REDUCE RELIANCE ON CHINESE SUPPLY CHAINS

Congress must address U.S. dependency on goods and materials sourced from China that pose serious economic and national security risks.

Quick Take

As of 2019, China is the United States' largest supplier of goods. The United States' critical dependence on China undermines economic and national security.

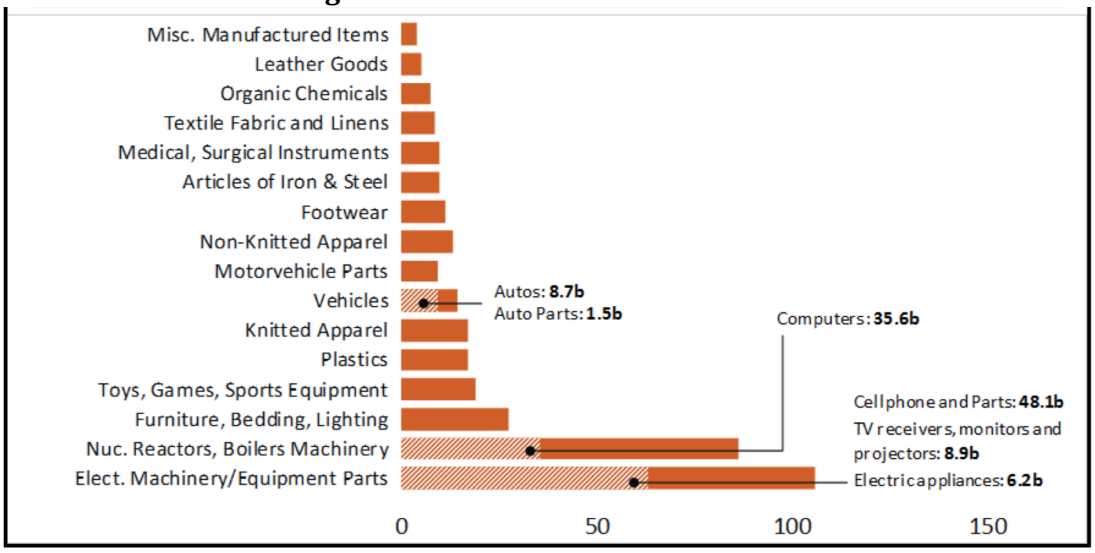
Congress must assess U.S. overreliance on Chinese supply chains and consider options to reroute them domestically and to allied nations.

Background

Global economies are interconnected, interdependent, and complex.[1] Congressional review of the United States' reliance on China for sourcing critical goods is overdue. In a historical context, China aims to quickly transition from the "World's Factory" to the dominant global power.[2]

Since the U.S. supported China's accession to the World Trade Organization (WTO) in 2001, China has emerged as the world's second-largest economy.[3] The U.S. is currently a net importer from China. In 2019, China accounted for about $452 billion in imports[4] (*See* Figure 1), representing the United States' largest supplier of goods and our third-largest trading partner overall. Moreover, China is the second largest foreign holder of U.S. Treasury securities as of April 2020.[5]

Figure 1. U.S.-China Trade in 2019[6]



Source: Congressional Research Service (CRS) with data from Global Trade Atlas.

Note: Dashed portion of the bar depicts a subset of the product category.

In 2017, the U.S. Trade Representative (USTR) published their 16th report on China's WTO compliance. The USTR report concluded the U.S. "erred" in supporting China's inclusion to the WTO in 2001, as "it is now clear that the WTO rules are not sufficient to constrain China's market-distorting behavior."[7]

Furthermore, the report found that China failed to revise "hundreds of laws, regulations, and other measures" to satisfy WTO compliance, focusing instead on leveraging WTO membership to become "a dominant player in international trade."[8]

China's trade weaponization poses a direct threat to national security. In 2018, FBI Director Christopher Wray stated, "No country presents a broader, more severe threat to our ideas, our innovation, and our economic security than China."[9] The 2017 National Security Strategy of the United States designated China as a strategic competitor engaged in "economic aggression."[10]

In recent years, the Trump administration has encouraged foreign allies to ban imports of certain products from Chinese-backed company Huawei based on security concerns.[11] Unfortunately, global partners have been reluctant to support such a ban. In response, a May 2019 editorial by state-run press agency Xinhua stated that by "waging a trade war against China, the United States risks losing the supply of materials that are vital to sustaining its technological strength."[12]

