

Weaving Strategic-Industry Competitiveness Into the Fabric of U.S. Economic Policy

ROBERT D. ATKINSON | FEBRUARY 2022

Meeting the challenge of China's mercantilist, state-directed economy will require much more than piecemeal competitiveness initiatives, as important as they are. It is time to incorporate a competitiveness focus into most if not all major areas of U.S. policy affecting the economy.

- Virtually every policy area affecting the economy is currently, at best, grounded in a framework to support overall growth and allocative efficiency, though the focus is increasingly shifting away from growth toward redistribution.
- With the exception of a few, explicitly focused initiatives, competitiveness is exogenous to the operation of the U.S. government. When it occasionally gains attention, the result is usually some discrete, underfunded program.
- If there is any hope for the United States to avoid continuing its long slide into UK-like industrial decline, this must change.
- Congress and the administration need to overhaul a wide array of federal policies and operations to embed a distinct focus on bolstering the competitiveness of strategically important industries.
- Doing so would entail adopting significantly different frameworks for policy areas including tax, antitrust, financing, regulation, and research policy.
- For example, a competitive-focused antitrust regime would ensure that antitrust authorities identify and take into consideration the effects of antitrust enforcement on key traded-industries' international competitiveness.

INTRODUCTION

It is welcome news that there is increasing interest in Congress in policies to boost broad U.S. competitiveness policy and even to support competitiveness in strategically important industry sectors such as semiconductors.¹ Legislation such as the proposed U.S. Innovation and Competitiveness Act (USICA) would move the nation forward on both the competitiveness and strategic-industry fronts.

But as important as USICA and other similar measures are, it is not enough to establish selected programs, no matter how well funded. If the United States is going to increase its competitive and strategic-industry position, especially vis-à-vis China, Congress and the administration will need to incorporate a competitiveness focus—ideally oriented toward strategic industries—in virtually all federal agencies and policy areas, including trade, tax, antitrust, financing, and regulation.

Unfortunately, this is far from the case now. Virtually every policy area affecting the economy is at best grounded in a framework designed to support overall growth and what economists call “allocation efficiency” (i.e., ensuring market forces allocate goods and services), although increasingly the focus is shifting away from growth and toward redistribution and economic opportunity. However, for the most part, with the exception of a few programs explicitly focused on competitiveness, competitiveness policy is exogenous to the operation of the U.S. government. When it occasionally breaks its way in for attention, the result is usually some discrete but underfunded program that doesn’t “upset any apple carts.”

If there is any hope for the United States to not continue its long slide into United Kingdom-like industrial decline, this must change. Congress and the administration need to overhaul a wide array of policy areas and operations and embed in them a focus on competitiveness and strategic-industry capabilities. Doing so would mean a significantly different trade policy, a significantly different tax policy, a significantly different antitrust policy, and so on.

This policy brief lays out how a number of policy areas are currently structured and what each would look like if it were structured around a goal of generic competitiveness and strategic-industry competitiveness.

PRINCIPLES OF GENERIC VS. STRATEGIC-INDUSTRY COMPETITIVENESS POLICY

In evaluating any policy area that affects competitiveness (whether for generic or strategic industries), there are a number of key principles to focus on.

First—and this is obvious, but requires mentioning—incorporating competitiveness means focusing policy to the extent possible on either traded sectors (for generic competitiveness policy) or on traded critical, dual-use industry sectors (for strategic-industry policy). Traded sectors are those industries that face more than de minimis competition from enterprises outside the United States (e.g., cars, machine tools, drugs, etc.) Strategic industries are those industries that are key for the United States (or its close allies, such as the Commonwealth nations), to be competitive in.

Second, and related, this means abandoning the deeply held view of most economists and many policymakers that all industries are equal. In other words, no more “potato chips, computer chips—what’s the difference?” No more “car production, car rental—what’s the difference?” Policy approaches that have competitiveness concerns integrated in them reflect the reality that

the sectoral composition of the economy matters; not just gross domestic product (GDP) and keeping “distortions” from free-market allocation to a minimum.

