The Need for Corporate Guardrails in U.S. Industrial Policy

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ABSTRACT

U.S. politicians are actively "marketcrafting": the passage of the Bipartisan Infrastructure Law, the CHIPS and Science Act, and the Inflation Reduction Act collectively mark a new moment of robust industrial policy. However, these policies are necessarily layered on top of decades of shareholder primacy in corporate governance, in which corporate and financial leaders have prioritized using corporate profits to increase the wealth of shareholders. The Administration and Congress have an opportunity to use industrial policy to encourage a broader reorientation of U.S. businesses away from extractive shareholder primacy and toward innovation and productivity. This Article examines discrete opportunities within the major policy programs for rule-makers to include corporate guardrails to prevent public funds from flowing mainly to shareholders, to encourage gain-sharing with multiple corporate stakeholders, and to ensure that the public interests embedded in industrial policy are met.

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INTRODUCTION

Private corporations never stand outside the public realm: governments are always shaping markets and the complex web of interactions between households, businesses, and the state.[1] Such "marketcrafting" has, for the last several decades, mainly enabled shareholder primacy, a corporate governance model of decision-making that places maximizing shareholder wealth above other goals.[2] In contrast, in the 2020s, U.S. politicians are actively marketcrafting with economic transformation in mind: the passage of the Bipartisan Infrastructure Law, the CHIPS and Science Act, and the Inflation Reduction Act collectively mark a new moment of robust industrial policy.[3] However, these policies are necessarily layered on top of decades of shareholder primacy in corporate governance, in which corporate and financial leaders have prioritized using corporate profits to increase the wealth of shareholders.

The question at stake in 2023 is whether the market-shaping activities contained in the rollout of the Biden Administration's signature industrial policy initiatives—the Bipartisan Infrastructure Law (BIL), the

1. *See generally* Mariana Mazzucato, *Rethinking the Social Contract Between the State and Business: A New Approach to Industrial Strategy with Conditionalities* (Univ. Coll. London Inst. for Innovation & Pub. Purpose, Working Paper No. 18, 2022), https://www.ucl.ac.uk/bartlett/public-purpose/publications/2022/nov/rethinking-social-contract-between-state-and-business-0 [https://perma.cc/C68A-XC87] [hereinafter Mazzucato, *Social Contract*]; Steven K. Vogel, *The Marketcraft Solution: How the Government Can Reshape Markets to Make Them Work Better—For Everyone*, (NYU L., Working Paper, 2019), https://www.law.nyu.edu/sites/default/files/Vogel%20Steven%20-%20The%20Marketcraft%20Solution.pdf [https://perma.cc/BHW9-TCYA] [hereinafter Vogel, *Marketcraft Solution*].

2. William Lazonick, *Is the Most Unproductive Firm the Foundation of the Most Efficient Economy? Penrosian Learning Confronts the Neoclassical Fallacy*, INT'L REV. OF APPLIED ECON., Mar. 15, 2022.

3. Dani Rodrik, *An Industrial Policy for Good Jobs*, BROOKINGS (Sept. 2022) https://www.brookings.edu/wp-content/uploads/2022/09/20220928_THP_Proposal_Rodrik_GoodJobs.pdf [https://perma.cc/WR8M-U652].

CHIPS and Science Act, and the Inflation Reduction Act (IRA)—will seize the opportunity at hand to move U.S. corporations that benefit from industrial policymaking away from a single-minded focus on share price appreciation at the expense of real innovation and productivity gains. The Biden Administration has been clear that the last forty years of shareholder primacy did not work for the American middle class or U.S. competitiveness; Democratic policymakers have become vocal about the harms of extractive shareholder primacy in recent years. However, immense pressures from financial institutions keep the corporate governance of shareholder primacy in place, such that, for example, companies across sectors with equity traded on open markets spent $6.3 trillion on stock buybacks in the 2010s.[4]

Industrial policymaking should put robust guardrails in place such that public investments create real-world productivity gains. Ultimately, public policymakers should recognize the flaws inherent in shareholder primacy as a theory of how corporations produce and put structural reforms in place to encourage corporate innovation, such as reforming board fiduciary duties, including worker voice in corporate decision-making, and federalizing incorporation.[5] Until then, the opportunity at hand in 2023 is to use the opportunity of trillions of dollars of federal funding flowing to corporations to include meaningful corporate guardrails in industrial policymaking. Industrial policy will be open to populist concerns of corporate giveaways without clear conditions in place. This Article examines discrete opportunities within the major policy programs for rule-makers to include corporate guardrails to prevent public funds from flowing mainly to shareholders, to encourage gain-sharing with multiple corporate stakeholders, and to ensure that the public interests of industrial policymaking are actually met. After reviewing the three key legislative initiatives that have defined industrial policymaking under the Biden Administration, the rest of this Article will focus on the questions of conditionalities in U.S. industrial policymaking.

4. *See* Lenore M. Palladino & William Lazonick, *Regulating Stock Buybacks: The $6.3 Trillion Question*, 34 INT'L REV. APPLIED ECON. 1, 2 (2022).

5. *See also* Lenore M. Palladino, *Economic Policies for Innovative Enterprises: Implementing Multi-Stakeholder Corporate Governance*, 54 REV. RADICAL ECON. POLICIES 5 (2021) [hereinafter Palladino, *Economic Policies*], for an in-depth discussion of recommended structural reforms to corporate and financial law.

I. THE BACKDROP: U.S. SHAREHOLDER PRIMACY AND ITS INTERSECTION WITH INDUSTRIAL POLICY IN THE 2020S

A. The Political Economy of Corporations & The Harms of Shareholder Primacy

In the United States, industries from semiconductors to healthcare run through private companies, which bring together inputs to produce outputs: the goods and services offered for sale in product markets. While the history of U.S. economic growth is a history of innovation in the production process, the dominant neoclassical theory of the business corporation and the dominant model that legally corporate boards must follow—shareholder primacy—is focused on allocating corporate profits to shareholders and does not contain a true theory of innovation.[6] This theory claims that shareholders—those who buy corporate stock and either hold it or trade it—are the most critical stakeholders for corporations and are the only group who should vote on the most important corporate decisions and for whose benefit corporate profits should be distributed.[7]

This framework ignores that corporate productivity improves mainly from workforce contributions, corporate leadership, and state investments.[8] In public markets, shareholders largely trade shares on secondary markets, which means that the purchase of a share of equity from a share-seller does not result in any actual funds going to the corporation if the share-seller is not the corporation itself; the proceeds stay in the hands of the seller of the share.[9] Far from being an anodyne academic theory, the shareholder primacy framework shapes how trillions of dollars of corporate profits flow from corporations to financial institutions and the small group of white, wealthy households who own most corporate equity.[10]

The policy recommendations in the Article are grounded in an alternative political economy of the corporation and innovation. Corporations are innovative because of the collective and cumulative learning over time and the public and collective investments made in their capabilities.[11]

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6. Lazonick, *supra* note 2.

7. *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 312–313 (1976).

8. *See generally* Mazzucato, *Social Contract*, *supra* note 1; Lenore Palladino, *Economic Democracy at Work: Why (and How) Workers Should be Represented on US Corporate Boards*, 1 J.L. & POL. ECON. 373 (2021) [hereinafter Palladino, *Economic Democracy*]; EDITH PENROSE, THE THEORY OF THE GROWTH OF THE FIRM (1959).

9. *See* Lazonick, *supra* note 2, at 23.

10. Lenore M. Palladino, *The Contribution of Shareholder Primacy to the Racial Wealth Gap*, 50 REV. OF BLACK POL. ECON. 1, 2 (2022) [hereinafter Palladino, *Racial Wealth Gap*].

