PRIORITIES AND ALLOCATIONS: HOW THE DEFENSE PRODUCTION ACT ALLOWS GOVERNMENT TO MOBILIZE INDUSTRY TO ENSURE POPULAR WELL-BEING

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INTRODUCTION

The Defense Production Act (DPA) provides numerous tools for the government to intervene on the demand and supply sides of particular industries. This issue brief focuses primarily on two such powers: priorities and allocations. Unlike price controls—the previous tool profiled in our issue brief series on distinctly American industrial policy (Tucker 2021)—priorities and allocations powers are available to US presidents now, without any further action needed by Congress. And they can play a particularly useful role in meeting two of the biggest challenges facing Americans today: the ongoing pandemic and climate crises.

In fact, they have already been used for such purposes—though to only a fraction of their full potential. This issue brief will explain what priorities and allocations are, how they work, the arguments for and against them, how they've been used historically, and how they could be used today. In particular, we show how the DPA could be used to further scale up COVID testing and treatments, erect vaccine manufacturing facilities around the country and world, ensure that food not being used by restaurants during shutdowns gets to hungry people, build up domestic solar panel and cell production capacity, unwind supply chain logjams, phase out coal production, and more.

WHAT ARE PRIORITIES AND ALLOCATIONS?

Priorities and allocations are tools currently authorized under the Defense Production Act (DPA). Congress first passed the statute on September 8, 1950,[1] although the history of priorities and allocations goes back to World Wars I and II. Congress has reauthorized the DPA over 50 times, most recently in 2019. The current authorization is due to expire in 2025 (Cecire and Peters 2020).

[1] PL 81-774: 64 Stat. 798, https://govtrackus.s3.amazonaws.com/legislink/pdf/stat/64/STATUTE-64-Pg798b.pdf.

The DPA breaks up the interventions the president is allowed to make by the type of economic activity at issue: **contracts, orders, materials, services, facilities,** and **equipment.** For the first five, Title I, paragraph A of the DPA authorizes the president:

> *(1) to require that performance under contracts or orders (other than contracts of employment) which he deems necessary or appropriate to promote the national defense shall take priority over performance under any other contract or order, and, for the purpose of assuring such priority, to require acceptance and performance of such contracts or orders in preference to other contracts or orders by any person he finds to be capable of their performance, and (2) to allocate materials, services, and facilities in such manner, upon such conditions, and to such extent as he shall deem necessary or appropriate to promote the national defense.*[2]

Title III of the DPA creates a further set of allocation authorities:

> *If the President determines that such action will aid the national defense, the President is authorized—*
> *(A) to procure and install additional equipment, facilities, processes or improvements to plants, factories, and other industrial facilities owned by the Federal Government;*
> *(B) to procure and install equipment owned by the Federal Government in plants, factories, and other industrial facilities owned by private persons;*
> *(C) to provide for the modification or expansion of privately owned facilities, including the modification or improvement of production processes, . . . and*
> *(D) to sell or otherwise transfer equipment owned by the Federal Government and installed under this subsection to the owners of such plants, factories, or other industrial facilities.*[3]

These grants of authority are highly malleable, as policymakers have given a progressively broader scope to the DPA. After the 1973 oil crisis, provisions were added to Title I to allow the DPA to use allocations and priorities of materials, equipment, and services "in order to maximize domestic energy supplies" even when the national defense is not at risk,[4] provided the president coordinates this with any existing priorities and allocations. There are certain restrictions on the president's use of this Title I authority when it comes to energy materials, services, and facilities,[5] but, notably, the Title III DPA allocation provisions are virtually unrestricted for the distribution of capital equipment in private markets. In 1994, the act was amended to include emergency

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[2] 50 U.S.C.A. § 4511 (a).

[3] 50 U.S.C.A. § 4553 (e).

[4] Though programs for energy production and/or construction are also now in the DPA's definition of "national defense."

[5] P.L. 94-163, 94th Congress, Dec. 22, 1975, https://www.govinfo.gov/content/pkg/STATUTE-89/pdf/STATUTE-89-Pg871.pdf . See the Appendix for a fuller description of the caveats to this power.

preparedness in the definition of "national defense."[6] After 9/11 and growing concerns about foreign companies and countries buying up sensitive US assets, the definition of "national defense" was expanded to include protection and restoration of "critical infrastructure"—a legal designation of 16 sectors deemed essential to the functioning of the economy, from health care, to telecom, to grocery workers.[7] The full range of critical sectors are depicted in Figure 1 below. Finally, the National Defense Authorization Act for Fiscal Year 2022 would further expand the DPA's definition of national defense to explicitly include "health emergency preparedness and response activities," though it would seem from the actions during the pandemic that this addition would merely affirm a stretching of the authorities already underway. The end result of these amendments is a conception of "national defense" that goes far beyond the military battlefield and into almost every nook and cranny of the economy.

Figure 1: Sixteen Sectors Making Up Critical Infrastructure

Source: Cybersecurity & Infrastructure Security Agency (CISA). 2021. "Identifying Critical Infrastructure During COVID-19." Updated August 13. https://www.cisa.gov/identifying-critical-infrastructure-during-covid-19.

[6] P.L. 103-337, 103rd Congress, Oct. 5, 1994, https://www.govinfo.gov/content/pkg/STATUTE-108/pdf/STATUTE-108-Pg2663.pdf.

[7] P.L. 108-195, 108th Congress, Dec. 19, 2003, https://www.congress.gov/108/plaws/publ195/PLAW-108publ195.pdf . The full list of critical infrastructure includes the following sectors: chemicals, commercial facilities, communications, critical manufacturing, dams, defense industrial base, emergency services, energy, financial services, food/agriculture, government facilities, health care/public health, information technology, nuclear reactors/materials/waste, transportation, and water/wastewater. See https://www.cisa.gov/critical-infrastructure-sectors.

Not only does the DPA touch much of the economy, it does so with particular political economy values embedded within it—including promotion of **the health of the economy overall, fair competition/anti-concentration,** and **prioritization of particular industrial policies.** Combined, these provisions show that DPA is not neutral between industries—our definition of what constitutes an industrial policy, which is any policy that encourages resources to shift from one industry into another (Tucker 2019). Here are six ways the DPA achieves these three objectives.

Holistic Economy: First, the DPA calls on the government to prioritize the strength of the civilian peacetime economy. Recognizing that "the security of the United States is dependent on the ability of the domestic industrial base to supply materials and services for the national defense," the DPA notes that policymakers cannot only attend to the vitality of this industrial base in the context of a full-blown emergency. Rather, investments and other actions are needed "to support continuing improvements in industrial efficiency and responsiveness" and the ability of US industries "to produce internationally competitive products and operate profitably while maintaining adequate research and development to preserve competitiveness with respect to military *and* civilian production" (emphasis added). This imperative gives military and emergency planners a direct stake in the US civilian industry's productive capacity, technological edge, supply chains, and labor force.[8] Crucially, even the risk of knock-on inconveniences to military and space facilities (such as NASA) from happenings in the civilian economy can merit DPA interventions (Gramm 2001, 20, 30).

Fair Competition / Anti-Concentration: Second, the DPA instructs the president to accord a "strong preference" for small businesses over large ones, and to do so "to the maximum extent practicable" for small businesses "in areas of high unemployment or areas that have demonstrated a continuing pattern of economic decline."[9] Small businesses are to be treated fairly when goods are being allocated.[10] Third, and relatedly, the DPA instructs government to "encourage the geographic dispersal of industrial facilities in the United States to discourage the concentration of such productive facilities within limited geographic areas that are vulnerable to attack by an enemy."[11] Fourth, the Act also provides a tool for greater regional economic integration, incorporating Canada into

[8] 50 U.S.C.A. § 4502 (a)(3,4,7), (b)(1).

