

Administering a Democratic Industrial Policy

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ABSTRACT

In Washington today, we are witnessing what many call the “return of industrial policy.” Some argue that a new political economic paradigm is emerging, departing from the neoliberal order of the last several decades. High-stakes questions about how to administer industrial policy have followed, for good reason: industrial policy necessarily involves a great deal of administrative discretion. Yet we have no adequate literature discussing how that discretion should be deployed. Administrative law scholarship has largely ignored the distinctive tools of industrial policy, such as grantmaking, lending, government contracts and ownership stakes. These tools require flexibility and discretion, and often cannot be—and are not—constrained by conventional administrative law tools like notice-and-comment rulemaking or judicial review. The literature on industrial policy argues for bureaucratic autonomy and flexibility, but also has little account of how this power can be accountable in a democracy.

This Article seeks to address this gap. We argue that we should view industrial policy as a developmental practice: it involves deliberate attempts to shape sectors of the economy to meet public aims writ broadly, rather than to serve values of wealth-maximization or national competitiveness. In order to be both effective and legitimate, we argue, industrial policy today requires concerted efforts to build administrative power sufficient to enable effective governance of the economy, including by experimenting with new kinds of conditionalities and public ownership structures. It must also build countervailing power to allow disorganized and marginalized groups to exercise influence over both the government and subsidy recipients. We map administrative tools that can help achieve these aims, arguing that by using them, we can help build industrial policy that does not merely subsidize particular sectors but advances shared goals for democratic development.

TABLE OF CONTENTS

INTRODUCTION	280
I. THE RETURN OF INDUSTRIAL POLICY.	286
A. <i>The Case for Sectoralism.</i>	287
B. <i>Beyond Efficiency and Competitiveness.</i>	291

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II.	INDUSTRIAL POLICY AS DEMOCRATIC PRACTICE	295
	<i>A. Administrative Power</i>	297
	<i>B. Countervailing Power</i>	300
	1. <i>The Governance Gap in Industrial Policy</i>	300
	2. <i>The Associational Alternative</i>	304
	3. <i>Addressing Objections</i>	310
	<i>C. Illustrating the Practice</i>	312
III.	THE ADMINISTRATIVE POWER TOOLKIT	315
	<i>A. Building Information and Knowledge</i>	316
	<i>B. Mapping the Continuum of Control</i>	320
IV.	THE COUNTERVAILING POWER TOOLKIT	327
	<i>A. Administration</i>	329
	1. <i>Structured Contestation</i>	330
	2. <i>Mobilization Beachheads</i>	333
	3. <i>Operational Empowerment</i>	334
	4. <i>Enforcement Empowerment</i>	335
	<i>B. Production</i>	336
	1. <i>Empowering Labor</i>	337
	2. <i>Empowering Communities</i>	339
	<i>C. Diffusion</i>	341
	CONCLUSION	342

INTRODUCTION

In the United States today, there is a remarkable resurgence of interest in industrial policy.¹ The Biden Administration has characterized its signature legislative achievements—the American Rescue Plan Act, the Infrastructure Investment and Jobs Act, the CHIPS and Science Act (semiconductors), and the Inflation Reduction Act (clean energy)—as an expression of a new industrial strategy.² Influential commentators argue that industrial policy is the

¹ See, e.g., Noam Scheiber, *The Biden Team Wants to Transform the Economy. Really.*, N.Y. TIMES (Feb. 11, 2021), <https://www.nytimes.com/2021/02/11/magazine/biden-economy.html> [<https://perma.cc/8W9G-WW4A>]; Keith B. Belton, *The Emerging American Industrial Policy*, AM. AFFS. (Aug. 2021), <https://americanaffairsjournal.org/2021/08/the-emerging-american-industrial-policy/> [<https://perma.cc/8ZX4-DQ59>]; Daniel Drezner, *Is the US Capable of Industrial Policy in 2021?*, WASH. POST (June 14, 2021) <https://www.washingtonpost.com/outlook/2021/06/14/is-united-states-capable-industrial-policy-2021/> [<https://perma.cc/6LAX-QXRU>]; Greg Ip, *Industrial Policy Is Back: The West Dusts Off Old Idea to Counter China*, WALL ST. J. (July 29, 2021) <https://www.wsj.com/articles/subsidies-chips-china-state-aid-biden-11627565906> [<https://perma.cc/8ZH8-6WJH>]; see also Felicia Wong & Todd N. Tucker, *A Tale of Two Industrial Policies*, FOREIGN AFFS. (Jan. 26, 2023), <https://www.foreignaffairs.com/united-states/tale-two-industrial-policies> [<https://perma.cc/UWF3-T9YL>].

² See Brian Deese, National Economic Council Director, Remarks on Executing a Modern American Industrial Strategy (Oct. 13, 2022), <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/10/13/remarks-on-executing-a-modern-american-industrial-strategy-by-nec-director-brian-deese/> [<https://perma.cc/S2U6-VFKT>]; see also Jake Sullivan, National Security Advisor, Remarks on Renewing American Economic Leadership at the Brookings Institution (Apr. 27, 2023), <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution/> [<https://perma.cc/Q9ZU-FE2T>].

backbone of a new political-economic paradigm, the successor to the neoliberal logic that dominated over the last several decades.³ And political realities also make industrial policy an increasingly attractive means of statecraft in the U.S. today. Institutional veto points and partisan divisions make consolidating the supermajorities needed for lawmaking exceedingly difficult. Discretionary spending—a key tool of industrial policy—is taking on new importance, because spending generally easier than other kinds of lawmaking—both in terms of assembling political coalitions for passage,⁴ and under existing legislative procedural rules.⁵

Fights about what the new industrial policy should aim to accomplish, and how it can best do so, are emerging, and likely to intensify in years to come.⁶ As we invest in clean energy generation, should we mandate that subsidized companies respect workers' rights, or is this just a distraction from the real purpose of industrial policy, which is to build capacity efficiently and quickly?⁷ Should the Department of Commerce condition government support for semiconductor firms on their providing childcare for their workers, or does this turn industrial policy into “a Christmas tree in which all interest groups get a bauble?”⁸ When implementing the IRA, should we seek to limit dividends and stock buybacks by firms that receive subsidies, and if so, why?⁹ Is community input into green infrastructure development essential, or “bad, actually?”¹⁰

³ See, e.g., Ezra Klein, *The Economic Mistake the Left Is Finally Confronting*, N.Y. TIMES (Sept. 19, 2021), <https://www.nytimes.com/2021/09/19/opinion/supply-side-progressivism.html> [https://perma.cc/G7SZ-CPU8]; Dani Rodrik, *The New Productivism Paradigm?*, PROJECT SYNDICATE (July 5, 2022), <https://www.project-syndicate.org/commentary/new-productivism-economic-policy-paradigm-by-dani-rodrik-2022-07> [https://perma.cc/F5C8-42EU]; Paul Krugman, *How to Think About Green Industrial Policy*, N.Y. TIMES (May 9, 2023), <https://www.nytimes.com/2023/05/09/opinion/climate-inflation-reduction-act-biden.html> [https://perma.cc/A7WW-GLJ3]; RANA FOROQHAR, *HOME COMING: THE PATH TO PROSPERITY IN A POST-GLOBAL WORLD* 26 (2022); see also Anshu Siripurapu & Noah Berman, *Is Industrial Policy Making a Comeback?*, COUNCIL ON FOREIGN RELS. BACKGROUNDER (Sept. 18, 2023), <https://www.cfr.org/backgrounder/industrial-policy-making-comeback> [https://perma.cc/CN5U-AKTZ] (describing the debate, and noting new calls for industrial policy on the right). For a discussion of the neoliberal paradigm, see *infra* note 36.

⁴ See Lachlan Carey, *Green Industrial Strategy*, PHENOMENAL WORLD (May 20, 2023), <https://www.phenomenalworld.org/analysis/green-industrial-strategy/> [https://perma.cc/QFR2-GKVA] (outlining the political economy of the passage of the Inflation Reduction Act).

⁵ See Jonathan S. Gould, *Law Within Congress*, 129 YALE L.J. 1946, 1961 (2020) (describing the impact of budget reconciliation rules).

⁶ See Yakov Feygin & Nils Gilman, *The Designer Economy*, NOEMA (Jan. 19, 2023), <https://www.noemamag.com/the-designer-economy/> (describing different political blocs supporting industrial policy) [https://perma.cc/37LX-Q5BE].

⁷ For an influential statement of this position, see Ezra Klein, *The Problem with Everything-Bagel Liberalism*, N.Y. TIMES (Apr. 2, 2023), <https://www.nytimes.com/2023/04/02/opinion/democrats-liberalism.html> [https://perma.cc/7TUS-HM27].

⁸ See *The US Chips Act Becomes a Christmas Tree*, FIN. TIMES (Mar. 5, 2023), <https://www.ft.com/content/15f23ffd-e83a-4c24-b770-91719308957c> [https://perma.cc/86V8-GXLU].

⁹ See Lenore Palladino, *How to Ensure Industrial Policy Promotes Public Over Private Gain*, PROMARKET (Jan. 31, 2023), <https://www.promarket.org/2023/01/31/how-to-ensure-industrial-policy-promotes-public-over-private-gain/> [https://perma.cc/VX9F-BQBT].

¹⁰ Jerusalem Demsas, *Community Input is Bad, Actually*, ATLANTIC (Apr. 22, 2022), <https://www.theatlantic.com/ideas/archive/2022/04/local-government-community-input-housing-public-transportation/629625/> [https://perma.cc/M6MW-TR5A].

To answer questions such as these, we need a clear definition of industrial policy. Such a definition is also critical to determining whether it is indeed “back” and whether we should *want* it back. In Part I, we argue that we should not, as some do, declare that all economic policy is industrial policy. Nor should we envision industrial policy as limited to manufacturing, or to the aim of economic competitiveness—an assumption that structured an earlier generation’s debate over industrial policy.¹¹ Rather, industrial policy is best understood as the *deliberate attempt to shape different sectors of the economy to meet public aims*.¹² (The term “developmental policy” might better capture the enterprise, and we sometimes use that term here.) Understood this way, industrial or developmental policy was indeed discouraged, if never absent, in the last few decades. Mainstream policy and academic thought instead commonly urged the free play of prices, using arms-length tools like taxes and transfers or the background rules of property and contract, largely on the grounds that these were likely to yield more efficient economic allocations.

Industrial policy is *rightly* back, we also argue, citing recent writing in both economics and political economy circles. Different sectors have different problems, and we have new evidence to contradict the common assumption that resources and information flow freely across the economy absent government intervention. We may also legitimately want to promote some sectors (like home care and clean energy) and demote others (like markets for cryptocurrency). Indeed, the turn to industrial policy makes enormous sense precisely as we recognize the obviously political nature of judgments about the kind of economy we want to have.¹³

But built-to-measure developmental policy is hard. It requires an informed and empowered state that is also democratically responsive. This challenge is at the very heart of the project of administration in a democracy—but it especially acute in the industrial policy context. Industrial policy requires building more bureaucratic expertise and authority over production than we currently have—capacity and expertise that historically has not be exercised in ways easily called democratic. Industrial policy also risks generating substantial private power, both because it may directly subsidize industry, and because it requires interactions with industry that may divert the implementing agency from public aims.

Administrative law aims to manage the tension between expertise and democratic aims. But as we describe in Part II, we cannot rely on the prevailing proceduralist framework to resolve the tension at the heart of industrial policy. There is a governance gap in industrial policy administration: the core tools of administrative law often apply poorly, or not at all. Grants, loans, and procurement, for example, are both undertheorized in the administrative law

¹¹ See *infra* note 62 and accompanying text.

¹² See *infra* note 27 and accompanying text.

¹³ See generally Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski & K. Sabeel Rahman, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 *YALE L.J.* 1784 (2020).

literature, and fall outside of its core doctrinal regime.¹⁴ Both statutory and administrative common law also frequently will mediate against judicial review of agencies' decisions in this context—and thus the “hard look” said by many to render administrative law democratically legitimate.¹⁵

There are real risks to democratic values in this area—but also an opportunity. Administrative law sits on a precipice today. Old proceduralist tools are both under withering attack in the courts, and often failing to achieve the substantive ends of administration, leading to calls for new approaches.¹⁶ Industrial policy is a domain where we can, and must, envision new paradigms. Without more attention to democratic values, industrial policy risks empowering private firms over both the government and ordinary people, and reproducing stratifications of resources and expertise.

Given these administrative challenges and lack of state and civil capacity to navigate them, how can industrial policy advance values of democracy? We argue that under any adequate conception of democracy, industrial policy must expressly seek to build *administrative* power and build *countervailing* power. Administrative power is the government's technical and legal ability to

¹⁴ See Gillian E. Metzger, *Taking Appropriations Seriously*, 121 COLUM. L. REV. 1075, 1082–85 (2021) (describing the marginalization of scholarship on appropriations and government contracts). Of course, these policy instruments are not terra incognita, and important recent work has addressed some of these powers. See generally Eloise Pasachoff, *Executive Branch Control of Federal Grants: Policy, Pork, and Punishment*, 83 OHIO ST. L.J. 1113 (2022) (surveying administrative discretion over Congressional appropriations); Eloise Pasachoff, *Federal Grant Rules and Realities in the Intergovernmental Administrative State: Compliance, Performance, and Politics*, 37 YALE J. ON REG. 573 (2020) (mapping the rules of federal grant management); Bridget Fahey, *Federalism by Contract*, 129 YALE L.J. 2326 (2020) (showing how the federal government makes policy through contractual conditions on grants to states and localities); Steven M. Davidoff & David Zaring, *Regulation by Deal: The Government's Response to the Financial Crisis*, 61 ADMIN. L. REV. 463 (2009) (highlighting the lack of traditional administrative procedures in contracts made with banks after the financial crisis); Jody Freeman, *The Contracting State*, 28 FLA. ST. U.L. REV. 155 (2000) (discussing the rise of contracts, particularly service and provision-of-benefits and regulatory contracts, as a tool of regulatory and administrative power); see also JODY FREEMAN & MARTHA MINOW, GOVERNMENT BY CONTRACT: OUTSOURCING AND AMERICAN DEMOCRACY 1-23 (2009) (exploring the trend toward outsourcing core government functions to private contractors); Steven L. Schooner, *Desiderata: Objectives for a System of Government Contract Law*, 11 PUB. PROCUREMENT L. REV. 103, 104 (2002) (identifying nine frequently referenced objectives for federal procurement systems). While these contributions address important components of the industrial policy toolkit, we know of no Article that has attempted to stake out an administrative law of industrial policy and consider them synthetically.

¹⁵ See Metzger, *supra* note 14, at 1118; see also *infra* Part II.B.1.

¹⁶ For examples that call for a more structuralist turn, see K. SABEL RAHMAN, DEMOCRACY AGAINST DOMINATION 3 (2016); BLAKE EMERSON, THE PUBLIC'S LAW: ORIGINS AND ARCHITECTURE OF PROGRESSIVE DEMOCRACY 2 (2019); Sophia Z. Lee, *Our Administered Constitution: Administrative Constitutionalism from the Founding to the Present*, 167 U. PA. L. REV. 1699, 1746-47 (2019); K. Sabel Rahman, *Policymaking as Power-Building*, 27 S. CAL. INTERDISC. L.J. 315, 321 (2018); Nicholas Bagley, *The Procedure Fetish*, 118 MICH. L. REV. 345, 349-50 (2019). For work illuminating the ways the current paradigm entrenches subordination, see Bijal Shah, *Administrative Subordination*, 2 U. CHI. L. REV. (draft, on file with authors) (manuscript at 9), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4392123; Joy Milligan & Karen Tani, *Seeing Race in Administrative Law: An Interdisciplinary Perspective*, YALE J. ON REG.: NOTICE & COMMENT BLOG (Sept. 16, 2020), <https://www.yalejreg.com/nc/seeing-race-in-administrative-law-an-interdisciplinary-perspective-by-joy-milligan-and-karen-tani/> [<https://perma.cc/8TKC-LQY6>]; Sophia Z. Lee, *Racial Justice and the Administrative Procedure Act*, 97 CHI.-KENT. L. REV. 161, 169 (2022). See also Jeremy Kessler & Charles Sabel, *The Uncertain Future of Administrative Law*, 150 DAEDALUS 188, 188 (2021) (describing guidance as a key modern mechanism that requires a rethinking of administrative law).

effectively implement broadly shared public interests.¹⁷ Countervailing power is the organized capacity of structurally disadvantaged groups to exercise collective influence. This influence must span over both the state itself, and the private sector actors who make critical ordering decisions.¹⁸ Administrative power and countervailing power are, as we describe, in productive tension with one another. Pursuing both is critical to the realization of what John Dewey called *public* power: the power of the people, through and beyond government, to meet their collective aims.¹⁹

In the last two Parts of the paper, we begin to map the toolkit available towards these ends, asking how *in practice* administrators can build administrative and countervailing power. In Part III, we argue that building administrative power over the economy requires deliberate initiatives to develop the information and knowledge needed to shape sectoral activity. This will require much more than experimentalist collaboration with industry, including ambitious new programs to generate data directly, require industry to create and share information, and systematically use conditionalities to generate government expertise and insights into production. We offer examples of each and identify key legal issues in their implementation.

We also begin to map the “continuum of control” in industrial policy, helping to articulate the wide variety of legal forms that might accompany spending, grant-making, contracting, and public investment, to enable government to shape sectors as well as gain insight into production. These include many types of public corporations and forms of partial ownership, such as equity stakes, golden shares, grant-back programs, and ownership in intellectual property. Conditionalities imposed by contract will also be a key element of all successful industrial policy programs today.²⁰ Each offers a different means and measure of control. We argue that effective administration will need both more experimentation with these various forms, and better conceptualization of their risks and benefits.

Part IV describes tools administrators have to build countervailing power. These interventions stem from the proposition that bureaucracy should not simply try to approximate the interests of a diffuse public, but aim to actively use administrative tools to counteract existing power disparities, to help hold agencies—and industry—accountable to public aims. We highlight a range of legal authorities that can create hooks for systematically disadvantaged groups to effectively organize, such as contracts for program operation; structured input over agency leadership; leverage points for labor and community-benefit

¹⁷ See *infra* Part II.B.

¹⁸ See *infra* Part II.B.2 (describing the concept of countervailing power and drawing on literatures showing the importance and associational and organized power to democracy).

¹⁹ See JOHN DEWEY, *THE PUBLIC AND ITS PROBLEMS* 35-36 (1927).

²⁰ See generally Mariana Mazzucato & Dani Rodrik, *Industrial Policy with Conditionalities: A Taxonomy and Sample Cases* (Univ. Coll. London Inst. for Innovation & Pub. Purpose Working Paper no. 2023/07) (2023), <https://www.ucl.ac.uk/bartlett/public-purpose/publications/2023/oct/industrial-policy-conditionalities-taxonomy-and-sample-cases> [https://perma.cc/9RBQ-SNC5]; ISABEL ESTEVEZ, ROOSEVELT INST., *MULTI-SOLVING, TRADE-OFFS, AND CONDITIONALITIES IN INDUSTRIAL POLICY* 15 (Oct. 2023).

negotiations; and allocation formulas that automatically fund communities of greatest need.

This vision rejects the idea that introducing more democratic inputs into administration necessarily stymies public development. Our toolkit aims to elide creating new institutional ‘veto points’ such as private rights of action, instead centering on upstream delegations that give disadvantaged groups deliberative and epistemic authority.²¹ We are not sanguine about the difficulty of this enterprise, or the awkwardness inherent in asking administrators to identify and counteract structural exclusion. But we also describe strategies to mediate these difficulties, and examples of initiatives that may do so. While efforts to build countervailing power will be highly imperfect, the alternatives are significantly worse.

We aim in this paper to provide what we think is the right framework for implementing the new industrial policy as a democratic practice. Many hard questions remain. Sometimes—though not always—our twin imperatives will conflict. One or both may conflict with operational effectiveness, which is desirable even where economic efficiency—defined in terms of wealth maximization—is not.²² There are other practical issues too.²³ Our aim here is not to provide a one-size-fits-all prescription, but a framework for thinking about how to implement industrial policies that attend to both the effectiveness and democratic legitimacy of administration. Our typology highlights a range of tools that can achieve these goals in ways that other tools—like reliance on insulated expertise, or notice-and-comment procedures—alone cannot.

The practice of American statecraft is changing faster than our theories to shape and understand it. While industrial policy is resurgent, we have not yet mapped the strategies and tools that can help meet its aims, and do so without betraying democratic values. Ours is an early effort to chart a better course. Finally, we aim to contribute to the legal theory of Law and Political Economy, and to provide conceptual and practical tools to construct the more democratic economy that we urgently need today.²⁴

²¹ See *supra* Part II.B.3. We likewise address concerns about “picking losers,” risks of clientelism, and representativeness. See *id.*

²² See *infra* Part I.B.

²³ Most obviously, administrators cannot go beyond the remit given to them by legislators (though this will often be very broad, as we describe). And what it means to build administrative and countervailing power in particular contexts will differ. In some settings, administrative power can be better achieved with regulation, where in others, it may require strategies like public equity or public options. We provide maps of the relevant tools to help guide these debates. Countervailing power can also be built at multiple levels, with different relevant constituencies. The constituencies that bargain with recipient firms to distribute community benefits may be differently composed than those that try to steer the technological direction of government research funding. We describe tools that regulators can use to self-consciously counteract power imbalances in these disparate domains of policymaking.

²⁴ See Britton-Purdy *et al.*, *supra* note 13; Angela Harris & James J. Varellas, *Introduction: Law and Political Economy in a Time of Accelerating Crises*, 1 J.L. & POL. ECON 1, 5 (2020). See generally J.L. & POL. ECON; LAW & POL. ECON. BLOG, www.lpeproject.org/blog [<https://perma.cc/95DR-899Q>]. But cf. Samuel Moyn, *Reconstructing Critical Legal Studies* 3 (Yale Pub. L. Rsch. Paper, 2023), <https://ssrn.com/abstract=4531492> (“[urging] the Law and Political Economy movement, which has exploded today, to become much less non-committal theoretically.”).

I. THE RETURN OF INDUSTRIAL POLICY

Anyone writing about industrial policy faces a challenge at the outset: the longstanding debate about how best to define the term. Some define it as broadly as economic policy itself.²⁵ That has some appeal, especially for those who recognize that the “free market” is always underpinned by state regulation of one kind or another—meaning that the state is *always* making policies that structure markets and industries.²⁶ But that definition also robs the term of any distinctive meaning. This is a mistake, we think, because it helps to designate something important on the move today: a more assertive, acknowledged, and self-conscious role for government in shaping different sectors of the economy.

This is how we define industrial policy in this paper: as the deliberate attempt to shape different sectors of the economy to meet public aims.²⁷ Its tools include any economic policies that are applied to particular sectors.²⁸ A better term might be “developmental” policy.²⁹ After all, the manufacturing sector accounts for fewer than one in ten jobs in our economy, and industrial policy can serve many different aims.³⁰

Two features of industrial policy help distinguish it from economic policy more generally, and from the dominant economic policymaking logic of the past several decades. First, industrial policy self-consciously adopts sector-specific rules, instead of prioritizing more generic levers to influence the

²⁵ See Aaron Wildavsky, *Industrial Policies in American Political Cultures*, in *THE POLITICS OF INDUSTRIAL POLICY: A CONFERENCE SPONSORED BY THE AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH* 15, 15 (Claude E. Barfield et al., eds., 1986) (“Industrial policy is economic policy; its purpose is prosperity”); cf. Mancur Olson, *Supply-Side Economics, Industrial Policy, and Rational Ignorance*, in Barfield et al., eds., 245, 266 (arguing that common uses of the term are so vague as to be “no idea at all; that is the grin without the cat”).

²⁶ For a classic statement, see generally JOHN R. COMMONS, *LEGAL FOUNDATIONS OF CAPITALISM* (1924).

²⁷ For similar understandings, see OTIS L. GRAHAM, *LOSING TIME: INDUSTRIAL POLICY DEBATE* 3 (1994) (describing industrial policy as “sector specific policies such as deregulating the airlines or protecting textiles from Asian imports.”); TODD TUCKER, ROOSEVELT INST., *INDUSTRIAL POLICY AND PLANNING: WHAT IT IS AND HOW TO DO IT BETTER* 6 (2019) (defining industrial policy as “any government policy that encourages resources to shift from one industry or sector into another” and “industrial planning as an intentional economy-wide aggregation of and coordination among individual industrial policies”); Réka Juhász, Nathan Lane & Dani Rodrik, *The New Economics of Industrial Policy* 4 (Nat’l Bureau of Econ. Rsch., Working Paper No. 31538, 2023) (defining industrial policy as “those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal”).

²⁸ They include not only tariffs and direct subsidies, but also education policies aiming to train workers in a given sector; government procurement that creates demand for the sector’s products; and regulatory standards that establish minimum standards for quality. See TUCKER, *supra* note 27, at 9 (elaborating a fuller list).

²⁹ By “developmental,” we refer to sociological work on the idea of “developmental state,” and philosophical work on development and freedom. See, e.g., Fred Block, *Swimming Against the Current: The Rise of a Hidden Developmental State in the United States*, 36 *POL. & SOC’Y* 169, 169–71 (2008); see generally AMARTYA SEN, *DEVELOPMENT AS FREEDOM* (2000).

³⁰ On services, see DANI RODRIK, THE HAMILTON PROJECT, *AN INDUSTRIAL POLICY FOR GOOD JOBS* 6–8 (2022), https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/rodrik_-_an_industrial_policy_for_good_jobs.pdf [<https://perma.cc/567U-Y957>] (pointing out that “[m]anufacturing presently supplies less than one in ten total jobs in the US economy” and that jobs in services have grown by 59 million since 1979, while jobs in goods-producing sectors have fallen by 4 million).

economy, like broad-gauged fiscal or monetary policy, or the rules of property and contract that underpin economic activity more generally.³¹ Second, industrial policy is oriented to *public* aims, which may include, but are not limited to, measures like international competitiveness.³² Industrial policy can aim, for example, at generating good jobs, or a sustainable environment, and its success should be evaluated accordingly.³³ The two points connect: to work sectorally is to reject the assumption, common in neoclassical approaches to economics, that one singular value—maximizing aggregate wealth—should govern the economy, with questions of distribution dealt with *ex post*. To adopt a sectoral lens is also to accept that the size and operation of individual sectors *matters*, because institutions do not inevitably adapt fluidly to market signals, equilibrating across the whole economy.