11. WILLIAM LAZONICK & JANG-SUP SHIN, PREDATORY VALUE EXTRACTION: HOW THE LOOTING OF THE BUSINESS ENTERPRISE BECAME THE US NORM AND HOW SUSTAINABLE PROSPERITY CAN BE RESTORED 21–22 (2020).

Theories of corporations as innovative enterprises lay out the social conditions that make innovation possible: the ability for corporate leaders and workers to engage in collective and cumulative learning requires a strong organization, a clear sense of strategy, and financial commitment to take necessary risks.[12] Heterodox economic theories of the firm ground investment decision-making, not in comparisons of marginal prices and marginal revenue, but in the long-term goals that corporations have for survival and dominance of their product markets.[13] The history of innovation is a history of the development of organizational capabilities within large and growing corporations.[14]

Corporations with publicly traded equity face enormous pressure to maximize shareholder value from the financial institutions that are the asset owners and managers of pooled funds, as well as so-called "activist" shareholders who seek short-term profits.[15] As a result of such pressures, corporations spent $6.3 trillion on open-market share repurchases from 2010 to 2019 and are projected to spend $1 trillion in 2022.[16] Shareholder payments— including buybacks and dividends—have been rising for decades, and executive compensation is now completely wrapped up in constantly appreciating share prices.[17] To make these purchases, companies use earnings that they might otherwise invest in innovation, expanding production, or compensating workers.[18] The practice straightforwardly benefits executives and shareholders (especially those who actively sell and trade shares). The increase in companies repurchasing their own stock on the open market is also relatively recent, deregulated just forty years ago.[19] Companies that do not offer their equity for trading on the public markets face similar dynamics as they engage with private equity and venture capital firms.[20]

The orientation of business toward constantly increasing share prices has increased economic inequality, furthered the climate crisis, and harmed corporate investment and innovation.[21] The harms of shareholder

12. *Id.*

13. *See* PENROSE, *supra* note 8, at 24–25.

14. *See generally* Alfred. D. Chandler, *What Is a Firm? A Historical Perspective*, 36 EUR. ECON. REV. 483 (1992).

15. Palladino & Lazonick, *supra* note 4, at 3.

16. *Id.* at 6.

17. Nitzan Shilon, *Stock Buyback Ability to Enhance CEO Compensation: Theory, Evidence, and Policy Implications,* 25 LEWIS & CLARK L. REV. 303 (2021).

18. Lenore M. Palladino, *The $1 Trillion Question: New Approaches to Regulating Stock Buybacks*, 36 YALE J. ON REGUL. BULL. 89, 90 (2019) [hereinafter Palladino, *The $1 Trillion Question*].

19. *Id.* at 100.

20. *See* EILEEN APPELBAUM & ROSEMARY BATT, PRIVATE EQUITY AT WORK: WHEN WALL STREET MANAGES MAIN STREET 31 (2014).

21. Niko Lusiani, *Power Struggle: How Shareholder Primacy In the Electrical Utility Sector Is Holding Back An Affordable and Just Energy Transition*, ROOSEVELT INST. (May 2022),

primacy on corporate reinvestment and innovative capacities are clearly, at least for certain industries, a major driver of the resurgence of industrial policy.[22] Accurately measuring the impact of rising shareholder payments on corporate investment is complicated by rising corporate debt, the impact on corporate finances of the Tax Cuts and Jobs Act (TCJA), and the fact that the foundation of innovation is a financial commitment over time, which cannot be measured in a single balance sheet.[23] Nevertheless, many studies at the aggregate, sectoral, and firm levels have demonstrated a relationship between rising shareholder payments—primarily stock buybacks—and stagnant innovative investment.[24] Analysis at the firm level for publicly traded firms shows a major transition toward shareholder payments and away from net new investment over the last few decades.[25] It is critical for policymakers to reduce the incentives that currently exist for corporate leaders to prioritize financial metrics over sustainable investment and prosperity, especially when their own compensation is linked directly to such metrics.[26]

B. Industrial Policymaking in the Biden Administration

1. Defining Industrial Policy

The Biden Administration is widely credited with ushering in a new economic policymaking paradigm with industrial policy legislation at the core of its successes.[27] In this section, I describe the "marketcrafting" framework, define the industrial policymaking priorities of the Biden Administration, and briefly outline the major legislative vehicles passed in 2021–2022.

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https://rooseveltinstitute.org/wp-content/uploads/2022/05/RI_PowerStruggle_202205.pdf [https://perma.cc/KD7T-J9VE]; Palladino & Lazonick, *supra* note 4.

22. Mazzucato, *Social Contract*, *supra* note 1.

23. Palladino, *Economic Policies*, *supra* note 5; Benjamin Bennett & Zexi Wang, Stock Repurchases and the 2017 Tax Cuts and Jobs Act (June 8, 2021) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3443656 [https://perma.cc/A26X-38G7].

24. *See generally* Leila E. Davis, *Financialization and Investment: A Survey of Empirical Literature*, 31 J. ECON. SURVEYS 1332 (2017).

25. *See* Leila E. Davis & Shane McCormack, *Industrial Stagnation and the Financialization of Nonfinancial Corporations*, 30 REV. EVOLUTIONARY POL. ECON. 1 (2021); Germán Gutiérrez & Thomas Philippon, *Investment-less Growth: An Empirical Investigation*, BROOKINGS PAPERS ON ECON. ACTIVITY, Sept. 2017, at 89.

26. Lenore M. Palladino, *Do Corporate Insiders Use Stock Buybacks for Personal Gain?*, 34 INT'L REV. APPLIED ECON. 152 (2020) [hereinafter Palladino, *Corporate Insiders*]; Shilon, *supra* note 17; Matt Hopkins & William Lazonick, *The Mismeasure of Mammon: Uses and Abuses of Executive Pay Data* 9 (Inst. for New Econ. Thinking, Working Paper No. 49, 2016), https://www.ineteconomics.org/research/research-papers/the-mismeasure-of-mammon-uses-and-abuses-of-executive-pay-data [https://perma.cc/HHH9-JJ6H].

27. Rodrick, *supra* note 3.

a. Market Fundamentalism v. Marketcrafting

"Marketcrafting" is a framework for an approach to the governmental design of "the legal and regulatory infrastructure that makes modern markets work, including everything from corporate governance to financial regulation, labor practices, antitrust policy and intellectual property rights."[28] Marketcrafting is in contrast to the neoliberal market fundamentalism framework, in which there is virtually no role for government beyond basic police powers, which would, under neoliberal theory, enable markets to meet social welfare goals optimally.[29] Market primacy is so dominant that even as the state continuously engaged in marketcrafting, it embedded shareholder primacy and economic inequality as "natural" market outcomes; in other words, in the words of Fred Block, there was a "hidden developmental state."[30] Even the efforts towards productive innovation that the state did engage in were deliberately unrecognized as marketcrafting so as not to contest the "market fundamentalist claim that private sector firms should simply be left alone to respond autonomously and spontaneously to the signals of the marketplace."[31]

Industrial policymaking is a component of marketcrafting, though narrower in its specific focus on prioritizing specific sectors for public investment; one prominent economist defines it as "a policy aimed at particular industries (and firms as their components) to achieve outcomes that are perceived by the state to be efficient for the economy as a whole."[32] An industrial strategy requires clearly defined goals—or what economist Mariana Mazzucato calls "missions"—and the degree to which nations succeed in aligning their manifold policy interventions with clear public-interest goals marks the success or failure of their industrial strategy.[33] The "missions" that policymakers select as north stars, in turn, can be as diverse and varied in ambition as incentivizing vaccine production in a pandemic, achieving an economy-wide clean energy transformation, or eradicating poverty.[34] Ha-Joon Chang and Antonio Andreoni highlight how the institutional structures in place guiding the industrial policymaking process have widely varied historically and are central to successful

28. *See* Vogel, *Marketcraft Solution*, supra note 1, at 2.