Third, incorporating competitiveness means making tough political choices and “picking winners.” (And not “losers,” despite what competitiveness policy opponents like to say.) All 50 state governments, whether “red” or “blue,” do this routinely because state policymakers know that without a healthy traded sector, their economy will wither and shrink, and along with it all the locally traded industries that depend on exports outside the state. Yet, federal policymakers have so far resisted this kind of thinking, in part because the dominance of the dollar as the global reserve currency acts as an opiate enabling hard choices to be forever punted into the future—until, of course, the dollar crashes and the federal government defaults on the debt.

If the United States is going to increase its competitive and strategic-industry position, especially vis-à-vis China, Congress and the administration will need to incorporate a competitiveness focus—ideally oriented toward strategic industries—in virtually all federal agencies and policy areas, including trade, tax, antitrust, financing, and regulation.

Finally, incorporating competitiveness means government officials, including those carrying out policy, will need to become more knowledgeable and sophisticated about the operation of industry and the effects of policy on traded sectors. When policy is generic, there is no need to know these things because the policy applies to all sectors. But competitiveness policy requires a more than surface knowledge about how key industries, and firms within them, operate.

INCORPORATING COMPETITIVENESS INTO POLICY REALMS

If policymakers really put a premium on U.S. competitiveness, a host of U.S. policy areas would be conceived of differently, and be structured and implemented differently. This section discusses how this could play out in a number of policy areas. Ideally, the Biden administration will articulate a clearly stated national competitiveness strategy over the course of this year.

Trade Policy

For many decades, the focus of U.S. trade policy was on consumers. Ensuring that consumers could get unfettered access to the cheapest and best selection of goods and services from around the globe was paramount. At the same time, to the extent trade policy focused on exports, there was little attempt to prioritize sectors; in fact, the very idea of trade policy prioritizing computer chips over cows was heresy.

President Biden has talked about moving toward a “worker-centric” trade agenda, although that term has never been defined. Presumably it would mean that when considering trade deals or policy, the impact on the workers in firms in the United States would be given greater consideration. Depending on how this framework is implemented, there is nothing wrong with this, but it really doesn’t incorporate the challenge of competitiveness.

A trade policy focused on generic competitiveness would give significantly more resources and attention to trade enforcement. Current trade policy underprivileges enforcement because open trade and the free flow of goods, especially low-cost imports, are seen as the most important goals, especially because they boost consumer welfare (with people in their role as consumers seen as different from people in their role as workers). A competitiveness-focused trade policy would place much more focus on enforcement, including using a wide range of government tools

to pressure other nations that violate trade norms or rules that target U.S. traded sector industries.

Such a policy would also place more emphasis on U.S. competitiveness than on broad foreign policy goals such as spurring development in low-income nations and maintaining U.S. friendship with certain nations. Case in point: A competitiveness-focused trade policy would deny developing countries membership in the Generalized System of Preferences if they were to behave unfairly vis-à-vis trade, including being on the USTR 301 list for intellectual property violations.

A trade policy focused on strategic-industry competitiveness would go further. It would embrace the increased focus on enforcement, but it would target limited enforcement resources (including political capital) toward the countries that pose the largest threat to U.S. strategic industries. To use one example, it would focus far more on unfair Chinese policies and programs around semiconductors than on unfair Canadian policies related to milk and timber.

Likewise, trade policy, especially negotiations over new trade agreements, involves trade-offs between various U.S. interests. A strategic-industry trade policy would treat potato chips and computer chips—to use that famous quip—differently; going to the mat for the latter even if that means letting other nations get their way on the former. To take a recent example, President Trump’s Phase One trade deal with China pressured China to import more agricultural goods—something that is in no way related to U.S. strategic interests. For the most part, trade in agricultural commodities is fungible: If the United States exports more pigs to China, another country will export more to somewhere the United States used to export. Moreover, there is no way the United States will lose its competitive capabilities in agriculture (or in timber, for that matter). In other words, a strategic trade-focused trade policy would be one in which trade negotiators would insist on the most favorable trade provisions for strategic U.S. industries, while using other sectors as areas to negotiate away.

