

U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin



October 20, 2021

Highlights of This Month's Edition

- **Goods trade:** In August 2021, the U.S. goods trade deficit with China reached \$31.7 billion, its highest monthly level since July 2019. U.S. Trade Representative Katherine Tai said China has failed to meet some of its Phase One Trade Agreement commitments.
- **Energy:** Surging energy prices in China threaten domestic growth and global supply chains while demonstrating some of the practical difficulties of achieving the country's energy and emissions goals against ever-growing demand.
- **China Bans Crypto Transactions:** Chinese regulators escalated their crackdown on cryptocurrencies, declaring all cryptocurrency transactions illegal and severely curtailing any cryptocurrency mining operations.
- **Beijing Stock Exchange:** General Secretary Xi Jinping announced the establishment of a new bourse in Beijing to help nonstate companies secure capital and offset a worsening external financing environment.
- **In Focus - Evergrande:** The Evergrande fallout tests Beijing's propensity for market intervention as it tries to wean the economy off debt-fueled growth without sparking financial turbulence.

Contents

U.S.-China Trade Deficit Grows amid Slowing Export Growth.....2
 Biden Administration Challenges China on Phase One Performance.....3
Energy Crisis Continues in China as Xi Promises No More Coal Plants Abroad.....3
Chinese Regulators Ban All Crypto Transactions in China5
China's Government Accelerates Stock Market Development with New Beijing Stock Exchange6
In Focus: Evergrande Debt Crisis Forces Tough Choices.....8
 Implications for China's Economy9
 U.S. and Global Exposure to Stresses in Evergrande and China's Property Markets10
 Outlook for China's Policy Response11

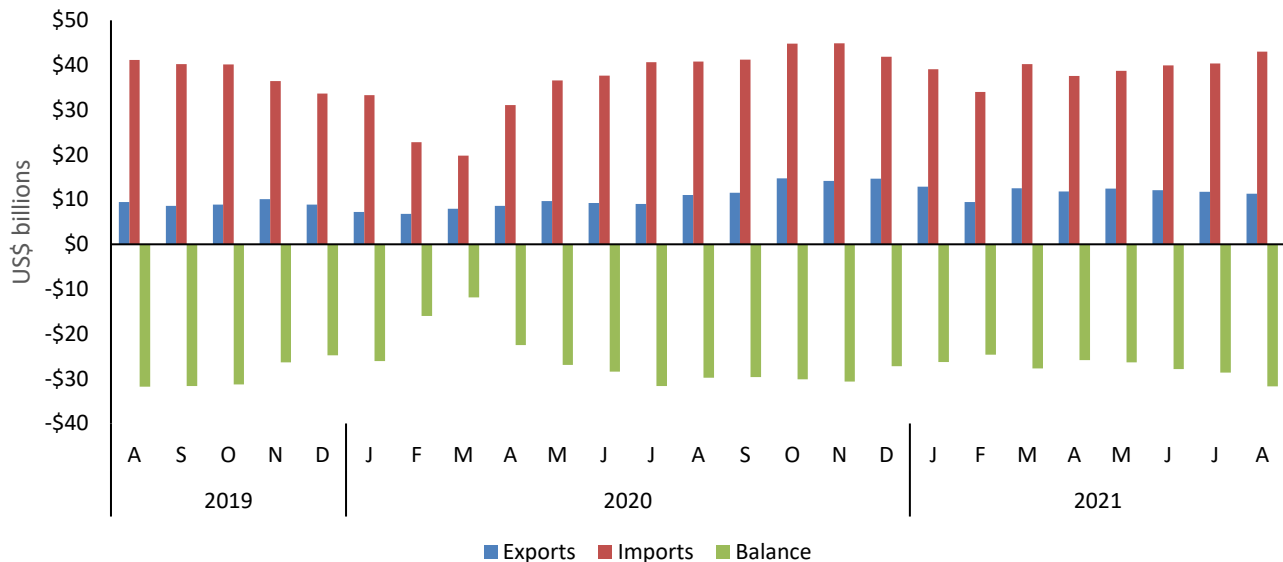
This issue of the Economics and Trade Bulletin was prepared by Daniel Blaugher, Kaj Malden, Leyton Nelson, Emma Rafaelof, Taylore Roth, and Charles Horne. You may reach us at contact@uscc.gov.

U.S.-China Trade Deficit Grows amid Slowing Export Growth

The U.S. goods trade deficit with China climbed in August as monthly U.S. exports to China decreased. Bilateral trade between the United States and China has increased significantly during 2021, though growth of U.S. imports from China has exceeded growth in U.S. exports to China.

- *Trade balance:* In August 2021, the U.S. goods trade deficit with China reached \$31.7 billion, its highest monthly level since July 2019.¹ The deficit in 2021 totaled \$218.9 billion through August, up from \$192.7 billion during the same period in 2020.²
- *Exports:* U.S. goods exports to China totaled \$11.3 billion in August 2021, a \$461 million decrease from July 2021.³ Total U.S. goods exports to China in 2021 through August reached \$94.1 billion, compared to \$69.6 billion in the first eight months of 2020.⁴
- *Imports:* The United States imported \$39.3 billion worth of goods from China in August 2021, up \$1.3 billion from July.⁵ U.S. imports from China through August totaled \$313 billion, compared to \$262.7 billion during the same period in 2020.⁶

Figure 1: U.S.-China Goods Trade, August 2019–August 2021



Source: U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021.

The U.S. goods trade deficit with China is likely to continue widening through the rest of 2021.

- *Outlook for exports:* Decreased demand for U.S. exports is likely to persist as China’s economic growth falters amid supply chain disruptions. China’s energy shortage, discussed further below, has prompted a slowdown in China’s factory activity that could impact U.S. suppliers to Chinese manufacturers.⁷
- *Outlook for imports:* U.S. demand for imports from China historically peaks during the fourth quarter, ahead of the U.S. holiday season.⁸ This trend is likely to persist in 2021 despite global supply chain disruptions, as Chinese manufacturers face decreased competition from Southeast Asian producers.⁹ Continued novel coronavirus (COVID-19) outbreaks in Thailand, Vietnam, and Malaysia have left Chinese manufacturers poised to benefit from higher mobile phone sales in the United States, as major designers such as Apple release new models between September and November.¹⁰

Biden Administration Challenges China on Phase One Performance

After months of reviewing U.S. trade policy toward China, U.S. Trade Representative (USTR) Katherine Tai said China has not complied with its commitments under the Phase One Trade Agreement. During a speech describing the Biden Administration’s approach on October 4, 2021, Ambassador Tai outlined a framework that upheld the main tenets of the Trump administration’s trade policies toward China, namely:

- The Biden Administration plans to engage China’s government on the country’s performance meeting its Phase One Agreement commitments, as well as China’s continued use of industrial policies.¹¹
- To benefit U.S. importers, the administration will reopen an exclusion process for Chinese imports subject to tariffs introduced by the Trump administration.*
- Tariffs and export controls will remain key tools in U.S. trade policy toward China.¹²

Additionally, Ambassador Tai noted that the Phase One agreement did not fully address China’s state-centered and non-market trade practices.¹³ USTR officials have dismissed a potential Phase Two trade deal that could address Chinese support for domestic firms.¹⁴ Following her speech, Ambassador Tai spoke to her counterpart, Chinese Vice Premier Liu He, on October 8. During the call, Vice Premier Liu requested the United States lift tariffs imposed by the Trump administration on \$370 billion worth of Chinese goods.¹⁵

Energy Crisis Continues in China as Xi Promises No More Coal Plants Abroad

Unprecedented energy demands are outpacing coal supplies in China, driving up Chinese electricity prices and creating economic ripple effects that cut power for firms and homes around the country. China has been struggling with energy shortage incidents since December 2020, but the situation has become even more constrained since June due to a summer heatwave and a continuous deficit of coal, China’s major energy source.¹⁶ Post-pandemic undersupply of energy sources around the world and more extreme global weather have caused a surge in demand and global price increases for coal, gas, and oil.¹⁷ Even with the relaxation of import quotas,[†] China’s overall imports of coal dropped 3.6 percent in the first three quarters of 2021 due to increased global demand and logistical difficulties.¹⁸ Despite a 6.8 percent increase in demand year-on-year, domestic output has fallen by nearly 1 percent year-on-year, a partial effect of widespread coal mine closures after severe weather, safety, and efficiency issues.¹⁹

Price controls and government restrictions on energy usage aimed at cutting emissions have also contributed to power outages across the country.²⁰ As coal prices have doubled in China, caps on electricity prices have led utilities companies to operate minimally or cease operation altogether to avoid running at a loss, literally leaving factories and homes in the dark even when supplies may be available, albeit more expensive.[‡]²¹

* More than 2,200 imported products from China subject to tariffs were granted an exclusion during the Trump administration. Of these, 549 exclusions were granted an extension, with most extensions expiring at the end of 2020. The day after Ambassador Tai’s speech, USTR issued a notice inviting public comments on whether to reinstate the exclusions for each of the 549 items. U.S. Trade Representative, “USTR Requests Comments on Reinstatement of Targeted Potential Exclusions of Products of China Subject to Section 301 Tariffs,” October 5, 2021. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/october/ustr-requests-comments-reinstatement-targeted-potential-exclusions-products-china-subject-section>.

† China imposed import quotas on coal in 2020 to protect its domestic industry throughout the height of the COVID-19 pandemic, but also imposed a ban on Australian coal after Australia’s call for an independent COVID-19 inquiry. Australia accounted for nearly 2 percent of China’s coal use, but 64.6 percent of its thermal coal imports. While a small portion of China’s overall coal use, Australian thermal coal is globally preferred due to its high energy output and emission of fewer pollutants than other forms of coal when burned. Clyde Russell, “Column: China’s Coal-Fired Power Companies Struggle amid High Prices, Australia Ban,” *Reuters*, July 29, 2021. <https://www.reuters.com/article/us-column-russell-coal-china/chinas-coal-fired-power-companies-struggle-amid-high-prices-australia-ban-russell-idUSKBN2EZ0DB>; International Energy Agency, “Coal 2020,” December 2020, 14-16. https://iea.blob.core.windows.net/assets/00abf3d2-4599-4353-977c-8f80e9085420/Coal_2020.pdf; China General Administration of Customs, *Customs Statistics – Interactive Tables*.

‡ China has long maintained a specific range for electricity prices with a ceiling of 10 percent above a government set benchmark and a floor of 15 percent below the benchmark. Chinese policymakers have used these controls to guard against volatility and price swings, but

Although the Chinese government has emphasized its public commitment to reduce emissions, the ongoing strain on resources, productivity, and livelihoods may force even more emissions-heavy policy measures to avoid a broader economic crisis. The central government has made some attempts to stabilize prices, assuage domestic worries, and alleviate constraints.

- In July, China’s National Development and Reform Commission (NDRC), released 10 million tons of coal to alleviate the shortage and decrease staggering prices.²² The NDRC is China’s central planning agency responsible for commodities pricing as well as stockpiling critical materials.²³ On September 24, the NDRC sold national oil reserves for the first time, a move that follows similar government reserve sales in other commodities.^{*}²⁴ Scarcity of imports has also reportedly led the Chinese government to overlook imports of smuggled North Korean coal through ship-to-ship transfers, which are a violation of international sanctions.²⁵
- On September 29, the NDRC held a press conference to outline its plans for preserving power in the winter focused specifically on the issue of energy reserves for China’s northeast, which traditionally experiences much colder temperatures.[†]²⁶ The NDRC encouraged companies to sign medium- and long-term contracts to ensure stability.[‡]²⁷
- In spite of emissions goals, the Chinese government subsequently urged increased production of domestic coal mines.²⁸ On October 8, China’s State Council announced a higher price cap from 10 to 20 percent from the benchmark to encourage more electricity generation.²⁹ The State Council said that energy-intensive industries would be exempt from the caps and may rely on market-based prices.³⁰ On October 19, the NDRC announced that it was “study[ing]” ways to bring down coal prices into a “reasonable range.”³¹

With widespread power outages affecting over 22 provinces or regions in the country, manufacturing output is expected to drop and dampen the global economic forecast.³² Manufacturing delays are impacting everything from toys to textiles and consumer electronics.³³ In September, ten semiconductor parts manufacturers reported shutdowns in a sign of increasing severity that is affecting even China’s highly prioritized industries.³⁴ Suppliers for both Apple and Tesla reportedly had to pause operations due to power outages as well.³⁵ The ongoing energy crisis will likely exacerbate the current semiconductor shortage that has hampered automobile production in 2021. Suspended production across sectors is set to increase prices as supplies wane and could spill into the Christmas holiday season. Overall, these delays will harm not only Chinese producers but also U.S. and other foreign companies sourcing from China.

