# U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin



#### **October 7, 2020**

## **Highlights of This Month's Edition**

- **Bilateral trade:** The U.S. goods trade deficit with China totaled \$29.8 billion in August 2020; year-to-date, the goods deficit was \$193.1 billion, down 16.5 percent year-on-year.
- U.S.-China trade tensions: The U.S. Department of Commerce (DOC) imposed export restrictions on SMIC,
  China's largest semiconductor manufacturer, dealing a further setback to China's costly but unfulfilled efforts
  to establish self-sufficiency in the industry; DOC clarified prohibited transactions for TikTok and WeChat, but
  questions remain on process, appropriate legal tools, and the future of TikTok's ownership; China's Ministry
  of Commerce released a guiding framework for its unreliable entity list without publishing the list itself.
- **Financial markets:** Leading index provider FTSE Russell announces it will include Chinese government bonds in its landmark global fixed-income investment index, elevating the international profile of China's financial markets and significantly expanding Beijing's access to foreign capital.
- **Policy trends in China's economy:** A new government plan to strengthen investment in strategic emerging industries and establish industrial clusters shows industrial policy remains a cornerstone of China's economic management; CPP releases the *Opinions on Strengthening the United Front Work of the Private Economy in a New Era*, raising further concerns about Chinese government's control of the domestic private sector.
- In focus China's 2060 carbon neutrality pledge: At the UN General Assembly, the Chinese government pledged to achieve carbon neutrality by 2060, but ongoing investments in coal both domestically and abroad undercut these promises.

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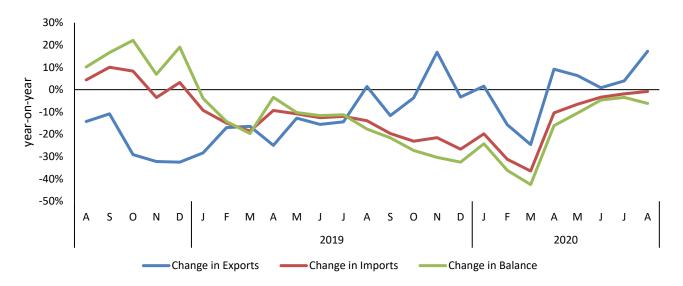
#### **Bilateral Trade**

#### U.S. Trade Deficit with China Falls in August as Exports Rise Sharply

The U.S. trade deficit in goods with China stood at \$29.8 billion in August 2020, down 6.2 percent year-on-year (see Figure 1). In contrast, the U.S. trade deficit in goods with the world reached a record high of \$83.9 billion. Strong performance by U.S. goods exports helped drive down the U.S.-China trade deficit. In August 2020, U.S. exports to China totaled \$11 billion, up 17.2 percent from August 2019—the largest year-on-year growth in monthly exports since March 2018. U.S. imports of Chinese goods fell 0.8 percent year-on-year to \$40.8 billion. U.S. imports from China in August were the highest so far in 2020, a sign of continuing economic recovery in both the United States and China. 4

In the first eight months of the year, U.S. exports to China totaled \$69.6 billion, down 0.6 percent over the same time period last year. <sup>5</sup> U.S. goods imports from China year-to-date stood at \$262.7 billion, down 12.8 percent year-on-year. <sup>6</sup> The U.S. trade deficit in goods with China through August was \$193.1 billion, down 16.5 percent year-on-year. <sup>7</sup> China continues to lag significantly behind its Phase One purchase commitments: according to analysis by Chad Bown, an economist at the Peterson Institute for International Economics, China's purchases of U.S. goods covered by the Phase One trade deal are at half of their year-to-date targets. <sup>8</sup>

Figure 1: U.S. Exports to, Imports from, and the Trade Deficit with China, August 2018-August 2020



Source: U.S. Census Bureau, Trade in Goods with China, October 6, 2020. https://www.census.gov/foreign-trade/balance/c5700.html.

#### **U.S.-China Trade Tensions**

#### **Commerce Department Restricts Exports to Top Chinese Semiconductor Firm**

On September 25, the U.S. Department of Commerce (DOC) imposed restrictions on exports to Semiconductor Manufacturing International Corporation (SMIC), China's largest semiconductor manufacturer. In a letter sent to some of SMIC's suppliers and customers, DOC indicated exports to SMIC may be diverted to military end use. Some SMIC suppliers will now have to obtain a license to export technology, including semiconductor

manufacturing equipment and software, to SMIC.\* <sup>10</sup> The restrictions also impact U.S. SMIC costumers that transfer semiconductor designs to SMIC to fabricate, including chip-designer Qualcomm, which accounts for 8.6 percent of SMIC's revenue.<sup>11</sup>

In April 2020, DOC tightened export controls on potential military use of U.S. technology in China, Russia, and Venezuela through programs to integrate the civilian and defense sectors. <sup>12</sup> Although SMIC's spokesperson denied the firm supplies China's military, an investigation by SOS International uncovered Chinese military researchers describing using SMIC equipment, as well as SMIC ties to Chinese defense contractor Chinese Electronics Technology Group Corporation (CETC). <sup>13</sup>

SMIC's inability to access U.S. semiconductor manufacturing equipment and software delivers a further setback to China's semiconductor industry, after DOC's Bureau of Industry and Security restricted sale of any chips made using U.S. technology to telecommunications firm Huawei in May 2020.<sup>† 14</sup> SMIC is China's largest semiconductor manufacturer, accounting for 5 percent of global output in 2020.<sup>15</sup> China's government has unsuccessfully tried to close the gap for decades, redoubling efforts with the 2014 launch of a \$150 billion fund aimed at establishing a self-sufficient Chinese semiconductor industry.<sup>16</sup> Despite such investments, China lags behind the United States, Taiwan, Japan, and South Korea in producing cutting edge-chips used in flagship smart phones and other consumer electronics.<sup>17</sup>