[9] 50 U.S. Code § 4518(a).

[10] 50 U.S. Code § 4551(e).

[11] 50 U.S.C.A. § 4502 (b)(6,8).

the definition of the "domestic industrial base" upon which the national defense relies.[12] Thus, the economy must be structured domestically and internationally to prioritize competition and redundancy over concentration.[13] This provides a potent tool for place-based policies that could invigorate regions left behind by globalization, automation, and other factors.

Industrial Policy: Fifth, the Act focuses most explicitly on energy industries, requiring maintenance of adequate domestic energy supplies, including reliance "to the maximum extent possible . . . on renewable energy sources (including solar, geothermal, wind, and biomass sources), more efficient energy storage and distribution technologies, and energy conservation measures."[14] Various provisions prioritize development and mining of critical metals and minerals.[15] Finally, and relatedly, there is a wide-ranging authority for government to procure, install, modify, expand, sell, or transfer equipment in any plant, factory, or other industrial facility—not only when necessary in emergencies, but any time the president finds such action will provide any aid to the national defense or maximization of domestic energy supplies.[16]

[12] 50 U.S. Code § 4552(6-7). The implementing regulations enlist Canadian government agencies to help with filling of priority orders. See 15 CFR § 700.56. Similar bilateral arrangements are in place with Australia, Finland, Italy, The Netherlands, Spain, Sweden, and the United Kingdom.

[13] At the same time, Title VII of the DPA (50 U.S. Code § 4558) – which we will not deal with in this issue brief – allows for exemption from antitrust rules for would-be competitor firms that come together in a voluntary agreement to expand production for the national defense or preparedness. So its overall impact on competition is case dependent.

[14] 50 U.S.C.A. § 4502(a)(5-6).

[15] See, e.g. 50 U.S. Code § 4532(a) in Title III of the DPA, authorizing loans for such mining.

[16] 50 U.S.C.A. § 4533(e).

HOW DO PRIORITIES AND ALLOCATIONS WORK?

The **priorities power** allows government agencies to sequence production by private companies by assigning ratings based on higher and lower need. The precise ratings schemes have varied over time. In World War I (the first time the power was used) and World War II, the priorities classifications were Class AA (covering emergency war work), Class A (other war work), and Class B (priority production for the civilian economy). Would-be buyers of commodities under priorities orders would submit applications to a governmental Priorities Committee, which would assign it a rating and issue a certificate. Producers would then have to (re)sequence their production so that higher-rated orders were produced before lower-rated ones. Recipients of priority orders could in turn pass on priority orders to their own suppliers and supply chains (Baruch 1921, 52).

Today, DPA regulations use a significantly simpler scheme. The Defense Production and Allocation System (DPAS) uses a lower **"DO" rating** to jump the queue over non-DPA orders (e.g., a firm's normal customer base), and a higher **"DX" rating** to take precedence over DO orders. The former can be issued by lower-level officials, while agency heads must sign off on the latter. A rated order includes a rating, a required delivery date, a signature, and a statement noting the applicability of DPAS procedures. However, current and future administrations could expand out the range of priority classifications—including for the civilian economy—provided the right legal boxes were checked (see the Appendix).

Priorities are among the government's most powerful tools for using **demand channels** to structure industries, through both its own purchases and for those of private firms that receive priority orders. Businesses that receive priority orders are required to accept them and cannot charge higher prices or impose more onerous terms than they would in the normal course of business. There is a very limited set of instances where rejection of a rated order is possible: if the order is impossible to fill by the requested date (in which case the order must be rejected, but the earliest later delivery rate must be offered), or if the requested order or service is not or is no longer provided. The recipient is in turn empowered to push the requests down their supply chain to expedite action from their suppliers as well.[17] The timeline for acceptance/rejection can be as little as six hours or as long as 15 days. However, in the wartime-era use of DPA, government could and did use priorities to shift the goods made by particular firms, and the statute (as opposed to the changeable regulations) puts few restrictions on doing so anew. As one manual from the World War II era described it, priorities act "as a traffic cop to give defense contractors a

[17] See https://www.dcma.mil/Portals/31/Documents/DPAS/DPAS_Contractors_REV7.pdf. Other grounds for rejecting orders include if the order conflicts with other DPA requests or if initial recipient of the order attempts to push a request down the supply chain for a product they themselves already make. See 15 CFR § 700.13.

clear right-of-way on the order books, the production schedules and the assembly lines of their suppliers and subcontractors. This it does by the very simple process of tagging defense orders or stamping the output of whole industries with the seal of defense importance" (RIA 1942, 2).

An example can illustrate how priorities work. Say Mr. Steel, a domestic steel producer, has contracts with luxury facilities like Mar-a-Lago resort in Florida. However, national policymakers have determined that steel would be better put to use building new ships for the Navy to counter Chinese military actions in the South China sea, and to make new storage containers for the Port of Long Beach to unstick supply chain logjams. The government can send Mr. Steel orders with the highest DX rating for the Navy acquisitions, and with the next highest DO rating for the civilian logistics needs. Thus, Mr. Steel could reorder its production so that the Navy is serviced first, the Port of Long Beach second, and Mar-a-Lago only if supplies are left over. The latter cannot successfully sue for breach of contract.

In contrast to priorities, the **allocation power** allows the government to use **supply channels** to shape industrial activity. With priorities, the state is essentially one procurer among others (even if it can push itself to be first in the queue). In contrast, allocations are a more direct economic planning tool. Under current regulations, the allocation power includes **set-asides** (requiring businesses to reserve materials, services, or facilities capacity in anticipation of priority orders), **directives** (orders to take or not take certain actions, such as to stop or reduce production of an item; prohibit the use of specific materials, services, or facilities; or divert such resources from one purpose to another), and **allotments** (caps on the maximum quantity of a material, service, or facility authorized for a specific use).[18] Allocation orders present even less flexibility than priority orders. Even if full compliance is impossible for some reason, the recipient must comply to the fullest extent possible for as long as the Department of Commerce (or another agency under delegated power) tells them to.[19]

To return to our example, maybe officials are unclear as of yet which companies will be able to take the steel orders and make them into ships and shipping containers. However, if they wait, Mr. Steel will use up all its capacity on a Mar-a-Lago contract. Thus, policymakers could use set-asides to instruct Mr. Steel to stand by for priority orders. Alternatively, the Department of Commerce could use directive powers to instruct Mr. Steel to not service luxury facilities at all, or to use no more than 10 percent of its capacity to do so. Finally, it could use allotments to specify to all domestic steel companies that no more than 5 percent of steel capacity go to non-essential uses.

[18] 15 CFR § 700.33.

[19] 15 CFR § 700.35.

WHO LEADS ON DPA?

The text of the DPA vests power in the first instance to the president themself. However, it also allows the president to delegate their powers to agencies as they so choose. Under the Defense Priorities and Allocation System (DPAS), seven agencies currently share these powers. This division of labor was most recently systematized in Executive Order 13603 by the Obama administration in 2012, which the Trump administration modified on April 1, 2020 during the COVID crisis. Agencies are divided up by function and sector of the economy. "Determination departments" are the gatekeepers, and must (in most instances) be the ones who will make determinations in writing that DPA priorities and allocations are "necessary or appropriate" to promote the national defense. The Department of Defense is the gatekeeper with respect to military and space uses, the Department of Energy for energy uses, and the Department of Homeland Security for everything else.

