

Hidden Power in Global Supply Chains

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Most consumers are familiar with brand names like Apple, Nike, and H&M, but few have heard of the actual offshore multinational enterprises that make their products: Foxconn, Yue Yuen, TAL Apparel, and many others. This Article argues that these companies—whom I call “Big Suppliers”—represent a new crop of hidden corporate powers that have transformed the legal organization of global trade and production. In today’s “made in the world” era, transnational suppliers, not brands, are the true quarterbacks of global supply chains. As manufacturing experts, they coordinate and oversee supplier networks spanning Asia, Latin America, and beyond. Acting at once as employers, landlords, and quasi-regulators, they manage the employment, housing, mobility, and social lives of millions of workers whose labor sustains global trade. Yet, legal scholarship has only begun to notice the presence of these new global capitalists.

This Article is the first to systematically unearth the hidden impact of Big Suppliers on a suite of public and private law issues, including cross-border contracts, corporate social responsibility designs, trade regulations, private regulatory functions, and beyond. It makes three principal contributions: First, it identifies a critical yet largely overlooked power shift in the economic forms of globalization, that is, the reconsolidation of global production at the level of first-tier suppliers. Second, in revealing how transnational suppliers operate in a highly enmeshed market, it complicates the influential paradigm of “buyer-driven” globalization, which has long assumed that Global North brands are the key power holders in global trade. As this Article demonstrates, the narrative of buyer hegemony rests on an incomplete assumption that buyers can effectively exert pressure on their suppliers that has long undergirded important laws and policies such as corporate social responsibility designs. Third, this Article conceptualizes “norm assembly” as a process by which transnational suppliers, by virtue of their size and scale, act as critical sites of norm contestation, diffusion, and resistance. Norm assembly may be driven by agency, but could also happen simply as a by-product of a firm’s organizational logic and economic arrangement. Ultimately, in revealing the engine under the hood of global supply chains, this Article identifies a group of new critical actors and opens up potential venues for inquiries and interventions at a moment of imminent shifts in the architecture of globalization.

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INTRODUCTION	36
I. TWO PARALLEL TALES OF GLOBALIZATION	45
A. <i>The Great “Unbundlings”</i>	45
B. <i>Rise of Transnational Suppliers</i>	50
1. <i>Economic Drivers</i>	50
2. <i>Regulatory Drivers</i>	54
C. <i>Summary</i>	58
II. TRANSNATIONAL SUPPLIERS	60
A. <i>Vignette Case Studies</i>	60
1. <i>Vendor-Managed Inventory: TAL Apparel</i>	60
2. <i>Customer-Specific Production Lines: Yue Yuen</i>	62
3. <i>Supply Chain Cities: Luen Thai, Hon Hai and Beyond</i>	64
B. <i>An Updated Vision of Global Value Chains</i>	68
III. IMPLICATIONS	68
A. <i>Law & Policies</i>	69
1. <i>Cross-Border Contracts</i>	69
2. <i>Transnational Corporate Liability</i>	71
3. <i>Private Regulatory Functions</i>	72
4. <i>Trade Policies and Sanctions</i>	73
5. <i>Geopolitics</i>	78
6. <i>Summary</i>	80
B. <i>Toward Conceptualizing “Norm Assembly”</i>	81
CONCLUSION	83

INTRODUCTION

Hon Hai Precision Industry, better known under its trading name, Foxconn Technology Group, is the world’s largest electronics contract manufacturer and the twenty-sixth largest company in the world.¹ Headquartered in Taiwan, it employs nearly one million employees worldwide² and boasted more revenue than Alphabet, Ford Motor Company, General Electric, JPMorgan Chase, or Microsoft in 2020.³ Best known as Apple’s main manufacturer and supplier, it has been actively investing in and acquiring factories abroad, including in India, Mexico, and the United States.⁴ Impressive

1. See HON HAI PRECISION INDUS. CO., 2020 ANNUAL REPORT 15, 105 (2021), [https://image.honhai.com/financy_by_year/%E9%B4%BB%E6%B5%B7109%E5%B9%B4%E5%A0%B1_EN-v2_\(2\).pdf](https://image.honhai.com/financy_by_year/%E9%B4%BB%E6%B5%B7109%E5%B9%B4%E5%A0%B1_EN-v2_(2).pdf) [<https://perma.cc/7TNA-QXS3>].

2. HON HAI PRECISION INDUS. CO., 2019 CORPORATE SOCIAL RESPONSIBILITY REPORT 38 (2020), https://www.honhai.com/s3/reports/CSR%E5%A0%B1%E5%91%8A%E6%9B%B8/%E8%8B%B1%E6%96%87%E7%89%88/2019%E9%B4%BB%E6%B5%B7%20CSR%20report_en.pdf [<https://perma.cc/CR87-SJJS>].

3. See *Global 500*, FORTUNE, <https://fortune.com/global500> [<https://perma.cc/33LM-E9F3>] (last visited May 25, 2021).

4. See HON HAI PRECISION INDUS. CO., *supra* note 1, at 2, 152–56 (listing subsidiaries that are included in Hon Hai’s consolidated financial statements).

in its scale and stature, Hon Hai is not an anomaly. It is but one multinational enterprise in a group of powerful yet largely hidden global economic actors: transnational suppliers.

This Article traces the rise of “Big Suppliers” in our modern era of “made in the world” global value chains and explores their legal and policy implications.⁵ By Big Suppliers, I refer to large contract manufacturing corporations, public and private, with presence in multiple jurisdictions, whether through subsidiaries or contracting network.⁶ Global value chains—known also as global supply chains, global commodities chains, or global production networks—are, broadly defined, an ecosystem of internationally fragmented production, where tasks along the manufacturing process are deliberately carried out in different jurisdictions, primarily to achieve lower costs.⁷ Take, for example, an Apple iPhone (or a smartphone of an equivalent brand). Chances are it has lived a far more cosmopolitan life than many of us have—the rare earth minerals in its semiconductor chip might have been unearthed across Africa, the chip itself fabricated in Taiwan or Germany, its screen sourced from a high-tech factory in Mexico, its many parts then shipped to and assembled in a low-labor-cost country like Vietnam, and the final packaging done in an industrial park in China before the device is dispatched to retail stores all over the world and sold to individual consumers.⁸ In such a complex scheme, each part of the product has been carefully curated, its production schedule calibrated in sync with other processes and its suppliers vetted through competitive bidding, all strung together by cross-border contracts.⁹ Unsurprisingly, control, coordination, task manage-

5. See Pol Antràs, *Conceptual Aspects of Global Value Chains*, 34 *WORLD BANK ECON. REV.* 551, 553 (2020) [hereinafter Antràs, *Conceptual Aspects*] (defining global value chains as “consist[ing] of a series of stages involved in producing a product or service that is sold to consumers, with each stage adding value, and with at least two stages being produced in different countries”); see also POL ANTRÀS, *GLOBAL PRODUCTION: FIRMS, CONTRACTS, AND TRADE STRUCTURE* 4 (2015) [hereinafter ANTRÀS, *GLOBAL PRODUCTION*] (arguing that the “made in” label now belongs not to a single country but rather a global production effort).

6. In this Article, I use the terms Big Suppliers, first-tier suppliers, top-tier suppliers, and lead suppliers interchangeably to refer to these large companies.

7. See Antràs, *Conceptual Aspects*, *supra* note 5, at 553. Compared to the global value chains concept, “supply chains” are more logistically oriented, denoting the steps needed to get products to end customers. “Value chains,” a more recent term, adds an economic disparity perspective, whereby firms and countries compete to “upgrade” from labor-intensive work to technology-oriented work in order to obtain higher profit margins (also called “value capture”). “Global commodity chains,” a relatively older term, denotes that outsourced products were once “commodities”—that is, basic, undifferentiated goods. See Jennifer Bair, *Global Commodity Chains: Genealogy and Review*, in *FRONTIERS OF COMMODITY CHAIN RESEARCH* 1, 2–14 (Jennifer Bair ed., 2009) (tracing the various conceptualizations of global value chains). Though each of these terms carries economic significance, for the purpose of this Article, they all refer to the transnational networks of global production.

8. See, e.g., Charles Duhigg & Keith Bradsher, *How the U.S. Lost Out on iPhone Work*, *N.Y. TIMES* (Jan. 21, 2012), <https://www.nytimes.com/2012/01/22/business/apple-america-and-a-squeezed-middle-class.html> [<https://perma.cc/B8WX-GBT3>].

9. See ANTRÀS, *GLOBAL PRODUCTION*, *supra* note 5, at 10 (noting that “an important characteristic of global production networks is that they necessarily entail intensive contracting”); Michael P. Vandenbergh, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 *UCLA L.*

ment, and compliance are critical responsibilities for ensuring a smoothly run supply chain.¹⁰

Much of what we know about global production is understood through a narrative about the power of the corporate buyers, that is, multinational enterprises based in rich economies who sit at the end of supply chains. This highly influential account of “buyer-driven” globalization revolves around an asymmetric power dynamic between Goliath-like corporate buyers and their David-like suppliers.¹¹ The standard story goes like this: corporate buyers have superior leverage thanks to, among many factors, their economic clout, brand reputation, and access to consumer markets.¹² As such, they are able to control the terms of engagement with a sprawling, often unruly, network of suppliers and contractors worldwide.¹³ A significant mechanism of control, public law aside,¹⁴ is private governance through formal and informal obligations, most prominently enforced through auditing and monitoring.¹⁵ In this account, suppliers are generally thought to be isolated and fungible players, each only responsible for a discrete task in a far-flung location, with little agency or leverage over the production process. Because suppliers are also often the sites of ethical and environmental problems in

REV. 913, 925–28 (2007) (noting the roles of cross-border supply agreements in imposing obligations on suppliers).

10. See, e.g., *What is Supply Chain Management?*, IBM, <https://www.ibm.com/topics/supply-chain-management> [https://perma.cc/XN8M-2483] (last visited Jan. 3, 2022) (“Supply chain management is the handling of the entire production flow of a good or service—starting from the raw components all the way to delivering the final product to the consumer.”).

11. See *infra* notes 60–76 and accompanying text (summarizing the literature on supply chain governance).

12. See Gary Gereffi, John Humphrey & Timothy Sturgeon, *The Governance of Global Value Chains*, 12 REV. INT’L POL. ECON. 78, 85–87 (2005); see also U.N. CONF. ON TRADE AND DEV., CORPORATE SOCIAL RESPONSIBILITY IN GLOBAL VALUE CHAINS iii (2012) (“It is now common for large global firms to demand that their suppliers comply with codes of conduct covering social and environmental practices.”).

13. See U.N. CONF. ON TRADE AND DEV., *supra* note 12, at ix–x (noting the phenomenon of “monitoring fatigue”). Compliance is, of course, in reality much messier than on-paper control, and a sizeable interdisciplinary scholarship has been devoted to the thorny issue of improving supplier compliance. For a few representative works, see generally Kishanthi Parella, *Improving Human Rights Compliance in Supply Chains*, 95 NOTRE DAME L. REV. 727 (2019) (developing a reputational typology to analyze firms’ incentives for compliance); Jodi Short, Michael Toffel & Andrea Hugill, *Monitoring Global Supply Chains*, 37 STRATEGIC MGMT. J. 1878 (2016) (analyzing 17,000 supplier audits to identify factors that influence an auditor’s decision to report violations); Michael Toffel, Jodi Short & Melissa Ouellet, *Codes in Context: How States, Markets, and Civil Society Shape Adherence to Global Labor Standards*, 9 REGUL. & GOVERNANCE 205 (2015) (conducting a large-scale comparative study to identify factors that influence suppliers’ compliance).

14. While this Article principally analyzes the roles of private actors in global production, including their impacts on public law, it must be acknowledged that public law itself continues to play a heavy role in transnational business regulations. “Made in the world” products still have to be made within some jurisdictions, whose labor, environmental, and other rules create compliance obligations. Domestic and international trade law still govern cross-border commerce and, indeed, played a critical role in the phenomenon of transnational suppliers itself. See *infra* Part I.B (tracing the impact of regulations on the rise of Big Suppliers). I thank Steven Ratner for this point.

15. See *supra* notes 12–13 and accompanying text (summarizing representative literature on monitoring and audit).

global value chains—be it sweatshops, forced labor, or environmental disasters¹⁶—a main concern has been to ensure their compliance with the buyer’s standards and code of conduct, as a way to address the “governance gap” created by the mismatch of capital and territoriality in global production.¹⁷

Critically, under this paradigm of buyer hegemony, multinational brands, as the power holders, have long been upheld as the key to addressing the complex and persistent problems associated with globalization. Examples of buyer-targeted regulations and policies abound. At the international level, soft law instruments, such as the United Nations Guiding Principles on Business and Human Rights and ongoing efforts to create a legally binding treaty on business and human rights, largely focus on the transnational conduct of buyers.¹⁸ At the national level, supply-chain disclosure and vigilance laws—more robust in Europe than the United States—represent important steps in imposing obligations on corporate buyers to disclose and, in some instances, conduct due diligence on their otherwise opaque supply chains.¹⁹ From a civil society perspective, consumer movements for responsible supply chains have played a prominent role in changing corporate conduct, spurring an entire industry of corporate social responsibility, including the creation of social responsibility professionals, auditors, and rankings.²⁰ From a private law perspective, scholars have further advanced innovative arguments on ways to utilize contract law, tort law, and other hybrid mechanisms to incentivize corporate buyers (and vicariously, their suppliers) to

16. See David V. Snyder, Susan A. Maslow & Sarah Dadush, *Balancing Buyer and Supplier Responsibilities: Model Contract Clauses to Protect Workers in International Supply Chains, Version 2.0*, 77 BUS. LAW. 115 (2021) (grappling with the issue of how to remedy harms when “perfect shirts were made in extremely dangerous conditions” and proposing a model contract solution); Aditi Bagchi, *Production Liability*, 87 FORDHAM L. REV. 2501 (2019) (drawing on debates from torts and arguing that transnational companies should be liable for their production process in addition to their products).

17. In the supply chain context, “governance gap” refers to the challenges and complexity of seeking remedies for harms resulting from corporate activities that occur overseas. For a review of the extensive literature in this area, see Galit A. Sarfaty, *Shining Light on Global Supply Chains*, 56 HARV. INT’L L.J. 419, 427–31 (2015) (summarizing national and international laws aimed at regulating transnational harms in global value chains); Kishanthi Parella, *Outsourcing Corporate Accountability*, 89 WASH. L. REV. 746, 769–84 (2014) (same); and IGLP L. & Glob. Prod. Working Grp., *The Role of Law in Global Value Chains: A Research Manifesto*, 4 LONDON REV. INT’L L. 57, 63–64 (2016) (noting that the difficulty in regulating global value chains results from a fundamental mismatch between “a territorial logic of law and the transnational logic of capital”).

18. See Steven R. Ratner, *Introduction to the Symposium on Soft and Hard Law on Business and Human Rights*, 114 AJIL UNBOUND 163 (2020); see also JOINT CIVIL SOCIETY STATEMENT ON THE DRAFT GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS (2011), https://www.fidh.org/IMG/pdf/JOINT_CSOS_Statement_on_GPs.pdf [<https://perma.cc/3ZRK-C4YN>].

19. In the United States, efforts to increase supply chain transparency have largely followed a model of disclosure obligations. France’s Duty of Vigilance Law goes a step further, requiring that covered companies develop a vigilance plan that sets out “reasonable vigilance measures” to prevent and remedy business-related human rights risks. See Trang (Mae) Nguyen, *Co-Constructing Business Governance*, 31 STAN. L. & POL’Y REV. 143, 157–62 (2020) (highlighting the diverging models of transnational corporate liability in the United States, the United Kingdom, and France); see also Sarfaty, *supra* note 17 (overviewing U.S. laws implicating supply chains).