The new licensing requirements come after earlier reporting in September that DOC was contemplating adding SMIC to the Entity List. As of October 5, the department has yet to issue an announcement including SMIC on the Entity List, which would formalize restrictions on exporting controlled technologies to the firm without a license and would include a presumption of denial for license applications. In addition to limiting U.S. exports to firms suspected of transferring technology to China's military, DOC has added 38 companies involved in mass detention

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<sup>\*</sup> U.S. semiconductor manufacturing equipment maker LAM research is likely among the firms most impacted. LAM is SMIC's largest U.S. vendor, accounting for 8.5 percent of SMIC's expenditure as of May 2020 and earning 1.1 percent of its revenue from sales to SMIC. More explicit guidance from DOC or a list of companies contacted had not been released as of October 7, 2020. On October 5, 2020, SMIC's Hong Kong-listed subsidiary released a public statement to shareholders indicating it was engaged in "preliminary discussions" with DOC, but did not provide further detail on the scope of the restrictions. Semiconductor Manufacturing International Corporation, "Further News about U.S. Export Restrictions (關於美國出口限制的進一步消息)," Hong Kong Exchanges and Clearing Limited, October 5, 2020. Translation. https://web.archive.org/web/20201005035926/https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1004/2020100400080\_c.pdf; Robert Castellano, "Micron and Semiconductor Manufacturing International: Headwinds for Applied Materials and Lam Research," Seeking Alpha, October 2020. https://seekingalpha.com/article/4377261-micron-and-semiconductor-manufacturing-international-headwinds-forapplied-materials-and-lam; Lam Ka-sing, "ASML, Huawei and Qualcomm May Be Caught in the Crossfire as SMIC Runs Risk of US Tech War," South ChinaPost, Blacklist Escalating Morning September https://www.scmp.com/business/companies/article/3100428/explainer-asml-huawei-and-qualcomm-may-be-caught-crossfire-smic.

<sup>†</sup> Notably, these companies include SMIC, which drew 18.7 percent of its revenue from Huawei but had to cancel contracts with the telecommunications firm because it uses U.S. technology to manufacture semiconductors. In August 2020, the bureau tightened the interim final rule initially issued in May to close a further loophole enabling Huawei to import chips contracted by a non-U.S. chip designer from a third party. Yuan Yang et al., "China's Biggest Chipmaker SMIC Hit by US Sanctions," Financial Times, September 27, 2020. https://www.ft.com/content/7325dcea-e327-4054-9b24-7a12a6a2cac6; Lam Ka-sing, "ASML, Huawei and Qualcomm May Be Caught in the Crossfire as SMIC Runs Risk of US Blacklist in Escalating Tech War," South China Morning Post, September 6, 2020. https://www.scmp.com/business/companies/article/3100428/explainer-asml-huawei-and-qualcomm-may-be-caught-crossfire-smic; U.S.-China Economic and Security Review Commission, Economics and Trade Bulletin, September 8, 2020, 8. https://www.uscc.gov/sites/default/files/2020-09/September\_2020\_Trade\_Bulletin.pdf.

<sup>&</sup>lt;sup>‡</sup> A presumption of denial means DOC by default assumes that exports to the entity in question pose a risk to U.S. national security and indicates DOC will not issue a license without compelling proof to the contrary. For military end use, in particular, DOC indicates "the presumption can be overcome when applications demonstrate exclusive civil end use, consistent with U.S. national security interests. For example, exporters with existing suppliers in China should submit license applications documenting the supply chain, i.e., what items are exported to the Chinese supplier and what the exporter receives from the Chinese supplier." U.S. Department of Commerce, Bureau of Industry and Security, Frequently Asked Questions: Expansion of Export, Reexport, and Transfer (in-Country) Controls for Military End Use or Military End Users in the People's Republic of China, Russia, or Venezuela. Final Rule. (85 FR 23459) (April 28, 2020). https://www.bis.doc.gov/index.php/documents/pdfs/2566-2020-meu-faq/file; Alexandra Baj et al., "Major Chinese Telecommunications Equipment Company Added to BIS Entity List," Steptoe, March 16, 2016.

and surveillance of Uyghurs, a predominantly Muslim minority from China's northwestern Xinjiang Province, and 24 entities involved in artificial island building efforts in the South China Sea.\* 20

#### TikTok and WeChat Executive Orders Clarified, yet Still Face Challenges

On September 19, the Trump Administration issued further clarification on covered transactions that will be prohibited by the August 6 executive orders targeting TikTok and WeChat, effective September 27 and September 20, respectively.<sup>21</sup> DOC noted WeChat and TikTok pose similar challenges to U.S. national security, including immense user data collection, participation in military-civil fusion,<sup>†</sup> and obligation to cooperate with Chinese intelligence under Chinese law.<sup>22</sup>

The executive orders prohibit a variety of transactions by the two apps, including distribution and maintenance of either application, effectively barring downloads and operation of any supporting code from U.S. mobile application stores. The clarification also prohibits use of WeChat for funds transfer or payment processing within the United States. A variety of supporting services for both TikTok and WeChat are also banned, such as internet hosting, content delivery networks, internet transit and peering services, and other use of mobile application constituent code or software. Prohibitions on enabling technical services apply to WeChat on September 20, but will apply to TikTok on November 12, 2020, unless the president rescinds prohibitions on the determination that concerns with TikTok's national security are resolved prior to that date through its purchase by a U.S. entity. DOC indicated that further prohibitions against either mobile application may be released at a later date and additional orders may be considered for other mobile applications that replicate the behavior identified from WeChat and TikTok.