A. *The Case for Sectoralism*

Sector-specific policymaking is as old as the United States republic, and has profoundly shaped our political economy over our history.³⁴ However, in recent decades, there was a tendency to inveigh against the very idea of “sectoral” policy in favor of the ostensible power of markets to seamlessly direct investment and achieve efficient outcomes on their own accord. The Reagan

³¹ TUCKER, *supra* note 27, at 6 (“Industrial policy and planning [is] a horizontal lever that distributes resources among industries. Fiscal policy [is] a vertical lever that redistributes income among classes and income brackets. Monetary policy [is] a temporal lever that redistributes income among time periods and generations.”); *cf.* Juhász, Lane & Rodrik, *supra* note 27, at 4 (defining industrial policy as “those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal”).

³² We are in accord here with Juhász, Lane and Rodrik. *See* Juhász, Lane & Rodrik, *supra* note 27, at 4 (describing “public goals” as the aim). Notably, their broad definition is at odds with other parts of their account, such as the assumption that industrial policy *requires* conventional efficiency rationales like “externalities” or “coordination failures.” *Id.* at 5. Although these may be relevant reasons to adopt sectoral policies, they are far from the only such reasons. Instead, as we describe, industrial policy often aims at the protection of health and safety, the environment, or the value of good work, as they also recognize.

³³ The latter point is key, and as scholars have begun to recognize it, they have begun to reevaluate the empirical case for industrial policy. Juhász, Lane and Rodrik describe, for example, how first-generation studies purporting to show the failure of industrial policy by showing that supported industries were relatively less productive. *Id.* at 14–15. These studies failed to account for the fact that policymakers in fact *aimed* to support less “productive” industries in order to achieve broader goals, such as protecting jobs). *See id.* at 14–17.

³⁴ *See* TUCKER, *supra* note 7, at 17; Stefan Link & Noam Maggor, *The United States As A Developing Nation: Revisiting The Peculiarities Of American History*, 246 PAST PRESENT 269, 273–4 (2020); *see generally* RICHARD D. BINGHAM, INDUSTRIAL POLICY AMERICAN-STYLE: FROM HAMILTON TO HDTV (1998); *see also* William J. Novak & Naomi Lamoreaux, *Introduction*, in CORPORATIONS AND AMERICAN DEMOCRACY 1, 8 (William J. Novak and Naomi R. Lamoreaux, eds., 2017) (describing the state role in developing utilities, transportation, and banking via corporate chartering in the 19th century); PAUL A. C. KOISTINEN, MOBILIZING FOR MODERN WAR: THE POLITICAL ECONOMY OF AMERICAN WARFARE 18 (1997) (describing WWI production coordination and quotas); IRA KATZNELSON, FEAR ITSELF: THE NEW DEAL AND THE ORIGINS OF OUR TIME 251 (2013) (describing the New Deal Agricultural Adjustment Act); PHILIP SELZNICK, TVA AND THE GRASS ROOTS: A STUDY OF POLITICS AND ORGANIZATION 3–8 (2011) (describing the Tennessee Valley Authority); JAMES STUART OLSON, SAVING CAPITALISM: THE RECONSTRUCTION FINANCE CORPORATION AND THE NEW DEAL, 1933–1940 103 (2017) (describing the Reconstruction Finance Corporation).

Administration in certain ways exemplified this.³⁵ The “neoliberal” paradigm that came to dominance in this period idealizes markets and decentralized competition, arguing that they are in general more efficient than government for the allocation of resources.³⁶

In practice, this era was no stranger to sector-specific policies that were both overt and covert.³⁷ Deregulation of the finance and the technology industries favored these sectors over others and contributed to their massive growth.³⁸ The federal government used trade agreements to extend intellectual property rights abroad, securing new markets for software designers, Hollywood, and the biotechnology sector.³⁹ The government continued to fund basic and applied science research, but encouraged private ownership of the results through reforms like the Bayh-Dole Act of 1980.⁴⁰ And it

³⁵ GRAHAM, *supra* note 27, at 3 (describing Reagan’s “bold, radical fiscal policy experiment, using economywide measures, specifically tax reduction and huge deficits”); OLSON, *supra* note 34, at 111 (describing the Reagan Administration’s opposition to legislation to implement industrial policy); *id.* at 167–69 (describing the administration’s attempt to push industrial policy to “the perimeter of politics and policy”).

³⁶ Neoliberalism has its intellectual origins in the 1940s and 1950s rebellion against managed capitalism, that became politically mainstream in the 1980s and 1990s, with the rise of figures like Ronald Reagan and Margaret Thatcher. A common view of neoliberalism describes it as an economic ideology that prioritizes free markets and the liberation of entrepreneurial spirits, and that seeks to restrict the size and scale of government, for example by deregulating. In fact, neoliberalism is better understood as a *political* order, which generated new patterns of domination via the appeal to a market ideal of freedom. See DAVID HARVEY, A BRIEF HISTORY OF NEOLIBERALISM 19 (2005). Neoliberalism as a political paradigm seeks less to deregulate across the board than to *reregulate* in a manner that increases the power of market actors. See generally JAMIE PECK, CONSTRUCTIONS OF NEOLIBERAL REASON (2010); see also David Grewal & Jedediah Purdy, *Law and Neoliberalism*, 77 L. CONTEMP. PROBS. 1, 2–3 (2015) (describing neoliberalism as characterized by the reformatting of state power away from modalities that could oversee and discipline market actors, and toward modalities that could better discipline the public to conform with market rationality).

³⁷ We are aware of no existing account of the industrial policy of the neoliberal era, and one is needed. Clearly, there were forms of overt sectoralism even in this time of celebration of the powers of the price signal. Reagan traded steel tariffs for import quotas, for example, and agricultural subsidies increased in the 1980s and 1990s. See DOUGLAS IRWIN, CLASHING OVER COMMERCE: A HISTORY OF U.S. TRADE POLICY 573–86 (2017); see also Juhász, Lane & Rodrik, *supra* note 27, at 2 n.2 (noting that Reagan, like other neoliberals, including Pinochet and Thatcher, deliberately supported certain sectors, like steel and automobile manufacturing.); GRAHAM, *supra* note 27, at 173–206 (describing the Reagan era’s “unconscious” industrial plan).

³⁸ On finance, see generally GRETA R. KRIPPNER, CAPITALIZING ON CRISIS: THE POLITICAL ORIGINS OF THE RISE OF FINANCE (2011). On technology, see generally JULIE COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATION CAPITALISM (2019); see also Amy Kapczynski, *The Law of Informational Capitalism*, 129 YALE L.J. 1460, 1487–94 (2020). Policymakers also deliberately elevated the housing sector, such as through revisions to banking law that gave home mortgages and mortgage-backed securities favorable regulatory treatment. See Joel Michaels, *Capital Regulation as Climate Policy*, 59 IDAHO L. REV. 127, 155 (2023).

³⁹ See generally SUSAN K. SELL, PRIVATE POWER, PUBLIC LAW: THE GLOBALIZATION OF INTELLECTUAL PROPERTY RIGHTS (2003).

⁴⁰ See Daniel Traficante, Property and Power on the Endless Frontier 2 (Working Paper, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3901914 (describing Bayh-Dole as a means of “preserv[ing] corporate power” consistent with “neoliberalization in the law more broadly”); see also RAINER KATTEL, WOLFGANG DRECHSLER & ERKKI KARO, HOW TO MAKE AN ENTREPRENEURIAL STATE 128 (2022) (describing NIH encouraging grantees to form Genentech); Andrew Schrank & Josh Whitford, *Industrial Policy in the United States: A Neo-Polanyian Interpretation*, 37 POL. & SOC’Y 521, 526 (2009) (discussing the commercialization focus of ARPA and NIH administrators).

created entirely new industries by outsourcing what were state services to private entities.⁴¹

But while industrial policy never ‘went away,’ policymakers broadly valorized price-signals for their ability to distribute resources across sectors, and introduced a series of transformative policies that sought to “liberate” prices and competition toward this end.⁴² The return of interest in overtly *sectoral* policy has been prompted by a series of specific problems that neoliberal policies could not address (or even helped to cause), as well as by new evidence and insights in the study of the economy.

Energy and climate change are domains where neoliberal policies have clearly fallen short. Neoliberalism suggested that we ought to liberalize markets in energy both within and across borders to render them more efficient.⁴³ The recent Russian-Ukrainian war, with its massive implications for regions dependent on Russian energy exports, has provided a salient example of the problems of such an approach.⁴⁴ As more frequent and intense wildfires darken the skies across the country, the catastrophic implications of climate change have also become impossible to ignore. Carbon taxes, heralded in the neoliberal era as the most efficient solution,⁴⁵ have proven both politically difficult⁴⁶ and easily manipulated and distorted in practice.⁴⁷ Effective climate regulation has instead taken the form of mandatory regulatory directives to alter carbon intensive-behavior,⁴⁸ and government spending to facilitate the development of new emissions-reducing technologies.⁴⁹

⁴¹ See generally JON D. MICHAELS, CONSTITUTIONAL COUP: PRIVATIZATION’S THREAT TO THE AMERICAN REPUBLIC 112 (2022). See also *infra* notes 101-102 and accompanying text (describing the privatization of state welfare services and Medicare provision).

⁴² Two obvious examples are in the trade sector, where moves like tariff reductions and the diminishing of “inside the border” trade barriers were made mandatory through the WTO, and the rise of cost-benefit analysis as a guide-star for federal regulation, enforced through regulatory review by the OMB Office of Information and Regulatory Affairs. See Lisa Heinzerling, *Statutory Interpretation in the Era of OIRA*, 33 FORDHAM URB. L.J. 1097, 1097 (2006).

⁴³ To those who objected because of concerns about energy dependence, neoliberals added a second-order argument: the claim (now dubious) that liberalization would drive democratization and thus avoid the risks of energy dependence. See David Singh Grewal, *A World-Historical Gamble: The Failure of Neoliberal Globalization*, AM. AFFS. (Winter 2022), <https://americanaffairsjournal.org/2022/11/a-world-historical-gamble-the-failure-of-neoliberal-globalization/> [<https://perma.cc/5F6Y-KGT4>].

⁴⁴ See *id.*

⁴⁵ See William Boyd, *The Poverty of Theory: Public Problems, Instrument Choice, and the Climate Emergency*, 46 COLUM. J. ENV’T L. 399, 427 (2021).

⁴⁶ The difficulties are evidenced by the fact that even with a Democratic super-majority in Congress, a carbon tax failed to gain political favor. See John M. Broder, ‘Cap and Trade’ Loses Its Standing as Energy Policy of Choice, N.Y. TIMES (Mar. 25, 2010), <https://www.nytimes.com/2010/03/26/science/earth/26climate.html> [<https://perma.cc/RLQ4-K57L>].

⁴⁷ See Dirk Rübhelke, Stefan Vögele, Matthias Grajewski & Luzy Lobel, *Hydrogen-Based Steel Production and Global Climate Protection: An Empirical Analysis of the Potential Role of a European Cross Border Adjustment Mechanism*, 380 J. CLEANER PRODUCTION. 135040, 135040-1e (2022) (describing “leakages” in the EU’s carbon tax regime).

⁴⁸ National Ambient Air Quality Standards and the since-invalidated Clean Power Plan are both examples of this kind of regulation. See Eric Laschever, *Clean Air Act Regulation after West Virginia and the Inflation Reduction Act*, 52 ENV’T L. REP. 10876, 10880 (2022).

⁴⁹ See Carey, *supra* note 4 (describing the politics of the Inflation Reduction Act’s funding for climate grants, loan guarantees, and tax credits).

Other examples are easy to come by. The positive role of developmental policy was also on full display in the pandemic, with the government playing a critical role in the production of the COVID-19 vaccines.⁵⁰ The pandemic revealed the vulnerabilities of public health systems and supply chains that had been redesigned for “just-in-time” efficiency, spurring new sectoral interventions to try to stabilize those supply chains.⁵¹ For better or worse, it likewise spurred institutions unaccustomed to crafting industrial policies into making sectoral interventions. The Federal Reserve worked to stop the spread of financial contagion by directly injecting capital into businesses across the United States.⁵²

What counts as common sense in economic thought has also begun to change in ways that make sectoral intervention more appealing. There has been growing recognition, for example, that the state facilitates coordination between firms and acts as a buyer of last resort.⁵³ It is also a critically important market-maker, particularly where innovative technologies are concerned. For example, government investments can bring down the cost curve to facilitate more rapid adoption of new renewable technologies.⁵⁴ The pre-commitment of public funds can also reduce volatility and incentivize investment in productive capacity.⁵⁵ When it comes to developing “moon-shot” technologies like green hydrogen—highly capital-intensive, but potentially highly impactful—the state is often better-suited than firms to assume investment risk.⁵⁶ A significant

⁵⁰ See CONG. RSCH. SRV., OPERATION WARP SPEED CONTRACTS FOR COVID-19 VACCINES AND ANCILLARY VACCINATION MATERIALS, Rept. 11560 1-2 (Mar. 1, 2021), <https://crsreports.congress.gov/product/pdf/IN/IN11560> [<https://perma.cc/J7JG-8TEQ>] (describing the scale of HHS and DoD funding for vaccine development); Amy Kapczynski, Reshma Ramachandran & Christopher Morten, *How Not to Do Industrial Policy*, BOSTON REV. (Oct. 2, 2023), <https://www.bostonreview.net/articles/how-not-to-do-industrial-policy/> [<https://perma.cc/4KPQ-TACA>] (detailing how government investment in the manufacture of the COVID-19 vaccine led to enormous public health benefits, though also had flaws, such as the failure to build durable government capacity and power).

⁵¹ “Just-in-time manufacturing” optimized for firms’ ability to deliver a widget to market at the lowest possible cost by reducing inventories and productive capacity. But when the COVID-19 pandemic roiled manufacturing supply chains, the same corporate organization techniques rendered firms ill-equipped to adapt to changing circumstances. See THE WHITE HOUSE, BUILDING RESILIENT SUPPLY CHAINS, REVITALIZING AMERICAN MANUFACTURING, AND FOSTERING BROAD-BASED GROWTH 153 (June 2021), <https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf> [<https://perma.cc/HE32-LJUZ>]. Policymakers’ reliance on markets to hedge against macroeconomic risks presumed that firms had effectively priced the risk of such shocks and could self-correct for them. Little wonder that when this turned out not to be the case, policymakers became interested in how to build “supply chain resilience” through excess capacity above what market signals dictate. See *id.*

⁵² Cf. Lev Menand, *The Federal Reserve and the 2020 Economic and Financial Crisis*, 26 STAN. J. L. BUS. & FIN. 295, 359 (2021) (arguing that the Fed engaged in “industrial policy making” in its crisis lending programs).

⁵³ See generally Emanuel Saez and Gabriel Zucman, *Keeping Businesses Alive: The Government Will Pay* (Economics for Inclusive Prosperity Research Brief, 2020), <https://econfp.org/wp-content/uploads/2020/03/20.Keeping-Businesses-Alive.pdf> [<https://perma.cc/ZH5L-YYQP>].

⁵⁴ See Zachary Liscow & Quentin Karpilow, *Innovation Snowballing and Climate Law*, 95 WASH. U. L. REV. 387, 426 (2017).

⁵⁵ See Ha-Joon Chang & Antonio Andreoni, *Industrial Policy in the 21st Century*, 51 DEV. & CHANGE 324, 328 (2020) (discussing how the state can reduce demand uncertainty).

⁵⁶ See Dani Rodrik, *Green Industrial Policy*, 30 OXFORD REV. ECON. POL’Y 469, 470 (2014). Indeed, while there are a number of private firms working to commercialize green hydrogen technology, the most important foundational research has been conducted at national laboratories,

role for government intervention in particular sectors has renewed appeal in the current political and intellectual moment.

Finally, these intellectual currents have coincided with new empirical literature on the historic importance of state-led industrial policy to economic development.⁵⁷ Advances in econometrics, as well as new appreciation for the multiple goals of industrial policy, have led to a new literature providing evidence of highly successful industrial policies.⁵⁸ For example, public subsidies, careful control of foreign-direct investment, and targeted trade protections appear to have been central to rapid economic development in countries such as Japan, South Korea, and Taiwan.⁵⁹ In the U.S., new scholarship has found that public “moonshot” investment programs, such as research & development during World War II and the Apollo spacecraft program, had dramatic aggregate effects to shift the direction of American innovation and the geographic dispersion of manufacturing.⁶⁰ These developments offer new evidence for the historical thesis that public investment has long been a driving feature of American statecraft.⁶¹

B. *Beyond Efficiency and Competitiveness*

Historically, industrial policy has often been seen primarily as a tool of nationalist geopolitical rivalry and a means to improve “competitiveness.”⁶²

funded through government spending. See, e.g., *Lowering the Bar For Hydrogen-Powered Technology*, SANDIA LABNEWS (Oct. 24, 2019), <https://www.sandia.gov/labnews/2019/10/24/hy-marc-2/> [<https://perma.cc/6HGC-CRVZ>] (describing some of the national laboratories’ basic science collaborations).

⁵⁷ See Juhász, Lane & Rodrik, *supra* note 27 (providing an overview of these developments).

⁵⁸ See *id.*; Nathaniel Lane, *The New Empirics of Industrial Policy*, 20 J. INDUS. COMPETITION & TRADE 209, 219-24 (2020); Nicholas Bloom, John Van Reenen & Heidi Williams, *A Toolkit of Policies to Promote Innovation*, 33 J. ECON. PERSP. 163179-80 (2019).

⁵⁹ See generally Nathaniel Lane, *Manufacturing Revolutions: Industrial Policy and Industrialization in South Korea* 1-4 (Working Paper, 2021) (last visited Aug 9, 2023), <https://osf.io/6tqax> [<https://perma.cc/S4PA-KAHS>] (examining support for the South Korea chemicals industry); Jie Bai et al., *Quid Pro Quo, Knowledge Spillover, and Industrial Quality Upgrading: Evidence from the Chinese Auto Industry* (Nat’l Bureau Econ. Rsch., Working Paper no. 27644, 2020), <http://www.nber.org/papers/w27644.pdf> [<https://perma.cc/76YU-QET9>] (examining Chinese FDI policies). For an overview of the East Asian miracle debate, see generally Robert Wade, *East Asia, in ASIAN TRANSFORMATIONS: AN INQUIRY INTO THE DEVELOPMENT OF NATIONS* 471 (Deepak Nayyar, ed., 2020).

⁶⁰ See generally Shawn Kantor & Alexander Whalley, *Moonshot: Public R&D and Growth* (Nat’l Bureau Econ Rsrch, Working Paper no. 31471, 2023), <http://www.nber.org/papers/w31471.pdf> [<https://perma.cc/TXG5-WZY9>]; Daniel Gross & Bhaven Sampat, *America, Jump-Started: World War II R&D and the Takeoff of the U.S. Innovation System* (Nat’l Bureau Econ Rsrch, Working Paper no. 27375, 2020), <http://www.nber.org/papers/w27375.pdf> [<https://perma.cc/H6UM-9SB2>].

⁶¹ See Link & Maggor, *supra* note 34, at 273-74 (2020).

⁶² See Réka Juhász, *Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade*, 108 AM. ECON. REV. 3339, 3339-43 (2018) (describing the effects of French policies promoting textiles during the Napoleonic Wars); GRAHAM, *supra* note 27 (describing the role of economic competition with Japan in the 1970s and 80s industrial policy debates); Charles L. Schultze, *Industrial Policy: A Dissent*, BROOKINGS REV. 3, 4 (Fall 1983) (dismissing industrial policy as unsuccessful in incubating industries for international competition); Robert B. Reich, *Why the U.S. Needs an Industrial Policy*, HARV. BUS. REV. (Jan. 1982) (advocating for “a coherent strategy for regaining industrial competitiveness”).

This reflects, appropriately, that industrial policy should be oriented toward political aims. But it restricts those aims in an unaccountably narrow fashion. Why, in a democracy, could we aim to build more robust manufacturing capacity for national defense, but not for pandemic preparedness, or to ensure affordable healthcare for all? Once we recognize that our political economy is a product of our politics, there is no good reason to cabin the public aims that industrial policy can serve.

Industrial policy has commonly responded—and should, we think—to a set of policy goals set out in iterative, democratic debate. Do we want high-paying manufacturing jobs or more jobs in the service sector? Should people be able to stay in their hometowns, or be forced to move to urban areas for decent work? Are we willing to spend to green the energy sector, or would we rather impose the consequences of climate change on future generations? Should we onshore critical supply chains for health, or risk another pandemic without them? These are political questions, and must be answered in the first instance politically. A country's developmental goals will depend on what weight its citizens place on different normative values.

Competitiveness might be among the aims that we choose for industrial policy. The term is a slippery one, often used to naturalize markets as having rules and equilibria that operate beyond political intervention. But we might reasonably decide in politics, for example, that we are willing to fund the development of a local leading-edge semiconductor industry, but only temporarily, so that over the long run the industry would rise or fall based on its ability to “compete” on the global market. We might also determine the opposite: that semiconductors are critical infrastructure and should always be locally produced—or that associated good jobs are important—and that ensuring these things is worth sustained subsidy. There might be other industries similar to healthcare or education, where we expect eternal subsidy for equity reasons; we might also deliberately circumscribe the logic of competition on cost, exchanging it for quality controls or competition of a different sort (for example, in patient or student satisfaction).

Another common assumption is that industrial policies should respond only to market failures, and—accordingly—should be primarily evaluated based on their economic efficiency.⁶³ In the neoliberal era, for example, critics

While the legal literature has scarcely addressed industrial policy since the debates of the 1970s and 1980s, in the limited cases where it has, competitiveness has also been its normative touchstone. See D. Daniel Sokol, *Tensions between Antitrust and Industrial Policy*, 22 GEO. MASON L. REV. 1247, 1248 (2015) (assuming national competitiveness as a goal); Jim Chen & Daniel J. Gifford, *Law as Industrial Policy: Economic Analysis of Law in a New Key*, 25 U. MEM. L. REV. 1315, 1318 (1995) (describing industrial policy's greatest challenge as “how this nation can maximize its gross domestic product”); Steve Charnovitz, *Designing American Industrial Policy: General Versus Sectoral Approaches*, 5 STAN. L. & POL'Y REV. 78, 86–87 (1993) (describing managing trade and reducing foreign barriers as among the core instruments of industrial policy).

⁶³ See Robert H. Wade, *The American Paradox: Ideology of Free Markets and the Hidden Practice of Directional Thrust*, 41 CAMBRIDGE J. ECON. 859, 860 (2017) (describing the dominance of the “market failure” rationale).

of industrial policy lambasted it as an inefficient way to allocate resources relative to market price signals.⁶⁴ Industrial policy proponents today commonly respond by couching their arguments in the language of efficiency as well.⁶⁵ In the framing of this debate, the wisdom of industrial policy turns on whether the aggregate wealth that it generates after (theoretically) monetizing all unpriced costs and benefits exceeds the cost of the intervention. But this view, too, has little to recommend to it. One problem with this view is moral. The “wealth maximization” approach to efficiency analysis, for example, has been operationalized to benefit the wealthier.⁶⁶ One of the primary frameworks that regulators use to monetize unpriced costs and benefits—such as public goods like clean air—is to calculate individuals’ willingness-to-pay for these goods.⁶⁷ But there is a robust literature showing that this metric is biased toward those with greater ability to pay,⁶⁸ and marginalizes dignitary, distributive, and other non-commensurable interests.⁶⁹

If an “efficient” industrial policy is one that maximizes aggregate national wealth, this literature shows that this measure of success is neither politically neutral, nor obviously broadly appealing. What *is* broadly appealing is the more colloquial idea that government should be effective. We of course care whether policymakers pursue our aims in expeditious ways, minimizing wasted time, effort, and resources. Effectiveness is a critically important value for government in a democracy; without it, the public cannot achieve its

⁶⁴ See, e.g., Charnovitz, *supra* note 62, at 80 (1993) (“If successfully implemented, then, a general policy would dominate sectoral approaches because the efficiency gains and welfare benefits would accrue to all, not just those of the chosen industry”).

⁶⁵ Dani Rodrik—one of the most prominent economists working on industrial policy today—has argued that government support for building out “green technologies” can be justified because it corrects two market failures: the under-pricing of carbon, and the spillover effects of new technologies through “cross-firm externalities, industry-wide learning, skill development, or agglomeration effects.” Rodrik, *supra* note 56, at 470; see also Adam B. Jaffe et al., *Technology and Environmental Policy: A Tale of Two Market Failures* (Resources for the Future Discussion Paper 04-38, 2004). But in the absence of such failures, Rodrik argues that “the public sector does not have any comparative advantage in undertaking such activities and should not be in the business of subsidizing or funding private projects.” Rodrik, *supra* note 56, at 480. See also Juhász, Lane & Rodrik, *supra* note 27, at 4-5 (arguing that industrial should meet broad public goals, but then implying that its only rationales are market failures).

⁶⁶ See Zachary Liscow, *Is Efficiency Biased*, 85 U. CHI. L. REV. 1649, 1651 (2018).

⁶⁷ Richard L. Revesz, *Quantifying Regulatory Benefits*, 102 CALIF. L. REV. 1423, 1436-39 (discussing how this methodology is used to value a statistical life).

⁶⁸ See Liscow, *supra* note 66, at 1680, 1688. For example, a spending program to help protect homes from climate change governed by efficiency criteria will systematically direct subsidies to wealthier homeowners, simply because their homes are more valuable. See Zachary Liscow & Cass R. Sunstein, *Efficiency vs. Welfare in Benefit-Cost Analysis: The Case of Government Funding* (Oct. 1, 2023), <https://ssrn.com/abstract=4589563>.