The energy crisis portends continued challenges as China seeks to reach peak emissions by 2030 and carbon neutrality by 2060, though the Chinese government may look to fulfill these public goals through efforts beyond its borders.³⁶ At the UN General Assembly in September, General Secretary of the Chinese Communist Party (CCP) Xi Jinping pledged that China would not build new coal-fired plants abroad.³⁷ According to Li Shuo, a policy advisor at Greenpeace China, it was unclear whether General Secretary Xi’s pledge applied to the nonstate

these are not adjusted based on changes in fuel costs, such as those of coal, oil, or liquid natural gas. Higher costs of energy inputs under Chinese price controls can shrink or eliminate the profit margins of China’s power companies, disincentivizing them from production. Chen Xuewan et al., “Cover Story: How China Stumbled into a Giant Energy Shortage,” *Caixin Global*, October 11, 2021.

<https://www.caixinglobal.com/2021-10-11/cover-story-how-china-stumbled-into-a-giant-energy-shortage-101784839.html>.

^{*} For more on Chinese sales of reserve commodities and commodity pricing, see U.S.-China Economic and Security Review Commission, “CCP Seeks to Strengthen Commodity Price Controls,” in *Economics and Trade Bulletin*, June 2021, 6–7. https://www.uscc.gov/sites/default/files/2021-06/June_2021_Trade_Bulletin.pdf.

[†] China’s energy consumption peak has traditionally been highest in the winter, but summer peaks are becoming higher with more extreme weather and demands for cooling. In 2019, China accounted for 39.1 percent of global space cooling unit sales. In June 2021, China’s National Energy Administration reported that energy consumption was up by 9.8 percent year-on-year, a level 4.7 percent above consumption the preceding winter. *Global Times*, “China’s Electricity Use Hits Fresh Record, Prompting Efforts to Avert Shortages,” July 18, 2021. <https://www.globaltimes.cn/page/202107/1228970.shtml>; *Xinhua*, “China’s power use up 9.8% in June as recovery continues,” July 17, 2021. <https://news.cgtn.com/news/2021-07-17/China-s-power-use-up-9-8-in-June-as-recovery-continues--11YBHtDbMUU/index.html>; International Energy Agency, “Cooling,” June 2020. <https://www.iea.org/reports/cooling>.

[‡] Standard definitions for these terms vary, but the NDRC has specified that medium- and long-term contracts are “one year or longer” and can include contracts as long as three years. Zheng Xin, “Long Coal Contracts May Rein in Prices,” *China Daily*, September 18, 2021. <https://www.chinadaily.com.cn/a/202109/18/WS61452782a310e0e3a682270c.html>.

sector or to projects that have already been proposed, been approved, or begun construction.* Additionally, Mr. Li said it was unclear whether the moratorium applied to the financing of projects in addition to construction.† Chinese investments in coal-fired plant projects had already dropped at the beginning of 2021, but the country remains the largest financier for coal-fired plants around the world, support tied to its Belt and Road Initiative.³⁸ While General Secretary Xi’s announcement was encouraging to many international observers, it also did not address the future of domestic coal-fired plant construction.³⁹ As of 2021, China is the world’s largest builder of coal-fired plants, accounting for 56 percent plants planned or under construction,[‡] and announced the construction of 43 new plants at the start of the year.⁴⁰ General Secretary Xi also pledged to support renewable energy efforts in developing countries just after President Biden’s announcement of a doubled U.S. contribution of climate change funds that support developing countries.⁴¹ These announcements by the world’s top two emitters have boosted confidence in the potential for the November annual UN Climate Change Forum, COP26, to be held in Glasgow this year, where the UN hopes to forward government collaboration and finalize rules for implementation of the Paris Agreement.⁴²

Chinese Regulators Ban All Crypto Transactions in China

China’s top regulatory bodies issued sweeping restrictions on cryptocurrencies in September, effectively outlawing them in China. On September 24, the People’s Bank of China (PBOC) issued a notice, in coordination with eight other governmental bodies, declaring all cryptocurrency transactions illegal, including transactions on offshore exchanges.[§] On the same day, the NDRC issued a notice on “rectifying” cryptocurrency mining** activities and disposing of the “hidden risks” of crypto mining.⁴³ The notice did not immediately prohibit all mining activities, but it did ban new investment in mining projects and mandated higher electricity prices for mining operations.⁴⁴ The notice also required local authorities to catalog all mining activities currently in operation or under development, which it says will be phased out “in an orderly manner.”⁴⁵ Cryptocurrency prices fell immediately following the release of the notices, with the price of Bitcoin initially falling 8 percent.^{††}

The recent restrictions mark the escalation of an ongoing crackdown against cryptocurrencies. In 2013, Chinese regulators issued a notice prohibiting banks in China from handling transactions involving Bitcoin as the cryptocurrency was experiencing growth in popularity.⁴⁶ In 2017, regulators banned domestic initial coin offerings (ICOs), a means of funding blockchain projects in which individuals and businesses sell digital tokens that can generally be used to pay for goods or services on their platform.⁴⁷ That same year, regulators informed domestic cryptocurrency exchanges they would be required to cease business operations within weeks, driving many Chinese users to trade via peer-to-peer platforms or offshore exchanges.⁴⁸ Earlier this year, authorities in some provinces, including Xinjiang and Inner Mongolia, placed restrictions on crypto mining operations, and an official summary

* Azi Paybarah, “China Says It Won’t Build New Coal Plants Abroad. What Does That Mean?” *New York Times*, September 22, 2021. <https://www.nytimes.com/2021/09/22/world/asia/china-coal.html>.

† Azi Paybarah, “China Says It Won’t Build New Coal Plants Abroad. What Does That Mean?” *New York Times*, September 22, 2021. <https://www.nytimes.com/2021/09/22/world/asia/china-coal.html>.

‡ Planned projects include those announced, pre-permitted, and permitted but not yet under construction. Capacity is measured as gross megawatts of energy output, prior to subtracting the capacity used for plant operations. Global Energy Monitor, “Global Coal Plant Tracker,” July 2021. <https://globalenergymonitor.org/projects/global-coal-plant-tracker/tracker/>.

§ The notice was also signed by the Cyberspace Administration of China, the Supreme People’s Court, the Supreme People’s Procuratorate, the Ministry of Industry and Information Technology, the Ministry of Public Security, the State Administration for Market Supervision, the China Banking and Insurance Regulatory Commission, and the China Securities Regulatory Commission. People’s Bank of China, *Notice on Further Preventing and Disposing of the Risk of Hype in Virtual Currency Trading* (关于进一步防范和处置虚拟货币交易炒作风险的通知), September 24, 2021. Translation. <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/2843789/index.html>.

** Cryptocurrency mining is a process by which cryptocurrency transactions are processed and new units of cryptocurrency are created. It is used for many cryptocurrencies, including Bitcoin. Processing transactions requires solving complex math problems; the user that successfully solves the math problem receives units of the cryptocurrency (i.e., “mines” the new cryptocurrency) as a reward.

†† Bitcoin prices subsequently recovered and jumped to their highest levels in nearly a month on October 1 after Federal Reserve Chairman Jerome Powell said that the United States government did not plan to ban Bitcoin. Caitlin Ostroff, “Bitcoin Price Jumps after Powell Says U.S. Has No Plans to Ban Crypto,” *Wall Street Journal*, October 1, 2021. <https://www.wsj.com/articles/bitcoin-price-jumps-after-powell-says-u-s-has-no-plans-to-ban-crypto-11633094452>; Elaine Yu and Joe Wallace, “China Declares Cryptocurrency Transactions Illegal; Bitcoin Price Falls,” *Wall Street Journal*, September 24, 2021. <https://www.wsj.com/articles/china-declares-bitcoin-and-other-cryptocurrency-transactions-illegal-11632479288>.

of a State Council meeting called for a broader crackdown on Bitcoin mining and trading.*⁴⁹ Unlike these earlier actions, however, the September notices are far broader and apply nationally. According to Jonathan Padilla, deputy director at Stanford University’s Future of Digital Currency Initiative, “The ban is sweeping, absolute, comprehensive. It is not focused on some partial aspect ... and it seems that top-level government officials are taking this on.”⁵⁰

The restrictions on cryptocurrency transactions are in line with the government’s desire to exert greater control over China’s financial system. The Chinese government is developing a central bank digital currency, which will enable it to monitor all digital payments made using renminbi (RMB).⁵¹ The presence of cryptocurrencies, which can be transferred without revealing the identity of the parties, presents a challenge to these plans. Luisa Kinzius, director at China-focused consultancy Sinolytics, said “to ensure a successful adoption of the digital currency, China has no interest in other rising, alternative payment options.”⁵² The fluctuation in prices of cryptocurrencies, which generally do not have fixed values relative to traditional currencies,[†] also introduces greater volatility, threatening regulators’ attempts to ensure greater financial stability in China.⁵³

Restrictions on cryptocurrency mining, meanwhile, have been linked to policymakers’ concerns over the energy usage associated with the activity.⁵⁴ The NDRC’s notice on cryptocurrency mining emphasized that “rectifying” cryptocurrency mining would help China achieve goals for reaching peak carbon emissions by 2030 and carbon neutrality by 2060.[‡] According to estimates from research firm Rystad Energy, approximately 65 percent of global Bitcoin mining took place in China last year, largely using coal-fired electricity.⁵⁵ The firm estimated that the cessation of Bitcoin mining in China could eliminate 57 million tons of carbon dioxide, equivalent to Portugal’s total annual carbon emissions.⁵⁶

While authorities have cracked down on cryptocurrencies, the Chinese government continues to encourage the development of blockchain technology for other purposes. In 2019, General Secretary Xi said that blockchain “plays an important role in new industrial innovation and industrial transformation” and called for China to increase its blockchain research and development.⁵⁷ In a speech in September, an official from the PBOC said the central bank was considering incorporating blockchain into the technology used to issue the digital RMB.⁵⁸ In an effort to claim leadership in blockchain development, in 2020 China’s government launched the Blockchain-Based Service Network, an international cloud computing network with the capability of supporting blockchain-based applications.⁵⁹ According to Yaya J. Fanusie, adjunct senior fellow at the Center for a New American Security, the Blockchain-Based Service Network “accentuates China’s broader push toward an information-based economy and supports its strategy to dominate in financial technology and become a ‘cyber superpower.’”⁶⁰

China’s Government Accelerates Stock Market Development with New Beijing Stock Exchange

The Chinese government plans to establish a new stock exchange in Beijing focused on small- and medium-sized enterprises (SMEs). On September 2, General Secretary Xi announced the Chinese government would establish a new stock exchange in Beijing at an undetermined date.⁶¹ The Beijing Stock Exchange (BSE), mainland China’s third major exchange after the Shanghai and Shenzhen exchanges, will serve as “the primary platform serving innovation-oriented SMEs.”⁶² The BSE will partly supersede an existing over-the-counter trading platform

* These provincial crackdowns had brought crypto mining to a halt in China even before September’s announcement, with China accounting for 0 percent of global Bitcoin mining power by June, down from 44 percent in April. Since China’s crackdown on crypto mining, the United States has become the top Bitcoin destination in the world, accounting for 35.4 percent of global Bitcoin computing power in July, up from 17.8 percent in April. Miners have been drawn to the United States due to relatively low energy prices and permissive regulatory environments in some states. MacKenzie Sigalos, “U.S. Officially the Top Destination for Bitcoin Miners, Beating Out China for the First Time,” *CNBC*, October 13, 2021. <https://www.cnbc.com/2021/10/13/us-beats-china-as-the-number-one-destination-for-bitcoin-miners.html>; Cambridge Bitcoin Electricity Consumption Index, “Bitcoin Mining Map.” https://cbecei.org/mining_map.

