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National Security as a Means to a Commercial End: Call for a New Approach

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ABSTRACT

While corporations do not enjoy unfettered freedom—they are constrained by legal, political, and social requirements and expectations—governments must have legitimate grounds when they compel corporations to act. After investigating the nationwide semiconductor shortage, the U.S. Secretary of Commerce warned that the government might invoke national security to compel semiconductor producers to disclose sensitive business information. The government has also invoked national security to justify extensive tariffs imposed on imported steel and aluminum products, leading to a major trade dispute. Years of neoliberal policy have created a perceived (though not necessarily functional) separation between government and industry. This separation encourages and, to some extent, necessitates the government to invoke the most compelling reasons, such as national security grounds, to justify its interventions with private industry.

This article explains the inherent risks of such national security invocations to corporate freedom and international trade. It presents an alternative approach, under which corporate interests and government industrial policy can be better aligned. The role of government in the economy and private industry must be reconsidered. Adopting a new approach will facilitate a mutually beneficial partnership between government and industry, helping to avoid inappropriate recourse to national security obligations for commercial purposes in domestic and international contexts. This proposed partnership will not be inconsistent with the preservation of corporate autonomy and freedom, but will actually help to preserve these interests when government interventions are inevitable to address national economic issues such as the semiconductor shortage.

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Keywords: Corporate Freedom, International Trade, National Security, Semiconductors, Defense Production Act

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I. INTRODUCTION

On September 24, 2021, the Bureau of Industry and Security (BIS) of the United States Department of Commerce (DOC) issued a Notice

of Request for Public Comments on Risks in the Semiconductor Supply Chain.[1] The Notice cited the "ongoing shortages in the semiconductor product supply chain"[2] that "are having an adverse impact on a wide range of industry sectors."[3] The DOC set forth a number of questions in the Notice and sought responses from "interested parties," including "domestic and foreign semiconductor design firms, semiconductor manufacturers, materials and equipment suppliers, as well as semiconductor intermediate and end-users."[4] The stated purpose of this inquiry was to "accelerat[e] information flow across the various segments of the supply chain, identify[ ] data gaps and bottlenecks in the supply chain, and potential inconsistent demand signals."[5]

The DOC's questions included requests for sensitive business information, such as the technology nodes, semiconductor materials types, and device types that each firm[6] was capable of providing, in addition to annual sales, the firm's top three current customers and the estimated percentage of sales accounted for by each customer, and inventory data.[7] The disclosure of this information would be adverse to the interests of the firm should it be acquired by competitors and clients negotiating the terms of sales, despite the Notice's stipulation that "business proprietary information . . . will not be published and will be protected from disclosure. . . ."[8] "Interested parties" were "invited" to submit the requested information on an ostensibly voluntary basis,[9] but firms were in fact under considerable pressure to provide the information. A comment by DOC Secretary Gina Raimondo illustrates this pressure. Secretary Raimondo warned, "[W]e have other tools in our tool box that require them to give us data. I hope we don't get there. But if we have to we will."[10] Raimondo also privately informed the companies that "the government would mandate information

1. Notice of Request for Public Comments on Risks in the Semiconductor Supply Chain, 86 Fed. Reg. 53,031 (Sept. 24, 2021) [hereinafter Notice].
2. *Id.*
3. *Id.*
4. *Id.*
5. *Id.*
6. The terms "firm," "company," "business," and "corporation" are used interchangeably throughout this article without distinction. The terms "industry" and "private industry" are also used interchangeably, although these terms refer to the composite of firms.
7. Notice, *supra* note 1, at 53,032.
8. The firm is required to indicate that the information submitted is confidential in order to trigger heightened protection against disclosure by the government. *Id.* at 53,032.
9. *Id.*
10. David Shepardson, Stephen Nellis & Alexandra Alper, *White House Prods Companies on Chips Information Request*, REUTERS (Sept. 23, 2021), https://www.reuters.com/technology/white-house-seeks-address-semiconductor-chips-crisis-harming-automakers-2021-09-23/ [https://perma.cc/56YM-FFPR].

sharing if necessary," indicating that some of the business proprietary information could be released.[11]

Notwithstanding the government's legitimate interest in resolving the semiconductor shortage, the pressure that the government has exerted on companies to obtain information raises significant concerns, as such coercive disclosure infringes upon corporate freedom.[12] The DOC has reportedly considered invoking the Defense Production Act (DPA)[13] to enforce data submission. DPA was enacted in 1950, during the Korean War, as part of a broad civil defense and war mobilization effort. It authorizes the President to require the producer of a product impacting national security to release a wide range of product information, such as the information requested by the DOC.[14] Part I of this article discusses the current semiconductor shortage, its impact on national security, and the government's request for information.

Part II examines the applicability of DPA and analyzes how this application infringes on corporate freedom. Corporate management may refuse to meet the government's request for information to fulfill their duties under corporate law. Directors and officers owe their respective corporations fiduciary duties, under which they must act in the interests of the corporation.[15] Thus, directors and officers may arguably be in breach of this duty when they release the information with the knowledge that it will be adverse to their corporate interests. The last section of Part II examines potential legal liabilities for corporate directors and officers. In practice, it will be difficult to hold directors and officers liable when they act under pressure and threat of sanction from the government. However, the issue is still useful to examine; the existence of corporate fiduciary duties may work as a defense for directors and officers who refuse to meet the government's demand for information—especially where the government's legal ground (such as the national security guise considered by the DOC) is dubious.

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11. *Id.*

12. I do not use the term "corporate freedom" to support the maximalist version of corporate freedom, in recognition that corporations are constrained by legal, political, and social requirements and expectations. I also do not refer exclusively to the freedom of corporations to maximize shareholder value. *See, e.g.,* Yong-Shik Lee, *Reconciling Corporate Interests with Broader Social Interests—Pursuit of Corporate Interests Beyond Shareholder Primacy*, 14 WM. & MARY BUS. L. REV. 1 (2022). Corporate freedom includes the freedom of corporations to serve the interests of stakeholders, such as employees, customers, and the community, as well as shareholders.

13. Defense Production Act of 1950, Pub. L. No. 81-774, § 702(d), 64 Stat. 798 (codified as amended at 50 U.S.C. §§ 4501–4568 (2022)).

14. *Id.*; *see also infra* section III.A (exploring how application of DPA in this context infringes on corporate freedom).

15. *See infra* section III.C.

Indeed, invoking national security to justify the government's demand for information is problematic when the government does not clearly articulate the risk to national security, as shown by the DOC's request for information (RFI). National security has also been used to justify the government's intervention with international trade: the U.S. government has recently used the national security argument to justify increasing tariffs on imported steel and aluminum products.[16] The government justified the increased tariffs on a broad assumption that maintaining an adequate level of domestic production of steel and aluminum products is a matter of national security, an argument that the United States hoped would validate its trade measures under the rules of international trade law.[17] On the contrary, these tariff measures have been met with worldwide resistance, and the World Trade Organization (WTO) dispute settlement panel has recently adjudicated the matter (pending appeal).[18] The (mis)use of a national security rationale for an essentially commercial matter creates a substantial risk of government interference with corporate freedom. Part III discusses this risk.

This is not to argue that the government should not play a role in the economy or that corporations should enjoy unfettered freedom from government intervention.[19] The current semiconductor shortage, which, as claimed by the DOC, substantially affects the economy, may justify the government's involvement to improve the critical component shortage and to facilitate cooperation and coordination between government and industry. Despite such needs, whether the government should be allowed to intervene with private businesses in the name of national security, without specifically identifying and articulating risks to national security, is questionable. Part IV discusses alternative industrial policy justifications under which the government may work with industry to address national economic issues and explores the ways in which the government can motivate firms to comply rather than compelling them under the threat of legal sanctions. This type of government engagement requires a shift in approach and a redefinition of the role of government in the economy. Part V draws conclusions.

16. *See infra* section IV.B.
17. *See infra* section IV.B.
18. Panel Report, *United States – Certain Measures on Steel and Aluminium Products*, WTO doc. WT/DS556/R (adopted Dec. 9, 2022) [hereinafter *Panel Report*].
19. *See supra* note 12 (noting that corporations are constrained by legal, political, and social requirements and expectations).

II. SEMICONDUCTOR SHORTAGE AND NATIONAL SECURITY

A. 2021 Semiconductor Shortage

1. Overview

The DOC's request for information (RFI) is predicated on economic difficulties caused by the shortage of semiconductors. A June 2021 Report by the White House[20] highlights the importance of semiconductors:

> The semiconductor-based integrated circuit is the "DNA" of technology and has transformed essentially all segments of the economy, from agriculture and transportation to healthcare, telecommunications, and the Internet. The semiconductor industry is a major engine for U.S. economic growth and job creation. Semiconductors are used in virtually every technology product and underpin state-of-the-art military systems. Semiconductors are an integral part of a consumer's everyday life and can be found in household items such as light switches, garage door openers, and refrigerators, as well as in more complex products such as mobile phones, computers, and automobiles.[21]

The Report also discusses the shortage of semiconductors, which emerged in mid-2020 when automakers warned about the decreasing availability of semiconductors used in automobiles and potential disruptions to vehicle production.[22] The shortage impacted the automobile industry in the second half of 2020 when vehicle demand recovered from the adverse impact of the pandemic; vehicle production halted while manufacturers waited for the parts that use semiconductors, and automakers could not maintain production lines.[23] The shortage cost the automobile industry an estimated $110 billion in 2021, resulting in the production of nearly four million fewer vehicles than previously forecast.[24] The semiconductor shortage also influenced other industries: as many as 169 U.S. industries were directly affected by the shortage,[25] causing substantial economic problems across the board. The shortage is expected to "stretch into 2023."[26]

Secretary Raimondo expressed concern about the "ripple effects" of the shortage,[27] observing that the bottlenecks in the semiconductor

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20. THE WHITE HOUSE, BUILDING RESILIENT SUPPLY CHAINS, REVITALIZING AMERICAN MANUFACTURING, AND FOSTERING BROAD-BASED GROWTH (June 2021), https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf [https://perma.cc/VXX9-QSLQ] [hereinafter REPORT].
21. *Id.* at 22.
22. *Id.* at 25.
23. *Id.* at 26.
24. *Id.*
25. *Id.*
26. Benjamin Preston, *Global Chip Shortage Makes It Tough to Buy Certain Cars*, CONSUMER REPS. (June 13, 2022), https://www.consumerreports.org/buying-a-car/global-chip-shortage-makes-it-tough-to-buy-certain-cars-a8160576456/ [https://perma.cc/RC66-JJND].
27. Gina M. Raimondo, *Secretary Raimondo Announces Results of Request for Information on Semiconductor Supply Chain*, U.S. DEP'T OF COM. (Jan. 25, 2022),

industry that are largely responsible for the shortage present several obstacles to rebounding from it.[28] Finally, the ongoing war in Ukraine, a country that supplies about sixty percent of the world's neon, is disrupting the supply of neon gas that is used extensively in the semiconductor manufacturing process.[29] The situation in Ukraine indicates that the shortage is likely to continue, and it is not certain when and how the shortage will end. The RFI's results, discussed in section C below, confirm this observation.

2. Causes of the Shortage

There are multiple causes for this shortage. The initial disruption was due to major demand shocks from the COVID-19 pandemic. In the second quarter of 2020, at the height of the pandemic-related economic slowdown, auto parts suppliers cancelled orders for chips due to a six-week industry shutdown to mitigate the spread of the pandemic at vehicle and parts manufacturing facilities.[30] Parts suppliers also anticipated a decline in vehicle demand amid the pandemic and accordingly reduced the production of automotive-grade chips for use in vehicles.[31] In fact, automobile sales dropped nearly fifty percent in the early months of the pandemic.[32] When vehicle demand subsequently resurged, these parts suppliers were not ready to resupply chips for the automobile industry, as a part of their production capacities used for automotive chips had been committed for other use.[33] The

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https://www.commerce.gov/news/blog/2022/01/secretary-raimondo-announces-results-request-information-semiconductor-supply#:~:text=Last%20year%2C%20the%20Department%20of,producers%20and%20the%20major%20automakers [https://perma.cc/NAS7-89TP].

28. *Id.*
29. Preston, *supra* note 26.
30. REPORT, *supra* note 20, at 25.
31. *Id.*
32. Ondrej Burkacky, Stephanie Lingemann & Klaus Pototzky, *Coping with the Auto-Semiconductor Shortage: Strategies for Success*, MCKINSEY & CO. (May 27, 2021), https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/coping-with-the-auto-semiconductor-shortage-strategies-for-success [https://perma.cc/PMC5-59NW].
33. *See* REPORT, *supra* note 20, at 26 (describing the difficulties in the recovery of semiconductor production for the automobile industry). According to the Report:

> When auto parts suppliers returned to place orders for chips to meet the unanticipated surge in vehicle demand, semiconductor manufacturers had reportedly already utilized spare capacity to produce chips for electronics devices. Because manufacturing a chip can take up to 26 weeks, and sometimes much longer when supply is tight, production volumes are usually confirmed six months in advance, and it can take months to switch a production line from one type of chip to another. A further complication for the automotive industry is that automotive grade chips can only be produced by qualified producers and they require extensive testing to meet rigorous quality and vehicle safety requirements. These requirements are burdensome—both in time and cost—to the

lockdowns that occurred in Asia, the production hub of semiconductor chips, aggravated the shortage.[34]

The shortage is also the result of structural flaws: the semiconductor industry does not have the capacity to meet increasing demand. According to a McKinsey & Company report, the semiconductor sector was already working at eighty-eight percent of its production capacity in 2020.[35] In addition to the lack of production capacity, short-term planning in the semiconductor industry is a contributing factor to the shortage. The sector is known to practice "just-in-time manufacturing."[36] This type of practice might be useful in minimizing waste, but it cannot maintain adequate supplies when production is disrupted.[37] The recent trade war between the United States and China has also contributed to the ongoing shortage.[38] For the most part, however, this crisis can be traced to the uncertainty caused by the COVID-19 pandemic and how it affected the fragile and underprepared semiconductor manufacturing sector.