Rosemary Gibson, Senior Advisor at the Hastings Center, testified before a U.S.-China Economic and Security Review Commission hearing in 2019 that U.S. dependence on China for medicine posed security risks, stating, "The centralization of the global supply chain of medicines in a single country, whatever country it may be, makes it vulnerable to interruption, whether by mistake or design."[13] Following threats from China to restrict access to medical supplies during the COVID-19 pandemic in 2020, Congress enacted the Coronavirus Aid, Relief, and Economic Security (CARES) Act which requires reporting and public disclosure of U.S. medical supply chain risks.[14]

In 2019, the USTR published a list of products of which China supplied 75 percent or more of U.S. imports in 2018. Top products in this list included "cell phones, laptop computers, video game consoles, certain toys, computer monitors, and certain items of footwear and clothing." Products, such as pharmaceuticals, select medical goods, rare earth materials, and critical minerals were not identified in the USTR lists.[15]

Other sources of potential supply chain vulnerability include:

- **Pharmaceuticals** - China is widely reported to supply an estimated 90 percent of U.S. antibiotics,[16] including about 80 percent of active pharmaceutical ingredients (APIs) and 70 percent of acetaminophen (Tylenol). Although India sources about 45 percent of the U.S.'s over-the-counter drugs, about 75 percent of its ingredients are sourced from China.[17]

  Importantly, however, in October 2019, a Food and Drug Administration (FDA) official testified to Congress that the FDA "doesn't know whether Chinese facilities are actually producing APIs, how much they are producing, or where the APIs they are producing are being distributed…[nor] have information that would enable us to assess the resilience of the U.S. manufacturing base, should it be tested by China's withdrawal from supplying the U.S. market," due to insufficient data.[18]

- **Rare Earth Materials** - The U.S. Geological Survey (USGS) reports that China supplies about 80 percent of rare earth compounds and metals to the U.S.[19] After China, the U.S. is the second-largest producer of rare earth materials.[20] Rare earth materials are critical to the production of a wide range

of electronic components used in both consumer and national defense applications.[21] Scandium and yttrium, both which are used to make various metal alloys, are two examples of the 17 rare earth elements. According to USGS, the U.S. was 100 percent import-reliant on foreign nations for scandium and yttrium supplies. China was the largest source of yttrium to the U.S. in 2020 (87 percent of yttrium compounds), and one of the four highest-listed sources for scandium.[22]

- **Electronics and Information Technology (IT)** – China sourced an estimated 60 percent of U.S. imports of information, communication, and technology equipment in 2018.[23] Separately, much of America's $90 billion annual IT budget is spent on outdated, legacy technologies sourced from China. A report from the U.S.-China Economic and Security Review Commission found that the federal government's top seven IT providers sourced over 51 percent of its materials from China since 2012, constituting a risk to national security.[24]

- **Personal Protective Equipment (PPE)** - China supplies about 48 percent of PPE to the U.S.[25]

- **Shoes and Apparel** - The U.S. relies on overseas sourcing for about 99 percent of shoes. China accounts for about 70 percent of that amount, according to the Footwear Distributors of America.[26] Furthermore, the American Apparel and Footwear Association estimates that China supplies about 40 percent of all U.S. clothing.[27] While U.S. imports from Vietnam continue to grow, Vietnam imports up to an estimated 60 percent of its raw materials for the garment industry from China.[28]

- **Other Products** - A 2019 Quartz report found, based on data from the U.S. Census Bureau, that China sources over 90 percent of the following supplies to the U.S.: electric blankets (99 percent); video game consoles and umbrellas with a telescopic shaft (98 percent each); plastic artificial flowers, non-plastic artificial flowers, electric toasters, thermoses, garden umbrellas, and iron or steel-based cooking appliances and plate warmers (97 percent each); portable radio players and tape recorders (96 percent); and baby carriages and strollers (95 percent).[29]

CONSTITUTIONAL AUTHORITY AND REPUBLICAN PRINCIPLES

The Constitution gives Congress authority to "regulate Commerce with Foreign Nations."[30] The United States must protect its economic and strategic interests by facilitating free and fair trade worldwide.

POLICY SOLUTIONS

- The U.S. must strengthen its international alliances and diversify its global supply chain to reduce economic dependency on China. U.S. leadership on the global stage will empower the United States and its allies, not China, to set the rules of the road.[31] Congress should strengthen multilateral alliances with international partners, particularly with Pacific regional allies, as well as close geographical allies in central and south America, by reducing and harmonizing trade barriers.[32]

- Currently, about one-third of global maritime trade flows through the South China Sea.[33] As territorial disputes over sea control between China and U.S. regional allies continue, Congress must recognize secure access to the South China Sea as a critical economic and national security priority.