A strategic trade policy would also focus on the nations that pose the biggest threat or opportunity for strategic U.S. industry interests. Opening up trade with a country that largely sells American commodity goods is not strategic.

The fact that Select USA supports foreign companies in nontraded sectors seeking to enter the U.S. market, resulting in a foreign firm taking market share from a U.S. firm with no net trade advantage, highlights just how little competitiveness is embedded in U.S. policy.

A strategic-industry focus would mean operating the Committee on Foreign Investment in the United States (CFIUS) in a different way. Rather than focus principally on whether a foreign investment would affect U.S. national security directly, it would include a focus on whether foreign investments might weaken U.S. strategic industries. In addition, when it comes to dealing with nations such as China that largely do not let U.S. companies buy majority shares in their companies, a competitiveness-oriented CFIUS would ensure reciprocity when it comes to such investments in the United States.

It would mean significantly limiting policies that hurt U.S. exporters in pursuit of foreign policy objectives, especially trade embargoes, including the Commerce Department’s foreign-produced direct product (FDP) rule, has been used to prevent Chinese companies from acquiring semiconductors made with certain U.S. software and technology.² Such policies are based on the belief that America’s advanced technology is so dominant that other nations can be hurt by U.S.

actions and that our own companies will not be. One or both of these assumptions is often wrong.

And a competitiveness-focused trade and investment policy would also mean expanding programs such as Select USA in the Commerce Department (and creating a national investment attraction fund) to more effectively attract foreign investment. And it would mean narrowing the focus of Select USA (which includes sectors such as retail and hospitality) to only globally traded sectors.³ The fact that Select USA supports foreign companies in nontraded sectors seeking to enter the U.S. market, resulting in a foreign firm taking market share from a U.S. firm with no net trade advantage, highlights just how little competitiveness is embedded in U.S. policy.

A strategic-industry-focused approach would charge Select USA with trying to attract firms in strategic industries.

Antitrust Policy

For many decades, U.S. antitrust policy has focused on competition for its own sake, with the view that more competition was generally better. Antitrust authorities also treated traded and nontraded sectors no differently, regardless of the competitiveness effect of their actions on the former. And they largely turned a blind eye to harmful foreign antitrust practices, such as denial of mergers of U.S. companies, believing that other nations' antitrust authorities were sovereign.

A competitive-focused antitrust regime would ensure that antitrust authorities include a competitiveness screen in their decisions.

U.S. antitrust policy has historically ignored the potential impact of antitrust decisions on U.S. competitiveness. As long as the action created more competitive markets, even if the additional entrants were foreign, that was fine. Case in point: the 1970s Federal Trade Commission (FTC) antitrust suit against Xerox, at the time the dominant copier firm in the world, with its Silicon Valley Xerox Parc being an incubator of tech innovation. The head of FTC's Bureau of Competition stated that he would be "dissatisfied if Xerox's market share isn't significantly diminished in several years."⁴ Because the FTC forced Xerox to share its blueprints, drawings, and an estimated 1,700 patents with its competitors, Xerox lost half its market share, mostly to Japanese firms such as Canon, Toshiba, and Sharp. Two decades earlier, the Department of Justice (DOJ) forced Western Electric to divest its Canadian equipment division, Northern Telecom (later renamed Nortel), creating yet another robust foreign competitor that took market share from Western Electric, and the later-restructured Lucent, contributing to the latter's demise. Because competitiveness was not integrated into antitrust authorities' theories or practices, these competitiveness-harming decisions were not uncommon.