B. Impact on National Security

The White House Report highlights the importance of semiconductors to national security. According to the Report:

> [S]emiconductors are essential to national security. Semiconductors enable the development and fielding of advanced weapons systems and control the operation of the nation's critical infrastructure. They are fundamental to the operation of virtually every military system, including communications and navigations systems and complex weapons systems such as those found in the F-35 Joint Strike Fighter.[39]

There is no doubt that semiconductors are an essential element of modern military equipment and devices.[40] The export ban of semicon-

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> semiconductor producers, particularly when compared to the less stringent requirements for the relatively higher-margin chips for consumer good applications.

Id. (footnotes omitted).

34. Burkacky, Lingemann & Pototzky, *supra* note 32. Additionally, a series of accidents have disrupted the production of semiconductors. For example, a fire at a Japanese semiconductor plant that accounts for thirty percent of the market for microcontrollers used in automobiles, a severe drought in Taiwan that strained semiconductor production requiring large amounts of water, and storms in Texas that caused loss of utilities to two major semiconductor manufacturing plants have also aggravated the shortage. REPORT, *supra* note 20, at 26.
35. Burkacky, Lingemann, & Pototzky, *supra* note 32.
36. *Id.*
37. *Id.*
38. Kim Lyons, *US Tightens Trade Restrictions on Chinese Chipmaker SMIC*, THE VERGE (Sept. 26, 2020), https://www.theverge.com/2020/9/26/21457350/us-tightens-trade-restrictions-china-chipmaker-smic [https://perma.cc/YS4A-SSRU].
39. REPORT, *supra* note 20, at 25.
40. In 2017, President Obama's Council of Advisors on Science and Technology (PCAST) also released a report on the security interests associated with the na-

ductors to Russia, on account of its invasion of Ukraine, has reportedly caused Russia's two major tank plants to halt production.[41] Reliance on foreign sources of semiconductors, as shown by the Russian case, may implicate national security. The White House Report sounded alarms over the decreasing share of global semiconductor manufacturing capacity on U.S. soil from 37% to 12% over the last two decades.[42] The Report points out that "U.S. companies, including major fabless semiconductor companies, depend on foreign sources for semiconductors, especially in Asia, creating an obvious supply chain risk."[43]

However, the Report which prompted the RFI does not provide any specific information on U.S. reliance on semiconductor production for military use (as opposed to commercial use) from foreign sources. Without such information, it is difficult to gauge the potential risk should the imports from foreign sources be interrupted. The risk to U.S. interests will vary according to the location of each particular source; for example, semiconductor manufacturers based in South Korea, Taiwan, and Japan may present a lesser degree of risk compared to Chinese manufacturers because South Korea and Japan are military allies of the United States. Taiwan also has a strong interest in maintaining close political relations with the United States for security reasons while there is a degree of political and military tension between the United States and China.[44]

The Report also does not provide any information about whether the current semiconductor shortage has, in fact, caused any disruption in the production of military equipment and devices, including weapons. The Report describes the damage estimate to the automobile industry but does not articulate either a production delay or any other cost to the military; thus, it is not possible to assess whether the current semiconductor shortage requires government action to protect national security.

The broad description of semiconductors' importance to national security alone does not offer justification for such an action. Caution

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tional semiconductor supply. Throughout this report, the availability of semiconductors to U.S. manufacturers is often cited as a critical national security interest and a defense imperative. *See* PCAST, ENSURING LONG-TERM U.S. LEADERSHIP IN SEMICONDUCTORS (2017), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_ensuring_long-term_us_leadership_in_semiconductors.pdf [https://perma.cc/5Q3P-GTT9] [hereinafter PCAST REPORT].

41. Karen Freifeld, *U.S. Official Says Export Curbs on Russia Hit Car Production and Tank Building*, REUTERS (Mar. 30, 2022), https://www.reuters.com/business/us-official-says-export-curbs-russia-hit-car-production-tank-building-2022-03-30/ [https://perma.cc/7LFB-8MGD].
42. REPORT, *supra* note 20, at 22.
43. *Id.*
44. Reflecting this tension, the PCAST Report identifies China's rising influence in this sector as a threat to the availability of semiconductors to U.S. manufacturers. *See* PCAST REPORT, *supra* note 40, at 7–9.

should also be taken against the governmental tendency to impose protective measures to address a commercial issue under the guise of national security. In 1975, for example, the Swedish government attempted to justify import restraints on certain footwear to protect domestic shoe producers with the argument that shoes are essential to soldiers and thus essential to national security.[45]

The United States government has also tried to justify its broad import measures (specifically, tariff increases) on a wide range of imported steel and aluminum products by claiming that such products are essential to national security.[46] In justifying its import measures, the government offered a broad description of the importance of steel and aluminum products to national security but did not specifically explain how its proposed protection of domestic industries would further the goal of protecting national security.[47] The U.S. measures, which will be further discussed in Part III, have been criticized as an attempt to protect the commercial interests of domestic producers by using national security as a pretext.[48] The protection of national security could conceivably involve virtually all categories of products. Accordingly, there is a risk of abuse should the government be allowed to invoke national security grounds, in the absence of legitimate national security concerns, to impose measures on industry in both the domestic and international contexts.

C. Government Request for Information

The Report identifies vulnerabilities in the supply chain of semiconductors; it then calls upon the DOC to address the shortage by partnering with industry to facilitate information flow between semiconductor producers, suppliers, and end-users.[49] The DOC has requested a wide range of information, including product design specifications, sales information, and inventory and stock data[50] from

45. Sweden – Import Restrictions on Certain Footwear, GATT doc. L/4250, at 3 (Nov. 17, 1975).
46. See Yong-Shik Lee, *Three Wrongs Do Not Make a Right: The Conundrum of the US Steel and Aluminum Tariffs*, 18 WORLD TRADE REV. 481, 481–91 (2019).
47. *Id.*
48. *Id.*
49. REPORT, *supra* note 20, at 23.
50. The requested information included: the role of the company in the semiconductor product supply chain; the technology nodes (in nanometers), semiconductor material types, and device types that the firm is capable of providing (design and/or manufacture); any integrated circuits the firm produces—whether fabricated at the firm's own facilities or elsewhere, the primary integrated circuit type, product type, relevant technology nodes (in nanometers), and actuals or estimates of annual sales for the years 2019, 2020, and 2021 based on anticipated end use; the semiconductor products with the largest order backlog; each product's top three current customers and the estimated percentage of that product's sales accounted for by each customer; and product inventory. Notice, *supra* note 1, at 53,032.

"interested parties" including "domestic and foreign semiconductor design firms, semiconductor and microelectronics manufacturers, materials and equipment suppliers, as well as semiconductor product intermediate and end-users."[51] The RFI was made with the "goal of facilitating the flow of information across the various segments of the supply chain, identifying data gaps and bottlenecks in the supply chain, and potential inconsistent demand signals. . . ."[52] The RFI invited all interested parties to provide information but expressed "particular[ ] interest[ ] in obtaining information from foreign and domestic entities that actively participate in the semiconductor product supply chain *at any level*," including "semiconductor design, front end semiconductor wafer fabrication, semiconductor assembly test [sic] and packaging, microelectronics assembly, intermediate and end-users of semiconductors and microelectronics, distributors of such products, as well as entities supporting semiconductor and microelectronics manufacturing as providers of materials and equipment."[53]

Firms have expressed concerns with this RFI. First, although the Notice supposedly "invited" interested parties to submit information on a voluntary basis, firms were under substantial pressure to provide the requested information as reflected by the Secretary of Commerce's remark suggesting that the government had a means to compel firms to comply with its information request.[54] Such pressure may have seemed necessary due to the reluctance of businesses to provide the sensitive business information sought by the RFI.[55] For example, firms such as Apple and Tesla—both major clients of semiconductor manufacturers and purchasers of semiconductor technologies—reportedly do not want producers' client lists to be disclosed, as such information could "be used to identify and compare the performance level as well as market competitiveness of their products."[56] As further discussed in Part II, businesses consider such sensitive information business secrets, disclosure of which is adverse to their business interests.[57]

Some semiconductor producers, particularly those based outside of the United States, are concerned that the RFI may benefit firms based in the United States. These foreign-based firms are wary of the possibility that information they submit to the DOC may be leaked to U.S.-

51. *Id*. at 53,031–32.
52. *Id.* at 53,031.
53. *Id.* at 53,032.
54. Shepardson, Nellis & Alper, *supra* note 10.
55. Notice, *supra* note 1, at 53,032.
56. Shin-young Park, *US Pressures Samsung, Chipmakers to Disclose Key Internal Data*, THE KOREA ECON. DAILY (Sept. 26, 2021), https://www.kedglobal.com/semiconductor-shortages/newsView/ked202109260001 [https://perma.cc/WC4G-HKP9].
57. Notice, *supra* note 1, at 53,032.

based firms, despite the government's assurances that proprietary information will not be published and will be protected from disclosure.[58]

These concerns are not without basis, as there has been a growing partnership between the government and U.S.-based semiconductor producers. One such producer, Intel, has been vocally and aggressively pursuing foundry investment plans in line with the government's initiative to set up a strong global supply chain on U.S. soil.[59] However, even among U.S.-based firms, interests are not aligned with respect to the RFI: some end-users, such as Apple and Tesla, did not want their identities disclosed in the requested client list for the reasons discussed above.

Despite these concerns, several firms provided the requested information. On January 25, 2022, the DOC released the results from the RFI. With Secretary Raimondo's engagement, more than 150 entities from around the world responded to the RFI.[60] The RFI has shown the following results: the median inventory held by chips consumers has decreased "from 40 days in 2019 to less than 5 days in 2021," demonstrating the shortage;[61] demand for semiconductors increased by 17% in 2021 from 2019, but there have been no corresponding increases in the available supply;[62] the room for an additional increase in supply is limited, as the majority of semiconductor manufacturing facilities are operating at or above 90% utilization;[63] there is a significant, persistent mismatch in supply and demand for semiconductors;[64] and the main bottleneck is the lack of fab capacity and insufficient material and assembly, testing, and packaging capacity. The DOC argues that the extensive RFI was an effort to bring the industry together and encourage increased transparency throughout the supply chain. Nonetheless, it is unclear that the government was justified in pressuring businesses to comply with the RFI under the threat of invoking

58. Sameera Fazili & Peter Harrell, *When the Chips Are Down: Preventing and Addressing Supply Chain Disruptions*, THE WHITE HOUSE (Sept. 23, 2021), https://www.whitehouse.gov/briefing-room/blog/2021/09/23/when-the-chips-are-down-preventing-and-addressing-supply-chain-disruptions/ [https://perma.cc/A8VS-TTHC].

59. Intel's CEO Pat Gelsinger reportedly met with Biden administration officials in a rooftop reception that he held to push for his company's chip investment plan. Park, *supra* note 56.

60. *See Commerce Semiconductor Data Confirms Urgent Need for Congress to Pass U.S. Innovation and Competition Act*, U.S. DEP'T OF COM. (Jan. 25, 2022), https://www.commerce.gov/news/press-releases/2022/01/commerce-semiconductor-data-confirms-urgent-need-congress-pass-us [https://perma.cc/6JKB-WTE2].

61. Raimondo, *supra* note 27.

62. *Id.*

63. *Id.*

64. *Id.*

DPA.[65] The next Part discusses the applicability of DPA and the risk of infringement on corporate freedom.

III. CORPORATE FREEDOM AT STAKE

A. Applicability of Defense Production Act of 1950

1. Defense Production Act of 1950: An Overview

Nations at war necessarily prioritize the production and supply of the material, equipment, and services essential for their war efforts. To meet this need, Congress enacted the War Powers Acts of 1941 and 1942 to support its war efforts during World War II and enacted DPA at the outset of the Korean War.[66] DPA vests the President with broad authority to prioritize the production and supply of critical materials, equipment, and services for war efforts and to obtain information from private industries for the national defense.[67] DPA has remained in force since the Korean War, reauthorized by Congress fifty-three times—albeit with some adjustments to its provisions.[68]

The DPA provisions still in force are Titles I, III, and VII. Title I authorizes the President to ensure the timely availability of critical materials, equipment, and services produced in the private market in the interest of national defense and to receive those materials, equipment, and services through contracts before any other competing interest.[69] It also authorizes the President to allocate or control the general distribution of materials, services, and facilities.[70] Title III of DPA is designed to ensure that the nation has an adequate supply of, or the ability to produce, essential materials and goods necessary for the national defense.[71] Under Title III, the President is authorized to provide appropriate financial incentives to develop, maintain, modernize, restore, and expand the production capacity of domestic sources for "strategic and critical materials, critical components, critical technology items, and other industrial resources" essential to national defense.[72] Finally, Title VII contains general and miscellaneous DPA provisions. For example, in order to give effect to several Title III provisions, section 705 of DPA authorizes the President to "obtain extensive information from private industries" in order to formulate a

65. *See* Park, *supra* note 56.
66. HEIDI M. PETERS, CONG. RSCH. SERV., R43767, THE DEFENSE PRODUCTION ACT OF 1950: HISTORY, AUTHORITIES, AND CONSIDERATIONS FOR CONGRESS 2 (2020).
67. 50 U.S.C. § 4502(a).
68. PETERS, *supra* note 66, at 3.
69. 50 U.S.C. § 4511(a).
70. *Id.*
71. 50 U.S.C. § 4533(a).
72. *Id*. § 4533(g).