20. See U.N. CONF. ON TRADE AND DEV., *supra* note 12 (noting that corporate social responsibility has become “a mainstream practice of international business”).

improve labor and environmental conditions.²¹ Wide-ranging and innovative, these efforts tend to share a common foundation, that is, they are designed to motivate the biggest, most visible actors in the ecosystem—corporate buyers—in hopes that those players can exert pressure on relevant actors along the production process. Explicitly or implicitly, these solutions are built around the assumption that these firms can and do effectively exert such pressure.²²

This Article complicates the prevailing paradigm of buyer hegemony by detailing an updated account of global production. The punchline is this: the narrative of buyer-dominated supply chains is largely outdated. While brands remain important, a remarkable economic shift has slowly surfaced.²³ Today, towering firms are no longer just corporations from developed economies. Non-Western transcontinental suppliers like Hon Hai (electronics), Fuyao (industrial glass), Nien Hsing (denim fabric), Yue Yuen (footwear), and TAL Apparel (knitwear), as well as trading houses like Li & Fung, have emerged alongside corporate retailers such as Walmart, Nike, Apple, and JCPenney as indispensable players in global trade and production. Their emergence parallels a now-familiar narrative of how Western brands outsourced and offshored in pursuit of low-cost materials and labor.²⁴ As brands and retailers in the United States, Europe, and elsewhere divested, their foreign-based contracting partners have increasingly scaled up and consolidated.²⁵ As a result, these transnational suppliers represent a new crop of multinational enterprises, sitting atop a robust global supply base spanning Asia, Latin America, and beyond.²⁶ As laid bare by the COVID-19 pandemic, this global supply base, while transboundary and expansive, is also concentrated, both geographically to a small number of key countries and economically to a small group of key firms.²⁷ As a result, laws and policies

21. See, e.g., Kishanthi Parella, *Contractual Stakeholderism*, 102 B.U. L. REV. 865 (2022) (proposing a harm-prevention principle in contract enforcement); Snyder, Maslow & Dadush, *supra* note 16 (proposing revised model contract clauses that corporate buyers could adopt to provide remedies for negative externalities that arise in purchasing contracts); Jonathan Lipson, *Promising Justice: Contract (as) Social Responsibility*, 2019 WIS. L. REV. 1109 (2019) (noting that contracts can uniquely blend formal and informal enforcement to achieve the attended goals); David V. Snyder, *The New Social Contracts in International Supply Chains*, 68 AM. U. L. REV. 1869 (2019) (explaining the designs of the ABA Business Law Section Working Group's Draft Model Contract Clauses to Protect the Human Rights of Workers in International Supply Chains).

22. Other scholars have echoed this criticism. See, e.g., Parella, *supra* note 13, at 750–56 (arguing that supply chain transparency laws fail to adequately target down-stream suppliers and proposing decentralization and “reflexive laws” as a way to better align incentives between buyers, sellers, and suppliers).

23. See *infra* Part I.B (analyzing the rise of transnational suppliers).

24. See *infra* Part I.A (describing a brief history of outsourcing).

25. See *infra* Part I.B (describing the reconsolidation of global value chains at the level of first-tier suppliers).

26. See Timothy Sturgeon, John Humphrey & Gary Gereffi, *Making the Global Supply Base*, in *THE MARKET MAKERS: HOW RETAILERS ARE RESHAPING THE GLOBAL ECONOMY* 231, 235–41 (Gary Hamilton, Benjamin Senauer, & Misha Petrovic eds., 2011) (summarizing the historical development of Global South's supplying economies).

27. The recent disruption in the semiconductor supply chain is illustrative of this phenomenon. See *infra* notes 125–143 and accompanying text.

that primarily target corporate buyers are missing a remarkable shift in global economic arrangements.²⁸

At its core, this Article argues that global value chains' changing economic forms—manifested through reconsolidation at the level of first-tier suppliers—have a symbiotic effect with the various legal frameworks that cater to and proliferate from global production. This includes, most obviously, private law areas such as cross-border contracts and transnational corporate liability, but also bears on private governance issues such as standard setting and private actors' quasi-regulatory functions as well as public law and policy issues such as trade and geopolitics.²⁹ At least four attendant questions arise: (1) How have legal frameworks governing global trade transformed the economic organizations of global value chains? (2) How have transnational actors, particularly private actors, utilized laws, explicitly or implicitly, to facilitate or resist these changes? (3) What are the ramifications of their actions? (4) And finally, how should regulators—public or otherwise—respond and adapt in light of these developments?

This Article is the first in a series of planned academic articles to explore these questions. It does so here through both original and secondary research, marshalling evidence from interdisciplinary scholarship, including law, sociology, and business literature, company documents, and comparative law sources. In diving into the phenomenon of supply chain reconsolidation and its legal implications, it contributes to and expands on a fast-growing body of interdisciplinary scholarship on global production, much of which has tended to treat law as an exogenous, rather than constitutive factor, of globalization.³⁰ Legal scholarship, on the other hand, has only started to unravel the interplay of economic forms and legal forms of global value chains.³¹ Within legal scholarship, this Article is in dialogue with a rich

28. A number of scholars have also started to push back on the wisdom of corporate buyers-centered supply chains, though they have yet to offer an alternative. See, e.g., Gary Gereffi, *On Richard M. Locke, The Promise and Limit of Private Power: Promoting Labor Standards in a Global Economy*, 12 *SOCIO-ECON. REV.* 219, 222 (2014) (noting the rapidly evolved structure of global value chains and that “the power and information asymmetries that characterized what were referred to as ‘buyer-driven’ chains have diminished”); Parella, *supra* note 13, at 785 (noting that “the drawbacks to the current [corporate social responsibility] initiatives is that these approaches are based on the view that the buying end of the value chain contains the only key actors”); see also Nguyen, *supra* note 19, at 149–52 (calling attention to the critical roles of other neglected actors in global value chains, particularly host states and alternative structures created by developing countries).

29. See *infra* Part III (exploring the implications of Big Suppliers on a suite of public and private law issues).

30. See IGLP L. & GLOB. PROD. WORKING GRP., *supra* note 17, at 58 (“For the most part, legal scholarship has only summarily or incidentally analysed [global value chains], and similarly, [global value chains] scholars outside law have not made law a focal point of their theoretical or empirical analyses.”).

31. See *id.*; Dan Danielsen & Jennifer Bair, *The Role of Law in Global Value Chains: A Window into Law and Global Political Economy*, LAW & POL. ECON. PROJECT (Dec. 16, 2019), <https://lpeproject.org/blog/the-role-of-law-in-global-value-chains-a-window-into-law-and-global-political-economy> [https://perma.cc/2S9K-HSGA] (“[T]he role of law in the organization, operation and effects of [global value chains] was little understood and significantly undertheorized in the burgeoning social science and policy

body of work on compliance in transnational business regulations,³² private and transnational governance,³³ and a more recent critical strand on the role of law in global production.³⁴

In mapping this terrain, the Article makes three principal contributions. First, descriptively, it identifies and traces a relative shift in the locus of power in global value chains through the rise of transnational suppliers. Globalization’s “great unbundlings”—first the decoupling of the production of goods and consumption of goods, then the fragmentation of production itself—transformed industrial competitiveness from a country level to a global business model of “dispersed production.”³⁵ As a result, trade increasingly occurred in intermediate goods rather than in final goods. This, in turn, spurred demands for logistics professionals capable of optimizing complex cross-border processes. Driven in part by economic rationales and in part by regulatory by-products, global suppliers have emerged across industries. The key takeaway from this descriptive account is a push-back on the dominant conceptualization of global value chains as largely “unipolar” business empires of brands and corporate buyers. Instead, what emerges looks like an ongoing shift towards a multi-polar system, with offshore suppliers holding more power and control than previously understood.

Second, normatively, the Article examines the various legal and policy implications flowing from the above descriptive account. These implications span from private law areas such as contracting practice, to public law issues such as trade and sanctions, to in-between private governance issues like standard setting and self-regulation. As global value chains become entwined with pandemic disruptions and geopolitics, understanding the logistics of global value chains is critical to evaluating efforts to reorganize global production. Contract negotiations, for example, need to take into account the extensive linkages between corporate buyers and their lead suppliers, which, as explored below, sometimes involve the outsourcing of core operational functions beyond make-or-buy decisions.³⁶ This only begins to unpack the challenges associated with calls to onshore, re-shore, and restructure global value chains.

literatures on [global value chains].”); see also Amy Cohen, *Negotiating the Value Chain: A Study of Surplus and Distribution in Indian Markets for Food*, 45 LAW & SOC. INQUIRY 460 (2020).

32. See *supra* notes 13, 16–17 and accompanying text.

33. A recent wave of legal scholarship explores the unique infrastructure of transnational law. See, e.g., GREGORY SHAFFER, *EMERGING POWERS AND THE WORLD TRADING SYSTEM: THE PAST AND FUTURE OF INTERNATIONAL ECONOMIC LAW* 9–12, 14–21 (2021) (demonstrating how the pursuit of trade law capacity by emerging powers has transformed not only these countries’ internal legal systems but also trade law itself); SONIA ROLLAND & DAVID TRUBEK, *EMERGING POWERS IN THE INTERNATIONAL ECONOMIC ORDER: COOPERATION, COMPETITION AND TRANSFORMATION* 1–16 (2019) (documenting emerging economies’ resistance to the neoliberal vision and, as a consequence, predicting a more pluralistic international economic order); see also *infra* notes 291–97 and accompanying text (explaining the expansive roles of private actors in transnational law).

34. See *supra* notes 30–31 and accompanying text.

35. See *infra* Part I.A (describing a brief history of outsourcing).

36. See *infra* Part II.A.1 (discussing the TAL Apparel case study).

Corporate social responsibility designs provide another illustrative example. Strategies to improve social, environmental, and labor conditions such as codes of conduct and auditing regimes in the United States and beyond are generally designed to target corporate buyers.³⁷ These policies are linked to a specific vision of how global production is arranged. As the relative power locus in global value chains shifts, it follows that labor and environmental strategies, whether from regulators or private governance, will also need to adapt. As the vignette case studies below demonstrate, transnational suppliers can shape and resist norm diffusion (whether or not intentional) based on the economic arrangement of their business operations.³⁸ In some ways, this also highlights a story of inconvenience. The case studies complicate the oft-simple portrait of Western multinationals as the bad actors in their capitalist pursuits, showing instead how structural challenges can impede efforts to diffuse progressive norms.

The increasingly regulatory and public roles of Big Suppliers likewise raise similarly interesting questions. As explained below, a signature feature of modern global value chains is the creation of “supply chain cities”—massive, self-sustaining industrial complexes reminiscent of the “company town” model once popular during the Industrial Revolution era.³⁹ In this model, transnational suppliers act at once as employers, landlords, and governments, overseeing all aspects of millions of workers’ lives, including their waking and sleeping hours, their children’s education, access to healthcare, and freedom of movement. That these sites are often located in “regulatory carve-out” landscapes such as special economic zones and export-import zones further amplifies the quasi-public and regulatory roles played by these enterprises.⁴⁰

Third and finally, the Article makes a conceptual contribution to the literature on private norm-making through the idea of “norm assembly.” By virtue of their size and scale, both economically and in infrastructure, Big Suppliers are poised to become important players in the creation, interpretation, implementation, even resistance of a range of business and legal norms. “Norm assembly” thus envisions a co-production process, whereby these transnational private actors, together with their corporate buyers and other relevant actors in the supply chains, act as sites of norm contestation and diffusion, even evasion. As the case studies demonstrate, unlike “norm entrepreneurs,”⁴¹ who appear purposeful and goal-oriented, norm assembly may be driven by agency but could also happen simply as a by-product of a firm’s organizational logic and economic arrangement. This underscores the importance of understanding not only the macro-level organization of global

37. See *supra* notes 18–22 and accompanying text.

38. See *infra* Part II.A.2 (discussing the Yue Yuen case study).

39. See *infra* Part II.A.3 (discussing the supply chain cities case study).

40. *Id.*

41. See *infra* notes 294–300 and accompanying text (summarizing the literature on norm entrepreneurship and private governance).

value chains but also the economic structure of each industry and its key actors.

To be clear, this Article does not argue that existing efforts aimed at regulating corporate buyers are all futile or misguided. Targeting the biggest players, who are also often located in the most advanced legal systems, makes intuitive sense, especially in the real world of resource constraints. Many consumer-led efforts are indeed highly successful,⁴² and have gone a long way in addressing and educating the public about the problems in an otherwise invisible system of global capitalism.⁴³ At the same time, what we have learned so far has taught us that global economic governance is interdependent, thick with overlapping rules, and distorted by multiple incentives.⁴⁴ Just because certain roads have been well-traveled should not foreclose the usefulness of new paths and yet to be explored possibilities, especially when the existing paths face ample road blocks.⁴⁵ To borrow a metaphor, a “dragonfly eye” approach, which privileges a multifaceted mode of engagement, is sorely needed to get at a more accurate picture of something as complex and divisive as today’s globalization.⁴⁶

The remainder of the Article advances in four Parts. Part I provides a brief background on two parallel tales of globalization. The first documents the so-called “great unbundling” of firms in developed nations, who transformed from vertically integrated enterprises to multinational corporations to take advantage of competitive costs. The second details the creation of a corresponding offshore global supply base and its reconsolidation at the level of first-tier suppliers, which have now emerged as a new crop of transnational enterprises. Part II then uses a collection of vignette case studies to illustrate how these Big Suppliers operate in various settings: buyer-supplier inventory contracts (TAL Apparel); segmented production (Yue Yuen); and supply chain cities (Luen Thai and others). It then offers an updated portrait of global value chains as a counter-narrative to the influential paradigm of buyer-driven globalization. Part III explores the implications of the rise of

42. See generally RICHARD M. LOCKE, *THE PROMISE AND LIMITS OF PRIVATE POWER: PROMOTING LABOR STANDARDS IN A GLOBAL ECONOMY*, 135–42, 171–81 (2013) (documenting successful efforts to improve the lives of workers in Cambodia, Latin America, and elsewhere).

43. See, e.g., DELOITTE, *RESPONSIBLE SUPPLY CHAIN TOOLS: UNDERSTANDING THE MARKET OPPORTUNITY* 23 (2019), <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/about-deloitte/us-about-deloitte-humanity-united-responsible-supply-chain-tools.pdf> [https://perma.cc/2WAS-F4JG] (noting the difficulty of “end-to-end visibility” where companies are unable to track compliance beyond first-tier suppliers due to unauthorized subcontracting, limited resources, and ineffective method of inquiry, among other reasons).

44. See generally Karen J. Alter, *The Promise and Perils of Theorizing International Regime Complexity in an Evolving World*, 17 *REV. INT’L ORGS.* 375 (2022) (tracing the history of global capitalism and its interactions with the many overlapping regimes of international law).

45. See Nguyen, *supra* note 19, at 149–52 (explaining and visualizing the various governance gaps that exist in the current regime of transnational business regulations).

46. See ANTHEA ROBERTS & NICOLAS LAMP, *THE SIX FACES OF GLOBALIZATION: WHO WINS, WHO LOSES, AND WHY IT MATTERS* 12–17 (2021) (using dragonflies, whose compounded eyes of thousands of lenses enable 360-degree vision, as a metaphor for a mode of innovative thinking which integrates and synthesizes multiple perspectives).

Big Suppliers. It first lays out at least five major legal and policy areas implicated by an updated understanding of global value chains: (1) cross-border contracts; (2) transnational corporate liability; (3) suppliers' regulatory-like functions; (4) trade and trade sanctions; and (5) geopolitics. It then turns to the early steps in conceptualizing "norm assembly" and situates this concept within existing legal theories on private actors and transnational lawmaking. A brief conclusion follows.

I. TWO PARALLEL TALES OF GLOBALIZATION

Part I lays out a necessarily brief historical background of global production, with a focus on the economic story of how global value chains evolved to where they are today. The first section details the story from a Western perspective, where firms "unbundled" to take advantage of low-cost manufacturing elsewhere. The second section tells an accompanying story from the offshore perspective, where global suppliers have emerged across industries indicating a contraction of supply chains, driven in part by both economic needs and regulations.

A. *The Great "Unbundlings"*

In a now well-known narrative, economist Richard Baldwin recast the history of globalization as an odyssey of two great "unbundlings."⁴⁷ The first unbundling, lasting from the Industrial Revolution of 1820 to around 1990, was about the decoupling of the *production* of goods from the *consumption* of goods.⁴⁸ Thanks to inventions such as railroads, steamships, and container shipping, international transportation, once prohibitively expensive, became capable of moving mass products cheaper and faster.⁴⁹ Standardization played a critical role in this transition. Not only did container sizes need to be adjusted, so did the railroad systems used to move the containers and the attachment systems to anchor them, as well as the dimensions of rail cars and ships themselves.⁵⁰ This first era of global production was characterized by a boom in trade in final goods—that is, goods pro-

47. See RICHARD BALDWIN, *THE GREAT CONVERGENCE: INFORMATION TECHNOLOGY AND THE NEW GLOBALIZATION* 47–110 (2016) [hereinafter BALDWIN, *THE GREAT CONVERGENCE*] (summarizing the two eras of globalization); RICHARD BALDWIN, ECONOMIC COUNCIL OF FINLAND, *GLOBALISATION: THE GREAT UNBUNDLING(S)* (Sep. 2006), [http://appli8.hec.fr/map/files/globalisationthegreatunbundling\(s\).pdf](http://appli8.hec.fr/map/files/globalisationthegreatunbundling(s).pdf) [<https://perma.cc/53SB-K7Q2>].