A competitive-focused antitrust regime would ensure that antitrust authorities include a competitiveness screen into their decisions. This would include assessing whether any forced divestitures as a condition of a merger would not have a negative effect on U.S. competitiveness, especially vis-à-vis China. Unfortunately, when Dutch semiconductor company NXP bought U.S. maker Freestyle, the FTC approved the merger on the condition that NXP divest a key part of its business to a Chinese company indirectly owned by China's sovereign wealth fund under the Chinese State Council.⁵

Such a screen also would mean recognizing competitiveness factors when considering antitrust cases, as some federal agencies do, such as when DOJ, Department of Energy (DOE) and Department of Defense (DOD) did when they weighed in on the FTC case against Qualcomm,

asking the FTC to side with Qualcomm because of the negative implications on U.S. competitiveness and security of the FTC prevailing.⁶

A focus on competitiveness would also mean that antitrust authorities would abandon the increasingly fashionable practice of attacking large U.S. companies in traded sectors simply because they are big, as FTC Chair Lina Khan appears to be doing. Rather than continue to justify antitrust actions against large successful technology companies on the basis of helping small business, they should incorporate a competitiveness screen. Doing so would recognize the value for U.S. competitiveness of large, successful, R&D-intensive firms. For example, in 2019, Alphabet, Amazon, Apple, Facebook, and Microsoft invested 86 percent more in R&D than the Chinese government did.⁷

Finally, a focus on competitiveness would mean understanding that the competitive landscape for most traded-sector firms, especially for strategic ones, is global, and that at least in the case of China, competition is often unfair due to the Chinese government propping up its champions. Often, the only viable response, absent large federal government subsidies, is to enable U.S. firms to gain and retain scale.

A broad competitiveness-based tax code would lower the effective tax rate on companies that compete in international markets.

Tax Policy

Tax policy would also change if competitiveness policy infused it with a competitiveness focus. Current tax policy, especially for business taxes, is based on the notion that the tax code should distort the economy as little as possible. That is why the consensus is in favor of “broadening the base, and lowering the rate.” William Gale, director of the economic studies programs at the Brookings Institution, summed up this view when he stated, “The sine qua non of meaningful tax reform is to clean out and rationalize the exclusions, exemptions, deductions, and credits in the tax system.”⁸ In other words, get rid of any tax incentives and ideally apply the same level of taxation to the profits of every firm, regardless of the industry it is in. More broadly, many conservative supply-siders favor lowering taxes on individuals, especially on capital gains, dividends, and high-income earners, which they imagine will mean increased savings and investment.⁹ Many liberals, in contrast, want to raise taxes on the wealthy and big corporations, which they equate as equally problematic.

A broad competitiveness-based tax code would be different. It would recognize that taxes have a larger negative impact on firms in traded industries.¹⁰ It would try to lower the effective tax rate on companies that compete in international markets, knowing that other countries are doing the same and that slightly higher taxes on domestic-serving industries will have little or no effect on their output. In this sense, the now-abandoned domestic production credit would be part of a competitiveness-focused tax policy. Similarly, a competitiveness-focused tax policy would not reduce the rate of the foreign-derived intangible income (FDII) deduction, as this would mostly harm U.S. firms in traded sectors.¹¹ It would ideally entail creating an “innovation box” tax provision.¹² It would also mean increasing the research and development (R&D) tax credit, as the lion’s share of R&D is spent by firms in traded sectors. The U.S. R&D tax credit is anemic, ranking 24th out of 34 Organization for Economic Co-operation and Development (OECD) and BRIC (Brazil, Russia, India, China and South Africa) nations.¹³ A principal reason why it is so low compared with our competitors is most of them take a competitiveness-focused approach to tax policy, whereas the United States does not.

