(2023-2035年)	10.2023	Have an advanced green aviation manufacturing with high integrity and safety standards, along with large-scale deployment of new energy-powered aircrafts.
<u>National Whole Grain Action Plan (2024-2035)</u> .	国家全谷物行动计划(2024-2035年)	12.2024	Significantly increase the proportion of cereal grains in residents' dietary consumption.

Name in English	Name in Chinese	Date	Objective(s) for 2035
Energy and environment			
<u>14th FYP and Long-Term Objectives for 2035</u> [Energy aspects].	经济和社会发展第十四个五年规划	03.2021	Besides a transition to greener production and lifestyle, carbon emissions to “ <i>decline steadily</i> ” and, after having peaked, carbon emissions to be established at 200 million tons of oil and gas equivalent.
<u>14th Five-Year Plan for Modern Energy System.</u>	“十四五”现代能源体系规划	03.2022	Nuclear energy to make up approximately 10 percent of China’s total electricity generation.
<u>Medium and Long-term Plan for the Development of the Hydrogen Energy Industry (2021-2035).</u>	氢能产业发展中长期规划 (2021-2035年)	03.2022	Hydrogen, identified as one of six industries of the future, to have a proper safe and efficient “ <i>energy system</i> ” (能源体系), along with the supporting infrastructure (transportation, energy storage, etc.) for guaranteed production, adoption and application.
<u>National Climate Change Adaptation Strategy 2035.</u>	国家适应气候变化2035	05.2022	Make China’s society and economy “ <i>more resilient in the face of climate change through better monitoring and prediction of extreme weather, more resilient crops, farmland, and waterways.</i> ” Includes sub-targets on climate change monitoring and early warning abilities, including in terms of technical and standards systems, on water resources resilience, on land management (forest, grasslands, wetland, etc.).
<u>Guidance on the Comprehensive Green Transformation of Economic and Social Development.</u>	加快经济社会发展全面绿色转型的意见	07.2024	Establish a “ <i>green, low-carbon, circular development economic system,</i> ” meaning pollution and carbon reductions will have made significant progress.