"detailed understanding of current domestic and industrial capabilities."[73]

Given the broad discretionary power conferred on the President, it is important to determine the scope of DPA, i.e., what constitutes an action taken "for the national defense." The term has evolved since DPA was first enacted. Initially, executive action taken "for the national defense" was regarded as an action taken to safeguard "the operations and activities of the armed forces, the Atomic Energy Commission, or any other department or agency directly or indirectly and substantially concerned with the national defense."[74] Since 2003, the term has expanded to encompass the protection and restoration of "critical infrastructure."[75] This definition, adopted in the aftermath of the September 11th terrorist attacks, addresses concerns over the vulnerability of key infrastructure to attack and the dire potential effects of such an attack.[76] Critical infrastructure is defined as "any systems and assets, whether physical or cyber-based, so vital to the United States that the degradation or destruction of such systems and assets would have a debilitating impact on national security, *including*, but not limited to, *national economic security* and national public health or safety."[77]

As demonstrated by the evolution of the phrase "action taken for the national defense," Congress has expanded the scope of DPA to cover not only traditional military aspects of national security, but also some other, less conventional areas of "national defense" such as computer communication networks, water supplies, power production, electrical transmission and distribution, emergency services, banking systems, mass transit systems, and gas and oil production.[78] This expansion of federal authority has been met by criticism, with warnings against the possible abuse of governmental power in private markets.[79] For example, some legislators expressed concerns that DPA's new expansive scope (as of 2003) gave the President "almost un-

73. 50 U.S.C. § 4555(a). These "industrial base assessments" are directly relevant to the central issue examined in this article, i.e., whether the President is, *or should be*, authorized to obtain sensitive corporate information pursuant to DPA.

74. PETERS, *supra* note 66, at 5 (citing Defense Production Act of 1950, Pub. L. No. 81-774, § 702(d), 64 Stat. 798) (codified as amended at 50 U.S.C. §§ 4501–4568 (2022)).

75. J. Michael Littlejohn, *Using all the King's Horses for Homeland Security: Implementing the Defense Production Act for Disaster Relief and Critical Infrastructure Protection*, 36 PUB. CONT. L.J. 1, 4 (2006).

76. *Id.* at 10.

77. 50 U.S.C. § 4552(2) (emphasis added).

78. Littlejohn, *supra* note 75, at 4.

79. *Id.* at 11–12 (discussing former economics professor and then-U.S. Senator Phil Gramm's public opposition to DPA, which he deemed the "most powerful and potentially dangerous American law" on the books in 2001 because of its potential for abuse in private markets).

checked power . . . to interfere in the economy in the name of 'national security.'"[80] However, these concerns over undue executive influence in domestic economic policy dissipated over time. Ultimately, a majority of Americans found it palatable to cede greater authority to the President in order to ensure the effective protection of vital infrastructure against attack or destruction.[81] DPA enjoys bipartisan political support and has withstood numerous constitutional challenges in U.S. federal courts.[82]

2. Applicability of DPA

As discussed earlier, Secretary Raimondo pressured the semiconductor producers to comply with the RFI with the threat of invoking DPA.[83] Section 705 of DPA authorizes the President to "obtain extensive information from private industries" in order to formulate a "detailed understanding of current domestic and industrial capabilities."[84] Because the invocation of any DPA authority must "promote, support, or otherwise be deemed needed or essential for the national defense,"[85] the applicability of DPA centers on the question of whether the semiconductor supply issue is one which poses a threat to the "national defense." Congress's expanded conception of "national defense" to include "critical infrastructure" in 2003 granted the President much broader authority under DPA than the original 1950 Act's drafters envisioned.[86]

As discussed earlier, Congress defined "critical infrastructure" as encompassing "any systems and assets, whether physical or cyber-based, so vital to the United States that the degradation or destruction of such systems and assets would have a debilitating impact on national security, *including, but not limited to, national economic security* and national public health or safety."[87] DPA has been expanded to cover, among other subjects, "critical technology," including "any technology designated by the President to be essential to the national defense,"[88] as well as other "critical components."[89] The Department

80. *Id.* at 12 (quoting U.S. Representative Ron Paul, a Republican from Texas).
81. *Id.*
82. *See, e.g.*, *In re* Bleichfeld Bag & Burlap Co., 105 F. Supp. 162 (W.D.N.Y. 1952) (upholding DPA, generally, and the subpoena and inspection powers of section 705, specifically, against challenge by plaintiffs as being violative of the Fourth Amendment's right against unreasonable searches and seizures); United States v. Huler Abattoirs, Inc., 108 F. Supp. 536 (E.D. Mich. 1952); United States v. Latrobe Constr. Co., 246 F.2d 357 (8th Cir. 1957).
83. Shepardson, Nellis & Alper, *supra* note 10.
84. 50 U.S.C. § 4555(a).
85. PETERS, *supra* note 66, at 4.
86. *Id*. at 16.
87. 50 U.S.C. § 4552(2) (emphasis added).
88. *Id.* § 4552(3).

of Homeland Security (DHS) monitors a number of areas of the U.S. economy for potential infrastructure risks, including energy production, chemical production, banking and financial industries, postal and shipping services, agriculture, water supplies, and Internet and information technology (IT), many of which could give rise to questions regarding their arguably attenuated connection to any military defense strategy.[90] Evidently, the government has embraced a highly complex understanding of the numerous factors that influence national security.

DPA evidences the modern belief that a strong national defense requires a strong national economy, rendering the U.S. economy inseparable from the United States' national security policy. The same approach has been taken to address the semiconductor shortage. The Report highlighted semiconductors' use in "virtually every technology product" and asserted that they "underpin state-of-the-art military systems."[91] The Report noted that semiconductors power "virtually every sector of the economy—including energy, healthcare, agriculture, consumer electronics, manufacturing, defense, and transportation."[92] In addition to their "central role" in the U.S. economy, the Report concluded that semiconductors are "essential" to national security.[93] The Report also directly linked potential supply chain shocks to national security and critical infrastructure,[94] supporting the President's invocation of subpoena and inspection powers under DPA section 705.[95]

The applicability of DPA in the U.S. semiconductor context depends on whether semiconductors qualify either as a "critical technology" or as an essential component of "critical infrastructure" under DPA.[96] The documented importance of semiconductors to the U.S. economy and national security suggests that semiconductors would qualify as "critical technology" forming an essential component of various "critical infrastructure" networks. Semiconductors would conse-

89. *Id.* ("critical components" defined in DPA as "such components, subsystems, systems, and related special tooling and test equipment essential to the production, repair, maintenance, or operation of weapon systems or other items of equipment identified by the President as being essential to the execution of the national security strategy of the United States").
90. Littlejohn, *supra* note 75, at 4–5.
91. REPORT, *supra* note 20, at 22.
92. *Id.* at 24.
93. *Id.* at 25.
94. *Id.* (explaining that a sudden supply chain shock could have "a far-reaching and unforeseen impact in any of these areas, for specific industries, communities, and workers, but also potentially affecting national security and critical infrastructure").
95. *See* 50 U.S.C. § 4555(a).
96. "Critical technology" and "critical infrastructure" are defined at 50 U.S.C. §§ 4552(2) and 4552(3), respectively.

quently be subject to the President's broad authority under DPA.[97] The government, therefore, has a case for its invocation of DPA and RFI from private industry under section 705: such information can help interested parties formulate a detailed understanding of current domestic and industrial capabilities, facilitate coordination, and enhance information flow between semiconductor producers, suppliers, and end-users.[98] Still, critics may question the legitimacy of authorizing such broad executive power over essentially domestic economic issues in private industries. These competing corporate interests will be discussed in the next section.

B. Infringement on Corporate Freedom

1. Corporate Interests in the Protection of Sensitive Information

Economic freedom, defined as the fundamental right of every human to control his or her own labor and property, is the cornerstone of American capitalism.[99] In countries where economic freedom prevails, governments do not interfere with the free movement of labor, capital, and goods; rather, they "refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself."[100] Corporations are the most important economic entities in the modern industrialized economy, as they produce most of the goods and services for society. Thus, the notion of economic freedom applies to corporations, giving rise to the notion of corporate freedom, defined as the economic liberty enjoyed by private corporations to conduct business without coercion or constraint from the government.[101] Corporate freedom includes the freedom to own property, including proprietary information like sensitive business information, to the exclusion of others, including the government.

Corporations have an interest in protecting sensitive information. Sensitivity attaches to the information's proprietary value. For example, information such as technologies and knowhows, client lists, inventory, pricing, and production capacity have proprietary value, disclosure of which would be adverse to the interests of the information holders as it undermines their competitive positions in the mar-

97. REPORT, *supra* note 20; *see also* Chevron U.S.A., Inc., v. Nat. Res. Def. Council, 467 U.S. 837 (1984) (granting government agency broad discretion to interpret statute unless Congress "has spoken to the precise question at issue").

98. 50 U.S.C. § 4555(a).

99. *2023 Index of Economic Freedom*, HERITAGE FOUND. (2022), https://www.heritage.org/index/about [https://perma.cc/3U7E-6ZU5].

100. *Id.*

101. State corporation laws stipulate the powers and privileges of corporations and their constituents, such as officers, directors, and shareholders. *See, e.g.,* DEL. CODE ANN. tit. 8, § 121 (2010); *see also supra* note 12 (clarifying that corporate freedom also includes the freedom to serve the interests of stakeholders other than shareholders, such as employees, customers, and the community).

kets. Thus, an essential function of the law with respect to private industry is the protection of sensitive corporate information,[102] such as trade secrets.[103] With this protection, the law serves the purpose of promoting innovation and discovery—and of safeguarding the competitive process by preventing unscrupulous economic actors from unjustly profiting from (or otherwise exploiting) the hard work of others.[104] The economic rationale for such legal protections is that "[t]he value of any transferable commodity, including information, increases with its scarcity in the market."[105] The legal protection of sensitive information, therefore, effectively incentivizes productive pursuits by ensuring that one's work will not be unfairly utilized. Legal protection of private companies' sensitive or confidential information is also based on the judicially recognized interest in maintaining business confidences—that is, "against breach of faith and reprehensible means of learning another's secret."[106]

In addition to the general public policy considerations underlying the notion of corporate privacy, there is arguably a constitutional ground to support corporations' right to privacy.[107] Advocates reason that the extension of constitutional privacy protections against unreasonable search and seizure to corporations is a natural consequence of the concept of legal personhood, and that corporations' "distinct" privacy and property interests justify the extension of an explicitly recognized constitutional privacy right to corporations.[108] The Supreme Court has not recognized corporations' constitutional right to privacy.[109] Regardless of whether or not corporations enjoy a constitutional right to privacy, commentators argue that corporations are nonetheless protected by Fourth Amendment guarantees against unreasonable search and seizure as well as the First Amendment right to freely associate.[110]

The Freedom of Information Act (FOIA) is also relevant in considering corporations' interests in protecting sensitive information versus the potential public interests in its disclosure (i.e., corporate privacy

102. The terms "sensitive business information" and "sensitive corporate information" are synonymous and used interchangeably without distinction throughout this paper.

103. James T. O'Reilly, *Government Disclosure of Private Secrets under the Freedom of Information Act*, 30 BUS. L. 1125, 1125 (1975).

104. *Id.*

105. *Id.*

106. *Id.* at 1126.

107. *See* Kayla Robinson, *Corporate Rights and Individual Interests: The Corporate Right to Privacy as a Bulwark Against Warrantless Government Surveillance*, 36 CARDOZO L. REV. 2283, 2295–2304 (2015).

108. *Id.* at 2288.

109. *See, e.g.*, FCC v. AT&T Inc., 562 U.S. 397 (2011).

110. Elizabeth Pollman, *A Corporate Right to Privacy*, 99 MINN. L. REV. 27, 84 (2014).

versus the "right to know").[111] Under FOIA, the government is required to disclose requested information, including information acquired from third parties such as corporations, unless one of nine categorical exemptions applies.[112] These exemptions include personal privacy and trade secrets or commercial or financial information that is confidential or privileged.[113] This is important for corporations in regulated industries that may face legal obligations to report information to federal agencies, because the application of these exceptions will determine whether sensitive information provided to the government will later be subject to obligatory public disclosure.

The Supreme Court addressed the issue of personal privacy interests for corporations in the context of FOIA in *FCC v. AT&T*.[114] In this case, AT&T attempted to shield company records from public disclosure by asserting the personal privacy exemption available under FOIA. The Court held that even though the term "person" was defined in the statute to include corporations, FOIA's "personal privacy" exemption protects only individual personal privacy, not corporate privacy.[115] Notwithstanding this decision, corporations can protect sensitive information under the confidential or privileged trade secrets or commercial and financial information exemption. But sensitive corporate information that does not qualify for this exemption is not protected, and the absence of such a protection threatens to fundamentally change "the ground rules of American business so that any person can force the Government to reveal information which relates to the business activities of his competitor."[116] Whatever their scope, FOIA exemptions are limited in that they simply protect information from disclosure *by the government*; they do not protect private parties from having to disclose such information *to the government* in the first place.

2. Impact of the Release

The RFI has raised concerns among businesses about releasing sensitive information. Despite the government's threatened invocation

111. *See* O'Reilly, *supra* note 103, at 1125.
112. *What Is the FOIA?*, U.S. DEPT. JUSTICE, https://www.foia.gov/faq.html (last visited Apr. 11, 2023) [https://perma.cc/42QH-XFTH].
113. *Id.*
114. *See FCC*, 562 U.S. at 400. The FOIA request at issue relates to an investigation of respondent AT&T Inc., conducted by the Federal Communications Commission. *Id.* As part of that investigation, AT&T provided the FCC various documents. *Id.* The FCC and AT&T resolved the matter, but a third party subsequently submitted a FOIA request seeking all pleadings and correspondence on the AT&T investigation. *Id.* AT&T opposed CompTel's request, and the Bureau issued a letter ruling in response. *Id.*
115. *Id*. at 409–10.
116. O'Reilly, *supra* note 103, at 1127.

of DPA, several companies declined to produce certain information on the grounds that such information was confidential.[117] For example, Samsung Electronics and SK Hynix, the world's leading semiconductor producers, raised concerns with the RFI item requesting that they "list each product's top three customers and the estimated percentage of that product's sales accounted for by each customer," claiming the requested information comprised sensitive client information.[118] The two companies also reportedly made only minimal submissions of sensitive information on customers, inventory, and sales.[119] The Israeli firm Tower Semiconductor similarly withheld sensitive business information, including "back-log specifics, product attributes[,] and past month sales."[120]

Companies have cited several reasons for their reluctance to disclose sensitive information. First, it is standard practice within the industry for firms to enter into non-disclosure agreements with their clients as a term of their sales contracts.[121] Thus, as Samsung and SK Hynix have explained, submitting such information to the government would not only constitute a breach of contract but also undermine customer trust.[122] Companies have also voiced concerns over the possibility of unauthorized disclosure of confidential business information in the event the government requires compliance.[123] Although the government takes measures to ensure that confidential information submitted in response to its requests will remain confidential (and will not become a part of the public record, as most other public comment

117. *See* Jae-yeon Woo, Samsung, *SK Hynix Withhold Key Data in U.S. Request for Chip Biz Info*, YONHAP NEWS AGENCY (Nov. 9, 2021, 9:08 AM), https://en.yna.co.kr/view/AEN20211109001251320 [https://perma.cc/8ETY-H2K3]; Eunjee Park, *Chipmakers Balk at U.S. Survey Arguing Information Is Secret*, KOREA JOONGANG DAILY (Sept. 27, 2021), https://koreajoongangdaily.joins.com/2021/09/27/business/tech/Samsung-Electronics-TSMC-chip-shortage/20210927195743172.html [https://perma.cc/C4LM-6DRK]; Su-hyun Song, *Samsung, SK Withhold Sensitive Client Info from US Data Submission*, KOREA HERALD (Nov. 9, 2021, 9:15 PM), http://www.koreaherald.com/view.php?ud=20211109000772 [https://perma.cc/AM8Y-BFTM].