29. *See generally* MILTON FRIEDMAN, CAPITALISM AND FREEDOM (40th anniversary ed. 2002).

30. Fred Block, *Swimming Against the Current: The Rise of a Hidden Developmental State in the United States*, 36 POL. & SOC'Y 169 (2008).

31. *Id.* at 170.

32. HA-JOON CHANG, GLOBALISATION, ECONOMIC DEVELOPMENT & THE ROLE OF THE STATE 112 (2003); TODD TUCKER, INDUSTRIAL POLICY AND PLANNING: WHAT IT IS AND HOW TO DO IT BETTER (2019), https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI_Industrial-Policy-and-Planning-201707.pdf [https://perma.cc/T7YX-UKH4].

33. MARIANA MAZZUCATO, MISSION ECONOMY: A MOONSHOT GUIDE TO CHANGING CAPITALISM 105–59 (2021) [hereinafter MAZZUCATO, MISSION ECONOMY].

34. *Id.* at 185–88.

outcomes.[35] They argue this can be credited to organizational capacities to coordinate, the quality of interaction with the private sector, and the availability of critical intermediate inputs and diffusion of learning to the private sector.[36] The conditions placed on private corporations receiving public funds have been central to the success of industrial policy globally; I will turn to outlining specific recommendations for U.S. policymaking in the next section.[37]

b. The New Visibility of Industrial Policymaking in the 2020s

The pandemic era has led to a renewed visibility of and excitement for industrial policymaking in the United States, though energy had started to bubble up globally before the pandemic.[38] For example, the International Monetary Fund released a paper in March 2019 titled "The Return of the Policy that Shall Not Be Named: Principles for Industrial Policy."[39] The Biden Administration, in recognizing that climate change represented a highly lucrative economic opportunity instead of simply a threat, has driven an aggressive focus on how the federal government can hasten the necessary economic transformation and establish the U.S. as a global producer again.[40] While the U.S. always has, in many respects, actively shaped markets even as it proclaimed fidelity to neoliberalism, the Biden Administration and the Democratic Congressional majorities of 2021–2022 made major federal investment in reshaping the entire economy an explicit priority.[41]

"Conditionalities" are related to but distinct from the institutional structure that can best support effective industrial policymaking.[42] Steven Vogel's discussion of the institutional structures in Japan that enabled successful promotion of key sectors shows how key government agencies like the MITI and MOF were crucial for shaping the public-private interactions that led to successful promotion and diffusion of key sectors.[43] In this

35. Antonio Andreoni & Ha-Joon Chang, *The Political Economy of Industrial Policy: Structural Interdependencies, Policy Alignment and Conflict Management*, 48 STRUCTURAL CHANGE & ECON. DYNAMICS 136 (2019).

36. *Id.*

37. Mazzucato, *Social Contract*, *supra* note 1, at 13.

38. Reda Cherif & Fuad Hasanov, *The Return of the Policy That Shall Not Be Named: Principles of Industrial Policy* 63 (Int'l Monetary Fund, Working Paper No. 19/74, 2019), https://www.imf.org/-/media/Files/Publications/WP/2019/WPIEA2019074.ashx [https://perma.cc/NY2Y-XQEJ].

39. *Id.*

40. Lee Harris, *Industrial Policy Without Industrial Unions*, AM. PROSPECT (Sept. 28, 2022), https://prospect.org/labor/industrial-policy-without-industrial-unions/ [https://perma.cc/FDX77Z8U].

41. TUCKER, *supra* note 32.

42. Mazzucato, *Social Contract*, *supra* note 1, at 3.

43. STEVEN K. VOGEL, MARKETCRAFT: HOW GOVERNMENTS MAKE MARKETS WORK 80 (2018).

Article, because the focus is on the near-term rollout of industrial policy-making strategies already in motion under certain agencies, I discuss conditionalities that can be put in place through programmatic and contractual means by the government.

The three major industrial policy programs enacted in 2021–2022 include the Bipartisan Infrastructure Law (BIL); the CHIPS and Science Act (the CHIPS Act); and the Inflation Reduction Act (IRA).[44] The BIL (also known as the Infrastructure Investment and Jobs Act) provided a $1.2 trillion public investment into physical infrastructure, including transportation, the electric grid, and high-speed internet.[45] The BIL focuses on physical investments in updating U.S. infrastructure for the 21st century, for example, investing $65 billion into reliable high-speed internet, $66 billion into Amtrak, $7.5 billion for a national network of EV chargers, $65 billion for the clean energy grid, and $90 billion for public transit.[46] The CHIPS and Science Act authorizes the federal government to direct $52 billion in subsidies and tax credits to chip manufacturers fabricating in the United States, aimed squarely at improving U.S. capacity for semiconductor production due to the importance of semiconductors for goods manufacturing and the economy writ large.[47] Semiconductors are essential inputs for products from computers to cars, and the U.S. was the global leader in semiconductor fabrication for several decades after their invention in the 1950s. The IRA was hailed by Democrats as a historic achievement and the most important climate legislation in history, with claims that it would reduce carbon emissions by 40% in 2030 and create one million new jobs in the course of a massive ramp-up of domestic production of renewable energy resources.[48] However, macroeconomists like Servaas Storm argue that the IRA is too small a fiscal stimulus given the

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44. Infrastructure Investment and Jobs Act of 2021, Pub. L. No. 117-58, 135 Stat. 429 (codified as amended in scattered sections of 6, U.S.C., 15 U.S.C., 16, U.S.C., 23 U.S.C., 30 U.S.C, 33 U.S.C, 40 U.S.C., 42 U.S.C., 43 U.S.C., 47 U.S.C., 49 U.S.C.); CHIPS & Science Act of 2022, Pub. L. No. 117-167, 136 Stat. 1366 (codified as amended in scattered sections of 15 U.S.C., 26 U.S.C., 42 U.S.C.); Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (codified as amended in scattered sections of 23 U.S.C., 26 U.S.C., 30 U.S.C., 42 U.S.C., 43 U.S.C.).

45. *See generally* Infrastructure Investment and Jobs Act of 2021, Pub. L. No. 117-58, 135 Stat. 429 (codified as amended in scattered sections of 6, U.S.C., 15 U.S.C., 16, U.S.C., 23 U.S.C., 30 U.S.C, 33 U.S.C, 40 U.S.C., 42 U.S.C., 43 U.S.C., 47 U.S.C., 49 U.S.C.); *Fact Sheet: The Bipartisan Infrastructure Deal*, THE WHITE HOUSE (Nov. 6, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/ [https://perma.cc/N4PV-TK3Z] [hereinafter *Bipartisan Fact Sheet*].

46. *See Bipartisan Fact Sheet*, *supra* note 45.

47. *See id.*

48. BLUEGREEN ALLIANCE, A USER GUIDE TO THE BIPARTISAN INFRASTRUCTURE LAW (BIL): HOW NEW AND EXPANDED FEDERAL PROGRAMS CAN DELIVER GOOD JOBS AND ENVIRONMENTAL BENEFITS 2 (2023), https://www.bluegreenalliance.org/wp-content/uploads/2023/02/BGA-BIL-User-Guide-012723-Update-1.pdf [https://perma.cc/GM6C-JQVT].

complexity of the renewable energy transition,[49] and its reliance on individual-household-targeted price incentives will not work.[50] Regardless of their limitations, these three policies together represent potentially trillions of dollars of federal funds flowing to private corporations.