48. See BALDWIN, *THE GREAT CONVERGENCE*, *supra* note 47, at 47–78.

49. The impact of shipping logistics on trade and globalization is a subject of a robust scholarship in economics, sociology, and elsewhere. For a few representative works, see EDNA BONACICH & JAKE WILSON, *GETTING THE GOODS: PORTS, LABOR, AND THE LOGISTICS REVOLUTION* 6–12 (2008) (documenting the development of a logistics industry that accompanied the rise of retailers); MARC LEVINSON, *THE BOX: HOW THE SHIPPING CONTAINER MADE THE WORLD SMALLER AND THE WORLD ECONOMY BIGGER* (2006) (tracing the history and global impact of standardized container boxes).

50. LEVINSON, *supra* note 49, at 7–15. Standardization itself is a highly political process. For an insightful investigation of standard settings by private power, see generally TIM BÜTHE & WALTER

duced and completed at one destination, then shipped to another destination for consumption.⁵¹ Countries competed based on nation-based comparative advantage—that is, production tended to occur wholly within a particular nation, while consumption occurred elsewhere.⁵² Because of this nation-based division, this era of globalization substantially contributed to the “great divergence” of global development: on the one hand, the industrialized and consumption-heavy Global North (today’s developed countries); on the other, the raw material and labor-supplying Global South (today’s developing and emerging economies).⁵³

If the first unbundling of globalization was about decoupling production and consumption, the second was about fragmenting production itself. Starting from 1990 onward, rapid development in information and communication technology enabled a radical change in the business model of manufacturing.⁵⁴ Firms in developed nations, having already outsourced, could now internationalize.⁵⁵ As communication technology improved, these firms gained the ability to coordinate complex, dispersed production from afar, in addition to sending technical and management know-how to labor-rich destinations.⁵⁶ As a result, industrial competitiveness was increasingly defined by production networks rather than by country-level comparative advantage.⁵⁷ Instead of final goods, trade increasingly occurred in intermediate goods—that is, components and parts crisscrossed the globe, waiting to be assembled at the most cost-advantageous destinations.⁵⁸ This business model of decentralized production was the beginning of global value chains as we know them today.⁵⁹

MATTLI, *THE NEW GLOBAL RULERS: THE PRIVATIZATION OF REGULATION IN THE WORLD ECONOMY* (2011) (studying rulemaking by privately-backed technical experts).

51. See BALDWIN, *THE GREAT CONVERGENCE*, *supra* note 47, at 47–78.

52. See *id.*; Michael Porter, *The Competitive Advantage of Nations*, HARV. BUS. REV., Mar.–Apr. 1990 (studying how various countries supported their prime industries).

53. See KENNETH POMERANZ, *THE GREAT DIVERGENCE: CHINA, EUROPE, AND THE MAKING OF THE MODERN WORLD ECONOMY* (2001) (arguing that Global North countries were able to take advantage of resource-extensive, labor-saving growth, while countries in Asia were forced down an opposite path).

54. See BALDWIN, *THE GREAT CONVERGENCE*, *supra* note 47, at 79–110.

55. See Peter Buckley, *Globalization and the Multinational Enterprise*, in OXFORD HANDBOOK OF STRATEGY 698, 699–703 (Andrew Campbell & David Faulkner eds., 2006) (noting the correlation between dispersed production and the creation of the multinational enterprise corporate form, designed to exploit the different levels of integration in international markets).

56. *Id.*

57. See BALDWIN, *THE GREAT CONVERGENCE*, *supra* note 47, at 79–110; see also Pol Antràs & Alonso Gortari, *On the Geography of Global Value Chains*, 84 *ECONOMETRICA* 1553 (2020).

58. See U.N. CONF. ON TRADE AND DEV., *KEY STATISTICS AND TRENDS IN INTERNATIONAL TRADE* 13 (2020), https://unctad.org/system/files/official-document/ditctab2022d3_en.pdf [<https://perma.cc/924N-L3A7>] [hereinafter *KEY STATISTICS*] (noting that, in 2019, intermediate products represent almost half of world trade in goods).

59. See Antràs & Gortari, *supra* note 57, at 1553–57 (developing a model of how firms pick the optimal locations for their supply chains).

Though much of supply chain studies today focus on the economic and technical aspects of production such as “Just in Time,”⁶⁰ global value chains’ early conceptualization as a “commodity chain” traces its roots to a critical approach advanced by developmental sociologists. This world-systems school posits that to understand why some nations achieve development while others struggle, scholars should focus not solely on nation-states and their domestic policies, but also on the structural, systemic inequalities of the entire global system, facilitated and institutionalized by colonialism and an emerging international division of labor.⁶¹ In this conceptualization, the cast of characters that makes up global supply chains—host states, home states, lead firms, intermediary firms, labor, and consumers—all operate within nested, overlapping networks, socially defined by a global order that reproduces and reinforces a hierarchy of power.⁶² A commodity chain, defined as a set of processes that transforms inputs into consumable goods, is a physical manifestation of the uneven cumulation of capital in international trade, with most of the wealth captured by “core” states at the expense of “peripheral” states—in other words, a cross-border manifestation of capitalism’s distributive consequences.⁶³

Governance—how particular actors in the chain of production exert control over others—soon emerged as the centerpiece of supply chain studies.⁶⁴ The conception of “supply chain governance”—that is, analyzing global production based on the power dynamics of inter-firm relationships within a production chain—has its genesis in a series of seminal works by economic sociology and interdisciplinary scholars.⁶⁵ Key to the governance framework is the identity of the power holder—that is, the lead firm that controls the

60. Popularized by Toyota in its manufacturing manifesto, “Just in Time” was an inventory management strategy aimed at minimizing costs by ordering just enough products as needed. For example, Toyota is known to operate with low inventory levels, relying instead on its supply chain to deliver the parts required to build cars on an as-needed basis. Toyota orders the parts required to assemble the cars only after an order is received. See Hirotaka Takeuchi et al., *The Contradictions That Drive Toyota’s Success*, HARV. BUS. REV., June 2008. A well-oiled supply chain is thus critical for “Just-in-Time” production. See Sean McLain et al., *Everywhere You Look, the Global Supply Chain Is a Mess*, WALL ST. J. (Mar. 18, 2021), <https://www.wsj.com/articles/where-you-look-the-global-supply-chain-is-a-mess-11616019081> [<https://perma.cc/P8XQ-8DYT>] (documenting supply chain disruptions due to COVID-19). To the contrary, traditional manufacturing with large inventory needs is somewhat denigratingly called “Just in Case” production, though the COVID-19 pandemic has renewed calls for a return to such safeguards. See *Companies Should Shift from ‘Just in Time’ to ‘Just in Case,’* FIN. TIMES (Apr. 22, 2020), <https://www.ft.com/content/606d1460-83c6-11ea-b555-37a289098206> [<https://perma.cc/D3VJ-4SWH>].

61. See Christopher Chase-Dunn & Peter Grimes, *World-System Analysis*, 21 ANN. REV. SOCIO. 387 (1995).

62. See *id.*

63. See Christopher Chase-Dunn & Marilyn Grell-Brisk, *Uneven and Combined Development in the Sociocultural Evolution of World-Systems*, in HISTORICAL SOCIOLOGY AND WORLD HISTORY: UNEVEN AND COMBINED DEVELOPMENT OVER THE LONG DURÉE 205 (Alexander Anievas & Kamran Matin eds., 2016).

64. See generally Gereffi, Humphrey & Sturgeon, *supra* note 12 (conceptualizing supply chain governance).

65. *Id.* at 85–87.

economic and legal arrangements of the production process—which previous scholarship, in focusing on state-centric competitive advantage, had neglected.⁶⁶

Early conceptualizations of the supply chain governance framework identified two patterns of control: “producer-driven” and “buyer-driven” supply chains, though both pointed to rich nations-based multinational companies, with the former denoting brands that also do their own manufacturing and the latter denoting retailers.⁶⁷ Producer-driven chains are often found in capital- and technology-intensive industries such as automobiles, electronics, and aircrafts, where multinational manufacturers exert tight control over the production process, typically through infrastructure and technical specifications.⁶⁸ By contrast, buyer-driven chains are found in labor-intensive industries such as apparel and consumer goods.⁶⁹ Industries aside, the main distinction lies in their corporate forms. Producer-driven chains tend to be more vertically integrated, while buyer-driven chains tend to rely on outsourcing.⁷⁰ While lead firms (who are also manufacturers) in producer-driven chains also contract with offshore suppliers, they also tend to enter into joint ventures with local partners in order to retain adequate control.⁷¹ To put it another way, whereas producer-driven chains tend to exert control through equity ownership and corporate law, buyer-driven chains tend to do so through contracts.⁷²

The producer-buyer dichotomy has been criticized as too narrow to accurately capture the diversity of structures in global production. For example, “true” commodity products such as coffee, sugar, and cotton have been shown to be “international traders-driven” chains due to the pivotal roles of large international trading houses.⁷³ In online commerce and services supply

66. *Id.*; see also Stefano Ponte & Timothy Sturgeon, *Explaining Governance in Global Value Chains: A Modular Theory-Building Effort*, 21 REV. INT'L POL. ECON. 195, 201 (2014).

67. Gereffi, Humphrey & Sturgeon, *supra* note 12; see also Ponte & Sturgeon, *supra* note 66, at 201–03.

68. Gereffi, Humphrey & Sturgeon, *supra* note 12, at 85–91.

69. *Id.* at 92–96.

70. See Bair, *supra* note 6, at 20 (noting the high level of control exerted by “big buyers” in either configuration even when no equity ties are involved in buyer-driven chains).

71. I thank Gary Gereffi for this point.

72. See Mark P. Dallas, Stefano Ponte & Timothy J. Sturgeon, *Power in Global Value Chains*, 26 REV. INT'L POL. ECON. 666, 668–94 (2019). For an analysis on the impact of supplier codes of conduct beyond global value chains, see Li-Wen Lin, *Legal Transplants through Private Contracting: Codes of Vendor Conduct in Global Supply Chains as an Example*, 57 AM. J. COMP. L. 711 (2009).

73. A “true” commodity refers to an interchangeable, basic good with little differentiation; for example, a bushel of wheat or a barrel of oil is more or less the same product regardless of its producer. In commodities trade, trading houses facilitate cross-border transactions and act as market makers (analogous to the roles of underwriters in securities transactions). Significantly, beyond importing and exporting the physical products, they also engage in capital market activities such as financing local producers (through loans or trade credits) and trading commodity futures and derivatives to hedge risk—thereby controlling not only the physical movements of the goods but also the price, risk profile, and liquidity of the entire market. See Peter Gibbon, *Upgrading Primary Production: A Global Commodity Chain Approach*, 29 WORLD DEV. 345, 345–63 (2001).

chains, technology is another key driver.⁷⁴ A chain may also have multiple governance structures, driven by product differentiation within the same industry. For example, the coffee and chocolate industries have a bifurcated structure based on product quality differentiation.⁷⁵ Specialty roasters and brand-name manufacturers care much more about bean quality, whereas industrial grinders buy in bulk and compete on price.⁷⁶ As a result, these industries have multiple lead firms, each controlling a segment of the market with its own supplier networks.

Ultimately, it was the shift of power from manufacturers and producers to retail buyers that created the “logistics revolution” that paved the way for Big Suppliers.⁷⁷ In the old model of “push” production, manufacturers produce in mass quantity for economies of scale and incentivize retailers to purchase in bulk for discounts, effectively shifting the complex burden (and associated costs) of demand forecasting to buyers. For buyers, one of the biggest risks is inventory: the ownership of products yet to be sold, vulnerable to the double dangers of overstocking and therefore looming discounts on the one hand and understocking and missed sale opportunities on the other, not to mention high overhead costs.⁷⁸ Instead, today’s retailers, having the virtue of being located at the end of the supply chain, benefit from a wealth of point of sale data, from which they can extrapolate consumers’ demands and purchase behaviors.⁷⁹ Under the more modern “pull” system, retailers transmit consumer preferences back to manufacturers and manage orders based on demands. This mode of “demand control” allows retailers to optimize for order quantity and profits, thereby reducing inefficiencies in inventory throughout the production process.⁸⁰

74. See, e.g., Gary Gereffi, *Beyond the Producer-Driven/Buyer-Driven Dichotomy: The Evolution of Global Value Chains in the Internet Era*, 32 *IDS BULL.* 30 (2001).

75. See, e.g., Niels Fold, *Lead Firms and Competition in “Bi-polar” Commodity Chains: Grinders and Brands in the Global Cocoa–Chocolate Industry*, 2 *J. AGRARIAN CHANGE* 228 (2002); Rocco Macchiavello & Ameet Morjaria, *Competition and Relational Contracts: Evidence from Rwanda’s Coffee Mills* (Soc. for Econ. Dynamics, Working Paper No. 431, 2015), <https://econpapers.repec.org/paper/redsed015/431.htm> [<https://perma.cc/49BH-TXBY>].

76. See Fold, *supra* note 75; Macchiavello & Morjaria, *supra* note 75.

77. See BONACICH & WILSON, *supra* note 49 (documenting the development of a logistics industry that accompanied the rise of retailers). As a definitional matter, retailers generally refer to department stores who typically purchase goods from manufacturers or wholesalers and then resell these goods to consumers in small quantities, whereas brands are private labels. See, e.g., Jason Goldberg, *The Epic Battle Between Brands and Retailers*, *FORBES* (Aug. 15, 2019), <https://www.forbes.com/sites/jasongoldberg/2019/08/25/the-epic-battle-between-brands-and-retailers/?sh=113f8e4136b5> [<https://perma.cc/4EBP-DDJ2>].

78. See Frederick Abernathy et al., *Control Your Inventory in a World of Lean Retailing*, *HARV. BUS. REV.* (Nov.–Dec. 2000) <https://hbr.org/2000/11/control-your-inventory-in-a-world-of-lean-retailing> [<https://perma.cc/WN8T-GKKA>] (noting a gravitation towards “lean retailing”).

79. *Id.* Indeed, point of sale infrastructure—where to locate check-out counters and product placements around them—is carefully structured to motivate consumption behavior. See, e.g., Hristina Nikolova & Jeffrey Inman, *Healthy Choice: The Effect of Simplified POS Nutritional Information on Consumer Food Choice Behavior*, 52 *J. MKTG. RSCH.* 817 (2015) (finding that strategically placed point-of-sale nutrition scoring system helped consumers make healthier food choices).

80. See BONACICH & WILSON, *supra* note 49, at 4–8.

The combination of rising retail power and dispersed production, in turn, created demands for a professional logistics industry capable of optimizing complex cross-border processes. Indeed, as detailed in the next section, logistics management, in addition to dispersed production, has become the hallmark business model of transnational suppliers.

B. Rise of Transnational Suppliers

The reconsolidation of global value chains at the level of first-tier suppliers varies by industry and by company but gravitates around at least two major drivers: economies of scale and trade-related regulations. As one economist aptly puts it, today's consumer products are best characterized as "made in the world"⁸¹ and, as detailed below, much of the logistics and coordination required to make this possible are done by highly capable transnational suppliers.⁸² Significantly, the rise of Big Suppliers has occurred across industries, from technology-intensive fields like electronics to labor-intensive areas like garments and footwear. This section studies how globalization's several great unbundlings, outlined above, have shifted towards reconsolidation.

1. Economic Drivers

From a corporate buyer's management perspectives, consolidation of the supply chains at the top-tier supplier level makes intuitive sense. Half of global trade today is in intermediate goods, such that each product is assembled through a "bundle of contracts" long before they arrive in the hands of retailers.⁸³ With rising transactional complexity, having fewer, larger, and more capable suppliers can lower transaction costs, both in terms of monetary costs and management efforts. Buyer firms, with a smaller number of relationships to manage and simpler logistics to coordinate, can build up

81. See ANTRÀS, GLOBAL PRODUCTION, *supra* note 5 (arguing that the "made in" label now belongs to no single country but rather a global production effort).

82. See *infra* notes 86–108 and accompanying text (noting the offerings and services offered by transnational suppliers in the apparel and electronic industries); see also Cornelia Startiz, *Making the Cut? Low-Income Countries and the Global Clothing Value Chain in a Post-Quota and Post-Crisis World*, WORLD BANK ix (2010), <https://documents1.worldbank.org/curated/en/801571468325149436/pdf/588510PUB0Maki101public10BOX353816B.pdf> [<https://perma.cc/4HKE-3KZ6>] ("At the firm level the increasing adoption of supply chain rationalization strategies by global buyers has benefited larger and more capable suppliers to the detriment of smaller and marginal suppliers in all countries.").