† An exception is stablecoins, which are cryptocurrencies pegged to the value of assets such as fiat currency or gold. *Coinbase*, “What Is a Stablecoin?” <https://www.coinbase.com/learn/crypto-basics/what-is-a-stablecoin>.

‡ For more on China’s carbon peak and carbon neutrality pledges, see U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, October 7, 2020, 10–13. https://www.uscc.gov/sites/default/files/2020-10/October_2020_Trade_Bulletin.pdf.

in Beijing called the National Equities Exchange and Quotations (NEEQ)* board,⁶³ with the NEEQ functioning as the sole shareholder of the new exchange.⁶⁴ The 66 companies trading on the NEEQ’s “select tier” will automatically be moved over to the BSE once trading begins, while the 1,250 companies on the NEEQ’s “innovation tier” can apply for listing on the BSE provided they have traded on the NEEQ for at least 12 months and meet other market capitalization requirements.⁶⁵ According to draft rules governing the BSE, companies seeking to list on the new exchange will do so through a registration-based initial public offering (IPO) approval process[†] and must have a minimum of \$7.7 million (RMB 50 million) in net assets and \$4.7 million (RMB 30 million) in share capital[‡] at the time of listing, among other requirements.⁶⁶ The draft rules also note that stocks trading on the BSE will be allowed to rise or fall by 30 percent each day, a wider range than the 20 percent limit set for Shanghai’s STAR Market and the Shenzhen ChiNext Board and 10 percent limit on the Shanghai and Shenzhen stock exchanges.⁶⁷

In establishing the BSE, the Chinese government seeks to cultivate a more diversified financial system and expand small nonstate companies’ access to finance. The establishment of the BSE highlights the Chinese government’s pursuit of a financial system that relies less on the state banking sector.[§] At the end of August 2021, China’s stock market accounted for only 2.9 percent of China’s aggregate financing.^{**} ⁶⁸ The Chinese government is also seeking to channel financial resources toward small nonstate companies. In a statement describing the BSE, the China Securities Regulatory Commission (CSRC) noted the new exchange aims to complement the Shanghai and Shenzhen exchanges by focusing strictly on strengthening SME financing channels.⁶⁹ The BSE’s focus on serving SMEs coincides with more immediate efforts to support small companies hard hit by the COVID-19 pandemic, rising commodity prices, and uneven economic recovery.⁷⁰ For example, on September 1, China’s State

* The NEEQ was established in Beijing in 2012 as an over-the-counter (OTC) trading and fundraising platform for China’s smaller businesses that did not meet the listing standards for the Shanghai and Shenzhen stock exchanges. In operating as an OTC trading platform, the NEEQ facilitates securities trading directly between two parties, as opposed to more centralized and supervised trading conducted on a formal stock exchange. It was designed to serve as an incubator for smaller companies to grow, strengthen profitability and corporate governance, and in time list on either the Shanghai or Shenzhen exchange. Trading on the NEEQ is divided into three categories, with a “select tier,” “innovation tier,” and “basic tier” of companies of descending market capitalization and profitability requirements and “R&D [research and development] and innovation capabilities.” As of September 3, the select tier hosts 66 companies, the innovation tier hosts 1,250 companies, and the base tier hosts 5,983 companies. Tang Ziyi et al., “Four Things to Know about Beijing’s New Stock Exchange for Small Companies,” *Caixin*, September 3, 2021. <https://www.caixinglobal.com/2021-09-03/four-things-to-know-about-beijings-new-stock-exchange-for-small-companies-101768602.html>.

† The IPO application system was historically administration based rather than registration based. Under the administration-based system, a company seeking to list on Chinese stock exchanges first had to have its IPO application reviewed and approved by the China Securities Regulatory Commission (CSRC) in an often politicized process. For example, in deciding whether to approve an IPO, the CSRC could consult the local government of the province where the applying firm was headquartered. The administration-based system also created incentives for corruption, as companies could try to buy their way to an IPO. In moving to a registration-based system, companies circumvent the CSRC review process altogether and submit their applications directly to the exchange where they seek to list. The listing exchange’s review procedure focuses chiefly on financial and operating data disclosure and information transparency, while the CSRC is responsible for registration of the IPO once approved by the exchange. The registration-based IPO approval process has been implemented on the Shanghai exchange’s STAR Market and Shenzhen ChiNext Board, both of which target high-tech companies. Shiwei Zhang, “Initial Public Offerings 2020 | China,” *Global Legal Insights*, June 9, 2020. <https://www.globallegalinsights.com/practice-areas/initial-public-offerings-laws-and-regulations/china>; Franklin Allen et al., “The Development of the Chinese Stock Market,” in Marlene Amstad, Guofeng Sun, and Wei Xiong, eds., *The Handbook of China’s Financial System*, Princeton University Press, 2020, 287–288; Thomas Gatley, “A User’s Guide to the Chinese Stock Market,” *Gavekal Dragonomics*, April 2, 2019, 18.

‡ This is the same share capital requirement as the Shenzhen ChiNext Board, which also targets smaller companies, but is less than the \$7.7 million (RMB 50 million) share capital requirement for the Shanghai exchange. National Equities Exchange and Quotations, *Beijing Stock Exchange Trading Rules (Trial) [Draft for Public Comment]* (北京证券交易所交易规则(试行)》(征求意见稿)), September 5, 2021. http://www.neeq.com.cn/bse_news/200010653.html; Shanghai Stock Exchange, *Rules Governing the Listing of Stocks on Shanghai Stock Exchange (Revised in 2019)*, 2019, 17. <http://english.sse.com.cn/start/rules/sse/public/c/4938268.pdf>; Shenzhen Stock Exchange, *Rules Governing the Listing of Shares on the ChiNext Market of Shenzhen Stock Exchange (2018 Revision)*, November 2018, 21. <http://www.szse.cn/English/rules/siteRule/P020190806407176632209.pdf>.

§ For more on China’s bank-dominated financial system and uneven financing environment for SMEs, see U.S.–China Economic and Security Review Commission, Chapter 2, Section 2, “Vulnerabilities in China’s Financial System and Risks for the United States,” in *2020 Annual Report to Congress*, December 2020, 243–292.

** By comparison, bank loans accounted for 61.1 percent of total outstanding credit stock in the same period. People’s Bank of China via CEIC database.

Council instructed the PBOC to increase relending* to banks by an additional \$46.5 billion (RMB 300 billion) in 2021 to safeguard economic growth and SME employment.⁷¹

The expansion of China’s stock markets reflects Beijing’s efforts to counteract a worsening environment for overseas listings and ensure Chinese companies’ financing needs can be met domestically. Heightened U.S. regulatory scrutiny of U.S.-listed Chinese companies and U.S. investment restrictions on select Chinese companies is threatening to narrow China’s access to U.S. capital. In establishing a new stock exchange in Beijing, the Chinese government is trying to mitigate against these risks by bolstering domestic capital markets and reducing reliance on foreign capital.⁷² The establishment of the BSE may also create more dynamic stock markets in China, with the BSE competing with Shenzhen’s ChiNext Board and Shanghai’s STAR Market for innovative startups seeking to list through registration-based IPOs.⁷³ As China’s stock markets continue to evolve and become more competitive, China’s influence in global financial markets is likely to rise.[†]

In Focus: Evergrande Debt Crisis Forces Tough Choices

Highly indebted property developer Evergrande continues to miss payments on its dollar-denominated offshore bonds as its creditors countdown to default. The developer missed its first payment of \$83.5 million on September 23, 2021, and has a 30-day grace period before formally defaulting on the bond. By October 11, 2021, it had missed \$277 million in payments to its offshore bondholders, with another \$573 million in payments due before the end of the year.[‡]⁷⁴ Although some analysts have speculated that Evergrande’s unfolding debt crisis could represent China’s “Lehman moment,” alluding to the rapid collapse of the U.S. financial system after the bank’s 2008 bankruptcy, Evergrande’s debt troubles are unfolding more slowly. This could buy policymakers time to devise a solution that prevents financial contagion, though the extent of the risk is difficult to ascertain. Some of Evergrande’s bonds have cross-default clauses that allow the bondholders to demand repayment of principal on other debt.⁷⁵ Should Evergrande default, these clauses could lead to a rush of creditors attempting to collect. Additionally, it is unclear the extent to which Evergrande has guaranteed its affiliates’ debt or issued debt in private placements. In early October, Evergrande joint venture Jumbo Fortune Holdings failed to repay \$260 million in principal on maturing bonds which had been guaranteed by Evergrande.⁷⁶

Chinese policymakers have kept silent about any plans to restructure the developer’s debt or provide relief to Evergrande’s creditors. On October 15, PBOC issued its first public statement on Evergrande since the developer’s missed payments, insisting that spillover was “controllable” and China’s real estate industry was healthy overall.⁷⁷ Analysts interpreted PBOC’s statement as a signal of its intent not to intervene.⁷⁸ Without government intervention, an apparently unrelated potential acquisition of Evergrande’s property management subsidiary could still provide Evergrande with cash to meet debt payments.⁷⁹ On October 4, trading in Evergrande’s shares on the Hong Kong Stock Exchange was suspended pending a “major transaction,” according to a regulatory filing from the developer.⁸⁰ Chinese state media reported that Hong Kong property developer Hopson Development Holdings Limited (Hopson) planned to purchase a 51 percent stake in Evergrande Property Services, but Hopson

* Under the PBOC’s relending program, the PBOC provides loans to commercial banks for lending to customers. The PBOC usually specifies the use of the funds to target certain policy priorities, such as assisting small businesses, enabling more targeted monetary policy support to the economy. Under the relending program, banks borrow from the PBOC at a lower interest rate than the PBOC’s one-year medium-term lending facility. John Liu and Yujing Liu, “China’s Central Bank Turns to Niche Policy Tool to Boost Growth,” *Bloomberg*, September 9, 2021. <https://www.bloomberg.com/news/articles/2021-09-09/china-s-central-bank-turns-to-niche-policy-tool-to-boost-growth?sref=mxBIzFb4>; Peng Qinqing and Guo Yingzhe, “PBOC Offers \$31 Billion in Cheap Loans to Boost Struggling Regions,” *Caixin*, August 12, 2021. <https://www.caixinglobal.com/2021-08-12/pboc-offers-31-billion-in-cheap-loans-to-boost-struggling-regions-101754488.html>.

† For more on the Chinese government’s efforts to upgrade Chinese stock markets, see U.S.-China Economic and Security Review Commission, “In Focus: China’s Stock Market Reforms,” in *Economics and Trade Bulletin*, July 6, 2020, 10–14. https://www.uscc.gov/sites/default/files/2020-07/July_2020_Trade_Bulletin.pdf.

‡ Evergrande has also missed payments on at least two bank loans in addition to approximately \$6.2 billion in wealth management products sold to retail investors. *Bloomberg*, “Evergrande Pain Spreads to Wealthy Investors as More Interest Payments Missed,” September 26, 2021. <https://www.bloomberg.com/news/articles/2021-09-27/evergrande-pain-spreads-to-wealthy-investors-as-more-interest-payments-missed?sref=mxBIzFb4>; *Bloomberg*, “Evergrande Misses Loan Payments to Banks as Bond Deadlines Loom,” September 21, 2021. <https://www.bloomberg.com/news/articles/2021-09-21/evergrande-misses-loan-payments-to-banks-as-bond-deadlines-loom?sref=mxBIzFb4>.

has not yet confirmed the acquisition.⁸¹ Evergrande's 61 percent stake in its subsidiary was worth \$4.3 billion as of October 11.⁸² Ahead of the rumored acquisition, some distressed debt traders, such as Marathon Asset Management and Saba Capital Management, purchased Evergrande bonds in hopes that a restructuring would cause the bonds' value to increase.*

Evergrande's debt pressures have been building for over a year, exacerbated by new policies introduced to deleverage China's property sector. In August 2020, Chinese regulators required Evergrande, along with a dozen other large Chinese property developers, to comply with the "three red lines",[†] a deleveraging initiative that cuts off new bank loans to developers that do not meet certain prudential requirements.⁸³ The policy is intended to reduce the size and growth rate of China's most indebted property developers while cutting down on overall debt within the sector.⁸⁴ The policy directly impacted Evergrande's financing channels and eliminated the firm's access to new loans that could allow it develop new properties and generate cash flow.⁸⁵ Without new revenue to meet debt payments, Evergrande reportedly began offering discounts of up to 30 percent for some of its properties in attempt to raise cash.