II. PROPOSALS FOR SPECIFIC CORPORATE GUARDRAILS IN U.S. INDUSTRIAL POLICY

Federal policymakers should put conditions into all public funds made available to private corporations to ensure the productive goals of industrial policymaking are met. "Guardrails," or conditionalities, range from those that limit negative behavior to those that either incentivize or require corporations to engage in gain-sharing and to serve the public interest.[51] This section starts with discussing the possibility of limiting shareholder payments and excessive executive compensation. I then turn to labor conditions requiring or incentivizing decent wages and the right to organize, which have been a mainstay of industrial policymaking and economic development proposals, though the implementation has been uneven. Next, I turn to conditions that would structurally change control dynamics within private companies, including proposals for the government to hold public equity stakes over the long-term (rather than solely in crisis moments) and to encourage worker ownership in the companies receiving public investment. Finally, the particularities of the Defense Production Act (DPA) mean that programs undertaken under its auspices can be explicitly conditioned on companies not practicing shareholder value maximization at the expense of meeting the real goals that the DPA sets out.[52]

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49. Storm writes,

> First, most climate macro-economists agree that a strategy to reduce carbon emissions so as to keep global warming below 1.5°C degrees (with a reasonable degree of probability) would require an annual increase (or reallocation) of investment by around 2 to 2.5% of GDP (for instance, see [Gregor Semieniuk, Lance Taylor, Armon Rezai & Duncan K. Foley, *Plausible Energy Demand Patterns in a Growing Global Economy with Climate Policy*, 11 NATURE CLIMATE CHANGE 313 (2021)]).
>
> For the US, this would mean an increase in investment in renewable energy generation and infrastructure of around $500 billion per year. IRA is budgeting an annual increase in such investment of $37 billion, which is less than one-tenth of what is needed. It is difficult to see how the limited stimulus provided by the IRA is going to lower US emissions by (the expected) forty per cent compared to levels in 2005.

Servaas Storm, *The Inflation Reduction Act (IRA): A Brief Assessment,* INST. FOR NEW ECON. THINKING (Sept. 15, 2022) https://www.ineteconomics.org/perspectives/blog/the-inflation-reduction-act-ira-a-brief-assessment [https://perma.cc/V87Y-L2LP].

50. Storm, *supra* note 49.

51. Mazzucato, *Social Contract*, *supra* note 1, at 4.

52. 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 (2022),

A. Limiting Corporate Extraction

Straightforward policies exist to limit the ability of corporations receiving federal funds to engage in extractive practices that could hurt their focus on innovation and productivity.[53] In this section, I outline specific opportunities in the three major legislative initiatives, along with details about why clear guardrails are so important to ensuring that industrial policy has a chance at success.

1. Limiting Extractive Practices in the Bipartisan Infrastructure Law (BIL)

Passed in November 2021, the Bipartisan Infrastructure Law (BIL) (also referred to as the Infrastructure Investment and Jobs Act, or IIJA) focuses on physical investments in updating U.S. infrastructure for the 21st century.[54] While some of these federal investments go to infrastructure services publicly provisioned by either the federal or state and local governments, many of the investments run through large corporations in telecommunications and utilities.[55] For example, ensuring access to broadband internet service is one component of the BIL that will be channeled through large business corporations.[56] The Biden Administration launched the "Affordable Connectivity Program" to expand access to high-speed broadband internet for U.S. households by subsidizing the costs of high-speed internet to households.[57] The benefit of offsetting the costs for consumers means that while the program can meet the critical goal of affordable internet access, it is also vulnerable to the shareholder primacy orientation of the large Internet Service Provider (ISP) companies that the program necessarily runs through.[58]

The public investment in affordable broadband raises the question about how the major ISPs will utilize the government subsidies that will flow to them from the BIL, as past corporate practices are indicative of future priorities without clear rules reorienting behavior.[59] The ISP

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https://rooseveltinstitute.org/wp-content/uploads/2022/12/RI_ProgressivePreemption_Brief_202212.pdf [https://perma.cc/VQ2K-H9DL].

53. *See* Mazzucato, *Social Contract*, *supra* note 1, at 1.

54. *See generally* Infrastructure Investment and Jobs Act of 2021, Pub. L. No. 117-58, 135 Stat. 429 (codified as amended in scattered sections of 6, U.S.C., 15 U.S.C., 16, U.S.C., 23 U.S.C., 30 U.S.C, 33 U.S.C, 40 U.S.C., 42 U.S.C., 43 U.S.C., 47 U.S.C., 49 U.S.C.).

55. *See* IBISWORLD, INDUSTRY REPORT: INTERNET PROVIDERS IN THE US 45 (2023).

56. *See id.* at 9.

57. *See* 47 C.F.R. § 54 (2023); *Get Internet: Claim Your Affordable Connectivity Program Benefit*, THE WHITE HOUSE, https://www.whitehouse.gov/getinternet/ [https://perma.cc/6S8A-P5SP].

58. *See* IBISWORLD, *supra* note 55, at 45–54.

59. *See generally id.* (discussing in part that government assistance is important to the ISP industry, the regulations impacting the industry, and the financial realities that have affected industry growth).

industry is profitable and growing, taking in $132 billion in annual revenue and $13.2 billion in profits, and is dominated by five large corporations, which accounted for 70% of industry revenue in 2021: AT&T, Comcast, Charter, Verizon, and Lumen.[60] Because of the networked nature of internet service, barriers to entry are extremely high; companies maintain their market power through network dominance.[61]

Despite the growing recognition that high-quality internet access is an essential public utility for U.S. households, large ISP companies act to maximize their own shareholders' wealth in line with the broader corporate governance framework of shareholder primacy.[62] Comcast spent $36.25 billion on stock buybacks over the last decade and authorized an additional $10 billion in 2022.[63] AT&T spent $850 million on stock buybacks from July 1, 2021–June 30, 2022, with the vast majority ($673 million) spent in the second quarter of 2022 after pressure in 2020 from activist investor Elliott Management to have AT&T engage in $4 billion in stock buybacks to raise short-term share prices.[64] Without clear guardrails, dominant ISPs will gain public subsidies with no commitment that they will improve service, invest in innovation, or curb their focus on short-term share price appreciation.

The BIL also makes a $65 billion investment to upgrade the U.S. power grid and lower costs in service of the transition to a zero-emission economy.[65] Just as with investment in broadband, the Biden Administration's investments will work through a mix of public and private utilities that currently provide power to the nation's households and businesses: private companies that offer publicly traded securities provide electricity to three-quarters of U.S. households.[66] According to recent research by Niko Lusiani, the thirty-nine publicly listed electric utilities spent 86 % of their earnings on shareholder payments in the last decade, mainly in dividends, totaling $250 billion.[67] The intensity of shareholder payments has increased in the last decade, as companies increased annual shareholder

60. *See id.* at 43.

61. *See id.* at 33–36.

62. Assemb. Bill A7412, 2021–2022 Leg. Sess. (N.Y. 2021).

63. Ry Marcattilio-McCracken, *Stock Buybacks Remind Us That Monopoly ISPs Work for Shareholders, Not Subscribers*, INST. FOR LOC. SELF-RELIANCE (Apr. 7, 2022), https://ilsr.org/stock-buybacks-remind-us-that-monopoly-isps-work-for-shareholders-not-subscribers/ [https://perma.cc/P96F-DTX3].