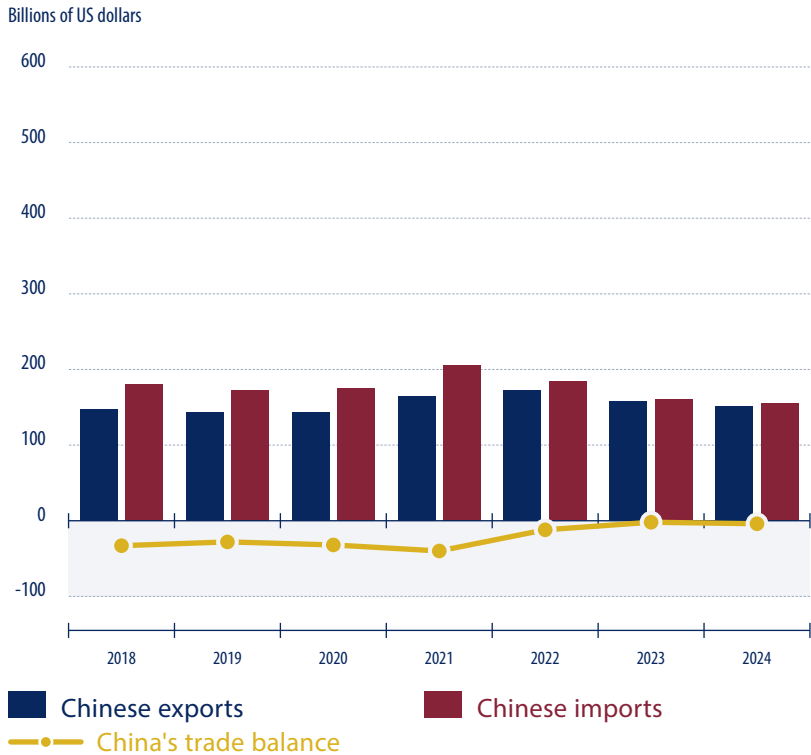
Name in English	Name in Chinese	Date	Objective(s) for 2035
Social and demographics			
<u>14th FYP and Long-Term Objectives for 2035</u> [Social aspects].	经济和社会发展第十四个五年规划	03.2021	Population aging is identified as an issue with policies called for on fertility, infant and child development, and eldercare services.
<u>Opinions on Deepening the Reform and Development of Elderly Services.</u>	关于深化养老服务改革发展的意见	01.2025	Basic eldercare service system must be complete and both urban and rural elderly people must enjoy basic care services.
<u>Outline of the Plan for Building a Powerful Country through Education (2024-2035).</u>	教育强国建设规划纲要(2024-2035年)	01.2025	Build a world-class education system by expanding free education, shrinking the education gap between urban and rural areas, increasing PhD and graduate students, strengthening basic research, and leveraging AI to support teaching.
Science and technology			
<u>Medium- to Long-Term Development Plan for Scientific and Technological Innovation in the Transportation Field (2021-2035).</u>	交通领域科技创新中长期发展规划纲要(2021-2035年)	09.2019	Innovation in the transportation sector to match that of the most developed countries, with strong basic research and innovation capabilities allowing for technological self-sufficiency.
<u>14th FYP and Long-Term Objectives for 2035</u> [Science and Technology aspects].	经济和社会发展第十四个五年规划	03.2021	Have China become an S&T “ <i>powerhouse</i> ” (科技强国) to allow it to make strong achievements in key and core technologies and enter the first ranks of “ <i>innovation-oriented countries</i> ” (创新型国家).
<u>Outline of the Nationwide Scientific Literacy Action Plan (2021-2035).</u>	全民科学素质行动规划纲要(2021-2035年)	06.2021	25 percent of Chinese citizens reach scientific literacy, while rural urban and regional disparities in such literacy will still have to be reduced.

Name in English	Name in Chinese	Date	Objective(s) for 2035
<u>Outline for Building a Powerful Intellectual Property Nation (2021-2035).</u>	知识产权强国建设纲要(2021-2035年)	09.2021	Chinese intellectual property rights to be globally competitive, including to favor innovation and attract entrepreneurs. Intellectual property system to prove its effectiveness and serve as an example for other countries.
<u>National Standardization Development Outline.</u>	国家标准化发展纲要	10.2021	Chinese standardization system to be “ <i>more robust</i> ” through the guidance of both the market and the government. Standardization process to cover scientific and technological innovation, industry, green development, urban and rural construction.
<u>Plan for the Overall Layout of Building a Digital China.</u>	数字中国建设整体布局规划	02.2023	Level of digital development to match that of leading nations, and Digital China, which will have infused the economic, political, cultural, societal, and ecological, to bring “ <i>great achievements</i> ” (重大成就).
<u>“Moving Forward Courageously Toward the Goal of Becoming a Space Power”:</u> <u>Xi Jinping speech</u>	向着航天强国目标勇毅前行	09.2024	Bases of an international lunar research station completed.
Military and security			
<u>Report at the 19th National Congress of the Chinese Communist Party.</u>	中国共产党第十九次全国代表大会上报告	10.2017	The national security system and its capacity will be strengthened, while society's long-term stability will be maintained.