"Resource departments" are placed by default in a more reactive mode to the determination departments, acting on requests for them in their industrial area of competence. Each is required to keep active plans for using the DPAS, and their jurisdictions are defined as:

- The US Department of Agriculture (USDA) over food resources, food resource facilities, livestock resources, veterinary resources, plant health resources, and the domestic distribution of farm equipment and commercial fertilizer;
- The Department of Energy (DOE) over all forms of energy;
- The Department of Health and Human Services (HHS)—and, since Trump, the Department of Homeland Security (DHS)'s Federal Emergency Management Agency (FEMA)—over health resources;
- The Department of Transportation (DOT) over civil transportation;
- The Department of Defense (DOD) over water resources; and
- The Department of Commerce (DOC) over all other materials, services, and facilities, including construction materials.[20]

[20] E.O. 13603 of Mar 16, 2012. https://www.federalregister.gov/documents/2012/03/22/2012-7019/national-defense-resources-preparedness.

The complexity does not end there. Congress has empowered a further 10 agencies to sit on a FEMA-chaired Defense Production Act Committee that oversees DPA activities. (More on their failure to effectively do so below.) The resource departments can subdelegate priority authority for their economic sectors to each other or to still other agencies. The DOC, which oversees the procedural aspects of the overall DPAS, can and has subdelegated authority to DOD, DHS, and DOE, as well as the General Services Administration (GSA). These latter four can and have sub-subdelegated powers to agencies as varied as the National Aeronautics and Space Administration (NASA), the Army Corps of Engineers, and even state, local, tribal, and territorial governments. Finally, when resource agencies deem it necessary, they can bypass the determination departments and ask the president for approval to take industrial actions (Criswell 2021).

Nonetheless, agencies have been lax on preparing plans to use their powers in emergencies. In 2008, a Government Accountability Office (GAO) study concluded that—of the (then) six agencies with DPAS planning responsibilities—only the Defense Department had both serious plans and experience using them (GAO 2008). This prodded Congress, in its 2009 DPA amendments, to require agencies to produce plans within 270 days. It took some four years for the agencies to finalize these plans, and even when they did so, they did not include substantial detail for how they would use the allocations power—the more muscular of the two tools.

It is important to restate that this complexity is due almost entirely to executive branch regulations. Greater simplification or centralization would be in keeping within the discretion of the text of the DPA itself.

The DPA represents a particular type of legal authority in that its plain language allows substantial executive action (even when the current Congress is unable or unwilling to act), yet its implementing regulation provides substantial hurdles to action. In the **action-facilitating** category, the DPA stands apart from other exceptional delegations of power that exist in federal statute in that Congress need not authorize any pursuant actions (as in the declaration of war) and the president need not formally declare an emergency in order to make priorities and allocations. Rather, the DPA can be used continually in war and peacetime, in emergency and calm. (Though it is subject to a handful of largely untested and partial limits discussed in the Appendix.)

Second, the president has virtually unlimited power to compel the production of information from private parties to inform DPA actions. Failure to comply can be punished by a fine or year in prison.[21] Third, the DPA specifies that "In order to prevent hoarding, no person shall accumulate (1) in excess of the reasonable demands of business, personal, or home consumption, or (2) for the purpose of resale at prices in excess of prevailing market prices, materials which have been designated by the President as scarce materials or materials the supply of which would be threatened by such accumulation."[22] Fourth, violations of these or any DPA provisions are subject to expedited injunctions and compliance orders in the courts, which are stripped of discretion to not give them upon the appropriate showings by the executive. Defendants are denied the ability to have government cover their legal costs.[23] Fifth, in the use of the DPA's equipment installation authorities, recipients of these technologies agree to waive legal claims against the US and indemnify the government against third party claims.[24] Sixth, in taking DPA actions, some aspects of the Administrative Procedure Act—otherwise the cornerstone of much of the field of US administrative law—do not apply.[25]

Moving over to the **action-limiting column**, current regulations create presumptions against the use of allocations outside of equipment allocations, relegating to instances when priorities powers will not sufficiently increase supplies to meet national defense requirements or deployment of priorities would cause a severe or prolonged disruption to normal US economic activities. Moreover, the regulations specify that the DPA not be used

[21] "The President shall be entitled, while this chapter is in effect and for a period of two years thereafter, by regulation, subpoena, or otherwise, to obtain such information from, require such reports and the keeping of such records by, make such inspection of the books, records, and other writings, premises or property of, and take the sworn testimony of, and administer oaths and affirmations to, any person as may be necessary or appropriate, in his discretion, to the enforcement or the administration of this chapter and the regulations or orders issued thereunder." 50 U.S. Code § 4555(a). The penalties are described at 50 U.S. Code § 4555(c).

[22] 50 U.S. Code § 4512.

[23] 50 U.S. Code § 4556.

[24] 50 U.S.C.A. § 4533(e)(2).

[25] 50 U.S. Code § 4559.

for rationing materials or services at the retail level, nor to force any company to give up disproportionate market share.[26] (Nonetheless, agencies have offered several examples when both powers could be used, including scenarios where bus companies could be required to reserve 40 percent of their capacity to service a designated emergency,[27] and where Foot and Mouth disease could lead to herd cullings and 80 percent curtailment of milk supply [wherein USDA would allocate available milk to priority needs like school food programs]. [28]) Yet these limitations are only in regulation and are not required by statute, so could be altered unilaterally by the executive.

HOW HAVE PRIORITIES AND ALLOCATIONS BEEN USED IN THE US?

For decades, the Department of Defense has been the primary user of DPA authorities, issuing around 300,000 priority orders annually for routine procurement needs.[29] But the Act's powers have a longer and more varied usage in earlier decades, and the year 2020 may be a turning point back toward more regular use of these powers.

The first authorization of priorities came on August 10, 1917, when the Preferential Shipments Act stated that:

> *During the continuance of the war in which the United States is now engaged the President is authorized, if he finds it necessary for the national defense and security, to direct that such traffic or such shipments of commodities as in his judgment, may be essential to the national defense and security shall have preference or priority in transportation by any common carrier by railroad, water, or otherwise.*

While no explicit power was given for priorities and allocations outside of transportation, the War Industries Board used its power over the means of transport (as well as supply of food and fuel through the separate Food and Fuel Control Act) to get firms to agree to proto-DPA arrangements. A voluntary priorities and allocation arrangement with steel—a crucial input into other industries—led to further "voluntary agreements" downstream.[30]

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[26] 15 CFR § 700.30.

[27] The regulation notes that "DOT could not use allocation authority to tell a bus company how to distribute its buses to serve its commercial customers or to tell a bus company how many tickets it could sell to persons in a given month." See https://www.federalregister.gov/documents/2012/10/01/2012-23789/prioritization-and-allocation-authority-exercised-by-the-secretary-of-transportation-under-the.

[28] See USDA DPAS regulation here: https://www.federalregister.gov/documents/2015/10/22/2015-26766/agriculture-priorities-and-allocations-system. For corresponding regulations for HHS and DOE, see https://www.federalregister.gov/documents/2015/07/17/2015-17047/health-resources-priority-and-allocations-system-hrpas; https://www.federalregister.gov/documents/2011/06/09/2011-14282/energy-priorities-and-allocations-system-regulations.

[29] https://www.dcma.mil/Portals/31/Documents/DPAS/DPAS_Contractors_REV7.pdf.

[30] On July 1, 1918, priorities control was extended to all industries, but the application procedure was simplified so that buyers could self-certify certain classes of ratings.

Behind closed doors, agency officials attained what they called "involuntary voluntary agreements" through threats of government commandeering production or giving industries just enough petroleum to be able to produce the exact decline in civilian car production that government wanted (Schwarz 1981). Overall, 191,966 priority certificates were issued in World War I (Baruch 1921, 54).