118. Notice, *supra* note 1, at 53,032.

119. Woo, *supra* note 117.

120. *Id.*

121. Park, *supra* note 56.

122. Woo, *supra* note 117.

123. *See supra* note 59 (discussing the concern about possible collusion between the government and some favored companies).

submissions do),[124] these procedures cannot altogether prevent unauthorized disclosure through a "leak."[125]

In addition, certain end-users, such as Apple and Tesla, may not want to disclose client information. For clients whose business models rely on semiconductor technology, client information can be used "to identify and compare the performance level as well as market competitiveness of [a buyer's] products" and thereby gain an unfair competitive advantage.[126] The government's requests to submit production and yield data also place certain semiconductor producers, such as foundry companies, at a disadvantage. Such submissions reveal companies' specific levels of semiconductor technology and thereby put them in an unfavorable position regarding price negotiations with global clients.[127] Disclosure of production, yield, and sales information could also affect the market and impact the price of semiconductor chips.[128] This effect is explained in terms of simple supply and demand, where the knowledge that a seller has a substantial inventory of a particular good reduces the amount a buyer is willing to pay for the product.[129]

The government's broad request for information from private industry leaders—including sensitive business information, such as customer, sales, and inventory data—represents a significant divergence from traditional capitalist free market principles. The impact of the government's pressure on firms to disclose this information is the compromise of corporate freedom and corporate interest in maintaining the confidentiality of sensitive information. This compromise occurs even if procedural safeguards are in place to protect sensitive information against government disclosure. In many cases, it would be a breach of contract (subject to any available defense) for companies to disclose client–customer information even to the government, per industry-standard non-disclosure agreements. And regardless of this potential contract breach, submission of such information to the government would substantially undermine client confidences and the company's economic interests. Submission of the requested information is further complicated by the legitimate concern among foreign

124. Notice, *supra* note 1, at 53,033. Significantly, even if companies wish to avoid public disclosure of confidential information as part of the public comment process, the procedures described in the government's request still instruct respondents to submit a copy of the records containing confidential business information. *Id.* Rather than simply withholding the information from government, the government's request provides that respondents should file both the confidential version and a non-confidential version of the submission, with assurances that only the latter will be made available to the public. *Id.*

125. *See supra* note 59.

126. Park, *supra* note 56.

127. *Id.*

128. *Id.*

129. *Id.*

manufacturers that their sensitive business information—accumulated through their own efforts and using their own resources—could be leaked to competitors, giving favored firms an unfair competitive advantage.[130] DPA has been leveraged inappropriately to aggrandize executive influence over an essentially economic issue. The next section examines further legal grounds that may justify, or even mandate, corporate management's decision to maintain the confidentiality of sensitive information against government pressure to release said information.

C. Do Directors and Officers Have a Fiduciary Duty to Protect Corporate Information?

As discussed in the preceding section, some companies have minimized or simply refused to submit certain sensitive business information to the government despite the RFI. Such decisions may be justified, or even mandated, under the fiduciary duties owed by corporate directors and officers to the corporations they manage. This section discusses these fiduciary duties, especially the duty of loyalty, as additional legal grounds to support corporations' decisions not to comply with portions of the RFI. It also discusses the potential legal liabilities for corporate directors and officers when they release this information to the government.

1. Duty of Loyalty

The duty of loyalty requires corporate directors and officers to act and make decisions in the best interests of the corporation.[131] Directors[132] are required to act on a disinterested and independent basis, and to do so in good faith,[133] with an honest belief that the action is in

130. *Id.*

131. Ivanhoe Partners v. Newmont Mining Corp., 535 A.2d 1334, 1345 (Del. 1987) (directors have an affirmative duty to protect the interests of the corporation, but also an obligation to refrain from conduct which would injure the corporation and its stockholders or deprive them of profit or advantage).

132. In the context of corporate fiduciary duty, the term "directors" is meant throughout this paper to include "officers" who also owe the corporation a fiduciary duty.

133. At the core of the duty of loyalty lies the obligation to act in good faith: "[a] director fails to act in good faith where the director 'intentionally acts with a purpose other than that of advancing the best interests of the corporation, where [the director] acts with the intent to violate applicable positive law, or where [the director] intentionally fails to act in the face of a known duty to act, demonstrating a conscious disregard for [the director's] duties.'" Timothy P. O'Toole, William P. Barry & Margot Laporte, *Directors' Duties: The US Perspective*, GLOB. INV. REV. (Jan. 3, 2020) (quoting Stone v. Ritter, 911 A.2d 362, 369 (Del. 2006)), https://globalinvestigationsreview.com/guide/the-practitioners-guide-global-investigations/2020/article/directors-duties-the-us-perspective [https://perma.cc/6G6L-QYQ3].

the best interests of the company and its stockholders.[134] The court in *Guth v. Loft, Inc.*[135] described the nature of the duty of loyalty:

> Corporate officers and directors are not permitted to use their position of trust and confidence to further their private interests. While technically not trustees, they stand in a fiduciary relation to the corporation and its stockholders. A public policy, existing through the years, and derived from a profound knowledge of human characteristics and motives, has established a rule that demands of a corporate officer or director, peremptorily and inexorably, the most scrupulous observance of his duty, not only affirmatively to protect the interests of the corporation committed to his charge, but also to refrain from doing anything that would work injury to the corporation, or to deprive it of profit or advantage which his skill and ability might properly bring to it, or to enable it to make in the reasonable and lawful exercise of its powers. The rule that requires an undivided and unselfish loyalty to the corporation demands that there shall be no conflict between duty and self-interest. The occasions for the determination of honesty, good faith and loyal conduct are many and varied, and no hard and fast rule can be formulated. The standard of loyalty is measured by no fixed scale.[136]

The duty of loyalty prohibits directors and managers from pursuing self-interests at the expense of corporate interests.[137] Nor may these actors pursue other (non-corporate) social interests at the expense of their corporate interests. This point was confirmed by the Supreme Court of Michigan in the seminal case *Dodge v. Ford Motor Co.*[138] In this case, Ford Motor Company President Henry Ford decided not to distribute special dividends, intending thereby to lower the prices of Ford automobiles and increase employment. His decision would serve the interests of consumers and of employees but not those of the company.[139] The court held the decision violated the fiduciary duty Ford's directors owed to its shareholders.[140] The *Dodge* decision indicates that directors have a duty to refrain even from actions that

134. Peter A. Atkins, Marc S. Gerber & Edward B. Micheletti, *Directors' Fiduciary Duties: Back to Delaware Law Basics*, HARV. L. SCH. F. ON CORP. GOVERNANCE, (Mar. 10, 2020), https://corpgov.law.harvard.edu/2020/03/10/directors-fiduciary-duties-back-to-delaware-law-basics/ [https://perma.cc/6N6G-LJMF].

135. Guth v. Loft, Inc., 5 A.2d 503 (Del. 1939).

136. *Id.* at 510.

137. *Id.*; *see also In re* eBay, Inc. Shareholders Litigation, No. C.A. 19988-NC, 2004 WL 253521 (Del. Ch. Jan 23, 2004) (noting officers breached fiduciary duty when they created "conflict between their self-interest and the corporation's interest").

138. Dodge v. Ford Motor Co., 170 N.W. 668 (Mich. 1919). This is a Michigan Supreme Court case, but Delaware, which is the most important jurisdiction on corporate law in the United States, also follows this position and affirms the fiduciary duty owed to shareholders. *See* Leo E. Strine, Jr., *The Dangers of Denial: The Need for a Clear-Eyed Understanding of the Power and Accountability Structure Established by the Delaware General Corporate Law*, 50 WAKE FOREST L. REV. 761, 774–75 (2015).

139. *Dodge*, 170 N.W. at 684.

140. *Id.*

serve the public interest, such as those served by the RFI, if such actions undermine corporate interests.[141]

In the context of the release of business information, directors who disclose confidential, non-public information may breach their duty of loyalty because the duty "also *implies* that directors have a duty to keep corporate information confidential."[142] Directors are prohibited from using confidential corporate information to further their own interests and from disclosing the information to those who can use the information to their own benefit.[143] Applying the rationale of *Dodge*,[144] directors may also breach their fiduciary duty even if the release of confidential corporate information does not serve their self-interests but nevertheless undermines corporate interests. As discussed in the preceding sections,[145] the government may have a legitimate public interest in the information requested in the RFI. However, to the extent the RFI undermines corporate interests, directors are arguably duty-bound to refrain from releasing such information. Thus, the actions of the companies that have minimized or refused submission of sensitive business information may find justifications under this duty.

2. Potential Legal Liabilities

For directors who have decided to release sensitive corporate information in compliance with the RFI, another fiduciary duty, the duty of care, may be implicated. The duty of care requires that directors take care of corporate businesses as a reasonable person would do for his or her own business, and that they make decisions on an informed basis.[146] In another seminal case in corporate law, *Smith v. Van Gorkom*, the court imposed upon directors the duty to educate themselves with all reasonably-available and material information prior to making corporate decisions.[147] Given the significant ramifications of releasing sensitive corporate information,[148] the duty of care requires

141. *See, e.g.,* Lee, *supra* note 12 (discussing the varied views about corporate interests).
142. William M. Lafferty, Lisa A. Schmidt & Donald J. Wolfe, Jr., *A Brief Introduction to the Fiduciary Duties of Directors Under Delaware Law*, 116 PENN. ST. L. REV. 837, 847 (2012) (emphasis added).
143. *Id.* at 847–48. Notably, the restriction against disclosing confidential corporate information rests not "upon the narrow ground of injury or damage to the corporation resulting from a betrayal of confidence, but upon a broader foundation of a wise public policy that, for the purpose of removing all temptation, extinguishes all possibility of profit flowing from a breach of the confidence imposed by the fiduciary relation." Guth v. Loft, Inc., 5 A.2d 503, 510 (Del. 1939).
144. *Dodge*, 170 N.W. at 684.
145. *See supra* sections III.A & III.B.
146. Smith v. Van Gorkom, 488 A.2d 858, 872 (Del. 1985).
147. *Id.*
148. *See supra* section III.B.

directors to consider the potential risks of disclosure carefully. These risks will include breach of contract liability where the corporation has agreed with its clients to maintain the confidentiality of their identities, yet nevertheless releases these confidential client identities pursuant to the RFI.[149] Despite the government's assurances that it will maintain the confidentiality of sensitive business information, directors may also have to consider the risk of release to competing corporations.[150] Failure to exercise due care may subject directors to liabilities.[151]

Directors who exercise due care are unlikely to be subject to any liability, regardless of their decision on compliance with the RFI. Directors may well vary in their assessment of the necessity for compliance. Neither the duty of loyalty nor the duty of care requires directors to reach any particular decision.[152] Indeed, some directors may consider compliance with the RFI in their corporate interest considering the government's regulatory powers, including the potential invocation of DPA. These corporations may also consider maintaining cooperative relationships with the government (by complying with the RFI) to be in their corporate interests. But other firms may consider the risks associated with the release of sensitive business information to outweigh the risks of non-compliance, and may therefore decline to comply with the RFI. The corporations' positions in the semiconductor supply chain vary, affecting the degree of the sensitivity of information requested by the government. Hence, the impact of compliance or non-compliance will not be identical among corporations. These variances will alter each corporation's risk assessment and ultimate decision regarding compliance with the RFI.

The DOC has considered invoking DPA.[153] Although the DOC ultimately did not make such an invocation, it is useful to consider the possible liabilities of directors should the government employ DPA to compel the release of the information—particularly against the companies that have minimized or refused submission of the requested information. Unlike the RFI, for which compliance is "voluntary," a governmental order for information under DPA is mandatory.[154] As discussed earlier, DPA grants the government authority to acquire extensive information on corporations engaged in semiconductor produc-

149. *See supra* section III.B.
150. *See supra* section III.B.
151. *Smith*, 488 A.2d at 872.
152. Under the business judgment rule, directors have discretion to make a decision as they consider fit, on the presumption that they have acted in good faith in the interests of the corporation, unless the plaintiff demonstrates breach of fiduciary duty, conflict of interest, fraud, or illegality on the part of the directors. *See* Shlensky v. Wrigley, 237 N.E.2d 776, 780 (Ill. App. Ct. 1968).
153. *See* Shepardson, Nellis & Alper, *supra* note 10.
154. *See* 50 U.S.C. § 4555(c).

tion and supply.[155] It is unlikely that directors complying with a hypothetical DPA mandate will be subject to any liability, but directors who defy such a mandate may face liability for failing to comply with a lawful order.[156] The business judgment rule that accords directors discretion to make their own decisions may no longer apply where directors do not comply with lawful government orders.[157] The noncomplying directors may elect to challenge the applicability of DPA and the legality of the government's order; the corporation's legal liability would then depend on the outcome of this challenge. Considering the extensive scope of the President's discretion in acquiring information under DPA,[158] it is not clear whether such a challenge can succeed.