⁶⁹ See Ackerman and Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. PA. L. REV. 1553, 1583-84 (2002); DOUGLAS KYSAR, REGULATING FROM NOWHERE, 7-9 (2010); Ronald M. Dworkin, *Is Wealth a Value?*, 9 J. L. STUDIES 191, 220-21 (1980); Rachel Bayefsky, *Dignity as a Value in Agency Cost-Benefit Analysis Note*, 123 YALE L.J. 1732, 1757 (2013). But see generally OFFICE OF MGMT. & BUDGET, PROPOSED OMB CIRCULAR No. A-4, “REGULATORY ANALYSIS” (Apr. 2023), <https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf> [<https://perma.cc/8N25-P9DU>] (proposing a new framework for regulatory analysis that incorporates distributional analysis and attends to difficulty-to-monetize benefits).

aims.⁷⁰ But efficiency in its technical sense is not the same thing. Instead, it subtly redirects policies towards the interests of the already well-off, undermining other legitimate democratic goals.

Efficiency analysis is sometimes instead defended as providing tractability. But there is clear tension between the claims that “efficiency” analysis is *both* tractable *and* provides a single comprehensive metric that incorporates all relevant costs and benefits. Assembling and evaluating comprehensive data at the scale required for complex policy problems is impossible, so that efficiency analysis in practice is always far more circumscribed. This calculation problem is especially acute in the industrial policy context. The data challenges of evaluating industrial policies’ productive impact are immense; measuring the welfarist or wealth consequences of such policies is harder still.⁷¹ Many industrial policy investments are by their nature speculative—they involve foundational investments with many downstream effects, much like basic R&D, which is not easily sustained in private markets.⁷² Others attend to network failures of lack of coordination between institutional actors.⁷³ Quantifying the positive externalities of these interventions precisely is not possible even as a historical matter—one reason why the debate about whether industrial policy can “work” is so murky.⁷⁴ Calculating them as a *prescriptive* matter in designing public policy is not feasible.

Clearly, then, industrial policy will be, and should, respond to a broader set of values than competitiveness or efficiency. We suggest that industrial policy should reflect “public” aims to emphasize, as well, that industrial policy should not just respond to *any* political aim. In a democracy, it is not enough for industrial policy to reflect the interests of industrialists or a political elite. Democracy itself is a political order premised on equality—on the radical promise that “the people rule themselves.”⁷⁵ In a democracy, developmental policy should reflect public interests, in the sense that John Dewey used the term. For Dewey, the “public” is not a unified will, but all of those affected by the actions of others—interests that are often amorphous and unorganized.⁷⁶ Industrial policy can only reflect public aims if those groups often excluded from our politics and dominated in our economy can be empowered to shape the direction of our economy and power relations within it.⁷⁷ And it can only

⁷⁰ See, e.g., DEWEY, *supra* note 19; cf. Sanjukta Paul, *On Firms*, 90 U. CHI. L. REV. 579, 598 (2023) (discussing “productive” or “operational efficiency,” as compared to what she calls the dominant form of “allocative” efficiency—and what we refer to as efficiency-as-wealth-maximization).

⁷¹ See Jeff Gordon, *Tax Law as Industrial Policy* (manuscript on file with authors at 41, 2023).

⁷² See generally Wesley M. Cohen, Richard R. Nelson & John P. Walsh, *Links and Impacts: The Influence of Public Research on Industrial R&D*, 48 MGMT. SCI. 1 (2002).

⁷³ See Matthew Keller & Fred Block, *Do As I Say or As I Do? U.S. Innovation and Industrial Policy Since the 1980s*, in DEVELOPMENT AND MODERN INDUSTRIAL POLICY IN PRACTICE 219, 227 (Jesus Felipe, ed., 2015).

⁷⁴ See Nathan Lane, *The New Empirics of Industrial Policy*, 20 J. INDUS., COMPETITION & TRADE 209, 210-11 (2020).

⁷⁵ Wendy Brown, *We Are All Democrats Now*, 13 THEORY & EVENT (2010).

⁷⁶ DEWEY, *supra* note 19, at 125; RAHMAN, DEMOCRACY AGAINST DOMINATION, *supra* note 16, at 87-88.

⁷⁷ RAHMAN, DEMOCRACY AGAINST DOMINATION, *supra* note 16, at 88 (describing Dewey); see also *infra* Part II.B.2.

achieve public aims if government is in fact sufficiently powerful and well-informed to do so.

II. INDUSTRIAL POLICY AS DEMOCRATIC PRACTICE

Industrial policy is administratively intensive. It implies a large and muscular bureaucracy, capable of foresight and sound structural decision-making. How can such a bureaucracy be effective, while also remaining accountable to public aims? This is no small problem. One of the central criticisms of industrial policy is that it will *either* lack the necessary information, *or* will be too close to industry, thus politically empowering the dominant firms in targeted sectors, and undermining public aims along the way.⁷⁸ The literature on what makes for successful industrial policy only partly answers this question. It emphasizes “embedded autonomy”—that that program officers should move flexibly within the technological communities they support and be granted independence from their political higher-ups to engage in policy learning.⁷⁹ But each of these precepts also generates accountability concerns. Evidence-based grantmaking, a professionalized civil service, and conflict-of-interest rules mitigate some kinds of influence.⁸⁰ But these kinds of interventions cannot alone dissolve the tension between expert administration and democracy.

Blake Emerson describes the tension this way: Democracy both requires expert administration to address complex social problems, and yet “specialized expertise, regularization, and distance from more immediate expression of popular will” undermines democratic values.⁸¹ Democracy more broadly embodies this same tension: it requires structures and law to achieve its aims and represent the collective will of the people, yet these laws and representations are themselves necessarily only representations—and become places where “hierarchies develop, experts of one kind or another cluster around the centers of decision order, [and] procedure and precedent displace a more spontaneous politics” to which ordinary people have more access.⁸² This tension cannot be wished away or eliminated. Democracy itself is a continuous

⁷⁸ See, e.g., Shantayanan Devarajan, *Three Reasons Why Industrial Policy Fails*, BROOKINGS (Jan. 14, 2016), <https://www.brookings.edu/articles/three-reasons-why-industrial-policy-fails/> [<https://perma.cc/SVA7-CKZP>] (describing the problem of political capture).

⁷⁹ See PETER EVANS, EMBEDDED AUTONOMY: STATES AND INDUSTRIAL TRANSFORMATION 12 (1995) (“A state that was only autonomous would lack both sources of intelligence and the ability to rely on decentralized private implementation”); James E. Rauch & Peter B. Evans, *Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries*, 75 J. PUB. ECON. 49, 49 (2000); KATTEL, DRECHSLER, AND KARO, *supra* note 40, at 40. See generally Mariana Mazzucato, *From Market Fixing to Market-Creating: A New Framework for Innovation Policy*, 23 INDUS. & INNOVATION 140 (2016) (on how the state needs to have “absorptive capacity” to recruit talent from the development network). See also *infra* notes 127–130 and accompanying text (elaborating on the concept of “embedded autonomy”).

⁸⁰ See, e.g., Block, *supra* note 29, at 176 (“ARPA personnel are encouraged to cut off funding to groups that are not making progress and to reallocate resources to other groups that have more promise”); Rauch & Evans, *supra* note 79 (describing the importance of meritocratic hiring procedures for industrial policymaking).

⁸¹ EMERSON, *supra* note 16, at 1–2.

⁸² SHELDON WOLIN, FUGITIVE DEMOCRACY 108 (2019).

process of both building institutions that work to achieve widely shared public aims, and holding open space to allow these aims to be challenged and changed over time.⁸³

There are many traditions of democratic thought. But any compelling account of democracy today, we think, will describe it as having at least two important requirements. One is the polity's collective capacity—for example, in the form of public administration—to achieve common goals.⁸⁴ Another is a measure of material equality that enables members of the polity to make credible claims about what those goals ought to be.⁸⁵ Because many in our democracy today face forms of material, structural subordination, a key task for those who would defend democracy is to help build systematic, organized power among groups so subordinated.⁸⁶ And just as these requirements are key to democracy writ large, they are also key to a democracy's design of industrial policy.

With this in mind, industrial policy that effectively meets public aims today requires two distinct things: 1) building the durable *administrative power* needed to govern the economy, and 2) building the *countervailing power* among historically disempowered groups over time that is needed to generate more genuinely democratic checks on the administrative state itself, and on private power exerted in the economy. After decades of neoliberal attack on the capacity and power of certain parts of the state, administrative power must today deliberately be cultivated or industrial policy will fail to achieve public aims. But building countervailing power is essential for success too, for two reasons. First, the conventional tools of accountability for the administrative state, such as regulations backed by notice-and-comment rulemaking, transparency, and adjudication, have limited purchase in this context. Second, developmental policy sometimes allocates significant resources to incumbent firms, creating the risk of clientelism and excessive structural power for private

⁸³ EMERSON, *supra* note 16, at 7 (“[T]hese constitutive tensions do not render the modern democratic state untenable. They motivate its normative development.”). Sheldon Wolin argues that “institutionalization marks the attenuation of democracy,” making democracy necessarily fugitive. WOLIN, *supra* note 82, at 108. This captures one aspect of the tension we are interested in here, but not the other: Administration *both* appears undemocratic, *and* is necessary for the achievement of public aims in our world of extraordinary complexity and interdependence.

⁸⁴ For work theorizing the importance of public power to achieve collective aims to democracy, see DEWEY, *supra* note 19; RAHMAN, DEMOCRACY AGAINST DOMINATION, *supra* note 16.

⁸⁵ See generally SAMUEL BAGG, THE DISPERSION OF POWER: A CRITICAL REALIST THEORY OF DEMOCRACY (2024) (arguing that democracy requires measures to address inequalities of power, including the development of countervailing power among ordinary people).

⁸⁶ Important work articulating the importance of organized power includes Joshua Cohen & Joel Rogers, *Secondary Associations and Democratic Governance*, 20 POL. & SOC’Y 393, 393-95 (1992) (hereinafter “*Secondary Associations 1992*”); Joshua Cohen & Joel Rogers, *Secondary Associations and Democratic Governance*, in ASSOCIATIONS AND DEMOCRACY: THE REAL UTOPIAS PROJECT 7, 42-46 (Erik Olin Wright ed., 1995) (hereinafter “*Secondary Associations 1995*”); Steven Klein, *Democracy Requires Organized Collective Power*, 30 J. POL. PHIL. 26, 27 (2022); Steven Klein & Cheol-Sung Lee, *Towards a Dynamic Theory of Civil Society: The Politics of Forward and Backward Infiltration*, 37 SOC. THEORY 62, 64 (2019). See also K. Sabeel Rahman & Jocelyn Simonson, *The Institutional Design of Community Control*, 108 CAL. L. REV. 101, 103 (2020); Amna A. Akbar, Sameer M. Ashar & Jocelyn Simonson, *Movement Law*, 73 STAN. L. REV. 821, 821 (2021); Kate Andrias & Benjamin I. Sachs, *Constructing Countervailing Power: Law and Organizing in an Era of Political Inequality*, 130 YALE L.J. 546, 551 (2020); see also BAGG, *supra* note 85.

actors in the economy. Industrial policy will not be able to meet public aims without deliberately counteracting this tendency.

The aims of building administrative and countervailing power exist in productive tension with one another, reflecting the tension Emerson describes between administrative organization and democratic politics itself. Administrative power must be accountable to democratic mobilizations, and mobilizations will contest and at times make the exercise of administrative power more difficult. Effectively configuring the two against one another will contribute to another feature of democratic industrial policy: a set of *policy feedback loops* that sustain durable political coalitions needed to support effective administration. Accordingly, there can be no democratic industrial policy without *both* more muscular administrative capacity and more well-developed sites and institutions of countervailing power. Whatever is “beyond neoliberalism” can only aim toward deeper democracy with these two aims in mind.

A. Administrative Power

The neoliberal era helped usher in a period of concentrated private power and diminished governmental capacity. Both undermine the ability of the government to enact industrial policy, and so too our ability to effectively govern the economy. Legal changes over the last several decades helped, for example, facilitate the rise of more concentrated corporate power, with now measurable negative impacts on innovation, wages, and the autonomy of workers.⁸⁷ For example, the immense power that new technology firms hold today developed not in the absence of law, but in response to specific legal changes—from tort immunity under Section 230, to stronger intellectual property (IP) protection, to the weakening of worker power and antitrust law.⁸⁸ Shifts in banking law unleashed processes of financialization that encouraged speculation in secondary markets over investment in productive capacity, in addition to creating increasingly pervasive risks of financial crisis.⁸⁹

⁸⁷ Some of the most acute concentration is in sectors of deep importance to American democracy—such as in social media ownership—and to the infrastructure of the American economy—such as new intermediaries to online markets. See, e.g., Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 973 (2019). See also generally THOMAS PHILIPPON, *THE GREAT REVERSAL* (2019) (describing increased concentration and its relationship to US policy); Suresh Naidu & Eric A. Posner, *Labor Monopsony and the Limits of the Law*, 57 J. HUM. RES. 284, 285 (2022) (describing the evidence of monopsony power in labor, and possible drivers).

⁸⁸ See Kapczynski, *supra* note 38. See generally Herman Mark Schwartz, *Mo'patents, Mo'problems: Corporate Strategy, Structure, and Profitability in America's Political Economy*, in *THE AMERICAN POLITICAL ECONOMY: POLITICS, MARKETS, AND POWER* 247 (Jacob S. Hacker et al. ed., 2021); Brian Callaci, *What Do Franchisees Do? Vertical Restraints as Workplace Fissuring and Labor Discipline Devices*, 1 J. L. POL. ECON. 397 (2021).

⁸⁹ See, e.g., Saule T. Omarova, *The Quiet Metamorphosis: How Derivatives Changed the “Business of Banking*, 63 U. MIAMI L. REV. 1041, 1106 (2009); (on how shifts in financial regulation enabled the rise of the shadow banking sector); Lev Menand, *Too Big to Supervise: The Rise of Financial Conglomerates and the Decline of Discretionary Oversight in Banking*, 103 CORNELL L. REV. 1527, 1530 (2019) (on how the shift from supervision to formula-based regulation enabled financial industry concentration and consolidation of power).

Government also turned over more functions and authority to the private sector in recent decades, pursuing the ostensible efficiency gains, innovation, and improvements to services that would result.⁹⁰ Along the way, government progressively lost access to the information and knowledge it needed to be an effective procurer, regulator, or enforcer of our laws, and transferred enormous authority and value to the private sector.⁹¹ The problem snowballed as information (in the form of data and intellectual property, which may be protected from disclosure to the public, and sometimes even to the government) and know-how became increasingly located in the private sector.⁹²

For example, in the biomedical sector, new laws made it routine for government funded research to be transferred to private companies via exclusive licenses that had previously been rare.⁹³ And though residual fair pricing requirements were included in these laws to protect the public interest, successive administrations, Democratic and Republican, foreswore use of these tools because industry effectively threatened to strike—and not license federally funded inventions—if they were implemented.⁹⁴ The result is that federally funded research continues to fund breakthroughs, and industry has the authority to price as it wishes, undermining access to the resulting technologies. The structural nature of the power that industry has gained was visible in the rollout of Operation Warp Speed, where the government funded COVID-19 vaccine development to the tune of hundreds of billions of dollars—including nearly all of the clinical development costs of the Moderna vaccine—but achieved no long-term rights to IP or pricing concessions as a result.⁹⁵

A similar plot was played out in other sectors, including the defense industry.⁹⁶ Here, too, the government underwrote the pricing power of defense

⁹⁰ See MICHAELS, *supra* note 41, at 85–103; David A. Super, *Privatization, Policy Paralysis, and the Poor*, 96 CALIF. L. REV. 393, 393 (2008).

⁹¹ See, e.g., Charles Sabel, Jonathan Zeitlin & Jan-Kees Helderma, *Transforming the Welfare State, One Case at a Time: How Utrecht Makes Customized Social Care Work*, POL. & SOC'Y (2023) (on the outsourcing of welfare state functions); MICHAELS, *supra* note 41.

⁹² See generally MARIANA MAZZUCATO & ROSIE COLLINGTON, *THE BIG CON: HOW THE CONSULTING INDUSTRY WEAKENS OUR BUSINESSES, INFANTALIZES OUR GOVERNMENTS, AND WARPS OUR ECONOMIES* (2023).

⁹³ See, e.g., Traficonte, *supra* note 40; see also KATTEL, DRECHSLER & KARO, *supra* note 40, at 128; Andrew Schrank & Josh Whitford, *Industrial Policy in the United States: A Neo-Polanyian Interpretation*, 37 POL. & SOC'Y 521, 526 (2009) (discussing the commercialization focus of ARPA and NIH administrators).

⁹⁴ See Traficonte, *supra* note 93, at 14–5.

⁹⁵ Kapczynski, Ramachandran & Morten, *supra* note 50.

⁹⁶ The Department of Defense's Advanced Research Projects Agency (DARPA) grew in size in this period and was intended to similarly subsidize public research that could be ported to private profit-seeking enterprises. Many of the critical components of new hardware products over this period—most famously, for the Apple iPhone—were originally developed through research funded through it. See MARIANA MAZZUCATO, *THE ENTREPRENEURIAL STATE: DEBUNKING PUBLIC VS. PRIVATE SECTOR MYTHS* 74 (2013). Its perceived success led to many other experiments in the form. The Advanced Research Projects-Energy program (ARPA-E), created during the depths of the 2008 recession, gave the Department of Energy resources to subsidize the development of new renewable technologies. And ARPA-E's primary focus has been supporting firms that are commercializing technologies funded through public research—adding public subsidy while allowing private actors to decide which ones to bring to market, and how to price them. U.S. ENV'T PROT. AGENCY, *ARPA-E STRATEGIC VISION ROADMAP: REPORT TO CONGRESS* iii–iv (Aug. 2022), <https://arpa-e.energy.gov/sites/default/files/2022%20ARPA-E%20Strategic%20Vision%20Roadmap.pdf> [<https://perma.cc/2KAL-9FJZ>].

contracting firms. After the Cold War ended in the early 1990s and defense spending began to decline, the Department of Defense explicitly orchestrated a wave of mergers and acquisitions that dramatically increased concentration in the industry.⁹⁷ DOD even allowed the companies to bill the United States for the legal costs of these transactions.⁹⁸ The result is an industry with dramatic pricing power over the U.S. government—not to mention epistemic power over the perceived need for particular defense technologies.⁹⁹

Social insurance and welfare schemes were also outsourced to private entities, cutting secure (often unionized) public sector jobs for privately contracted workers and firms. For example, states like Texas and Indiana outsourced the administration of programs from food stamps to children's health insurance to Medicaid, creating new private profit centers and disrupting traditional lines of accountability.¹⁰⁰ At the federal level, a new Medicare program was created in this period, called "Medicare Advantage," that is fully federally funded but privately run, including with respect to reimbursement rates and evaluations of medical necessity of services.¹⁰¹ Medicare Advantage has become so vast that it serves four in ten Medicare beneficiaries; the successful public program that is the basis for calls for "Medicare for All" today has, in fact, been dramatically privatized.¹⁰²

These trends have empowered private firms and undermined state capacity, increasing the structural power of industry over the state itself. A key goal of industrial policy in the wake of neoliberal governance, therefore, must be to build administrative power. Administrative power can, critically, be located in many different kinds of governmental institutions, from agencies to commissions to state-owned enterprises, and can operate at the federal, state, or municipal level.¹⁰³

To argue that administration be designed to enhance administrative power over the economy is, admittedly, to cut against the grain of much recent administrative law scholarship. A great deal of work in the field, under the

⁹⁷ See John Mintz, *How A Dinner Led To A Feeding Frenzy*, WASH. POST (July 4, 1997), <https://www.washingtonpost.com/archive/business/1997/07/04/how-a-dinner-led-to-a-feeding-frenzy/13961ba2-5908-4992-8335-c3c087cdebc6/> [<https://perma.cc/H8ES-QSEE>].

⁹⁸ See Lawrence J. Korb, *Merger Mania: Should the Pentagon Pay For Defense Industry Restructuring?*, BROOKINGS INST. COMMENT. (Jun. 1, 1996), <https://www.brookings.edu/articles/merger-mania-should-the-pentagon-pay-for-defense-industry-restructuring/> [<https://perma.cc/U9XQ-UYQW>].

⁹⁹ The largest ten defense companies now account for 86% of revenues in the sector, and the increasing cost of new weapons systems has significantly exceeded inflation. See AMERICAN ECONOMIC LIBERTIES PROJECT, *COURAGE TO LEARN: DEFENSE AND AEROSPACE* (Jan. 11, 2021), <https://www.economicliberties.us/our-work/courage-to-learn-defense-aerospace/> [<https://perma.cc/MD8Z-269Y>].

¹⁰⁰ See Super, *supra* note 90, at 397.

¹⁰¹ See, e.g., Barbara Caress, *The Dark History of Medicare Privatization*, AMER. PROSPECT (Jan. 24, 2022), <https://prospect.org/health/dark-history-of-medicare-privatization/> [<https://perma.cc/58HF-BHQP>].

¹⁰² Allison Hoffman & Ann F. Baum, *Winners and Losers in the Debate Over the Expansion of Medicare*, 31 ELDER. L. J. 51, 86 (2023).

¹⁰³ Industrial policy governance challenges are sited at multiple levels of governmental power; our task is not to prescribe where and how they should be resolved, but to offer an account of the proper aims of democratic industrial policy and to excavate legal tools that might be made available for these ends across public administration.

influence of prevailing neoliberal thought, has treated public power as a threat to private liberty more than as an instrumentality of the public good. But this is a decidedly modern development. As Lev Menand has noted, “for most of American history, administrative authority was widely perceived not as a threat to liberty, but as ‘a means of protecting liberty and the public interest against private power.’”¹⁰⁴ As that history describes, building administrative authority over the economy is a necessary *condition* of public power in a democracy. It is this tradition that we mean to invoke and revive.

B. *Countervailing Power*

How can this amplified administrative power be rendered publicly accountable? Below we describe the “governance gap” in industrial policy today that makes this problem acute, and how a strategy of building countervailing power can help to remedy it.

1. *The Governance Gap in Industrial Policy*

Industrial policy often entails vast discretion in setting program eligibility terms and negotiating agreements with individual counterparties, and finds the government near the height of its regulatory power.¹⁰⁵ An expansive and demanding role for the executive is, in fact, implicit in the nature of industrial policy, because so many sector-specific details matter, and because market conditions in those sectors are constantly changing.¹⁰⁶ Notably, in the last Congressional session alone, Congress stood up appropriations and tax credits to the tune of hundreds of billions of dollars, giving regulators an enormously consequential role in implementation.¹⁰⁷ The COVID crisis yielded still more massive programs, valued in the trillions of dollars, and also left innumerable critical decisions to administrators. In this time, both the Biden and Trump administrations also made use of an extraordinarily broad statute, the Defense Production Act, that grants executive authority to reallocate production, mandate that certain contracts be prioritized over others, and even direct the building of production facilities and sharing of data—all overseen

¹⁰⁴ Lev Menand, *Why Supervise Banks? The Foundations of the American Monetary Settlement*, 74 VAND. L. REV. 951, 1010 (quoting LEONARD D. WHITE, INTRODUCTION TO THE STUDY OF PUBLIC ADMINISTRATION 464 (4th ed. 1955)).

¹⁰⁵ Note that the exercise of governmental power to impose requirements on other parties through loans, grants, or other forms of aid is constitutionally proscribed by Spending Clause doctrine with respect to states (*see NFIB v. Sebelius*, 567 U.S. 519 (2012)), and the unconstitutional conditions doctrine with respect to private parties. We discuss these doctrinal questions *infra* Part IV.

¹⁰⁶ *See infra* Part II.B.1.

¹⁰⁷ For example, the CHIPS and Science Act gives the Department of Commerce authority to enter into agreements to support semiconductor manufacturing “on such terms as the Secretary considers appropriate.” Pub. L. 117–167, 136 Stat. 1366, § 103. The Inflation Reduction Act requires the EPA Administrator to allocate grants to finance climate-related lending to “low-income and disadvantaged communities,” without defining either term. Pub. L. 116–169, 136 Stat. 1818, § 134.

administratively.¹⁰⁸ This power is limited to matters of national urgency, yet Congress has written the scope broadly enough that it has provided a central tool for the early governance of the emerging artificial intelligence industry.¹⁰⁹

Yet despite the expansive regulatory power in this domain, administrative law is often ill-equipped to cabin how this power should be exercised. The cornerstone of administrative law is “hard look” judicial review of agency action under the arbitrary-and-capricious standard to ensure that it is reasonable.¹¹⁰ But much of the industrial policy toolkit—such as grants and loans, procurement, other transactions authority, and other ad hoc contract negotiations—is effectively exempt from judicial review. Lack of an administrative record, timing issues, and lack of standing all present barriers to relief.¹¹¹ And even when review is theoretically available, administrative common law generally militates against the exercise of judicial review.

First, much of industrial policymaking is done in the form of directly obligating funds to third parties. Where Congress directs an agency to spend a lump-sum appropriation, agencies’ discretion about how to allocate those resources are presumptively unreviewable by the courts.¹¹² In many statutes, Congress has gone further, explicitly barring judicial review of such decisions.¹¹³ And when it comes to the substantive enforcement of the terms of grants, courts often play a negligible role.¹¹⁴

Second, most of the core regulations that will implement industrial policy are exempt from many procedural requirements undergirding hard look review. Doctrinally, actions like contracts made pursuant to “other transactions authority” and notices of fund opportunities (NOFOs) are informal adjudications under the Administrative Procedure Act (APA), with few procedural requirements other than those imposed by their enabling statutes.¹¹⁵ Agencies need not seek public comment to exercise authority in this manner, nor must they demonstrate that they have considered and dispensed with viable regulatory alternatives.¹¹⁶ Similarly, regulations relating to public property, loans,

¹⁰⁸ See CONG. RSCH. SERV., THE DEFENSE PRODUCTION ACT OF 1950: HISTORY, AUTHORITIES, AND CONSIDERATIONS FOR CONGRESS 7-9, 13-14, Rept. R43767, (2023).

¹⁰⁹ Exec. Order No. 14,110, 88 Fed. Reg. 211 (Nov. 2, 2023).

¹¹⁰ See *Motor Vehicle Manufacturers Assn. v. State Farm Mutual Ins.*, 463 U.S. 29, 44-45 (1983) (considered the archetypical statement of how courts should review agency action for being “reasoned”). Of course, there are other important checks on agency discretion beyond judicial review, such as presidential oversight. See generally Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245, 2246 (2001).