Although ByteDance, TikTok's parent, was ultimately able to identify a U.S. company to take part in ownership of TikTok Global, the tentatively U.S.-approved business arrangement leaves several ambiguities and may still be challenged by both U.S. and Chinese governments. In July 2020, ByteDance initiated a search for a buyer of TikTok Global in response to pressure from the Trump Administration, which had signaled that it would pursue a ban of the app unless the company was sold to a U.S. entity. After turning down Microsoft, on September 18 ByteDance announced an arrangement with Oracle and Walmart.<sup>23</sup> Unlike original expectations for TikTok to be sold off completely to a U.S. buyer, under the terms of the proposed deal Oracle and Walmart would collectively have a 20 percent stake in the company, with Oracle responsible for TikTok's data hosting.<sup>24</sup> For the deal to succeed, the U.S. government requires resolution of key data security concerns along with TikTok's clear separation from ByteDance's operations and any obligations to the Chinese government. Recent changes to China's export control regime have also created additional hurdles to any transfer of TikTok's business.§ ByteDance would be required to

<sup>\*</sup> China claims the 90 percent of the South China Sea as its historic sovereign territory in a demarcation called the nine-dash line. In July 2016, a tribunal at the Permanent Court of Arbitration in The Hague issued a ruling on the merits of a case brought by the Philippines that overwhelmingly ruled against multiple claims China had made in the South China Sea, including that the nine-dash line had no legal basis, that none of the land features China claimed were actually islands, and that China had violated the Philippines' sovereign rights by interfering in its exclusive economic zone (within 200 nautical miles of its coast). China's land reclamation projects attempt to establish both that the features are actual islands and that China has a sovereign claim to them. U.S. China Economic and Security Review Commission, "Year in Review: Security and Foreign Affairs," in 2016 Annual Report to Congress, November 2016, 193-200.

<sup>†</sup> Military-civil fusion is a comprehensive Chinese strategy incorporating industrial policy and other forms of government support to foster civilian innovation and advancements in the Chinese defense sector. For more, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 2, "Emerging Technologies and Military-Civil Fusion - Artificial Intelligence, New Materials, and New Energy," in 2019 2019, Congress, November 205-247. https://www.uscc.gov/sites/default/files/2019-11/Chapter%203%20Section%202%20-%20Emerging%20Technologies%20and%20Military-

Civil%20Fusion%20-%20Artificial%20Intelligence,%20New%20Materials,%20and%20New%20Energy.pdf.

<sup>&</sup>lt;sup>‡</sup> ByteDance was founded in 2012, becoming a successful tech startup with the app Toutiao. In 2017, ByteDance founded TikTok, a version of the popular Chinese video-sharing app Douyin accessible and marketed outside of China. TikTok Global includes operations in the United States, Singapore, Australia, and United Kingdom. See ByteDance, "About Us," June 30, 2020. https://www.bytedance.com/en/; see also, Arjun Kharpal, "TikTok owner ByteDance is a \$75 billion Chinese tech giant – here's what you need to know about it," CNBC, May 20, 2019. https://www.cnbc.com/2019/05/30/tiktok-owner-bytedance-what-to-know-about-the-chinese-tech-giant.html

<sup>§</sup> The September 2020 Economics and Trade Bulletin incorrectly attributed the new license obligations to reform of China's Export Control Law. Instead, the new obligations resulted from changes to China's Catalogue of Technologies Subject to Export Prohibitions and Restrictions. See Ministry of Commerce, "China's Catalogue of Technologies Subject to Export Prohibitions and Restrictions" Revised Content (《中国 极致出口限制出口技术目录》调整内容), August 28, 2020. Translation. http://www.gov.cn/zhengce/zhengceku/2020-08/29/content 5538299.htm. See also U.S.-China Economic and Security Review Commission, September Trade Bulletin, September 8, 2020, 6. https://www.uscc.gov/sites/default/files/2020-09/September 2020 Trade Bulletin.pdf.

obtain a license from China's Ministry of Commerce for a significant foreign investment in TikTok and export certain key technological features, such as voice synthesis and artificial intelligence interface interaction.

Significant legal opposition from WeChat users and TikTok followed the executive orders, standing to complicate the U.S. government's policy on both applications as well as future actions. TikTok filed a lawsuit to counter the executive order, arguing a lack of due process and inappropriate usage of the International Economic Emergency Powers Act.<sup>25</sup> TikTok earned a preliminary injunction on September 18, suspending the September prohibitions on new downloads and updates to the app. Other court filings addressing the November 12 restrictions on TikTok are pending.<sup>26</sup> On September 25, the U.S. Department of Justice released a memo opposing the injunction with a detailed summary of the relevant statutory framework and the national security risks posed by TikTok, which the department described as a "mouthpiece" of the Chinese Communist Party (CCP).<sup>27</sup> While WeChat parent company Tencent has had no legal response to the executive order, the U.S. WeChat Users Alliance\* filed a collective action suit and won a preliminary injunction against the app's ban on First Amendment grounds.<sup>28</sup> On October 2, the Department of Justice appealed the injunction, positing that DOC's clarification on transactions will not restrict communications among U.S. users or infringe on their First Amendment rights.<sup>29</sup>

#### China's Unreliable Entity Framework Published, List Withheld

On September 19, China's Ministry of Commerce published a guiding framework for its "unreliable entity list," a blacklist that establishes a mechanism for punishing foreign companies, organizations, or individuals perceived as harming China's interests. The list itself has yet to be released, but longtime observers assume it may target U.S. companies in retaliation for U.S. Entity List additions.<sup>30</sup>

According to the guidelines, the list targets foreign entities who engage in one of two types of behavior:

- 1. Actions that endanger China's "national sovereignty, security, or development interests," or
- 2. Actions in which the entity "[suspends] normal transactions" or "[applies] discriminatory measures" against a Chinese company, organization, or individual which "violates normal market transaction principles and causes series damage to the legitimate rights and interests" of a Chinese entity.<sup>31</sup>

Possible punishment includes restrictions or prohibitions on trade and foreign investment in China, as well as visa restrictions.<sup>32</sup> The guidelines also stated fines and "other necessary measures" might also be imposed.<sup>33</sup> Analysts said the list's broad, vague definitions give the Chinese government leeway to determine when and how aggressively to respond.<sup>34</sup> It also creates more uncertainty for U.S. and other foreign companies with commercial interests in China. American Chamber of Commerce in Shanghai President Ker Gibbs emphasized that "business needs a safe and reliable environment in order to continue to invest."<sup>35</sup>

As the Chinese government seeks ways to retaliate against U.S. restrictions, it is keen not to scare off foreign investment in a weak economy. In a press conference, the China Ministry of Commerce sought to reassure foreign companies. The ministry stated it would continue to welcome foreign investors, that only a "very small number" of foreign entities will be placed on the list, and that penalties will only be applied if those entities do not change their behavior after a grace period. The *Wall Street Journal* reported that Chinese officials—including Vice Premier Liu He—have debated when to publish the list, as some say releasing the list should wait until after the U.S. election. Election.