- Congress may consider directing U.S. statistical agencies, such as the Census Bureau, the Department of Commerce, the U.S. International Trade Commission, and the Bureau of Economic Analysis "to

review methodologies for collecting and publishing…detailed supply chain data to better document the country of origin" for imported goods.[34]

As Congress considers implementing reporting requirements on sourcing and countries of origin, Congress must also recognize that imported goods from countries like India, Taiwan, Vietnam, and other partners may contain raw materials sourced from China.

- Congress must conduct oversight to assess whether the tax code may unintentionally penalize or discourage domestic production. In doing so, Congress must also support reforming costly labor laws that place U.S. manufacturing at an economic disadvantage.

- Congress should consider S. 3538, the Strengthening America's Supply Chain and National Security Act of 2020. S. 3538 would direct the Department of Defense to report on its reliance to foreign entities for pharmaceutical drugs and API. Congress should also consider H.R. 6690, the BEAT CHINA Act of 2020. H.R. 6690 would establish certain tax incentives to reroute medical supply production to the U.S.

- Countering China's ambitions to dominate the technology sector is essential to U.S. economic and security interests.[35] Congress should examine U.S. participation in existing multilateral arrangements to identify opportunities to reduce China's international influence.

  Currently, the U.S. is party to the Wassenaar Arrangement, a voluntary 42-member international export control agreement on conventional arms and dual-use goods and technologies.[36] The Arrangement seeks to mandate controls to prevent digital weaponization by repressive regimes. Notably, China is not a member to the Wassenaar Arrangement.

  Unfortunately, the Wassenaar Arrangement contains certain problematic requirements which unintentionally undermine strategic interests. The "intrusion software" provision, for example, requires complex licensing approvals on cybersecurity information sharing and development. Congress must take action to reform the Wassenaar Arrangement, which has broad, bipartisan support.[37]

- Separately, Congress must conduct oversight of the WTO and consider opportunities to hold China accountable for its noncompliance with WTO requirements.[38] Currently, WTO membership enables China to impose trade sanctions on U.S. goods.[39]

- Congress may also consider establishing a National Supply Chain Risk Management (SCRM) Strategy to secure the federal government's technology products and services.[40]

- Finally, western allies established a system to bar the sale of sensitive military technologies to the Soviet Union during the Cold War. Congress may consider a similar alliance to limit "key strategic imports" from China.[41]

[1] The Economic Complexity Index lists the United States as "the 3rd largest export economy in the world and the 7th most complex [economy]." The Observatory of World Complexity, the Economic Complexity of the United States, last visited May 8, 2020, available at https://oec.world/en/profile/country/usa/.

[2] See, *Respond to Chinese Trade Practices*; *Hold China Accountable for COVID-19*; and also *Reject Authoritarian Internet Control,* House Republican Policy Committee (March 2020).

[3] The World Bank, "The World Bank in China," March 28, 2017, available at http://www.worldbank.org/en/country/china/overview and *The China Trade Challenge: Phase II,* The Committee for Economic Development (2020), available at https://www.ced.org/2020-solutions-briefs/the-china-trade-challenge-phase-ii.

[4] *2019: U. S. Trade in Goods with China,* U.S. Census Bureau, (last visited May 15, 2020,), available at https://www.census.gov/foreign-trade/balance/c5700.html.

[5] U.S. Department of Treasury, Major Foreign Holders of Treasury Securities, (last visited July 13, 2020), available at https://ticdata.treasury.gov/Publish/mfh.txt.

[6] *COVID-19, China Medical Supply Chains and Broader Trade Issues*, CRS, R46304, (April 6, 2020), available at https://crsreports.congress.gov/product/pdf/R/R46304

[7] USTR, *2017 Report to Congress on China's WTO Compliance,* January 2018, https://ustr.gov/sites/default/files/files/Press/Reports/China%202017%20WTO%20Report.pdf.

[8] *Id.*

[9] Further, "U.S. Assistant Attorney General John C. Demers stated that, from 2011 to 2018, China was linked to more than 90% of the Justice Department's cases involving economic espionage and two-thirds of its trade secrets cases." Wayne M. Morrison, U.S.-China Trade Issues, CRS (June 23, 2019), https://fas.org/sgp/crs/row/IF10030.pdf.

[10] The White House, Executive Office of the President, *National Security Strategy of the United States of America, December 2017,* https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf.

[11] In May 2019, President Trump issued Executive Order 13873, Securing the Information and Communications Technology and Services Supply Chain. The order stated the Administration's view that U.S. purchases of information, communications, and technology (ICT) goods and services from "foreign adversaries" posed a national security risk to the United States and authorized the Federal government to ban certain ICT transactions deemed to pose an "undue risk." On the same day, the U.S. Commerce Department announced that it would add Chinese telecommunications firm Huawei and 68 of its non-U.S. affiliates to the Department's Bureau of Industry and Security Entity List, which would require an export license for the sale or transfer of U.S. technology to such entities. CRS, *supra* at 9.