64. Linda Hardesty, *AT&T Decides Now's Not a Good Time for Share Buybacks*, FIERCE WIRELESS (Mar. 20, 2020), https://www.fiercewireless.com/operators/at-t-decides-now-s-not-a-good-time-for-share-buybacks [https://perma.cc/HDP7-RSWC].

65. *Bipartisan Infrastructure Law*, ENERGY.GOV, https://www.energy.gov/gdo/bipartisan-infrastructure-law#:~:text=For%20the%20next%20five%20years,%2C%20Demonstration%2C%20and%20Deployment%20programs. [https://perma.cc/U4EV-RC27].

66. *See generally* Lusiani, *supra* note 21.

67. *Id.* at 1.

payments by 65 %, including a 10 % increase between 2019 and 2020. Meanwhile, electricity is expensive: the price of electricity rose 4.3 % in 2021 and was up 15 % in key states like Florida and New York.[68] How the $65 billion public investment will be protected from being used to maximize shareholder payments remains to be seen.

2. Limiting Extractive Practices in the CHIPS and Science Act

The semiconductor industry—companies that design and fabricate semiconductors, transistors, and integrated circuits—is a prime example of a sector that focused on shareholder payments while investment in innovation slowed.[69] The largest semiconductor companies—Intel, IBM, Qualcomm, Texas Instruments, and Broadcom—spent 71% of their net income on stock buybacks alone from 2011–2020, totaling $249 billion, nearly $200 billion more than the federal subsidies proposed in the CHIPS Act.[70] Intel, once the leader in semiconductor production, spent 100% of its net income on shareholder payments from 2011–2015, which, as Bill Lazonick and Matt Hopkins put it, resulted in "Intel's failure in organizational integration [that] lies in the financialized character of strategic control within the company."[71] Intel CEO Bob Swan, who led the company from 2016–2021, raised buybacks 186% compared to his predecessor.[72] However, in a sign of a reorientation towards productive investment inside the business community, Intel's current CEO Pat Gelsinger declared upon taking over that the company would "not be anywhere near as focused on buybacks going forward as we have in the past."[73] While it is encouraging that Gelsinger announced this shift in focus, there is still a need for more robust guardrails to be put in place by industrial policymakers to ensure that the focus on investment is durable.

The Commerce Department has been clear from the passage of the CHIPS and Science Act (the CHIPS Act) that CHIPS funds should not create windfalls for the companies that receive them.[74] The 52 billion dollars of CHIPS Act funds cannot be used for stock buybacks, but money is

68. *Id.* at 4.

69. William Lazonick & Matt Hopkins, *Why the CHIPS Are Down: Stock Buybacks and Subsidies in the U.S. Semiconductor Industry* 9 (Inst. for New Econ. Thinking, Working Paper No. 165, 2021), https://www.ineteconomics.org/research/research-papers/why-the-chips-are-down-stock-buybacks-and-subsidies-in-the-u-s-semiconductor-industry [https://perma.cc/7P3K-BAHA].

70. *Id.* at 1.

71. *Id.* at 9.

72. *Id.* at 10.

73. *Intel Will 'Focus' Less on Buying Back Company Stock—CEO*, REUTERS (May 2, 2021), https://www.reuters.com/business/finance/intel-will-focus-less-buying-back-company-stock-ceo-2021-0502/#:~:text=%22We%20will%20not%20be%20anywhere,to%20air%20on%20Sunday%20night. [https://perma.cc/S6V5-TRKT].

74. CHIPS and Science Act, H.R. 4346, 117th Cong. (2022) (enacted).

fungible: companies were permitted under the statute to use any other available funds for stock buybacks.[75] That means the details of the conditions put in place are important: the CHIPS Program Office is currently in the middle of the rulemaking process, in which the law's intention to preference companies which commit not to engage in stock buybacks with non-CHIPS funds must be translated into specific and actionable rules.[76] Current Securities and Exchange Commission (SEC) regulations permit virtually unlimited stock buybacks.[77] Private companies receiving a major infusion of public funds to further their "research and development, science and technology, and the workforce of the future to keep the United States the leader in the industries of tomorrow" should not be focused on manipulating their short-term share prices after receiving such public support due simply to the fact that innovation is a long-term and risky process with no certainty of outcomes.[78]

The CHIPS Program Office's October 2022 Request for Information asked for feedback on what should be the specific terms of commitments by CHIPS grantees to not engage in stock buybacks.[79] The Department of Commerce should grant preferences to companies that restrict buybacks for a ten-year period, as innovation is a long-term and risky process with no certainty of outcomes.[80] The CHIPS Act directly included ten-year restrictions on investments in China to meet reshoring goals of establishing a strong semiconductor industry in the United States.[81] A ten-year limit on stock buybacks is equally necessary to resist the immense pressure coming from the financial sector for shareholder payments.[82]

Further restrictions are necessary to make sure that the personal incentives of leading corporate decision-makers align with innovation and productivity rather than personal gain.[83] Corporate insiders (defined as corporate management and board members) can legally take advantage of

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75. *See id.*

76. NAT'L INST. FOR STANDARDS & TECH., CHIPS FOR AMERICA FUNDING OPPORTUNITY—COMMERCIAL FABRICATION FACILITIES: FACT SHEET—PROTECTING U.S. TAXPAYERS (2023), https://www.nist.gov/system/files/documents/2023/02/28/CHIPS_NOFO-1_Protecting_US_Taxpayers_Fact_Sheet_0.pdf [https://perma.cc/LM9U-PFH3] [hereinafter FACT SHEET].

77. Palladino, *$1 Trillion Question*, *supra* note 18.

78. *Fact Sheet: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China*, THE WHITE HOUSE (Aug. 9, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/ [https://perma.cc/G8J6-FLE2].

79. *See* Dep't of Com., Nat'l Inst. of Standards & Tech., Notice for Comments on the Implementation of the CHIPS Incentives Program, 87 Fed. Reg. 61570 (Oct. 12, 2022).

80. LAZONICK & SHIN, *supra* note 11.

81. CHIPS and Science Act, H.R. 4346, 117th Cong. (2022) (enacted).

82. Comment Letter from Lenore Palladino, Assistant Prof. of Econ. & Pub. Pol'y. on FR Doc #2022-22158, (Nov. 16. 2022) (on file with regulations.gov).

83. Palladino, *Corporate Insiders*, *supra* note 26, at 157.

the near-total lack of regulations on open-market share repurchases and sell their own personal shareholdings to benefit from stock buyback-induced share price appreciation before such activity is disclosed to shareholders.[84] Industrial policymaking guidelines should put in place the kinds of common-sense restrictions on insider transactions that use stock buybacks for personal executive gain that the SEC recognized were a problem back in the 1970s.[85] Overall, though, the CHIPS Act implementation so far has demonstrated a tangible commitment to ensuring that public funds are used by corporations in service of real productive gains through its clear focus on limiting stock buybacks and promoting upside gain-sharing by corporations who receive public investment.[86]

Corporate insiders can sell their personal shares for personal gain after they conduct stock buybacks using corporate funds and when such activity is disclosed to the public.[87] Although this behavior sounds like insider trading because corporate insiders know how stock buybacks are raising corporate stock prices before such information is disclosed, it is currently legal under SEC Rule 10b-18 (17 CFR §240.10b-18).[88] Generally, the Securities and Exchange Commission should promulgate rules so that corporate insiders should not be able to sell their own personal shareholdings for at least several years after any stock buyback activity is allowed.[89] This will ensure that when the public invests in a private company to improve the production of semiconductors, executives are focused on that goal rather than short-term financial practices for self-enrichment.