IV. COMMERCIAL USE OF THE NATIONAL SECURITY ARGUMENT

A. Risk of Misuse

1. Ambiguous Limits on the National Security Argument

The parameters of national security set by DPA are broad and ambiguous. The grounds that can justify the invocation of DPA are not limited to national defense. Such grounds also include the protection and restoration of any "systems and assets" that affect a wide range of concerns, branded as "national security," including national economic security and national public health and safety.[159] In the case of semiconductor shortages, the government may justify an invocation of DPA by arguing that semiconductors are essential for national defense (as articulated by the Report),[160] and that the shortage, by affecting the national economy, also concerns the protection of critical infrastructure (i.e., destruction of the semiconductor industry would have a debilitating impact on national economic security).

The government's actions to pressure the semiconductor industry demonstrate that the national security argument has over-expanded. Former economics professor and then-U.S. Senator Phil Gramm's remark in 2001, that DPA is the "most powerful and potentially dangerous American law" on the books, is not an overstatement given DPA's potential for abuse against private markets.[161] In fact, the government will be able to invoke DPA and the national security argument

155. *See supra* section III.A.
156. *See* 50 U.S.C. § 4555(c).
157. *See supra* note 152 (discussing the limitations of the business judgment rule including illegality—breach of lawful government order may constitute illegality).
158. *See supra* section III.A.
159. *Id.*
160. REPORT, *supra* note 20, at 25.
161. Littlejohn, *supra* note 75, at 11–12.

for almost anything. DPA gives the government "almost unchecked power . . . to interfere in the economy in the name of 'national security,'" as aptly described by U.S. Representative Ron Paul.[162] The risk of abuse is clear: given the expansive scope of DPA and the national security argument used to justify it, the government will be able to use the shortage of nearly any major product (e.g., computers, automobiles, ships, not just semiconductors) as grounds to subject entire industries to its unfettered discretion.

While it could not have been the legislature's intent to grant the President unlimited power in the name of national security, the current DPA provisions create this danger. The absence of a statutory definition of "national security" tends to allow and even promote the expansive application of the concept, as illustrated by DPA. As Professor Donahue notes, the term "national security" is often used in relation to statutory authorities, but is rarely defined.[163] For example, the National Security Act of 1947 cites "national security" over 100 times but does not provide any definition.[164] Similarly, in the Foreign Intelligence Surveillance Act of 1978, the term is used almost a dozen times but is never defined.[165] In the rare case that a definition of "national security" does appear, it is defined broadly. For example, under the current Classified Information Procedures Act, national security "involves matters related to the 'national defense and foreign relations of the United States,'—an amorphous description, open to wide interpretation."[166] Developing threats to national security may create difficulty and reluctance on the part of legislators to provide a clear definition of the term, but legislative efforts must be made to delineate the boundaries of this concept and thereby reduce room for abuse.[167]

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162. *Id.* at 12 (alteration in original). The inherent risk of appealing broadly to national security without meeting any specific burdens was also well illustrated in other cases, such as *Korematsu v. United States*, where a conviction for violation of the exclusion order based on race was justified in the name of national security, and *Youngstown Sheet & Tube Co. v. Sawyer*, where the President sought to seize private property under the guise of national security. *See* Korematsu v. United States, 323 U.S. 214 (1944); Youngstown Sheet & Tube Co. v. Sawyer, 343 U.S. 579 (1952).

163. Laura K. Donohue, *The Limits of National Security*, 48 AM. CRIM. L. REV. 1573, 1579 (2011).

164. *See* 50 U.S.C. §§ 3002–3243; Donohue, *supra* note 163, at 1579.

165. *See* 50 U.S.C. §§ 1881–1885c; Donohue, *supra* note 163, at 1579.

166. Donohue, *supra* note 163, at 1580; *see* Classified Information Procedures Act, Pub. L. No. 96-456, § 1(b), 94 Stat. 2025, 2025 (1980) (codified as amended at 18 U.S.C. app. 3).

167. The Supreme Court has recognized that the term "national security" is frustratingly broad. In *New York Times Co. v. United States*, in response to the government's conception of "national security" as allowing the President to prevent anything that threatens "grave and irreparable" injury to the public interest, Justice Black wrote the following: "The word 'security' is a broad, vague generality whose contours should not be invoked to abrogate the fundamental law embodied

2. Serving the Commercial Purpose with the National Security Argument

In recent decades, there has been an increasing trend of using the national security argument to serve commercial purposes. The semiconductor shortage is a significant problem that has affected the national economy and industries across the country. The shortage may also have implications for national defense,[168] but it is essentially a commercial issue; the government would have simply invoked DPA immediately had the shortage raised a legitimate national security concern.

The government's actions toward the semiconductor industry are more likely motivated by concern about growing U.S. dependency on foreign semiconductor production than by national defense needs. Reflecting these concerns, the 2017 PCAST Report identifies China's rising influence in the sector as a threat to the availability of semiconductors to U.S. manufacturers.[169] However, the PCAST report makes no concrete case as to how this rising Chinese influence adversely affects U.S. national security. Setting aside the question of the wisdom of reducing international trade in the name of lessening "foreign reliance," government decisions to supplant foreign supply of what it considers strategically important items in the name of national security create the risk that the government may present the perceived problem—such as foreign dependence of "strategic" items—as an "urgent, imminent, extensive, and existential threat" to the nation at large, thereby justifying "extraordinary responses" that "typically involve bending rules of normal governance."[170]

The risk of this approach is apparent. First, it undermines fair competition in the marketplace. The protection of domestic industries in the name of national security—regardless of whether they are semiconductor, automobile, or steel industries—may promote the interests of less competitive domestic producers at the expense of the

in the First Amendment." N.Y. Times Co. v. United States, 403 U.S. 713, 719 (1971). Furthermore, Black states: "The guarding of military and diplomatic secrets at the expense of informed representative government provides no real security for our Republic." *Id.*; *see also* Donohue, *supra* note 163, at 1583 (elaborating on Justice Black's view). In *Hamdi v. Rumsfeld*, Justice O'Connor, in response to the question of whether the President could detain a U.S. citizen indefinitely without basic due process, wrote: "We recognize that the national security underpinnings of the 'war on terror,' although crucially important, are broad and malleable." Hamdi v. Rumsfeld, 542 U.S. 507, 520 (2004); *see also* Donohue, *supra* note 163, at 1584 (discussing Justice O'Connor's reasoning).

168. REPORT, *supra* note 20, at 25.

169. *See* PCAST Report, *supra* note 40.

170. Helen Nissenbaum, *Where Computer Security Meets National Security*, 7 ETHICS & INFO. TECH. 61, 66, 69 (2005); *see also* Charles Duan, *Of Monopolies and Monocultures: The Intersection of Patents and National Security*, 36 SANTA CLARA HIGH TECH. L.J. 369, 374 (2020) (elaborating on Nissenbaum's argument).

interests of importers and consumers, who may benefit from more competitive foreign products. Economists point out that such protection can reduce economic welfare for society because the harms to the public caused by protection tend to outweigh any benefits to domestic producers.[171] This does not mean that the interests of importers and consumers should always prevail over other considerations. But the blanket protection of industries, based on broadly alleged connections between the industries and national security, and without identification of any specific national security risks, is hardly justifiable. The government, armed with virtually unchecked power to intervene in the economy,[172] will be able to pick a winner in the market. Such arbitrary government interference would mark a significant departure from free market ideals.

Second, commercial protectionism imposed on national security grounds undermines the long-term competitiveness of U.S. industries. A commentator has observed, "the opportunity cost of leveraging the ever-growing global markets make [trade protectionism] an unattractive prospect if taken to any extreme, as the benefits of global trade rapidly offset the risk of economic dependency upon hostile nations."[173] The case of Brazil illustrates this risk. Brazil adopted strong trade protection policies in the 1980s to defend its budding computer industry from highly evolved international competitors.[174] However, as technology advanced, Brazil lagged behind because it lacked global strategic alliances.[175] Protectionism, in the end, undermined Brazil's competitiveness in the industry. The massive capacity for specialization, economies of scale, technological advancement, and myriad other advantages have directly resulted from free global markets.[176] For the most part, the beneficiaries of these advantages have been the influential players in advanced economies.[177] Leveraging the national security argument to justify an exception to free trade can thus come at the opportunity cost of global value and domestic industrial competitiveness.

Lastly, the use of the national security argument for a commercial purpose creates hostile international dynamics, including trade retaliations, that cause adverse impacts on U.S. domestic industries. The next section examines the case of recent U.S. tariffs imposed on im-

171. *See, e.g.*, DOMINICK SALVATORE, INTERNATIONAL ECONOMICS 241–42 (8th ed. 2001).
172. *See* Littlejohn, *supra* note 75, at 3–4.
173. *Arguments for and Against Protectionist Policy*, LUMEN, https://courses.lumenlearning.com/boundless-economics/chapter/arguments-for-and-against-protectionist-policy/ (last visited Apr. 11, 2023) [https://perma.cc/79EM-WS2B].
174. *Id.*
175. *Id.*
176. *Id.*
177. *Id.*

ported steel and aluminum products under the national security argument. These tariffs have provoked strong international responses from around the world.[178] The affected exporting countries have challenged the U.S. tariffs and have adopted retaliatory measures against U.S. exports.[179] This case study illustrates the international risk that is created by misusing the national security argument for a commercial purpose.

B. United States—Steel and Aluminum Tariffs

1. Case of Misuse

In March 2018, President Trump announced the imposition of an additional 25% in tariffs on a broad range of steel products and 10% increases on aluminum products imported from around the world, effective as of March 23, 2018.[180] These substantial increases were justified on national security grounds, following a DOC investigation into the effects of steel and aluminum imports on U.S. national security under section 232 of the Trade Expansion Act of 1962.[181] The DOC published two reports (the Steel and Aluminum Reports) in January 2018.[182] These reports found that steel and aluminum are essential to U.S. national security and that domestic steel and aluminum industries had been weakened by increases in imports.[183] The DOC recommended adopting measures to reduce steel and aluminum imports and strengthen domestic steel and aluminum industries essential to national security,[184] similar to the recommendations in the DOC's semiconductor report.[185] Specifically, the DOC recommended increased tariffs or quotas on steel and aluminum imports to the President, who agreed with the DOC's recommendations and imposed the tariffs.[186]

178. *See* Lee, *supra* note 46.
179. *See id.*
180. Proclamation No. 9705, 83 Fed. Reg. 11,625 (Mar. 15, 2018) (adjusting steel imports); Proclamation No. 9704, 83 Fed. Reg. 11,619 (Mar. 15, 2018) (adjusting aluminum imports).
181. Trade Expansion Act of 1962, Pub. L. 87-794, § 232, 76 Stat. 872, 877 (codified as amended at 19 U.S.C. § 1862).
182. U.S. DEP'T OF COM., THE EFFECT OF IMPORTS OF STEEL ON THE NATIONAL SECURITY: AN INVESTIGATION CONDUCTED UNDER SECTION 232 OF THE TRADE EXPANSION ACT OF 1962, AS AMENDED (2018) [hereinafter STEEL REPORT]; U.S. Dep't of Com., THE EFFECT OF IMPORTS OF STEEL ON THE NATIONAL SECURITY: AN INVESTIGATION CONDUCTED UNDER SECTION 232 OF THE TRADE EXPANSION ACT OF 1962, AS AMENDED (2018) [hereinafter ALUMINUM REPORT].
183. *See* STEEL REPORT, *supra* note 182, at 27; ALUMINUM REPORT, *supra* note 182, at 89.
184. *See* STEEL REPORT, *supra* note 182, at 58; ALUMINUM REPORT, *supra* note 182, at 107.
185. *See* REPORT, *supra* note 20.
186. *See* Proclamation No. 9705, *supra* note 180, at 11,625–26; Proclamation No. 9704, *supra* note 180, at 11,619.

Several countries have questioned this national security rationale, alleging that heightened U.S. tariffs are unjustified trade protection in violation of international trade law.[187] In their view, the United States has attempted to protect its declining domestic steel and aluminum industries for decades, imposing a number of trade measures such as increased tariffs.[188] Given this history of U.S. trade protection, the international community has not given much credence to the national security argument that the United States has adopted to defend its tariff measures.[189]

Determining the existence of a legitimate national security concern is not always a straightforward task. Nor is disguised trade protection always readily discernable. To make this determination, relevant analytical questions include (i) whether there is an essential security interest to be protected by a trade measure, and (ii) whether the country adopting the measure has considered all relevant factors and provided a reasoned and adequate explanation as to the necessity of its measure to protect national security interests.[190] For the U.S. tariffs on steel and aluminum products, it is necessary to examine the Steel and Aluminum Reports[191] to determine whether the tariffs are imposed to address legitimate national security concerns.

The Steel and Aluminum Reports find trade restricting measures, such as tariffs or quotas, necessary on the following grounds: (i) steel and aluminum are needed for national defense requirements and critical U.S. infrastructure, and domestic steel and aluminum production yielded by healthy and competitive U.S. markets is necessary for national security applications; and (ii) trade measures are necessary to support the domestic industries weakened by imports.[192] The DOC reached these conclusions under section 232 of the Trade Act,[193]

187. *See, e.g.*, *DS556: United States—Certain Measures on Steel and Aluminum Products*, WORLD TRADE ORG. (Dec. 9, 2022), https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds556_e.htm [https://perma.cc/7RVF-FFMQ].

188. *See Anti-Dumping Sectoral Distribution of Measures by Reporting Member 01/01/1995 - 30/06/2022*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/adp_e/AD_Sectoral_MeasuresByRepMem.pdf (last visited Apr. 11, 2023) [https://perma.cc/TK2V-2KYN] (showing that the U.S. had implemented the second-highest number of reported anti-dumping measures during the covered period).

189. *See, e.g.*, Panel Report Addendum, *United States—Certain Measures on Steel and Aluminum Imports*, Annex B-1, ¶ 13, WTO Doc. WT/DS544/R/Add.1 (Dec. 9, 2022) [hereinafter *Panel Report Addendum*] (citing a Department of Defense memorandum concluding that the increased tariffs do not "impact the ability of DoD programs to acquire the steel or aluminum necessary to meet national defense requirements").

190. Lee, *supra* note 46, at 488.

191. *See* STEEL REPORT, *supra* note 182; ALUMINUM REPORT *supra* note 182.