# **Financial Markets**

# Chinese Government Bonds to Be Added to FTSE Russell World Government Bond Index

On September 24, FTSE Russell, a London Stock Exchange subsidiary and indexing services company, announced it would add Chinese government bonds to its World Government Bond Index (WGBI).<sup>38</sup> The FTSE WGBI

<sup>\*</sup> The U.S. WeChat Users Alliance has no affiliation with WeChat, Tencent, or the Chinese government, but is composed of and supported by several Chinese American activist groups. See U.S. WeChat User Alliance, "About Us." <a href="https://uswua.org/about-us">https://uswua.org/about-us</a>; United Chinese Americans, "122 Chinese American Organizations Asking White House to Rescind Its Executive Order on WeChat Ban," September 16, 2020. <a href="https://ucausa.org/chinese-community-asking-wh-to-reverse-wechat-ban/">https://ucausa.org/chinese-community-asking-wh-to-reverse-wechat-ban/</a>.

inclusion of Chinese government bonds is significant as the index has a large passive band of investors following it. Goldman Sachs estimates there is \$2.5 trillion worth of capital tracking the FTSE WGBI, compared to \$2–\$2.5 trillion tracking Bloomberg Barclays and \$300 billion tracking JPM GBI-EM.<sup>39</sup> Analysts project China's inclusion could lead to \$60–\$150 billion being invested in Chinese bonds during the 12-month inclusion period beginning October 2021.<sup>40</sup> The announcement follows several global investment index providers' inclusion of Chinese government bonds in 2019, as well as FTSE Russell's 2018 decision to include Chinese equities in its FTSE Global Equity Index Series (see Figure 2).\*

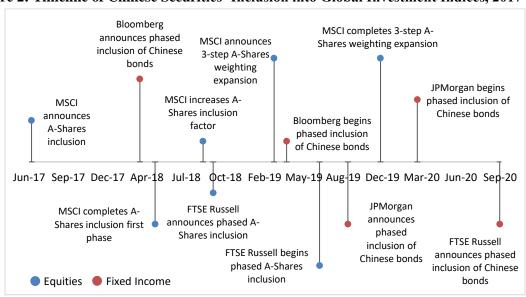


Figure 2: Timeline of Chinese Securities' Inclusion into Global Investment Indices, 2017–2020

Source: Created by Commission staff.

FTSE Russell's announcement comes as China's government takes steps to ease foreign investors' access to and participation in China's \$15.4 trillion bond market in a bid to secure foreign investment inflows. In July 2020, for example, the People's Bank of China (PBOC) and China Securities Regulatory Commission (CSRC) jointly announced China's interbank and exchange-traded bond markets would be unified,† easing trading, clearance, and settlement procedures for foreign investors who previously needed multiple accounts to trade bonds across the two markets.<sup>41</sup> Separately, in early September the PBOC, CSRC, and China's State Administration of Foreign Exchange unveiled draft regulations further harmonizing rules governing investment channels for the two markets.<sup>‡ 42</sup> The inclusion of Chinese government bonds into the FTSE WGBI also accompanies intensifying overseas investor

<sup>\*</sup> For a comprehensive review of global investment index inclusions of Chinese securities, see U.S.-China Economic and Security Review Commission, "In Focus: Index Inclusions Increase Foreign Holdings of Chinese Securities," *Economics and Trade Bulletin*, January 2020, 8–11. https://www.uscc.gov/sites/default/files/2020-01/2020%20January%20Trade%20Bulletin.pdf.

<sup>†</sup> Bonds in China were previously traded in two distinct markets: the over-the-counter interbank market and the Shanghai and Shenzhen stock exchanges. The interbank market is the more consequential of the two, with about 89 percent of total bonds outstanding traded on it in 2018. Marlene Amstad and Zhiguo He, "China's Bond and Interbank Market" (draft) in Marlene Amstad, Guofeng Sun, and Wei Xiong, *The Handbook of China's Financial System*, forthcoming Princeton University Press, 2019, 3. https://www.chinafinancialsystem.com/wp-content/uploads/2019/08/Ch5\_BondInterbankMarket\_AmstadHe\_HandbookChinaFinancialSystem\_AmstadSunXiong.pdf.

<sup>&</sup>lt;sup>‡</sup> Currently, foreign investors can invest in Chinese interbank and exchange-traded bond markets through three main channels: the Qualified Foreign Institutional Investor Program (QFII) and RMB Qualified Foreign Institutional Investor Program (RQFII), the Bond Connect Program, and directly through China's interbank bond market. These channels are regulated by different authorities and have different requirements for applicants. Only investors in the QFII and RQFII channel can invest in both bond markets, while investors in the other two channels can only invest in the interbank market. The draft rules allow foreign investors already in the interbank bond market through the other two channels to buy and sell exchange-traded bonds without further regulatory approval. Peng Qinqin et al., "Update: China Moves to Ease Foreign Access to \$15.4 Trillion Bond Market," *Caixin*, September 3, 2020. https://www.caixinglobal.com/2020-09-03/china-movesto-ease-foreign-access-to-154-trillion-bond-market-101600571.html; Kate Jaquet, "The Evolution of China's Bond Market," *Seafarer*, March 2019, 6, 11–12. https://www.seafarerfunds.com/documents/the-evolution-of-chinas-bond-market.pdf.

interest in China's debt markets. As of August 2020, overseas investors held RMB 2.8 trillion (\$412 billion) worth of Chinese bonds, up 38.2 percent year-on-year, as investors chase high yields.<sup>43</sup> A ten-year Chinese government bond offered a yield of about 3.14 percent at the end of September versus 0.69 percent for an equivalent U.S. Treasury (see Figure 3).<sup>44</sup>