By World War II and the Korean War, policymakers were convinced that the voluntary methods had led to undue delays in mobilization. Thus, lawmakers granted explicit priority and allocation powers in the First and Second War Powers Act (1941, 1942) and the Defense Production Act of 1950. In the Production Requirements Plan (PRP) in the early part of World War II, virtually all users of 30 critical materials had to provide extensive information about their current and future demand needs, and the government would approve (typically lower) allocations based on available supply. In 1943, this was scaled back in favor of a Controlled Materials Plan (CMP) that just applied to users of steel, copper, and aluminum. But by allocating the products of these critical upstream industries that produced goods virtually every other industry needed, government planners were able to effectively direct the activities of most private industries. In the post-war period, allocations returned to a PRP-style arrangement, but only a certain percentage of available supply was set aside for allocations (Colberg 1951).

These strategies were complemented with other allocation-like tools called **limitations**. One type of limitation involved how much of a given **input** could be used, with caps or even prohibitions on civilian or non-essential use of items like aluminum or rubber. A second involved regulations on **output**. Non-residential construction was sharply limited, and construction of amusement parks essentially blocked altogether. Alternatively, government could require more output, such as the order that rubber companies produce 150 percent of their pre-war levels. A third variation was **inventory** limitations, such as the requirement that firms keep only a minimum amount of supply on hand. This allowed planners to have a more accurate sense of what goods could be called on for the national mobilization. Rounding out the list were limitations on **delivery, export, import**, and **shipping** (Ibid).

Not only did most businesses not fight the use of these authorities, some polls indicate substantial support. Elite opinion polls from the time show that many business leaders found the controls helpful for understanding how to fit in with wartime priorities (Mills and Rockoff 1983). Indeed, one business advisory group sold better understanding of priorities and allocations as a competitive advantage over competitors, going so far as to offer guidance on what types of C-suite hires should be made to indicate ideological compatibility with the Rooseveltian economic philosophy and value of conservation (RIA 1942, 50—52).

Priorities and allocations have been particularly useful in energy industries. In World War II, there was a wide range of economic arrangements used to deploy energy resources, including those that were government-owned and -financed, but operated by private companies (pipelines); government-financed, privately owned and operated (refineries); and government-owned and -operated (arsenals). The net result was 14 billion gallons of aviation gasoline, expansion of 34 facilities, and 3,500 new miles of pipeline (Gulick 1979, 14—15). Amidst the 1970s oil shock, the Departments of Defense and Interior used the DPA to get priority performance of petroleum for military use and to expedite completion of the Trans-Alaska pipeline (Gulick 1979).[31] In 2001, the DPA was used to keep energy flowing during the California utility crisis. In the latter instance, market manipulation by Enron led to 800 percent increases in wholesale prices, threatening the financial viability of energy providers like the Pacific Gas & Electric Company (PG&E). Six natural gas suppliers threatened to halt orders to the company. The Clinton administration invoked the DPA to require continued delivery by 27 suppliers under previously agreed terms, justified on the basis of the importance of continuity of service to not only private households but also defense bases and NASA facilities (Gramm 2001; Duane 2002; Van Nostrand 2018). More recently, since a 2011 Obama administration initiative, the Navy has used the DPA to turn algae, cooking oil, and other bioproducts into fuel, hoping to eventually establish a so-called Great Green Fleet (Andrews et al. 2012; Energy 2020). These initial demonstration projects have coincided with—and likely inspired—greater private sector shipping company optimism and ambition to decarbonize their own operations (Wienberg 2022).

The DPA has also been used for resources beyond energy. After the 1950s, the DPA was used to compel the production of toxic elements like Agent Orange[32] and polychlorinated biphenyls.[33] In the 2000s, the DPA's authority to install equipment in private facilities has been used by the Department of Defense to help small start-ups get over "the valley of death" from innovation to commercial viability, including for developing next-generation radiation-hardened microelectronics, silicon carbide wafers, highly rigid plastics, and aerogels. According to the DOD's former director of the DPA program, this installation authority is used frequently (Mirsky 2005). The DPA also played a vital role in getting reconstruction materials to New Orleans during the Hurricane Katrina disaster in 2005 and providing interpretive services during other natural disasters like Hurricanes Sandy and Maria (Johnson 2013; Cecire and Peters 2020).

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[31] By one estimate, the total subsidy to stimulate energy production between 1918 and 1980 neared $1 trillion in today's dollars. See Cone et al. 1980, 6.

[32] Hercules Inc. v. United States, 24 F.3d 188, 210 (Fed. Cir. 1994), aff'd, 516 U.S. 417, 116 S. Ct. 981, 134 L. Ed. 2d 47 (1996).

[33] State v. Monsanto Co., 274 F. Supp. 3d 1125, 1127 (W.D. Wash. 2017), aff'd, 738 F. App'x 554 (9th Cir. 2018). Producers have thus far tried and failed to successfully argue that DPA orders should shield them from contract or tort liability (Greenspoon and Class 2020).

In the 2020s, the DPA has been an essential part of the response to the COVID-19 pandemic. On March 13, 2020, President Trump declared a national emergency due to the threat from COVID. Five days later, on March 18, he additionally found that "health and medical resources needed to respond to the spread of COVID-19, including personal protective equipment (PPE) and ventilators, meet the criteria" of the DPA.[34] By April 10, FEMA allocated certain PPE solely to domestic use, meaning exports were blocked. That order was effective only through June 30, 2021.[35] On May 14, Trump authorized the Development Finance Corporation (DFC) to use DPA lending authorities to onshore medical supply chains.[36] President Biden has continued to use priorities as a procurement device: according to the GAO, 73 priority orders for medical supplies, vaccine supplies, vaccines, therapeutics, and diagnostics were issued from March 2020 through September 2021, though agencies like the Department of Health and Human Services (HHS) have still have not developed plans for using the DPA into the future (GAO 2021).[37] Federal agencies took hundreds of other DPA actions to address the pandemic, including expediting alternative care centers to support the surge in patients and directing cleaning supplies and information technology to deal with enhanced hygiene needs and telework during COVID (Criswell 2021).

In fact, Trump's relatively expansive use of the DPA predated COVID. Over the course of his presidency, President Trump used the DPA to define materials as varied as space launch systems to advanced photomasks to alane fuel cells (the latter a major component in low-emissions vehicles) as essential to the national defense, and to determine that private industry cannot reasonably be expected to provide production capability for these items in a timely manner without DPA purchase commitments.[38] And during COVID, Trump also used the DPA in particularly untraditional and cruel ways, declaring meat and poultry a "scarce and critical" resource after several meatpacking facilities had COVID outbreaks and were looking at sustained closure. Accordingly, he instructed the USDA to "determine the proper nationwide priorities and allocation of all the materials, services, and facilities necessary to ensure the continued supply of meat and poultry."[39] While more bluster than clear instruction, the order was widely interpreted as requiring the facilities to stay open, which may have led to tens of thousands of unnecessary deaths of meatpacking workers (Dineen 2020).

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[34] Exec. Order No. 13909: Prioritizing and Allocating Health and Medical Resources to Respond to the Spread of COVID-19, 85 FR 16227.

[35] Prioritization and Allocation of Certain Scarce and Critical Health and Medical Resources for Domestic Use, 85 FR 86835-01.

[36] Delegating Authority Under the Defense Production Act to the Chief Executive Officer of the United States International Development Finance Corporation To Respond to the COVID-19 Outbreak, 85 FR 30583.

[37] See also Bown and Bollyky 2021; Hufbauer and Jung 2021.

[38] Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as Amended, 85 FR 38747 https://www.federalregister.gov/documents/2020/06/29/2020-14090/presidential-determination-pursuant-to-section-303-of-the-defense-production-act-of-1950-as-amended; Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as Amended, 83 FR 51617.

[39] Delegating Authority Under the Defense Production Act With Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID-19, 85 FR 26313.