Name in English	Name in Chinese	Date	Objective(s) for 2035
<p><u>"To achieve the Party's goal of strengthening the military in the new era, we must strive to build the people's army into a world-class military": Xi Jinping speech</u></p>	<p>为实现党在新时代的强军目标 把人民军队全面建成世界一流军队而奋斗</p>	<p>10.2017</p>	<p>Modernization of the national defense structure and military achieved.</p>
<p><u>14th FYP and Long-Term Objectives for 2035</u> [Military aspects].</p>	<p>经济和社会发展第十四个五年规划</p>	<p>03.2021</p>	<p>A <i>"peaceful and national reunified China"</i> (和平发展和祖国统一) is to be established besides the previously mentioned military objectives of a national defense structure and modernized armed forces.</p>

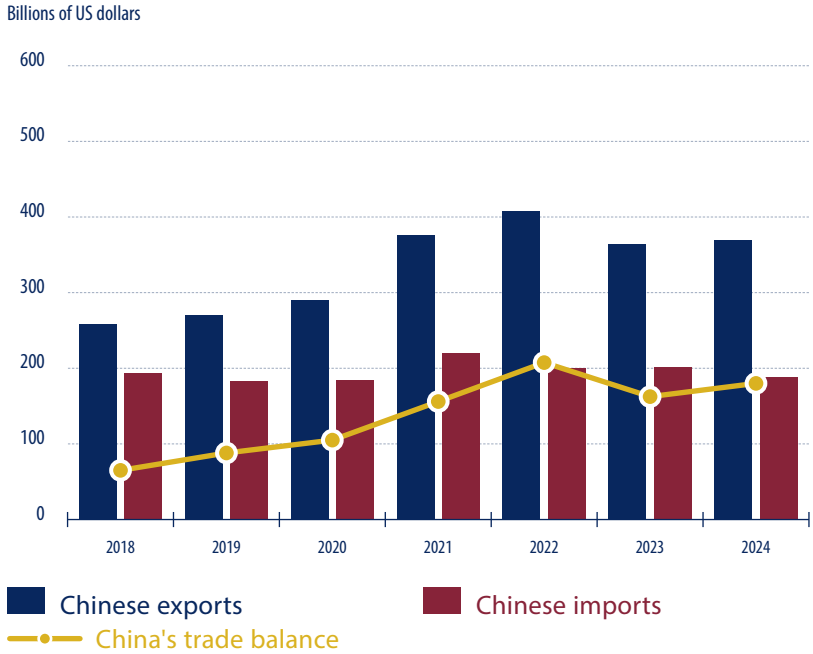
Trade Relations of China with the United States, Japan, a group of selected EU countries, Taiwan, India and Russia since 2018

Figure 9: Trade Relations of China with Japan since 2018



Source: General Administration of Customs of the People's Republic of China.

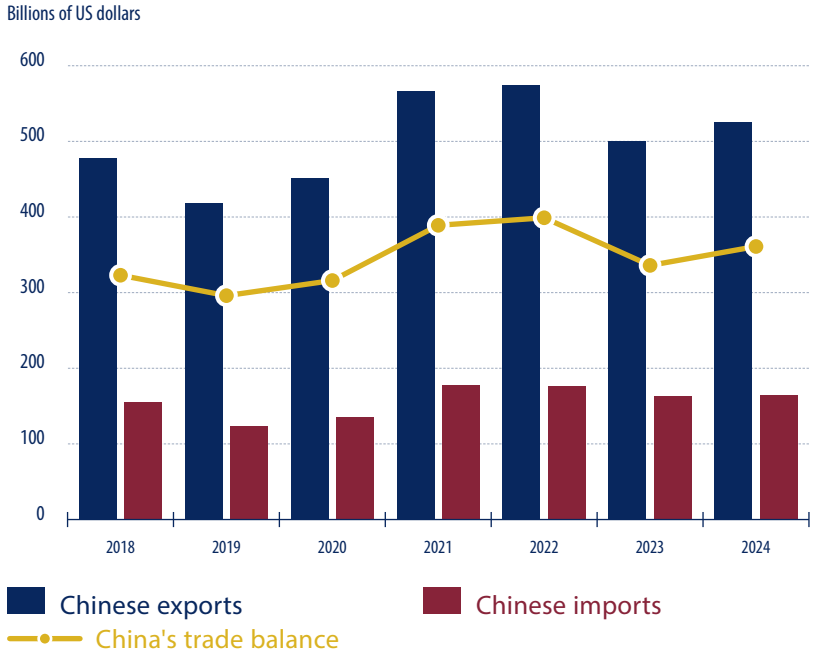
Figure 10: Trade Relations of China with a group of selected EU countries since 2018



European countries included: France, Germany, Italy, Netherlands, Spain, Poland.