83. See U.N. CONF. ON TRADE AND DEV., KEY STATISTICS, *supra* note 58, at 13 (noting the dominance of trade in intermediate goods); John G. Ruggie, Closing Plenary Remarks, Third United Nations Forum on Business and Human Rights, at 3–7 (Dec. 3, 2014), https://www.ohchr.org/sites/default/files/Documents/Issues/Business/ForumSession3/Submissions/JohnRuggie_SR_SG_BHR.pdf [<https://perma.cc/TF4X-MLPM>] (noting that modern transnational corporations operate through "a bundle of contracts" and calling attention to the historically asymmetrical nature of transnational commerce, including in investment law).

trust through repeated interactions.⁸⁴ As a result, more and more supply chain management and governance activities have shifted to the purview of lead suppliers.⁸⁵

Prime examples are the apparel and footwear industries, known to be classic “buyer-driven” supply chains—that is, led by retailers and brands. These industries are characterized by labor-intensive work driven by fast fashion, quick turnaround times, and trend-sensitive customer demands.⁸⁶ Fashion was organized around twice-a-year seasonal collections until brands like Zara and H&M pioneered a “micro seasons” business model that focused on trend-setting items, effectively creating year-round release.⁸⁷ As a result, brands face the twin dilemma of constantly scouting for new locations with competitive labor costs and requiring a reliable production network to meet fast deadlines. First-tier suppliers, usually already located in favorable off-shore countries such as South Korea and Hong Kong, are often in a better position to search for second-tier manufacturers in cheaper nearby locations, such as Vietnam or Cambodia.⁸⁸ Like brands, suppliers’ make-or-buy decisions are driven by complex decision-making processes. Usually only some of the functions in the production lines can be further outsourced—for example, labor-intensive tasks like sewing, compared to more sophisticated, capital-intensive tasks like fabric cutting.⁸⁹ As a result, low labor cost is but one driver of whether to outsource.⁹⁰ Seasonal changes, ever-evolving trends, and quick turnaround demands mean first-tier suppliers also need downstream coordination and standardization in order to meet buyers’ demands.

84. See Antràs, *Conceptual Aspects*, *supra* note 5, at 566 (noting the difficulty of enforcement in cross-border contracts motivated supply chain participants “to employ repeated interactions among them to build a governance that provides implicit contract enforcement”).

85. See Richard P. Appelbaum, *Transnational Contractors in East Asia*, in *THE MARKET MAKERS: HOW RETAILERS ARE RESHAPING THE GLOBAL ECONOMY* 255, 255–57 (Gary Hamilton, Benjamin Senauer & Misha Petrovic eds., 2011) (noting the proliferation of lead suppliers across a number of industries).

86. See Felipe Caro & Victor Martínez-de-Albeniz, *Fast Fashion: Business Model Overview and Research Opportunities*, in *RETAIL SUPPLY CHAIN MANAGEMENT: QUANTITATIVE MODEL AND EMPIRICAL STUDIES* 237, 243–53 (Narendra Agrawal & Stephen A. Smith eds., 2014) (detailing the business model of Zara and H&M).

87. See Audrey Stanton, *What Is Fast Fashion, Anyway?*, *THE GOOD TRADE* (Oct. 2022), <https://www.thegoodtrade.com/features/what-is-fast-fashion> [<https://perma.cc/X4RS-BK8Q>] (noting that fast fashion produces low-cost, low-quality trend-setting pieces).

88. See TAKAHIRO FUKUNISHI, KENTA GOTO & TATSUFUMI YAMAGATA, OECD, WTO & IDE-JETRO, *AID FOR TRADE AND VALUE CHAINS IN TEXTILES AND APPAREL* 22–24 (2013), https://www.oecd.org/dac/aft/AidforTrade_SectorStudy_Textiles.pdf [<https://perma.cc/QV53-SS8Q>] (noting that lead suppliers, once able to upgrade to a higher function in the supply chain, tend to outsource labor intensive tasks to firms in less developed countries).

89. See Gary Gereffi & Stacey Frederick, *The Global Apparel Value Chain, Trade and the Crisis: Challenges and Opportunities for Developing Countries*, in *GLOBAL VALUE CHAINS IN A POSTCRISIS WORLD: A DEVELOPMENT PERSPECTIVE* 157, 173–74 (Olivier Cattaneo, Gary Gereffi & Cornelia Staritz eds., 2010); see also FUKUNISHI et al., *supra* note 88.

90. See Startiz, *supra* note 82 (noting the importance of other factors such as short lead times, production flexibility, quality, compliance, and non-manufacturing capabilities such as inventory management and logistics).

A distinguishing feature of transnational suppliers is the level of sophisticated management services they offer upstream buyers. One apt example is Li & Fung, one of the world's biggest apparel trading houses, once called "the most important company that most American shoppers never heard of."⁹¹ Though known as "the Walmart of purchasing," Li & Fung is actually unlike other Big Suppliers in that it does not own factories, but rather built its reputation as a sourcing and logistics management company.⁹² It has presence in over fifty economies through its network of 10,000 suppliers, in addition to acquisitions in warehousing and transportation.⁹³ As with many Asia-based conglomerates, its rise and expansion parallels the modernization of China itself.⁹⁴ Li & Fung rose to fame thanks to its attractive offerings of "customized value chains" that include specialized services, logistics management, rapid order fulfillment, and materials sourcing.⁹⁵ In essence, it creates customer-specific manufacturing programs and identifies where, when, and how to source the needed materials to meet the customer's vision for the upcoming fashion season (synthetics are better in Taiwan, but cottons are best from Hong Kong; zippers are good from specific Chinese manufacturers of a certain Japanese brand, and so on and so forth).⁹⁶ It then figures out which factories can offer the best combination of price, quality, and other attributes based on customer criteria, and develops production schedules keyed to specific deadlines, which it also offers to monitor and manage.⁹⁷ As its former chairman put it, "[w]e are not asking which country can do the best job overall. Instead, we are pulling apart the value chain and optimizing each step—and we're doing it globally."⁹⁸ Li & Fung's "matchmaking" model soon established the gold standard for supply chain management.⁹⁹ Critics, particularly labor advocates, however, have long argued that its service, designed to optimize for low costs, facilitated a global race to the bottom to the detriment of workers.¹⁰⁰

91. See Ian Ubrina & Keith Bradsher, *Linking Factories to the Malls, Middleman Pushes Low Costs*, N.Y. TIMES (Oct. 3, 2014), <https://www.nytimes.com/2013/08/08/world/linking-factories-to-the-malls-middleman-pushes-low-costs.html> [<https://perma.cc/8JB2-GUK2>].

92. *Id.*; LI & FUNG LTD., CREATING THE SUPPLY CHAIN OF THE FUTURE: ANNUAL REPORT 7 (2019) https://www.lifung.com/wp-content/uploads/2019/08/LiFung_AR_2019.pdf [<https://perma.cc/D6TJ-G4CD>]. I thank Gary Gereffi for emphasizing this point.

93. LI & FUNG LTD., *supra* note 92.

94. For a colorful history of the company, see Joan Magretta, *Fast, Global, and Entrepreneurial: Supply Chain Management, Hong Kong Style—An Interview with Victor Fung*, HARV. BUS. REV., Sept.–Oct. 1998. See also Robert Ross et al., *A Critical Corporate Profile of Li & Fung*, 31 MOSAKOWSKI INST. PUB. ENTER. (2014) (criticizing the company's aggressive acquisition tactics and sourcing strategy).

95. See *Our Business*, LI & FUNG LTD., <https://www.lifung.com/supply-chain-innovation/our-business> [<https://perma.cc/N7DX-4TBC>] (last visited Oct. 7, 2021); Magretta, *supra* note 94.

96. See Magretta, *supra* note 94.

97. See LI & FUNG LTD., *supra* note 92, at 13.

98. See Magretta, *supra* note 94.

99. *Id.*

100. Ubrina & Bradsher, *supra* note 91 (analogizing Li & Fung to a "sherpa showing companies the fastest route" to the race to the bottom) (quoting Cathy Feingold, international director of AFL-CIO).

Technology-intensive industries such as personal electronics—personal computers, cell phones, wearable tech—provide another apt example. Original equipment manufacturers—that is, companies who manufacture goods under their own brands like Apple and Samsung—generally focus on their core strengths in product design, software development, and brand marketing.¹⁰¹ Manufacturing tasks are outsourced to electronic contractors—theyself corporate giants but whose names consumers may have barely heard of: Taiwan-based Foxconn, its smaller competitor Pegatron, Singapore-based Flextronics, just to name a few. Foxconn and its peers are generally known to be in charge of lower-end components and assembly work, while high-end parts such as display screens and microchips may come from other specialized Japanese, Taiwanese, and Korean firms.¹⁰² While assembling tasks are labor-intensive and low-margin, these suppliers' high revenues come from their ability to handle large volumes at an attractive cost, time, and quality for a range of electronics customers.¹⁰³ Similar to Big Suppliers in the apparel industry, Foxconn promises brands a comprehensive service experience, which it does through a vertically-integrated one-stop-shop business model.¹⁰⁴ In addition to manufacturing and assembly work, it offers joint product design and development, logistics management, system standardization, and after-sale repairs and maintenance, thus selling “the lowest cost solutions” when issues arise along the product's lifespan.¹⁰⁵

Though headquartered in Taiwan, Foxconn first built its factories—now sprawling industry parks—in mainland China to take advantage of favorable tax treatment, migrant workers' low wages, and excellent manufacturing infrastructure.¹⁰⁶ The proliferation of personal electronics further provides opportunities for horizontal expansion. Between 1998 and 2012, Foxconn alone conducted over 15 major mergers and acquisitions worldwide, includ-

101. See ANTONIO VARAS ET AL., STRENGTHENING THE GLOBAL SEMICONDUCTOR SUPPLY CHAIN IN AN UNCERTAIN ERA 9–13 (2021), <https://web-assets.bcg.com/9d/64/367c63094411b6e9e1407bec0dccb9gsia-strengthening-the-global-semiconductor-value-chain-april-2021.pdf> [https://perma.cc/6454-Y9UB].

102. See Shiu Wan Hung et al., *Analysis of the Development Strategy of Late-Entrants in Taiwan and Korea's TFT-LCD Industry*, 34 *TECH. IN SOC'Y* 9, 9–11 (2012).

103. See, e.g., Tim Culpan, *Apple Profit Margins Rise at Foxconn's Expense*, *BLOOMBERG* (Jan. 4, 2012), <https://www.bloomberg.com/news/articles/2012-01-04/apple-profit-margins-rise-at-foxconn-s-expense> [https://perma.cc/K739-BHL4].

104. For an analysis of how Foxconn achieved its one-stop-shop vision through mergers and acquisitions, see Charlie Chiang & Ho-Don Yan, *Terry Gou and Foxconn*, in *HANDBOOK OF EAST ASIAN ENTREPRENEURSHIP* 300, 304–10 (Ho-Don Yan & Tony Fu-Lai Yu eds., 2015).

105. See DIRK MORSCHETT, HANNA SCHRAMM-KLEIN & JOACHIM ZENTES, *STRATEGIC INTERNATIONAL MANAGEMENT: TEXT AND CASES* 377–84 (2015), http://ir.mkus.ac.ke/bitstream/handle/123456780/6267/2015_Book_StrategicInternationalManageme.pdf?sequence=1&isAllowed=Y [https://perma.cc/LD8K-M887] (discussing Hon Hai).

106. Foxconn's rise was, in many ways, a capstone of China's history—rooting in Deng Xiaoping's economic and policy reforms in the 1970s, including the creation of special economic zones, mass migrant workers movements, and the integration of China into the global economic order. For a comprehensive overview of China's industrial policies during this period, see EZRA VOGEL, *DENG XIAOPING AND THE TRANSFORMATION OF CHINA* (2013).

ing Japan-based Sharp (itself a multinational manufacturer known for its TVs and display screens) and Motorola's Mexico business.¹⁰⁷ In particular, Sharp's acquisition enabled Foxconn to "upgrade" its position in the electronic value chain and achieve a higher profit margin, as display screens are the most expensive component in personal electronic devices.¹⁰⁸

Firms' and industries' economic activities of course do not exist in a regulatory vacuum. The next section explores some of the major regulatory drivers that contribute to the rise of transnational suppliers.

2. Regulatory Drivers

Unsurprisingly, trade-related regulations and policies, both domestic and international, have enormous impacts on the economic forms of global production. Consider again the textile and garment industry, where the products themselves were not highly regulated but trade was. In the United States, textiles and apparel were historically among the most fiercely protected.¹⁰⁹ In the United States, starting in the 1950s, the domestic textile industry became increasingly concerned over surges in cotton import from Japan, then Hong Kong, Pakistan, and India.¹¹⁰ This led to lobbying efforts for import controls, culminating in a series of regulations that restricted trade in cotton textiles.¹¹¹ As protectionist efforts centered on cotton, imports started to shift to synthetic fiber, replicating the same tension.¹¹² In response to this mounting pressure, the United States negotiated textile quota restrictions under various bilateral agreements before the Nixon Administration signed the sweeping Multi-Fibre Arrangement.¹¹³

107. See Ho-Don Yan, *Managing Electronic Manufacturing Service (EMS)—Terry Gou and the Making of Foxconn*, 4 *KINDAI MGMT. REV.* 40, 43 (2016) (summarizing Foxconn's M&A activities); see also Jean-Pierre Lehmann, *Acquisition of Japan's Sharp by Taiwan's Foxconn*, *INST. MGMT. DEV.* (Feb. 2016), <https://www.imd.org/research-knowledge/articles/acquisition-of-japans-sharp-by-taiwans-foxconn> [https://perma.cc/3E7P-KPG9] (noting the symbolic significance of the deal as a triumph for globalization against Japan's insular politics).

108. See Kana Inagaki, *Sharp Sees Foxconn as "Ticket to Becoming Global,"* *FIN. TIMES* (June 27, 2019), <https://www.ft.com/content/9057832a-4a3a-11e9-bde6-79eaea5ac64> [https://perma.cc/2CEL-E2DL]. Upgrading, a core concept in supply chain literature, refers to a firm's ability to access higher-value activities, thereby capturing more of the profits generated along the supply chain. See John Humphrey & Hubert Schmitz, *How Does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters?*, 36 *REG'L STUD.* 1017 (2002); Elisa Giuliani et al., *Upgrading in Global Value Chains: Lessons from Latin American Clusters*, 33 *WORLD DEV.* 549 (2005).

109. See Oona A. Hathaway, *Positive Feedback: The Impact of Trade Liberalization on Industry Demands for Protection*, 52 *INT'L ORG.* 575, 596–604 (1998) (using textile and apparel as a case study for industries' demand for trade protection).

110. U.S. INT'L TRADE COMM'N, *THE HISTORY AND CURRENT STATUS OF THE MULTIFIBER ARRANGEMENT* 1–5, 18–24 (1978).

111. *Id.* at 8–11.

112. *Id.*

113. *Id.* at 12–18, 33–38.

The Multi-Fiber Arrangement (“MFA”) was a multilateral regime that governed trade in textiles from 1973 until 2005.¹¹⁴ Now obsolete, it was once extraordinary. Its underlying goal was transparently both protectionist and distributive, seeking “to expand world trade in textiles with particular regard to the economic needs of developing countries . . . while at the same time preventing disruption of the markets of the developed, importing countries.”¹¹⁵ Functionally, the MFA created a special quota regime as an exception to the trade framework set up by the General Agreement on Tariffs and Trade (“GATT”), the precursor to the World Trade Organization (“WTO”).¹¹⁶ This quota regime was a major departure from the basic GATT principles of trade liberalization and nondiscrimination.¹¹⁷ Under the MFA, importing economies (*i.e.*, developed countries) could impose item-by-item, country-specific quotas against exporters (*i.e.*, developing economies).¹¹⁸ The quota regime effectively prevented a country-level or regional-level oligopoly. Prior to the implementation of the MFA, in the United States, most apparel imports originated from Northeast Asia, primarily Hong Kong, Taiwan, and South Korea.¹¹⁹ Once the MFA was implemented, by 1997, U.S. apparel imports had increased multifold compared to the previous decade, but with more even distribution from South and Southeast Asia, Central America, and Mexico.¹²⁰ In effect, the MFA created a dispersed global textile production scheme, whereby far-flung nations with previously limited technical or business capacity such as Cambodia and Sri Lanka were able to gain access to Western markets.¹²¹

114. The MFA governed not only cottons but also wool, man-made fiber, and other textiles (hence the name “multi-fiber”). See Agreement Regarding International Trade in Textiles, Dec. 20, 1973, GATT B.I.S.D. (21st Supp.) (1975). Starting in 1995, it was replaced by the World Trade Organization Agreement on Textiles and Clothing, which set out a ten-year transitional arrangement to bring textiles back under the disciplines of the WTO. For a history of the MFA, see U.S. INT’L TRADE COMM’N, *supra* note 110.