Evergrande is just one of many highly indebted developers in China's property sector. To finance new projects, China's property developers rely heavily upon bank loans and bonds as well as deposits on future construction. Therefore, the sector's primary business model relies on the accumulation of new debt and the expectation that housing prices will continue to rise in order to offset current liabilities. The expectation of ever-rising housing prices has also made housing a popular investment for Chinese households, and real estate holdings accounted for roughly three-quarters of China's household wealth in 2018.⁸⁶ The resulting glut in China's property sector contributed to the development of hundreds of "ghost cities" filled with mostly unoccupied housing units. As Chinese policymakers have tightened prudential requirements in the sector, however, the highly leveraged nature of the model has become increasingly evident. According to data from Wind, 36 property developers had defaulted on bonds amounting to \$8 billion (RMB 51.2 billion) in the first eight months of 2021, with more expected.⁸⁷

Evergrande expanded its business into multiple unrelated sectors contributing to its debt woes. While Evergrande's core business is property development and real estate, the company owns more than 200 offshore and 2,000 domestic subsidiaries engaged in unrelated businesses, including electric vehicles, media production, water and food, and sports and recreation.⁸⁸ Evergrande's debt-fueled business expansion resembles that of China Huarong Asset Management Co., a state-owned asset manager that borrowed heavily to expand beyond its principle business and utilized Hong Kong shell companies to help it raise money.⁸⁹ Huarong ultimately required a government bailout in August to avoid a bond default, a decision that reinforced market assumptions Beijing would intervene to guarantee the debt of major state-owned enterprises (SOEs).⁹⁰ The Chinese government appears to view Evergrande's highly publicized debt crisis as an opportunity to demonstrate it will not bail out nonstate firms in order to avert financial turbulence.⁹¹ The government nonetheless wants to convey that it has the situation under control, and will likely attempt to carefully manage the financial and economic fallout while trying to suggest it has not intervened.

Implications for China's Economy

The Chinese government's response to Evergrande's debt crisis will be based on political calculus. Policy responses are likely to include a combination of mechanisms—including debt rollovers, asset devaluation, and relief payments to the most vulnerable—that historically have been leveraged by policymakers to address credit events impacting the Chinese economy.⁹² Major creditors and stakeholders include the following, presented in the order of their importance to the Chinese government:

* Other funds that increased positions in Evergrande include Redwood Capital Management, Contrarian Capital Management, and Silver Point Capital, according to reporting from Bloomberg. Rachel Butt et al., "Saba, Redwood Are Among Credit Funds Buying Evergrande Bonds," *Bloomberg*, September 20, 2021. <https://www.bloomberg.com/news/articles/2021-09-20/saba-redwood-are-among-credit-funds-buying-evergrande-bonds?sref=mxblZFb4>.

† The prudential requirements established by the three red lines are: (1) setting a ceiling for developers' debt-to-asset ratios at 70 percent; (2) setting net debt-to-equity ratios at 100 percent; and (3) capping short-term borrowing on par with cash reserves.

- *Households*: Chinese policymakers are likely to prioritize support to Chinese households as they represent both the greatest risk of contagion and the greatest bastion of social stability. According to Dinny McMahon, analyst at Trivium China, the real risk in Evergrande’s fall is that it will shift consumer sentiment and spook households from investing in real estate, ultimately contributing to falling prices and the potential collapse of other developers that rely on deposits on future construction for revenue.⁹³ Regulators have thus pressured Evergrande to prioritize completing construction on prepaid homes.⁹⁴ According to estimate from Barclays, as many as 1.6 million people are still waiting to move into new homes under construction by Evergrande.⁹⁵ Given already consistently weak post-pandemic consumption, Beijing has been vocal about its intention to support households amid the crisis, with the PBOC pledging to safeguard the rights and interests of homebuyers.⁹⁶
- *Contractors and suppliers*: Policymakers are also likely to prioritize support to contractors and suppliers, as these groups generate employment and economic growth in the real economy. Such nonstate firms, many of them small and medium-sized enterprises, have already been disproportionately impacted by the COVID-19 pandemic and have received fiscal support from local governments, while the PBOC has encouraged loan forbearance and increased lending to them.⁹⁷ Government support for Evergrande’s contractors and suppliers is likely to build upon these existing policies.
- *Banks*: China’s banking system is largely state owned and oriented toward policy goals rather than commercial objectives. This affords the Chinese government several levers to attempt to contain widespread financial contagion and turbulence, including influencing banks’ lending decisions and moderating their responses to worsening credit conditions, and even ensuring their solvency through mergers and capital injections.⁹⁸ Demonstrating Chinese government support for banks, on September 27 the PBOC announced plans to inject additional liquidity into the banking system.⁹⁹ Furthermore, while Chinese banks and financial institutions are highly exposed to Evergrande’s debt, their loans to the company are reportedly well collateralized with land, properties, or projects under construction, reducing the risk of broader financial collapse.¹⁰⁰
- *Local governments*: Because many of China’s local governments rely primarily upon land sales to property developers to supplement revenue shortfalls, declining land sales resulting from China’s property market slowdown are worsening already tight fiscal conditions for indebted local governments. According to independent research firm Rhodium Group, local governments’ land sales revenue declined 17.5 percent year-on-year in August 2021, with local governments in China’s southwest and the Yangtze River Delta regions most vulnerable to rising debt pressures from the decline.¹⁰¹ Despite their strained fiscal capacity and burgeoning debt, local governments are under central government pressure to help absorb some of the fallout from Evergrande’s collapse. For example, on September 29 Evergrande announced it would sell its \$1.5 billion stake in Shengjing Bank to Shenyang Shengjing Finance Investment Group Co., a state-owned enterprise partially owned by provincial and local governments.¹⁰² Shenyang Shengjing Finance Investment Group now holds 19.93 percent of the share capital in Shengjing Bank.¹⁰³ China Vanke Co Ltd. and China Jinmao Holdings, both property developers with large state-owned shareholders, have also been asked to purchase Evergrande’s assets.¹⁰⁴
- *Bondholders*: Compared to households, contractors, and suppliers, which have a direct impact on economic growth and social stability, Beijing is less likely to prioritize support to bondholders. Any policy support it does extend is likely to prioritize onshore bondholders over offshore bondholders due to their direct impact on China’s domestic economy and social stability.¹⁰⁵ Direct policy support may also be limited in this space given policymakers’ goals of reducing overall debt financing in the sector.¹⁰⁶

U.S. and Global Exposure to Stresses in Evergrande and China’s Property Markets

While offshore bondholders are only marginal creditors to Evergrande, it remains unclear to what extent they might suffer losses in the event of a debt restructuring. According to Evergrande’s 2021 interim report, the firm has \$305 billion in liabilities as of the end of June 2021, \$19.3 billion of which is composed of dollar-denominated bonds.¹⁰⁷ Total foreign holdings of these bonds are estimated to be \$7.4 billion, suggesting most holders may ultimately be mainland Chinese firms and individual investors.¹⁰⁸ Data compiled by Bloomberg shows U.S. and global investment firms, including BlackRock, UBS, HSBC, and Ashmore Group, are among the largest foreign holders, with combined holdings of \$1.3 billion.¹⁰⁹ Evergrande’s failure to meet interest payment deadlines to offshore bond holders throughout September—despite reportedly resolving some domestic payments—is heightening concerns that offshore bondholders may suffer losses in any state-led debt restructuring plan.¹¹⁰ At the

same time, the Chinese government will need to consider how Chinese companies' access to dollar funding may narrow should losses to foreign creditors occur.

A broader downturn in China's property sector poses a greater risk to U.S. investors than Evergrande's debt crisis alone. One National Bureau of Economic Research study found China's real estate sector, broadly defined, accounts for a nearly one-third of gross domestic product (GDP).¹¹¹ The troubles with Evergrande, and broader contraction in the property market from the three red lines policy, are having a clear effect on Chinese real estate. Based on floorspace, new home sales across 30 Chinese cities fell by 33 percent year-on-year in September.¹¹² The September plummet in sales is particularly disruptive for the property sector in China as September and October are peak sales months in the year and are critical for developers to meet full-year sales targets to avoid financial stress.¹¹³ As uncertainty over Evergrande's future continues to shake markets and financing channels for property developers remain tight, liquidity challenges have come into stark relief for other developers. For example, U.S.-listed Chinese property developer Xinyuan initially struggled in early October to exchange \$229 million worth of maturing bonds due October 15 for new bonds due October 2023, though bondholders eventually agreed to the exchange.¹¹⁴ U.S. investors have direct and indirect exposure to these developers' debt risks:

- *Direct exposure:* U.S. investors in China's offshore bond market are directly exposed to rising defaults among Chinese property developers. For example, in October, property developers Fantasia Holdings Group Co. Ltd. and Sinic Holdings failed to repay principal amounting to \$206 million and \$246 million, respectively, on their dollar-denominated offshore bonds.¹¹⁵ Separately, smaller developer Modern Land has asked investors that it delay a \$250 million bond payment due October 25 by three months "to avoid any potential payment default."¹¹⁶
- *Indirect exposure:* U.S. and foreign investors have indirect exposure to China's beleaguered property sector through major investment indices whose sector allocations are tied closely to sectors relevant to China's property market. The MSCI and FTSE Russell China indices, for example, feature 26.6 and 21.2 percent sector weights,* respectively, toward such sectors.¹¹⁷ U.S. and foreign investors are also indirectly exposed to China's property developers through their holdings of the banks and financial institutions that may be mobilized to extend credit to them. U.S. investor portfolios have growing exposure to China's banking sector† through MSCI and FTSE Russell's inclusion of China A-shares into their widely tracked benchmark indices.¹¹⁸

A slowdown in China's property sector threatens other global economies by reducing China's demand for commodities and raw materials. Chinese demand for commodities and raw materials used in the construction of residential and commercial real estate, such as copper, steel, and iron, is likely to fall amid a downturn in China's property markets, hurting commodity exporters.¹¹⁹ U.S. Secretary of State Antony Blinken urged Chinese policymakers to "responsibly" manage Evergrande's debt crisis given China's tight integration with the world economy.¹²⁰ Chilean Minister of Economy Lucas Palacio has expressed concern that Evergrande's debt crisis could harm Chile's copper sector, describing the heavily indebted firm as a "monster."¹²¹ Brazil is also likely to be hard hit, with two-thirds of the country's iron ore exports sold to China.¹²² According to the Foreign Trade Secretariat of the Brazilian Ministry of Economy, Brazil sold \$20.5 billion worth of iron ore to China in the first eight months of 2021, accounting for 11 percent of total exports in the same period.¹²³

Outlook for China's Policy Response

Evergrande's debt crisis is forcing policymakers to confront difficult choices, as they try to balance maintaining financial stability with imposing greater market discipline on creditors. Beijing faces a trade-off

* Specifically, as of September 30, 2021, the MSCI China Index features a 13.86 percent sector weight toward financials, 5.14 percent sector weight toward industrials, 4.39 percent sector weight toward real estate, and 3.21 percent sector weight toward materials. The FTSE Russell China Index features a 9.32 percent sector weight toward banks, 4.27 percent sector weight toward real estate, 3.85 percent sector weight toward industrial goods and services, 2.49 percent sector weight toward financial services, and 1.25 percent sector weight toward construction and materials. FTSE Russell, "FTSE China Index," September 30, 2021. <https://research.ftserussell.com/Analytics/FactSheets/temp/ba428f3a-87ae-414f-bc12-7e9158ec74d4.pdf>; MSCI, "MSCI China Index (USD)," September 30, 2021. <https://www.msci.com/documents/10199/aa99c3a4-d48b-44ac-8caa-49522caa9021>.