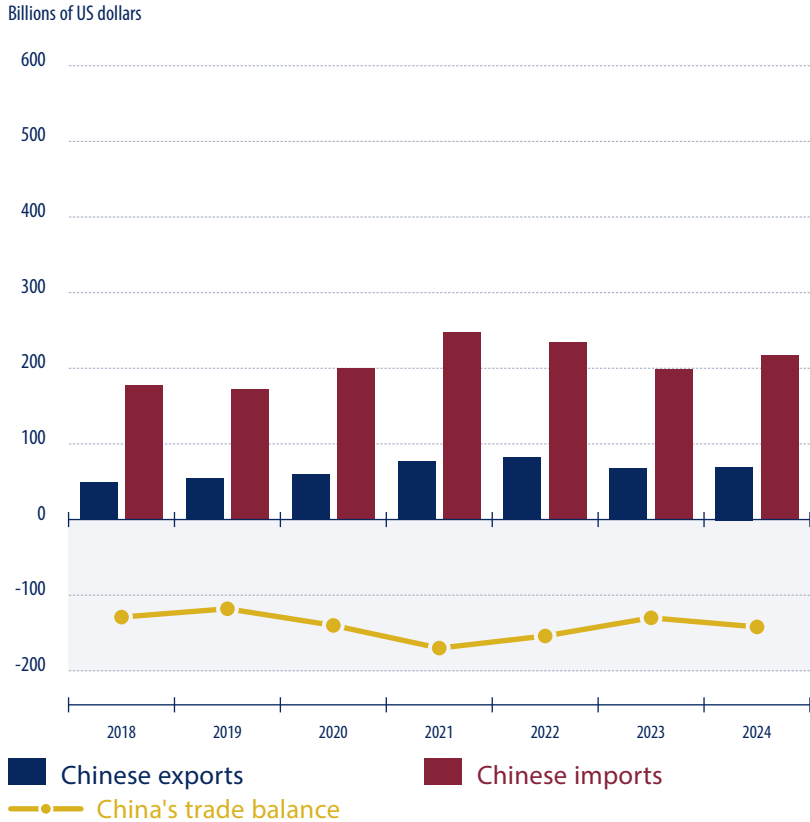
Source: General Administration of Customs of the People's Republic of China.

Figure 11: Trade Relations of China with United States since 2018



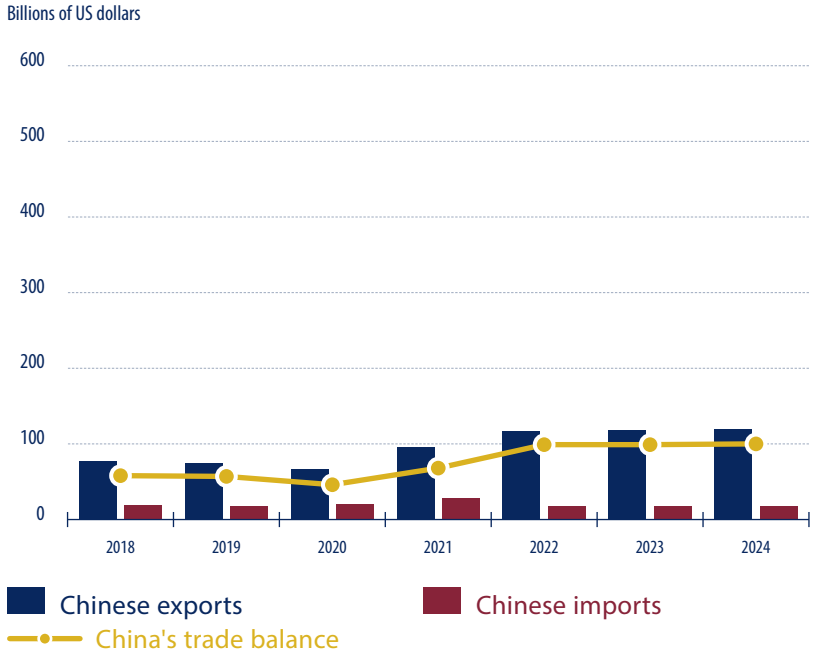
Source: General Administration of Customs of the People's Republic of China.