115. See U.S. INT’L TRADE COMM’N, *supra* note 110, at vi.

116. The GATT, which came to life in 1947, minimized barriers to international trade by eliminating or reducing quotas, tariffs, and subsidies while preserving significant regulations. See General Agreement on Tariffs and Trade art. 1, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT]; see also *Textiles: Back in the Mainstream*, WTO, https://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm5_e.htm [https://perma.cc/UZ28-R38R] (last visited Oct. 26, 2022) (noting that the MFA regimes were exceptions to the GATT’s non-discrimination principle).

117. One cornerstone principle of the GATT was nondiscrimination, also known as the “most-favored-nation” principle. See GATT, *supra* note 116 art. 1 (“[A]ny advantage, favor, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.”). Despite its name, a most-favored-nation treaty clause actually requires the opposite, that is, a standard of treatment that is “not less favorable” to third countries. In supply chain context, this status is critical for trade viability because it significantly raises the cost of opting out of the global trade regime. For an overview on this issue, see KYLE BAGWELL & ROBERT STAIGER, *THE ECONOMICS OF THE WORLD TRADING SYSTEM*, 71–94 (2004).

118. See Hathaway, *supra* note 109, at 598.

119. See Gary Gereffi, *International Trade and Industrial Upgrading in the Apparel Commodity Chain*, 48 J. INT’L ECON. 37, 49–50 (1999).

120. *Id.*

121. *Id.*

Regulatory shifts like the MFA led to new forms of supply chain coordination and made it even harder for corporate buyers to themselves develop direct sourcing capabilities. The regime rewarded firms with transnational presence, cross-border knowledge, and established relationships. Knowing, for example, which quotas were close to being reached in one country would be critical to make timely pivots to sourcing from elsewhere. “Production switching”—moving production to less restrictive locations—was a common business strategy to bypass country-specific trade barriers.¹²² When major apparel-exporting hubs such as Hong Kong, South Korea, Taiwan, and later China reached their maximum quotas, transnational firms set up presence or contracted with factories in nearby low-wage countries such as Bangladesh, Sri Lanka, and Vietnam to take advantage of their unused export allowances.¹²³ The MFA’s regulatory scheme thus incentivized the creation of transnational intermediaries. By working with a large number of factories across multiple jurisdictions, these firms were able to coordinate production and trade, shifting and sharing when needed.¹²⁴

By the time the MFA regime was phased out in 2005, first-tier suppliers had already emerged, and subsequent events only further accelerated their consolidation. For one, the elimination of quotas and safeguards was soon followed by the 2007–2008 financial crisis, resulting in the demise of smaller apparel exporters and contraction of supply chains.¹²⁵ As payments were delayed and access to credit dried up, suppliers’ financial stability was critical to maintaining operations, favoring the survival of bigger, more established companies.¹²⁶ At the macro level, without quota restrictions, the apparel supply chain started to converge toward an oligopoly, mainly in China, but also spilling over to new hubs such as India, Bangladesh, Vietnam, and Indonesia.¹²⁷ At the same time, wary of systematic financial risks, corporate buyers increasingly desired long-term strategic relationships with established suppliers who could weather such risks as well as offer supply chain management services.¹²⁸

While consolidation in the textile and apparel industry was driven in no small part by international trade law,¹²⁹ in the semiconductor industry, changing economic forms were influenced by industry-specific and national industrial policies. Semiconductors—also called integrated circuits, microchips, or just chips—are the neurons of today’s technology, powering

122. See Gary Gereffi et al., *Trade Policies, Firm Strategies, and Adaptive Reconfigurations of Global Value Chains*, 4 J. INT’L BUS. POL’Y 506, 508 (2021).

123. *Id.*

124. *Id.*

125. See Gereffi & Frederick, *supra* note 89, at 219–20.

126. See Auret van Heerden, Maria Prieto Berhouet & Cathrine Caspari, *Rags or Riches? Phasing-Out the Multi-Fibre Arrangement* 20–24 (Int’l Lab. Off., Working Paper No. 40, 2003) (noting the winners and losers under the MFA regime).

127. *Id.*

128. See Gereffi & Frederick, *supra* note 89, at 181–82.

129. See Hathaway, *supra* note 109, at 604–07.

everything from consumer goods to critical infrastructure such as cloud servers and defense systems.¹³⁰ As such, the semiconductor supply chain is tightly integrated with other highly-regulated industries, including automobiles, air transportation, telecommunication, and defense equipment.¹³¹ Today, over 90% of the world's semiconductor manufacturing capacity is located in Asia, mainly in China and Taiwan, and is controlled by a handful number of key firms.¹³²

To understand the semiconductor supply chain, a little bit of industry knowledge is necessary. The creation of a microchip involves four main processes: design, fabrication, assembly, and testing.¹³³ Once dominated by vertically-integrated firms such as U.S.-based Texas Instruments and IBM, the industry today has fragmented into horizontal specialization, particularly along the line of design and manufacturing (also called fabrication).¹³⁴ Two main types of companies make up the industry, largely mirroring this specialization: chip makers do only designs, while foundries focus on manufacturing.¹³⁵ Geography-wise, the United States continues to lead in microchip design with established names like Broadcom, Qualcomm, and NVIDIA, while East Asia, in particular Taiwan, South Korea, and mainland China, dominates microchip fabrication.¹³⁶ Industrial policies played a critical role. These “Asian miracle” economies have heavily invested in their national high-tech champions such as Taiwan-based Taiwan Semiconductor Manufacturing Company (“TSMC”), South Korea’s Samsung Electronics, and China’s Semiconductor Manufacturing International Corporation (“SMIC”).¹³⁷ TSMC, by way of an example, was started as a joint venture

130. See VARAS, *supra* note 101, at 7.

131. *Id.*

132. See Bindiya Vakil & Tom Linton, *Why We're in the Midst of a Global Semiconductor Shortage*, HARV. BUS. REV. (Feb. 26, 2021), <https://hbr.org/2021/02/why-were-in-the-midst-of-a-global-semiconductor-shortage> [<https://perma.cc/R5RH-PKSU>].

133. See VARAS, *supra* note 101, at 13.

134. *Id.* at 9–13; see also ACCENTURE, GOING VERTICAL: A NEW INTEGRATION ERA IN THE SEMICONDUCTOR INDUSTRY 5–6 (2021), https://www.accenture.com/_acnmedia/PDF-158/Accenture-Vertical-Integration-POV-Vertical-20.pdf [<https://perma.cc/9L8Q-A4DB>].

135. See VARAS, *supra* note 101, at 23–24. In addition to these two types, firms in the industry also include “integrated device manufacturers” who can develop both design and manufacturing capacity, e.g., Intel, and firms who focus on the back-end process of testing, assembly, and packaging. *Id.*

136. *Id.* at 5 (noting that 92% of the world's most advanced semiconductor manufacturing capacity is located in Taiwan, and 75% of all semiconductor manufacturers and suppliers are concentrated in China and East Asia).

137. For an overview of the so-called “Asian miracle” economies and their domestic industrial policies aimed at developing the semiconductor industry, see generally ALICE AMSDEN & WAN-WEN CHU, BEYOND LATE DEVELOPMENT: TAIWAN'S UPGRADING POLICIES (2003) (attributing Taiwan's success in developing its high-tech industry to critical government interventions); William Keller & Louis Pauly, *Crisis and Adaptation in East Asian Innovation Systems: The Case of the Semiconductor Industry in Taiwan and South Korea*, 2 BUS. & POL. 237 (2000) (summarizing Taiwan and South Korea's investments into their respective companies); John VerWey, *Chinese Semiconductor Industrial Policy: Past and Present*, J. INT'L COM. & ECON. 1 (2019) (noting that while China is the world's leading consumer of semiconductors with a rising manufacturing presence, its foundries still lag behind peer countries in technology capacity).

between the Taiwanese government, the Dutch multinational Philips, and local investors as part of Taiwan's technology-focused industrial policy after a 38-year period of draconian martial law.¹³⁸ Now the biggest foundry in the world, it is slated to open a chip factory in Arizona in 2024.¹³⁹ Samsung Foundry, a subsidiary of Samsung Electronics, is the world's second-largest contract chip producer, just after TSMC.¹⁴⁰ It offers foundry services to its own parent company as well as other semiconductor companies.¹⁴¹ Shanghai-based SMIC, a publicly-listed multinational enterprise, is mainland China's largest semiconductor foundry, controlling about 4% of the industry's market share.¹⁴² Though its technology generally lags behind TSMC and Samsung, SMIC caters to industries that do not need cutting edge technology such as automobiles, where manufacturing is based on long-term planning rather than annual updates.¹⁴³

C. Summary

In sum, globalization unbundled the production process geographically, but the emergence of lead suppliers has transformed the economic shape of global supply chains. To be clear, this Article does not argue that suppliers and contractors have completely usurped their corporate customers, or that first-tier suppliers have managed to reverse the second unbundling. Production remains fragmented, but instead of a highly diffused network of many small suppliers, first-tier suppliers have become critical hubs of access to global production. Likewise, just as corporate buyers vary in size and purchasing power, the global supply base comprises of a multitude of firms, from global suppliers to lower-tier manufacturers that cater to secondary

138. See *About TSMC*, TAIWAN SEMICONDUCTOR MFG. CO., <https://www.tsmc.com/english/aboutTSMC> [<https://perma.cc/LFT7-2VWA>] (last visited Oct. 7, 2022). See generally AMSDEN & CHU, *supra* note 137 (noting Taiwan's meteoric rise); Jiunn-Rong Yeh, *Democracy-driven Transformation to Regulatory State: The Case of Taiwan*, 3 NAT'L TAIWAN U. L. REV. 31 (2008) (documenting the role of Taiwan's democratization in its regulatory and economic transformation).

139. See *TSMC Says Has Begun Construction at Its Arizona Chip Factory Site*, REUTERS (June 1, 2021), <https://www.reuters.com/technology/tsmc-says-construction-has-started-arizona-chip-factory-2021-06-01> [<https://perma.cc/XH3Y-JTDQ>].

140. Arjun Kharpal, *Samsung Aims to Make the World's Most Advanced Chips in 5 Years, as It Plays Catch Up with TSMC*, CNBC (Oct. 4, 2022), <https://www.cnbc.com/2022/10/04/samsung-aims-to-triple-production-for-most-advanced-chips-by-2027.html> [<https://perma.cc/33PG-FZAG>] (noting that Samsung's market share was 17%, second after TSMC's 53%).

141. *Id.*

142. *Id.* SMIC is currently listed on the Shanghai and Hong Kong stock exchanges. In 2019, amidst the U.S.-China trade war, it voluntarily delisted from the New York Stock Exchange, citing low trading volume and burdensome administrative costs. See Jon Russell, *China's Largest Chipmaker is Delisting from the NYSE*, TECHCRUNCH (May 25, 2019), <https://techcrunch.com/2019/05/24/smic-nyse-delisting> [<https://perma.cc/2BVJ-7KR6>] (speculating that SMIC's delisting was related to the United States' crackdown on Chinese technology company Huawei).

143. See Arjun Kharpal, *China's Most Important Chipmaker SMIC Could Be a Big Winner From the Global Semiconductor Shortage*, CNBC (Mar. 1, 2021), <https://www.cnbc.com/2021/03/02/china-semiconductor-maker-smic-could-be-a-winner-from-global-chip-shortage.html> [<https://perma.cc/V7GB-9LRH>] (noting SMIC's roles in supplying to the automobile industry).

markets.¹⁴⁴ The degree to which these firms exercise agency and the impact that they have remain ripe for exploration. Transnational suppliers' unique bargaining positions may be characteristic only of top-tier firms.¹⁴⁵ Even so, their scale and dominance within their respective industries signal business practices and implications worthy of attention.

Finally, it is also important to acknowledge that, while this Part segments global value chains by industry to better understand the industry-specific structure of global production, firms within the same industry can, and do, differ in their responses to exogenous change. An apt example of this is Nike and New Balance's directly opposing positions on the removal of tariffs on Vietnam-produced footwear under the Trans-Pacific Partnership.¹⁴⁶ A bilateral trade partner since 2001, Vietnam has grown into the United States' second-largest supplier of footwear, just behind China.¹⁴⁷ In the United States, while 99% of purchased footwear is made offshore,¹⁴⁸ its domestic footwear sector is among the most highly protected—its import tariff is 10% higher than the average tariff imposed on other consumer goods.¹⁴⁹ In the wake of the proposed trade agreement, New Balance took the position that the elimination of footwear tariffs with Vietnam would be detrimental to U.S. footwear workers, whereas Nike argued that maintaining footwear tariffs would harm consumers.¹⁵⁰ Unlike Nike, which has almost completely outsourced manufacturing to offshore contractors, New Balance employs a hybrid model of insourcing and outsourcing—in fact, it

144. Many brands continue to lead “captive” supply chains and capture the highest tier of profit margins. For example, Apple's profit margin on its smartphones and tablets was historically many times over that of Hon Hai's. See Tim Culpan, *Apple Profit Margins Rise at Foxconn's Expense: Chart of the Day*, BLOOMBERG (Jan. 4, 2012), <https://www.bloomberg.com/news/articles/2012-01-04/apple-profit-margins-rise-at-foxconn-s-expense#xj4y7vzkg> [<https://perma.cc/CV9C-DBB4>]; see also Sturgeon, Humphrey & Gereffi, *supra* note 26 (noting that transnational suppliers are the top-tier firms in otherwise diverse markets).

145. I thank Virginia Harper Ho for this point.

146. The Trans-Pacific Partnership was a proposed free trade agreement between the United States and eleven Asia-Pacific countries. After the Trump administration withdrew from the deal in 2018, the remaining TPP parties signed the new Comprehensive and Progressive Agreement on Trans-Pacific Partnership (CPTPP). See CONGRESSIONAL RSCH. SERV., *TPP Countries Sign New CPTPP Agreement without U.S. Participation*, CRS INSIGHT (Mar. 9, 2018), <https://crsreports.congress.gov/product/pdf/IN/IN10822> [<https://perma.cc/3GEL-RLRK>].

147. See U.S. INT'L TRADE COMM'n, FOOTWEAR: U.S. GENERAL IMPORTS BY SELECTED TRADING PARTNERS, 2015–19 (2022), https://www.usitc.gov/research_and_analysis/trade_shifts_2019/footwear.htm [<https://perma.cc/3HG2-JWV9>] (showing that, in 2019, Vietnam accounted for 25.8% of U.S. footwear imports, second to China's share of 49.6%).

148. See Alina Selyukh, *Why the American Shoe Disappeared and Why It's So Hard to Bring It Back*, NPR (June 19, 2019), <https://www.npr.org/2019/06/19/731268823/why-the-american-shoe-disappeared-and-why-its-so-hard-to-bring-it-back> [<https://perma.cc/CT9F-8ZLK>].

149. See Courtney Reagan, *You're Already Paying Tariffs on Clothing and Shoes, and Have Been for Almost 90 Years*, CNBC (Apr. 6, 2018), <https://www.cnbc.com/2018/04/06/americans-are-already-paying-tariffs-on-clothing-and-shoes.html> [<https://perma.cc/Z6V6-V8JH>] (citing to the American Apparel & Footwear Association). See also Hathaway, *supra* note 109, at 584–97 (summarizing the industry's history of trade protectionism).

150. See Ari Van Assche & Byron Gangnes, *Global Value Chains and the Fragmentation of Trade Policy Coalitions*, 26 TRANSNAT'L CORP. 31, 46–48 (2019).

remains the sole U.S. athletic footwear brand to have a manufacturing presence in the United States today.¹⁵¹ Though they are both multinational enterprises in the same industry, Nike and New Balance's divergent positions aptly symbolize, in a nutshell, the United States' ambivalence toward global value chains and their distributive consequences.¹⁵²

II. TRANSNATIONAL SUPPLIERS

With the above historical background in mind, this Part turns to the main cast: transnational suppliers. It proceeds in two sections. The first examines the economic stature and scale of these actors through three vignette case studies, each highlighting a different aspect of production: contract innovation (TAL Apparel), production lines (Yue Yuen), and infrastructure (Luen Thai, Hon Hai, and others). Together, these vignettes illustrate how Big Suppliers are the animating core of a highly enmeshed commercial world. The section also starts to unpack the implications of the influential roles that transnational suppliers play, including in supply chain management, compliance, and public services. The second section then steps back to offer an updated portrait of global value chains as a counter-narrative to the influential yet incomplete paradigm of buyer-driven globalization.