Still more recently, the Biden administration allocated 21 aircrafts from private commercial airlines to aid the evacuation of those fleeing Afghanistan during the US withdrawal. This was only the third time—after Operation Desert Storm and the early phases of the Iraq War—that this so-called Civilian Reserve Air Fleet (CRAF) was invoked. CRAF is an arrangement whereby private airlines agree to make some of their capacity available for allocation purposes, in return for government procurement of their carrier services in non-emergency time (Cecire and Peters 2021).

DPA IS BLESSED BY THE COURTS

Despite what would seem like a centralization of powers in the executive in conflict with constitutional requirements, courts and the legal system have repeatedly blessed DPA-style authorities. In a 1946 memo reviewing Franklin D. Roosevelt and Harry S. Truman's use of the proto-DPA allocation authorities, the Department of Justice identified no less than nine major favorable rulings by courts.[40] More recently, courts have held DPA authorities to be constitutionally permissible. For instance, even if priorities orders frustrate private firms' fulfillment of their normal commercial contracts (even dramatically), the US Court of Claims has found this does not constitute a compensable taking of property.[41] Much more recently, in December 2021, a US District Court upheld the applicability of the DPA's anti—price gouging language, noting that while terms like scarcity and prevailing market rates are not defined, executives and judicial branch officials have extensively used interpreting these and similar phrases, noting over 1,000 such examples.[42]

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[40] Full quote: "the methods adopted by the Government to implement the priorities and allocation powers have been numerous and varied. They include the rationing of food and other scarce commodities, and this has been upheld on the ground that the power to allocate encompasses the power to distribute, to assign, and to allot (Gallagher's Steak House v. Bowles, 142 F. (2) 530; cert. den. 64 Sup. Ct. 1288). Under the doctrine that allocation may be accomplished by the restriction diversion, or conservation of scarce commodities, the Government has prescribed the size of a standard loaf of bread (United States v. Ashley Bread Co., 59 F. Supp. 671) and has established sanitary regulations for the storage of meat which have for their purpose the conservation of this commodity (United States v. Durst, 59 F. Supp. 891). The establishment of ceiling prices on commodities has been sustained under the allocation power as an incident thereto (K. d J. Markets v. Bowles, 57 F. Supp. 294; aff'd. 148 F. (2) 661) and the Government has restricted the right of an individual to acquire, use, or dispose of scarce commodities by the issuance of 'suspension orders' upon violation of rationing regulations (L. P. Steuart d Bro. v. Bowles, 322 U. S. 398; Brown v. Wilemon, 139 F. (2) 730). Where commodities are the subject of sales contracts which are in violation of existing war food quotas, the Government may under its allocation powers prevent their delivery under the contracts (United States v. General Cigar Co., 98 F. Supp. 620; United States v. Lehigh Valley Co-op Farm, 59 F. Supp. 1022). Ownership of materials prior to the establishment of allocations or priorities does not remove them from regulations, since the allocation power includes control over the disposition and use of materials on hand without regard to whose hands they were in or whether they were being held for use or for sale (Shreveport Engraving Company, Inc. v. United States, supra)." Reprinted in (Kilgore 1947, 23477).

[41] Kearney & Trecker Corp. v. United States, 688 F.2d 780, 782 (Ct. Cl. 1982).

[42] Full quote: "It is significant to note that the statute under which the defendant is charged, the Defense Production Act, is not new. Quite the contrary. It is 70 years old, having first appeared in 1950 at the start of the Korean War as § 2072 of the Defense Production Act. 50 U.S.C. § 2072. The language of § 2072 has remained unchanged and was modeled after the Second War Powers Act of 1942 . . . The defendant's insistence that the lack of a specific or numerical specification of what exactly constitutes 'prices in excess of prevailing market prices' requires a finding of constitutional vagueness is mistaken. Indeed, the argument ignores more than a century of unbroken usage of that phrase in every imaginable legal context. As noted earlier, while the phrase 'prevailing market price' appeared 70 years ago in the Defense Production Act of 1950, that was by no means its debut. Quite the contrary. The phrase had been used repeatedly for more than a century by both courts and scholars, and both before and after the Act. It must not be forgotten that '[t]he requirement of reasonable certainty does not preclude the use or ordinary terms to express ideas which find adequate interpretation in common usage.' United States v. 2600 State Drugs, Inc., 235 F.2d 913, 916 (7th Cir. 1956). A Westlaw search of the phrase, 'prevailing market price,' reveals that it has been used in 1,107 federal cases going back to 1894, with the most recent case being from the Eastern District of Missouri in 2021." US v/ Krikor Topouzian, No. 20 CR 721, 2021 WL 5882204, at *3 (N.D. Ill. Dec. 13, 2021).

WHAT ARE THE ARGUMENTS FOR AND AGAINST PRIORITIES AND ALLOCATIONS?

The argument in favor of priorities and allocations is simple: They are an industrial policy device allowing the government to provide national defense, emergency preparedness, and maximization of energy supplies when private markets and firms can't or won't. At the same time, they are a balanced tool in line with American rule of law norms, in that they don't eliminate private property, the bodily autonomy of individual workers, or the right to procedural protections when what the government requests is impossible.[43] Far from replacing markets, these tools allow government to work through markets, as a demander of goods, services, and facilities in the priorities power, and as a coordinator of supply in the allocations power.

However, priorities and allocations are a form of economic planning, and as such the critiques against planning generally are applicable here. Austrian economist Friedrich Hayek has criticized the idea of economic planning on the basis of its supposed inferiority to the price mechanism as an aggregator of decentralized knowledge (Hayek 1945). However, the presumption for policymakers is that free market prices will make it impossible to mobilize for the national well-being at an acceptable price to taxpayers, while maintaining a rough semblance of a fair civilian economy. Thus even Republican critics of the authorities—first given to Democratic presidents Wilson, Roosevelt, and Truman—conceded their utility (Taft 1941) and have regularly renewed the DPA long after the cession of hostilities in the Korean War. The most recent reauthorization was in 2018, when the tellingly named John S. McCain National Defense Authorization Act passed on bipartisan 359—54 and 87—10 margins respectively in the GOP-controlled House and Senate, and was signed into law by a Republican president.

Bernard Baruch, a Wall Street financier and advisor to Wilson, Roosevelt, and numerous other administrations, called priorities "a new method of control," and a novel way to do American industrial mobilization with equity:

> *Through application of the principle of priorities, the processes of manufacture and trade were made to move in response to a national purpose rather than in response to the wills of those who had money to buy. Through price-fixing, men were discouraged in any unwhole some ambitions to make inordinate profits out of the war. Through the conservation work of the Board, many wasteful trade practices were reformed and millions of hours of human*

[43] For international and historical examples that do not have such features, see Smolinski 1969 and Feldman 2014.

> *labor were made more fruitful . . . When prices are fixed under circumstances in which demand far exceeds supply,* ***the right to buy cannot safely be left to the forces of chance and personal favoritism . . . Yet this priority control was strictly American in its nature.*** *The central authority was only the organism necessary to make articulate and definitive the desire of each man to do his part."* (Baruch 1921, 29, 47 ***emphasis added***)

Nonetheless, the experience of the DPA during the Vietnam War and then under President Trump—when it was used to produce Agent Orange and then to require meatpackers to stay open during COVID—shows that public and congressional vigilance are needed to ensure that priorities and allocations are not misused.

HOW COULD PRIORITIES AND ALLOCATIONS BE USED TODAY?

Unlike price controls—the topic of our previous industrial policy issue brief installment (Tucker 2021)—priorities and allocations need no new legislation. The current grant of DPA is good through 2025, and the act has been regularly renewed. While the authority could be used for a wide range of industries and problems, this section will focus on two: addressing the COVID-19 and climate crises. It will then suggest reforms that could be make the DPA even more useful.