There are cases where tax policy can support a strategic-industry-focused competitiveness policy. Case in point is the proposed Facilitating American-Built Semiconductors (FABS) Act, which would provide a 25 percent tax credit for investing in U.S. semiconductor facilities and equipment.¹⁴

Financing Policy

The federal government manages a wide array of business financing programs, including equity and debt, many operated by the Small Business Administration (SBA).¹⁵ The goal of these programs is not competitiveness. Some programs focus on helping spur growth in rural areas, others spurring energy efficiency adoption, and in most cases programs help small business because they are small. For example, SBA supported loans worth \$118 million for residential building construction, \$105 million for car dealers, \$312 million for liquor stores, \$742 million for gas stations, and \$760 million for dentists. It even made loans to small banks.

A competitiveness-oriented financing policy would focus on supporting high-growth firms in traded sectors and manufacturing. For example, it would include an industrial finance corporation as proposed by Senator Chris Coons (D-DE) in the Industrial Finance Corporation Act to provide patient capital to U.S. manufacturers.¹⁶ In addition, such a policy would restructure SBA such that there is a much greater focus on small firms in traded industries and high-growth, technology-focused start-ups. There is no rationale for funding local-serving small firms; any expansion they might enjoy comes at the expense of other small local firms. In addition, Congress should pass legislation requiring the administration to coordinate and consider how federal financing programs could more effectively support a competitiveness mission.

A strategic-industry financing policy would involve equity or debt programs focused explicitly on one or more strategic industries.

R&D Policy

Current R&D policy is based on either public mission-driven R&D (health, defense, energy, agriculture, etc.) or funding to university researchers for basic science in areas of interest defined by researchers. And university funding is intentionally allocated more or less evenly across disciplines, with the idea that all science is equal. Even though the scholarly literature shows that a significant share of the benefits of basic research flow outside the nation conducting it, the focus remains on basic research.¹⁷ Competitiveness is a component of R&D policy in part because the private sector is assumed to do that.

Like in countries where competitiveness is a national mission, more research funding would go to industrially relevant research, particular for traded sectors.

A broad competitiveness-focused R&D policy would be different in two main ways. First, like in countries where competitiveness is a national mission, more funding would go to industrially relevant research, particularly for traded sectors. This could be in the form of new (or repurposed) national laboratories along the lines of Taiwan's Industrial Technology Research Institute or significantly more funding for industry-university cooperative research centers, building on the Manufacturing USA Institutes.

Second, research policy and the role of universities would change. The proposed National Science Foundation (NSF) directorate on applied, industry-relevant research would be established and well-funded. Ideally, rather than trying to repurpose what is a science agency into a competitiveness-focused research agency, Congress would instead establish a national

advanced industry innovation foundation, as more than 50 nations have done, and fund applied research through that agency.¹⁸ In addition, Congress would preference competitiveness-related research funding at agencies such as NSF, meaning increasing funding for divisions such as computer science and engineering more than for social sciences.

A strategic-industry-focused approach would build on the competitiveness approach, but it would allocate more funding to strategic industries. The Creating Helpful Incentives to Produce Semiconductors for America (CHIPS) Act is an example of such an approach, as it contains funding for advanced semiconductor R&D.

Statistical Policy

At least since after the Great Depression, the federal government has never developed strategic economic intelligence in order to fully understand the competitive position of its traded sectors or to help support overall economic productivity. Rather, most of the focus goes to understanding the ups and downs of the business cycle.

A competitiveness-focused statistical system would focus on improvements in three main areas. First, our statistical system was largely designed around collecting statistics on firms that were located in the United States. But as the economy has become increasingly global, we need much more fine-grained international statistics. Second, one key kind of data needed for an effective national industrial and technology strategy is data that is disaggregated to reflect state and local differences. This is needed to inform not only federal policymakers (e.g., to be able to more accurately identify parts of the country leading in particular kinds of innovation), but also state and local officials, as all states and many localities have their own economic development programs. Third, a competitiveness-focused statistical system would collect much better national industry data, including better measures of information technology adoption, process technology and innovation, and production capabilities of firms and their supply chains.