3. Limiting Extractive Practices in the Inflation Reduction Act

The Inflation Reduction Act (IRA) is the Biden Administration's signature industrial policy to achieve economic transformation towards a clean energy economy.[90] The climate-related purpose of the IRA is to address the United States' "energy and climate crisis by adopting common sense solutions through strategic and historic investments that allow us to decarbonize while ensuring American energy is affordable, reliable, clean and secure."[91] The IRA aims to achieve these goals by encouraging

84. *Id.*

85. Palladino, *The $1 Trillion Question*, *supra* note 18, at 98.

86. FACT SHEET, *supra* note 76, at 1.

87. Palladino, *Corporate Insiders*, *supra* note 26, at 154.

88. *Id.* at 157; 17 C.F.R § 240.10b-18 (1992).

89. Palladino, *Corporate Insiders*, *supra* note 26, at 169.

90. Memorandum from Will Dobbs-Allsopp, Lenore Palladino & Reed Shaw on Limiting Stock Buybacks Among Recipients of Inflation Reduction Act Funds on behalf of Governing for Impact 3 (Dec. 2020) (on file with Governing for Impact).

91. *Id.* at 5.

innovative and significant advances in green technology.[92] However, the IRA's use of tax credits rather than direct loans or grants for much of its funding makes including restrictions more challenging from an enforcement perspective, though just as critical.[93] Agencies that are distributing funds under the law, such as the Department of Energy or the USDA, have discretion in how they prioritize applications from companies applying for grants in cases where the grant programs do not have a statutory formula—which the IRA does not, so long as the conditions set out are in line with the purpose of the law.[94]

One agency that will play a key role in providing direct funding to companies using IRA funds is the Department of Energy. Section 50142 of the IRA appropriates $3 billion to the Department of Energy to issue direct loans under §136(d) of the Energy Independence and Security Act of 2007.[95] The loans are intended for

> reequipping, expanding, or establishing a manufacturing facility in the United States to produce, or for engineering integration performed in the United States of, advanced technology vehicles [as defined in 42 U.S.C. § 17013(a)(1)] . . . only if such advanced technology vehicles emit, under any possible operational mode or condition, low or zero exhaust emissions of greenhouse gases.[96]

Following this authorization, the Department of Energy should preference corporations seeking loans that commit to not conducting stock buybacks over the life of the loan—or at least commit to maintaining them below certain pre-defined limits—because this creates the risk that federal funds could be used to displace pre-planned investment projects that used private funds, while such funds are now used for stock buybacks. This would be in direct contravention of the purpose of the IRA.[97] Other agencies engaged in grantmaking can use the same approach, given the overall productive purposes of the IRA.[98] As in the CHIPS Act, once loans are granted, there remains the question of what would keep companies from reneging on their commitments, both in terms of their commitments to not engage in practices like stock buybacks, excessive executive compensation, and (perhaps most consequentially considering) to actually take the long-term investments necessary.[99] While clawback mechanisms (i.e.,

92. *Id.* at 3.

93. *Id.*

94. *See id.* at 5–6.

95. Inflation Reduction Act of 2022, § 50142, Pub. L. No. 117-169, 136 Stat. 1818, 2044; Energy Independence and Security Act of 2007, § 136(d), Pub. L. No-110-140, 121 Stat. 1492.

96. Inflation Reduction Act of 2022, § 50142, Pub. L. No. 117-169, 136 Stat. 1818, 2044.

97. Memorandum from Dobbs-Allsop, Palladino & Shaw, *supra* note 90, at 3.

98. *Id.*

99. *Id.* at 6.

enabling the government to recoup funds if the terms of the agreement are unmet) may be difficult for conditional promises, companies that violate their commitments know that such behavior will be part of future federal funding evaluations.

B. Labor Requirements

Another critical area for conditions in industrial policy is labor requirements, as one of the express reasons policymakers engage in industrial policy is to support 'good jobs,' though economic transitions create risks for high-road employment.[100] The Biden Administration recognized early on that

> [T]he U.S. government has not adopted a robust strategy to encourage the innovation and deployment of clean energy or to support U.S. workers and communities through the energy transition. Absent such a strategy, workers could be hit by the dual negative effects of declining jobs in high-carbon industries alongside too few new domestic jobs in the emerging carbon-free industries of the future.[101]

Public investments should contain project labor and prevailing wage agreements, where appropriate, which are a staple of local and municipal economic development policymaking.[102] An explicit policy of non-interference with respect to workers' rights to freedom of association[103] should be a clear commitment made by any company receiving public funds, whether loan or grant.[104] Rick McGahey makes the point as well that because labor rights range so widely in the U.S. (over half of states have laws that prohibit closed-shop unionization), federal industrial policy dollars can mean that jobs are created in states without protections for unions and workers' rights if explicit federal rules do not require companies to adhere

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100. *The Good Jobs Initiative: Department of Commerce and Department of Labor Good Jobs Principles*, U.S. DEP'T OF LAB., https://www.dol.gov/general/good-jobs/principles [https://perma.cc/Z9JL-X282].

101. COUNCIL OF ECON. ADVISERS, INNOVATION, INVESTMENT, AND INCLUSION: ACCELERATING THE ENERGY TRANSITION AND CREATING GOOD JOBS 3 (2021).

102. Lenore Palladino, *Why Biden's New Industrial Policy Won't Work Without Reforms*, BOS. REV. (Sept. 22, 2022), https://www.bostonreview.net/articles/why-bidens-new-industrial-policy-wont-work/ [https://perma.cc/EA6E-G48N].

103. *See generally About Clean Slate for Worker Power*, CLEAN SLATE FOR WORKER POWER, https://www.cleanslateworkerpower.org/about [https://perma.cc/PN3D-L727]; Brishen Rogers, *Can Labor Law Reform Encourage Robust Economic Democracy?*, *in* CAMBRIDGE HANDBOOK OF LAB. L. REFORM 327 (Richard Bales & Charlotte Garden eds., 2019) (discussing how U.S. labor law itself does not go far enough in protecting worker rights to freedom of association, and thus, commitments to comply beyond the letter of the law—along the lines of International Labor Organization standards—are essential).

104. Teresa Ghilarducci & Rick McGahey, *What About Workers?*, BOS. REV. (Sept. 15, 2021), https://www.bostonreview.net/forum_response/what-about-workers/ [https://perma.cc/QL9T-RJ5G].

to higher standards.[105] Notably, conditionalities that started in the IRA to have a higher tax credit incentive for electric vehicles assembled at unionized facilities did not make it through the legislative process.[106] Some of the tax credits do have prevailing wage standards attached to them, though enforcement will then rely on the IRS rather than the Department of Labor.[107]

Policymakers can also experiment with new approaches to incentivize worker voices inside companies. While the National Labor Relations Act contains important provisions to preserve workers' rights to collective bargaining free from "company unionism," U.S. labor law does permit labor-management committees formed for health and safety that would otherwise be impermissible under NLRA §8(a)(2). Several states require a set of employers to create safety and health committees (SHCs) that include management and employee representatives.[108] If the establishment of joint SHCs was a requirement for federal loans and grants, and the conditions for the committees were well-specified in the contracts, it is plausible that it would not run afoul of §8(a)(2) because employers would not have unlawful control over the committees, which is the focus of the prohibition of employer-dominated organizations under the NLRA. (Palladino 2021a). Such a requirement could strengthen the potential for public funds supporting resilient workplaces in the face of current and future public health crises.