¹¹¹ *But see Biden v. Nebraska*, 143 S.Ct. 2355 (2023) (reaching the merits on a claim that the Executive Branch inappropriately exercised its power to modify federal student loans).

¹¹² See *Lincoln v. Vigil*, 508 U.S. 182, 191 (1993) (holding that “the very point of a lump-sum appropriation is to give an agency the capacity to adapt to changing circumstances and meet its statutory responsibilities in what it sees as the most effective or desirable way”).

¹¹³ See Laura Dolbow, *Barring Judicial Review*, 77 VAND. L. REV. 307, 380 (2024) (listing explicit statutory preclusions of judicial review of agency resource allocation).

¹¹⁴ See Pasachoff, *Federal Grant Rules*, *supra* note 14, at 593.

¹¹⁵ See Christopher J. Walker, *The Lost World of the Administrative Procedure Act: A Literature Review*, 28 GEO. MASON L. REV. 733, 747 (2021) (explaining that “informal adjudication” is a “residual category” of actions not covered by the APA’s hearing provisions).

¹¹⁶ See Metzger, *supra* note 14, at 1118 (highlighting the inapplicability of administrative procedures to appropriations decision-making).

grants, benefits, and contracts are rulemaking under the APA's regime, but generally exempt from its notice-and-comment requirements.¹¹⁷

As a practical matter, these exemptions make sense. Ad hoc negotiations with firms are difficult to discipline with public comment. And disclosure of the reasoning behind the government's bargaining goals may undermine the government's negotiating position, implicate business confidences, or elongate the timeline of negotiations. But they also foreclose the possibility of meaningful judicial review of agency action. While review may theoretically be available under the APA, the paucity of the administrative record—and courts' extreme reluctance to order extra-record discovery of agency materials—give little basis on which for courts to adjudicate.¹¹⁸

Next, industrial policy agencies will necessarily tend to rely on informal guidance, rather than rulemaking, in making program decisions, similarly limiting judicial review.¹¹⁹ Guidance will be justifiable in many such contexts. When designing a program to encourage private investment in a particular sector, for example, speed, flexibility to adapt to changing circumstances, and clarity to regulated industries are all of paramount importance.¹²⁰ Guidance is often faster and more flexible than rulemaking, with regulated parties commonly requesting such guidance in the first place.¹²¹ Guidance can also provide a valuable leverage point for regulators that oversee powerful entrenched interests: when coupled with later authority to regulate market access or conditions, regulated parties are highly likely to follow agency guidance, though it lacks the force of law.¹²² While guidance has many features to recommend it here, it presents ripeness issues that may foreclose judicial review, and often operates at a time scale that renders review unworkable.¹²³

Finally, would-be challengers of industrial policy actions are likely to face problems of constitutional standing. Taxpayer status is almost never sufficient to demonstrate standing.¹²⁴ Where an agency has significant discretion to design subjective program criteria for an industrial policy program, it

¹¹⁷ 5 U.S.C. § 553(a)(2). Note that a number of agencies are bound by self-imposed commitments to use notice-and-comment for such rulemakings, unless and until they repeal such rules. See JERRY L. MASHAW ET AL., *THE AMERICAN PUBLIC LAW SYSTEM, CASES AND MATERIALS* 649 (8th ed. 2019). See also *Batterton v. Marshall*, 648 F.2d 694 (D.C. Cir. 1980) (enforcing such a regulation on the agency that promulgated it).

¹¹⁸ See generally Aram A. Gavoort & Steven A. Platt, *Administrative Records and the Courts*, 67 U. KAN. L. REV. 1 (2018). See also *Oceana, Inc. v. Ross*, 920 F.3d 855, 865-66 (D.C. Cir. 2019) (upholding the decision not to require supplementing the administrative record with a privilege log even with evidence of agency misconduct).

¹¹⁹ See Ronald M. Levin, *Rulemaking and the Guidance Exemption*, 70 ADMIN. L. REV. 263, 266 (2018) (defining and describing guidance).

¹²⁰ Guidance about likely future eligibility for an investment tax credit, for example, is mutually beneficial: claimants want immediate clarification as to what activities are eligible for the tax credit, and the government wants to encourage such activity as soon as possible.

¹²¹ See NICHOLAS R. PARRILLO, *FEDERAL AGENCY GUIDANCE: AN INSTITUTIONAL PERSPECTIVE* 7 (2017).

¹²² *Id.* at 37 (Parties “have a strong incentive to follow guidance when they face a pre-approval requirement”); see also *id.* at 40-44. As Parrillo notes, in agencies like the FTC, which lack of preapproval regimes, and limited enforcement resources, guidance is often ignored. *Id.* at 78.

¹²³ See Gwendolyn McKee, *Judicial Review of Agency Guidance Documents: Rethinking the Finality Doctrine*, 60 ADMIN. L. REV. 371, 374 (2008).

¹²⁴ *Arizona Christian School Tuition Organization v. Winn*, 563 U.S. 125, 138 (2011).

is doubtful that an unselected applicant would meet the redressability prong to successfully bring a suit challenging the design of that program.¹²⁵ The requirement of a specific injury-in-fact might also limit a third party's ability to bring suit against a transaction, even where the government has unquestionably given a far-too-favorable deal to a private company relative to what the public will receive in return.¹²⁶ Collectively, these dynamics highlight that much administrative law doctrine offers little guide to how industrial policy administrators ought to exercise their discretion.

Notably, there is a robust sociological literature about what makes for successful industrial policy regimes—but it, too, offers little insight into how to resolve the political questions central to administration. As we have noted, this literature is rooted in the idea that program officers should be drawn from technological communities they support.¹²⁷ It likewise emphasizes the importance of operational and programmatic flexibility—“learning by doing” through a variety of different policy instruments—and coordinating activity between public, private, and hybrid institutions through interlinked developmental networks.¹²⁸ In this sense, the embedded autonomy literature mirrors arguments in the legal literature for “collaborative governance,” whereby agencies and regulated parties have “[shared] responsibilities and mutual accountability that crosses the public-private divide.”¹²⁹

This literature is descriptively valuable but overlooks first-order questions about what developmental goals industrial policy is meant to achieve, instead assuming technical effectiveness as the desired end. Just as crucially, this tradition offers little guidance for how program administrators should navigate the fields of power within those sectors they aim to nurture; address inevitable tensions between bureaucratic expertise and democratic responsiveness; or build the kinds of constituencies that could help render these efforts politically sustainable and successful.¹³⁰ Its implicit status quo bias—that the state simply needs to subsidize and arrange already-existing sites of production into a coherent order—constrains both what industrial policy can be expected to achieve, and who will be able to benefit from it. A democratic industrial policy requires not only an empowered state. It also requires forms

¹²⁵ See *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992).

¹²⁶ See Mila Sohoni, *On Dollars and Deference: Agencies, Spending, and Economic Rights*, 66 *DUKE L.J.* 1677, 1706 (2016).

¹²⁷ See *supra* note 79 (citing key exemplars of this literature).

¹²⁸ See Keller & Block, *supra* note 73, at 219; KATTEL, DRECHSLER & KARO, *supra* note 40, at 101–04 (describing how the Defense Advanced Research Projects Agency (DARPA) had no congressionally-commanded obligations to support given sectors, but a general mandate to achieve scientific superiority over the Soviets); Block, *Swimming Against the Current*, *supra* note 29, at 176 (describing the state's role in helping firms commercialize technologies); Dan Traficonte, *Collaboration in the Making*, 21 *COLUM. SCI. & TECH. L. REV.* 328, 350–63 (2020) (describing techniques to encourage intellectual property sharing between firms).

¹²⁹ Jody Freeman, *Collaborative Governance in the Administrative State*, 45 *UCLA L. REV.* 1, 30 (1997). See generally Charles F. Sabel & Jonathan Zeitlin, *Experimentalist Governance*, in *THE OXFORD HANDBOOK OF GOVERNANCE* (David Levi-Faur ed., 2012).

¹³⁰ See, e.g., Mariana Mazzucato, Rainer Kattel & Josh Ryan-Collins, *Challenge-Driven Innovation Policy: Towards a New Policy Toolkit*, 20 *J. INDUS. COMPETITION & TRADE* 421, 426 (2020) (describing “moonshot” efforts but offering little guidance about how to navigate the potential democratic deficits generated by the resulting empowerment of experts or private firms).

of countervailing power that can help hold the state and the private sectors to account, as well as generate feedback loops that sustain the long-term investments that industrial policy requires.¹³¹

2. *The Associational Alternative*

Historically, major industrial policy programs have commonly run roughshod over groups with little social, economic, and political power. Ninety percent of the workforce of the Central Pacific Railroad—chartered by Congress to construct the Western part of the first transcontinental connection—were Chinese immigrants who worked under grueling, sometimes deadly conditions, and who were then prohibited from becoming U.S. citizens under the Chinese Exclusion Act.¹³² Subsidy regimes underlying the post-war housing boom systematically excluded African Americans and other people of color, with dramatic and ongoing implications for the racial wealth gap.¹³³ Support for the U.S. automobile industry in the 1970s sought to ensure international competitiveness at the expense of manufacturing workers.¹³⁴ Indeed, the dominant position of the last major popular debate over industrial policy, in the 1980s, was that “equity issues” had to be sacrificed in favor of a greater focus on efficiency.¹³⁵ Without attention to the authority of structurally disempowered groups to influence the shape of governance, contemporary industrial policies risk replicating this history.

And notwithstanding progress towards equality in some domains of political life, the avenues which dispossessed Americans have used to exercise political influence have waned in the past decades.¹³⁶ Membership in labor unions, which is strongly correlated with flattening of political and income inequalities,¹³⁷ has declined for decades.¹³⁸ So too has participation in other civic organizations.¹³⁹ This has deepened inequalities of influence in the political process. Empirical evidence shows that Congress today is

¹³¹ See TODD N. TUCKER, ROOSEVELT INST., EVERYTHING IS CLIMATE NOW: NEW DIRECTIONS FOR INDUSTRIAL POLICY FROM BIDEN’S SUPPLY CHAIN REPORTS 22 (2022).

¹³² See generally GORDON H. CHANG, GHOSTS OF GOLD MOUNTAIN: THE EPIC STORY OF THE CHINESE WHO BUILT THE TRANSCONTINENTAL RAILROAD (2020).

¹³³ See RICHARD ROTHSTEIN, THE COLOR OF LAW 70-73 (2017).

¹³⁴ GRAHAM, *supra* note 27, at 33-36 (1992) (describing how the Loan Guarantee Board that oversaw the Chrysler bailout required a wage freeze).

¹³⁵ *Id.* at 48 (quoting *Revitalizing the U.S. Economy*, BUS. WEEK (Jun. 30, 1980)).

¹³⁶ See generally Andrias & Sachs, *supra* note 86, at 562-68.

¹³⁷ See John S. Ahlquist, *Labor Unions, Political Representation, and Economic Inequality*, 20 ANN. REV. POL. SCI. 409, 410 (2017); Patrick Flavin, *Labor Union Strength and the Equality of Political Representation*, 48 BRIT. J. POL. SCI. 1075, 1076 (2018).

¹³⁸ See ECON. POL’Y INST., UNIONS HELP REDUCE DISPARITIES AND STRENGTHEN OUR DEMOCRACY (Apr. 2021), <https://www.epi.org/publication/unions-help-reduce-disparities-and-strengthen-our-democracy/> [<https://perma.cc/R2LJ-ZPMF>]

¹³⁹ See UNIV. MD., WHERE ARE AMERICA’S VOLUNTEERS? A LOOK AT AMERICA’S WIDE-SPREAD DECLINE IN VOLUNTEERING IN CITIES AND STATES 1 (Oct. 2018), https://dogood.umd.edu/sites/default/files/2019-07/Where%20Are%20Americas%20Volunteers_Research%20Brief%20_Nov%202018.pdf [<https://perma.cc/26VR-RMHP>]

disproportionately responsive to the interests of the wealthiest segments of society.¹⁴⁰ In the regulatory context, the same dynamics have been magnified by ostensibly neutral procedures. The cost of meaningful participation in notice-and-comment style-rulemaking structurally favors participation from the highest-resourced participants.¹⁴¹ Biases of participation are even more extreme in *ex parte* deliberations before policies are formally proposed to the public.¹⁴² And disclosure-driven regimes have also often fallen short of genuine democratic accountability, because they are likewise blind to the inequitable fields of power in which regulated industries, agencies, and the public are acting in.¹⁴³

These conditions underscore that a robustly democratic administrative process cannot be produced by a simple, “all comers” approach to participation and engagement. Administrative procedures do not simply transmit, but also necessarily structure, democratic engagement. To do so according to a principle of equality against a backdrop of concentrated social and economic power, as Sabeel Rahman has argued, means aiming to generate “hooks and levers that can enable more conventionally marginalized and disempowered constituencies to have an equal voice, for example through channels of representation, or mechanisms of monitoring and accountability.”¹⁴⁴ And in exercising the discretion inherent to flexible modes of governance like industrial policy, democratic administration requires officials to “use their discretion to rectify asymmetrical social relationships that leave certain social groups with arbitrary and unaccountable authority over others.”¹⁴⁵

Rahman, along with scholars like Jocelyn Simonson, Kate Andrias, and Ben Sachs, have begun to connect structural and power-centered theories of democracy to questions of law and administration, arguing that deliberate efforts to include and reinforce the organizational power of structurally

¹⁴⁰ See Martin Gilens & Benjamin I. Page, *Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens*, 12 PERSP. ON POL. 564, 572 (2014); Jacob S. Hacker & Paul Pierson, *Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States*, 38 POL. & SOC’Y 152, 155 (2010).

¹⁴¹ See Jason Webb Yackee & Susan Webb Yackee, *A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy*, 68 J. POL. 128, 133-35 (2006) (documenting how agencies are observably more deferential to business groups when they change regulations in response to public comment); Thomas O. McGarity, *Administrative Law as Bloodsport: Policy Erosion in a Highly Partisan Age*, 61 DUKE L.J. 1671, 1746 (2012) (describing how those who can “deluge the agency with thousands of pages of technical comments” dominate agencies’ time responding to public feedback); Wendy E. Wagner, *Administrative Law, Filter Failure, and Information Capture*, 59 DUKE L.J. 1321, 1325 (2010) (explaining the concept of “information capture”).

¹⁴² See Brian Libgober, *Meetings, Comments, and the Distributive Politics of Rulemaking*, 15 Q. J. POL. SCI. 449, 452 (2020) (using stock price behavior as a proxy to show corporate influence over rulemaking).

¹⁴³ The Freedom of Information Act, for example, is formally neutral toward all requesters, but in practice advantages businesses because they have the resources and organizational capacity to use it abusively. See Margaret B. Kwoka, *FOIA, Inc.*, 65 DUKE L.J. 1361, 1380 (2016) (finding that “commercial requests represent the overwhelming majority of all requests received” at the largest FOIA offices).

¹⁴⁴ RAHMAN, DEMOCRACY AGAINST DOMINATION, *supra* note 16, at 15–16.

¹⁴⁵ See EMERSON, *supra* note 16, at 173. See also *id.* at 160 (policies that “reduce inequalities of resources, information, and access to the political process are therefore to be favored over those that worsen such inequalities or merely perpetuate the status quo.”).

subordinated groups are essential to democracy today.¹⁴⁶ Andrias and Sachs argue for concerted efforts to build “countervailing power,” defined as “mass-membership organizations to equalize the political voice of citizens who lack the political influence that comes from wealth.”¹⁴⁷ The term was popularized in the 1950s by John Kenneth Galbraith, who argued that countervailing power in organized entities like labor unions and cooperatives was essential to contest the power of large firms in the modern American economy.¹⁴⁸ Sachs, Andrias, and Rahman use the term more broadly, to call for efforts to build organized power for grassroots movements, poor and working-class Americans, and others who are poorly represented in our unequal political environment.¹⁴⁹ Andrias and Sachs call for law to be “used explicitly and directly to enable low- and middle-income Americans to build their own social-movement organizations for political power,” urging efforts to facilitate legally protected institutions like unions for other structurally disempowered groups, such as low-income tenants.¹⁵⁰

This work emphasizes, rightly, that influence over public decision-making is generally inseparable from *organizational* power to stake out claims and marshal resources behind them.¹⁵¹ Organizations, in contrast to individual community leaders and looser network formations, often have deeper financial pockets and deeper institutional knowledge.¹⁵² Organizations can turn out voters and fly out their members to lobby members of Congress. They can also exert pressure on business interests through strikes, secondary boycotts, and other forms of collective action.¹⁵³ By acting as “repeat players” in governance debates, organizations can hone long-term negotiating strategies and identify potential political allies. And consistent participation backed by an organization’s membership can bolster its stature in the eyes of its counterparties,

¹⁴⁶ See Rahman & Simonson, *supra* note 86; Andrias & Sachs, *supra* note 86.

¹⁴⁷ Andrias & Sachs, *supra* note 86, at 552.

¹⁴⁸ See JOHN KENNETH GALBRAITH, *AMERICAN CAPITALISM* 118-19 (1952) (defining the term “countervailing power”). Justice Oliver Wendell Holmes was an important progenitor of this view. See Spencer Weber Waller, *The Modern Antitrust Relevance of Oliver Wendell Holmes*, 59 BROOKLYN L. REV. 1443, 1444 (1994).

¹⁴⁹ See RAHMAN, *DEMOCRACY AGAINST DOMINATION*, *supra* note 16, at 25 (arguing that “regulatory capture be addressed by expanding the countervailing power of grassroots movements, groups, and individuals to contest regulatory decisions”); Andrias & Sachs, *supra* note 86, at 551.

¹⁵⁰ Andrias & Sachs, *supra* note 86, at 555, 560.

¹⁵¹ See Cohen & Rogers, *Secondary Associations 1995*, *supra* note 86, at 15 (describing how groups can help inform policymakers, equalize representation by pooling individual resources and correcting for imbalances in material power, providing political education, and enabling cooperation and trust); Andrias & Sachs, *supra* note 86, at 578-79. Focusing on mass-movement organizations also offers a way to navigate a tension between the need to strengthen the bargaining position of organizations that can credibly and effectively advocate for disadvantaged stakeholders, and the need to ensure that those organizations are actually responsive to those groups of people they claim to represent. Cf. Miriam Seifter, *Second-Order Participation in Administrative Law*, 63 UCLA L. REV. 1300, 1304 (2016).

¹⁵² See Cohen & Rogers, *Secondary Associations 1992*, *supra* note 86, at 424 (describing how associations “[permit] individuals with low per capita resources to pool those resources through organization”).

¹⁵³ Secondary boycotts by labor unions in the U.S., of course, were long ago made illegal by the Taft-Hartley Act. See Labor Management Relations (Taft-Hartley) Act, 29 U.S.C. § 158(b)(4).

granting it credibility to make commitments that make those counterparties more willing to negotiate.

We invoke the term countervailing power in line with this literature, but focus on its application in the industrial policy context. Here, our attention should be on building organizational capacity of structurally disempowered groups within industrial policy networks—ideally in mass-movement formations—to make claims across those networks, on both government administrators and the recipients of government support.¹⁵⁴

Building countervailing power among such groups is critical, because industrial policy *itself generates power* among groups that have disproportionate power over our politics, including firms and agency officials. The critical task to counterbalance this influence, then, is generating ‘hooks’ for less-resourced groups to mobilize around and assert their policy priorities.¹⁵⁵ In organizing processes of information-gathering, decision-making, and enforcement, administrators must distinguish between empowered groups that seek to gain further leverage over these processes, and groups that are critically impacted or have important perspectives on industrial policy, but that lack the resources and organizational infrastructure to participate in them.¹⁵⁶

Civic republican and agonistic accounts of administration have much to recommend them. But they are as ill-equipped as neutral participatory models at facilitating durable political formations among disempowered groups over time—which are particularly important to shaping industrial policy given its sometimes staggering complexity.¹⁵⁷ Organized institutions are essential to

¹⁵⁴ See GALBRAITH, *supra* note 148. Industrial policy networks encompass the firms, workers, and surrounding communities involving in producing a good or service the government aims to support, as well as the consumers of such goods and services. See *supra* note 128 and accompanying text (describing the role of developmental networks in industrial policy). These networks are the most critical context for attending countervailing power because they are the main sites of program design and resource allocation. They are where we can clearly see groups of people that are identifiably within its zone of interests.

¹⁵⁵ See Rahman & Simonson, *supra* note 86, at 690.

¹⁵⁶ See *infra* Part II.B.3 for discussion of how we differentiate this conception from the way public choice theorists might understand it.

¹⁵⁷ Some might urge administrators seeking to deepen their democratic accountability instead to experiment with new deliberative processes, such as “deliberative micro-publics,” citizen juries or other sortition-based schemes. See, e.g., Ronald F. Wright, *Why Not Administrative Grand Juries*, 44 ADMIN. L. REV. 465, 512 (1992). Yet deliberative and proceduralist views generally do not reckon with the fields of political and economic power that will tend to distort even these reformed processes. But see generally Samuel Bagg, *Sortition as Anti-Corruption: Popular Oversight against Elite Capture*, 67 AM. J. POL. SCI. 1 (2022). Plebiscites are no simple remedy, not only because participation is not universal, but because our most important problems are too complex to be solved through ideals of consensus. The problem is not just the familiar public choice of the difficulty expressing and aggregating collective preferences. It is that many of our most serious problems are ones that no one person—or even *all* persons—can solve. Administration is a process by which we learn how to solve problems, discovering things along the way that “the people” as a whole do not know. See EMERSON, *supra* note 16, at 164. Agonistic traditions do more to grapple with the role of organized and hierarchical power in politics, but the best-developed attempt in the legal literature to connect agonism to administrative law urges that we make administrative policies easier to overturn rapidly. Daniel Walters, *The Administrative Agon*, 132 YALE L.J. 1, 1 (2021). That is in obvious tension with the kind of long-term commitments and investments that industrial policy requires. We instead see the task of administration as productively channeling conflict into the policymaking arena in a manner that does not simply reflect its most powerful voices.

democratic industrial policy for at least three key reasons. They can help *inform and shape* decisions in the administrative state; create *policy-feedback loops* to entrench democratic authority over time; and contest concentrated private power *within the sites of production* to further public ends.

Once we recognize that industrial policy aims not at a narrow efficiency criterion but a broader set of public goals, it is essential to organize decision-making in a way that provides meaningful information about the array of choices before policymakers. Choices between potential technological frontiers have important distributive consequences; for example, technologies can be designed to be substitutes or complements for labor.¹⁵⁸ When administrators set criteria for recipients of government funds, they must make normatively laden choices about whether recipient firms should facilitate unionization or respect community benefit agreements.¹⁵⁹ Treating industrial policy as a matter of technical expertise alone not only obscures the normative judgments that will be made by industrial policy decision-makers, but arbitrarily limits the scope of inputs informing those decisions.

Similarly, countervailing power is critical to facilitating higher-order political debate over what values industrial policy ought to serve.¹⁶⁰ Democratic industrial policy requires not only bureaucratic capacity for administration, but deliberative capacity for the polity to resolve these higher-order considerations. One virtue of an associational model of democratic participation is that membership-based organizations are particularly capable of effective citizen and political education.¹⁶¹ And building hooks and levers for organizational power-building within the industrial policy apparatus can build expertise for mass-movement groups to organize members and resources to intervene in Congressional debates.

Second, industrial policy's durability (in its nascent new form) also depends on the mobilization of diverse constituencies to support it.¹⁶² Organized power will be important to continuing investments in industrial policy that reflect public more than concentrated private interests. The literature on "policy feedback loops" in political science documents the role that public programs play in generating constituencies for their continuation.¹⁶³ Policies are not just the output of politics, but "also shape the political arena and the possibilities

¹⁵⁸ See generally Daron Acemoglu, *Labor- and Capital-Augmenting Technical Change*, 1 J. EURO. ECON. ASSN. 1 (2003).

¹⁵⁹ Accord Joel Michaels, *Will the Green Transition Build Worker Power? The IRS Will Help Decide*, AMER. PROSPECT (Nov. 14, 2022), <https://prospect.org/environment/will-green-transition-build-worker-power-irs-will-help-decide/> [<https://perma.cc/7S5R-3TN2>].

¹⁶⁰ Following Kate Andrias and Benjamin Sachs, we understand a core goal of countervailing power as remedying wealth-based inequalities of political influence. See Andrias & Sachs, *supra* note 86, at 555.

¹⁶¹ See Cohen & Rogers, *Secondary Associations 1992*, *supra* note 86, at 424.

¹⁶² See Block, *supra* note 29, at 194 ("Since these developmental state activities are hidden, the whole system lacks democratic legitimation, and the public exercises little voice in determining the Federal government's R&D priorities.")

¹⁶³ See generally Suzanne Mettler & Joe Soss, *The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics*, 2 PERSP. ON POL. 55 (2004); Paul Pierson, *When Effect Becomes Cause: Policy Feedback and Political Change*, 45 WORLD POL. 595 (1993); Jamila Michener, *Medicaid and the Policy Feedback Foundations for Universal Healthcare*, 685 ANNALS AM. ACAD. POL. & SOC. SCI. 116 (2019).

for further policy making.”¹⁶⁴ This happens not only because policies redirect resources, but also because they create new sources of information and meaning.¹⁶⁵ Administration can create a certain kind of visibility and “institutional focal point,” helping to draw out views and organize political debate.¹⁶⁶

Industrial policy relies on the same feedback loops. Programs that provide benefits to many congressional districts, for example, generate ongoing demands on legislators for their continuation. Perhaps most famously, the durability of the military R&D and procurement systems, with their ever-increasing costs, has been widely attributed to the importance of such contracts in nearly every Congressional district in the country.¹⁶⁷ Entrenchment is not always normatively valuable, but entrenchment of democratic changes—such as ending slavery and overcoming aristocratic power—has been essential to American democratic development.¹⁶⁸ If appropriately aligned against oligarchic and concentrated power, a developmental policy focused on empowering mass-movement organizations can implant values of economic democracy as a durable decision-making criteria.¹⁶⁹

Finally, organized countervailing power can further the ends of industrial policymaking within specific sites of economic production. Where workers are more organized, or communities have enforceable benefit agreements, they can directly counteract concentrated private power, and further public priorities.¹⁷⁰ Countervailing power also gives those same stakeholders authority to

¹⁶⁴ Andrea Louise Campbell, *Policy Makes Mass Politics*, 15 ANN. REV. POL. SCI. 333, 334 (2012).