Regulatory Policy

Regulatory policy is a broad topic, including both economic and social regulation. However, federal regulators normally neither differentiate between traded and nontraded sectors nor give significant consideration to the competitiveness impact of regulatory decisions. We see this, for example, in the narrative over Internet privacy, which is almost exclusively focused on protecting privacy without considering how an overly stringent bill could harm U.S. Internet industry competitiveness. Similarly, environmental regulators seldom consider the effects of their decisions on traded-sector industry competitiveness. Likewise, the drug price regulation debate would take into account the deleterious effects of drug price controls on U.S. drug industry competitiveness.

A competitiveness-focused regulatory policy would mean that all major regulatory legislative proposals and administrative actions would automatically incorporate a competitiveness screen.

Poorly designed and implemented regulation is especially damaging to industries that compete in international markets. If government imposes unwise regulatory burdens on non-tradable industries that sell only in the domestic economy, such as insurance brokers, dry cleaners, and home builders, it reduces total welfare by limiting competition or unnecessarily increasing costs. But the affected businesses are normally able to pass on the increased costs to consumers. Even if they cannot, they do not suffer any relative disadvantage against their competitors since

everyone is in the same boat. And they cannot move their production overseas without giving up their customers.

The situation is very different for traded industries wherein high regulatory costs harm producers and reduce jobs, often without accomplishing any corresponding benefit relative to more efficient regulation. When traded-sector business establishments face a competitive disadvantage due to regulation, there can be only two results: They move production to another nation with better regulation, or they lose market share to competitors in other nations. In either case, they employ fewer workers domestically—and because traded sectors have a much larger multiplier effect on the economy than nontraded sectors, these losses then ripple through the economy.

A competitiveness-focused regulatory policy would mean that all major regulatory legislative proposals and administrative actions would automatically incorporate a competitiveness screen to identify potential competitiveness impacts and identify, wherever possible, how to achieve the regulatory goals with minimal impacts on competitiveness.

It would also mean the creation of an interagency council to take a comprehensive look at the regulatory system facing individual traded industries. It would mean instituting an ongoing process wherein the federal government takes a comprehensive look at key industries facing strong international competition to determine what changes could improve the environment in which they operate. Such an effort would have to include a review of existing regulations affecting traded sectors to see whether any can be streamlined or eliminated.

CONCLUSION

With the rise of China and its mercantilist, state-directed economy, the United States faces its toughest competitiveness challenge since the days of the founding of the Republic. Effectively addressing this challenge will require more than the creation of some freestanding competitiveness initiatives, as important as they are. Rather, it is time to incorporate a competitiveness focus into most if not all major areas of U.S. policy affecting the economy.

About the Author

Robert D. Atkinson (@RobAtkinsonITIF) is the founder and president of ITIF. Atkinson's books include *Big Is Beautiful: Debunking the Myth of Small Business* (MIT, 2018), *Innovation Economics: The Race for Global Advantage* (Yale, 2012), *Supply-Side Follies: Why Conservative Economics Fails, Liberal Economics Falts, and Innovation Economics Is the Answer* (Rowman Littlefield, 2007), and *The Past and Future of America's Economy: Long Waves of Innovation That Power Cycles of Growth* (Edward Elgar, 2005). Atkinson holds a Ph.D. in city and regional planning from the University of North Carolina, Chapel Hill.

About ITIF

The Information Technology and Innovation Foundation (ITIF) is an independent, nonprofit, nonpartisan research and educational institute focusing on the intersection of technological innovation and public policy. Recognized by its peers in the think tank community as the global center of excellence for science and technology policy, ITIF's mission is to formulate and promote policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress.

For more information, visit itif.org.