† If these banks included in investment indices are pressured to extend loans to China's troubled property developers, their asset quality will deteriorate to the detriment of their investors.

in deciding how to contain the fallout of Evergrande's liquidity difficulties on China's economy. Policymakers could intervene with a bailout of Evergrande in an implicit abandonment of the three red lines policy.¹²⁴ Such a course of action would relieve financial panic and provide short-term stability, but it would also reinforce implicit government guarantees of support.¹²⁵ Alternatively, Beijing could let Evergrande default on its debts in a bid to impose market discipline, but doing so would exert immense financial disruption as credit is repriced across the Chinese economy and Beijing affirms it will not always be there to bail out struggling companies.¹²⁶ While the Chinese government has taken steps toward moderating its implicit guarantee of government support in China's corporate bond markets since late 2020,^{*} its ability to do so with a nonstate company of Evergrande's size and debt profile is untested. The Chinese government's moderation of implicit guarantees of support have instead focused on allowing smaller, state-owned companies to default.

Chinese policymakers are signaling that the property sector does not fit their vision for China's economic future, but it remains unclear how Beijing will manage slowing long-term growth. Continued growth of the heavily indebted property sector does not align with Beijing's other economic policy priorities. These include the cultivation of advanced manufacturing capabilities in emerging technologies and protection of economic and social stability.¹²⁷ Demographic challenges also suggest China will struggle to fill any newly created residential real estate, with household surveys indicating home ownership[†] is already high at over 80 percent.¹²⁸ Should policymakers move to abandon property development and government-led investment as key drivers of growth, they will exacerbate China's ongoing economic slowdown and be forced to reckon with slowing long-term growth as a result.¹²⁹ Ting Lu, chief China economist at investment firm Nomura, estimates such a transition could see China's annual growth rate drop to 4 percent or lower before 2025.¹³⁰ The stakes for economic and social stability are high. Official Chinese data show that at the end of 2019 property-relevant sectors employed 125.6 million people, or 15.5 percent of China's 811 million employees.¹³¹ Despite these risks, the Chinese government's recent policy actions suggest it feels confident it can manage them. Beijing's recent regulatory tightening campaign against China's nonstate technology sector, for example, suggests China's leaders may be worrying less about the economic consequences of their policy choices.¹³²

Disclaimer: The U.S.-China Economic and Security Review Commission was created by Congress to report on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China. For more information, visit www.uscc.gov or join the Commission on Facebook!

This report is the product of professional research performed by the staff of the U.S.-China Economic and Security Review Commission and was prepared at the request of the Commission to support its deliberations. Posting of the report to the Commission's website is intended to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by Public Law 106-398 and Public Law 113-291. However, it does not necessarily imply an endorsement by the Commission, any individual Commissioner, or the Commission's other professional staff, of the views or conclusions expressed in this staff research report.

¹ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.

² U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.

^{*} A string of corporate bond defaults by state-backed Chinese companies in late 2020 rocked China's credit markets and prompted investors to reassess credit risks in China's corporate debt market. For more, see U.S.-China Economic and Security Review Commission, "SOE Defaults Shake Investor Confidence in Guarantees of Government Support," in *Economics and Trade Bulletin*, December 7, 2020, 7–8. https://www.uscc.gov/sites/default/files/2020-12/Dec_2020_Trade_Bulletin.pdf.

[†] Rural land is owned by village collectives, while the state owns all urban land in China and leases it to property holders for varying durations depending on the land use—70 years for residential use, 50 years for commercial use, and 40 years for industrial use. According to China's Property Rights Law, when the 70-year term for the land-use right for residential purposes expires, it is automatically renewed. The Property Rights Law also provides that individuals may privately own houses and apartments above the land on which they are built, but not the land itself. For further discussion of laws governing property rights in China, see Laney Zhang, "Chinese Law on Private Ownership of Real Property," *Library of Congress*, March 10, 2015. <https://blogs.loc.gov/law/2015/03/chinese-law-on-private-ownership-of-real-property/>; China Economic Review, "If Beijing Is Your Landlord, What Happens When the Lease Is Up?" June 17, 2013. <https://chinaeconomicreview.com/china-land-lease-property-law-ownership-rights/>.

- ³ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.
- ⁴ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.
- ⁵ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.
- ⁶ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.
- ⁷ Trading Economics, “China NBS Manufacturing PMI,” September 30, 2021. <https://tradingeconomics.com/china/business-confidence>; Matt Farer, “China’s Factory Activity on Shock Slowdown as Energy Crisis Hits Home,” *Guardian*, September 30, 2021. <https://www.theguardian.com/world/2021/sep/30/chinas-factory-activity-in-shock-slowdown-as-energy-crisis-hits-home>.
- ⁸ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2021. <https://www.census.gov/foreign-trade/balance/c5700.html#questions>.
- ⁹ Zhang Yu, “Zhang Yu Comments on August Trade Data: Southeast Asian Pandemic May Extend Export Prosperity” (张瑜 8 月进出口数据点评: 东南亚疫情或延长出口景气度), *Sina Finance*, September 8, 2021. Translation. <http://webcache.googleusercontent.com/search?q=cache:gU6HoRD4XXkJ:finance.sina.com.cn/zl/2021-09-08/zl-iktzscyx2895737.shtml>.
- ¹⁰ Zhang Yu, “Zhang Yu Comments on August Trade Data: Southeast Asian Pandemic May Extend Export Prosperity” (张瑜 8 月进出口数据点评: 东南亚疫情或延长出口景气度), *Sina Finance*, September 8, 2021. Translation. <http://webcache.googleusercontent.com/search?q=cache:gU6HoRD4XXkJ:finance.sina.com.cn/zl/2021-09-08/zl-iktzscyx2895737.shtml>.
- ¹¹ Center for Strategic and International Studies, “A Conversation with Ambassador Katherine Tai, U.S. Trade Representative,” October 4, 2021. <https://www.csis.org/analysis/conversation-ambassador-katherine-tai-us-trade-representative>.
- ¹² Center for Strategic and International Studies, “A Conversation with Ambassador Katherine Tai, U.S. Trade Representative,” October 4, 2021. <https://www.csis.org/analysis/conversation-ambassador-katherine-tai-us-trade-representative>.
- ¹³ Center for Strategic and International Studies, “A Conversation with Ambassador Katherine Tai, U.S. Trade Representative,” October 4, 2021. <https://www.csis.org/analysis/conversation-ambassador-katherine-tai-us-trade-representative>.
- ¹⁴ Inside U.S. Trade, “China Check-In: Coupling The Decoupling And Recoupling Talks,” October 13, 2021. <https://insidetrade.com/trade/china-check-coupling-decoupling-and-recoupling-talks>; Center for Strategic and International Studies, “A Conversation with Ambassador Katherine Tai, U.S. Trade Representative,” October 4, 2021. <https://www.csis.org/analysis/conversation-ambassador-katherine-tai-us-trade-representative>.
- ¹⁵ Inside U.S. Trade, “Tai raises industrial policy, phase-one deal concerns in ‘candid’ call with Liu,” October 8, 2021. <https://insidetrade.com/daily-news/tai-raises-industrial-policy-phase-one-deal-concerns-%E2%80%98candid%E2%80%99-call-liu>.
- ¹⁶ Alfred Cang and Krystal Chia, “China’s Heat Wave Is Pushing Coal Prices toward Record Level,” *Bloomberg*, July 15, 2021. <https://www.bloomberg.com/news/articles/2021-07-15/china-s-heat-wave-is-helping-to-drive-coal-prices-higher-again?sref=mxblZFb4>; Su-Lin Tan, “China Weighs Price Caps on Coal as Supply Shortage Sends Energy Prices Soaring,” *South China Morning Post*, June 9, 2021. <https://www.scmp.com/economy/article/3136675/china-weighs-price-caps-coal-supply-shortage-sends-energy-prices-soaring>; Elizabeth Chen, “Winter Coal Shortages Reveal Chinese Energy Vulnerabilities,” *Jamestown Foundation*, January 12, 2021. <https://jamestown.org/program/winter-coal-shortages-reveal-chinese-energy-vulnerabilities/>.
- ¹⁷ Stephen Stapczynski, “Europe’s Energy Crisis Is Coming for the Rest of the World, Too,” *Bloomberg*, September 27, 2021. <https://www.bloomberg.com/news/articles/2021-09-27/europe-s-energy-crisis-is-about-to-go-global-as-gas-prices-soar?sref=mxblZFb4>.
- ¹⁸ Jada Nagumo and Rurika Imahashi, “Indonesian and Indian Coal Miners Rally Amid China Energy Crisis,” *Nikkei Asia*, October 13, 2021. <https://asia.nikkei.com/Business/Markets/Commodities/Indonesian-and-Indian-coal-miners-rally-amid-China-energy-crisis>; Reuters, “CORRECTED – China’s September Coal Imports Rise by 76% From a Year Earlier,” October 12, 2021. <https://www.reuters.com/article/china-economy-trade-coal/corrected-chinas-september-coal-imports-rise-by-76-from-a-year-earlier-idUSB9N2OW01R>.
- ¹⁹ Muyu Xu and Shivani Singh, “China’s Power Woes May Worsen as Demand Surges Amid Coal Supply Lag,” *Reuters*, October 18, 2021. <https://www.reuters.com/world/china/chinas-power-woes-may-worsen-demand-surges-amid-coal-supply-lag-2021-10-18/>; Mary Hui, “Why Giant Coal Mines Are Part of China’s Plan to Reduce Its Dependence on Coal,” *Quartz*, July 27, 2021. <https://qz.com/2036326/chinas-low-carbon-energy-transition-goals-rely-on-big-coal-mines/>.
- ²⁰ Keith Bradsher, “Power Outages Hit China, Threatening the Economy and Christmas,” *New York Times*, September 27, 2021. <https://www.nytimes.com/2021/09/27/business/economy/china-electricity.html>.
- ²¹ Chen Xuewan et al., “Cover Story: How China Stumbled into a Giant Energy Shortage,” *Caixin Global*, October 11, 2021. <https://www.caixinglobal.com/2021-10-11/cover-story-how-china-stumbled-into-a-giant-energy-shortage-101784839.html>; Emily Feng, “Why China Has to Ration Electricity and How That Could Affect Everyone,” *NPR*, October 1, 2021. <https://www.npr.org/2021/10/01/1042209223/why-covid-is-affecting-chinas-power-rations>.
- ²² Amanda Lee, “China Coal Imports Unlikely to Increase, State Reserves Release Aimed at Steady Prices amid Strong Activity,” *South China Morning Post*, July 15, 2021. <https://www.scmp.com/economy/china-economy/article/3141237/china-coal-imports-unlikely-increase-state-reserves-release>.
- ²³ Min Zhang and Tom Daly, “Explainer: What We Know About China’s Metals Reserves Release,” *Reuters*, June 17, 2021. <https://www.reuters.com/world/china/what-we-know-about-chinas-metals-reserves-release-2021-06-17/>.
- ²⁴ Tom Wilson and David Sheppard, “China to Sell Oil from State Reserves in Bid to Contain Prices,” *Financial Times*, September 9, 2021. https://www.ft.com/content/d6d01199-ac9c-4e52-befd-f809dba59694?mc_cid=0e189d32b2&mc_eid=25c9aeea2c.
- ²⁵ Hyemin Son and Eugene Whong, “North Korean Traders Smuggle Coal to Power-Short China,” *Radio Free Asia*, October 11, 2021. <https://www.rfa.org/english/news/korea/china-coal-10112021212309.html>.
- ²⁶ China National Development and Reform Commission, *National Development and Reform Commission’s Economic Operations and Regulatory Bureau’s Responsible Comrades Respond to Reporter Questions on Work to Ensure Energy in Upcoming Winter and Spring*