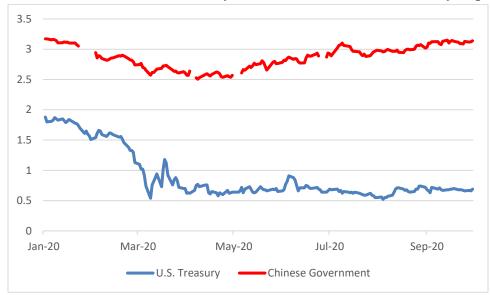


Figure 3: Ten-Year Bond Yields, U.S. Treasury and Chinese Government, January-September 2020

Note: Breaks in the Chinese government bond yield line reflect closed trading days in China's interbank bond market. Source: U.S. Department of the Treasury, Daily Treasury Yield Curve Rates, October 2, 2020. https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2017; China's National Interbank Funding Center via CEIC database.

# **Policy Trends in China's Economy**

#### China Continues Embracing Industrial Policy in New Emerging Industry Plan

On September 25, a consortium of Chinese government agencies published an industrial plan aiming to establish self-sufficiency and surpass other economies in eight strategic emerging industries, foremost among them commercial 5G applications and biotechnology, including vaccines (see Table 1).<sup>45</sup> Unlike China's past industrial plans, which are broad and generalized, this plan is concise and details specific products and agencies tasked with executing each element of the plan.\* <sup>46</sup> Chinese government planners initially developed the concept of strategic emerging industries in a 2009 plan targeting seven technology areas.

Published ahead of China's 14th Five-Year Plan, which is slated for released in March 2021, the plan shows China's unabated pursuit of industrial planning. At the same time, it echoes Chinese policymakers' redoubled concerns over ending dependence on other countries and shoring up domestic capacity as economic tensions with the United States continue to escalate. For several of the technologies, the plan's goals focus on closing gaps or addressing weaknesses to support other industries for which China currently relies on imported components. <sup>47</sup> For instance, in new materials, the plan calls for "assuring the stability of production chains and supply chains in key domains, such as large aircraft, microelectronics manufacturing and deep-sea mining."

<sup>\*</sup> Detailing both specific products and agencies is common within Chinese policy documents, but often in supplementary policies elaborating on the implementation of an overarching document.

Table 1: Technology Areas Included in Strategic Emerging Industries, 2009 and 2020

2009 Strategic Emerging Industries Initiative	2020 Strategic Emerging Industries and Investment Plan
New information technology industry	Information technology, with a focus on 5G connectivity
Biology industry	Biotech, including vaccines
High-end equipment	High-end equipment manufacturing, including industrial robotics
New materials	New materials, with an emphasis on filling gaps in application to other industries, such as aerospace
New energy industry	New energy technologies, with a focus on overcoming bottlenecks in research and development
New energy vehicles	Autonomous vehicles and new energy vehicles
Energy-saving environmental industry	Energy efficient and environmentally friendly technologies, with an emphasis on implementing pilot projects
	Various digital services and media, from remote healthcare to augmented reality tourism

Source: Various.49

Aside from detailing the targeted industries, a core feature of the plan is establishing a top-down vision of industrial clusters, or groups of firms and research institutes located in close proximity to benefit from network effects. The plan specifically calls for establishing ten such clusters with "global influence," 100 with "international competitiveness," and 1,000 distinct strategic emerging industry ecosystems.<sup>50</sup> Notably, a number of the provisions address integrating the industrial clusters within existing city and public service infrastructure, suggesting they could become a key part of China's urbanization policy.\* <sup>51</sup>

The 2009 strategic emerging industries initiative responded in part to concerns that the global financial crisis would undermine China's economic growth. <sup>52</sup> While industrial planning had always been a staple of China's centralized economic policymaking, the initiative expanded the remit of innovation policy beyond achieving parity in industries with clear importance for national security to an economy-wide effort to spur China's next phase of technological development. <sup>53</sup> The plan resulted in duplicative efforts by different local governments and companies, leading to acute surpluses of solar panels and wind mill components that China dumped on world markets. <sup>54</sup> Similar to its predecessor, the new strategic emerging industries policy exhibits broad economic and administrative scope in its whole-of-government approach and comes as the world tips into economic recession.

Perhaps because of concerns over wasted investment and duplicative efforts, the new plan includes detailed guidance on improving China's investment environment and financing mechanisms for emerging technology. Notably, the plan calls for a greater role for "government guidance funds," or public-private funds administered by central government agencies or local governments akin to venture capital funds, but with an explicit mandate to channel investments toward fulfilling state policy objectives. <sup>55</sup> Guidance funds have been a feature of industrial policy implementation in the past five years, although reporting by both Chinese and foreign media has questioned whether their impact is overstated. <sup>56</sup> Reported funding amounts often quote government plans, but in some cases local governments have not been able to attract private investors to contribute to guidance funds. <sup>57</sup> In 2018, China-

<sup>\*</sup> China uses urbanization policy as a key fulcrum for implementing industrial policy, in particular by spurring demand for excess supply generated through industrial policy. For instance, after the initial strategic emerging industry plan created a glut of electric vehicles, a consortium of Chinese government agencies issued a policy requiring cities to build extensive charging infrastructure for electric vehicles. Chinese cities have also launched hundreds of smart city pilot projects to implement connected and green technologies. Katherine Atha et al., "China's Smart Cities Development," SOSi Special Programs Division (prepared for the U.S.-China Economic and Security Review Commission), January 2020, 10. https://www.uscc.gov/sites/default/files/China\_Smart\_Cities\_Development.pdf; National Development and Reform Commission of the People's Republic of China, Development Guidelines for Electric Vehicle Charging Infrastructure (电动汽车充电基础设施发展指南(2015-2020 年)), October 9, 2015. Translation. https://webcache.googleusercontent.com/search?q=cache:cR-tR88ECcEJ:https://www.ndrc.gov.cn/xwdt/ztzl/cjnjtzzcwj/201606/t20160607\_1033476.html+&cd=1&hl=en&ct=clnk&gl=us.