A. Vignette Case Studies

1. Vendor-Managed Inventory: TAL Apparel

Hong Kong-based TAL Apparel Group is a textile manufacturer that supplies for Brooks Brothers, L.L.Bean, JCPenney, and other brand names, producing one out of every eight dress shirts bought in the United States.¹⁵³ TAL manages its inventory through an “electronic data interchange” software system to facilitate “vendor-managed inventory” (“VMI”).¹⁵⁴ In the company's words, the innovation allowed TAL “to address the need of [its] customers [and] manage their inventory better by forecasting the amount they need in each individual store, every week.”¹⁵⁵ TAL's VMI contract with JCPenney, for example, reflects an arrangement whereby it takes

151. Ben Otto & Anh Thu Nguyen, *Nike, New Balance Showdown Highlights Thorny Issues in Trans-Pacific Trade Talks*, WALL ST. J. (Oct. 4, 2013), <https://www.wsj.com/articles/nike-new-balance-showdown-highlights-thorny-issues-in-transpacific-trade-talks-1380916736> [<https://perma.cc/CQZ5-9L4B>].

152. See U.S. INT'L TRADE COMM'N., TRANS-PACIFIC PARTNERSHIP AGREEMENT: LIKELY IMPACT ON THE U.S. ECONOMY AND ON SPECIFIC INDUSTRY SECTORS 281–83 (2016); see also Roberts & Lamp, *supra* note 46, at 3–19 (describing six stylized narratives of globalization “winners” and “losers”).

153. See DELOITTE, THE POWER OF SYNCHRONIZATION: THE CASE OF TAL APPAREL GROUP 1 (2005), [https://www.talapparel.com/uploads/news/97/TALnewsPDF1%20\(1\)-20160104123524.pdf](https://www.talapparel.com/uploads/news/97/TALnewsPDF1%20(1)-20160104123524.pdf) [<https://perma.cc/FZ72-W7RR>] (noting also that TAL has production facilities in Thailand, Malaysia, Taiwan, mainland China, the United States, Vietnam, and Mexico).

154. *Id.* at 2.

155. *Supply Chain Expertise*, TAL APPAREL, <https://www.talapparel.com/en/supply-chain-management/supply-chain-expertise> [<https://perma.cc/KKE6-PNXG>] (last visited Oct. 8, 2022).

full responsibility for maintaining JCPenney's inventory levels, from generating purchase orders through delivery.¹⁵⁶ Traditionally, manufacturing was based on a business model of "push" production, such that vendors like TAL simply responded to orders and had little visibility into customers' activities.¹⁵⁷ VMI, by contrast, links data from retailers' points of sale directly to the factory floor, enabling fine-tuned, dynamic "synchronization" such that TAL knows exactly who bought what at JCPenney in real time.¹⁵⁸ Based on such data, TAL can direct its factories in Asia on how many shirts to make, in what style, size, and color, and automatically replenish inventory, sometimes in as little time as four hours.¹⁵⁹ Furthermore, all these actions can occur without JCPenney tracking and submitting purchase orders, as usually required in purchasing agreements.¹⁶⁰ As TAL's managing director described, "[i]nstead of asking [JC]Penney what it would like to buy, I tell them how many shirts they just bought."¹⁶¹

Vendor-managed inventory, though a fairly common business arrangement in the United States, was not typically used in outsourcing prior to the TAL-JCPenney arrangement.¹⁶² It has been hailed as a new invention in outsource logistics management—dubbed "Just in Time II," the next evolution of Toyota's famous Just in Time system.¹⁶³ JCPenney was at first reluctant to enter into VMI but agreed to a pilot after years of partnering with TAL.¹⁶⁴ Under the agreement, TAL took on the risk of delays, at times needing to pay ten times the freight cost to rush products by air.¹⁶⁵ As a result, JCPenney was able to eliminate physical warehouses in the United States, cut costs, and realize higher profit margins.¹⁶⁶ For TAL, the impact of the VMI arrangement was similarly transformative. It essentially gained an exclusive contract with JCPenney and avoided having to compete on a

156. See Patrick Scott, *How TAL Apparel is Rebalancing for Growth – CEO Interview*, JUST STYLE (Aug. 22, 2018), <https://www.just-style.com/interviews/how-tal-apparel-is-rebalancing-for-growth-ceo-interview> [<https://perma.cc/EFG5-BBQ3>] (quoting TAL Apparel's CEO that big brands are moving towards having suppliers compete on a combination of both price and product strategies, rather than just the cheapest price).

157. See *supra* notes 78–80 and accompanying text (contrasting the old and new model of inventory management); see also Shamel Azmeh & Khalid Nadvi, *Asian Firms and the Restructuring of Global Value Chains*, 23 INT'L BUS. REV. 708, 709 (2014); Walter Wallace & Craig Hill, *Value Creation for Global Procurement Competitiveness*, 6 INT'L BUS.: RSCH., TEACHING & PRAC. 76, 77–78 (2012).

158. See DELOITTE, *supra* note 153, at 3–4.

159. *Id.*

160. *Id.*

161. Gabriel Kahn, *Made to Measure: Invisible Supplier Has Penney's Shirts All Buttoned Up*, WALL ST. J. (Sept. 11, 2003), <https://www.wsj.com/articles/SB106323446110491600> [<https://perma.cc/FW2M-PYPB>].

162. See BONACICH & WILSON, *supra* note 49, at 31–36 (noting that the arrangement TAL was able to make with JCPenney was exceptional but that it had the potential to become more common).

163. *Id.*; Tobias Held, *Supplier Integration as an Improvement Driver—An Analysis of Some Recent Approaches in the Shipbuilding Industry*, in SUPPLY CHAIN NETWORK MANAGEMENT 369, 380–82 (2010).

164. See Wallace & Hill, *supra* note 157, at 78; Kahn, *supra* note 161.

165. See Kahn, *supra* note 161.

166. See DELOITTE, *supra* note 153, at 2.

pure price basis in an industry known for cut-throat price competition.¹⁶⁷ In addition, TAL benefited from a wealth of real-time, store-level data on sales patterns, inventory performance, and purchasing needs that it could use to gain insights into other customers in the apparel business.¹⁶⁸ Indeed, after its successful experiment with JCPenney, TAL now provides similar services to other named brands including Brooks Brothers and L.L.Bean, and it has expanded its suite of services to include demand forecasting, product design, and material sourcing, among others.¹⁶⁹

This logistic arrangement marked, to some observers, “a radical power shift” from retailers to their contract manufacturers.¹⁷⁰ That TAL was able to secure such a contract with JCPenney only after time-tested collaboration is understandable: a VMI model required JCPenney to share important data, outsource a critical function, and integrate TAL’s proprietary software into its own system. Because of the high level of trust and integration required, VMI often requires long-term partnerships. Though once exceedingly rare, the sharing of organizational control by brands with offshore contractors is no longer off limits, as demonstrated by TAL’s example. Supply chain governance, traditionally about managing people and products beyond the borders, has now evolved into a tighter integration of business functions between corporate buyers and their suppliers.

2. *Customer-Specific Production Lines: Yue Yuen*

Yue Yuen, a Taiwanese-owned corporate group that specializes in athletic footwear, is the main supplier for Nike, Adidas, Reebok, and other brands.¹⁷¹ One out of every six pairs of sneakers sold globally is made in a Yue Yuen factory, mostly located in Vietnam and Indonesia, with smaller footprints in Cambodia, Mexico, and elsewhere.¹⁷² Footwear, like apparel, is considered a trend-sensitive, labor-intensive industry located at a lower rung of the value chain ladder.¹⁷³ Products have short life cycles, change quickly from season to season, and often have diverse, non-uniform styles, all of which adds complexity to the manufacturing process. The quick-changing nature of the footwear market means factories often face tight deadlines and

167. *Id.*

168. See Wallace & Hill, *supra* note 157, at 77–78; Kahn, *supra* note 161.

169. See DELOITTE, *supra* note 153, at 1; TAL APPAREL, *supra* note 155.

170. See Kahn, *supra* note 161.

171. See *Corporate Information*, YUE YUEN INDUS. (HOLDINGS) LTD., https://www.yueyuen.com/en/corporate_information.html [<https://perma.cc/R88U-XG8B>] (last visited July 1, 2021); *Manufacturing Business*, YUE YUEN INDUS. (HOLDINGS) LTD., <https://www.yueyuen.com/en/iframe-manufacturing-business.html> [<https://perma.cc/6WYN-NFRX>] (last visited Oct. 31, 2022).

172. See LOCKE, *supra* note 42, at 5.

173. *Id.* at 1–13.

customer demands for quick turnarounds.¹⁷⁴ Workers in footwear factories are known to face a range of human rights–related issues.¹⁷⁵

As one of Nike’s major suppliers, Yue Yuen became embroiled in the anti-sweatshop campaign against Nike during the late 1990s, including major exposés on its factories in Vietnam.¹⁷⁶ Nike became an early adopter of corporate social responsibility, soon followed by other brands.¹⁷⁷ As a supplier to multiple brands, Yue Yuen increasingly needs to comply with not only varying manufacturing specifications but also a variety of codes of conduct and labor and safety standards. Yue Yuen organizes its production lines based on specific merchandisers, producing specific items in batch.¹⁷⁸ As a result, meeting the more stringent requirements for a customer like Nike does not necessarily result in positive spillover effects on other production lines.¹⁷⁹ Furthermore, workers’ varying working conditions and standards can also produce diverging interests among workers that may impede an integrated approach to labor organizing.¹⁸⁰

Yue Yuen’s business model may thus give insights into why codes of conduct and corporate social responsibility efforts continue to face persistent challenges. In addition to existing explanations related to “greenwashing” or auditing and monitoring difficulties,¹⁸¹ Yue Yuen’s example shows that even implementing a successful code may have limited impact. The customer-specific arrangements effectively limit diffusion of progressive norms—a counter story to what scholars have called a “Brussels effect” or “California effect.” The “California effect,” a term coined by business ethics scholar David Vogel, documents a counterintuitive phenomenon, that is, a

174. *Id.* at 6.

175. For a detailed report on working conditions in athletic footwear factories and company responses, see generally CHANGE YOUR SHOES, TRAMPLING WORKERS RIGHTS UNDERFOOT (2016), <https://saubere-kleidung.de/wp-content/uploads/2016/06/Trampling-Workers-Rights-Underfoot.pdf> [<https://perma.cc/23BV-V2TC>]. For a nuanced account that documents both the difficulties experienced by young Chinese migrant workers as well as the freedom and independence they enjoy breaking away from their rural villages, see LESLEY T. CHANG, *FACTORY GIRLS* (2008).

176. See, e.g., Steven Greenhouse, *Nike Shoe Plant in Vietnam Is Called Unsafe for Workers*, N.Y. TIMES (Nov. 8, 1997), <https://www.nytimes.com/1997/11/08/business/nike-shoe-plant-in-vietnam-is-called-unsafe-for-workers.html> [<https://perma.cc/D6F9-KYRZ>]; Burhan Wazir, *Nike Accused of Tolerating Sweatshops*, GUARDIAN (May 19, 2001), <https://www.theguardian.com/world/2001/may/20/burhanwazir.theobserver> [<https://perma.cc/HHV2-SQVF>].

177. See Lynn S. Paine, *Sustainability in the Boardroom: Lessons from Nike’s Playbook*, HARV. BUS. REV., July–Aug. 2014, at 87, 90 (2014) (crediting Nike’s creation of a board-level corporate responsibility committee for its success in turning around Nike’s image).

178. See Jeroen Merk, *Restructuring and Conflict in the Global Athletic Footwear Industry: Nike, Yue Yuen and Labour Codes of Conduct*, in GLOBAL ECONOMY CONTESTED: POWER AND CONFLICT ACROSS THE INTERNATIONAL DIVISION OF LABOUR 79, 90 (Marcus Taylor ed., 2008).

179. *Id.*

180. *Id.* (quoting NGO advocates).

181. See, e.g., William Laufer, *Social Accountability and Corporate Greenwashing*, 43 J. BUS. ETHICS 253, 255–58 (2003); Beate Sjøfjell, *Internalizing Externalities in E.U. Law: Why Neither Corporate Governance nor Corporate Social Responsibility Provides the Answers*, 40 GEO. WASH. INT’L L. REV. 977, 981–85 (2009).

“race to the top” when it comes to regulations.¹⁸² The term refers to the business decision by firms to apply the most stringent regulatory standards over their entire business, even if such standards only apply to a small market. The prime example is the U.S. automobile industry, which has gravitated towards the more stringent emission standards set by California (hence the eponymous term).¹⁸³ The “Brussels effect,” coined by legal scholar Anu Bradford, extends this concept to the global economy, using case studies from the European Union.¹⁸⁴ The European Union has some of the highest standards in the world in a range of areas, from data privacy to food safety to environmental protection.¹⁸⁵ In order to access European Union (“E.U.”) markets, private companies have to meet these higher standards.¹⁸⁶ Thanks to the European Union’s market power, international companies in industries such as chemicals and automobiles have chosen to “level up” and adopt the higher E.U. standards rather than fragmenting their production lines.¹⁸⁷

Firms like Yue Yuen, however, choose to fragment rather than “level up.” It is unclear whether such a management decision was done deliberately in response to the proliferation of corporate social responsibility or due to other business-related reasons. Either way, the result is that Yue Yuen was able to impose stringent standards only where required. Acknowledging the existence of critical intermediaries like Yue Yuen and understanding their business models thus sheds light into the long-standing debates on the effectiveness of corporate social responsibility and supply chain compliance.

3. *Supply Chain Cities: Luen Thai, Hon Hai, and Beyond*

“Supply chain cities”—a modern reincarnation of the once-popular “company towns”—have become a signature of Big Suppliers. Between the 1830s and 1940s, company towns were an architectural feature of the industrializing West, popular in the United States as well as England, France, Germany, and elsewhere.¹⁸⁸ In these communities, an enterprise built, owned, and operated the entire town, including public services such as utilities, sewage management, and garbage collection.¹⁸⁹ The corporate owners of these towns exercised extensive control over their workers’ lives, including

182. See DAVID VOGEL, *TRADING UP: CONSUMER AND ENVIRONMENTAL REGULATION IN A GLOBAL ECONOMY* 5–8 (1995).

183. *Id.* at 259.

184. See ANU BRADFORD, *THE BRUSSELS EFFECT: HOW THE EUROPEAN UNION RULES THE WORLD* 1–5 (2020).

185. *Id.* at 10.

186. *Id.*

187. *Id.*

188. See JOHN S. GARNER, *THE COMPANY TOWN: ARCHITECTURE AND SOCIETY IN THE EARLY INDUSTRIAL AGE* 3–4 (1992); see also HARDY GREEN, *THE COMPANY TOWN: THE INDUSTRIAL EDENS AND SATANIC MILLS THAT SHAPED THE AMERICAN ECONOMY* (2010) (documenting the rise and fall of company towns across the last 200 years of industrialization).

189. See GARNER, *supra* note 188, at 3 (defining “company towns” as “a settlement built and operated by a single business enterprise”).

regulating behaviors such as curfew, drinking, smoking, gambling, and speech.¹⁹⁰ While company towns have more or less faded out in developed countries,¹⁹¹ they have taken on new forms as supply chain cities, often built and operated by transnational suppliers.

The Luen Thai-Liz Claiborne facility in Dongguan, China is one such instance of a supply chain city. Luen Thai, a Hong Kong-based apparel manufacturer, first experimented with supply chain cities in 2007, on the heels of the expiration of the MFA.¹⁹² Recall that the MFA had contributed to a proliferation of supply bases around the world, and its end brought about a consolidation of the apparel supply chains.¹⁹³ With Liz Claiborne's backing, Luen Thai relocated the raw materials suppliers and product manufacturers into one mega-factory located in Dongguan, Guangdong province in China—known for its convenient transportation access.¹⁹⁴ From there the company built a campus comprised of product development centers, factories totaling two million square feet, a 4,000-person dormitory, a movie theater, gyms, hotels, and showrooms for visiting clients.¹⁹⁵ All parties follow a highly-standardized scan-and-track inventory system. This allows goods to move seamlessly across production stages and from the factory floors into Liz Claiborne stores in the United States and elsewhere.¹⁹⁶ “A buyer, a marketer, a brander from the [United States] can go to Supply Chain City and never have to leave the complex,” explained Luen Thai's U.S. president. “They can make their samples, they can buy their fabrics, they can do everything they want under one roof.”¹⁹⁷ Luen Thai's restructuring resulted in a corresponding change at Liz Claiborne, which at the time sourced from over 250 suppliers in thirty-five countries.¹⁹⁸ The retailer started to consolidate its supplier base and relocate its designers from Hong Kong, New York City, and elsewhere to the Dongguan complex so that they could closely collaborate with Luen Thai's technicians from the factory and

190. See M. Todd Henderson, *The Nanny Corporation*, 76 U. CHI. L. REV. 1517, 1534–39 (2009) (analogizing the high level of control observed in company towns to “corporate nannyism”).