- (国家发改委经济运行调节局负责同志就今冬明春能源保供工作答记者问), September 29, 2021. Translation. <https://webcache.googleusercontent.com/search?q=cache:aMh5T2NAEYYJ:https://www.pvmeng.com/2021/09/29/21657/+&cd=3&hl=en&ct=clnk&gl=us>.
- ²⁷ China National Development and Reform Commission, *National Development and Reform Commission's Economic Operations and Regulatory Bureau's Responsible Comrades Respond to Reporter Questions on Work to Ensure Energy in Upcoming Winter and Spring* (国家发改委经济运行调节局负责同志就今冬明春能源保供工作答记者问), September 29, 2021. Translation. https://www.ndrc.gov.cn/xwdt/xwfb/202109/t20210929_1298306.html?code=&state=123.
- ²⁸ Serene Cheong et al., "Physical Coal Prices in China Surge on Nationwide Shortage," *Bloomberg*, October 12, 2021. <https://www.bloomberg.com/news/articles/2021-10-12/physical-coal-prices-in-china-surge-on-nationwide-shortage?sref=mxblZFb4>.
- ²⁹ Lu Zhenhua, "China Raises Cap on Electricity Prices in Bid to Tackle Power Shortage," *Caixin Global*, October 9, 2021. <https://www.caixinglobal.com/2021-10-09/china-raises-cap-on-electricity-prices-in-bid-to-tackle-power-shortage-101784639.html>.
- ³⁰ China State Council, "Li Keqiang Presided Over an Executive Meeting of the State Council to Further Make Arrangements for the Supply of Electricity and Coal This Winter and Next Spring to Ensure the Basic Livelihood of the People and the Smooth Operation of the Economy, etc. (李克强主持召开国务院常务会议 进一步部署做好今冬明春电力和煤炭等供应 保障群众基本生活和经济平稳运行等)," October 8, 2021. http://www.gov.cn/premier/2021-10/08/content_5641406.htm.
- ³¹ Dan Murtaugh, "China Weighs Coal Market Intervention to End Stunning Rally," *Bloomberg*, October 19, 2021. https://www.bloomberg.com/news/articles/2021-10-19/china-weighs-coal-market-intervention-to-end-stunning-rally?utm_source=twitter&utm_medium=social&utm_campaign=socialflow-organic&utm_content=nextchina&sref=mxblZFb4.
- ³² Chengyao Peng and Lara Dong, "Tight Coal Supply and Climate-Related Control Result in Wide-Spread Power Outages in China," *IHS Markit*, September 29, 2021. <https://ihsmarkit.com/research-analysis/tight-coal-supply-and-climate-related-control-result.html>.
- ³³ *Bloomberg*, "China's Electricity Crunch Is World's Latest Supply-Chain Threat," September 27, 2021. <https://www.bloomberg.com/news/articles/2021-09-27/china-s-electricity-shock-is-latest-supply-chain-threat-to-world?sref=mxblZFb4>.
- ³⁴ Stella Yifan Xie et al., "China Power Outages Pose New Threat to Supplies of Chips and Other Goods," *Wall Street Journal*, September 27, 2021. <https://www.wsj.com/articles/china-power-outages-pose-new-threat-to-supplies-of-chips-and-other-goods-11632769617>.
- ³⁵ Grace Kay, "A China Power Shortage Halting Some Apple and Tesla Suppliers Threatens to Roil an Already Strained Supply Chain," *Business Insider*, September 28, 2021. <https://www.businessinsider.com/china-power-shortage-halts-apple-tesla-suppliers-stresses-supply-chain-2021-9>.
- ³⁶ International Energy Agency, "China Has Clear Pathway to Build a More Sustainable, Secure, and Inclusive Energy Future," September 29, 2021. <https://www.iea.org/news/china-has-a-clear-pathway-to-build-a-more-sustainable-secure-and-inclusive-energy-future>.
- ³⁷ Somini Sengupta and Rick Gladstone, "China Pledges to Stop Building Coal Power Plants Abroad," *New York Times*, September 21, 2021. <https://www.nytimes.com/2021/09/21/climate/china-power-plants-coal.html>.
- ³⁸ Somini Sengupta and Rick Gladstone, "China Pledges to Stop Building Coal Power Plants Abroad," *New York Times*, September 21, 2021. <https://www.nytimes.com/2021/09/21/climate/china-power-plants-coal.html>.
- ³⁹ Leslie Hook and Camilla Johnson, "US and China Climate Commitments Raise Hopes Ahead of COP26 Summit," *Financial Times*, September 23, 2021. <https://www.ft.com/content/530d4550-34dd-4b94-aa0a-ec7d442c076e>.
- ⁴⁰ Centre for Research on Energy and Clean Air, "China's Power and Steel Firms Continue to Invest in Coal Even as Emissions Surge Cools Down," August 2021. <https://energyandcleanair.org/wp/wp-content/uploads/2021/08/China-Q2-briefing-coal-steel-CO2.pdf>; Global Energy Monitor, "Global Ownership of Coal Plants," July 2021. <https://docs.google.com/spreadsheets/d/1bcWh2stWSwRdxAPot78sbMkXUcPwfS7HMJhFZ9jECw/edit#gid=1654325183>.
- ⁴¹ Leslie Hook and Camilla Johnson, "US and China Climate Commitments Raise Hopes Ahead of COP26 Summit," *Financial Times*, September 23, 2021. <https://www.ft.com/content/530d4550-34dd-4b94-aa0a-ec7d442c076e>.
- ⁴² Jess Shankleman, "There's Hope Yet for Glasgow Climate Talks after U.S., China Pledges," *Bloomberg Green*, September 24, 2021. <https://www.bloomberg.com/news/articles/2021-09-24/there-s-hope-yet-for-glasgow-climate-talks-after-u-s-china-pledges?sref=mxblZFb4>; UN Climate Change Conference, "COP26 Goals," 2021. <https://ukcop26.org/cop26-goals/>.
- ⁴³ China's National Development and Reform Commission, *Notice on Rectifying Virtual Currency "Mining" Activities* (国家发展改革委等部门关于整治虚拟货币“挖矿”活动的通知), September 24, 2021. Translation. https://webcache.googleusercontent.com/search?q=cache:ipC4SCbTALkJ:https://www.ndrc.gov.cn/xwdt/tzgg/202109/t20210924_1297475.html+&cd=2&hl=en&ct=clnk&gl=us.
- ⁴⁴ China's National Development and Reform Commission, *Notice on Rectifying Virtual Currency "Mining" Activities* (国家发展改革委等部门关于整治虚拟货币“挖矿”活动的通知), September 24, 2021. Translation. https://webcache.googleusercontent.com/search?q=cache:ipC4SCbTALkJ:https://www.ndrc.gov.cn/xwdt/tzgg/202109/t20210924_1297475.html+&cd=2&hl=en&ct=clnk&gl=us.
- ⁴⁵ China's National Development and Reform Commission, *Notice on Rectifying Virtual Currency "Mining" Activities* (国家发展改革委等部门关于整治虚拟货币“挖矿”活动的通知), September 24, 2021. Translation. https://webcache.googleusercontent.com/search?q=cache:ipC4SCbTALkJ:https://www.ndrc.gov.cn/xwdt/tzgg/202109/t20210924_1297475.html+&cd=2&hl=en&ct=clnk&gl=us.
- ⁴⁶ Andrey Sergeenkov, "China Crypto Bans: A Complete History," *Coindesk*, September 29, 2021. <https://www.coindesk.com/learn/china-crypto-bans-a-complete-history/>; People's Bank of China, *Five Ministries Including the People's Bank of China Issued a Notice on Preventing Bitcoin Risks* (人民银行等五部委发布关于防范比特币风险的通知), December 5, 2013. Translation.

- http://webcache.googleusercontent.com/search?q=cache:Qqv486tdOfEJ:www.gov.cn/gzdt/2013-12/05/content_2542751.htm+&cd=2&hl=en&ct=clnk&gl=us.
- ⁴⁷ Andrey Sergeenkov, “China Crypto Bans: A Complete History,” *Coindesk*, September 29, 2021. <https://www.coindesk.com/learn/china-crypto-bans-a-complete-history/>;
- ⁴⁸ Andrey Sergeenkov, “China Crypto Bans: A Complete History,” *Coindesk*, September 29, 2021. <https://www.coindesk.com/learn/china-crypto-bans-a-complete-history/>.
- ⁴⁹ Andrey Sergeenkov, “China Crypto Bans: A Complete History,” *Coindesk*, September 29, 2021. <https://www.coindesk.com/learn/china-crypto-bans-a-complete-history/>.
- ⁵⁰ Gian Volpicelli, “China’s Sweeping Cryptocurrency Ban Was Inevitable,” *Wired*, September 30, 2021. <https://www.wired.com/story/chinas-sweeping-cryptocurrency-ban-inevitable/>.
- ⁵¹ Yaya J. Fanusie and Emily Jin, “China’s Digital Currency: Adding Financial Data to Digital Authoritarianism,” *Center for a New American Security*, January 2021, 11–13. <https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/CNAS-Report-Chinas-Digital-Currency-Jan-2021-final.pdf?mtime=20210125173901&focal=none>.
- ⁵² Gian Volpicelli, “China’s Sweeping Cryptocurrency Ban Was Inevitable,” *Wired*, September 30, 2021. <https://www.wired.com/story/chinas-sweeping-cryptocurrency-ban-inevitable/>.
- ⁵³ Gian Volpicelli, “China’s Sweeping Cryptocurrency Ban Was Inevitable,” *Wired*, September 30, 2021. <https://www.wired.com/story/chinas-sweeping-cryptocurrency-ban-inevitable/>.
- ⁵⁴ Cambridge Bitcoin Electricity Consumption Index, “Bitcoin Mining Map.” https://cbeci.org/mining_map.
- ⁵⁵ Rystad Energy, “Bit Late for Bitcoin: How China’s Crackdown Is Reducing More Emissions than Whole Countries Emit,” July 14, 2021. <https://www.rystadenergy.com/newsevents/news/press-releases/bit-late-for-bitcoin-how-chinas-crackdown-is-reducing-more-emissions-than-whole-countries-emit/>.
- ⁵⁶ Rystad Energy, “Bit Late for Bitcoin: How China’s Crackdown Is Reducing More Emissions than Whole Countries Emit,” July 14, 2021. <https://www.rystadenergy.com/newsevents/news/press-releases/bit-late-for-bitcoin-how-chinas-crackdown-is-reducing-more-emissions-than-whole-countries-emit/>.
- ⁵⁷ Liu Zhen, “Chinese President Xi Jinping Calls for More Research, Investment into Blockchain Technology,” *South China Morning Post*, October 26, 2019. <https://www.scmp.com/news/china/diplomacy/article/3034716/chinese-president-xi-jinping-calls-more-research-investment>; *Xinhua*, “During the 18th Collective Study Session of the Political Bureau of the Central Committee, Xi Jinping Emphasized the Use of Blockchain as an Important Breakthrough for Independent Innovation of Core Technologies and Accelerated the Development of Blockchain Technology and Industrial Innovation” (习近平在中央政治局第十八次集体学习时强调 把区块链作为核心技术自主创新重要突破口 加快推动区块链技术和产业创新发展), October 25, 2019. http://www.xinhuanet.com/2019-10/25/c_1125153665.htm.
- ⁵⁸ *21st Century Business Herald*, “Central Bank Digital Research Institute Talks about Blockchain: Technical Decentralization Does Not Mean Decentralization of Management” (央行数研所谈区块链：技术上去中心化并不等于管理去中心化), September 13, 2021. <https://finance.sina.com.cn/blockchain/roll/2021-09-13/doc-iktzscyx3969921.shtml>.
- ⁵⁹ Yaya J. Fanusie, “Don’t Sleep on China’s New Blockchain Internet,” *Lawfare*, November 10, 2020. <https://www.lawfareblog.com/dont-sleep-chinas-new-blockchain-internet>.
- ⁶⁰ Yaya J. Fanusie, “Don’t Sleep on China’s New Blockchain Internet,” *Lawfare*, November 10, 2020. <https://www.lawfareblog.com/dont-sleep-chinas-new-blockchain-internet>.
- ⁶¹ *Xinhua*, “Full Text of Chinese President Xi Jinping’s Remarks at Global Trade in Services Summit of 2021 Chin International Fair for Trade in Services,” September 2, 2021. http://www.news.cn/english/2021-09/02/c_1310164511.htm.
- ⁶² *Xinhua*, “Full Text of Chinese President Xi Jinping’s Remarks at Global Trade in Services Summit of 2021 Chin International Fair for Trade in Services,” September 2, 2021. http://www.news.cn/english/2021-09/02/c_1310164511.htm.
- ⁶³ Tanner Brown, “China Is Planning a New Beijing Stock Exchange. What Investors Need to Know,” *Barron’s*, September 7, 2021. <https://www.barrons.com/articles/what-to-know-about-the-proposed-beijing-stock-exchange-51631022582>.
- ⁶⁴ Enoch Yiu, “Veteran Regulator and Market Reformer Picked as Beijing Stock Exchange Boss,” *South China Morning Post*, September 6, 2021. <https://www.scmp.com/business/banking-finance/article/3147759/veteran-regulator-and-market-reformer-xu-ming-picked>.
- ⁶⁵ Arendse Huld, “The New Beijing Stock Exchange for SMEs—What We Know,” *China Briefing*, September 10, 2021. <https://www.china-briefing.com/news/beijing-stock-exchange-for-smes-what-we-know/>.
- ⁶⁶ Arendse Huld, “The New Beijing Stock Exchange for SMEs—What We Know,” *China Briefing*, September 10, 2021. <https://www.china-briefing.com/news/beijing-stock-exchange-for-smes-what-we-know/>; Tanner Brown, “China Is Planning a New Beijing Stock Exchange. What Investors Need to Know,” *Barron’s*, September 7, 2021. <https://www.barrons.com/articles/what-to-know-about-the-proposed-beijing-stock-exchange-51631022582>.
- ⁶⁷ Lin Yang, “China’s New Stock Exchange Eyes Small, Medium-Sized Companies,” *Voice of America*, September 19, 2021. <https://www.voanews.com/a/china-s-new-stock-exchange-eyes-small-medium-sized-companies/6232320.html>; Franklin Allen et al., “The Development of the Chinese Stock Market” in Marlene Amstad, Guofeng Sun, and Wei Xiong, eds., *The Handbook of China’s Financial System*, Princeton University Press, 2020, 289.
- ⁶⁸ People’s Bank of China via CEIC database.
- ⁶⁹ China Securities Regulatory Commission, *Persist in Rectifying Misalignments in Development and Highlight the Characteristics of Building the Beijing Stock Exchange to Better Serve the High-Quality Development of Innovative Small- and Medium-Sized Enterprises* (坚持错位发展、突出特色建设北京证券交易所 更好服务创新型中小企业高质量发展), September 2, 2021. Translation. http://www.csrc.gov.cn/pub/newsite/zjhxwfb/xwdd/202109/t20210902_404638.html.