based consultancy Zero2IPO estimated that of a target of \$1.8 trillion (renminbi [RMB] 12.3 trillion) in guidance funds, only \$544.9 billion (RMB 3.7 trillion), or 30 percent, had been raised.<sup>58</sup> Even where funding is sufficient, guidance funds may struggle to recruit qualified personnel to manage the funds or may not find firms that meet the funds' investment criteria.<sup>59</sup>

#### **CCP Tightens Its Grip on Private Sector**

On September 15, the General Office of the CCP Central Committee released the *Opinions on Strengthening the United Front Work of the Private Economy in a New Era*,<sup>60</sup> which outlines a plan to put Chinese entrepreneurs and private enterprises more firmly under the Party's control. According to the Opinions, the strengthening of the United Front Work Department's (UFWD)\* supervision of the private sector will enable the Party to "build a backbone team of private businesspeople that is dependable and usable [by the Party] in key moments." The Opinions correspondingly call for improving coordination between private enterprises and the government and strengthening Party-building activities in private enterprises.

The Opinions outline the Chinese government's demand for private enterprises' ideological compliance with the CCP and underscore the Party's ambition, under General Secretary Xi Jinping's leadership, to "Party-ify" all facets of Chinese society. For example, the sixth Opinion calls for "consolidating and expanding political consensus" to ensure private businesses "arm their minds and guide their practice with Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era." Pronouncements from officials tasked with implementing the Opinions suggest the Party plans to step up its monitoring of entrepreneurs' and other individuals' behavior to ensure compliance with this edict. Ye Qing, Vice Chairman of the All-China Federation of Industry and Commerce, said in a speech at a UFWD conference on engagement with the private sector that the Party should focus on "human resources and monitoring of behavior" in implementing the Opinions.

The Opinions mark the Party's latest effort to assert control over the private sector and ensure that China's ostensibly private companies align their commercial operations with CCP objectives. In 2018, the CSRC issued updated guidelines demanding listed companies establish Party committees in their leadership structures. Though data on the impact of these committees on business decisions is scant, the requirement highlights how private businesses in China must respond to political as well as market incentives. The Opinions will fortify the power of such incentives as the UFWD steps up its monitoring of businesses and entrepreneurs. The Opinions also reflect the Party's recognition that the private sector and its growth are critical to China's economic recovery in the wake of the novel coronavirus (COVID-19) pandemic's disruptions, and therefore must be more tightly controlled. The controlled of the coronavirus (COVID-19) pandemic's disruptions, and therefore must be more tightly controlled.

For the United States and other democratic governments, the new Opinions will deepen concerns that Chinese companies can operate as executors of the CCP's political will rather than as commercial actors. The Opinions may also further politicize the behavior and operations of Chinese suppliers, customers, and partners to multinational firms with business interests in China, lending further impetus to international firms to reconsider their exposure to

<sup>\*</sup> The United Front Work Department is a Chinese government entity charged with extending the CCP's influence and control over non-Party organizations both domestically and abroad to advance CCP policy objectives. For more on the United Front Work Department, see Alexander Bowe, "China's Overseas United Front Work: Background and Implications for the United States," *U.S.-China Economic and Security Review Commission*, August 24, 2018.

https://www.uscc.gov/sites/default/files/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20Overseas%20United%20Front%20Work%20-lines/Research/China's%20United%20Front%20Work%20-lines/Research/China's%20United%20Work%20-lines/Research/China's%20Work%20-lines/Research/China's%20Work%20-lines/Research/China's%20Work%20-lines/Research/China's Work%20Work%20-lines/Research/China's Work%20-lines/Research/China's Wo

<sup>%20</sup>Background%20and%20Implications%20for%20US\_final\_0.pdf.

<sup>†</sup> The All-China Federation of Industry and Commerce is a nominally nongovernmental organization that embeds Party committees within private enterprises and mobilizes Chinese entrepreneurs' investments in ways consistent with the Party's goals. The constitution of the national All-China Federation of Industry and Commerce, for example, stipulates that individual Federations of Industry and Commerce should "guide members to actively participate in China's economic construction" and "recommend political arrangements for representatives of the business community." The *Opinions on Strengthening the United Front Work of the Private Economy in a New Era* seeks to elevate the role of these organizations in "the ideological and political construction of private economic personnel." Ryan Fedasiuk, "Putting Money in the Party's Mouth: How China Mobilizes Funding for United Front Work," *Jamestown China Brief*, September 16, 2020. <a href="https://jamestown.org/program/putting-money-in-the-partys-mouth-how-china-mobilizes-funding-for-united-front-work/">https://jamestown.org/program/putting-money-in-the-partys-mouth-how-china-mobilizes-funding-for-united-front-work/</a>; State Council of the People's Republic of China, *The General Office of the CCP Central Committee Issues the "Opinions on Strengthening the United Front Work of the Private Economy in a New Era*" (中共中央办公厅印发《关于加强新时代民营经济统战工作的意见》, September 15, 2020. Translation. <a href="https://www.gov.cn/zhengce/2020-09/15/content-5543685.htm">https://www.gov.cn/zhengce/2020-09/15/content-5543685.htm</a>.

the Chinese market. Beijing's apparent willingness to stomach these costs and act without concern for international reactions suggests it is preparing to pursue economic decoupling on its own terms.

## In Focus: China's 2060 Carbon Neutrality Pledge

On September 22 at the 75th session of the UN General Assembly, General Secretary of the CCP Xi Jinping announced China would "aim to have carbon dioxide emissions peak before 2030 and achieve carbon neutrality before 2060."\* <sup>68</sup> In a shift from previous Chinese government statements on climate, the pledge does not reference "common but differentiated responsibilities," a phrase the Chinese government has historically to argue for more lenient targets due its developing country status. <sup>69</sup> The pledge also solidified China's commitments under the Paris Climate Accords to achieve peak carbon dioxide emissions by 2030. <sup>70</sup> Achieving these targets would have significant impacts on the global climate: China currently burns half of the world's coal and is responsible for one quarter of global greenhouse gas emissions. <sup>71</sup> However, the Chinese government's ongoing investment in coal both domestically and abroad and the relaxing of environmental policies in an attempt to spur short-term economic growth cast doubt on the Chinese government's ability and willingness to translate these targets into tangible action.