COVID-19 CRISIS

As of early 2022, over 74 percent of Americans had received at least one vaccination against COVID-19 (New York Times 2022). That's on the low end for developed nations, with the comparable number for countries like Canada and Japan closer to 80 percent. However, that number is far lower in many developing nations. In Africa as a whole, only 14.3 percent of the population has received at least one dose. In countries like Congo and Burundi, the number is under 1 percent. In a global pandemic, one of the greatest threats to public health is the ability of a virus to mutate over time. Thus, even if developed countries succeed in developing and distributing vaccines against early variants, uninoculated regions become petri dishes for variants against which early vaccines may be ineffective. This appears to be what has happened with the Omicron variant of COVID, which was first discovered in South Africa.

One of the solutions the Biden administration and developing countries have proposed to ramp up vaccination rates in developing countries is to waive intellectual property rules at the World Trade Organization (WTO). There are narrower versions of the proposal

that would waive patents only for vaccines, while more expansive proposals would waive monopolies across wider swaths of medical supply chains. One argument that European governments and other critics of a waiver have raised is that a waiver on its own does nothing to transmit the equipment and know-how that goes into making vaccine production reliable (Sullivan 2021).

Here is where the DPA could be really useful. The administration could procure or develop the equipment needed to make and preserve vaccines, and install that equipment free-of-charge in facilities around the US and the world. Recall that one objective of the DPA is greater geographic dispersal and redundancy in industrial facilities. Duplicative capacity around the world would help achieve that, and also lessen the power of monopolies in favor of new and existing small businesses—another DPA goal. This would lessen the power of companies like Pfizer, who have stood out for trying to keep policymakers from having full visibility into their production processes (Taylor 2021). Indeed, the Senate has recently affirmed a sense of Congress in the National Defense Authorization Act for 2022 that Biden "should make full use of the President's authority under the Defense Production Act of 1950 to scale vaccine production and deployment globally, which will save millions of lives and protect Americans from the risk of emerging viral threats." These steps, coupled with a WTO intellectual property rights waiver, could present a powerful strategy for finally taming the pandemic.

Beyond vaccine equipment, the DPA could also help expand the entire medical supply chain, as former New York Mayor Bill DiBlasio has called for with respect to at-home COVID tests and monoclonal antibody treatments amidst the Omicron surge (Garcia 2021).[44] The government could priority rate orders for testing equipment with any manufacturer with relevant capacity or expertise. This would pull forward production, while requiring delivery to specific recipients through allocation powers—be they local governments, private clinics, or any other entities—could ensure materials get to where they need to go. And the DPA not only applies to equipment and materials, but also to services and facilities. With one in five health care workers having quit their jobs during the pandemic (Galvin 2021) and the US at the end of decades of collapse in the number of rural hospitals and hospital beds (Flynn and Knox 2020), the US could use the DPA to redeploy health care service firms to COVID hotspots, require that hotels set aside 40 percent of their capacity for hospital overflow, and limit non-medically necessary procedures to 5 percent of capacity.

[44] For further thoughts on the DPA and COVID, see Baker 2020 and Goitein 2020.

Of course the disruptions of COVID are not only to public health but also to supply chains more broadly. When restaurants closed down at the height of social distancing in 2020, the food supply chain lost a major client. With no new source of demand, dairy farmers were dumping as much as 3.7 million gallons of milk a day, and other farmers and facilities burying a million pounds of onions or killing nearly as many chickens (Yaffe-Bellany and Corkery 2020). Meanwhile, in the industrial economy, a slowdown in production of new cars led to fewer orders of semiconductors at the height of the shutdown, so chip companies shifted to supply other purchasers. Now that the economy has been turned back on, chip companies have struggled to meet demand from all their customers, leading to a shortage and risking further shutdowns. Finally, delivery backlogs at ports have been driven in part by a supposed "trucker" shortage, which experts say has more to do with underutilization of truckers' work days (Wehrman 2021).

The DPA could be useful in each of these industries. Allocation authorities could be used to redeploy available food products to fight rising hunger at home and abroad.[45] The Production Requirements Plan from World War II offers a precedent to not only get information about chip production flows, but to allocate them to the uses that will have the highest employment multipliers.[46] The trucking industry could be ordered to provide 150 percent of its 2020 level of service, reserve 50 percent of that to unclogging the ports, and use no more than 5 percent of its capacity for delivery of unnecessary luxury goods. Under the Civil Reserve Air Fleet, airlines like United could be deputized to get medicine and other supplies to needed destinations. If this seems fanciful, recall USDA and DOT's implementing regulations for DPA envisioned two uses of allocation authority: instructing all of the nation's buses to put 40 percent of their capacity to addressing a crisis, and making sure those in highest need of milk get it when 80 percent of cattle are taken off the market. Thus, the only two hypothetical examples of allocation authorities federal agencies have found fit to enumerate in recent decades look much like these COVID-era challenges.

[45] The DPA is typically thought of as addressing shortages, rather than gluts. However, gluts in one geographic area or market are often accompanied by shortages elsewhere. This was particularly the case with COVID, such as when hunger soared in certain regions (Paquette 2020). Thus, precisely defining the area in which shortage exists—which has precedent in trade law (Meyer 2020)—could be a way to unlock DPA.

[46] The Biden administration has already threatened use of the DPA to get recalcitrant semiconductor firms to offer more visibility into their supply chains (Leonard 2021), so there is precedent here.

CLIMATE CRISIS

As noted above, the DPA (as amended) puts more emphasis on the energy industry than any other. Thus, it can and should play a role in helping aid the energy transition—alongside more traditional tools like the Clean Air Act. As of the writing of this issue brief, it seems that it may be impossible to get much climate legislation out of a 50-50 Senate. That gridlock makes it increasingly unlikely that a pro-climate action majority will be returned to Congress in 2022. For that reason, executive authorities like the DPA—repeatedly reauthorized for 70 years and thus particularly likely to be upheld by the courts—should become front and center.

The DPA is at its most flexible when it comes to the installation of equipment. Better and greener equipment and production processes are at the core of greening heavy industries like steel and aluminum—which could consume over half of the world's remaining carbon budget by 2050. Further, this past year has seen some enormous leaps forward in the development of equipment that can support a carbon neutral future. In August 2021, the Hybrit joint venture between Sweden's SSAB, Vattenfall, and LKAB produced and delivered the world's first batch of green steel—produced with 100 percent fossil-free hydrogen (Frangoul 2021). Elysis—a joint venture between Alcoa and Rio Tinto—has developed a parallel method for producing green aluminum (Deaux 2021). The company Lanzatech has developed a technology that captures carbon emissions from industrial production, fertilizes them into ethanol, and then uses the latter as a feedstock into other products like yoga pants and high fashion (Peters 2021). And recent developments in nuclear fusion (as opposed to the more controversial fission) could generate essentially limitless electricity forever, as even one glass of the fuel could power a home for 800 years (Wilson and Bott 2021).[47]

Once these and other equipment technologies reach the point of technical viability, the DPA can be used to acquire and distribute them to the nation's industrial firms (at no cost to the firms). This could have several benefits. First, it creates a government-backstopped market for these products, ensuring that the pioneering firms will in fact be able to find willing buyers as they invest more in their research and production capacities. Second, because government is distributing the equipment, it could ensure that businesses with unions, owners and workers of color, and in frontline communities have first-in-line access.

[47] The equipment distribution plan would be a vital complement to other moves the Biden administration has proposed, including pro-green and pro-domestic subsidies and procurements. Since the Trump administration already began using the DPA to develop the domestic steel industry and Congress has asked Biden to consider doing similarly for the aluminum industry (Platzer et al. 2021a and b), there is a sound precedent for this type of strategy. This type of deployment of the DPA has more normative appeal and legal basis than many of the uses of exceptional powers by the Trump administration (such as building the border wall) (Farber 2020, 1169).