¹⁶⁵ For example, scholars have mapped how healthcare reform has been thwarted by patterns of resource allocation and political participation set up by the system of employer-provided healthcare that was created at the mid-century. See generally JACOB S. HACKER, *THE DIVIDED WELFARE STATE* (2002). They have also shown how the Social Security program helped transform the elderly into one of the most active political constituencies. Campbell, *supra* note 164, at 336 (arguing that Social Security did this by granting recipients “resources of money and free time,” “enhancing their levels of political interest”, and “creating incentives for interest groups to mobilize them by creating a political identity based on program reciprocity”).

¹⁶⁶ RAHMAN, *DEMOCRACY AGAINST DOMINATION*, *supra* note 16, at 15.

¹⁶⁷ See generally REBECCA U. THORPE, *THE AMERICAN WARFARE STATE: THE DOMESTIC POLITICS OF MILITARY SPENDING* (2014). Other examples abound. The NIST’s Manufacturing Extension Partnership (MEP)—a kind of public-sector technological consultancy—has some four hundred locations in each of the fifty states. Schrank & Whitford, *supra* note 40, at 535–37. James Turner argues that the greater spatial spread of the programs across congressional districts is responsible for the MEP surviving where the otherwise similar Advanced Technology Program did not. James Turner, *Discussion*, in *THE ADVANCED TECHNOLOGY PROGRAM: ASSESSING OUTCOMES* 128, 128 (Charles Wessner, ed. 2001). The National Institutes of Health—which saw increased appropriations from Congressional Republicans even when the Trump administration tried to slash its budget, is likewise characterized by a diffuse model of grantmaking to research institutions across the United States. See Robert Pear, *Plan to Cut Funding for Biomedical Research Hits Opposition in Congress*, N.Y. TIMES (Apr. 3, 2017), <https://www.nytimes.com/2017/04/03/us/politics/trump-medical-research-funding-nih.html> [<https://perma.cc/NF7L-BY88>].

¹⁶⁸ See generally PAUL STARR, *ENTRENCHMENT: WEALTH, POWER AND THE CONSTITUTION OF DEMOCRATIC SOCIETIES* (2019).

¹⁶⁹ *But cf.* BEYOND CONTINUITY: INSTITUTIONAL CHANGE IN ADVANCED POLITICAL ECONOMIES (2005) (Wolfgang Streeck and Kathleen Thelen, eds.) (describing how layering of new constituencies can have “lock-in” effect on policy programs).

¹⁷⁰ For example, while agencies can encourage firms to utilize apprenticeship programs, labor unions are far better equipped to ensure that such apprenticeships ultimately give rise to stable, high-quality employment within those firms (and are not used instead as a source of cheap labor). *Cf.* Lee Harris, *Industrial Policy Without Industrial Unions*, AM. PROSPECT (Sep. 28,

monitor and remedy private abuses of the public trust: for example, through whistleblower bounties for reported violations of contractual terms, or by directly bargaining with firms over the terms of production.¹⁷¹

3. Addressing Objections

We have argued that countervailing power requires actively devolving resources, facilitating organization, and formalizing participation by structurally disempowered groups. But how can we ensure that this associationalist model does not produce clientelist tendencies that distort the goals of industrial policy? There are three distinct issues worth addressing here.

One concern is what we might call the “picking losers” problem. Is the state really equipped to determine which groups are relatively disadvantaged, or likely to truly empower the most unjustly excluded? Clearly, this is a real and legitimate concern. Given the associational power and bias in our political institutions, we should expect perpetual biases toward relatively better-off groups and representatives, in fact. But the alternative to working to combat this problem is doubling down on it. Administrators do not need to be perfect to do better than the alternative—which is industrial policymaking *without* attention to structurally disadvantaged groups, which will empower the privileged.¹⁷² We should evaluate administrative regimes relative to their plausible counterfactuals: “neutrality” in an unequal world is not itself a means to protect equality, but instead to produce plausible deniability about the sources of inequality. As public choice theorists themselves recognized, eliminating “rents” is an impossible feature of any regulatory regime;¹⁷³ rather than seeking to dissolve this fact, we should invert it by aiming to build power among groups deeply affected by regulatory outcomes but unable to influence them.¹⁷⁴

Resolving what social formations ought to be represented will ultimately be decided in politics, and will be influenced by a “chicken and egg problem” that can never be fully dissolved.¹⁷⁵ But administrators can facilitate and structure this debate by identifying the key instances where imbalances of power are likely to be particularly acute, and setting aside resources to enable countervailing mobilization. Inequality today is also so extreme that the edge case

2022), <https://prospect.org/labor/industrial-policy-without-industrial-unions/> [https://perma.cc/SEX7-7QK3].

¹⁷¹ See discussion of tools that can serve these purposes *infra* Parts V.A.4 and V.B.1, respectively.

¹⁷² And as we have noted, existing administrative procedures often reproduce hierarchies of private power in the regulatory context. See *supra* Part II.B.1.

¹⁷³ See generally MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* (1965); George J. Stigler, *The Theory of Economic Regulation*, 2 *BELL J. ECON. & MGMT. SCI.* 3 (1971).

¹⁷⁴ Cf. William J. Novak, *A Revisionist History of Regulatory Capture*, in *PREVENTING REGULATORY CAPTURE: SPECIAL INTEREST INFLUENCE AND HOW TO LIMIT IT* 25, 44-46 (Daniel Carpenter & David Moss, eds., 2013) (describing Progressive Era antecedents to capture theory focused on limiting concentrated private power).

¹⁷⁵ Cf. Kate Andrias & Benjamin I. Sachs, *The Chicken-and-Egg of Law and Organizing: Enacting Policy for Power-Building*, 124 *COLUM. L. REV.* 777, 781 (2024) (exploring the problem that power-building laws seem to require mobilized organizations to enact them and offering potential solutions).

is not the typical one. There will be many instances where structural imbalances are easily apparent.

A second concern is what we can call representativeness. Unions and non-profits will not be fully accountable to all members, and like all organizations, have their own hierarchies of influence.¹⁷⁶ This too is a legitimate concern, and rather than ignore it, we need strategies to address it. Unlike corporatists, who seek to organize a given set of interests into a peak-level organization and bargain with it, we envision iterative cultivation of multiple and overlapping associations, in part for this reason.¹⁷⁷ We also describe a role for “diffusionary” tools that spread resources across a range of communities and social movements, rather than a small number of organizations.¹⁷⁸ But here, too, the gravitational pull of privilege is no argument in favor of the status quo. Particularly where industrial policy is concerned, resources are hugely important to who can meaningfully participate. Only a small number of civil society organizations may have the expertise to submit effective comments on a highly technical proposed rule; as it stands, agencies are not required to pay heed to the representativeness of those organizations in responding to their comments.¹⁷⁹

A final concern is that intentionally empowering certain interest groups can create perverse feedback loops that distort policies in favor of their members’ own narrow interests. This relates to the longstanding concern in American political life with the political problem of “faction.”¹⁸⁰ There is, we agree, reason for concern that formalizing the authority of particular associations will entrench groups’ parochial interests in how to allocate resources, leading to both budgetary waste and mission failure.¹⁸¹ But industrial policy threatens to generate such lock-ins whenever it injects public funding into private enterprise—especially with few governmental tools for control and oversight. Contestation within the administrative state about how to allocate industrial policy resources gives a broader set of groups incentives to sniff out such waste in gaining leverage over other claimants. And where one can clearly identify groups that are structurally disadvantaged—as Galbraith did when he focused on worker organizations in a context of concentrated corporate power—empowering *these* groups will improve rather than exacerbate the problem of bias.

One subset of this final issue, which has come to dominate industrial policy debates, is the notion that democratic involvement in decision-making

¹⁷⁶ See Dara Strolovitch, *Do Interest Groups Represent the Disadvantaged? Advocacy at the Intersections of Race, Class, and Gender*, 68 J. POL. 894, 908 (2006). The so-called “iron law of oligarchy” dictates that movement organizations will develop more conservative and hierarchical leadership over time. See Craig J. Jenkins, *Radical Transformations of Organizational Goals*, 22 ADMIN. SCI. Q. 568, 569 (1977).

¹⁷⁷ Accord Brishen Rogers, *Libertarian Corporatism is Not an Oxymoron*, 94 TEX. L. REV. 1623, 1624 (2016) (arguing for the state to “strongly encourage...collective bargaining...while leaving workers nearly unfettered choice as to bargaining representatives”).

¹⁷⁸ See *infra* Part IV.C.

¹⁷⁹ Cf. Seifter *supra* note 151.

¹⁸⁰ THE FEDERALIST NOS. 10, 51 (James Madison).

¹⁸¹ See *supra* note 168-169 and accompanying text (discussing policy lock-ins).

enables those who oppose development projects to slow or block them.¹⁸² There is a growing literature arguing that some channels for exercising “citizen voice”—such as litigation challenging the environmental impact statements required for certain federally-funded projects under the National Environmental Policy Act (NEPA)—have raised the cost of building new infrastructure.¹⁸³ These dynamics are likely to be particularly entrenched in sectors where policy threatens to redistribute benefits of a good enjoyed by a select few; the example *par excellence* is wealthy homeowners opposing new housing construction in supply-constrained areas.¹⁸⁴ In these cases, greater participation by certain segments of the polity is an obstacle to realizing broader public aims.

These are serious concerns. Yet at the same time, their psychic grip on policy discourse has become so dominant that “democratic participation” threatens to become synonymous with the town hall meeting attended only by wealthy busy-bodies, or the frivolous lawsuit filed by a homeowners’ associations. These examples are appropriately alive to the fact that not all measures that ostensibly “democratize” administration in fact do so. Some instead provide footholds that enable the *privileged* to exert their will. But to acknowledge this is not to argue against measures that seek to do the opposite, and expand the opportunity of disadvantaged groups to develop voice and authority in critical matters of social policy. There are also good reasons to think that modalities like litigation, which are inherently high-cost, will tend to advantage more privileged groups.

Accordingly, the toolkit we offer in Part IV intentionally focuses on authorities that can be used to influence program design and operation, rather than on creating causes of action to challenge them in court. Moments of authority over policymaking can function as veto points. But they do not inevitably do so, and their effect is ultimately a question of administrative design. In some cases, we imagine countervailing power working to *accelerate* the realization of industrial policy goals, such as by contracting with community organizations to gather critical data inputs or facilitating labor peace agreements. Rather than wishing the unavoidable lock-in risks of industrial policy away, we urge efforts to build feedback loops that countervail lock-in and domination by the privileged.

C. *Illustrating the Practice*

We have argued that designing industrial policy that meets democratic aims requires specific efforts to build administrative and countervailing power.

¹⁸² See Demsas, *supra* note 10; Aidan Mackenzie and Santi Ruiz, *No, NEPA Really Is a Problem for Clean Energy*, INST. FOR PROGRESS (Aug. 17, 2023), <https://ifp.org/no-nepa-really-is-a-problem-for-clean-energy/> [<https://perma.cc/CVQ3-3YA2>]. This phenomenon is sometimes referred to as ‘NIMBY-ism.’ See Michael B. Gerrard, *The Victims of Nimby*, 21 *FORDHAM URB. L.J.* 495, 495-97 (1994).

¹⁸³ See Leah Brooks & Zachary Liscow, *Infrastructure Costs*, 15 *AM. ECON. J. APPLIED ECON.* 1, 3 (2023).

¹⁸⁴ For a classic statement of a problem that has since exacerbated, see Robert C. Ellickson, *Suburban Growth Controls: An Economic and Legal Analysis*, 86 *YALE L.J.* 385, 400 (1977).

But these features are not only normatively desirable, but key to the operational success of effective industrial policy. The plausible alternative—proceeding with only a focus on bureaucratic expertise within the zone of delegated authority—would distort industrial policy’s results toward concentrated power and privilege. We offer two brief examples to highlight this here.

Consider, first, industrial policy efforts to invest in home care infrastructure.¹⁸⁵ Investments in care are clearly sectoral policies intended to meet public aims. Care is essential to social reproduction, yet is structurally undervalued by measures of economic activity that are organized around paid work and market wages.¹⁸⁶ Home care workers are often paid poverty wages, and still child- and elder-care are beyond the means of many Americans.¹⁸⁷ Those who do have access to care often receive it in long-term care facilities where patients have little agency and are sometimes mistreated.¹⁸⁸ If industrial policy simply injects additional resources into this system it will empower large care providers over care workers, and create a program that may deliver more care, but lacks internal structures either that can help ensure that care is high quality and well paid, or to dynamically expand its provision over time. Indeed, it would likely instead exacerbate the exploitative dynamics of “uberized care” already emerging in the sector.¹⁸⁹

Evidence in this sector supports the idea that private provision is in tension with high-quality care because of the difficulty of ensuring quality. New research, for example, shows that nursing homes acquired by private equity firms—which have greater managerial incentives than other firms to maximize short-term profits—become more deadly for residents.¹⁹⁰ Effectively achieving public care goals will require attention to these dynamics, and concerted efforts to re-publicize the sector, either through more effective regulation or more direct public provision. And it will also require new administrative

¹⁸⁵ The Biden Administration initially framed the care crisis as an infrastructural challenge, and sought to address it with subsidized sectoral programs to expand access to home care, childcare, and universal pre-K. See, e.g., *Build Back Better Framework*, WHITE HOUSE (Oct. 28, 2021) <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/28/build-back-better-framework/> [<https://perma.cc/42AY-AVBB>]. This legislative proposal was loudly decried by many, who doubted that the provision of care could be grouped in with other important industrial policy objectives like the enhancement of built infrastructure. See Bryce Covert, *The Debate Over What ‘Infrastructure’ Is Ridiculous*, N.Y. TIMES (Apr. 26, 2021), <https://www.nytimes.com/2021/04/26/opinion/biden-infrastructure-child-care.html> [<https://perma.cc/P7UL-AAC9>] (gathering such statements).

¹⁸⁶ On social reproduction, see generally Nancy Fraser, *Contradictions of Capitalism and Care*, 100 NEW LEFT REV. 99 (2016); on the devaluing and undervaluing of care work, including in the paid workforce, see generally Paula England, Michelle Budig, Nancy Folbre, *Wages of Virtue: The Relative Pay of Care Work*, 49 SOC. PROBS. 455 (2002).

¹⁸⁷ Lina Stepick and Brooke Ada Tran, *The Rapidly Growing Home Care Sector and Labor Force Participation*, FED. RESRV. BANK S.F. (Mar. 23, 2022) <https://www.frbsf.org/research-and-insights/publications/community-development-research-briefs/2022/03/rapidly-growing-home-care-sector-and-labor-force-participation/> [<https://perma.cc/78QW-JD47>].

¹⁸⁸ *US: Concerns of Neglect in Nursing Homes*, HUM. RTS. WATCH (Mar. 25, 2021) <https://www.hrw.org/news/2021/03/25/us-concerns-neglect-nursing-homes> [<https://perma.cc/8EEJ-68R2>].

¹⁸⁹ Alana Lee Glaser, *Uberized Care: Employment Status, Surveillance, and Technological Eras in the Home-Health Care Sector*, 42 ANTHRO. WORK REV. 24, 32 (2021).

¹⁹⁰ See Atul Gupta et al., *Owner Incentives and Performance in Healthcare: Private Equity Investment in Nursing Homes*, 37 REV. FIN. STUD. 11029, 1032, 1037 (2024).

capacity, including to collect data that track care needs; develop analysis about care efficacy; and ensure effective training for care workers.

But increased administrative power alone is not sufficient. Low-wage workers, low-income people with disabilities, and those reliant on public care because of their youth or age, are plainly not well-heeled and highly organized constituencies. Harrowing examples from the nursing home context show that publicly-run institutions are capable of enormous abuse, reinforcing that public administration alone is no guarantee of good care.¹⁹¹ Mechanisms to build power among marginalized communities are essential to hold government to account, as well as to help administrators design patient-centric measures of well-being, identify areas of greatest need, and uncover abusive conduct. Mindful of this, organizers have proposed that home care be expanded through the creation of home care authorities and other processes at the state level that would enable isolated home care workers to organize via a common employer, and would allow patients a site to organize to expand and increase standards for care.¹⁹² Programs like these could also deliberately cultivate organizational power for those receiving care using some of the tools described below. This is but one example of how a countervailing power model might do better than a model of agency expertise informed by notice-and-comment and disciplined by judicial review to generate effective developmental policies.

Second, consider an effort to encourage more rooftop solar on residential homes to make our energy supply greener and more resilient. The Inflation Reduction Act offers tax credits for firms that install and operate such systems, often through contracts with homeowners.¹⁹³ While the residential solar industry has many success stories, there are likewise widespread reports of predatory consumer contracts; many state-level regulators, as well as the Federal Trade Commission, have launched corresponding inquiries.¹⁹⁴ Without attention to countervailing power—consumers’ ability to negotiate such contracts on equitable footing—the federal government may inadvertently subsidize such behavior. And predatory contacts not only harm consumers, but also contradict the goals of federal industrial policy, diverting resources to energy generation that is ineffectively sited or constructed with shoddy workmanship.¹⁹⁵ While agencies must act within the scope of their delegated

¹⁹¹ See, e.g., Gabriel Winant, *A Place to Die: Nursing Home Abuse and the Political Economy of the 1970s*, 105 J. AMER. HIS. 96, 96, 101 (2018).

¹⁹² *Care is Essential*, NAT’L DOMESTIC WORKERS ALL. (Apr. 2021), https://www.domesticworkers.org/wp-content/uploads/2021/04/Care_Is_essential_UPDATE_4_02_21-copy.pdf [<https://perma.cc/CG8B-4SE5>].

¹⁹³ 26 U.S.C. § 48.

¹⁹⁴ See CAMPAIGN FOR ACCOUNTABILITY, WHAT CONSUMER COMPLAINTS REVEAL ABOUT THE SOLAR INDUSTRY 1-4 (Dec. 2017), <https://campaignforaccountability.org/work/what-consumer-complaints-reveal-about-the-solar-industry/> [<https://perma.cc/N6MV-53SG>] (describing false claims of consumer savings, among other exploitative practices); FTC, SOMETHING NEW UNDER THE SUN: COMPETITION AND CONSUMER PROTECTION ISSUES IN SOLAR 2-5 (2016), <https://www.ftc.gov/system/files/attachments/press-releases/ftc-workshop-will-examine-competition-consumer-protection-issues-rooftop-solar-business/160412solarworkshop-notice.pdf> [<https://perma.cc/RE3T-U547>].

¹⁹⁵ See CAMPAIGN FOR ACCOUNTABILITY, *supra* note 194 (describing companies that “performed shoddy installation of...solar panels.”).

authority, preventing such practices is plausibly part of Congressional intent in enacting such programs.

A “bonus” tax credit for energy investments in low-income communities highlights one means by which the government can enable administrative and countervailing power. More than the generally claimable tax credits that make up the bulk of the foregone revenue under the Inflation Reduction Act, this model facilitates administrative power to encourage the shift of resources to their intended recipients.¹⁹⁶ Under the bonus credit—which increases the size of the taxpayer credit by up to 20 percentage points—the government processes applications from would-be beneficiaries, allowing greater visibility into the universe of credit claimants and information to ensure genuine eligibility. Through rulemaking, the government also created set-asides for entities such as non-profits, local and Tribal governments, consumer or worker cooperatives, and certain small businesses with a track record of serving low-income communities, enabling what we call “diffusion” and facilitating organization among these groups.¹⁹⁷ But this is only one model among many. In the Parts below, we highlight the range of tools government can use to build administrative and countervailing power.

III. THE ADMINISTRATIVE POWER TOOLKIT

How can we build administrative power over the economy through the implementation of industrial policy? First, we need deliberate initiatives to develop information and knowledge about targeted sectors, and metrics that create tractable proxies for realizing public values: for example, metrics that track carbon reduction, health benefits, or competitiveness. Information is a “public good” in economic terms, and the many kinds of information needed in this context will not reliably be created or readily shared by industry. A key task will be to create more robust governmental programs for the development of data about the economy and targeted industries and aims. “Knowledge”—a more embedded kind of “know-how”—will also be crucial, and implies that a key aspect of industrial policy will be (as acknowledged in the sociological literature on industrial policy) an expert and stable class of government employees who are acculturated to their distinct role.

Second, building administrative power requires tools to exert control over sectoral development itself, operating with, or as an alternative to, the private sector. Spending and grantmaking, along with contracting and public

¹⁹⁶ See generally CONG. RSCH. SERV., INFLATION REDUCTION ACT OF 2022 (IRA): PROVISIONS RELATED TO CLIMATE CHANGE, Rept. R47262 (Oct. 26, 2023), <https://crsreports.congress.gov/product/pdf/R/R47262> [<https://perma.cc/KP7G-59WG>] (summarizing these credits). Another notable exception to this general rule is the Department of Energy’s Loan Programs Office, which received approximately \$11.7 billion under the IRA to provide loan guarantees to clean energy products under individually-negotiated terms. See U.S. DEPT. OF ENERGY, INFLATION REDUCTION ACT OF 2022 (Sept. 22, 2023), <https://www.energy.gov/lpo/inflation-reduction-act-2022> [<https://perma.cc/7ZBB-HPLQ>].

¹⁹⁷ Additional Guidance on Low-Income Communities Bonus Credit Program, 88 Fed. Reg. 55506, 55545-6 (August 15, 2023).

ownership are, as we've described, core tools of industrial policy. Here we elaborate further on these tools as means to develop administrative power. Commonly, we conceive of industrial policy as operating through subsidies, tax breaks, and grants to industry.¹⁹⁸ But industrial policy may also involve the creation of public enterprises to achieve public aims, or hybrid forms such as public equity stakes that “[give] the public a meaningful way to continue to engage when companies and projects have been deemed in the public interest such that they are worth public investment.”¹⁹⁹ Industrial policy can be administered along what we call a continuum of administrative control: on one end is arms-length contracting, and on the other direct government ownership. Most programs of industrial policy will operate in between these extremes, though we do not yet have a good language in which to talk about them, or the tradeoffs between them. This section aims to begin to develop one. We aim here at a typology of tools that can be used to develop administrative power—power which, as the next Part will describe, can be rendered more accountable by the simultaneous commitment to building countervailing power.

A. *Building Information and Knowledge*

To administer industrial policy as a democratic practice requires, as Part II described, the deliberate development of administrative power. One critical source of that power is information and knowledge. The difficulty that government has in gathering information to guide economic decisions is often understood as *the* key argument against government planning of the economy. As Friedrich Hayek long ago noted, information is key to good economic decisions, and a great deal of information and knowledge cannot readily be assembled in any one mind or place.²⁰⁰ Price signals, he argued, generally reflect a great deal of assembled information, without anyone needing to possess it all.

Hayek's point has often been treated as decisive proof that markets are superior to government in allocating resources. There are four key problems with this view in the industrial policy context, which point to four important roles of government-generated information needed for good industrial policy.

First, a key issue in industrial policy is *determining* our goals in settings where markets only poorly reflect them. Many decades of work show the myriad of ways that markets do not “price in” all relevant information—and cannot, given the limitations of the institutional tools that we have to create markets, and the many distortions between preferences and prices. Governments make deliberate policy about sectors—for example, to create universal health insurance or long-term care, or to prioritize green energy

¹⁹⁸ While they are not our focus in this Part, industrial policy can also operate through functions like network-building and standard-setting, as we describe elsewhere. See *supra* note 128 and accompanying text.

¹⁹⁹ LENORE PALLADINO, PUBLIC EQUITY STAKES IN U.S. ECONOMIC POLICYMAKING 3 (Berggruen Inst., Mar. 7, 2024), <https://berggruen.org/news/public-equity-stakes-in-u-s-economic-policy-making> [<https://perma.cc/CS68-SNNG>].

²⁰⁰ Friedrich A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 525-26 (1945).

investments—precisely because markets will not. There are very real ways in which government has a systematic *advantage* over markets with respect to choosing among preferences—or choosing something *other* than “preference satisfaction” for people today—as the metric of the good. Hayek generally presumed away difficulties that markets have in expressing such meta-preferences about a society’s collective preferences.²⁰¹

Second, writing prior to the advent of modern information economics, Hayek also did not account for the systematic ways that markets fail to produce information, or distort information production.²⁰² For example, because aspects of health and environment cannot be sold or readily priced, market-generated health and environmental data is systematically distorted.²⁰³ Information, for example, about public health and environmental needs, equity concerns, and interventions that cannot be readily commoditized are often known, if at all, because of government data gathering efforts and mandates. Companies will not invest sufficiently in producing negative information about drugs or AI, which is why government regulations of private development efforts in these fields must focus heavily on information-forcing rules.²⁰⁴

Third, Hayek was focused on a particular kind of information—what he called “knowledge of the particular circumstances of time and place.”²⁰⁵ Examples include the knowledge of a foreman that would allow a machine to be more fully employed, or that one input could be substituted for another. Industrial policy does require information of this kind to be effective. Some of it, however, can be, and historically has been, produced by government.²⁰⁶ Precisely because information is expensive to produce, industry will fail to produce a great deal of information relevant to economic planning, because of “free-rider” problems that affect competitive markets.

Fourth, there are genuine concerns that firms will strategically hide the information they do produce or collect from the government or share only information that advances their agenda—inflating prices, demanding greater subsidies, and effectively coopting government decision-makers who are

²⁰¹ He assumed that “the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place.” *Id.* at 524.

²⁰² Nor did he recognize the institutional limits of the tools economists have recommended—like IP rights—to address the problem. For more on this, see generally Amy Kapczynski & Talha Syed, *The Continuum of Excludability and the Limits of Patents*, 122 *YALE L.J.* 1900 (2012).

²⁰³ For more on the problem of market signals and commodities in producing health information, see *id.*

²⁰⁴ See Amy Kapczynski, *Dangerous Times: The FDA’s Role in Information Production, Past and Future*, 102 *MINN. L. REV.* 2357, 2358 (2018); Jarod Facundo & David Dayen, *White House to Force Companies to Share Artificial-Intelligence Data*, *AMER. PROSPECT* (Oct. 31, 2023), <https://prospect.org/economy/2023-10-31-white-house-companies-artificial-intelligence-data/> [<https://perma.cc/7MAV-GUJ2>].