[12] Wayne M. Morrison, *Trade Dispute with China and Rare Earth Elements,* CRS, IF1125 (June 28, 2019) https://fas.org/sgp/crs/row/IF11259.pdf.

[13] *Exploring the Growing U.S. Reliance on China's Biotech and Pharmaceutical Products, Hearing Before the U.S.-China Economic and Security Review Commission [hereinafter USCC],* 116th Cong. (July 31, 2019). https://www.uscc.gov/sites/default/files/2019-10/July%2031,%202019%20Hearing%20Transcript.pdf.

[14] CRS, *supra* at 9.

[15] USTR, *USTR Announces Next Steps on Proposed 10 Percent Tariff on Imports from China,* (Aug. 13, 2019), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2019/august/ustr-announces-next-steps-proposed. The full list can be found at the following source, see Annexes C and D at 43450, https://ustr.gov/sites/default/files/enforcement/301Investigations/Notice_of_Modification_%28List_4A_and_List_4B%29.pdf and https://ustr.gov/sites/default/files/enforcement/301Investigations/84_FR_22564.pdf.

[16] Yanzhong Huang, *U.S. Dependence on Pharmaceutical Products from China,* Council on Foreign Relation (Aug. 14, 2019), https://www.cfr.org/blog/us-dependence-pharmaceutical-products-china.

[17] American Enterprise Institute, *We're too dependent on China for too many critical goods. Especially Medicine.* Mar. 21, 2020 https://www.aei.org/op-eds/were-too-dependent-on-china-for-too-many-critical-goods-especially-medicine/.

[18] FDA Director Woodcock attributed growth of foreign manufacturing of APIs to the U.S. in part to a lower labor cost advantage, with a 2011 FDA study estimating that API manufacturing in India could lower costs for U.S. and EU companies by 30 to 40 percent. *Safeguarding Pharmaceutical Supply Chains in a Global Economy, Hearing Before the House Cmte. On Energy and Commerce, Subcommittee on Health,* 116th Cong. (Oct. 30, 2019). https://www.fda.gov/news-events/congressional-testimony/safeguarding-pharmaceutical-supply-chains-global-economy-10302019.

[19] U.S. Geographical Survey [hereinafter USGS], Mineral Commodity Summaries, Rare Earths, 2020, https://pubs.usgs.gov/periodicals/mcs2020/mcs2020-rare-earths.pdf.

[20] *Id.*

[21] *See Combat America's Critical Mineral Dependency*, House Republican Policy Committee (March 2020), https://republicanpolicy.house.gov/sites/republicanpolicy.house.gov/files/documents/10%20-%20Combat%20America%27s%20Critical%20Mineral%20Dependency%20NR.pdf.

[22] According to USGS, "nearly all imports of yttrium metal and compounds are derived from mineral concentrates processed in

China." USGS lists Europe, China, Japan, and Russia as top scandium suppliers to the U.S. The USGS also lists arsenic (90 percent); silicon carbide (crude, 80 percent); bismuth (76 percent); antimony (oxide, 64 percent, and metal, 52 percent); germanium (metal, 59 percent); barite (58 percent); magnesium sulfates (53 percent); gallium (metal, about 50 percent); indium (36 percent); graphite (33 percent); and mica (sheet, 48 percent, scrap and flake, 31 percent) as minerals for which China is a leading source to the U.S. Of these listed minerals, the U.S. is 100 percent import-dependent on foreign suppliers for arsenic, gallium, indium, and mica. The USGS figure for gallium (metal) includes Hong Kong in its sourcing from China. USGS, Mineral Commodity Summaries, 2020 https://pubs.usgs.gov/periodicals/mcs2020/mcs2020.pdf.

[23] Wayne M. Morrison, *U.S.-China Trade Issues*, CRS (June 23, 2019), https://fas.org/sgp/crs/row/IF10030.pdf and Hugh R. Morley, The Journal of Commerce, *China Dominates Growing US Electronics Imports, (May 28, 2018),* https://www.joc.com/breakbulk/china-dominates-us-electronics-imports-—-big-and-small-screens_20180525.html.

[24] *Supply Chain Vulnerabilities from China in U.S. Federal Information and Communications Technology, Hearing Before USCC,* (Written testimony of Tara Beeny, Senior Business Analyst, Interos Solutions, Inc.) April 2018 https://docs.house.gov/meetings/IF/IF16/20180516/108301/HHRG-115-IF16-20180516-SD105-U105.pdf.