ENDNOTES

1. Robert D. Atkinson, "Computer Chips vs. Potato Chips: The Case for a U.S. Strategic-Industry Policy" (ITIF, January 2022), <https://itif.org/publications/2022/01/03/computer-chips-vs-potato-chips-case-us-strategic-industry-policy>.
2. U.S. Commerce Department, "Commerce Department Further Restricts Huawei Access to U.S. Technology and Adds Another 38 Affiliates to the Entity List," news release, August 17, 2020, <https://2017-2021.commerce.gov/news/press-releases/2020/08/commerce-department-further-restricts-huawei-access-us-technology-and.html>.
3. "Industries," SelectUSA, accessed January 18, 2022, <https://www.selectusa.gov/industries>.
4. Gary Jacobson and John Hillkirk, *Xerox: American Samurai* (New York: Macmillan, 1986), 72.
5. Federal Trade Commission, "FTC Requires NXP Semiconductors N.V. to Divest RF Power Amplifier Assets as a Condition of Acquiring Freescale Semiconductor Ltd.," press release, November 25, 2015, <https://www.ftc.gov/news-events/press-releases/2015/11/ftc-requires-nxp-semiconductors-nv-divest-rf-power-amplifier>.
6. Shara Tibken, "DOJ: Antitrust ruling against Qualcomm could 'put our nation's security at risk,'" *CNET*, July 16, 2019, <https://www.cnet.com/tech/mobile/doj-says-antitrust-ruling-against-qualcomm-could-put-our-nations-security-at-risk/>.
7. Calculations from the EU R&D 5000 report and OECD, "OECD Science, Technology and Innovation Scoreboard," accessed January 18, 2022, <https://www.oecd.org/sti/scoreboard.htm>.
8. William Gale, May 4, 2009 (8:52 a.m.), comment on John Maggs, "Tax Reform Handcuffs," *National Journal*, May 4, 2009, <http://economy.nationaljournal.com/2009/05/taxreformhandcuffs.php>.
9. Robert D. Atkinson, *Supply-Side Follies: Why Conservative Economics Fails, Liberal Economics Falts, and Innovation Economics is the Answer* (New York: Rowman & Littlefield Publishers, 2006).

10. Joe Kennedy, “A 14-Point Guide to Tax Reform” (ITIF, November 2017), <https://itif.org/publications/2017/11/10/14-point-guide-tax-reform>.
11. Robert D. Atkinson, “Increasing Taxes on Innovation-Based Traded Sectors Will Reduce U.S. Global Competitiveness” (ITIF, October 2021), <https://itif.org/publications/2021/10/08/increasing-taxes-innovation-based-traded-sectors-will-reduce-us-global>.
12. Robert D. Atkinson, “An Easy Checkoff for Global Competitiveness: The Case for a U.S. Innovation Box” (ITIF, November 2015), <https://itif.org/publications/2015/11/30/easy-checkoff-global-competitiveness-case-us-innovation-box>.
13. John Lester and Jacek Warda, “Enhanced Tax Incentives for R&D Would Make Americans Richer” (ITIF, September 2020), <https://itif.org/publications/2020/09/08/enhanced-tax-incentives-rd-would-make-americans-richer>.
14. Semiconductor Industry Association, “CHIPS for America Act & FABS Act,” accessed January 18, 2022, <https://www.semiconductors.org/chips/>.
15. USAGov, “Finance Your Business,” last updated October 7, 2021, <https://www.usa.gov/funding-options>.
16. Chris Coons, “Sen. Coons, colleagues seek to create new domestic manufacturing investment corporation,” press release, August 12, 2021, <https://www.coons.senate.gov/news/press-releases/sen-coons-colleagues-seek-to-create-new-domestic-manufacturing-investment-corporation>.
17. For example, David Coe and Elhanan Helpman found that a 1 percent increase in the R&D capital stock in the United States raised domestic productivity by 0.23 percent and raised the average productivity of 22 developed countries studied by 0.12 percent. David T. Coe and Elhanan Helpman, “International R&D Spillovers,” *European Economic Review*, 39 (1995), 859–887, <http://www.nber.org/papers/w4444.pdf>.
18. Stephen Ezell, Frank Spring, and Katarzyna Bitka, “The Global Flourishing of National Innovation Foundations” (ITIF, April 2015), <https://itif.org/publications/2015/04/13/global-flourishing-national-innovation-foundations>.