C. Public Equity Stakes

A public financial investment in a private company could be accompanied by a public equity stake with rights in corporate governance, just as such a financial investment does for private financiers. Public equity stakes could be structured such that the federal government receives a variable financial return on an investment; could enable involvement in governance, including the ability to veto certain kinds of company actions; or could be accompanied by both economic and governance rights.[109] Public equity stakes have been used in moments of crisis, though the purpose, in that case, is not for the government to benefit from its investment but to sell the stake back to the company as quickly as possible.[110] For example,

105. *Id.*

106. Harris, *supra* note 40.

107. *Id.*

108. Wilma B. Liebman, *Does Federal Labor Law Preemption Doctrine Allow Experiments With Social Dialogue?*, HARV. L. & POL'Y REV., Sept. 2017, at 16.

109. *See generally*, Steven M. Davidoff, *Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis*, 95 MINN. L. REV. 1733 (2017) (describing the equity stakes that the federal government took in banks and auto companies during the Great Financial Crisis).

110. *Id.* at 1757.

the federal government spent $50 billion on a 61% equity stake in General Motors (GM) in 2009 to keep the automaker alive after its bankruptcy. The Treasury Department began selling back its shares in 2010, culminating in 2013. The result was a $11.2 billion public loss because of the structure of the exit, though this does not account for the public benefits from the 1.5 million jobs saved (between GM and Chrysler).[111]

Public equity stakes could be tied to the scale of financial commitment or could be established through "Golden Shares," which are specific types of equity with specified governance authority.[112] Golden shares are not common in the United States, though they are not prohibited under Delaware corporate law.[113] Golden shares can be established in the private sector to maintain the pro-social character of a corporation.[114] Professor Saule Omarova has proposed golden shares in the context of the National Investment Authority (NIA).[115] If issued through congressional authorization as part of the NIA for critical sectors or as part of specific public support packages for the private sector, the government could "receive and hold, on a permanent basis, a special 'golden share' in each such firm."[116] Omarova distinguishes between a passive monitoring role in 'normal' situations and crisis situations, specifically triggered, in which the golden share would grant its holder—in her proposal, the NIA itself—control over certain kinds of corporate transactions, all with a public interest orientation.[117] The key question of public equity stakes is what role the stakeholder would play in corporate governance decisions. What fiduciary duty standards should guide the decisions of the public holder of a controlling or non-controlling equity stake in a private corporation? There is also the question of how a public equity stake should be situated institutionally within the federal government. Further research is required to think through the policy opportunities and risks inherent in public equity stakes.

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111. Eric Beech, *U.S. Government Says It Lost $11.2 billion on GM Bailout*, REUTERS (Apr. 30, 2014), https://www.reuters.com/article/us-autos-gm-treasury/u-s-government-says-it-lost-11-2-billion-on-gm-bailout-idUSBREA3T0MR20140430 [https://perma.cc/S7U6-DWVN].

112. SAULE OMAROVA, NATIONAL INVESTMENT AUTHORITY: AN INSTITUTIONAL BLUEPRINT 45 (2022), https://cdn.sanity.io/files/9xbysn2u/production/9a083cbad430cbb728b1f8dab77b6f88b44e35a5.pdf [https://perma.cc/D5NA-LJHE] [hereinafter OMARVOA, BLUEPRINT].

113. *Id.* at 46.

114. *Id.* at 45–46.

115. The National Investment Authority is a proposal from Saule Omarova to restructure the ability of private financial institutions to invest in public infrastructure in ways that serve the public interest. *See* OMAROVA, BLUEPRINT, *supra* note 112, at 4.

116. Saule T. Omarova, *Why We Need a National Investment Authority* 4 (Cornell Legal Studies, Research Paper No. 20-34, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3566462 [https://perma.cc/45CG-TJQF] [hereinafter Omarova, *Why We Need a National Investment Authority*].

117. *See* Omarova, *Why We Need a National Investment Authority*, *supra* note 116; OMAROVA, BLUEPRINT, *supra* note 112.

D. Worker Gain-Sharing and Employee Ownership

Employee ownership of businesses, more common in the United States than many think, shifts the shareholder primacy paradigm and enables businesses to run with the long-term interests of improving productivity and shared prosperity.[118] Joseph Blasi, Douglas Kruse, and Richard Freeman noted "four main reasons for interest in employee ownership and profit sharing—reducing economic inequality, improving workplace performance, enhancing firm survival and employment stability and creating more harmonious workplaces with greater corporate transparency and increased worker involvement."[119] Such employee ownership schemes are more prevalent than many Americans realize, including a range of profit and gain-sharing programs, stock options, and employee stock ownership programs.[120] In 2008, 45% of employees in the for-profit private sector reported participating in a shared capitalism program.[121] By 2014, 19.5% of US workers owned company stock, with 7.2% owning stock options.[122] Employee Stock Ownership Plans (ESOPs) also continue to grow—Kurtulus and Kruse note that the percentage of the private-sector workforce participating in ESOPs grew from 6.2 to 8.7 % from 1999 to 2010.[123] According to the National Center for Employee Ownership, a wide variety of public companies in the S&P 500 currently have some form of employee ownership.[124] The key to sharing ownership that improves wealth for internal and external shareholders is to ensure that ownership is linked to a corporate culture that improves overall productivity. If programs are constructed that way, employee ownership can contribute to a sense of common purpose, resulting in higher collective effort.[125]

Public policy has long been necessary to support employee ownership in the U.S., as employee-owned businesses face skepticism from

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118. *See generally* JOSEPH BLASI, DOUGLAS KRUSE & RICHARD FREEMAN, THE CITIZEN'S SHARE: PUTTING OWNERSHIP BACK INTO DEMOCRACY (2013) [hereinafter BLASI, KRUSE & FREEMAN, CITIZEN'S SHARE].

119. Joseph Blasi, Douglas Kruse & Richard Freeman, *Broad-Based Employee Stock Ownership and Profit Sharing*, 1 J. PARTICIPATION & EMP. OWNERSHIP 38, 40 (2018).

120. BLASI, KRUSE & FREEMAN, CITIZEN'S SHARE, *supra* note 118, at 58.

121. Joseph Blasi, Richard Freeman, Chris Mackin, & Douglas Kruse, *Creating a Bigger Pie? The Effects of Employee Ownership, Profit Sharing, and Stock Options on Workplace Performance* 5 (Nat'l Bureau of Econ. Rsch., Working Paper No. 14320, 2008).

122. Fidan A. Kurtulus & Douglas Kruse, *An Empirical Analysis of the Relationship Between Employee Ownership and Employment Stability in the U.S.: 1999–2011*, 56 BRIT. J. INDUS. RELS. 245 (2017).

123. *Id.* at 245–91.

124. *See Employee Ownership by the Numbers*, NAT'L CTR. FOR EMP. OWNERSHIP (Feb. 2023), https://www.nceo.org/articles/employee-ownership-by-the-numbers#3 [https://perma.cc/2BL8-WZSF].

125. *See* Harry M. Markowitz, Joseph R. Blasi & Douglas L. Kruse, *Employee Stock Ownership and Diversification*, 175 ANNALS OPERATION RSCH. 95, 96–97 (2010).

traditional corporate financial institutions. The CHIPS and Science Act had specific provisions to support worker ownership as a key economic development strategy.[126] The specific elements of the CHIPS Act centered around enabling worker ownership support entities to partner in the Regional Technology and Innovation Hub Program and the Regional Clean Energy Innovation Program.[127] Industrial policy could condition loans or grants by requiring that upside gains be shared with workers through partial Employee Stock Ownership Programs or other forms of employee equity ownership.[128] Funds could also incentivize worker ownership and gain-sharing along the same lines that labor conditionalities are incentivized by offering better loan terms, larger grants, or utilizing other financial mechanisms to increase the gains for corporations engaged in such practices.