²⁰⁵ Hayek, *supra* note 200, at 521–22.

²⁰⁶ A critical part of the Progressive and New Deal orders, in fact, was the building out of government surveillance of the economy, some of which remains today. Government agencies gather and make public basic information about job growth, and the health of different industrial sectors, for example. In the heyday of the Interstate Commerce Commission, the government produced hundreds of reports on individual market dynamics annually; now, to the extent such information is aggregated, it is held in the hands of private data providers and management consultants. See WILLIAM J. NOVAK, *NEW DEMOCRACY* 136–38 (2022).

reliant upon them for insight into cost-structures, as well as forecasting of future developments in the sector.²⁰⁷

Effective administration will require concerted efforts to build sectoral information and knowledge, and better mandate the sharing of private information with government and among competitors. There are many administrative models to draw on, though some will require reinvigorating. The FTC, for example, was shaped by Congress to have significant data-gathering powers, as well as the means to help coordinate industrial groups that could share information and develop standards.²⁰⁸ Congress can also authorize direct commands for firms to share information, as it did through the Defense Production Act.²⁰⁹

Broadly, though, neoliberal industrial policy deliberately undercut processes of government information production,²¹⁰ and outsourced activities to firms in a way that systematically worked against government insight into production processes.²¹¹ Rebuilding such systems will be important to industrial policy today. Developments in the courts have also generated new obstacles to administrative efforts to mandate the development and transfer of information. Expanding commercial speech doctrine, for example, threatens regulatory schemes that force information production in exchange for market access.²¹² Courts also have declared trade secrets “property” subject to the Takings Clause, and trade secrecy subject matter has expanded to cover nearly any kind of data, creating significant new challenges to administrative efforts to access and share corporate information.²¹³

Administration alive to the need to strategically develop better sectoral strategies to develop information will have to deploy existing tools wisely and challenge such doctrines in the courts. They will also, however, have to develop alternative strategies. Conditionalities on complex government programs can be designed in way that should be robust to takings challenges, either because

²⁰⁷ See Howard Pack & Kamal Saggi, *Is There a Case for Industrial Policy? A Critical Survey*, 21 WORLD BANK RESCH, OBSERVER 267, 281 (2006) (arguing that the informational requirements of industrial policy are immense).

²⁰⁸ See generally GERALD BERK, LOUIS D. BRANDEIS AND THE MAKING OF REGULATED COMPETITION, 1900-1932 (2009).

²⁰⁹ See 50 U.S.C. § 4511(a) (empowering the president to directly “allocate materials, services, and facilities” to promote national defense needs); see also 50 U.S.C. § 4552 (13) (defining “materials” to include not only more tangible objects, such as “commodities,” “products,” and “articles” but also “any technical information or services ancillary to the use of any such materials.”)

²¹⁰ The Reagan administration embarked on a deliberate strategy of reducing government data production, cutting the number of federal reports and agency budgets for statistical and research programs dramatically, and turning key data production initiatives over to the private sector. Donna Demac, *Hearts and Minds Revisited: The Information Policies of the Reagan Administration*, in THE POLITICAL ECONOMY OF INFORMATION 125, 136-41 (Vincent Mosco & Janet Wasko, eds., 1988).

²¹¹ The outsourcing of certain activities to the private sector, and the greater reliance on the private sector, for example in the neoliberal R&D model, means that a great deal of critical information lies in the hands of firms, rather than government. See also MAZZUCATO & COLLINGTON, *supra* note 92 (charting the rise of government contracting with consulting firms and arguing that this has turned critical data over to the private sector).

²¹² Kapczynski, *supra* note 204.

²¹³ Amy Kapczynski, *The Public History of Trade Secrets*, 55 U.C. DAVIS L. REV. 1367, 1370 (2022).

the company agrees voluntarily to share the information (in exchange for a subsidy or participation in a rebate program, for example), or because information sharing is a requirement in a complex regulatory scheme, upon which access to the market itself is conditional.²¹⁴

For example, the NIH has long required sharing of data that results from funding in contexts like genomics, and recently expanded the requirement to all of its research grants.²¹⁵ Agencies can also mandate sharing of information and data with regulators, or even the creation of “virtual data rooms” where government agencies have access to the same databases that the firms use for the funded program. The California state government did this, for example, when contracting with a non-profit drug company for the manufacture of an affordable biosimilar insulin to be sold in the state, to mandate that the company share certain information about production processes and costs with the state.²¹⁶ The contract also ensured the state could have members on the foundation board that would oversee the non-profit project, implying both information exchange and a kind of knowledge-building process for administrators.²¹⁷ Such information and knowledge mandates can help avoid private waste or malfeasance, while building administrative power and expertise. Successful industrial policy will require these kinds of information and knowledge building conditions throughout.

There still will remain a massive domain of Hayekian “casual information” that will not be inscribed in databases or formally reported to government. But government does not need to gather all of it to act upon it—rather, it can deliberately set policies and develop institutions to elicit such information. For example, government can set goals and leave counterparts in industry or the academic sector to determine the means of getting there—identifying a target level of energy efficiency, or a particular kind of vaccine that we want, and funding or rewarding those who get there. Government can create bidding processes, prizes, or other policies designed to elicit decentralized information. Government can also seek better insight into the financial workings and information of recipients by acting as clearinghouse for the recipient firms’ payments from government—allowing not only information about firms’ balance sheet, but the ability to block unauthorized transactions and seize potential collateral.

Importantly, the government needs not only information, but also *knowledge*—the kind of higher-level skills, understanding, and embedded know-how that cannot be fully externalized but that in government reside

²¹⁴ See *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 990, 1007 (1984); Kapczynski, *supra* note 213, at 1417-18 (*Monsanto* allowed mandated disclosure of trade secrets in exchange for market access).

²¹⁵ *Final NIH Policy for Data Management and Sharing*, NAT’L INSTS. HEALTH (2020), <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-013.html> [<https://perma.cc/3QY7-AXJB>].

²¹⁶ See *Agreement 22-23025*, CALRX.GOV (Feb. 23, 2023), <https://calrx.ca.gov/uploads/2023/03/Fully-Executed-22-23025-Civica-Foundation-1.pdf> [<https://perma.cc/6YVW-XJ9T>].

²¹⁷ *Id.*

in its workers and officers.²¹⁸ Neoliberal outsourcing was largely justified by the theory that state employees and functions were sclerotic, and lacked the necessary competitive pressures to be effective or efficient.²¹⁹ But these claims were more hypothesized than validated, and indeed a large empirical literature now shows that this view was both too pessimistic about government and too optimistic about private sector contracting. Contracting out only works if the government can closely supervise those who it hires, and there is now a voluminous literature on problems like “cream-skimming” that have emerged because such supervision is costly and rarely possible, particularly given that outsourcing negatively impacts government knowledge and insight into processes.²²⁰ And the literature on “open science” (among many others) provides strong evidence that there are effective disciplinary mechanisms in public bureaucracies that can ensure that public aims are met.²²¹

B. Mapping the Continuum of Control

Industrial policy broadly involves all of the tools of the administrative state, including those conventionally at the heart of administrative law scholarship, such as notice-and-comment rulemaking. Many sectors that the public has deliberately cultivated, from transportation to energy to banking are also what we might call “networks, platforms, and utilities,” making the regulatory toolkit conventional in these sectors particularly important.²²² But industrial policy also relies distinctively on tools like spending and grant-making, as well as contracting and forms of government ownership. These receive little attention in the administrative law context, and yet have potential to imbue production with public values in distinctive ways, while also building public sector knowledge and information. How can these techniques of investment be used dynamically over time to build administrative power?

Broadly, when government is acting as an investor or purchaser, we can map a spectrum of administrative control in industrial policy with two ends.

²¹⁸ Cf. MICHAELS, *supra* note 41, at 4 (arguing that the state’s “people, practices, and infrastructure . . . infuse liberal democratic governance with the necessary admixture of normative politics, civic engagement, professional expertise, financial disinterest, and fidelity to the rule of law”).

²¹⁹ *See id.*

²²⁰ *See, e.g.,* Joseph P. Newhouse, *Cream Skimming, Asymmetric Information, and a Competitive Insurance Market*, 3 J. HEALTH ECON. 97, 97 (1984); Ou Yang et al., *Cream Skimming: Theory and Evidence from Hospital Transfers and Capacity Utilization*, 173 J. ECON. BEHAV. & ORG. 68, 83-84 (2020); Sabel et al., *supra* note 91; Barbara L. Bezdek, *Contractual Welfare: Non-Accountability and Diminished Democracy in Local Government Contracts for Welfare-to-Work Services*, 28 FORDHAM URBAN L.J. 1559, 1598-99 (2001); *see also* Gupta et al., *supra* note 190, at 2 (showing that after private equity buyouts, “patient risk declines, which could reflect an effort to pursue more financially attractive patients”).

²²¹ Amy Kapczynski, *Order without Intellectual Property Law: Open Science in Influenza*, 102 CORNELL L. REV. 1539, 1590-1606 (2017).

²²² *See generally* MORGAN RICKS, GANESH SITARAMAN & LEV MENAND, NETWORKS, PLATFORMS & UTILITIES: LAW AND POLICY (2022) (describing this toolkit, which includes rate-setting, nondiscrimination rules, profit sharing, equal access rules, universal service requirements, interconnection mandates, quality of service requirements, entry-restrictions, and structural separations).

On one, government can invest directly in developing its own capacity, to be funded and controlled publicly.²²³ On the other end, government can simply purchase goods on the open market or subsidize private purchases, affecting aggregate levels of demand and production, but nothing more. But there are also many points between these two extremes. Government may own only certain aspects of a production process, or own outputs, or shares of firms. And government may purchase goods, but insist upon certain conditions, such as that the goods be made with union labor, or clean technology.²²⁴

The greatest administrative control will come with an entity that is directly owned by the government. Think, for example, of the difference in a pandemic between the government's ability to direct a factory it owns toward the production of ventilators, versus its ability to direct General Motors to turn its automobile production lines to the production of ventilators. The latter is possible, and was a key part of the model of mobilization for World War II.²²⁵ This model remains possible through via the vast executive powers given by the Defense Production Act.²²⁶ But it is subject both to greater agency problems, and potential legal claims (such as takings), that dilute state control relative to the first model. This was, after all, part of the *point* of the privatization push described above: to dilute government control and increase private sector power.

Government ownership today in the U.S., as around the world, is in fact not uncommon. It includes not only what we might call public “enterprises”—entities that are engaged in conventional forms of production like mining, factories, or transportation—but also a wide range of other entities, like “schools, universities, hospitals, roads, parks, and land.”²²⁷ Today, for example, there are around two thousand publicly owned utilities in the U.S.²²⁸ that provide about ten percent of the nation's electricity.²²⁹ Eighty-seven percent of people in the U.S. with piped water receive it from a publicly-owned utility, and there

²²³ Government-owned corporations can fund themselves through appropriations, or by other means, such as issuing debt to either be purchased by third-parties, or the Treasury itself, via the Federal Financing Bank. *See* 12 U.S.C. § 2285 (authorizing the Bank to purchase “any obligation which is issued, sold, or guaranteed by a Federal agency”).

²²⁴ The scale of government investment, and the degree of private power in the sector, will likely also influence how much leverage the government gets at different places along this spectrum. So too will the structure of countervailing power in a sector: government may have to do less where strong worker or community organizations exist to influence processes of production.

²²⁵ PAUL A.C. KOISTINEN, *ARSENAL OF WORLD WAR II: THE POLITICAL ECONOMY OF AMERICAN WARFARE, 1940–1945*, 277–78 (2004) (describing the conversion orders used to facilitate the shift from consumer to military production and noting that “using total purchases in 1939 as a base, only 39 percent of production capacity was free of conversion, curtailment, or control”).

²²⁶ *See supra* note 209 and accompanying text.

²²⁷ THOMAS HANNA, *OUR COMMON WEALTH: THE RETURN OF PUBLIC OWNERSHIP IN THE UNITED STATES* 5–6 (2018).

²²⁸ AM. PUB. POWER ASS'N, *PUBLIC POWER STATISTICAL REPORT 2023* 17 (2023), <https://www.publicpower.org/system/files/documents/2023-Public-Power-Statistical-Report.pdf> [<https://perma.cc/Q356-VPER>].

²²⁹ *Public Power*, AM. PUB. POWER ASS'N, <https://www.publicpower.org/public-power> [<https://perma.cc/8VJC-VYG9>].

is a nationwide trend of growing public ownership in that sector.²³⁰ Public entities own municipal broadband systems and banks,²³¹ as well as public hotels and markets.²³² The public has major ownership stakes in transportation, owning almost 500 commercial airports, hundreds of commercial ports and train stations, and providers like Amtrak.²³³ Education and healthcare are also domains where public ownership is common. Nearly 100,000 public schools in the U.S. educate 49.4 million students each year.²³⁴ The public owns nearly one in five community hospitals, as well as the Veterans Health Administration system, which provides care to nine million people each year.²³⁵

While there is a colloquial idea that “public ownership” is a coherent category that implies definitive state control, in reality government corporations are extremely diverse. They can have widely different governance structures, purposes, and arrangements—some of which provide very little ongoing public control or subsidy.²³⁶ There is no specific incorporation charter at the federal level, so the general rule is that corporations created by Congress have whatever power and structure Congress has given them.²³⁷ Government corporations may be for profit, or not-for-profit; may be entirely controlled by government, chartered but not at all controlled by government, or something in between; and may be treated as an agent of the government or be independent.²³⁸ As one prominent treatise describes,

Federal corporations should not be treated as if they constitute a single class of organization type. Virtually all are unique creatures, and . . . what is distinctive about them as a group is that each embodies its own calculated mixture of public and private elements and of financing and controls, and each is a result of a particular congressional enactment after extensive controversy over rival policies and interests.²³⁹

²³⁰ FOOD & WATER WATCH, THE STATE OF PUBLIC WATER IN THE UNITED STATES 2 (2016). https://foodandwaterwatch.org/wp-content/uploads/2021/03/report_state_of_public_water.pdf [<https://perma.cc/2M3A-G7P3>].

²³¹ HANNA, *supra* note 227, at 18–20 (municipal broadband and banks); *id.* at 29–30 (federal banks).

²³² *Id.* at 25 (citing examples like Pike Place in Seattle and hotels in Chicago, Omaha, and Myrtle Beach).

²³³ *Id.* at 25–27, 31–33.

²³⁴ *Educational Institutions*, NAT’L CTR. FOR EDUC. STAT. (2023) (2021 data), <https://nces.ed.gov/fastfacts/display.asp?id=84>; *Back-to-School Statistics*, NAT’L CTR. FOR EDUC. STAT. (2023), <https://nces.ed.gov/fastfacts/display.asp?id=372> (same) [<https://perma.cc/5MCJ-336J>].

²³⁵ HANNA, *supra* note 227, at 26; *About the Department*, U.S. DEP’T VETERANS AFFS., <https://department.va.gov/about/> [<https://perma.cc/VW8U-AZ6X>].

²³⁶ GOV’T ACCOUNTABILITY OFF., PRINCIPLES OF FEDERAL APPROPRIATIONS LAW, VOL. III 15–66 (3rd ed., 2004) (describing the lack of definition for federal corporations, grouping them in four broad types as per to a GAO report: “government corporations; government-sponsored enterprises (referred to as GSEs); patriotic, fraternal, or charitable entities designated in title 36 of the United States Code (commonly referred to as ‘federally chartered corporations’); and federally funded research and development centers (FFRDCs).”).

²³⁷ *See id.* at 15–63, 15–64; *United States v. Nowak*, 448 F.2d 134, 138 (7th Cir. 1971), cert. denied, 404 U.S. 1039 (1972).

²³⁸ *See GOV’T ACCOUNTABILITY OFF.*, *supra* note 236, at 15–64.

²³⁹ FRANCIS J. LEAZES, JR., ACCOUNTABILITY AND THE BUSINESS STATE: THE STRUCTURE OF FEDERAL CORPORATION 7 (1987).

Accordingly, some types of state ownership or enterprise will involve much more administrative control than others. For example, Amtrak is fully controlled by the federal government, while the Boy Scouts of America was federally chartered, but government has no ongoing role in its operations.²⁴⁰ States and localities also have the power to create corporations, including local public utilities and even instrumentalities like public mills (as in North Dakota) and community hospitals.²⁴¹

The point is, there will be a continuum of control even within the category of public ownership, and in an age of renewed interest in industrial policy, we will need to develop an administrative law of the public corporation that can help describe the tradeoffs of different design choices in legal and policy terms.

It is useful, therefore, to map out some of the types of *partial* ownership available in the implementation of industrial policy. One major question is *what* government owns. Government can on the one hand own the *outputs* or *results* of funding. The Bayh-Dole Act, for example, requires that patentees of federally funded research reserve for the government a fully-paid up (royalty-free) license to use the invention—in effect, a property right to use the invention for free.²⁴² Government agencies that conduct their own research can also seek their own patents or other intellectual property rights, as agencies today sometimes do.²⁴³ They can also effectively mandate public ownership, as with the rule that federal government works cannot be copyrighted, and therefore enter the public domain.²⁴⁴

On the other, government can own *shares* or *stakes* in private firms.²⁴⁵ There is a long history of government taking stakes in entities it supports: “[W]hen the Continental Congress authorized the Bank of North America in 1781[,] the Superintendent of Finance purchased approximately five-eighths of the capital stock in the name of the government, making the United States the majority owner.”²⁴⁶ Today, the CIA-funded venture capital firm In-Q-Tel uses government funds to invest, and sometimes obtains equity stakes in private firms.²⁴⁷ Ownership stakes in private firms can be structured in a

²⁴⁰ GOV'T ACCOUNTABILITY OFF., *supra* note 236, at 15–64.

²⁴¹ HANNA, *supra* note 227, at 16–17, 21, 26.

²⁴² 35 U.S.C. 202(c)(4).

²⁴³ U.S. GOV'T ACCOUNTABILITY OFF., BIOMEDICAL RESEARCH: NIH SHOULD PUBLICLY REPORT MORE INFORMATION ABOUT THE LICENSING OF ITS INTELLECTUAL PROPERTY 16 (GAO 21–52, Oct. 2020) (reporting more than 4000 patents obtained by HHS from 1980 to 2019).

²⁴⁴ See 17 U.S.C. § 105.

²⁴⁵ See generally Stacey R. Kole & J. Harold Mulherin, *The Government as Shareholder: A Case from the United States*, 40 J.L. & ECON. 1 (1997); PALLADINO, PUBLIC EQUITY STAKES, *supra* note 199.

²⁴⁶ GOV'T ACCOUNTABILITY OFF., *supra* note 236, at 15–89 (also adding that “[i]nitial governmental participation in . . . banking enterprises consisted of investment in stock as opposed to management of the corporation.”).

²⁴⁷ See Patrick S. Roberts & Jon Schmid, *Government-Led Innovation Acceleration: Case Studies of US Federal Government Innovation And Technology Acceleration Organizations*, 39 REV. POL'Y RSRCH. 353, 360–61 (2022). As a condition of its equity investments, In-Q-Tel is “typically provided an advisory spot on the Board of Directors[, which] provides early information about corporate problems and eases the exchange of information between parties. Returns from investments flow back into In-Q-Tel.” *Id.* at 362.

variety of other ways, including conditions on bailouts, or even takeover in the event of a bankruptcy.²⁴⁸ The former, of course, was imposed in the bailout of the auto industry, though with enormously onerous conditions on the government's ability to exert its ownership stakes.²⁴⁹

Scholars have also proposed ways in which the government can hold contingent shares, providing still more limited administrative control. Saule Omarova's "golden share" proposal, modeled on the shares Britain kept in public firms when they were privatized, is one example.²⁵⁰ These shares may be activated upon certain conditions to impose public authority, before reverting control back to the firm's other shareholders. The contractual threat of taking an equity stake in a firm can itself be useful instrument for getting the firm to meet public conditions. A similar kind of influence could also be achieved through contingent debt contracts, with pre-determined triggers that either alter repayment terms or convert the government's interest to an equity stake.²⁵¹

At the other end of the spectrum, government exerts very little sectoral control if it simply uses procurement or contract to purchase goods on the open market, or tax or voucher systems to subsidize private purchases. For example, a decision to buy solar panels from any supplier at the going market rate, or to offer tax credits to consumers who do so, would be means of enacting industrial policy that leveraged little beyond the simple market price signal. Guaranteeing a minimum level of demand for a particular good or service is important; it can induce new private investment, as well as help ensure public access to those goods and services.²⁵² But absent additional conditions, subsidies do not allow for any government influence over how that investment is deployed.²⁵³ Yet this is not an inevitable feature of contracts and grant agreements, and a great deal can be done to shape the activities and incentives of recipients to better meet public aims.

Between these two poles, the government can impose a variety of conditions short of an equity stake to ensure that its investments are employed for their intended purposes. The government could retain special rights to operate a recipient of federal funds in the event of bankruptcy, preventing the liquidation of its assets. It could require that a recipient open its books to the government, use a certain custodial agent for safeguarding funds, or route invoices through a government clearinghouse. And most familiarly, it could impose other terms on a funding recipient through contract. Many Congressional

²⁴⁸ Jared A. Elias & George Triantis, *Government Activism in Bankruptcy*, 37 EMORY BANKR. DEV. J. 509, 519 (2021).

²⁴⁹ See Steven M. Davidoff, *Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis*, 95 MINN. L. REV. 1733, 1744-48 (2010) (describing federal debt and equity stakes in GM and Chrysler, and limiting conditions adopted).

²⁵⁰ See Saule T. Omarova, *Bank Governance and Systemic Stability: The "Golden Share" Approach*, 1029 ALA. L. REV. 1052, 1043-44 (2017).

²⁵¹ See also Anna Gelpern, *Sovereign Debt: Now What?*, 41 YALE J. INT'L L. ONLINE 45, 88 (2016) (describing the virtues of convertible contracts for sovereign debt).

²⁵² See Juhász, Lane & Rodrik, *supra* note 27, at 22-25 (describing evidence for crowding-in).

²⁵³ See Daniela Gabor, *The Wall Street Consensus*, 52 DEV. & CHANGE 429, 436-38 (2021) (critiquing such government spending as "de-risking" private capital).

delegations to enter into contracts give agencies broad discretion to make funding decisions conditional on any priorities that are not inconsistent with the statute, as long as they are germane to the overall aim of the program.²⁵⁴ They can help build administrative power if they interpose public-oriented rules and incentives into the decision-making of firms, and should be designed to do that iteratively over time.

A key example includes the recent effort to induce recipients of government grants or loans to forego stock buybacks. Stock buybacks involve a company using its profits to purchase its own shares on the public market to boost share prices, generating capital gains for shareholders and increased compensation for executives. Buybacks have become commonplace in many industries, to the point where firms are using far more of their profits for buybacks than to increase productive capacity or provide better wages and working conditions for workers.²⁵⁵ Buybacks have also been sharply criticized because they can come at the expense of investment in innovation.²⁵⁶ These dynamics are often at odds with public efforts to encourage firms to increase capital expenditures and R&D in strategic sectors.²⁵⁷ In order to ensure that subsidy funds were utilized as intended, Congress and agencies recently conditioned certain incentives to airlines and semiconductor manufacturers on limits on buybacks.²⁵⁸ Others have suggested, in a similar vein, limits on dividends.²⁵⁹ Another similar approach was adopted by California in a recent deal with a non-profit drug company it has contracted with to produce publicly-funded and branded insulins. The contract includes a requirement that any profits from the sale of these insulins be reinvested in the program itself, to

²⁵⁴ See, e.g., CHIPS and Science Act, 15 U.S.C. § 4659 (giving the Secretary of Commerce power to “enter into agreements . . . as may be necessary and on such terms as the Secretary considers appropriate”). The broad requirements of the Spending Clause are also important, as set out in *South Dakota v. Dole*, 483 U.S. 203, 205-08 (1987) (requiring spending conditions be “unambiguous[]” as to the “consequences of . . . participation” in the federal spending program; germane “to the federal interest in particular national projects or programs;” and not in conflict with separate constitutional provisions). *Dole* also restricts Congress from functionally “coercing” funding recipients. *Id.* at 211; see also *NFIB v. Sebelius*, 567 U.S. 519, 582 (2012) (holding that requiring states to expand Medicaid or forfeit future federal Medicaid funds violated the Tenth Amendment).

²⁵⁵ See William Lazonick, *Profits Without Prosperity*, HARV. BUS. REV. (Sep. 2014), <https://hbr.org/2014/09/profits-without-prosperity> [<https://perma.cc/D3T5-FH8L>].

²⁵⁶ See *id.* But see Gregg Polsky & Daniel J. Hemel, *Taxing Buybacks*, 38 YALE J. REG. 246, 289 (2021) (arguing that buybacks do not meaningfully reduce corporate investment).

²⁵⁷ See William Lazonick & Matt Hopkins, “Maximizing Shareholder Value” Minimized the Strategic National Stockpile: The \$5.3 Trillion Question for Pandemic Preparedness Raised by the Ventilator Fiasco, 20-21 (INET Working Paper no. 127, July 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3671025 [<https://perma.cc/ZL7R-URZP>] (arguing that buybacks reduced investment by medical device manufacturers who supply the Strategic National Stockpile).

²⁵⁸ See WILL DOBBS-ALLSOPP, LENORE PALLADINO & REED SHAW, LIMITING STOCK BUYBACKS AMONG RECIPIENTS OF INFLATION REDUCTION ACTS FUNDS 3-4 (2022), https://governingforimpact.org/wp-content/uploads/2022/12/IRA-Stock-Buybacks-PAM_template_FINAL.pdf [<https://perma.cc/GV47-EKEX>] (describing the CARES and CHIPS restrictions, and urging ambitious restrictions be attached to IRA funds).

²⁵⁹ See Lenore Palladino & Isabel Estevez, *The Need for Corporate Guardrails in U.S. Industrial Policy*, ROOSEVELT INST. (Aug. 18, 2022), <https://rooseveltinstitute.org/publications/the-need-for-corporate-guardrails-in-us-industrial-policy/> [<https://perma.cc/X9CK-GK5Z>].

innovate to drive costs down further.²⁶⁰ Conditioning grants and contracts on capital remaining within the firm can be a means to try to ensure that investment meets public aims.