192. *See* STEEL REPORT, *supra* note 182; ALUMINUM REPORT *supra* note 182.

193. Trade Expansion Act of 1962, Pub. L. 87-794, § 232, 76 Stat. 872, 877 (codified as amended at 19 U.S.C. § 1862).

which addresses imports in the national security context, rather than under other provisions (such as section 201) allowing trade protection on other grounds.

As for the substantive questions, the first is whether an essential security interest exists. The reports identify the essential security interests as "national defense" and "critical infrastructural needs."[194] National defense requirements include "fabricating weapons and related systems for the nation's defense," and critical infrastructure with significant needs for steel includes "chemical production, communications, energy, food production, transportation, water and waste water systems."[195] Critical infrastructure with significant needs for aluminum includes energy (electric power transmission and distribution over 6,000 power plants), transportation (aircraft, automobiles, railroad freight cars, boats, ships, trains, trucks, trailers, wheels), containers and packaging (cabinets, cans, foils, storage bins, storage tanks), construction (bridges, structural supports, conduit, piping, siding, doors, windows, wiring), and manufacturing (machinery, stampings, castings, forgings, product components, consumer goods, heating and cooling devices, and utility lighting fixtures).[196]

It is reasonably clear that a national defense requirement would qualify as an essential security interest. However, the identified infrastructural needs are controversial because the range of the cited infrastructural components is simply too broad to represent legitimate national security interests, as demonstrated by the inclusion of items of everyday use without particular security connotations such as windows, cabinets, and various consumer goods. The Steel and Aluminum Reports do not offer any explanation as to why such a broad range of items is relevant to essential national security interests. Arguably, to justify tariff measures via national security, the scope of critical infrastructural needs must be tailored, and more detailed explanations should be given as to why including infrastructure items serves national security interests.

If the infrastructural needs are too broad to be justified under national security interests, may the steel and aluminum tariffs be justified for the national defense requirement alone? The Steel and Aluminum Reports find that only small percentages of domestically produced steel and aluminum products are directly consumed by the Department of Defense.[197] From these findings, there is no indication of any shortage of steel and aluminum necessary for national defense. The Steel and Aluminum Reports argue that the United States needs to maintain "commercially viable [domestic] steel producers to meet

194. STEEL REPORT, *supra* note 182, at 23; ALUMINUM REPORT, *supra* note 182, at 23.
195. STEEL REPORT, *supra* note 182, at 23–24.
196. ALUMINUM REPORT, *supra* note 182, at 24.
197. STEEL REPORT, *supra* note 182, at 23; ALUMINUM REPORT, *supra* note 182, at 25.

defense needs" because no producer "could afford to construct and operate a modern steel mill solely to supply defense needs," which are very diverse.[198] According to this argument, domestic producers should attract sufficient commercial business to supply those diverse national defense needs.[199]

The Steel and Aluminum Reports fail to explain why the tariffs are *necessary* even if the national defense requirement is a legitimate security interest. The reports only suggest a broad relationship between the commercial viability of steel and aluminum industries and their ability to meet the needs of national defense. They fail to present any evidence that domestic industries are in such conditions that they cannot meet the diverse defense needs. The reports also fail to show that there is a clear risk of failure in the future. In reaching their conclusions, the reports also appear to presume the United States cannot rely on the supply of imports to meet its defense needs should domestic production be insufficient. However, they do not make clear whether this presumption is reasonable. In today's complex defense environment, no country is expected to produce every single component that is necessary for national defense: some imports are inevitable. In sum, the Steel and Aluminum Reports fail to provide justifications for the tariff measures on the grounds of national security.

2. International Response

The U.S. steel and aluminum tariffs are among the largest trade measures in history in terms of the affected U.S. imports in relevant product categories, affecting $29 billion of steel trade and $17 billion of aluminum trade.[200] The products subject to these measures are also extensive, including all imported products of iron or steel (HTS heading 9903.80.01)[201] as well as all entries of aluminum products (HTS heading 9903.85.01).[202] These extensive U.S. measures provoked worldwide criticism and challenges from major steel and aluminum exporters, including the European Union (EU), China, Japan, Mexico, Canada, India, Norway, Russia, Switzerland, and Turkey.[203] Several affected countries, including the EU, China, Mexico, Canada, Russia, India, and Turkey, raised their own tariffs on imports from the United States in retaliation.[204] These countries did not agree that the U.S. measures were justified by its national security concerns but con-

198. STEEL REPORT, *supra* note 182, at 23.
199. *Id.*
200. Lee, *supra* note 46, at 488.
201. *Id*. at 482 & n.7.
202. *Id*. at 482 & n.8.
203. *See, e.g.*, *Panel Report Addendum*, *supra* note 189.
204. Lee, *supra* note 46, at 483 & n.10.

cluded instead that the measures were disguised trade protection for a commercial purpose.[205] The retaliatory measures, implemented on various dates from April to December of 2018, include tariff increases from 5% to 50% on a variety of agricultural, industrial, and steel and aluminum products exported from the United States.[206]

In response to these adverse international reactions, the United States has asserted that issues of national security are "political matters not susceptible to review or capable of resolution" by a third party and that every WTO member "retains the authority to determine [what is necessary for] the protection of its essential security interests" under Article XXI of the General Agreement on Tariffs and Trade (GATT).[207] The United States' position would grant a claimant of the national security exception complete discretion on the judgment of national security, but such blanket discretion would upset the balance sought by the GATT drafters in the application of Article XXI national security exceptions.[208] The United States argues that its claim under Article XXI is a self-judging matter, unreviewable by the WTO,[209] but international trade law under the auspices of the WTO[210] does not provide any support for the complete exclusion of national security claims from WTO review.[211] The unrestricted use of the national security argument would lead to the destabilization of the international trading system.[212]

The WTO dispute settlement panel has reviewed the steel and aluminum tariffs. The panel rejected the United States' argument that Article XXI is "self-judging" or "non-justiciable."[213] According to the panel, the conditions and circumstances that justify a measure as protecting essential national security interests under Article XXI are not entirely reserved to the judgment of the invoking country.[214] The panel also found that the determinations of U.S. authorities related to a different legal standard and basis established by U.S. law (section

205. *See, e.g.*, *Panel Report Addendum*, *supra* note 189.
206. *Id.*
207. Communication from the United States, *United States—Certain Measures on Steel and Aluminum Products*, WTO doc. WT/DS548/13 (July 6, 2018).
208. See Verbatim Report, Second Session of the Preparatory Committee of the United Nations Conference on Trade and Employment, GATT Doc. E/PC/T/A/PV/33, at 20–21 (July 24, 1947); Michael J. Hahn, *Vital Interests and the Law of GATT: An Analysis of GATT's Security Exception*, 12 MICH. J. INT'L L. 558, 579 (1991) (arguing that the national security exception in Article XXI should be narrowly interpreted).
209. *See Communication from the United States*, *supra* note 207.
210. Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154.
211. *Panel Report*, *supra* note 18, ¶ 7.146.
212. Lee, *supra* note 46, at 491.
213. *Panel Report*, *supra* note 18, ¶ 7.146.
214. *Id.*

232). This standard requires an examination of the necessity to protect the United States' essential security interests; it is a different standard from that applied under Article XXI, which requires a nation to identify or examine an "emergency in international relations" within the meaning of Article XXI.[215] The panel concluded that the situation to which the United States refers did not rise "to the gravity or severity of tensions on the international plane so as to constitute an 'emergency in international relations'" and found the tariffs in breach of Article XXI.[216]

This is a case in which misuse of the national security argument for a commercial purpose, i.e., protection of domestic steel and aluminum producers, has led to a major international trade dispute, undermining the interests both of foreign exporters and of U.S. traders (the latter due to the retaliatory measures adopted by several countries). The U.S. position is untenable: granting countries complete discretion on the judgment of essential national security will open the floodgates for the undisciplined application of security interest exceptions to all sorts of products whenever domestic producers endorsed by the government call for protection. If the national security argument could be applied to all categories of steel and aluminum imports without clear justification for their necessity, the same argument could also be applied to a myriad of other products such as automobiles, semiconductors, and other "strategic" materials. This will undermine the notions of fair competition and liberal trade protected under the current international trading system.

V. CALL FOR A NEW APPROACH

A. Aligning Corporate Interests with Industrial Policy

1. Return of Industrial Policy

The DOC's RFI and the steel and aluminum tariffs discussed in the preceding sections are implementations of the government's industrial policies, designed to address the semiconductor shortage in the United States and to promote domestic steel and aluminum industries. In both cases, the national security argument has been used to support government measures despite the absence of clear security risks associated with the semiconductor shortage or the conditions of the steel and aluminum industries.[217] The government has not used the term "industrial policy," which "refers to any economic, financial, and/or other policy adopted by a state to promote industries,"[218] to justify its actions in either case. The term "industrial policy" has not been preva-

215. *Id.* ¶¶ 7.161, 7.164.
216. *Id.* ¶ 7.166.
217. *See supra* sections IV.A, IV.B.
218. Yong-Shik Lee, LAW AND DEVELOPMENT: THEORY AND PRACTICE 242 (2d ed. 2022).

lent since the 1980s, when neoliberalism,[219] which discourages government interventions in the economy, proliferated with support from mainstream economists.[220]

Whether or not the government explicitly uses this term, virtually all governments, including the U.S. government, have adopted a wide range of policies, including tariff measures, grants, tax rebates, research and development (R&D) support, and regulatory support, to promote domestic industries.[221] No government can ignore declining industries and the resulting loss of employment, regardless of the economic ideologies to which that government subscribes, because such decline causes significant political, social, and economic problems. Also, a nation's industrial capacity is translated into its military power and international influence. From the perspective of the United States, the rising industrial capacity of China is concerning because of its potential to undermine the United States' military superiority, international influence, and global economic position.[222] The 2021 White House Report reflects these concerns about both China's rising industrial capacity and the immediate shortage of semiconductors.[223]

The use of the national security argument in both cases reflects the government's reluctance to admit that it is, for all practical purposes, implementing industrial policy, running counter to notions of governmental noninterference with private industry. Invoking national security arguments saves the government from some domestic political criticism. Despite the continuing influence of neoliberalism, industrial policy has returned: the White House Report cited throughout this pa-

219. Neoliberalism is a dominant political-economic ideology that emerged in the 1980s, which discourages positive government interventions in the economy and promotes free market approaches, including privatization and trade liberalization. The so-called "Washington Consensus" provided the theoretical basis for neoliberalism. The Washington Consensus refers to a set of policies representing the lowest common denominator of policy advice being advanced by Washington-based institutions, such as fiscal discipline, a redirection of public expenditure priorities toward areas offering both high economic returns and the potential to improve income distribution (such as primary healthcare, primary education, and infrastructure), tax reform to lower marginal rates and broaden the tax base, interest rate liberalization, a competitive exchange rate, trade liberalization, liberalization of inflows of foreign direct investment, privatization, deregulation (to abolish barriers to entry and exit), and protection of property rights. John Williamson, *What Washington Means by Policy Reform*, *in* LATIN AMERICAN READJUSTMENT: HOW MUCH HAS HAPPENED (John Williamson ed., 1990).

220. LEE, *supra* note 218, at 243; s*ee also* Jedediah Britton-Purdy et al., *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 YALE L.J. 1784, 1832 (2020) ("The Twentieth-Century Synthesis" created "a neoliberal political economy premised on concepts of efficiency, neutrality, and antipolitics").

221. LEE, *supra* note 218, at 243.

222. *See* PCAST REPORT, *supra* note 40 (discussing concerns about the rising economic and technological influence of China).

223. REPORT, *supra* note 20.

per, which explores how resilient supply chains can be built, American manufacturing can be revitalized, and broad-based growth can be fostered,[224] is a testament to this return. The government has also enacted legislation to promote industries. For example, the recently passed "CHIPS Act of 2022,"[225] aims to "restore American leadership in semiconductor manufacturing *by increasing Federal incentives in order to enable advanced research and development, secure the supply chain, and ensure long-term national security and economic competitiveness*."[226]

The return of industrial policy may not be consistent with the norms of neoliberalism, but the government's approaches to the RFI and the steel and aluminum tariffs are more of a problem. Successful industrial policies require effective cooperation and coordination between government and industry,[227] but the government has failed to work effectively with several key industry players. In the case of the RFI, key semiconductor suppliers have expressed concerns about the government's request for the disclosure of sensitive business information, which could have put them in breach of contract with their clients and adversely affected their competitive positions.[228] Some companies were also not certain that the government would maintain the confidentiality of their sensitive business information.[229] These concerns and lack of confidence evidence the insufficiency of cooperation and coordination between government and industry. In the case of steel and aluminum tariffs, the government may have benefited domestic producers who stand to gain from the trade protection, but it failed to coordinate and cooperate with other key stakeholders who may be adversely affected, such as consumers of steel and aluminum products (e.g., the automobile industry).[230] The government also has not demonstrated that the costly tariff protection will increase the competitiveness of domestic industry.[231]

2. An Alternative Approach

Consideration should be given to an alternative approach which would enhance cooperation and coordination between government and private industry. Indeed, the government's attempt to acquire infor-

224. *Id.*
225. CHIPS Act of 2022, Pub. L. No. 117-167, 136 Stat. 1372.
226. William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283, §§ 9901–08, 134 Stat. 3388, 4843–60 (codified as amended at 15 U.S.C. §§ 4651–59) (emphasis added).
227. LEE, *supra* note 218, at 252–53.
228. *See supra* section III.B.
229. *See supra* section III.B.
230. *See supra* section IV.B.
231. *See supra* section IV.B.

mation from industry is not an altogether inappropriate approach. As Professor Dani Rodrik has observed:

> [T]he public sector is not omniscient, and indeed typically has even less information than the private sector about the location and nature of the market failures that block diversification. Governments may not even know what it is they do not know. Consequently, the policy setting has to be one in which public officials are able to elicit information from the business sector on an ongoing basis about the constraints that exist and the opportunities that are available. It cannot be one in which the private sector is kept at arms' length and autonomous bureaucrats issue directives.[232]