- ⁷⁰ Arendse Huld, “The New Beijing Stock Exchange for SMEs—What We Know,” *China Briefing*, September 10, 2021. <https://www.china-briefing.com/news/beijing-stock-exchange-for-smes-what-we-know/>.
- ⁷¹ China’s State Council, *Li Keqiang Presides over Executive Meeting of the State Council to Make Arrangements to Increase Relief and Assistance for Market Entities, Especially SMEs* (李克强主持召开国务院常务会议 部署加大对市场主体特别是中小微企业纾困帮扶力度 加强政策储备做好跨周期调节等), September 1, 2021. Translation. http://www.gov.cn/premier/2021-09/01/content_5634753.htm; Tom Hancock, Yinan Zhao, and Yujing Liu, “China Steps Up Monetary Support for Economy Hit by Virus,” *Bloomberg*, September 1, 2021. <https://www.bloomberg.com/news/articles/2021-09-01/china-offers-funds-to-banks-to-boost-loans-to-small-firms?sref=mxblZFb4>.
- ⁷² *Economist*, “China Turns to New Stock Exchanges to Channel Finance to Innovative Firms,” September 11, 2021. <https://www.economist.com/finance-and-economics/2021/09/11/china-turns-to-new-stock-exchanges-to-channel-finance-to-innovative-firms>.
- ⁷³ Samuel Shen, “China’s New Stock Exchange Plans Fuel Fears of a Bourse War,” *Reuters*, September 3, 2021. <https://www.reuters.com/world/china/chinas-new-stock-exchange-plans-fuel-fears-bourse-war-2021-09-03/>.
- ⁷⁴ Narayanan Somasundaram, “Evergrande on Countdown to Default After More Missed Payments,” *Nikkei Asia*, October 12, 2021. <https://asia.nikkei.com/Business/Markets/China-debt-crunch/Evergrande-on-countdown-to-default-after-more-missed-payments>.
- ⁷⁵ *Bloomberg News*, “Markets Await Outcome for Opaque Bond Tied to Evergrande,” October 2, 2021. <https://www.bloomberg.com/news/articles/2021-10-02/nervy-markets-await-outcome-for-opaque-bond-tied-to-evergrande?sref=mxblZFb4>.
- ⁷⁶ Narayanan Somasundaram, “China Evergrande Faces Triple Deadline for Bond Interest Payments,” *Nikkei Asia*, October 11, 2021. <https://asia.nikkei.com/Business/Markets/China-debt-crunch/China-Evergrande-faces-triple-deadline-for-bond-interest-payments>.
- ⁷⁷ Thomas Hale, Tabby Kinder, and Hudson Lockett, “China’s Central Bank Says Spillover From Evergrande Crisis ‘Controllable,’” *Financial Times*, October 15, 2021. <https://www.ft.com/content/3d797dac-85f4-409d-b1e9-6e8ffb9fcc78>.
- ⁷⁸ *Bloomberg News*, “China Breaks Silence on Evergrande, Says Risks Controllable,” October 15, 2021. <https://www.bloomberg.com/news/articles/2021-10-15/china-breaks-silence-on-evergrande-saying-risks-controllable?sref=mxblZFb4>.
- ⁷⁹ Pearl Liu, “China Evergrande Turns to Advisers Who Helped Fix Debt Debacles at Lehman, Noble Group, Luckin Coffee as Investors Brace for Losses,” *South China Morning Post*, September 14, 2021. <https://www.scmp.com/business/companies/article/3148678/china-evergrande-turns-advisers-who-helped-fix-debt-implosions>; Clare Jim and Jing Xu, “China Asking State-Backed Firms to Pick Up Evergrande Assets – Sources,” *Reuters*, September 28, 2021. <https://www.reuters.com/world/china/china-asking-state-backed-firms-pick-up-evergrande-assets-sources-2021-09-28/>.
- ⁸⁰ China Evergrande Group, “Trading Halt,” Hong Kong Stock Exchange, October 4, 2021. <https://doc.irasia.com/listco/hk/evergrande/announcement/a211004.pdf>; Hopson Development Holdings Limited, “Trading Halt,” Hong Kong Stock Exchange, October 4, 2021. <https://www1.hkexnews.hk/listedco/listconews/sehk/2021/1004/2021100400101.pdf>.
- ⁸¹ Tom Westbrook and Donny Kwok, “Evergrande Eyeing \$5 Bln Property Unit Sale; Rival Fantasia Misses Payment,” *Reuters*, October 4, 2021. <https://www.reuters.com/business/china-evergrande-share-trading-halted-hong-kong-2021-10-04/>.
- ⁸² Narayanan Somasundaram, “China Evergrande Faces Triple Deadline for Bond Interest Payments,” *Nikkei Asia*, October 11, 2021. <https://asia.nikkei.com/Business/Markets/China-debt-crunch/China-Evergrande-faces-triple-deadline-for-bond-interest-payments>.
- ⁸³ *Bloomberg*, “China’s Three Red Lines for Home Developers,” October 18, 2020. <https://www.straitstimes.com/business/invest/chinas-three-red-lines-for-home-developers-0>.
- ⁸⁴ Pearl Liu, “Chinese Developers Face Potential Price War in Second Half amid Glut as State Issues ‘Red Lines’ in Deleveraging Campaign,” *South China Morning Post*, September 2, 2020. <https://www.scmp.com/business/china-business/article/3099701/chinese-developers-face-potential-price-war-second-half>.
- ⁸⁵ *Bloomberg*, “China’s Three Red Lines for Home Developers,” October 18, 2020. <https://www.straitstimes.com/business/invest/chinas-three-red-lines-for-home-developers-0>.
- ⁸⁶ *China Finance News*, “Chinese Households Have an Average Asset of 1.6 Million, and Nearly 80% of the Money Goes to Buy a House,” (中国家庭户均资产 160 万，近 80% 的钱都拿去买房) January 29, 2019. Translation. <https://www.jiemian.com/article/2834339.html>.
- ⁸⁷ Bian Jing, “Focus: Evergrande Is Faltering, Citing Concerns About China’s Credit Contraction” (焦点：恒大摇摇欲坠引中国信用收缩担忧 但“永煤之殇”料难重现), *Reuters*, September 27, 2021. Translation. <https://cn.reuters.com/article/evergrande-chinese-credit-concern-0927-m-idCNKBS2GN0W5>.
- ⁸⁸ David Scanlan and Cathy Chan, “What Is China Evergrande and Why Is It in Trouble?” *Washington Post*, September 21, 2021. https://www.washingtonpost.com/business/what-is-china-evergrande-and-why-is-it-in-trouble/2021/09/21/f85ee748-1a93-11ec-bea8-308ea134594f_story.html.
- ⁸⁹ Shuli Ren, “Will China Help with Huarong’s \$22 Billion Bill? Don’t Hold Your Breath,” *Bloomberg*, April 11, 2021. <https://www.bloomberg.com/opinion/articles/2021-04-11/huarong-s-ex-boss-was-executed-for-bribery-and-bigamy-but-china-s-not-satisfied?sref=mxblZFb4>.
- ⁹⁰ *Bloomberg*, “Inside Huarong Bailout that Rocked China’s Financial Elite,” August 30, 2021. <https://www.bloomberg.com/news/articles/2021-08-30/inside-the-huarong-bailout-that-rocked-china-s-financial-elite?sref=mxblZFb4>.
- ⁹¹ Logan Wright and Allen Feng, “Tests of Credibility: Huarong, Evergrande, and Regulatory Tightening,” *Rhodium Group*, August 19, 2021, 3-4.