If China becomes carbon neutral by 2060, it could reduce global warming projections by as much as 0.3°C, according to Climate Action Tracker, an independent portal tracking countries' emission commitments and actions Without the pledge, Climate Action Tracker projects a 2.7°C increase in global temperatures by 2100, far above the 1.5°C limit included in the Paris agreement. Pursuing more environmentally sustainable growth would also have domestic benefits, where environmental crises—including threats to food security and this summer's Yangtze flooding, which affected at least 63 million people and killed at least 219—threaten the CCP's legitimacy. Greater investment in the technologies needed to reach the carbon neutrality pledge, including renewables, could raise China's gross domestic product (GDP) by as much as 5 percent, according to Cambridge Econometrics.

#### A Coal-Driven Economic Recovery: Policies and Planning

The 2060 pledge stands in stark contrast to recent actions by the Chinese government, including its removal of environmental targets and restrictions in an effort to combat slowing economic growth. In April 2020, the Ministry of Ecology and Environment announced it would waive at least 21,000 environmental impact assessments for construction projects as part of a larger economic stimulus package.<sup>75</sup> In May 2020, Premier Li Keqiang did not include a target for decreasing energy consumption when briefing the National People's Congress, the first time such a target had been omitted since 2014.<sup>76</sup>

China's government has failed to meet its energy-related targets in 2019. For example, in 2019 energy efficiency improved by only 2.6 percent rather than the 3 percent targeted, and energy intensity decreased by only 13 percent instead of the 15 percent decrease targeted for the 2016 to 2020 period. Other indicators show China's energy mix only narrowly meeting targets and deviating only slightly from previous emission trends. According to research firm Rhodium Group, coal accounted for 57.7 percent of energy consumption in 2019, just below the 58 percent maximum in the 2016–2020 13th Five-Year Plan. Carbon dioxide (CO<sub>2</sub>) emissions increased by 2.6 percent in 2019, just below the 2010–2019 average of 3 percent but down significantly from the 2000–2009 average, when they grew 9.2 percent. Prior to the COVID-19 pandemic, Climate Action Tracker predicted that China might be able to achieve peak emissions by 2030, if not earlier, but notes that a carbon-driven recovery could alter these projections. Although CO<sub>2</sub> emissions dropped by 25 percent during lockdowns associated with the pandemic, they quickly rebounded. May 2020, fossil CO<sub>2</sub> emissions were up by at least 4 percent year-on-year, exceeding the 3 percent average growth over the past decade.

Meeting the 2060 pledge would require China to completely halt coal powerplant construction, according to Hector Pollitt, head of modelling at Cambridge Econometrics; however, the opposite is happening. <sup>83</sup> The Chinese government permitted 17 gigawatts (GW) of new coal-fired capacity in the first half of 2020. <sup>84</sup> China had 249.6 GW of coal-fired capacity under development in June 2020, up 21 percent from the 205.9 GW of capacity under

<sup>\*</sup> Carbon neutrality means net zero emissions. Carbon neutrality is typically achieved by reducing carbon emissions and offsetting remaining carbon emissions by carbon removal. Carbon neutrality does not include emissions other than carbon. *China Dialogue*, "China's New Carbon Neutrality Pledge: What Next?" September 23, 2020. https://chinadialogue.net/en/climate/chinas-new-carbon-neutrality-pledge-what-next/.

development at the end of 2019, according to the Center for Research on Energy and Clean Air. 85 This additional capacity represents 24 percent of China's existing 1040 GW in coal-fired capacity and is equivalent to the entire coal capacity of the United States (246.2 GW). 86 Increased coal capacity comes despite already existing overcapacity, with coal power plants operating about 4,000 of the potential 8,760 maximum hours of operation per year. 87 The increases in coal-fired capacity anticipated by the China Electricity Council would make it impossible for China to achieve any serious reduction in emissions (see Figure 4).

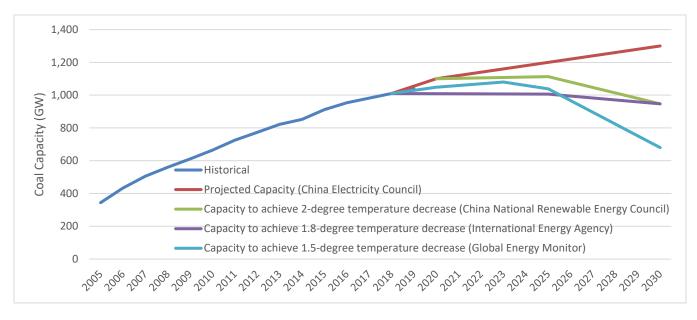


Figure 4: Coal-Fired Power Capacity and Climate Projections, 2005–2030

Source: Lauri Myllyvirta, Shuwei Zhang, and Xinyi Shen, "Analysis: Will China Build Hundreds of New Coal Plants in the 2020s?" CarbonBrief, March 24, 2020. https://www.carbonbrief.org/analysis-will-china-build-hundreds-of-new-coal-plants-in-the-2020s.