Figure 12: Trade Relations of China with Taiwan since 2018



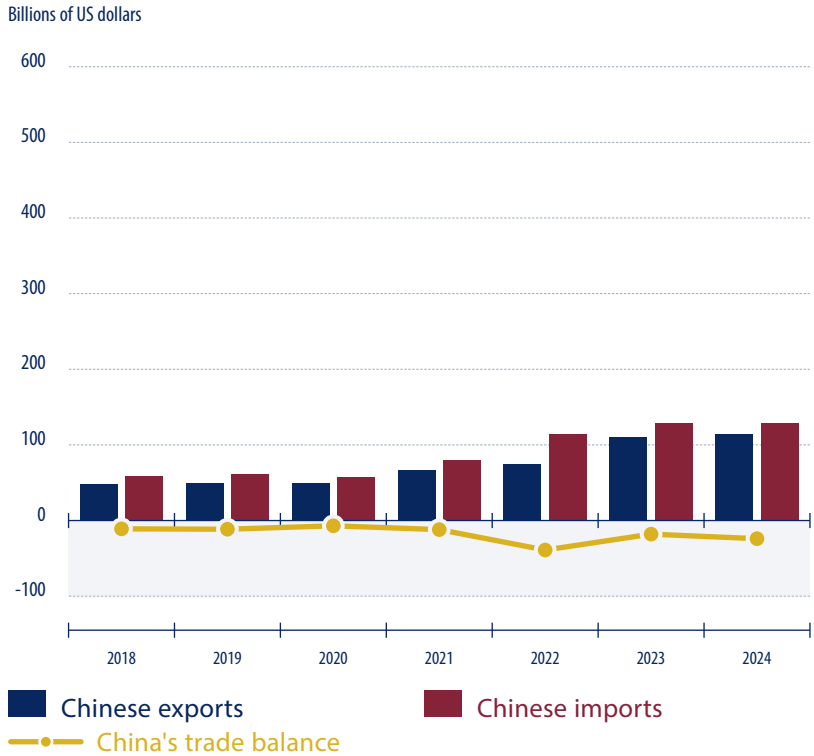
Source: General Administration of Customs of the People's Republic of China.

Figure 13: Trade Relations of China with India since 2018



Source: General Administration of Customs of the People's Republic of China.

Figure 14: Trade Relations of China with Russia since 2018



Source: General Administration of Customs of the People's Republic of China.

Acknowledgements

This paper is the result of in-depth research and many conversations, including:

- Over 250 primary and secondary sources analyzed;
- Over 30 interviews with sectoral and area academics from Europe, Asia and the United States (list below);
- Over 20 interviews with senior officials from EU institutions, member state governments and third countries;
- Over 20 interviews with senior representatives from the private sector;
- Workshops with leading experts, officials and companies examining the repercussions of China's continuous rise and transformations.

The authors extend their gratitude to the senior officials, business representatives, experts and external reviewers or editors, **David Mulrooney** in particular, they spoke to who were a substantial help in improving this paper. They especially thank their colleagues **Marie-Pierre de Baillencourt, Mathieu Duchâtel, Joseph Dellatte, Rosalie Klein, Ange Vaucher, Inès Miral** and **Nicolas Masson** for their helpful comments, suggestions and assistance. A special thanks goes also to **Matthieu Mercier** for his work on the publication's layout and visuals.