Thus, the problem is not that government tries to acquire information from industry to be better informed of the status of industry; rather, the problem is the coercive manner in which the DOC sought to pressure compliance by threatening to invoke DPA.[233] As a result, some companies have resisted, minimized, or refused the submission of the requested information.[234]

These reactions by semiconductor firms are not only a reflection of corporate resistance to government coercion but are also embedded in the fiduciary duty structure, which guides corporate directors and officers in making decisions.[235] Directors and officers owe the corporation a fiduciary duty to act in the best interests of the corporation. Hence, they should not comply with the RFI if it does not meet the interests of the company.[236] As such, the government may face repeated resistance, creating unnecessary tension between government and private industry, unless it adjusts its approach. Securing compliance through coercive measures, without demonstrating a clear security risk, raises public concern about unchecked government intrusion in private industries. As seen earlier, legislators raised these concerns when the government's power was expanded by amendments to the DPA.[237]

An alternative approach is one that better aligns corporate interests with industrial policy. For example, the government could have engaged industry firms when it designed the RFI by explaining to them the necessity of such a survey and inviting the firms' input as to their potential concerns about submitting the requested information. Through this process, the government could have better designed the RFI by incorporating firms' concerns from the beginning. Instead of threatening to invoke DPA, the government could also consider incentives for compliance, such as grants, tax rebates, and R&D support. As

232. DANI RODRIK, INDUSTRIAL POLICY FOR THE TWENTY-FIRST CENTURY 16–17 (2004), https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/industrial-policy-twenty-first-century.pdf [https://perma.cc/3VTE-LX9L].
233. *See* Shepardson, Nellis & Alper, *supra* note 10.
234. *See* Woo, *supra* note 117.
235. *See supra* section III.C.
236. *See supra* section III.C.
237. Littlejohn, *supra* note 75, at 12.

for the steel and aluminum tariffs, the government could have also engaged not only domestic industries but other stakeholders, e.g., consumers and importers, and could have explored better ways to improve the competitiveness of domestic industries without resorting to costly trade measures that ultimately harm U.S. exporters.[238]

This alternative approach—one that better aligns corporate interests with industrial policy—may require reconsideration of the role of the government in the economy. The tension between the practical need for the government to directly support industries and the remaining influence of neoliberal norms that separate government from private industry led the government to resort to drastic measures based on poorly justified national security concerns. This inconsistency can be reduced by rethinking and realigning the role of the government in the economy. Should the government's role in industrial policy be better accepted among the public, there would be less need for the government to resort to national security measures like DPA to justify its intervention in the economy. The government can adopt more measured and scrutinized policy tools that will better secure corporate freedom.

B. The Role of Government in the Economy

1. Should Government Intervene with Industry?

The role of government in the economy has been debated for centuries. Mainstream economics cautions against government intervention in the economy; i.e., the "invisible hand" of the market optimizes supply and demand, maximizing economic efficiency, and market forces are the core element of prosperous economies and create wealth for a nation and its people. Government intervention is not justified except in the small number of market failures, such as monopoly, monopsony, externalities, public goods, and asymmetric information.[239] Adam Smith stated: "What is the species of domestic industry which his capital can employ, and of which the produce is likely to be of the greatest value, every individual, it is evident, can, in his local situation, judge much better than any statesman or lawgiver can do for him."[240]

This market-centric view, holding that individuals make the best economic choice for themselves, given their access to information and freedom to choose, persists today.[241] Under this view, government in-

238. *See supra* section IV.B.

239. *See generally* ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (Edwin Cannan ed., The Modern Library 1937).

240. *Id.* at 243.

241. LEE, *supra* note 218, at 244.

volvement in the economy leads only to economic inefficiency.[242] This free-market theory is also applied to private corporations and grounds the principle of corporate freedom. The mainstream pro-market approach not only guides an economic policy choice but also supports the ideals of Western democracy. Such ideals include individual/corporate freedom and autonomy, necessary to make a free economic choice, as well as the rule of law, necessary to protect the integrity of market transactions (such as freedom of contract and property rights). The pro-market approach has broad sociopolitical appeal and remains a predominant economic ideology.

Despite the predominance of the free-market theory, the underlying presumptions—that information is available and that an individual makes rational choices based on the available information—do not always hold in reality. As for the information needed to make an informed economic choice, information is not always readily available to market participants. Also, information externalities (i.e., the risk of no compensation or under-compensation for those who first engage in new ventures) and coordination problems (i.e., lack of other support services and infrastructure necessary for new production activities that incur high fixed costs)[243] may necessitate government intervention to adjust compensation structures and facilitate vital coordination. As for the "rational choice," the 2007 financial crisis demonstrated that this presumption is not always valid: irrational greed, panic, and fear, not just rational discourse, can influence the decisions of sophisticated experts and the wider public.[244]

The extent to which government intervention in the economy should be allowed remains controversial, but most economists believe that some adjustive government roles are inevitable. Michael Trebilcock observes:

> By the late 1990s, the consensus in development economics had shifted dramatically. The Washington Consensus was agreed to have often been a failure and two principal paths forward have emerged. . . . A more promising approach is represented by the New Development Economics (NDE) which eschews truisms such as "getting institutions right" and represents a break with big-picture paradigms that advance one-size-fits-all solutions. Drawing on the neoclassical paradigm, it recognizes that markets are not nearly as inefficient as the early structuralists believed; rather the fundamental principle of rational responses to incentives continues to organize economic behavior. Further, with the rise of the New Institutional Economics, the distinction between government and markets has become blurred—each operating via

242. *Id.*

243. RODRIK, *supra* note 232.

244. Rachelle Younglai, Doug Palmer & Teresa Carson, *Financial Crises Caused by "Stupidity and Greed": Geithner,* REUTERS (Apr. 25, 2012), https://www.reuters.com/article/us-usa-economy-geithner/financial-crises-caused-by-stupidity-and-greed-geithner-idUSBRE83P01P20120426 [https://perma.cc/U3WZ-KR7B].

> similar fundamental mechanisms. As such, NDE advocates a complementary role for governments and markets, finding both to be susceptible to failures in coordination, imperfect information, and agency problems.[245]

Perhaps a more functional approach is to recognize the coordinating and facilitating roles of government in the economy and to better integrate its functions with the market's operation. This may require a new approach.

2. Call for a New Approach

A new approach, cognizant of the coordinating role the government already plays in the economy (as demonstrated by the RFI), would be more conducive to corporate freedom. This hypothesis may appear contradictory to the conventional wisdom that government intervention in industry can only restrain corporate freedom, but the new approach will actually afford a political space for government to adopt measures that are more deliberative and cooperative between the government and corporations. In contrast, the government acting alone is more likely to resort to unreviewable and uncontestable measures, such as those based on national security arguments, to justify intervention as long as society believes such intervention should be "minimal" and allowed only when it is absolutely inevitable. In the latter case, measures adopted by government tend to be one-sided, poorly deliberated, and more restrictive on corporate freedom, as seen by the government pressure associated with the RFI and the steel and aluminum tariffs.[246]

This new approach will support the government's role in facilitating economic development and addressing chronic economic problems in the United States.[247] The 2007–2008 financial crisis was a pivotal

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245. Michael Trebilcock, *Between Theories of Trade and Development: The Future of the World Trading System*, 16 J. WORLD INV. & TRADE 122, 128–29 (2015).

246. *See supra* sections II.C, III.B, IV.B.

247. Economic development refers to:

> the process of [ ] structural transformation of an economy from one based mostly on the production of primary products (*i.e.*, a product consumed in its unprocessed state), which generate low levels of income, to another based on modern industries, which generate higher levels of income for the majority of populations. It is a term that has been associated with less developed countries in the Third World ("developing countries") rather than economically advanced countries ("developed countries"), such as the United States. However, the changing economic conditions in developed countries—for example, the widening income gaps among individual citizens and geographic regions, the stagnant economic growth deepening income gaps, and the institutional incapacity to deal with these issues—go beyond the cyclical economic issues once considered a normality in developed economies; they resemble the chronic economic problems of the developing world. Yong-Shik Lee, *Law and Economic Development in the United States: Toward a New Paradigm*, 68 CATH. UNIV. L. REV. 229, 231–32 (2019).

display of chronic economic problems in the United States, which have been exacerbated since the emergence of neoliberalism in the 1980s.[248] These problems include stagnant economic growth and economic polarization across the board.[249]

As for stagnant economic growth, the U.S. economy has experienced a steady decline in its economic growth rate since the 1970s.

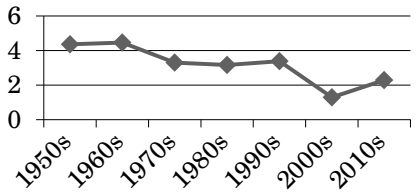

Figure 1: Average Annual Real Gross Domestic Product (GDP) Growth Rates by Decade (percentage)[250]

Figure 1 shows a long-term trend of steady decline. The particularly low average real growth rate in the 2000s was due to the 2007–2008 financial crisis, after which growth rebounded, but only at an average of a little over 2% growth per year.

Stagnant growth adversely affects employment. The unemployment/ population ratio for males aged twenty-five to fifty-four has been over 15% since 2010, compared to below 10% until the 1970s,[251] and over 24% for all persons aged twenty-five to fifty-four, compared

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The concept of "economic development" is also applicable to economic problems in developed countries to the extent that economic transformation is required to address them. Reflecting this reality, various national, regional, and local governments in developed countries have set up offices to foster "economic development," including the Economic Development Administration (EDA) established under the United States Department of Commerce, the Georgia Department of Economic Development in the State of Georgia, USA, and the Office of Economic Development in the City of New Orleans. The concept of economic development applicable to developed countries, whose economies are based on modern industries, rather than the production of primary products, can be redefined as "the process of progressive transformation of an economy, leading to higher productivity and increases in income for the majority of the population." *Id.* at 242–44; LEE, *supra* note 218, at 16–17.

248. *See supra* note 219 (discussing neoliberalism).

249. Lee, *supra* note 247, at 242–44.

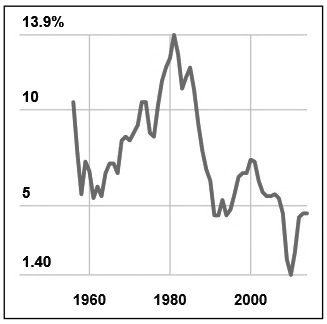
250. Compiled from *US Real GDP Growth Rate by Year*, MULTPL, http://www.multpl.com/us-real-gdp-growth-rate/table/by-year (last visited Apr. 11, 2023) [https://perma.cc/V4BF-2XJM] (a table of annual percentage changes in U.S. Real GDP, chained 2012 dollars (inflation-adjusted)).

251. *See* Edward Glaeser, *Secular joblessness*, *in* SECULAR STAGNATION: FACTS, CAUSES AND CURES 70 (Coen Teulings & Richard Baldwin eds., 2014), https://scholar.harvard.edu/files/farhi/files/book_chapter_secular_stagnation_nov_2014_0.pdf [https://perma.cc/6HHY-YM4L].

to 19% from 1999–2000.[252] A study reports the weakening of the stability of the labor market in the United States: until the end of the 1960s, the unemployment rate averaged approximately 5% to 8%, showing a degree of labor stability.[253] However, since 1970, increases in unemployment during recessions have been sharp, and previous employment rates did not return during periods of recovery.[254] The 2007–2008 economic recession aggravated unemployment, with the unemployment rate reaching almost 20% for the prime-aged male population, followed by only a slow recovery (down only to 16.6% by 2014).[255]

An important reason for the sluggish growth is the decline of the U.S. position in industries since the 1970s, particularly in the manufacturing sector.[256] U.S. companies have faced increasing competition from foreign manufacturers, such as those based in China.[257] As a result, U.S. producers have lost a substantial portion of their overseas and domestic consumer base. They have also relocated their production facilities overseas in search of cheaper labor and consumer outlets, reducing employment opportunities for U.S. workers. U.S. producers have taken the lead in some of the new, high-tech industries, such as information technology, bioindustry, and financial services. Yet this lead is not solid and also faces competition from producers abroad, as cautioned by the PCAST Report citing the rising influence of China's semiconductor sector.[258] Investment growth, measured by the non-residential fixed investment growth rate and the domestic net fixed investment/GDP ratio, has also been declining, as demonstrated by Figures 2 and 3 below. These declining investment growth rates adversely affect long-term economic growth.

252. *See* Coen Teulings & Richard Baldwin, *Introduction*, *in* SECULAR STAGNATION, *supra* note 251, at 8.
253. Glaeser, *supra* note 251, at 74.
254. *Id*.
255. *Id*.
256. LEE, *supra* note 218, at 120.
257. *Id.*
258. *See* PCAST REPORT, *supra* note 40.



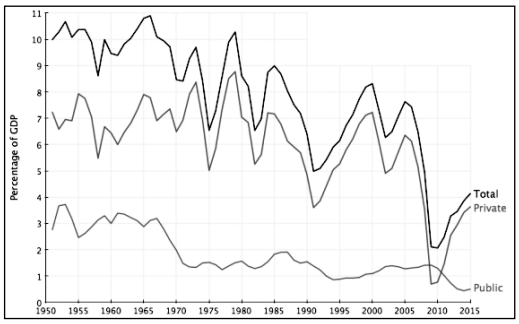


Figure 2 (left): Non-residential Fixed Investment Growth Rate[259]
Figure 3 (right): Domestic Net Fixed Investment (percentage of GDP)[260]

As for economic polarization, the inequality of income distribution impedes long-term economic growth in the United States.[261] According to one report, the increasing share of the top 10% of the income distribution has deprived the middle class of income growth.[262] Household income in the low to middle-income groups has stagnated since the 1970s, while household income in the highest-income group has increased rapidly. The active upward economic mobility from the 1950s until the 1970s has dissipated.[263] The number of middle-income households has been reduced from 58% of all households in 1970 to 47% in 2014, and the income share of the middle-income household has decreased from 47% in 1970 to 35% in 2014.[264]

259. Excerpted from Chris Matthews, *America's Investment Crisis is Getting Worse,* FORTUNE FINANCE (Dec. 2, 2015), http://fortune.com/2015/12/02/corporate-investment-crisis/ [https://perma.cc/2URW-49U2].
260. Excerpted from *How Fast Can GDP Grow?: Not as Fast as Trump Says*, AN ECON. SENSE (Aug. 1, 2017), https://aneconomicsense.org/category/econ-data/gdp-productivity/ [https://perma.cc/955Y-E935].
261. *See* SECULAR STAGNATION, *supra* note 251, at 8.
262. *Id*.
263. ALI ALICHI, KORY KANTENGA & JUAN SOLÉ, INT'L MONETARY FUND, WP/16/121, INCOME POLARIZATION IN THE UNITED STATES 5 (June 28, 2016), https://www.imf.org/external/pubs/ft/wp/2016/wp16121.pdf.
264. *Id.* at 5–8.