As economic growth slowed in late 2019 provincial governments began to increase spending on coal-fired projects, with the construction and approval of coal-fired projects accelerating in 2020 as provinces turned to COVID-19 recovery measures. In 2020 the number of provinces "green-lighted" to construct new coal power plants under the "traffic light policy," a national government scheme originally created to address overcapacity by limiting construction of coal power plants by province, expanded rather than restricted. All but six of China's provinces (25 of 31) were permitted to construct new plants in 2020, up from 21 provinces in 2019.<sup>88</sup> Of the \$2.95 trillion in spending on 4,348 potential new projects listed by provincial authorities in the eight largest energy producing provinces, "35 percent (\$1.03 trillion) would go toward fossil-fuel projects, with only 13 percent (\$0.38 trillion) allocated for low-carbon projects, including renewables and electric vehicles.<sup>89</sup>

China's energy distribution model uses a quota system, meaning that an increase in quotas for coal-fired capacity leaves less room for renewables. Renewable power operators, which tend to be smaller than fossil fuel companies, were already struggling to compete due to higher land taxes and higher interest loans, according to the AFP.<sup>† 90</sup> Renewable power producers also face significant cuts in subsidies. Solar subsidies were cut in half in March of 2020 and subsidies for onshore wind farms are due to end in 2021.<sup>91</sup> Achieving carbon neutrality would require China to increase investment in solar and wind energy by three to four times, according to a 2018 report by the Energy Transitions Commission and the Rocky Mountain Institute, but current spending, particularly for COVID-

<sup>\*</sup> Guangdong, Hebei, Henan, Inner Mongolia, Jiangsu, Shaanxi, Shandong, and Shanxi.

<sup>†</sup> These higher land taxes happen at a local level, with some regions targeting renewables with high renewable energy resource fees and urban land use taxes, while the coal industry has historically benefited from substantial tax rebates. Coal-focused SOEs also benefit from preferential interest rates, in contrast to renewables companies, which are typically private. Energy Research Institute of Academy of Macroeconomic Research and China National Renewable Energy Center, "China Renewable Energy Outlook: 2019," 2019. 

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19 economic recovery measures, continues to be overwhelmingly directed toward fossil fuels rather than renewables.<sup>92</sup>

The National Development and Reform Commission, which has stressed the need for local governments to reduce coal capacity, raised its target for wind and solar capacity to 240 GW in June 2020 after previous targets were met ahead of the deadlines, requiring an addition of 65 GW in capacity, a 24 percent increase over last year. 93 However, this 65 GW increase in wind and solar capacity is dwarfed by the 249.6 GW expansion in coal-fired capacity.

#### China's Overseas Fossil-Fuel Investment and Attempts at a "Green Belt and Road"

In addition to its domestic emissions, China has received scrutiny for its funding of fossil-fuel projects abroad as part of the General Secretary Xi's signature Belt and Road Initiative (BRI). Before the first Belt and Road Forum in 2017, the Chinese government released its *Guidance on Promoting a Green Belt and Road*. While the document was short on specifics, it set a timeline of three to five years for laying "a solid foundation for a Green BRI." Despite this rhetoric, BRI projects include carbon-intensive infrastructure, such as coal-fired power plants. At the time of the first Belt and Road Forum, Chinese firms were constructing an estimated 140 coal plants abroad.

Chinese-funded fossil-fuel projects in BRI countries have received pushback, including from within BRI countries themselves. In June 2019, a Kenyan court halted construction of a coal-fired plant near the coastal city of Lamu on the grounds that authorities had not conducted an adequate environmental impact assessment. In April 2020, amid calls for debt relief following the COVID-19 pandemic, a group of 260 environmental organizations sent a letter to China's finance minister requesting that the Chinese government not include certain projects in any debt relief measures due to the environmental risks inherent in such projects.

In response to such criticisms, Chinese policymakers have introduced a series of environmental initiatives under the BRI banner, such as the China-Arab States Environmental Cooperation Forum, the BRI Green Supply Chain Platform, and the China Green Finance Initiative. 99 Many of these initiatives, however, remain poorly defined, making it difficult to assess their impact on the environmental practices of BRI projects. At the second Belt and Road Forum in 2019, China announced a set of more concrete initiatives intended to improve the environmental standards of BRI projects, including the BRI International Green Development Coalition, a network of BRI countries that supports policy dialogue and information sharing about environmental protection among signatory countries. 100

The announced initiatives also included the Green Investment Principles for Belt and Road Development, a set of BRI project investment standards such as "embedding sustainability into corporate governance" and "adopting green supply chain management," whose signatories include financial institutions and corporations. <sup>101</sup> These principles are nonbinding, however, and do not appear to have significantly altered the financing practices of signatory banks. China Development Bank and the China Export-Import Bank, the two largest policy banks in China, are founding signatories to the Green Investment Principles. According to a Boston University study, however, more than 43 percent of the BRI energy projects these banks supported in 2019 were coal based, up from just 17 percent in 2016. <sup>102</sup>

Moreover, Chinese financial institutions remain one of the most significant sources of funding for fossil-fuel projects around the world. According to the Center for Strategic and International Studies, China Development Bank and the China Export-Import Bank provide foreign governments with as much energy financing as all multilateral development banks combined. Since 2001, nearly three-quarters of such financing has gone to investment in fossil fuels. Hetween 2014 and 2017, 91 percent of energy sector loans to BRI participant countries went to fossil fuel projects. More recently, China's fossil fuel investment has slowed down. In the first six months of 2020, fossil fuel projects accounted for only 42 percent of China's overseas energy investments, down from 56 percent in the same time period in 2019. Since 2014 and 2019 and 2019 are considered as a constant of the same time period in 2019.

Chinese policymakers continue to emphasize the importance of environmentally sustainable development, but the financing practices of Chinese-led financial institutions have not always matched this rhetoric. In September 2020, Jin Liqun, president of the Asian Infrastructure Investment Bank (AIIB)—a multilateral development bank founded and led by China—said the institution would not finance any projects "functionally related to coal—for example, roads leading to the plant or transmission lines serving coal power." The AIIB has announced it intends to meet

the goals of the Paris Agreement, and in 2019 nearly 40 percent of its financing went toward climate finance projects. However, the bank has not enacted any official policy to stop the financing of coal projects. In the past, leaders at the bank have announced intentions prioritize green deals and avoid coal investments, but in 2018 the bank financed a coal project in Myanmar. According to a 2019 study by the Bank Information Center, a U.S. nongovernmental organization focused on sustainable development, for every dollar the AIIB has invested in renewable energy, it has invested nearly two dollars in fossil fuels.

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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.

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