191. See GREEN, *supra* note 188, at 120–25.

192. See Sookhyun Kim & Doris Kincade, *Evolution of a New Retail Institution Type: Case Study in South Korea and China*, 27 CLOTHING & TEXTILES RSCH. J. 310, 307–10 (2009) (describing Luen Thai's “supply chain city” as a model of geographic integration and comparing it to South Korea's district-wide model).

193. See *supra* Part I.B (describing the impact of the MFA).

194. See Staci Kusterbeck, *China Appeals to U.S. Buyers with “Supply Chain Cities,”* RETAIL INFO SYS. (Aug. 1, 2005), <https://risnews.com/special-feature-china-appeals-us-buyers-supply-chain-cities> [<https://perma.cc/6BMF-4WLN>]; Kahn, *supra* note 161.

195. *From Fashion to Fish: How Hong Kong's Luen Thai Holdings Learned to Shift with the Wind*, KNOWLEDGE@WHARTON (Mar. 31, 2010), <https://knowledge.wharton.upenn.edu/article/from-fashion-to-fish-how-hong-kongs-luen-thai-holdings-learned-to-shift-with-the-wind> [<https://perma.cc/GYE5-4FF3>].

196. *Id.*

197. *Id.*

198. See Appelbaum, *supra* note 85, at 8 (noting Luen Thai's model of “design to store”).

fabric mills.¹⁹⁹ The Luen Thai complex also has its own police and fire station, which it apparently sometimes lends to the city of Dongguan.²⁰⁰

Luen Thai is not alone in its construction of such a hybrid working-living industrial complex. Hon Hai/Foxconn also operates such a company town in Longhua, Shenzhen that made international headlines after news broke about a string of worker suicides in 2010.²⁰¹ Dubbed a “forbidden city,” over 1,000 security guards staff the complex, which together with fingerprint scanners and ID checkpoints, keep order, ward off curious reporters, and prevent leaks of highly anticipated consumer products.²⁰² In addition to its dozens of assembly lines and dormitories, Longhua has a fire brigade, a hospital, restaurants, banks, a grocery store, and an employee swimming pool.²⁰³ It also has an in-house TV channel, Foxconn TV, which is broadcast on hundreds of monitors mounted around the complex, showing exercise programs, worker-safety videos, and company news.²⁰⁴ At Longhua, workers typically eat subsidized meals, and can choose to live rent-free in company dormitories inside the walls or off campus.²⁰⁵ They work exceedingly long hours, sometimes 29 days a month, during shifts where no talking or eating is allowed.²⁰⁶ The series of workers’ suicides have been attributed to the high-stress work culture and subpar living conditions of the Longhua campus.²⁰⁷

With all their efficiencies and ills, supply chain cities have become part of the infrastructure of global trade, most prominently in Asia but also beyond.²⁰⁸ These communities are usually located in tax-favorable locations that are designated economic zones, industrial zones, or free trade zones, sometimes governed under distinct bodies of law.²⁰⁹ Vietnam, for example, has designated over 150 industrial parks, mostly located along its coastal provinces, as governed under “carve-out” regulations that are separate from

199. *Id.*

200. See BONACICH & WILSON, *supra* note 49.

201. See David Barboza, *After Suicides, Scrutiny of China's Grim Factories*, N.Y. TIMES (June 6, 2010), <https://www.nytimes.com/2010/06/07/business/global/07suicide.html> [<https://perma.cc/PKW6-P9M8>].

202. See Jason Dean, *The Forbidden City of Terry Gou*, WALL ST. J. (Aug. 11, 2007), <https://www.wsj.com/articles/SB118677584137994489> [<https://perma.cc/K3BX-D4W7>]; Brian Merchant, *Life and Death in Apple's Forbidden City*, GUARDIAN (June 18, 2017), <https://www.theguardian.com/technology/2017/jun/18/foxconn-life-death-forbidden-city-longhua-suicide-apple-iphone-brian-merchant-one-device-extract> [<https://perma.cc/F83H-QCBK>].

203. See Dean, *supra* note 202.

204. *Id.*

205. *Id.*

206. See JENNY CHAN, MARK SELDEN & PUN NGAI, DYING FOR AN IPHONE: APPLE, FOXCONN, AND CHINA'S WORKERS (2020) (documenting the harsh realities within Foxconn's “iPhone cities”).

207. *Id.*

208. See WORLD ECON. F., COMPETITIVE CITIES AND THEIR CONNECTIONS TO GLOBAL VALUE CHAINS 10–13 (June 2016).

209. *Id.* at 7 (noting that cities’ competitiveness was based on economies of scale employment, infrastructure, proximity to ports for easy transport, and openness to global commerce).

its prevailing regulatory framework.²¹⁰ In China, many supply chain cities are located within its several special economic zones and bonded zones, first created in 1979 as part of Deng Xiaoping's "Open Door" policy.²¹¹ These special administrative areas not only enable economic development but also act as "regulatory laboratories" to test controversial policies such as land auctions, wholly foreign-owned companies, or labor market liberalization without the state having to commit to large-scale changes.²¹²

After the onset of COVID-19, suppliers, as operators of supply chain cities, have taken on even more surprising and dramatic roles as providers of public health and pandemic response. When COVID-19 outbreaks were reported in the Vietnam factories of Samsung and Pou Chen (a subsidiary of Yue Yuen), these suppliers, sanctioned by regulators, turned factory floors into quarantine spaces, where thousands of workers spent time away from their families isolating in clusters.²¹³ This was an exception to the then-regulation that COVID-19 exposures were subject to mandatory quarantine in military-operated camps.²¹⁴ Food and accommodation were provided free of charge; companies ran heavily promoted masking and handwashing campaigns and mounted fierce lobbying efforts to prioritize factory workers for vaccine eligibility.²¹⁵ To be sure, the desire to maintain production, at a time when global value chains became heavily scrutinized, factored into governments' delegation of critical public health functions to these suppliers.²¹⁶

210. See Vietnam Office of the Government, Decree on Management of Industrial Parks and Economic Zones, No. 82/2018/ND-CP (May 22, 2018), <https://www.unido.org/sites/default/files/files/2020-01/Viet%20Nam%20Decree%2082.pdf> [<https://perma.cc/3D6D-FX9L>] (regulating Vietnam's industrial parks and economic zones).

211. Douglas Zhihua Zeng, *How Do Special Economic Zones and Industrial Clusters Drive China's Rapid Development?*, in *BUILDING ENGINES FOR GROWTH AND COMPETITIVENESS IN CHINA* 1, 9 (2010).

212. See Sebastian Heilmann, *Policy Experimentation in China's Economic Rise*, 43 *COMP. INT'L DEV.* 1–26 (2008). China's accession to the WTO has tempered such experimentations based on WTO rules. *Id.*

213. See Lien Hoang, *Samsung Suspends Vietnam Factories Hit by COVID: Health Ministry*, *NIKKEI ASIA* (July 14, 2021), <https://asia.nikkei.com/Spotlight/Coronavirus/Samsung-suspends-Vietnam-factories-hit-by-COVID-health-ministry> [<https://perma.cc/6ANJ-QFA6>]; Phuong Nguyen & James Pearson, *Vietnam Coronavirus Outbreak Threatens to Disrupt Tech Supply Chains*, *REUTERS* (May 28, 2021), <https://www.reuters.com/technology/vietnam-coronavirus-outbreak-threatens-disrupt-tech-supply-chain-2021-05-28> [<https://perma.cc/8KLB-FP2R>].

214. See Trang (Mae) Nguyen & Edmund Malesky, *Reopening Vietnam: How the Country's Improving Governance Helped It Weather the COVID-19 Pandemic*, *BROOKINGS INST.* (May 20, 2020), <https://www.brookings.edu/blog/order-from-chaos/2020/05/20/reopening-vietnam-how-the-countrys-improving-governance-helped-it-weather-the-covid-19-pandemic> [<https://perma.cc/M7NR-U328>].

215. See Hoang, *supra* note 213; Nguyen & Pearson, *supra* note 213.

216. See Huong Le Thu, *Delta Variant Outbreak Challenges Vietnam's COVID-19 Response Strategy*, *BROOKINGS INST.* (Aug. 11, 2021), <https://www.brookings.edu/blog/order-from-chaos/2021/08/11/delta-variant-outbreak-challenges-vietnams-covid-19-response-strategy> [<https://perma.cc/76X9-889W>].

B. *An Updated Vision of Global Value Chains*

Taken together, the vignettes above paint a more nuanced portrait of global value chains than previously imagined. Against the dominant conceptualization of global value chains as composed largely of “unipolar” brands and corporate buyers, what emerges is a multi-polar system, with offshore Big Suppliers holding much more power and control than previously understood.

Three key features stand out in this updated account. First, suppliers and contractors that make up the global supply base comprise a highly diverse group. Like their buyers, they can range from small shops to business empires. The top-tier players in this group, as exemplified in the vignettes above, are Goliaths in their own right, rivaling their multinational customers in innovation, economic scale, workforce, technology, and political clout.

Second, suppliers and buyers are deeply enmeshed in the way that global production is built, whether through contractual arrangements, business models, workforce configurations, or physical infrastructure. This enmeshment creates an interdependent system of commerce that mutually transforms the parties involved. Buyers’ business models and legal requirements certainly transform suppliers, but the ways that suppliers operate and organize their workforce can *also* transform buyers in significant ways.

Finally, the rise of transnational suppliers in a highly interdependent system has resulted in a relative shift in the locus of power in global value chains. This rebalancing is achieved through diverse avenues. For TAL and JCPenney, the contractual innovation of vendor-managed inventory facilitated technology-sharing and resulted in tighter business integration. For Yue Yuen, its business model of customer-specific production can shape how corporate social responsibility standards are imposed, with far-ranging implications for compliance and norm diffusion (and resistance). For Luen Thai, Hon Hai, and others, the “supply chain cities” model keeps alive the company-town model once popular during the Industrial Revolution, raising fascinating questions about suppliers’ private governance and regulatory power.

III. IMPLICATIONS

If Big Suppliers are indeed critical, arguably indispensable, players in today’s global economy, what impact do they have on the status quo legal order, both domestic and beyond, and how should regulators and other actors respond to this phenomenon? Part III proceeds in two sections. The first section canvases the legal and policy implications arising from the reality of global value chains as described above. These implications touch on a suite of issues: private laws such as contracts and corporate social responsibility designs; public laws and policies such as trade, sanctions, and geopolitics;

and public-private governance issues such as suppliers' increasing regulatory and public health roles. The goal is to offer policymakers, legal analysts, and business professionals a survey of relevant legal issues that should be of interest in cross-border contracts, trade policy designs, and future research.

The second section turns to a more theoretical implication. How does the rise of transnational suppliers contribute to our existing understanding of private norm-making, if at all? This section lays out the early steps in conceptualizing "norm assembly"—the idea that norm-making may be driven by agency but could also happen as a by-product of a firm's organizational logic and economic arrangement.

A. *Law & Policies*

1. *Cross-Border Contracts*

At their most fundamental level, global value chains are strung together by cross-border contracts. A typical supply contract may contain a master purchase agreement that sets out the general terms.²¹⁷ This could be supplemented by periodic purchase orders that specify quantities desired and delivery dates, or, in a vendor-managed inventory arrangement such as JCPenney and TAL, a service agreement that lays out the scope of information sharing and the VMI process. In addition, a set of schedules may lay out various supplier obligations such as adherence to certain industry certifications, production standards, or environmental and labor regimes.²¹⁸ As with any business relationship, a supply chain procurement contract sets out the scope of obligations and allocation of risk among the contracting parties. At the same time, by its transnational nature, such a contract is particularly vulnerable to enforcement risk. Force majeure clauses—a contracting technique to allocate *ex ante* the risks of certain unanticipated events²¹⁹—become the lynchpin clause on which parties rely, at least in theory, to manage disputes.²²⁰

At the same time, relational contract theory has long documented a phenomenon of private parties choosing to opt out of the formal legal system in favor of privately fashioned dispute mechanisms.²²¹ Relational contract theory focuses on how parties in "small world" communities tend to opt out of

217. See, e.g., MICROSOFT, *Purchase Agreements* (Aug. 23, 2022), <https://learn.microsoft.com/en-us/dynamics365/supply-chain/procurement/purchase-agreements> [<https://perma.cc/YBD9-QPWZ>].

218. See Snyder, Maslow & Dadush, *supra* note 16 (describing a model contract clause schedule for human rights concerns of transnational buyers).

219. For an overview of the use of force majeure clauses in contract law, see generally Farshad Ghodoosi, *Contracting Risks*, 2022 U. ILL. L. REV. 805.

220. A proliferation of cutting-edge scholarship has turned its attention to force majeure clauses. See, e.g., Matthew Jennejohn, Julian Nyarko & Eric Talley, *COVID-19 as a Force Majeure in Corporate Transactions*, in *LAW IN THE TIME OF COVID-19* 141 (Katharina Pistor ed., 2020) (analyzing the use of force majeure clauses in merger and acquisition deals); Troy C. Fuhrman, *Rethinking Force Majeure in the Era of COVID-19: The Ironic Case for More Oppressive Shutdowns*, 29 J. LEGAL STUD. 75 (2021) (analyzing the disparate impact of force majeure regime).

221. The canonical text that set the field of relational contract theory was Stewart Macauley, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOCIO. REV. 55 (1963).

state-led orders to create their own private ordering comprised of informal but highly effective sanctions.²²² Groups as diverse as New York diamond merchants, California cattle ranchers, cotton producers, and even high-sea pirates, just to name a few classic and almost fantastical examples, have all resorted to informal enforcement based on shared industry practice, rather than going to court.²²³ This arrangement is generally observed among “tight-knit groups,” where community and industry norms often trump formal law and where the cost of informal sanctions (such as reputational loss) is high.²²⁴

Global producers and buyers are not exactly a tight-knit group. Yet, as the above vignettes illustrate, lead corporate buyers and their key suppliers do operate in a small, elite world. Economic efficiency has provided rationales for deep enmeshment—including key data access and supplier-led inventory management (in the case of TAL and JCPenney) and “reverse relocation,” where the retailer moves certain key functions closer to its supplier (in the case of Luen Thai and Liz Claiborne).²²⁵ This insight is echoed by economists and policymakers, who find that global value chains, unlike a typical market-based transaction, are particularly “sticky,” characterized by a durable firm-to-firm relationship, which promotes access to capital, technology transfer, and sourcing certainty along chains.²²⁶

The enmeshments created by global production might not be easy to unravel. Among its many effects, the COVID-19 pandemic triggered a sea change in the current system of supply chains, including disrupted deliveries, unpredictable customer needs, regulatory risks, and calls for “onshoring,” “near-shoring,” and “re-shoring” of critical industries.²²⁷ Faced with changing economic and geopolitical conditions, buyers and contractors anticipated a foreseeable future of contract negotiations.²²⁸ But hard contract

222. *See id.*

223. *See, e.g.,* Peter T. Leeson, *An-arrgh-ghy: The Law and Economics of Pirate Organization*, 115 J. POL. ECON. 1049 (2007) (describing the extralegal systems of “piratical law and order”); Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724 (2001) (describing the cotton industry’s internal system of enforcement); Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115 (1992) (describing how trade associations in the diamond industry enforce contractual breaches); Robert C. Ellickson, *Of Coase and Cattle: Dispute Resolution Among Neighbors in Shasta County*, 38 STAN. L. REV. 623 (1986) (describing how rural cattle ranchers in Shasta County, California, abide by norms rather than rules in resolving animal trespass disputes).

224. *See* Ellickson, *supra* note 223, at 624–29 (noting the tight-knit nature of rural cattle ranchers in California).

225. *See supra* Part II.A.3.

226. *See* Antràs, *Conceptual Aspects*, *supra* note 5, at 566 (noting the “stickiness” and repeated nature of buyer-supplier relationships); WORLD BANK, *supra* note 101, at 3, 14, 66 (noting that durable inter-firm relationships are a key feature of today’s global value chains).

227. *See* U.S. WHITE HOUSE, BUILDING RESILIENT SUPPLY CHAINS, REVITALIZING AMERICAN MANUFACTURING, AND FOSTERING BROAD-BASED GROWTH 4–21 (June 2021), <https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf> [<https://perma.cc/35ZV-NM2R>]; Exec. Order. No. 14107, 86 Fed. Reg. 11849 (Feb. 24, 2021) (commanding a 100-day review of U.S. supply chains and identifying critical industries).

228. Anonymous interview with the CEO of an apparel supplier in Vietnam (June 15, 2021).

law, typically found in spot transactions and between arm's-length parties, may not be determinative in global value chains. Thus, regardless of what the original contract says, relational contracting norms such as flexible negotiations and long-term planning may be the practical driving force of supply chain restructuring, especially among deeply enmeshed buyers and their lead suppliers.