List of experts interviewed:

- **Viking Bohman**, Analyst, Swedish National China Centre
- **Raoul Bunskoek**, Head, China Centre, Clingendael
- **Tai Ming Cheung**, Professor and Director, Institute on Global Conflict and Cooperation, UC San Diego
- **Choi Byung-il**, President, Korea Foundation for Advanced Studies
- **Ja-lan Chong**, Professor, National University of Singapore
- **Jérôme Doyon**, Junior Professor, CERI Sciences Po Paris

- **Naoko Eto**, Senior Fellow and Group Head on China, Institute of Geoeconomics
- **Mario Esteban**, Senior Analyst, Elcano Royal Institute
- **Le Hong Hiep**, Coordinator, Vietnam Studies Programme, Institute of Southeast Asian Studies
- **Sam Hogg**, Non-Resident Expert, Oxford China Policy Lab
- **Jakub Jakóbowski**, Deputy Director and Head of the China Department, Centre for Eastern Studies
- **Arthur Kroeber**, Founding Partner, Gavekal Dragonomics
- **Iikka Korhonen**, Director, Bank of Finland Institute for Emerging Economies
- **Wan-Hsin Liu**, Senior Researcher, Kiel Institute for the World Economy
- **Jorge Malena**, Professor, Argentina Catholic University
- **Tamás Matura**, Associate Professor of International Relations, Corvinus University of Budapest
- **Michal Meidan**, Head of China Energy Research, Oxford Institute for Energy Studies
- **Eric Olander**, Editor-in-Chief, China Global South Project
- **Soli Özel**, Senior Fellow for International Relations and Turkey, Institut Montaigne
- **Minxin Pei**, Professor, Government and International Relations Departments, Claremont McKenna College
- **Scott Rozelle**, Senior Fellow et Co-Directeur, Stanford Center on China's Economy and Institutions
- **Matt Sheehan**, Fellow, Carnegie
- **Brad W. Setser**, Senior Fellow, Council on Foreign Relations
- **Justyna Szczudlik**, Deputy Head of Research and Head of Asia-Pacific Programme, Polish Institute of International Affairs
- **Sabine Stricker-Kellerer**, Lawyer, SSK Asia
- **Volker Stanzel**, Former German Ambassador to China and Japan
- **Malcolm Turnbull**, Former Prime Minister of Australia
- **Steve Tsang**, Director, China Institute, SOAS University of London
- **Joseph Webster**, Senior Fellow, Global Energy Center, Atlantic Council
- **Tong Zhao**, Senior Fellow, Carnegie China, Nuclear Policy Program

*Institut Montaigne welcomes thoughts and ideas
on how to address these issues collectively
and put forward recommendations which serve
the public interest.*



Institut Montaigne
59 rue La Boétie, 75008 Paris
Tél. +33 (0)1 53 89 05 60
institutmontaigne.org/en