E. Progressive Preemption in the Defense Production Act

Perhaps the most assertive form of conditionalities the federal government can impose on private corporations is possible when the executive branch invokes the DPA.[129] The DPA's Title III authorities enable the executive branch to undertake projects for national security purposes, including maximizing domestic energy production.[130] In 2009, clear mandates were added to maximize the domestic supply of renewable energy and permit the government to engage in direct public production of energy.[131] The IRA provided appropriations such that the executive branch could directly fund projects using its authorities under the DPA.[132] Notably for the discussion of conditionalities, Title III projects that relate to advance market commitments made by the government can explicitly be advanced

126. *See* CHIPS and Science Act of 2022 § 10622(c), 42 U.S.C. § 17375.

127. *Id.*

128. Lenore M. Palladino, *The Potential Benefits of Employee Equity Funds in the United States*, 5 J. PARTICIPATION & EMP. OWNERSHIP 56, 70–71 (2021) [hereinafter Palladino, *Potential Benefits*].

129. *See generally* Dodge, Michaels, Palladino & Tucker, *supra* note 52.

130. *See* Defense Production Act of 1950 §101, 50 U.S.C. § 4511(a) (giving the Executive authorization to prioritize contracts necessary to promote the national defense); Defense Production Act of 1950 § 303, 50 U.S.C. 4533 (giving the President broad discretion to create, maintain, protect, expand, or restore industrial base capabilities deemed essential for national defense); Defense Production Act of 1950 § 702, 50 U.S.C. § 4552 (14) (broadly defining national defense such that the President has wide latitude to apply the DPA in such areas).

131. *See* Defense Production Act of 1950 § 702, 50 U.S.C. § 4552(14). Subsection 14 defines national defense as

> [P]rograms for military and energy production or construction, military or critical infrastructure assistance to any foreign nation, homeland security, stockpiling, space, and any directly related activity. Such term includes emergency preparedness activities conducted pursuant to title VI of The Robert T. Stafford Disaster Relief and Emergency Assistance Act [42 U.S.C. 5195 et seq.] and critical infrastructure protection and restoration.

Id. This gives the government broad license to produce energy in the name of 'national defense.'

132. Dodge, Michaels, Palladino & Tucker, *supra* note 52, at 13.

"without regard to the limitations of existing law," which includes the limits normally in place in federal, state, and local law, as long as the limits are overridden in the interest of expediting clean energy production.[133] As authors, Joel Dodge, Joel Michaels, Lenore Palladino, and Todd Tucker explain,

> Advanced market commitments, in particular, are not simply a tool to secure key resources for the government in the future but to encourage firms to invest in their capacity to supply such resources in the medium term to a wide range of purchasers. But while the government may want recipients of DPA funds to use the money for capital expenditures, firms may have other objectives in mind.[134]

The statutory text of the DPA contains explicit defense against federal and state antitrust violations for entities that coordinate to implement DPA orders, and case law in at least one instance found that DPA projects supersede contrary state law.[135] DPA advance market commitments under Title III could preempt state corporate law and federal securities laws that prioritize short-term shareholder gains over long-term investments to ensure that such public investments are carried out in the public interest.[136] Under the DPA, the federal government could prevent companies from paying dividends and could preempt the Security and Exchange Commission's (SEC) "safe harbor" for stock buybacks.[137] The SEC regulation governing stock buybacks puts putative limits in place for the volume and timing of stock buybacks but explicitly removes liability even if companies exceed the already-excessive limits. The DPA could preempt this regulation so that companies engaged in DPA-related production could not engage in virtually unlimited stock buybacks.[138] While such preemption would not explicitly make stock buybacks impermissible, it would make companies engaging in a high volume potentially liable for market manipulation under the securities laws.[139] Given the questionable economic value of stock buybacks to begin with, inducing companies to preemptively limit their use of such transactions would be a positive development.

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133. *See* Defense Production Act of 1950 § 303, 50 U.S.C. § 4533(b).

134. Dodge, Michaels, Palladino & Tucker, *supra* note 52, at 13.

135. In one case, the government successfully invoked the DPA's "without regard" language to argue that DPA projects supersede contrary state law. The US Court of Appeals for the Eighth Circuit agreed, recognizing that because the government entered into a contract with a mining company through the DPA, its "rights under its contract lawfully entered into can not be affected or limited by provisions of state law." United States v. Latrobe Const. Co., 246 F.2d 357, 360 (8th Cir. 1957), *cert denied*, 355 U.S. 890 (1957).

136. Dodge, Michaels, Palladino & Tucker, *supra* note 52, at 14.

137. *Id.*

138. *Id.*

139. *Id.*

CONCLUSION

For industrial policy to meet its goals in the 2020s, all public financial commitments should include substantive guardrails that corporations must adhere to—otherwise, such public funding sits in uneasy tension with the incentives for shareholder primacy. The most straightforward approach to implement clear guardrails is to include them as specifically as possible in legislative text, as was done with the CARES Act's prohibition on companies engaging in shareholder payments while receiving public support.[140] However, legislation is generally written in broad enabling language that then delegates authority to relevant governmental agencies to carry out the purpose of the statute.[141] The administrative state will play an important role in determining what conditions companies and sectors must meet to partner with the government. The terms and conditions of any given financing agreement will be substantially more specific than what is laid out in enabling legislation.[142]

One opportunity for relevant administrative branches of government to explore is crafting loan, loan guarantee, and grant program applications that specify preferences allowing for limited funding that can be given to companies that agree to the substantive conditions described above in their contracts with the relevant agency. For example, in the CHIPS and Science Act, the Commerce Secretary has the discretion to choose among applicants and to tailor the "amount and funding type for each financial assistance award" under §9902(a)(3)(A) in the public interest.[143] Expressing a preference for business entities that expressly commit to engaging in productive real investment when receiving public funding—not just with those specific public funds, but across the business—clearly supports the intent of industrial policy programs that are meant to strengthen the "economic interest" of the U.S.

Because financially extractive policies are not only in conflict with the public interest but actively divert from the purpose of industrial policy programs like the IIJA, CHIPS and Science Act, and the Inflation Reduction Act, policymakers have the discretion to place conditions in the contracts that businesses agree to. Public investment agreements can include prohibitions on extractive behavior when they are conducting financing under the terms of legislation that broadly provides for supporting productive innovation by U.S. private businesses. Such agreements can also

140. CARES Act § 4003, 15 U.S.C. § 9042(c)(2)(E)-(3)(A)(ii)(I).

141. *See id.*

142. *See* Dobbs-Allsopp, Palladino & Shaw, *supra* note 90, at 9.

143. JOHN F. SARGENT, JR. & KAREN M. SUTTER, CONG. RSCH. SERV., IF12016, SEMICONDUCTORS, CHIPS FOR AMERICA, AND APPROPRIATIONS IN THE U.S. INNOVATION AND COMPETITION ACT 1 (S. 1260) (2022).

include specific steps for monitoring—requiring the submission of financial reports, for example—and for clawbacks if the terms of the agreement are violated. Specifying clear guardrails, including limits on extractive behavior and preferences for companies that include workers and the public in the innovative process, to limit corporate extraction and public benefit will be crucial to ensure that the goals of industrial policy are actually met.