- ⁹² Zhou Xin, “China Evergrande Is Not a Lehman Brothers Moment, but Its Fate Spells Trouble for Long-Term Growth,” *South China Morning Post*, September 20, 2021. <https://www.scmp.com/economy/china-economy/article/3149412/china-evergrande-not-lehman-brothers-moment-its-fate-spells>.
- ⁹³ Trivium China, “Trivium China Flash Talk: Evergrande on the Brink – Where to From Here?” September 22, 2021.
- ⁹⁴ Jack Denton and Pierre Briançon, “Evergrande Gets Instructions from Chinese Authorities Reportedly Preparing for Its Failure,” *Barron's*, September 23, 2021. <https://www.barrons.com/articles/asian-markets-evergrande-deadline-51632391315>.
- ⁹⁵ Alexandra Stevenson and Cao Li, “Why China’s Economy Is Threatened by a Property Giant’s Debt Problems,” *New York Times*, October 12, 2021. <https://www.nytimes.com/article/evergrande-debt-crisis.html>.
- ⁹⁶ People’s Bank of China, *The Monetary Policy Committee of the People’s Bank of China Convenes the Regular Meeting of the Third Quarter of 2021*, (中国人民银行货币政策委员会召开 2021 年第三季度例会) September 27, 2021. <http://webcache.googleusercontent.com/search?q=cache:L1KGQ9dUOHcJ:www.pbc.gov.cn/WZWSREL2dvdXRvbmDqaWFvbGllLzExMzQ1Ni8xMTM0NjYvNDM1MDY0Ny9pbmRleC5odG1s+&cd=1&hl=en&ct=clnk&gl=us>.
- ⁹⁷ Xinhua, “China’s Central Bank Emphasizes Support for Small Business,” July 5, 2021. http://www.xinhuanet.com/english/2021-07/05/c_1310044409.htm; *Global Times*, “International MSMEs Day: China Vows More Support for Small Businesses,” June 27, 2021. <https://www.globaltimes.cn/page/202106/1227197.shtml>; *China Briefing*, “China’s Support Policies for Businesses under COVID-19: A Comprehensive List,” July 3, 2020. <https://www.china-briefing.com/news/china-covid-19-policy-tracker-benefiting-business-enterprises-comprehensive-updated-list/>.
- ⁹⁸ Shehzad Qazi and Derek Scissors, “Evergrande’s Real Lesson: The Party Runs China’s Markets,” *Barron's*, September 22, 2021. <https://www.barrons.com/articles/china-evergrande-lehman-moment-financial-crisis-51632316588>.
- ⁹⁹ People’s Bank of China, *The Monetary Policy Committee of the People’s Bank of China Convenes the Regular Meeting of the Third Quarter of 2021*, (中国人民银行货币政策委员会召开 2021 年第三季度例会) September 27, 2021. <http://webcache.googleusercontent.com/search?q=cache:L1KGQ9dUOHcJ:www.pbc.gov.cn/WZWSREL2dvdXRvbmDqaWFvbGllLzExMzQ1Ni8xMTM0NjYvNDM1MDY0Ny9pbmRleC5odG1s+&cd=1&hl=en&ct=clnk&gl=us>.
- ¹⁰⁰ Bloomberg, “China Banks Downplay Risks after Evergrande Missed Payments,” September 22, 2021. <https://www.bloomberg.com/news/articles/2021-09-23/china-banks-downplay-risks-after-evergrande-missed-loan-payments?sref=mxblZFb4>; Trivium China, “Trivium China Flash Talk: Evergrande on the Brink – Where to From Here?” September 22, 2021.
- ¹⁰¹ Allen Feng, Endeavour Tian, Logan Wright, “Land Sales: The Next Stage of China’s Property Slowdown,” *Rhodium Group*, September 23, 2021.
- ¹⁰² Serena Ng and Xie Yu, “China Evergrande to Sell Bank Stake to State-Owned Firm for \$1.5 Billion,” *Wall Street Journal*, September 29, 2021. https://www.wsj.com/articles/evergrande-to-raise-1-5-billion-by-selling-bank-stake-to-state-owned-firm-11632880557?utm_campaign=Marketing_Cloud&utm_medium=email&utm_source=USCBC+News+Overview+9.29.2021&%20utm_content=https%3a%2f%2fwww.wsj.com%2farticles%2fevergrande-to-raise-1-5-billion-by-selling-bank-stake-to-state-owned-firm-11632880557.
- ¹⁰³ Weizhen Tan, “Evergrande to Sell \$1.5 Billion Stake in Chinese Bank, as It Faces Another Bond Interest Payment,” *CNBC*, September 28, 2021. <https://www.cnn.com/2021/09/29/evergrande-debt-crisis-to-sell-stake-in-bank-faces-bond-payment.html>.
- ¹⁰⁴ Clare Jim and Jing Xu, “China Asking State-Backed Firms to Pick Up Evergrande Assets,” *Reuters*, September 28, 2021. <https://www.reuters.com/world/china/asking-state-backed-firms-pick-up-evergrande-assets-sources-2021-09-28/>.
- ¹⁰⁵ Andrew Galbraith, Xiao Han, and Clare Jim, “Evergrande Misses Second Offshore Bond Payment,” *Reuters*, September 30, 2021. <https://www.reuters.com/world/china/china-evergrande-shares-swing-bondholders-await-word-payments-2021-09-30/>; Joe Weisenthal and Tracy Alloway, “Transcript: Understanding Evergrande, the Troubled Chinese Real Estate Giant,” *Bloomberg*, September 21, 2021. <https://www.bloomberg.com/news/articles/2021-09-21/transcript-understanding-evergrande-the-troubled-chinese-real-estate-giant?sref=mxblZFb4>.
- ¹⁰⁶ Allen Feng and Logan Wright, “The Evergrande Options Menu,” *Rhodium Group*, September 28, 2021.
- ¹⁰⁷ China Evergrande Group, *2021 Interim Report*, August 31, 2021, 4, 31. <https://doc.irasia.com/listco/hk/evergrande/interim/2021/intrep.pdf>.
- ¹⁰⁸ Allen Feng and Logan Wright, “The Evergrande Options Menu,” *Rhodium Group*, September 28, 2021, 2–3; Martin Farrer, “Evergrande Investors Face 75% Hit as Company Edges Closer to Restructure,” *Guardian*, September 13, 2021. <https://www.theguardian.com/world/2021/sep/13/evergrande-investors-face-75-hit-as-company-edges-closer-to-restructure>.
- ¹⁰⁹ Narayanan Somasundaram, “BlackRock, UBS and HSBC Evergrande Bond Holdings Rise,” *Nikkei Asia*, September 21, 2021. <https://asia.nikkei.com/Business/Markets/China-debt-crunch/BlackRock-UBS-and-HSBC-Evergrande-bond-holdings-rise>.
- ¹¹⁰ Rebecca Choong Wilkins et al., “Evergrande Investors Say They’re Yet to Get USD Bond Coupon,” *Bloomberg*, September 29, 2021. <https://www.bloomberg.com/news/articles/2021-09-29/evergrande-investors-say-they-re-yet-to-get-dollar-bond-coupon?sref=mxblZFb4>; Narayanan Somasundaram, “China Evergrande Misses Bond Payment Deadline,” *Nikkei Asia*, September 24, 2021. <https://asia.nikkei.com/Business/Markets/China-debt-crunch/China-Evergrande-misses-bond-payment-deadline>.
- ¹¹¹ Kenneth Rogoff and Yuan Chen Yang, “Peak China Housing,” *NBER Working Paper 27697*, August 2020, 36. https://scholar.harvard.edu/files/rogoff/files/nber_27697_peak_china_housing_1.pdf.
- ¹¹² Jacky Wang, “China’s Property Fantasia Turns Nightmarish” (花样年违约揭开中国房地产噩梦), *Wall Street Journal* (Chinese Edition), October 7, 2021. Translation. <https://cn.wsj.com/articles/%E8%8A%B1%E6%A0%B7%E5%B9%B4%E8%BF%9D%E7%BA%A6%E6%8F%AD%E5%BC%80%E4%B8%AD%E5%9B%BD%E6%88%BF%E5%9C%B0%E4%BA%A%E5%99%A9%E6%A2%A6-11633578009>.

-
- ¹¹³ Allen Feng and Logan Wright, “Property: Sink or Swim,” *Rhodium Group*, September 14, 2021, 1.
- ¹¹⁴ Andrew Galbraith, “Chinese Developer Xinyuan Averts Default, Loan Curbs Loosen,” *Reuters*, October 15, 2021. <https://www.reuters.com/article/china-evergrande-debt-idCNL1N2RB0J4>; *South China Morning Post*, “Xinyuan Adds to Signs of China Property Distress as Debt Exchange Garner Insufficient Support Before Friday’s Repayment Deadline,” October 11, 2021. <https://www.scmp.com/business/companies/article/3151900/xinyuan-adds-signs-china-distress-debt-exchange-garners>.
- ¹¹⁵ *Financial Times*, “Chinese Developer Sinic Defaults as Evergrande Deadline Looms,” October 19, 2021. <https://www.ft.com/content/1e79c466-c813-41de-a0b3-cbd27a983aaa>; Wang Jing and Denise Jia, “Developer Fantasia Holdings Defaults on \$206 Million Note,” *Caixin Global*, October 7, 2021. <https://www.caixinglobal.com/2021-10-07/developer-fantasia-holdings-defaults-on-206-million-note-101783595.html>.
- ¹¹⁶ Andrew Galbraith and Marc Jones, “China’s Bond Markets Slump Again as New Evergrande Deadline Passes,” *Reuters*, October 11, 2021. <https://www.reuters.com/world/china/china-evergrande-bondholders-brace-mondays-coupon-deadline-2021-10-11/>.
- ¹¹⁷ FTSE Russell, “FTSE China Index,” August 31, 2021. <https://research.ftserussell.com/Analytics/FactSheets/temp/c6ea023d-40b3-4cd9-b31f-66beb2e64962.pdf>; MSCI, “MSCI China Index (USD),” August 31, 2021. <https://www.msci.com/documents/10199/aa99c3a4-d48b-44ac-8caa-49522caa9021>.
- ¹¹⁸ Virgilio Bisio, “China’s Banking Sector Risks and Implications for the United States,” *U.S.-China Economic and Security Review Commission*, May 27, 2020, 19. https://www.uscc.gov/sites/default/files/2020-05/Chinas_Banking_Sector_Risks_and_Implications_for_US.pdf.
- ¹¹⁹ Patti Domm, “The Global Economy Could Feel the Effects of China’s Evergrande Crisis. Here’s What Investors Should Know,” *CNBC*, September 20, 2021. <https://www.cnbc.com/2021/09/20/chinas-evergrande-crisis-could-inflict-pain-on-the-world-economy.html>.
- ¹²⁰ U.S. Department of State, *Secretary Antony J. Blinken with Francine Lacqua of Bloomberg*, October 6, 2021. <https://www.state.gov/secretary-antony-j-blinken-with-francine-lacqua-of-bloomberg/>.
- ¹²¹ *El Desconcierto*, “Minister Palacios is Worried About Evergrande Crisis: ‘We Are Talking About a Monster,’” (Ministro Palacios preocupado por crisis de Evergrande: “Estamos hablando de un monstruo”). September 21, 2021. Translation. <https://www.eldesconcierto.cl/economia/2021/09/21/ministro-palacios-preocupado-por-crisis-de-evergrande-estamos-hablando-de-un-monstruo.html>.
- ¹²² *Latin America Business Stories*, “China’s Evergrande Problem May Dent Global Brazil’s Growth,” September 25, 2021. <https://labsnews.com/en/news/economy/china-evergrande-problem-global-brazil-growth/>.
- ¹²³ *Latin America Business Stories*, “China’s Evergrande Problem May Dent Global Brazil’s Growth,” September 25, 2021. <https://labsnews.com/en/news/economy/china-evergrande-problem-global-brazil-growth/>.
- ¹²⁴ Allen Feng and Logan Wright, “The Evergrande Options Menu,” *Rhodium Group*, September 28, 2021, 3.
- ¹²⁵ Allen Feng and Logan Wright, “The Evergrande Options Menu,” *Rhodium Group*, September 28, 2021, 3; *ChinaTalk*, “Explaining Evergrande,” September 27, 2021. <https://chinatalk.substack.com/p/explaining-evergrande>.
- ¹²⁶ Michael Pettis, “What Does Evergrande Meltdown Mean for China,” *Carnegie Endowment for International Peace*, September 20, 2021. <https://carnegieendowment.org/chinafinancialmarkets/85391>.
- ¹²⁷ Emma Dong et al., “Evergrande Debt Crisis Is Financial Stress Test No One Wanted,” *Bloomberg*, September 22, 2021. <https://www.bloomberg.com/news/features/2021-09-22/china-s-evergrande-debt-crisis-is-stress-test-no-one-wanted?sref=mxblZFb4>.
- ¹²⁸ Allen Feng and Logan Wright, “Property: Sink or Swim,” *Rhodium Group*, September 14, 2021, 6.
- ¹²⁹ Michael Pettis, “What Does Evergrande Meltdown Mean for China,” *Carnegie Endowment for International Peace*, September 20, 2021. <https://carnegieendowment.org/chinafinancialmarkets/85391>; Allen Feng and Logan Wright, “Property: Sink or Swim,” *Rhodium Group*, September 14, 2021, 6.
- ¹³⁰ James Kyngge and Sun Yu, “Evergrande and the End of China’s ‘Build, Build, Build’ Model,” *Financial Times*, September 21, 2021. <https://www.ft.com/content/ea1b79bf-cbe3-41d9-91da-0a1ba692309f>.
- ¹³¹ China’s National Bureau of Statistics, *2020 China Statistical Yearbook: Employment and Wages*, 2020. <http://www.stats.gov.cn/tjsj/ndsj/2020/indexeh.htm>.
- ¹³² *ChinaTalk*, “Explaining Evergrande,” September 27, 2021. <https://chinatalk.substack.com/p/explaining-evergrande>.