Printed in France
Legal filing: January 2025
ISSN: 1771-6756

ABB France	D'Angelin & Co.Ltd	Katalyse	Renault
AbbVie	Dassault Systèmes	Kea	Ricol Lasteyrie
Accenture	Delair	Kearney	Rivoliér
Accor	Deloitte	KPMG S.A.	Roche
Accuracy	De Pardiéu Brocas	Kyndryl	Roche Diagnostics
Actual Group	Maffei	La Banque Postale	Rokos Capital
Adeo	Domia Group	La Compagnie	Management
ADIT	Edenred	Fruitière	Rothschild & Co
Air Liquide	EDF	LCH SA	RTE
Airbus	EDHEC Business	Lenovo ISG	Safran
Allianz	School	Linedata Services	Sanofi
Amazon	Ekimetrics France	Lloyds Europe	SAP France
Amber Capital	Engie	L'Oréal	Schneider Electric
Amundi	EQT	LVMH - Moët-	ServiceNow
Antidox	ESL & Network	Hennessy - Louis	Servier
Antin Infrastructure	Eurogroup	Vuitton	SGS
Partners	Consulting	M.Charraire	SIER Constructeur
ArchiMed	FGS Global	MACSF	SNCF
Ardian	Forvis Mazars	Média-Participations	SNCF Réseau
Arqus	Getlink	Mediobanca	Sodexo
Arthur D. Little	Gide Loyrette Nouel	Mercer	SPVIE
AstraZeneca	Google	Meridiam	SUEZ
August Debouzy	Groupama	Microsoft France	Synergie
AXA	Groupe Bel	Mitsubishi France	Teneo
AXA IARD	Groupe M6	S.A.S	The Boston
A&O Shearman	Groupe Orange	Moelis & Company	Consulting Group
Bain & Company	Hameur et Cie	Moody's France	Tilder
France	Henner	Morgan Stanley	Tofane
Baker & McKenzie	Hitachi Energy	Natixis	TotalÉnergies
BearingPoint	France	Natural Grass	TP ICAP
Bessé	Howden	Naval Group	Transformation
BNP Paribas	HSBC Continental	Nestlé	Factory
Bolloré	Europe	OCIRP	Unicancer
Bouygues	IBM France	ODDO BHF	Veolia
Bristol Myers Squibb	IFPASS	Oliver Wyman	Verian
Brousse Vergez	Incyte Biosciences	Ondra Partners	Verlingue
Brunswick	France	OPmobility	VINCI
Capgemini	Inkarn	Optigestion	Vivendi
Capital Group	Institut Mérieux	Orano	Wakam
CAREIT	International SOS	PAI Partners	Wavestone
Carrefour	Interparfums	Pelham Media	Wendel
Chubb	Intuitive Surgical	Pergamon	White & Case
CIS	Ionis Education	Polytane	Willis Towers Watson
Clariane	Group	Publicis	France
Clifford Chance	iQo	PwC France &	Zurich
CNP Assurances	ISR	Maghreb	
Cohen Amir-Aslani	Jeanet Associés	Qualisocial	
Conseil supérieur du notariat	Johnson & Johnson	Raise	
	Jolt Capital	RATP	

In a sense, predictability has been the hallmark of Xi Jinping's era, thanks to a highly centralized power structure and relentless surveillance – but even so, China continues to keep the world on edge. In pursuit of the goal of achieving “socialist modernization” by 2035, China is prioritizing new technologies, striving to reach self-sufficiency, and making national security an unyielding focus. Nevertheless, the contradictions are evident – for all that China appears to demonstrate unstoppable power. It is also grappling with a demographic decline, excessive savings, and the stifling effects of Xi's recentralization.

Meanwhile, Taiwan's “reunification” remains central to China's grand vision, underscoring Beijing's ambition to reshape global power dynamics. In terms of trade, China's zero-sum approach – which takes more from global growth than it contributes to it – is leading to heightened tensions with international partners who are wary of its rise.

Four possible scenarios for China's future loom on the horizon. In each of these scenarios, the actions of China's partners and competitors matter as much to its future as China's own actions will affect the world. Unless other countries can show genuine unity in creating alternatives and deterrents, China's trajectory may well have redefined the global landscape by 2035.

- Scenario n°1: A triumphant and largely prevailing China with a minimal foreign presence, able to coerce its partners and overshadow democratic systems,
- Scenario n°2: Pushbacks without much coordination from partners, creating more irritants than genuinely effective barriers to Beijing's ascent, yet with a somewhat preserved global geopolitical balance,
- Scenario n°3: A coordinated global response, with alliances ranging from the transatlantic sphere to the middle and emerging powers, challenging China's economic and strategic choices,
- Scenario n°4: A major conflict, most likely over Taiwan, spiraling into a worldwide crisis that no one can fully contain. While all participants in the global economy would be impacted, a defeat for the People's Republic of China would create major regime uncertainty.

10 €

ISSN: 1771-6756

NCL2501-01