Another common kind of public conditionality seeks to limit private profits on publicly-funded activities, where the public aim is about access or affordability, and not merely supply or production. Government investment in biomedical research has long been subject to a requirement that ensuing patent rights issue subject to a government right to “march in” on associated patents, to make the product available to the public on reasonable terms.²⁶¹ Profit or price limits can be structured in a wide variety of ways. For example, rather than vague “reasonable” price limits, administrators can ask for specific profit projections and claw back windfall profits, thereby ensuring that the action will not unsettle expectations or undermine private investment.²⁶²

As this taxonomy indicates, industrial policy involves a far broader variety of tools than are normally discussed in the administrative law toolkit. A key question for administrative law today will be about the stakes of these different choices, and how they can be both sufficiently flexible and dynamic to meet changing economic needs, and yet also publicly accountable. With this continuum in mind, we can begin to construct simple mental maps of key sectors in the economy to show the broad spectrum of public control. For example, we might chart housing investments with public housing on one end; mortgage subsidies and bank regulations that privilege residential housing on the other; and incentives for constructing income-restricted housing in between those poles. We might map the educational sector with public schools and colleges on one end; and charter schools, private vouchers, and subsidies like Pell Grants on the other. Of course, each of these enterprises are in fact bundles of activities that might themselves be disaggregated; janitorial work in public schools or housing can be outsourced, for example, or public funding can lead to public data but privately-owned products. A thick picture of the nature of public control would require much more detail. Still, even such a simple sketch conveys some important realities about the ubiquity of both industrial policy, and a broad range of approaches to public control developed through techniques of investment.

We offer our taxonomy in the service not of definitively deciding between these modalities, but showing that they operate along a continuum of government control—one with many more options than might initially be apparent—and that should be understood as a key factor in the choice of strategy. Administrators, we think, will need to consider drawing from this toolkit

²⁶⁰ See Agreement 22-23025, *supra* note 216.

²⁶¹ See Bayh-Dole Act, 35 U.S.C. § 203.

²⁶² By way of example, applicants for advanced semiconductor manufacturing grants under funds made available under the CHIPS and Science Act are required to submit estimated cash-flow projections; if actual cash flows exceed these projections, the program terms require them to share the windfall with the government. See NAT'L INST. STANDARDS & TECH., NOTICE OF FUNDING OPPORTUNITY: CHIPS INCENTIVES PROGRAM—COMMERCIAL FABRICATION FACILITIES 24 (2023), <https://www.nist.gov/system/files/documents/2023/06/23/CHIPS-Commercial%20Fabrication%20Facilities%20NOFO%20Amendment%201.pdf> [<https://perma.cc/G5QR-FNFZ>].

and deliberately move toward options that offer better structural guarantees of control and access to information. Only in this way can they counteract the tendency of industrial policy to build power and expertise in the private sector in ways that are in deep tension with the achievement of public aims over the long run.

IV. THE COUNTERVAILING POWER TOOLKIT

In Part II, we offered a substantive account of democracy that provides a justification for administration that deliberately seeks to build countervailing power: the ability of systemically disadvantaged groups to exercise organized power over governance and ordering decisions. Here, we offer a typology of tools that can facilitate the development of countervailing power through industrial policy administration. We emphasize tools that can facilitate and leverage organizational power—that is, groups’ capacity to act in a concentrated, *associational* fashion. We sometimes call these groups “countervailing organizations.” One cannot assume a democratic general will be waiting in the wings: social movements need space to strategize, mobilize, and resolve conflicts. Accordingly, tools that help mass movement organizations generate resources and develop coherent policy positions are just as critical as those that slot them into decision-making procedures.

In general, the tools we refer to here are not newly imagined legal instruments. Rather, they are modifications that can be made to existing instruments—program grant terms, individually-negotiated contracts, federal advisory committees, and so on—to serve the end of building countervailing power. We group these tools by modality. Administration can help nurture countervailing power by bringing disadvantaged groups directly into program administration; by imposing conditions on recipient firms that generate hooks and levers for influence over production; and by directing resources to communities in ways that enable movement-building.

FIG. 1 OVERVIEW OF THE COUNTERVAILING POWER TOOLKIT

Tool	Function	Examples
Administration		
Structured contestation	Identity-conscious requirements for appointments and advisory roles	Federal Reserve Regional Banks, U.S. Railway Association, FLSA wage & hour boards
Mobilization beachheads	Administrative sites where disempowered groups coalesce and strategize	CFPB Office of Consumer Affairs, ITACs, SBREFA panels
Operational empowerment	Formalized roles in program operation (<i>e.g.</i> community outreach)	ACA navigators, contracting preferences

Tool	Function	Examples
Enforcement empowerment	Incentives to monitor industrial policy beneficiaries for program violations	SEC whistleblower programs, Community Reinvestment Act review powers
Production		
Empowering labor	Building power of workers to shape private ordering decisions by industrial policy beneficiaries	Requiring project labor agreements, imposing labor standards by contract through market participant exemption to NLRA preemption
Empowering communities	Building power of communities to shape private ordering decisions by industrial policy beneficiaries	Encouraging use of community benefits agreements
Diffusion		
Power-shifting rules	Bright-line allocation rules that redistribute resources	Justice40, Social Vulnerability Index
Reliance on intermediaries	Using third parties to reach communities the federal government cannot	EPA Greenhouse Gas Reduction Fund, state block grant conditions
Supporting capacity-building	Giving underserved communities tools to make claims on resources	Technical assistance grants

Some of these tools will require statutory reform, while others can be realized by agencies on their own accord. Given the courts' growing hostility to agencies' exercise of discretion absent a clear Congressional statement of intent, the extent of agencies' ability to take such actions under delegated authorities will often be unclear.²⁶³ In particular, the non-delegation and major questions doctrines may pose serious challenges to the application of these tools.²⁶⁴ But dissecting these issues—which will necessarily vary based on different statutory regimes—is beyond our remit here. Instead, we aim to show in

²⁶³ See generally Leah Litman & Daniel Deacon, *The New Major Questions Doctrine*, 109 VA. L. REV. 1009 (2023) (describing the emergent “major questions doctrine”); see also Julian Davis Mortenson & Nicholas Bagley, *Delegation at the Founding*, 121 COLUM. L. REV. 277, 279 (2021) (describing the ahistoricism of the “non-delegation doctrine”).

²⁶⁴ While the contours of the major questions doctrine are protean, it has been repeatedly used to invalidate regulations that the Court deems “politically significant” absent a clear statement of intent from Congress. See *West Virginia v. Env’t Prot. Agency*, 597 U.S. 697 (2022) (slip op. at 11); *Ala. Ass’n of Realtors v. Dep’t of Health & Hum. Servs.*, 594 U.S. 758, 764 (2021); see also *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159-60 (2000).

practical terms how this theory of countervailing power can be realized in the industrial policy context. And we offer specific examples to highlight how the interventions we propose are not far from many contemporary and historical practices.

While judicial hostility may threaten to clip the potential of many of these tools, our proposals can also be understood as aiming at *limiting* agency discretion over the thorny implementation problems that abound in this domain. What constitutes a “disadvantaged” group?²⁶⁵ What organizations can make credible claims to represent them?²⁶⁶ These are properly political questions which ought to be resolved through political means. There is, however, an unavoidable dialectic in democratic politics between institutions that express and constitute our sense of public aims. Confronting this dialectic requires developing systems that open the processes of governance to disempowered groups—while minimizing the need to identify and lift up particular social formations *ex ante*. By counteracting imbalances of power within sites of administration, the tools we describe here can facilitate more robust and equitable political debate about what the goals of industrial policy ought to be in the first place.

A. Administration

First and foremost, countervailing power in the context of industrial policymaking means the formal inclusion of representatives of disadvantaged groups in public administration. From a power-building perspective, organizations should have not only input, but “upstream” delegations of power that enable early “moments of authority” to shape the identification of technological priorities, set generally applicable program terms, and so forth.²⁶⁷ Agencies should also, where possible, seek to integrate organizations in ways that enable structured contestation among group members themselves over their agenda and leadership.

We propose four kinds of interventions to achieve this. First, Congress can design agencies with specific institutional roles for members of disempowered groups, pushing them into the decision-making process for selecting agency leadership. Second, it can create beachheads within agencies for countervailing organizations to mobilize and exert influence. Third, agencies can employ countervailing organizations in lieu of private contractors to administer industrial policy programs on the ground, gathering and disseminating information. Fourth, agencies can empower those groups through incentives to act as their representatives in program enforcement. Going beyond the new

²⁶⁵ Note Inflation Reduction Act of 2022, Pub. L. 116-169, 136 Stat. 1818, § 134 (codified at 42 U.S.C. § 7434) (directing the EPA to allocate emissions reduction grants to benefit “disadvantaged communities,” without defining such a term).

²⁶⁶ See *supra* note 176 and accompanying text.

²⁶⁷ Cf. Rahman & Simonson, *supra* note 86, at 683.

literature on “identity-conscious” administration,²⁶⁸ we urge express attention to not only recognizing, but rectifying, pre-existing hierarchies of influence.

1. Structured Contestation

Most straightforwardly, Congress can create new, formal institutional roles for representatives of countervailing organizations in industrial policy decision-making. These kinds of arrangements can be found across the federal government; at least fifty-eight different official roles require that the President appoint an individual with certain characteristics.²⁶⁹ The Boards of Fannie Mae and Freddie Mac, for example, must include “at least one advocate for consumer, community, or low-income households.”²⁷⁰ While some scholars have argued that such qualification requirements are an unconstitutional violation of the President’s appointment powers,²⁷¹ such requirements have been repeatedly upheld by the Supreme Court.²⁷²

Congress should build upon this historic practice in designing agencies to administer industrial policy. It should not only require the President to nominate individuals representing racial justice, environmental, and labor organizations to federal office. It should also pass the ball to them, requiring that the President make such nominations from lists *generated* by those groups.²⁷³ This process, too, has historical precedent: when Congress created the predecessor organization to Amtrak, it required that members of its board be selected from

²⁶⁸ See, e.g., Brian Feinstein, *Identity-Conscious Administrative Law*, 90 GEO. WASHINGTON L. REV. 1, 21–22 (2022); Seifter, *supra* note 151, at 1304–06; Joshua Ulan Galperin, *The Death of Administrative Democracy*, 82 U. PITT. L. REV. 1, 17–20 (2020); Anne Joseph O’Connell, *Bureaucracy at the Boundary*, 162 U. PA. L. REV. 841, 857–61 (2014).

²⁶⁹ See O’Connell, *supra* note 268. So-called “identity-conscious” requirements range from partisan and other balancing requirements; ethnicity, gender, and geographic requirements; prohibitions on certain backgrounds; and requirements for representation of a given interest group. See Feinstein, *supra* note 268, at 21–22.

²⁷⁰ Feinstein, *supra* note 268, at 24; 12 U.S.C. § 1723(b) (Fannie Mae); 12 U.S.C. § 1452(a)(2)(A) (Freddie Mac).

²⁷¹ See, e.g., Hannah Metchis Volokh, *The Two Appointments Clauses: Statutory Qualifications for Federal Officers*, 10 U. PA. J. CONST. L. 745, 746 (2008); but see E. Garrett West, *Congressional Power over Office Creation*, 128 YALE L.J. 166, 203 (2018) (refuting Volokh’s argument).

²⁷² See *Myers v. United States*, 272 U.S. 52, 129 (1926) (allowing “reasonable and relevant qualifications and rules of eligibility” when establishing offices); *id.* at 265–74 (Brandeis, J., dissenting) (listing statutes with such requirements); *Bowsher v. Synar*, 478 U.S. 714, 740 (1986) (Stevens, J., concurring in the judgment).

²⁷³ For a related—but problematic—example, consider the structure of the regional Reserve Banks of the Federal Reserve System. These Reserve Banks have three classes of directors, two of which are directly appointed by the private member banks in that District. Those banks are charged with making appointments “with due but not exclusive consideration to the interests of agriculture, commerce, industry, services, labor and consumers.” 12 U.S.C. § 302. Ultimately, however, this institutional design has serious flaws. It not only devolves decision-making to a group of powerful private bankers, but is likely unconstitutional: some of those directors are charged with selecting federal officers without the approval of the President or any other presidentially-appointed officer (though the third class of directors is selected by the Federal Reserve’s Board of Governors). *Id.* See also Peter Conti-Brown, *The Institutions of Federal Reserve Independence*, 32 YALE J. REG. 257, 301–302 (2015) (arguing that these appointments by private bankers render the presence of the Reserve Bank presidents on the Federal Open Market Committee unconstitutional).

lists of individuals recommended by shippers, financial institutions, the Association of American Railroads, and the AFL-CIO in particular.²⁷⁴

Of course, civil society lobbying for favored candidates is already a feature of Presidential appointments.²⁷⁵ Our proposal would institutionalize these dynamics—and design them to give disadvantaged groups authority that others have long enjoyed. The President would still be free to choose between lists presented by different organizations, and whichever candidate from among those lists that they saw fit. And whether the President had chosen a nominee from an organizational that adequately represented environmental interests (by way of example) would likely be a nonjusticiable political question.²⁷⁶ The point is that such structured contestation can grant structurally disempowered groups tangible political struggles to organize their membership around. It would incentivize dialogue between different factions of social movements so they could more effectively try to influence Presidential nominations. And in the absence of agreement, it would force debate about whose claims to authority are more persuasive out into the open.

The same kind of structured contestation over personnel can be ported to lower levels of administration. Some federal advisory boards have statutory requirements that certain interests be represented.²⁷⁷ But most simply have toothless directives that the agency be “fairly balanced” in designing any given committee²⁷⁸—a requirement that is quite often non-justiciable.²⁷⁹ The result is the proliferation of advisory committees that transpose the interests of already-empowered segments of the polity.²⁸⁰

In lieu of simply trying achieve viewpoint diversity, we should look back to historic models where administrators convened representatives of specific

²⁷⁴ See Regional Rail Reorganization Act of 1973, Pub. L. No. 93-236, § 201(d), 87 Stat. 988 (1974) (establishing the United States Railway Association); see also Harold J. Krent, *Fragmenting the Unitary Executive: Congressional Delegations of Authority Outside the Federal Government*, 85 *Nw. U. L. Rev.* 62, 68 n.85 (1990). The constitutionality of such arrangements have never been litigated. For an argument that such requirements are constitutional, see West, *supra* note 271, at 204. See also BARRY J. McMILLON, CONG. RSCH. SERV., *THE BLUE SLIP PROCESS FOR U.S. CIRCUIT AND DISTRICT COURT NOMINATIONS: FREQUENTLY ASKED QUESTIONS* 1, Rept. R44975 (2017) (describing an uncodified process by which U.S. Senators influence judicial nominations).

²⁷⁵ See generally LAUREN COHEN BELL, *WARRING FACTIONS: INTEREST GROUPS, MONEY, AND THE NEW POLITICS OF SENATE CONFIRMATION* (2002).

²⁷⁶ See *Marbury v. Madison*, 5 U.S. 137, 167 (1803) (holding that “[t]he power of nominating to the senate, and the power of appointing the person nominated” is an unjusticiable political question); see also *Baker v. Carr*, 369 U.S. 186, 198 (1962).

²⁷⁷ See, e.g., Clean Air Act, 42 U.S.C. § 7409(d)(2) (requiring that members of a scientific review committee include a physician and member of the National Academy of Sciences).

²⁷⁸ Federal Advisory Committee Act, 5a U.S.C. § 5(b)(2).

²⁷⁹ See Daniel E. Walters, *The Justiciability of Fair Balance under the Federal Advisory Committee Act: Toward a Deliberative Process Approach*, 110 *MICH. L. REV.* 677, 681 (2012).

²⁸⁰ By way of example, consider the operation of Industry Trade Advisory Committees (ITACs). ITAC members not only have a formal venue to try to influence trade negotiations but receive privileged access to USTR deliberative documents not available to the general public. Environmental and labor organizations are rarely adequately represented on such committees relative to industry groups. See Zach Scott Simmons, *Other-than-Industry Representation on Industry Trade Advisory Committees*, 31 *UCLA PAC. BASIN L.J.* 147, 157 (2013). See also Brian D. Feinstein & Daniel J. Hemel, *Outside Advisers Inside Agencies*, 108 *Geo. L.J.* 1139, 1145 (2020) (describing how advisory committees often reflect Administrations’ political preferences).

segments of civil society for negotiation and collective decision-making.²⁸¹ The New Deal-era Fair Labor Standards Act empowered the Department of Labor to appoint advisory boards comprised of representatives of labor, industry, and the public to set minimum wages by sector.²⁸² As Kate Andrias has argued, the wage boards not only lifted workers' wages, but created key sites for building labor power by mobilizing members and generating organizing opportunities in the South.²⁸³ In 1941, the Supreme Court upheld the constitutionality of this administrative scheme,²⁸⁴ which numbered among several New Deal-era efforts at tripartite administration.²⁸⁵

In recent years, several members of the Court have expressed interest in reviving the so-called *private non-delegation doctrine*: the idea that empowering non-governmental organizations to exercise governmental functions violates the separation of powers.²⁸⁶ While this doctrine has been dormant since the 1930s, these kinds of arrangements could come under heightened scrutiny if it were revived.²⁸⁷ But requiring appointments from certain *categories* of civil society organizations—preserving agency discretion to make the actual selections—should be treated distinctly from delegating authority to those organizations themselves. The value of representational requirements is that they structure political debate, enabling different voices to enter the fray without deciding *ex ante* whose should win the day. Ultimately, it is incumbent on movement organizations to generate the political power to exercise influence; structured contestation simply gives them footholds they can leverage to do so.

²⁸¹ Closer to the present-day, the Negotiated Rulemaking Act of 1990 created a procedure for regulated firms and citizen groups to bargain over agency standard-setting, but the formalities of the process have ensured that it has been rarely utilized. See Peter H. Schuck & Steven Kochevar, *Reg Neg Redux: The Career of a Procedural Reform*, 15 THEORETICAL INQUIRIES L. 417, 439 (2014).

²⁸² Fair Labor Standards Act of 1938, ch. 676, § 8, 52 Stat. 1060, 1064.

²⁸³ Kate Andrias, *An American Approach to Social Democracy: The Forgotten Promise of the Fair Labor Standards Act*, 128 YALE L.J. 616, 674-75.

²⁸⁴ *Opp Cotton Mills v. Wage & Hour Div.*, 312 U.S. 126, 145 (1941) (rejecting arguments that the statute gave an unconstitutional delegation of authority to the Boards); see also *Andree & Seedman v. Wage & Hour Div.*, 122 F.2d 634, 636 (D.C. Cir. 1941) (ruling that the statute did not require that every member of industry be entitled to a representative).

²⁸⁵ See Allan R. Richards, *Tripartism and Regional War Labor Boards*, 14 J. POL. 72, 81-84 (1952); Lloyd K. Garrison, *The National Railroad Adjustment Board: A Unique Administrative Agency*, 46 YALE L.J. 567, 568-76 (1937).

²⁸⁶ In 2013, the D.C. Circuit struck down a statute on the grounds that it impermissibly granted Amtrak and the Federal Railroad Administration authority to “jointly develop standards.” *Ass’n of Am. R.R.s. v. U.S. Dep’t of Transp.*, 721 F.3d 666, 670 (D.C. Cir. 2013). On certiorari, the Court reversed on the grounds that Amtrak was a federal instrumentality, but both Justices Alito and Thomas urged renewed consideration of the private non-delegation doctrine. See *Dep’t of Transp. v. Ass’n of Am. R.R.s.*, 575 U.S. 43, 60-63 (Alito, J., concurring); *id.* at 86-88 (Thomas, J., concurring). See also Kate Andrias, *Constitutional Clash: Labor, Capital, and Democracy*, 118 N.W. U.L. REV. 985, 1062-63 (2024).

²⁸⁷ See *Carter v. Carter Coal Co.*, 298 U.S. 238, 310-11 (1936) (striking down a regime for coal miners and producers to negotiate binding wage-and-hour regulations on private non-delegation grounds); see also *A.L.A. Schechter Poultry Corp. v. U.S.*, 295 U.S. 495, 537 (1935).

2. *Mobilization Beachheads*

Next, countervailing power can be constructed through offices and procedures that give countervailing organizations a privileged vantagepoint into administrative decision-making. We call these “mobilization beachheads”: sites *within* the regulatory state where disempowered groups can coalesce and strategize to exercise a collective will.²⁸⁸ An agency creates a beachhead when it designates offices, resources, or procedures to help disempowered groups coalesce and exercise influence internally. This concept builds on proposals for agencies to develop formal authorities—proxy advocates, public interest councils, or empowered public interest groups in tripartite negotiation—to advocate within agency administration on the public’s behalf.²⁸⁹ But “public advocates” should not only seek to prevent regulatory capture and channel the interests of a diffuse polity.²⁹⁰ They can also offer institutional settings for countervailing groups to gather to exercise collective power, channeling and amplifying outside voices.²⁹¹

American administrative law is already checkered with these kinds of beachheads. Consumer groups have been highly successful in pressing for action on predatory financial products through network ties with the CFPB’s Office of Community Affairs.²⁹² More frequently, however, mobilization beachheads have not been in the service of countervailing power, but instead interests that are already relatively politically successful. For example, in the international trade context,²⁹³ as well as through support for small businesses, Congress has created regimes that give firms direct and disproportionate authority in setting policy.²⁹⁴ These regimes are effective because they combine

²⁸⁸ By “beachhead,” we reference the military term of a defensible line that is created when a unit completes a landing by sea (e.g., the Normandy landings). A beachhead is a fortification in otherwise unfamiliar terrain that can be used to assemble resources before advancing.

²⁸⁹ See, e.g., RAHMAN, *DEMOCRACY AGAINST DOMINATION*, *supra* note 16, at 111, 159 (describing models for regulatory public defenders); Saule T. Omarova, *Bankers, Bureaucrats, and Guardians: Toward Tripartism in Financial Services Regulation*, 37 J. CORP. L. 621, 659 (2012) (advocating for a “Public Interest Council” in systemic risk regulation); IAN AYRES AND JOHN BRAITHWAITE, *RESPONSIVE REGULATION* 54 (1992) (advocating the empowerment of public interest groups for tripartite negotiation).

²⁹⁰ Cf. Daniel Schwarcz, *Preventing Capture Through Consumer Empowerment Programs: Some Evidence from Insurance Regulation*, in *PREVENTING REGULATORY CAPTURE*, *supra* note 174, at 365, 366.

²⁹¹ See Margo Schlanger, *Offices of Goodness: Influence Without Authority in Federal Agencies*, 36 CARDOZO L. REV. 53, 100 (2014) (describing how engagement with outside groups can be used to align agencies with particular values).

²⁹² RAHMAN, *DEMOCRACY AGAINST DOMINATION*, *supra* note 16, at 160 (noting that many of the Bureau’s early staff formerly worked at consumer advocacy organizations, which was crucial for facilitating this interface).

²⁹³ See *supra* note 280 (describing ITACs).

²⁹⁴ The Small Business Regulatory Enforcement Fairness Act (SBREFA) created an office within the Small Business Administration to collect and synthesize complaints from small businesses regarding EPA, OSHA, and CFPB rules. 5 U.S.C. §§ 601 *et seq.* It likewise required agencies to respond to these counterarguments at mandatory “Small Business Advocacy Review Panels” prior to the publication of proposed regulations, slowing the pace of regulation. See Daniel Cohen, *S. 981, the Regulatory Improvement Act of 1998: The Most Recent Attempt to Develop a Solution in Search of a Problem*, 50 ADMIN. L. REV. 699, 712 (1998).

specific spaces for mobilization with mandatory procedures for regulatory review or consultation.

Establishing such “beachheads” for public involvement in industrial policymaking can overcome some of the key barriers for building countervailing power in this domain. It socializes the resource burden of achieving informed participation by disadvantaged groups. It can correct for lack of technical expertise on developmental issues by housing that expertise within the state itself. When key public decisions must be made behind closed doors—whether because they involve negotiations with private counterparties or national security considerations—a “beachhead” model allows for public representation while preserving the need for confidentiality. Finally, it allows for the government to empower mass movement organizations without deciding which specific organization is best representative of a social formation.

3. *Operational Empowerment*

Agencies should also utilize countervailing organizations as agents in the *operation* of industrial policy programs. As we have highlighted, many industrial policy programs center on developing effective network ties within a given sector.²⁹⁵ Policymakers seeking to invite historically underserved groups into these developmental networks can contract with community representatives to communicate with and organize intended populations.²⁹⁶ Moreover, contracts for program administration can build those organizations’ capacity to participate in higher-order policy debates and effectively channel the interests of the communities in question.

To see how such a model could work, consider the health insurance marketplace “navigator” system set up by the Affordable Care Act (ACA). The ACA required federal- and state-run insurance exchanges to designate and fund outside entities to help individuals decide between and enroll in plans in a manner “culturally and linguistically appropriate to the needs of the population being served.”²⁹⁷ These contracts—generally with non-profit social services organizations²⁹⁸—were instrumental to the ACA’s success in increasing health insurance enrollment.²⁹⁹ Acting as “frontline bureaucrats,” healthcare navigators established informal networks to compile information and puzzle

²⁹⁵ See *supra* note 128 and accompanying text.

²⁹⁶ Cf. NAT’L INST. STANDARDS & TECH., *supra* note 262 (urging semiconductor incentive applicants to “develop an equity strategy, in concert with their partners, to create equitable workforce pathways for economically disadvantaged individuals in their region.”).

²⁹⁷ 42 U.S.C. § 18031(i). *But see* Kirsten Dunham, *Navigating the Health Insurance Exchanges: Will State Regulations Guide Consumers or Chart Them Off-Course?*, 79 MO. L. REV. 1047, 1074–88 (2014) (summarizing lawsuits challenging the navigator programs).

²⁹⁸ The law required grants to be awarded based on relationships with likely enrollees, prohibiting insurance companies and other financially interested parties from serving as navigators. 42 U.S.C. §§ 18031(i)(2) and (4).