Third, government could use its leverage as equipment distributor to not only enable decarbonization but require firms to pay greater attention to environmental justice concerns in their siting and production decisions. Recent research has indicated this type of action could lead to 25,000 avoided deaths in marginalized communities (Mayfield 2020). Fourth, these domestic actions could provide greater international credibility to the US and EU's recent announcement of a green steel deal. Critics of this agreement claim it is simply a protectionist sop to powerful steel companies and workers that will lock in current levels of carbon emissions—which are lower than China's but still not zero. This equipment distribution plan—which would not require congressional approval—would blunt those criticisms (Tucker and Meyer 2021; Meyer and Tucker 2021).

Turning from equipment to materials, services, and facilities, the administration has further tools to combat the climate crisis and lead an energy transition. When the DPA was amended in the 1970s to include more explicit provisions on energy, lawmakers and agency officials described the threat of disruption in access to petroleum in very strong terms. Thus, a plausible interpretation of the act could include bold steps to promote the widespread availability of renewable energy sources and less dependence on non-renewables (Gulick 1979, 28—31). Further, DOE guidance dating from the 2001 California energy crisis specifies that allocation of energy supplies need not be directly in service of the national defense (Schneider and Trotta 2018). Indeed, officials noted that action could be justified for supply crunches for any reason, not just actual material shortages: "[I]t makes no difference whether the shortage gets prompted by a credit crunch or whether it is prompted by a strike or other extrinsic factors such as transportation infrastructure breakdowns and the like," said one official (Gramm 2001, 10). While Republican lawmakers threatened an "extensive rewrite" of these provisions (Ibid, 2), they did not end up doing so. Moreover, the 2009 DPA reauthorization removed language contained in prior versions of the law that restricted government's ability to directly engage in energy production (Andrews et al. 2012). This type of threatened but willfully foregone amendment opportunity—coupled with the 2009 amendment—will provide courts with a firm basis for upholding the legality and constitutionality of energy-directed DPA actions.

So long as an administration does not seek to totally supplant the market (see the Appendix), it can establish allocations for energy supplies. It could limit coal waste energy production to 5 percent of its 2019 production and petroleum to 50 percent of its 2019 levels. It could require the domestic solar panel industry to allocate 150 percent of its 2019 production to utilities in poor communities. Such industrial planning will be necessary, given the predicted volatility of energy prices and mineral inputs to electric vehicles (some of it speculative) (Lee 2021). The administration could order performance and delivery of lithium, wind energy, and other materials at pre-speculation contractual terms, or even engage in government production of these materials itself.

If an administration makes a finding that solar, wind, and other types of renewable energy are scarce, critical, and strategic, this would unlock significant additional authorities—including priority setting and more general control of markets. For instance, some fossil fuel companies have branched out into renewables. The federal government could issue priority orders that would require the companies to put renewable orders over other orders. Solar installation services could be allocated to frontline communities—effectively, a Civilian Conservation Corps without the need to pass Build Back Better. If firms agree to conservation measures, they could have priority access to supply of renewables (O'Donnell and Glassman 1981, 48—49). Likewise, small-scale energy providers geographically distributed around the country could receive a large share of allocations—thereby ensuring that the green economy is less dominated by monopolies and large firms, which is a core DPA purpose.

THE DPA AND SOLAR PANELS

One area in which the DPA could be used to particularly good effect would be utility-grade solar panels, cells, and components. Over the last 10 years, China rapidly captured the overwhelming share of domestic and international markets, while in some segments of the industry, there is no US production. That is one reason why the US International Trade Commission (ITC)—a "trade cop" for the government—recommended "safeguard" restrictions on the imports of solar panels and cells, first in 2017 and again at the end of 2021. President Biden has until early February 2022 to decide whether he agrees. Solar importers have claimed that the tariffs are ineffective and will not lead to the reshoring of the industry, as the foreign cost advantage is so high. At the same time, they support the subsidies envisioned for the sector in Build Back Better—legislation currently stalled in Congress (Wagman 2021).

The DPA offers a way to further close the US-foreign price disparity. By designating solar panels and components as scarce and critical, the Biden administration could unlock numerous authorities to expand the market for domestically produced solar components. Even without such a designation, the government could cover the cost of all equipment installations. These efforts, coupled with the price floor supported by the ITC-recommended safeguard, could ensure that the US has adequate domestic production in the critical years to come, as demand for solar energy is expected to tick further upward.

IMPROVING OVERSIGHT AND FUNDING

While the DPA's powers are vast on paper, more funding and oversight are needed to be both effective and accountable. Annual congressional appropriations for the DPA Fund—a Treasury account used to pay for equipment purchases and other disbursements under the act—have dipped as low as $34.3 million in recent years (Cecire and Peters 2020). Jurisdictional battles over whether the Defense Department has a monopoly on access to the Fund led to creation (in the American Rescue Plan of 2021) of a separate $10 billion account for DPA-related purposes at the Department of Health and Human Services (Sarata and Heisler 2021). While this will help facilitate certain pandemic-related spending, it will not provide for the full range of health and climate needs in the years to come.

Oversight and transparency have also been lacking. While the GAO reports that the Biden administration has begun centralizing more data collection in the Office of Management and Budget (GAO 2021), the disclosures available to the public remain limited. In 2009, Congress mandated the creation of an inter-agency Defense Production Act Committee (DPAC) that would coordinate on DPA actions and make detailed reports to Congress. The Congressional Research Service reports, however, that no executive director was ever appointed to DPAC, and that simulations as recently as 2019 showed total confusion about the DPA. The committee's only accomplished function is annual reports to Congress, but Congress whittled back the scope of even these in 2014 so that many DPA actions like equipment allocations are not covered (Cecire 2021).

As a dramatic indication of how poorly DPAC does even the annual reports, the Internet url for the committee (dpacommittee.com) has apparently lapsed from US government ownership and is currently being cybersquatted by a Chinese company. The FEMA website links to the current year's report to Congress, but not to those from previous years.

The National Defense Authorization Act for Fiscal Year 2022 contains some measures to enhance DPA transparency and reporting to Congress. It has passed the Senate at the time of this writing, but not the House. This is a start, but may not be sufficient to ensure that some of the questionable or objectionable uses of the DPA in the past—including during the Vietnam War or more recently with Trump's actions in the meatpacking plants—are put in check.

CONCLUSION

It is no exaggeration to say that the DPA and its predecessor authorities helped to develop the basic capacity of the American state. Prior to the introduction of these authorities, there were no emergency preparedness plans and government agencies had limited insights into what resources were in the hands of private firms and where (Sutter 1989, 18). The wartime mobilization—coupled with growing reliance on income taxes—made the government into the statistics-rich, diverse agency institution it is today (Zolberg 2002, 41). With the coming of the Cold War and DPA amendments over the following decades, priorities and allocations went from an exceptional tool of a hot war economy to a policy toolkit that could (at least on the books) reach into every corner of the economy (Hogan 2000).

At the same time, the capacity on the books has not kept up with the scope of the authorities. When the range of World War II economic planning agencies were shut down after the war, latter administrations shuffled the emergency planning authorities from the National Security Resources Board (1947) to the Office of Defense Mobilization (1950) to four other agencies until it was abolished in the early neoliberal era in 1973. Today, FEMA is the agency left holding much DPA coordination, even though other agencies have the expertise on most resources and the DOD has the most active DPA program. Clearer authority for the resource departments in particular could lead to more entrepreneurial identification of opportunities to deploy the DPA.

The pandemic and climate crises—and paralysis and dysfunction in Congress—have shown a need to remake that state capacity anew. Given that Congress has reauthorized DPA authorities over 50 times, and courts have blessed them repeatedly, greater use of priorities and allocations represent an open door through which responsible policymakers can and should walk. With greater funding and transparency, the DPA could again be a powerful tool of industrial policy and planning.