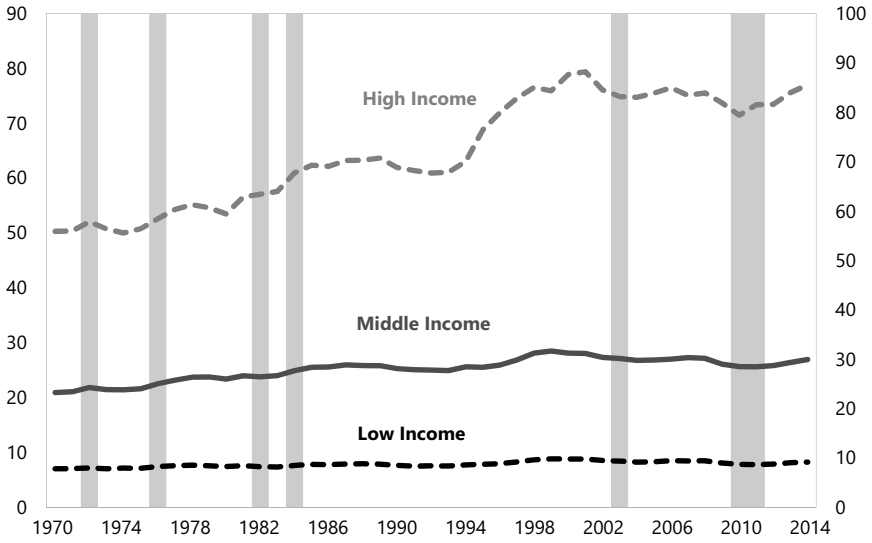


Figure 4: Average Scaled Household Income, 1970-2014 (thousand 2005 US$)[265]

265. *Id.* at 4. The low-income group comprises households with less than 50% of the median income; the middle-income group, households with 50-150% of median income; and the high-income group, households with more than 150% of median income. Household income is divided by its size per OECD's equivalence scale. *See id.* at 6 n.6.

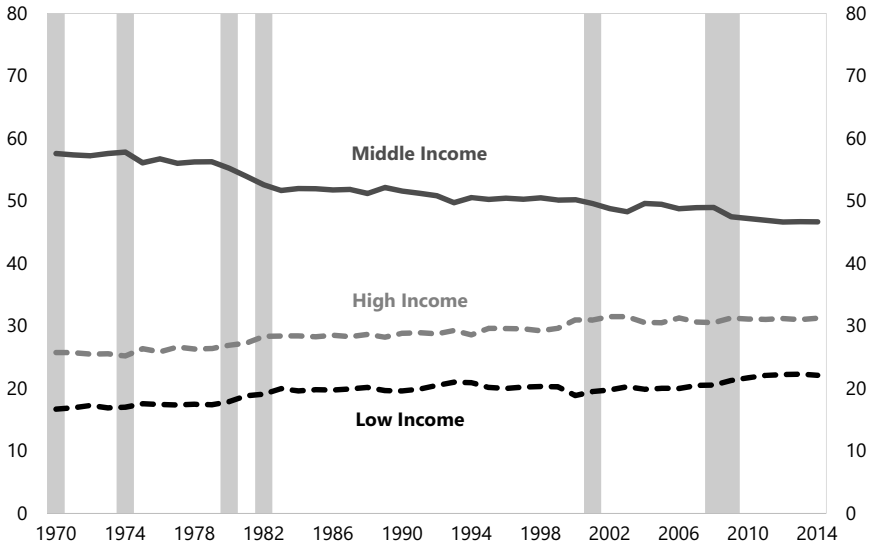


Figure 5: Number of Households by Income Group, 1970-2014 (percentage)[266]

266. *Id.* at 5.

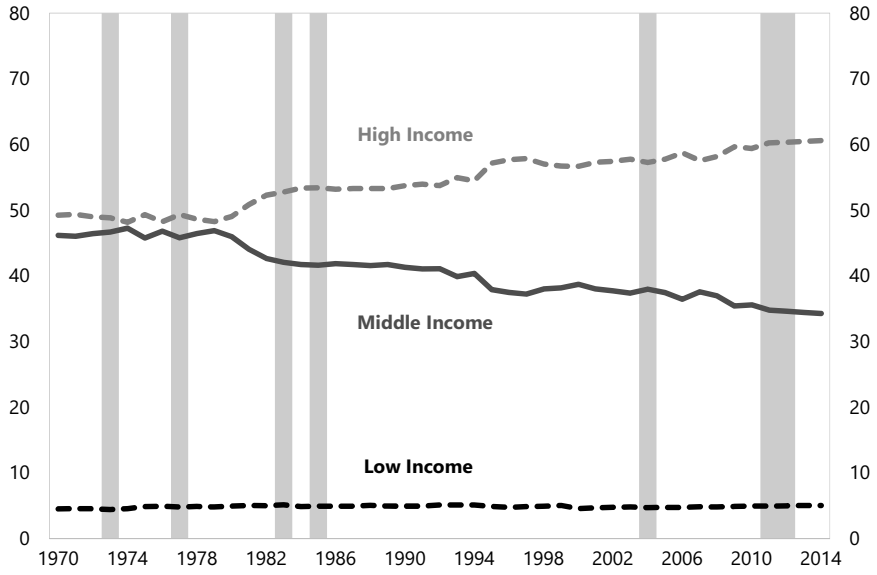


Figure 6: Income Shares by Income Group, 1970-2014 (percentage)[267]

Economic polarization has worsened in recent decades. From 1970 to 2000, more middle-income households moved into the high-income group rather than into the low-income group; but since 2000, only 0.25% of households have moved up to the high-income group compared to 3.25% of middle-income households who have moved down to the low-income group.[268] The majority of U.S. households have experienced stagnant income growth since the 1970s. This economic polarization adversely affects economic growth: as low and middle-income households spend a larger share of their income than the high-income group in order to meet their cost of living ("higher propensity to consume"), polarization lowers the level of consumption—suppressing, in turn, economic growth.[269] Therefore, stagnant income growth in the middle- and low-income groups, and the declining share of middle-income households, portend weakening consumption and explain stagnant economic growth over the years.

The specific roles that government should play in addressing these problems are beyond the scope of this paper. However, drawing from the successful experience of other countries, this paper proposes legal and institutional remedies that would mandate improved cooperation

267. *Id.* at 8.
268. *Id.* at 5.
269. *Id.* at 2.

and coordination among all levels of government and between the public and private sectors. Among these remedies are new investments to spur economic growth and to provide larger economic opportunities for the economically depressed regions and individuals in the middle- to low-income groups.[270] The government's efforts to solve the semiconductor shortage and protect domestic steel and aluminum industries are relevant to these objectives (i.e., spurring growth and providing economic opportunities). This paper proposes a measured partnership between the government and private corporations where corporate interests would be aligned with national economic objectives.[271] There is no place in such partnerships for coercive government measures, such as those misusing national security arguments to press corporations into compliance. Should government be allowed to sporadically adopt coercive measures based on alleged, non-verifiable security interests, these proposed partnerships cannot be formed, nor can corporate freedom be preserved.

VI. CONCLUSION

Corporate freedom and international trade interests do not prevail over national security interests. The economic freedom of individuals and corporations is the cornerstone of the modern market economy, and international trade is an integral part of our economic life today, but neither takes precedence over measures necessary to protect the security of the nation. Hence, corporate freedom and international trade interests are subordinate to national security interests but not to mere unsubstantiated *claims* of national security interests. Since the September 11th attacks in the United States, the public has accepted increased government powers to ensure national security.[272] But this public acceptance does not give government authority to randomly intervene in private industry and international trade or to order corporations to submit whatever information government wishes if it does not demonstrate a legitimate security risk.

The government could have adopted a more inclusive and consultative approach. The RFI and the steel and aluminum tariffs were not necessitated by the requirements of national security, as evidenced by the lack of demonstrated security interests in both cases, but for a commercial purpose. Government is justified in adopting measures to protect commercial interests that have a critical effect on the economy. The shortage of semiconductors could very well be in this cate-

270. LEE, *supra* note 218, at 126–37.
271. *Id.*
272. *See* Littlejohn, *supra* note 75, at 21. Another study also describes the increasing tendency to use corporate governance as an instrument of national defense. Andrew Verstein, *The Corporate Governance of National Security*, 95 WASH. UNIV. L. REV. 775 (2018).

gory. The RFI and tariffs are tools of industrial policy, and a more fitting approach would have included extensive prior consultations with key market players (both domestic and foreign-based), identification of industry concerns, and discussion of methods to ameliorate these concerns. The government ought to have taken these actions before resorting to coercive measures like warning to invoke DPA and adopting costly tariffs that provoked worldwide resistance and retaliation.[273] Coercion is not an effective tool for implementing industrial policy.

Secretary Raimondo indeed had tools in her "tool box."[274] The tool she should have considered using was not the misplaced threat to invoke the DPA; instead she should have initiated a productive partnership between the government and corporations. In the end, corporations supply the needed semiconductors, not the government; coercing firms to comply with the RFI is not a good start in motivating corporations to follow the government's policy lead. Lessons can be drawn from the successful economic development of other countries. For example, several East Asian countries, such as South Korea, Taiwan, and Singapore, have achieved unprecedented economic development through effective partnerships between government and industry rather than coercive mandates and compulsory government orders.[275] The latter approach pressures private corporations, restraining them rather than allowing them, via corporate freedom, to achieve their maximum potential. It will be counterproductive to limit this freedom under claims of national security where the government does not demonstrate a legitimate security interest.

As for international trade, the rules of international trade law (WTO law) authorize member states to adopt trade measures necessary to protect essential national security interests. However, the government has failed to demonstrate why it is necessary to impose tariffs on such a broad range of steel and aluminum products to pro-

273. *See supra* sections II.C, IV.B.

274. Shepardson, Nellis & Alper, *supra* note 10.

275. LEE, *supra* note 218, at 126–37. These newly industrialized countries (NICs) have achieved unprecedented economic development over the course of three decades; between 1961 and 1996, Korea increased its GDP (gross domestic product) by an average of 8.75% per annum, Hong Kong by 7.61%, Taiwan by 8.64%, and Singapore by 8.61% (calculated with real GDP figures at constant 2005 national prices). Meanwhile, the world's average annual GDP increase, and the annual GDP increase of the low and middle income countries for the corresponding period were 3.85% and 4.39%, respectively. Robert C. Feenstra, Robert Inklaar & Marcel P. Timmer, *Penn World Table Version 8.1* (Apr. 12, 2015), http://www.rug.nl/ggdc/productivity/pwt/pwt-releases/pwt8.1 [https://perma.cc/AUP9-FPZC]; *GDP Growth (annual %)*, WORLD BANK, https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG (last visited Apr. 11, 2023) [https://perma.cc/ZRJ4-VEV5].

tect the essential national security interests of the United States,[276] and the WTO held these tariffs are not justified under WTO law. This lack of justification has caused worldwide resistance to the U.S. tariffs, weakening the stability of the international trading system, and harming the economic interests of the United States. The tariffs may have assisted with domestic steel and aluminum industries, but they disadvantaged other sectors, such as automobile industries using steel products and other export industries whose interests are compromised by international retaliation. It is indeed necessary for the government to reassess and adjust how it invokes national security grounds to protect its favored industries at the expense of others.

This change in government relations with industry requires a shift in the approach. Under the U.S. Constitution, the federal government is a limited government with only the powers articulated in the Constitution, but the government can and does intervene in the economy and implement industrial policies.[277] Yet the neoliberal notion that seeks to reduce the role of government in the economy creates a façade of minimal government intervention, which remains influential in public thought. Per this notion, the government is under political pressure to find a compelling reason, such as national security, to justify its intervention; the ironic result is maximum, not minimum, restraint on corporate freedom by government measures invoked on dubious, unreviewable, and unchallengeable national security grounds.[278]

The international context poses additional risks. Inappropriate invocations of national security grounds to justify trade restricting measures, such as the steel and aluminum tariffs, will likely increase trade disputes that undermine the interests of U.S. exporters and increase costs for domestic customers. A better approach recognizes the government's coordinating role in the economy and the legitimacy of the government's industrial policies. This approach will accord a polit-

276. *See supra* section IV.B.

277. The federal government may regulate interstate commerce under the Commerce Clause of the Constitution. In *NLRB v. Jones & Laughlin Steel Corp*., the United States Supreme Court determined that a broad scope for the Commerce Clause should be used to control state activity. NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1 (1937). The Court ruled that an activity was considered commerce if that activity had a substantial economic effect on interstate commerce. *See id.* at 37–38. In a subsequent case, *United States v. Darby*, the Supreme Court held that the "power of Congress over interstate commerce is not confined to the regulation of commerce among the states." United States v. Darby, 312 U.S. 100, 118 (1941). The Court held that the power of the federal government "extends to those activities intrastate which so affect interstate commerce or the exercise of the power of Congress over it as to make regulation of them appropriate means to the attainment of a legitimate end, the exercise of the granted power of Congress to regulate interstate commerce." *Id.*

278. *See supra* section V.B.

ical space for government to adopt more consultative and coordinated measures, in both domestic and international contexts, that will draw and solicit stronger cooperation from corporations while preserving corporate freedom. It will also minimize the room for unnecessary and costly disputes in international trade, provoked by oppressive trade measures that benefit a small number of favored industries at the expense of consumers and other export industries.[279]

279. *Id.*