²⁹⁹ See Benjamin D. Sommers et al., *The Impact of State Policies on ACA Applications and Enrollment Among Low-Income Adults in Arkansas, Kentucky, and Texas*, 34 HEALTH AFFAIRS 1010, 1017 (2015) (showing that states that embraced outreach programs had higher insurance enrollment rates than those that did not).

through implementation problems, generating policy expertise that the exchanges' designers sometimes lacked.³⁰⁰

In the industrial policy context, this model would locate key aspects of project development and network-building within local communities. Suppose an industrial policy program aims to increase diversity in a technically-specialized field. Instead of assessing firms' applications on their plans to recruit a diverse workforce, administrators could contract directly with community organizations to connect individuals with workforce training programs. The proper analogy here is not one of outsourcing a key governmental function, but of harnessing community knowledge and capacity at the sites where it already exists. Properly designed, such programs can nurture a group of organizations in civil society who can bolster governmental capacity.

4. *Enforcement Empowerment*

Industrial policy agencies can also deputize countervailing organizations to enforce program and contractual terms. By granting movement groups authority to act as the public's eyes and ears on the ground, enforcement empowerment can simultaneously build those groups' resources to exercise countervailing power in other domains.

For example, Congress can extend *qui tam* bounty and whistleblower incentive programs to the industrial policy domain. Organizations with evidence that a firm has defrauded the federal government can bring a suit on its behalf under the False Claims Act, collecting a portion of any recovered sum.³⁰¹ Congress could broaden these provisions to allow for private suits to recover for breaches under loan, grant, or procurement contracts. Whistleblower incentive programs—like those established for the SEC and CFTC under the Dodd-Frank Act³⁰²—are more preferable still, since they grant financial incentives for individuals to report evidence of wrongdoing without necessitating that they bring litigation on their own (which they may not have capacity to do).³⁰³ Extending these tools to the industrial policy domain would give material incentives for groups to closely monitor recipients of federal funds in their communities.³⁰⁴

At the same time, these tools have their own pathologies which can sometime cut against the interests of building both public and countervailing

³⁰⁰ See Lars Tummers & Philip Rocco, *Serving Clients When the Server Crashes: How Front-line Workers Cope with E-Government Challenges*, 75 PUB. ADMIN. REV. 817, 823 (2015); see generally Robert Vargas, *How Health Navigators Legitimize the Affordable Care Act to the Uninsured Poor*, 165 Soc. Sci. & MED. 263 (2016) (describing how navigators built trust with low-income individuals to overcome skepticism of formalized healthcare systems).

³⁰¹ 31 U.S.C. § 3730.

³⁰² See 15 U.S.C. § 78u-6 (SEC); 7 U.S.C. § 26 (CFTC).

³⁰³ See JOHN COFFEE, CORPORATE CRIME AND PUNISHMENT 114 (2020) (calling such programs "dramatically successful").

³⁰⁴ For an argument for expanding whistleblower incentive programs, see Martin Totaro & Connor Raso, *A Brief Proposal to Expand the Scope of Whistleblower Programs*, BROOKINGS (Sept. 23, 2021), <https://www.brookings.edu/articles/a-brief-proposal-to-expand-the-scope-of-whistleblower-programs/> [<https://perma.cc/3QD4-X29B>].

power.³⁰⁵ Accordingly, the best models for enforcement empowerment may not be ones that create uniform incentives for monitoring and litigation, but specifically deputize mass movement organizations for the job. The World War II-era Office of Price Administration (OPA), for example mobilized more than 300,000 volunteers through a “National Consumer Advisory Board” to survey consumer goods retailers and report violations of federally-mandated price controls.³⁰⁶ More recently, the Community Reinvestment Act (CRA) enabled private parties to review and formally challenge bank merger approval and certain tax credits for banks—effectively delegating local community organizations specific power to enforce the CRA’s requirements.³⁰⁷ Granting an enforcement foothold to those groups increased their organizational power at the same time as it furthered the CRA’s statutory goal of increasing lending to underserved communities.

B. Production

Just as democratic administration requires remedying imbalances of power over government decision-making, policymakers should also seek to facilitate countervailing power within the spheres of economic production that the state seeks to shape. Building countervailing power in these spheres entails empowering other institutional actors—labor unions, community stakeholders, suppliers and customers—to challenge concentrated private interests within labor and product markets.

These kinds of “downstream” interventions can often be broader and more durable in impact than those that seek to equalize influence over administration itself. Policies that build organized labor’s bargaining power or establish standards for industry conduct can have spillover effects on firms outside the direct remit of industrial policy programs. Those effects can likewise outlast the duration of state subsidies. And by seeding policy feedback loops, “downstream” interventions can build bargaining power for mass movement organizations to make claims on industrial policy administration itself.

³⁰⁵ See, e.g., Alexander I. Platt, *The Whistleblower Industrial Complex*, 40 YALE J. REG. 688, 703 (2023) (describing how *qui tam* bounties are burdensome on government agencies and afford the greatest benefits to attorneys).

³⁰⁶ See Meg Jacobs, “How About Some Meat?": *The Office of Price Administration, Consumption Politics, and State Building from the Bottom Up, 1941-1946*, 84 J. AM. HIST. 910, 923 (1997). These volunteers averaged an astonishing 32 hours of work per week. Jacobs calls these volunteers “shock troops in the fight against inflation” and argues that they formed a political base for the OPA’s agenda (though one that also left it vulnerable to attacks by producer groups after inflation was under control). *Id.* at 911, 927, 939.

³⁰⁷ See K. SABEEL RAHMAN & HOLLIE RUSSON GILMAN, CIVIC POWER 160-63 (2019) (describing how Boston community groups in the 1990s leveraged the CRA to force mid-sized local banks to increase their commitments to funding neighborhood redevelopment projects).

1. *Empowering Labor*

First, policymakers can build workers' power through industrial policy by designing incentives that advantage firms where workers sit in the driver's seat. Many of the Inflation Reduction Act's energy-related tax credits have tack-on benefits for firms that meet certain labor standards.³⁰⁸ For certain investments in clean energy, for example, developers are entitled to a tax credit five times greater than what they would otherwise receive if they employ a minimum number of apprentices and pay workers locally prevailing wages as determined by Department of Labor regulations.³⁰⁹ Because those prevailing wages are often the same as those in union construction contracts—and the additional tax incentive is so great—it is effectively more expensive for firms receiving the credit to *not* use union labor.³¹⁰ These kinds of labor provisions are unprecedented as applied to tax credits.³¹¹

Congress could take this model and run with it, creating automatic incentives for firms with corporate structures even more conducive to building labor power. It could create top-off incentives for firms with collective bargaining agreements; for those with employee representatives on corporate boards; for those with systems for co-determination of production; and for worker cooperatives and other firms with employee ownership systems. By giving firms with these policies a competitive advantage, such incentives create a fertile ground for labor unions to organize workers and exercise countervailing power. Crucially, labor standards attached to tax provisions also have their own enforcement mechanisms: in contrast to the relatively weak sanctions available to the National Labor Relations Board, the government can seek stiff civil and criminal penalties from firms who make false certifications on their tax returns.³¹²

Second, industrial policy agencies can extend this preference for corporate structures that empower organized labor through funding selection criteria. Agencies can often establish requirements for funding and loan opportunities in excess of statutory minimums: the Department of Commerce's application for semiconductor fabrication grants, for example, required all applicants requesting over \$150 million show how they would provide childcare for all workers.³¹³ Agencies could establish similar requirements for firms to appoint workers to their corporate boards, or establish a policy of reviewing all applications from firms with employee ownership structures before

³⁰⁸ See Internal Revenue Serv., Notice of Initial Guidance, Prevailing Wage and Apprenticeship Initial Guidance Under Section 45(b)(6)(B)(ii) and Other Substantially Similar Provisions, 87 Fed. Reg. 73,580 (Nov. 30, 2022).

³⁰⁹ 26 U.S.C. § 48(a)(10)-(11).

³¹⁰ See FRED B. KOTLER, CORNELL UNIVERSITY, SCHOOL OF INDUSTRIAL AND LABOR RELATIONS, PROJECT LABOR AGREEMENTS IN NEW YORK STATE: IN THE PUBLIC INTEREST 2, 18 (2009) (summarizing PLAs and describing how they can reduce project costs).

³¹¹ See Gordon, *supra* note 71, at 23.

³¹² Cf. Robert M. Worster II, *If It's Hardly Worth Doing, It's Hardly Worth Doing Right: How the NLRA's Goals Are Defeated through Inadequate Remedies*, 38 U. RICH. L. REV. 1073, 1077 (2004) (describing the NLRA's weak remedies).

³¹³ See NAT'L INST. STANDARDS & TECH., *supra* note 262.

proceeding to the broader applicant pool. Because meeting such requirements would be entirely voluntary, they would not trigger aspects of the regulatory takings doctrine that are increasingly hostile to workers.³¹⁴

Third, agencies should extend preferences for recipient firms to employ a union workforce, such as through project labor agreements (PLAs).³¹⁵ The Biden administration has already required the use of project labor agreements on federal construction projects exceeding \$35 million.³¹⁶ It should extend such requirements to firms receiving government loans, guarantees, or grants.³¹⁷ The Department of Commerce's semiconductor fabrication application evinced a strong preference for such agreements—stating that applicants using a project labor agreement “will generally be likely to produce a construction workforce plan that meets the [required] criteria”—but agencies could go further to require such agreements outright.³¹⁸ Courts have interpreted the National Labor Relations Act (NLRA) to limit the permissibility of project labor agreements to the construction trade.³¹⁹ But agencies should explore tools to try to mandate similar agreements in the *operation* of facilities receiving government support. For instance, they could potentially require that recipient firms sign labor peace agreements with any union which requests one.³²⁰

Requiring these kinds of labor agreements or establishing preferences for them in grantmaking is not without its challenges. In particular, courts have expansively interpreted the preemptory power of the NLRA, generally prohibiting additional federal or state labor regulations in areas which Congress intended “to be controlled by the free play of economic forces.”³²¹ Courts have struck down efforts to impose higher labor standards for federal contractors through executive order.³²² In the case of industrial policymaking, however, the government may be able to rely on its role as a “proprietor” of developmental projects to take advantage of the market participant exception to the

³¹⁴ See *Cedar Point Nursery v. Hassid*, 594 U.S. 139, 152 (2021) (ruling that a law requiring labor unions to have regular access to a company's property was a *per se* taking).

³¹⁵ A PLA is an agreement between a union and construction contractor or project developer to set contractual terms and ensure labor peace before workers are hired (as opposed to most collective bargaining agreements, which are negotiated only after hired workers vote to form a union).

³¹⁶ Exec. Order 14,063 (codified at 87 Fed. Reg. 7,363) (Feb. 4, 2022).

³¹⁷ See generally DAVID FOSTER & HANNAH SACHS, ENERGY FUTURES INITIATIVE, JOB QUALITY—THE KEYSTONE OF CLEAN ENERGY INDUSTRIAL POLICY (2023).

³¹⁸ See NAT'L INST. STANDARDS & TECH., *supra* note 262.

³¹⁹ *Bldg. & Const. Trades Council v. Associated Builders and Contractors*, 507 U.S. 218, 231 (1993).

³²⁰ See FOSTER & SACHS, *supra* note 317.

³²¹ *Lodge 76, Int'l Ass'n of Machinists v. Wisconsin Emp. Rels. Comm'n*, 427 U.S. 132, 140 (1976) (quoting *NLRB v. Nash-Finch Co.*, 404 U.S. 138, 144 (1971)); see also *San Diego Bldg. Trades Council v. Garmon*, 359 U.S. 236, 245 (1959) (prohibiting state regulation of activities within the zone of exclusive competency of the NLRB). These preemption doctrines generally prohibit non-NLRB regulations that alter the bargaining power between firms and workers.

³²² See, e.g., *Texas v. Biden*, No. 6:22-cv-00004, 2023 WL 6281319, at *2 (S.D. Tex. Sep. 26, 2023) (enjoining enforcement of an E.O. to raise the minimum wage for federal contractors); *Chamber of Commerce v. Reich*, 74 F.3d 1322, 1339 (D.C. Cir. 1996) (striking down an E.O. prohibiting federal contractors from permanently firing striking workers); see generally Danielle Bereznavy, *History Repeating: Déjà Vu of Failed Labor Law Regulations in Government Contracting*, 47 PUB. CONTRACT L.J. 269 (2018).

preemption doctrine.³²³ Where the government takes an equity stake or guarantees a loan to a company, there is a clear business rationale for it to impose contractual terms on how that company is operated.

That said, building labor power in industrial policy requires confronting labor law preemption head-on. Congress could allow federal agencies and states to impose collective bargaining requirements in excess of those mandated by the NLRA for projects financially supported by industrial policy programs. In the absence of Congressional action, agencies can leverage existing statutes to avoid preemption problems. The Defense Production Act, for example, allows the federal government to enter into advanced market commitments and certain other contracts “without regard to the limitations of existing law. . . .”³²⁴ As one of us has written elsewhere, DPA agencies could utilize this language to overcome NLRA preemption, requiring the use of union labor by contractual counterparties.³²⁵ Finally, as Ben Sachs has argued, bargaining around community benefits agreements (CBAs) can be used to impose labor standards on firms that preemption prevents governments from mandating directly.³²⁶ Industrial policy agencies can provide substantial hooks for negotiating such agreements.

2. *Empowering Communities*

Next, industrial policy agencies should design selection criteria to create hooks for membership-based community organizations—such as racial justice groups and social service providers—to make demands on how program recipients use their resources. Community benefits agreements (CBAs) offer one such tool: in exchange for providing public backing for permits or subsidies for a project, community groups can secure legally binding commitments from the project developer to invest in social services and neighborhood infrastructure, meet higher-level environmental standards, hire and train local workers, and so forth.³²⁷ In contrast to regulatory requirements that firms make localized investments, CBAs can build countervailing power by

³²³ Bldg. & Const. Trades Council v. Assoc.'d Builders and Contractors, 507 U.S. 218, 227 (1993) (recognized this exception to NLRA preemption). While courts have been skeptical of market participant requirements that evince regulatory objectives, the D.C. Circuit has held that the federal government has a proprietary interest when it acts as a manager, purchaser, lender, or benefactor of federally-funded projects. Bldg. & Const. Trades v. Allbaugh, 295 F.3d 28, 35-46 (D.C. Cir. 2002). However, courts have ruled that the government does not have a proprietary interest in projects funded through tax credits. Assoc.'d Builders & Contractors v. Jersey City, 836 F.3d 412, 418-19 (3d Cir. 2016).

³²⁴ 50 U.S.C. §4533(b).

³²⁵ See JOEL DODGE, JOEL MICHAELS, LENORE PALLADINO, & TODD N. TUCKER, ROOSEVELT INST., PROGRESSIVE PREEMPTION: HOW THE DEFENSE PRODUCTION ACT CAN OVERRIDE CORPORATE EXTRACTION, BOOST WORKER POWER, AND EXPEDITE THE CLEAN ENERGY TRANSITION 16 (2022), https://rooseveltinstitute.org/wp-content/uploads/2022/12/RI_ProgressivePreemption_Brief_202212.pdf [<https://perma.cc/6EUP-MJHN>].

³²⁶ Benjamin I. Sachs, *Despite Preemption: Making Labor Law in Cities and States*, 124 HARV. L. REV. 1153, 1222 (2011).

³²⁷ See generally Virginia Parks & Dorian Warren, *The Politics and Practice of Economic Justice: Community Benefits Agreements as Tactic of the New Accountable Development Movement*, 17 J. CMTY. PRAC. 88 (2009) (describing features of CBAs).

routing those expenditures through movement organizations on the ground—and granting them a role in monitoring and enforcement of these contractual agreements.³²⁸ CBAs can also be used to induce corporate behavior that regulators are precluded from requiring directly, like union neutrality or card-check procedures.³²⁹

Industrial policy agencies are already taking steps to push grantees towards negotiating CBAs. In awarding funds under the IRA and Bipartisan Infrastructure Law, the Department of Energy awards twenty percent of scoring points based on applicants' binding "community benefits plan," which must reflect "engagement with a wide range of local stakeholders."³³⁰ Other government funders could follow their lead.³³¹

Because there is no statutory regime governing CBA negotiations analogous to that in labor law, community groups' most effective tactics are often to threaten to slow permitting required for projects to move forward, or to pressure public officials to block them altogether.³³² To prevent these dynamics, agencies should create leverage points that incentivize the negotiation of CBAs without creating roadblocks. For example, a program might require that a beneficiary earmark a certain percentage of funds for purposes to be determined through the CBA negotiation, and require that the recipient bargain in good faith with organizations seeking to negotiate CBAs.³³³

Agencies could also facilitate such agreements by directly allocating funds to community groups negotiating CBAs, analogous to programs that compensate individuals for the cost of participating in administrative decision-making.³³⁴ They could also impose rules that shift transaction costs onto the best-resourced parties, requiring successful program applicants to reimburse their counterparties for their expenditures in negotiating the CBA.

³²⁸ See Rahman & Simonson, *supra* note 86, at 135–40 (describing how CBAs can be used to empower urban justice groups).

³²⁹ See Sachs, *supra* note 326.

³³⁰ See *About Community Benefit Plans*, U.S. Dep't Energy (last accessed June 26, 2023), <https://www.energy.gov/infrastructure/about-community-benefits-plans> [https://perma.cc/VQR8-XXJS].

³³¹ *Accord* Taifa Smith Butler & Angela Hanks, *Making Equity Inevitable*, 69 DEM. J. (2023), <https://democracyjournal.org/magazine/69/making-equity-inevitable/> [https://perma.cc/4SPP-X9LH] (noting that "most IJJA funding is allocated to existing programs, which request only cursory environmental reviews or community input, without any criteria for what that input entails").

³³² See Vicki Been, *Community Benefits Agreements: A New Local Government Tool or Another Variation on the Exactions Theme?*, 77 U. CHI. L. REV. 5, 11 (arguing that "community groups' ability to insist on a CBA is based on their power to slow down or block required land use approvals").

³³³ To prevent concerns of co-optation, this might be paired with a requirement that the recipient show that how the result of the negotiations deviated from how the recipient would have otherwise spent the funds. See *id.* at 23–24 (describing the problem of representativeness).

³³⁴ See McGarity, *supra* note 140, at 1757 (describing such efforts in the 1970s); Wagner, *supra* note 140, at 1415–16 (making a renewed proposal).

C. Diffusion

Finally, policymakers should design program selection criteria to mechanically prioritize projects in disempowered communities, distributing resources to enable members of those communities to build power themselves. The guiding paradigm here is that resources—more than voice—are the core tools for building countervailing power at the grassroots. We have argued that industrial policy programs should incorporate concrete hooks for mass movement organizations to make claims on government administrators and funding recipients. But many organizations do not have the resources or organizational cohesion to exercise influence in these fora in the first place. Diffusion of program dollars into disempowered communities can enable organic mobilizations where institutional empowerment is not possible.³³⁵

Because social formations often develop organically in ways that do not lend themselves to the kind of associationist bargaining we advocate, diffusionary tools channel program resources to these communities to facilitate their ability to exercise power on their own terms.³³⁶ Diffusion-oriented programs also offer a means to counteract the “iron law of oligarchy” within social movements.³³⁷ Paradoxically, the larger and more complex a membership organization is, the more centralized its decision-making must be—at the expense of representativeness of all members. Policies that push resources downstream within industrial policy networks prevents a small number of groups from having a monopoly of influence.

While the state cannot effectively bargain with all comers, it can mobilize its counterparties to resource those organizations at the periphery. The government can diffuse resources through direct allocations: formulas that automatically preference industrial policy projects in certain geographic regions, or training grants for project development. And the government can do so indirectly, such as by conditioning grants to states and other recipients on redistributing resources more broadly.

First, the federal government can use “power-shifting rules” to ensure that disadvantaged communities can benefit from industrial policy without the need for effective political mobilization.³³⁸ Automatic allocation programs like Justice40—the postulate that 40 percent of environmental spending should be directed towards localities that are historic sites of environmental injustice—are useful exemplars here. In 2021, the Biden Administration announced a directive to implement Justice40 for a variety of environmental-related

³³⁵ Cf. BRENT CEBUL, *ILLUSIONS OF PROGRESS: BUSINESS, POVERTY, AND LIBERALISM IN THE AMERICAN CENTURY* 4-5 (2023) (describing the concept and downfall of resource diffusion to enable “maximum feasible participation” during the War on Poverty).

³³⁶ See Akbar, Ashar & Simonson, *supra* note 86.

³³⁷ See *supra* note 176 and accompanying text.

³³⁸ The federal government already uses procurement set-asides to ensure that a minimum number of contract dollars flow to small businesses, with specific set-asides for economically disadvantaged and women-owned businesses. A similar model could be imported here. See Federal Acquisition Regulation (FAR), Small Business Programs, codified at 48 C.F.R. § 19.000 *et seq.*

spending.³³⁹ Of course, the question of what constitutes an “environmental justice” or “disadvantaged” community is highly subjective, and can be twisted by powerful interests to redirect resources to their own ends.³⁴⁰ Accordingly, developing validated measures of socioeconomic status, such as the Social Vulnerability Index used by the Centers for Disease Control to target interventions in emergency settings, may help ensure that program dollars ultimately end up in the communities that can most benefit.³⁴¹

Next, industrial policymakers can allocate appropriations for training grants to help relatively under-resourced organizations apply for federal support in the first place.³⁴² The government can also rely on larger grantees to redistribute a proportion of their funds to smaller organizations, giving footholds to organizations without the resources to effectively make claims on the government itself.³⁴³ And the same principles can be applied to state block grants, which make up a significant portion of industrial policy spending under statutes like the Bipartisan Infrastructure Law.³⁴⁴ Collectively, these interventions can help smaller organizations marshal the resource needed to exercise countervailing power in other spheres of public administration and private ordering.

CONCLUSION

We sit on the verge of an epochal shift in the structure of the world’s largest economy. Within the span of a year, the U.S. Congress passed a suite of legislation to pump vast amounts of money into clean energy production, advanced manufacturing, and public works. Because many such programs take

³³⁹ See Exec. Order 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021) at § 223 (establishing the Justice40 initiative). See also OFFICE MGMT & BUDGET, MEMO M-21-28 (July 20, 2021) <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf> [<https://perma.cc/QX56-PD2L>] (providing implementation guidance).

³⁴⁰ Cf. generally DAVID WESSEL, ONLY THE RICH CAN PLAY (2021) (describing this dynamic in the designation of “Opportunity Zone” tax credits).

³⁴¹ See, e.g., Barry E. Flanagan et al., *A Social Vulnerability Index for Disaster Management*, 8 J. HOMELAND SEC. & EMERGENCY MGMT. 1, 1 (2011). The legality of using statistical indicators like SVI that incorporate race is unclear. But the role of race in calculating SVI could be eliminated with relatively small impacts on outcomes, and there are many other ways to construct indicators for disadvantage that do not rely on race itself. See David Herman, *Treating Racism, Not Race: How to Constitutionally Combat Racial Disparities in Health* (manuscript on file with authors, 2023).

³⁴² Cf. Community Development Financial Institutions (CDFI) Fund, Notice of Funds Availability, 87 Fed. Reg. 8085, 8103 (Feb. 11, 2022) (describing funds available to help CDFIs apply for financial assistance grants).

³⁴³ See *Notice of Funding Opportunity: National Clean Investment Fund*, ENV’T PROT. AGENCY (July 14, 2023), <https://www.grants.gov/web/grants/view-opportunity.html?oppId=349234> [<https://perma.cc/8LJM-CYQ2>] (proposing to distribute funds for low-emissions projects to non-profit organizations specifically designed to push those resources to smaller entities); PARTNERS IN HEALTH, COVID-19 IS THE SPRINT, EQUITY IS THE MARATHON 12 (June 2021), https://www.pih.org/sites/default/files/lc/LT-PHWorkforce_White-Paper-june-2021_06_FINAL.pdf [<https://perma.cc/AAJ3-GWRZ>] (describing how the federal government relied on intermediate organizations to distribute COVID-19 grants under the American Rescue Plan).

³⁴⁴ *But note* West Virginia v. U.S. Dept. of Treasury, 59 F.4th 1124, 1139 (11th Cir. 2023) (holding that the prohibition on states from using ARP funds to offset reductions in tax revenue violated the unconstitutional conditions doctrine).

the form of uncapped tax credits, the scale of resulting investments is likely to dwarf initial budgetary estimates, spanning into the trillions of dollars.³⁴⁵ And these programs are accompanied by ambitions of solving some of our most intractable societal problems: the climate crisis, retrenched racial inequality, the stratification of the American labor market. The task facing policymakers is vast, indeed.

Yet we lack a theory of how to collectively realize this new economy, in a fashion that is durable, effective, and democratic. Neither the traditional doctrines of administrative law, nor empirical accounts of what makes for effective industrial policy, can resolve the fundamentally political questions with which administrators must grapple. American industrial policy will require new organizing principles of statecraft; the only question is which ones will come to pass.

We have argued that one of these principles should be to utilize agency discretion to generate public power. Public power is not a concentration of authority, but a network of reciprocal relations: *administrative power* to derive knowledge and exercise control over production and regulated entities, and *countervailing power* that organizes citizens into associations that can effectively participate in governance and ordering. Industrial policy is a fertile terrain in which to explore these concepts, precisely because procedural neutrality, governmental disclosure, and subsequent litigation cannot be effectively relied upon. But we do not think these concepts limited to industrial policy: our hope is that that they prove a useful model for other forms of administration, as well.

Industrial policy necessarily empowers some actors over others. Subsidizing processing of a particular mineral may make one manufacturing process more cost-competitive over a rival; mandating universal access to a particular service will reduce the price-setting power of its providers. Industrial policy should not only operate on these fields of power as a substantive end, but also through its procedural means. Navigating who has the capacity to influence governance—and on what terms—is an *inevitable* feature of administration. Accordingly, seeking to level these fields of power is not only within the scope of regulatory authority, but central to exercising it effectively. Democracy is not an optional feature of American industrial policy. Its success depends on it.

³⁴⁵ See Josh Saul, *Goldman Sees Biden's Clean-Energy Law Costing US \$1.2 Trillion*, BLOOMBERG (Mar. 23, 2023), <https://www.bloomberg.com/news/articles/2023-03-23/goldman-sees-biden-s-clean-energy-law-costing-us-1-2-trillion#xj4y7vzkg> [<https://perma.cc/SCP7-XLZZ>].