APPENDIX: PARSING THE CONSTRAINTS ON PRIORITIES AND ALLOCATIONS

In 1952, a Congress controlled by Democrats added the following expansion of the DPA:

> *(b) When all requirements for the national security, for the stockpiling of critical and strategic materials, and for military assistance to any foreign nation authorized by any Act of Congress have been met through allocations and priorities it shall be the policy of the United States to encourage the maximum supply of raw materials for the civilian economy, including small business, thus increasing employment opportunities and minimizing inflationary pressures. No agreement shall be entered into by the United States limiting total United States consumption of any material unless such agreement authorizes domestic users in the United States to purchase the quantity of such material allocated to other countries participating in the International Materials Conference and not used by any such participating country. Nothing contained in this Act shall impair the authority of the President under this Act to exercise allocation and priorities controls over materials (both domestically produced and imported) and facilities through the controlled materials plan or other methods of allocation.*[48]

A year later, Republicans took back Congress and pared back the DPA, adding the following paragraph b to Title I:

> **(b) CRITICAL AND STRATEGIC MATERIALS**
> *The powers granted in this section shall not be used to control the general distribution of any material in the civilian market unless the President finds (1) that such material is a scarce and critical material essential to the national defense, and (2) that the requirements of the national defense for such material cannot otherwise be met without creating a significant dislocation of the normal distribution of such material in the civilian market to such a degree as to create appreciable hardship.*[49]

However, these limits are not as onerous as they might seem at first glance. First, the term "scarce and critical" is not further defined in statute, and there has not been a definitive settlement by courts of how scarce or critical something need be (objectively or otherwise) before the action is permitted.[50] Second, the hurdle applies only to **materials**, not to the

[48] 82 Cong. Ch. 530, June 30, 1952, 66 Stat. 296 https://www.govinfo.gov/content/pkg/STATUTE-66/pdf/STATUTE-66-Pg296-2.pdf#page=1.

[49] *3 Cong. Ch. 171, June 30, 1953, 67 Stat. 129 https://www.govinfo.gov/content/pkg/STATUTE-67/pdf/STATUTE-67-Pg129.pdf#page=1.

[50] The defendant in the most on-point reference – from a COVID-related hoarding case still in the lower courts did not challenge the scarcity designation of N-95 masks as ambiguous or unclear. See UNITED STATES OF AMERICA, Plaintiff, v. KRIKOR TOPOUZIAN, Defendant., No. 20 CR 721, 2021 WL 5882204, at *3 (N.D. Ill. Dec. 13, 2021).

services and facilities mentioned in DPA Title I, paragraph 1 (except that farms, churches, other houses of worship, and private dwelling houses are excluded from the definition of contemplated facilities).[51] Third, even for materials, paragraph 2 does not foreclose all priorities and allocations, only those that rise to control of distribution in the civilian market (CDCM). This term is not further defined, so is any "control" over any "distribution" enough to trigger this restriction, or is something approaching monopoly of commerce required? Courts have not given further interpretation to this term, meaning there is substantial room for a willing administration to test the waters.[52]

In 1975, the additional paragraph c was added to Title I:

> **(c) DOMESTIC ENERGY; MATERIALS, EQUIPMENT, AND SERVICES**
> *(1) Notwithstanding any other provision of this chapter, the President may, by rule or order, require the allocation of, or the priority performance under contracts or orders (other than contracts of employment) relating to, materials, equipment, and services in order to maximize domestic energy supplies if he makes the findings required by paragraph (3) of this subsection.*
>
> *(2) The authority granted by this subsection may not be used to require priority performance of contracts or orders, or to control the distribution of any supplies of materials, services, and facilities in the marketplace, unless the President finds that—*
>
> *(A) such materials, services, and facilities are scarce, critical, and essential*
> *(i) to maintain or expand exploration, production, refining, transportation;*
> *(ii) to conserve energy supplies; or*
> *(iii) to construct or maintain energy facilities; and*
> *(B) maintenance or expansion of exploration, production, refining, transportation, or conservation of energy supplies or the construction and maintenance of energy facilities cannot reasonably be accomplished without exercising the authority specified in paragraph (1) of this subsection.*
>
> *(3) During any period when the authority conferred by this subsection is being exercised, the President shall take such action as may be appropriate to assure that such authority is being exercised in a manner which assures the coordinated administration of such authority with any priorities or allocations established under subsection (a) [the original priorities and allocation power] of this section and in effect during the same period.*

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[51] 50 U.S. Code § 4552(8).

[52] In fact, the only apparent citation of CDCM came in a brief for the United Steelworkers before the Supreme Court, where they were challenging Eisenhower's enjoining of a strike to protect "national health" and safety. To the union's estimation, the fact that Eisenhower had not tried to exert CDCM over steel was support for the notion he wasn't taking steel industry woes as seriously as he could. See United Steelworkers of America v. U.S., 1959 WL 101256 (U.S.), 2 (U.S., 2006).

This subsection erects a typology of different categories of interventions with differing intensities of hurdles to clear. This typology of statutory requirements for all three paragraphs of the DPA's Title I are depicted below in Table 1.

TABLE 1. STATUTORY REQUIREMENTS FOR USE OF DPA POWERS^

Type of economic activity	Must be deemed necessary *or* appropriate to promote the "national defense"—broadly defined?	Must be found to be scarce, critical, and essential to the national defense—and government needs can't be met without creating difficulties in civilian market?	Any energy industry-specific limitations? (Note, restrictions in other two columns do not apply to energy—whose domestic energy supplies are to maximized)
Equipment	No.	No.	Only that related DPA actions be coordinated.
Services	Yes.	No.	Above, plus—if government wants to "control the distribution... in the marketplace"— must make a critical, scarce, essential, and no reasonable alternative finding.
Facilities*	Yes.	No.	Ditto.
Materials	Yes.	Yes, but only if government wants to "control the general distribution" in civilian markets.	Ditto.
Contracts and orders*	Yes.	No.	Any use of priority authorities requires a critical, scarce, essential, and no reasonable alternative finding, and must be coordinated with other DPA uses.

** These are excluded: private homes, churches, farms, employment contracts*

^ Upon declaration of an emergency (say, on climate), these restrictions may not apply

Let's start from the least restricted and move to the most. First, the priorities and allocations of **equipment** to maximize energy supplies is unrestricted, so long as it is coordinated with existing priorities and allocations (para. 3).

Second, there is a textual distinction made between allocation in paragraph a and the control of distribution in the marketplace (CDM) in paragraph c. Lawmakers did not use the same words, so presumably there are allocation actions that would fall short of the total supply management and displacement of market functions implied by CDM. These could include the types of allocations used in the California energy crisis, which merely lock in supply relationships previously established in the marketplace. Thus, allocations of **materials and supplies** that fall short of CDM must only meet the same requirements of Category 1 (equipment).

Third, there is a textual distinction between "priority performance *under* contracts or orders" in paragraph 1 and "priority performance *of* contracts or orders" in paragraph 2. While the text offers no further clues, some distinction will need to be drawn by these. Presumably "under" implies **pre-existing contracts or orders for materials and/or supplies**, which need only meet the requirements of Category 1. Fourth, **new contracts or orders for materials and/or supplies** would have to be accompanied additionally by the findings required in paragraph 2. Ditto for the fifth category, **CDMs for materials and/or supplies.**

Sixth, there can be no priorities or allocations of **facilities** without the findings in paragraph 2. This is presumably to protect private property rights, which must be accommodated using eminent domain or other powers. And finally, there are **no priorities or allocations permitted for contracts of employments** in order to maximize domestic energy supplies. This is presumably to safeguard labor rights.

However, it appears possible that the limitations of both paragraphs 2 and 3 could be suspended for these categories if the president also declares an emergency (Gramm 2001, 29).

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