[25] Chad P. Bown, Peterson Institute for International Economics, *COVID-19: China's Exports of Medical Supplies Provide a Ray of Hope,* Mar. 26, 2020, https://www.piie.com/blogs/trade-and-investment-policy-watch/covid-19-chinas-exports-medical-supplies-provide-ray-hope.

[26] Andria Cheng, Forbes, statement from the Footwear Distributors of America, *P&G Says 17,600 Products Could Be Affected By Coronavirus in China, Highlighting Supply Chain Risk,* Feb. 20, 2020 https://www.forbes.com/sites/andriacheng/2020/02/20/chinas-coronavirus-outbreak-threatens-to-send-global-supply-chain-into-a-tailspin-pg-alone-has-17600-items-that-could-be-affected/#5492d86a156f.

[27] Esther Fung, Wall Street Journal, *Apparel Companies Fear Tariffs Could Squash Profits,* Aug. 22, 2019, https://www.wsj.com/articles/u-s-apparel-industry-works-to-blunt-impact-of-tariffs-11566293401.

[28] *From Section 301 to COVID-19: How a Volatile China Changed Supply Chains,* Supply Chain Dive, Mar. 31, 2020, https://www.supplychaindive.com/news/coronavirus-china-tariff-trade-supply-chains/574702/.

[29] Dan Kopf, Quartz, *The US will have a hard time not getting these products from China,* July 30, 2019, https://qz.com/1654798/these-are-the-products-the-us-is-most-reliant-on-china-for/.

[30] U.S. Const. art. I, § 8, cl. 3.

[31] China is aggressively pursuing a similar strategy to reduce its dependency on trade with the United States. China's Belt and Road Initiative, or the "One Belt, One Road" initiative (BRI), commits a trillion-dollar infrastructure investment across 60 countries. The BRI is an attempt to rebuild the ancient Chinese trade infrastructure known as the Silk Road which established trade networks throughout Asia and into Europe. By issuing low-interest loans to help nations modernize various land and maritime infrastructure, China is creating a major trade network throughout Africa, India, and Asia. More importantly, it has the power to leverage indebtedness of BRI countries in exchange for trade concessions.

[32] Collectively, the U.S., Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam represent about 40 percent of the world's GDP, as a start.

[33] *How much trade transits the South China Sea?,* Center for Strategic & International Studies, https://chinapower.csis.org/much-trade-transits-south-china-sea/#easy-footnote-bottom-1-3073 and Pete Cobus, *Conflict and Diplomacy on the High Seas,* Voice of America, https://projects.voanews.com/south-china-sea/.

[34] USCC, 2019 Recommendations to Congress, https://www.uscc.gov/sites/default/files/2019-11/2019%20Recommendations%20to%20Congress.pdf.

[35] The China's Made in China 2025 plan directs about $300 billion into ten "strategic sectors," with technology as a leading strategic sector. Brigitte Dekker, *The US-China trade-tech stand-off,* Clingendael Report, Aug. 2019, https://www.clingendael.org/sites/default/files/2019-08/Report_US-China_stand-off.pdf.

[36] *Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, Vol II, List of Dual-Use Goods and Technologies and Munitions List,* compiled by the Wassenaar Arrangement Secretariat, December 2018, https://www.wassenaar.org/app/uploads/2019/consolidated/WA-DOC-18-PUB-001-Public-Docs-Vol-II-2018-List-of-DU-Goods-and-Technologies-and-Munitions-List-Dec-18-1.pdf.

[37] Congressional letter to the Hon. Susan Rice, Assistant to the President for National Security Affairs, Dec. 16, 2015, https://langevin.house.gov/sites/langevin.house.gov/files/documents/12-16-15_Langevin-McCaul_Wassenaar_Letter.pdf.

[38] Committee for Economic Development, *supra* at 3.

[39] Ana Swanson, *W.T.O, Allows China to Impose Trade Sanctions on U.S. Goods,* New York Times, Nov. 1, 2019, https://www.nytimes.com/2019/11/01/business/wto-china-us-trade.html.

[40] *Supply Chain Vulnerabilities from China in U.S. Federal Information and Communications Technology, Hearing Before USCC,* (Written testimony of Tara Beeny, Senior Business Analyst, Interos Solutions, Inc.) April 2018 https://docs.house.gov/meetings/IF/IF16/20180516/108301/HHRG-115-IF16-20180516-SD105-U105.pdf.

[41] AEI, *supra at 16.*