2. *Corporate Social Responsibilities*

The question of how to diffuse progressive norms in global value chains, especially those relating to labor and environmental practices, has long frustrated advocates and regulators. While corporate social responsibility standards, as a form of private ordering, have been the subject of much debate, this Article urges turning our attention to suppliers' corporate and organizational logic.²²⁹ As the example of Yue Yuen demonstrates, high-standard codes of conduct may be confined to specific product lines, preventing a "Brussels effect" or "California effect" of norm diffusion.²³⁰

At the same time, suppliers' transnational nature may open new, creative access points. Many transnational suppliers, for example, are publicly traded on the Hong Kong and Taiwan stock exchanges. Consistent with the Hong Kong government's view of corporate social responsibility as a "value capture strategy" to build long-term competitiveness, the Hong Kong Exchanges and Clearing Limited, which operates the region's stock market, adopted a "comply or explain" rule with regard to its Environmental, Social, and Governance reporting requirements.²³¹ In addition to disclosure obligations, listed firms are required to explain how they deal with operational risks and provide an assessment of their compliance, or else risk sanctions.²³² The "comply or explain" rule provides an additional avenue to gain information and insights into the practices of Big Suppliers, even as a potential basis for enforcement.²³³

The phenomenon of supply chain cities within special administrative zones provides another access point. The model of company towns nested within industrial parks has, by now, proliferated across several export-oriented economies, including in Asia, Central Asia, and Africa.²³⁴ Because special administrative regions often receive some autonomous lawmaking function, they represent a potential advocacy space, especially as "smart cit-

229. See *infra* Part III.B (conceptualizing norm assembly).

230. See *supra* Part II.A.2. (discussing the case of Yue Yuen).

231. See Virginia Harper Ho, "Comply or Explain" and the Future of Nonfinancial Reporting, 21 LEWIS & CLARK L. REV. 317 (2017).

232. See Haitian Liu, *The "Legalisation" of Corporate Social Responsibility: Hong Kong Experience on ESG Reporting*, 24 ASIA PACIFIC L. REV. 123 (2016).

233. For a comparative study on "comply or explain" disclosure requirements, see Ho, *supra* note 231, at 335–45 (surveying a range of jurisdictions and finding that "comply or explain" principles have enhanced transparency and improved corporate governance practices).

234. See Zeng, *supra* note 211.

ies” and “ecoparks,” with their focus on sustainability, are becoming the next frontiers of corporate social responsibility.²³⁵

3. Private Regulatory Functions

As the vignette on supply chain cities demonstrates, transnational suppliers’ growth model includes extensive infrastructure that extends well beyond the boundaries of the firm.²³⁶ These spaces are designed to be one-stop shops for the many moving parts of a company’s supply chains, thus reducing transaction costs and facilitating flexible logistics management. In these supply chain cities, firms have almost an omnipresent power over workers’ lives, acting at once as employers, landlords, public services providers, and regulators of behaviors and moral standards.²³⁷

The COVID-19 pandemic shined a spotlight on all these critical functions. In Vietnam, for example, after COVID-19 outbreaks, electronic factories turned to a model of “sleepover manufacturing” to insulate workers from infections, greenlit by a national leadership anxious to keep the country’s reputation as a supply chain rising star.²³⁸ Given their management responsibility over a big swath of the population, Big Suppliers have taken on an even more unlikely role as public health providers. Pou Chen—Yue Yuen’s Vietnamese subsidiary—advanced its own contact tracing, testing, and medical reporting system,²³⁹ while Samsung provided free dormitories and food to encourage workers to stay within its industrial park.²⁴⁰ In Taiwan, in a rather extraordinary development, Foxconn and TSMC have taken on a diplomatic and political role as they represented the Taiwanese government in its negotiation to purchase COVID-19 vaccines from BioNTech.²⁴¹ By outsourcing the negotiation to its two most powerful companies, Taiwan

235. See, e.g., Minsi Liu & Kevin Lo, *Governing Eco-Cities in China: Urban Climate Experimentation, International Cooperation, and Multilevel Governance*, 121 GEOFORUM 12, 12 (2021) (noting that countries with rapid urbanization such as China have been embracing experimental eco-cities and low-carbon cities); Rae-Anne Alves & Glenn Steinberg, ERNST & YOUNG, *How Sustainable Supply Chains Are Driving Business Transformation* (Sept. 20, 2022), https://www.ey.com/en_gl/supply-chain/supply-chain-sustainability-2022 [https://perma.cc/YK3N-BNP9] (“Supply chains are sustainability’s new frontier.”).

236. See *supra* Part II.A.3.

237. *Id.*

238. See Chia Woon Eunice Chua & Nguyen Dieu Tu Uyen, *Factory Sleepovers Help Guard Vietnam’s Workers From Virus Outbreaks*, BLOOMBERG (July 6, 2021), <https://www.bloomberg.com/news/newsletters/2021-07-06/supply-china-latest-vietnamese-workers-avoid-virus-by-sleeping-at-work> [https://perma.cc/NB73-4Z5V] (noting the stark divide between white-collar workers who could work from home during the pandemic, compared to blue-collar workers whose physical labor is needed to sustain export-orienting economies).

239. See *Pou Chen Group’s Efforts in Response to COVID-19 Pandemic*, POUCHEN ESG NEWS (May 31, 2021), https://www.pouchen.com/index.php/en/csr/esg-news/56-csr_2020/803-pcc-csr-news-200531-en [https://perma.cc/734Q-EGPM].

240. See *Samsung Viet Nam Day Manh Cac Bien Phap Phong Dich COVID-19* [Samsung Vietnam Increases Measures to Prevent Covid-19], SAMSUNG NEWSROOM (May 14, 2021), <https://news.samsung.com/vn/samsung-viet-nam-day-manh-cac-bien-phap-phong-dich-covid-19> [https://perma.cc/KQ5R-7VV5].

241. See *Taiwan Tech Giants Foxconn and TSMC to Buy 10m COVID Jobs*, BBC (July 12, 2021), <https://www.bbc.com/news/business-57801031> [https://perma.cc/M58P-RPT9].

was able to sideline a conflict with China, who reportedly blocked the self-governing island from directly negotiating with vaccine providers for geopolitical reasons.²⁴² In Vietnam, suppliers have also played critical roles in securing vaccine supplies for their workforce early in the pandemic, spurring a heated public debate on vaccine equity.²⁴³

These private, quasi-public efforts, while contributing to overall public health, are also no doubt motivated by suppliers' desire to keep factories open and avoid disruptions to global value chains, sometimes with direct urging from industry associations and host governments.²⁴⁴ Such public health efforts, while necessary and even laudable, also raise equity and distributive concerns, especially in the early days of vaccine shortage in developing economies.²⁴⁵

4. *Trade Policies and Sanctions*

The compounded shocks of the COVID-19 pandemic, geopolitical tensions, and national security concerns have spurred a wave of sanctions, regulations, and stimulus aimed at curbing domestic dependency on offshore production, in particular Chinese supply chains.²⁴⁶ A recently issued White House report on U.S. supply chain vulnerabilities found that U.S. national security is impacted by a number of supply chain industries, including semiconductors, high-capacity batteries, critical minerals, and biopharmaceutical ingredients.²⁴⁷ The report, with inputs from the Departments of Commerce, Energy, Defense, and Health and Human Services, issued a comprehensive set of recommendations aimed at strengthening U.S. supply chains, including government funding for semiconductor manufacturing, consumer rebates and tax incentives for U.S.-made electronic vehicles, and the creation of a Supply Chain Resilience Program, among others.²⁴⁸

On the sanctions side, the telecommunication industry provides an illustrative example. Citing cybersecurity concerns, the National Defense Authorization Act, passed by the U.S. Congress every fiscal year, now prohibits

242. See Joyu Wang and Chao Deng, *Tech Firms to Buy Covid-19 Vaccines on Behalf of Taiwan's Government*, WALL ST. J. (July 12, 2021), <https://www.wsj.com/articles/tech-firms-to-buy-covid-19-vaccines-on-behalf-of-taiwans-government-11626020496> [<https://perma.cc/J9VA-UWNC>] (“[T]he roundabout arrangement with TSMC and Foxconn effectively ends a months-long geopolitical impasse over whether Taiwan could buy vaccines directly from BioNTech.”).

243. See, e.g., Lien Hoang, *Intel Staff Vaccinated as Vietnam Prioritizes Tech Exports*, NIKKEI ASIA (July 13, 2021), <https://asia.nikkei.com/Business/Companies/Intel-staff-vaccinated-as-Vietnam-prioritizes-tech-exports> [<https://perma.cc/TT6N-BKB6>].

244. See *id.*

245. See, e.g., Tomoya Onishi, *Vietnam Vaccine Fund Secures Samsung and Toyota Donations*, NIKKEI ASIA (June 9, 2021), <https://asia.nikkei.com/Spotlight/Coronavirus/Vietnam-vaccine-fund-secures-Samsung-and-Toyota-donations> [<https://perma.cc/9G97-JRYP>] (noting governmental pressure to vaccinate worker populations).

246. See *infra* notes 247–266 and accompanying text (summarizing recent supply chain-related restrictions and sanctions).

247. See generally U.S. WHITE HOUSE, *supra* note 227.

248. See *id.* at 4.

executive agencies and federal contractors from using telecommunication equipment or services from certain “blacklisted” Chinese companies across their supply chains when fulfilling a U.S. government contract.²⁴⁹ The sanction, applied to all federal contractors and solicitations, effectively requires that these contractors conduct due diligence to ensure that they are not using or providing to the U.S. government such covered equipment.²⁵⁰ Violators risk disqualification, contract termination, and liability under the False Claims Act, which carries treble damages in certain circumstances.²⁵¹ The impact of these sanctions reverberates well beyond agency procurement contracts. For example, the U.S. Agency for International Development, which provides loans to development efforts, interpreted the law to apply to their own grants and investments abroad.²⁵² The unanimously passed Secure and Trusted Communications Networks Act of 2019 further subjects two of China’s (and the world’s) biggest telecommunications equipment producers—Huawei Technologies Co., Ltd. and ZTE Corporation—to a “rip and replace” program, which mandates the removal of extant China-produced equipment in U.S. infrastructure.²⁵³ This raised concerns over the disproportionate impact on rural U.S. telecom carriers, of which an estimated 25% use equipment from either Huawei or ZTE.²⁵⁴ Separately, both companies have also been added to the U.S. Department of Commerce’s “Entity List,” which bans any exports, re-exports, and transfers with covered entities without a special license.²⁵⁵ This effectively shuts off Chinese companies from being able to acquire the most advanced microchips, which are largely de-

249. See John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, § 889 (2019) [hereinafter National Defense Authorization Act]. The Act restricts executive agencies from directly purchasing products and services from certain Chinese companies and from contracting with any entities that use the restricted products and services. See *id.* § 889(a)(1)(A)–(B). The Act allows narrow exceptions for equipment that cannot transmit user data and limited waivers based on the discretion of executive agency heads. See *id.* § 889(a)(2), (d).

250. See *id.* § 889(a)(1)(B); see also Federal Acquisition Regulation: Prohibition on Contracting With Entities Using Certain Telecommunications and Video Surveillance Services or Equipment, 85 Fed. Reg. 42665 (July 14, 2020) (to be codified at 48 C.F.R. pts. 1, 4, 13, 39, 52) (implementing section 889(a)(1)(B) of the Federal Acquisition Regulation and requiring “submission of a representation with each offer that will require all offerors to represent, after conducting a reasonable inquiry, whether covered telecommunications equipment or services are used by the offeror”).

251. See National Defense Authorization Act, *supra* note 249, § 889(a)(1)(B); see also False Claims Act, 31 U.S.C. § 3729 (1985).

252. See U.S. AGENCY FOR INT’L DEV., SECTION 889 FREQUENTLY ASKED QUESTIONS (FAQS) FOR CONTRACTORS AND RECIPIENTS OF USAID AWARDS 8 (2020) (noting that contractors “must conduct a reasonable inquiry to determine if they use covered technology or services anywhere in their operations worldwide” including in relationships with subcontractors and suppliers).

253. H.R. 4459, 116th Cong. (2019).

254. William Yuen Yee, *With U.S. Restrictions on Huawei and ZTE, Where Will Rural America Turn?*, CTR. FOR STRATEGIC & INT’L STUD. (2020), <https://www.csis.org/blogs/new-perspectives-asia/us-restrictions-huawei-and-zte-where-will-rural-america-turn> [<https://perma.cc/R5LT-6HZE>] (citing to data from the Rural Wireless Association, a trade association that represents small wireless carriers).

255. David W. Opderbeck, *Huawei, Internet Governance, and IEEPA Reform*, 47 OHIO N.U. L. REV. 165, 166–67 (2021) (noting that sanctions against Huawei were exceptional because they were based on a national emergency declaration by the Trump administration as well as the Department of Justice’s criminal charges against Huawei CEO, Meng Wanzhou, based on allegations of financial fraud).

signed in the United States—one of the many factors in the ongoing semiconductor shortage.²⁵⁶ This trend only appears to be accelerating. In late 2022, two new laws are poised to significantly reform the global semiconductor industry. First, the passage of the Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (“CHIPS and Science Act”) promises, among other incentives, over \$50 billion in federal investment in the domestic semiconductor industry.²⁵⁷ At the same time, the Department of Commerce, through its Bureau of Industry and Security, issued a series of new, sweeping export control rules targeting the PRC’s ability to acquire, produce, or use advanced computing semiconductors and related equipment.²⁵⁸ Notably, these new rules target not only the end products (*i.e.*, advanced chips), but also the commercial items in these products’ supply chains necessary for their production, thus creating a more comprehensive export control regime than previously utilized.²⁵⁹

The textile and apparel industries are likewise experiencing shocks from trade sanctions. Between October 2019 and June 2021, the Department of Commerce added over 50 Chinese entities to the Entity List based on concerns over these companies’ involvement in human rights abuses of ethnic minorities in China’s Xinjiang Autonomous Region.²⁶⁰ In a concerted move, U.S. Customs and Border Protection, which, in addition to immigration, is also in charge of the admission of goods into the United States, has issued a series of “withhold release orders” detaining cotton and tomato products produced in Xinjiang based on concerns over the use of forced labor and modern slavery in these supply chains.²⁶¹ “Downstream” products made in

256. See *supra* notes 129–43 and accompanying text (analyzing the semiconductor industry).

257. See Creating Helpful Incentives to Produce Semiconductors and Science Act, Pub. L. 117-167, 136 Stat. 1366 (2022); see also Press Release, U.S. White House, FACT SHEET: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China (Aug. 9, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china> [https://perma.cc/LK4H-4URD].

258. Implementation of Additional Export Controls: Certain Advanced Computing and Semiconductor Manufacturing Items; Supercomputer and Semiconductor End Use; Entity List Modification, 87 Fed. Reg. 62186 (Oct. 13, 2022) (to be codified at 15 C.F.R. pts. 734, 736, 740, 742, 744, 762, 772, 774).

259. For ongoing analysis on the details and impact of the Department of Commerce’s new export control rules, see, for example, Brian Egan, *New US Semiconductor Export Controls Signify Dramatic Shift in Tech Relations With China*, JUST SECURITY (Oct. 24, 2022), <https://www.justsecurity.org/83744/new-us-semiconductor-export-controls-signify-dramatic-shift-in-tech-relations-with-china> [https://perma.cc/RFZ2-WBW7]; AKIN GUMP, *BIS Imposes New Controls to Limit the Development and Production of Advanced Computing and Semiconductor Capabilities in China* (Oct. 27, 2022), <https://www.akingump.com/en/news-in-sights/bis-imposes-new-controls-to-limit-the-development-and-production-of-advanced-computing-and-semiconductor-capabilities-in-china.html> [https://perma.cc/BX2H-HP6V].

260. Press Release, U.S. DEPT OF COM., *Commerce Department Adds Five Chinese Entities to the Entity List for Participating in China’s Campaign of Forced Labor Against Muslims in Xinjiang* (June 24, 2021), <https://www.commerce.gov/news/press-releases/2021/06/commerce-department-adds-five-chinese-entities-entity-list> [https://perma.cc/4NTD-AA4L].

261. Press Release, U.S. CUSTOMS AND BORDER PROT., *CBP Issues Region-Wide Withhold Release Order on Products Made by Slave Labor in Xinjiang* (Jan. 13, 2021), <https://www.cbp.gov/newsroom/national-media-release/cbp-issues-region-wide-withhold-release-order-products-made-slave> [https://perma.cc/T3SL-J5M7] (citing to Section 307 of the Tariff Act of 1930, which prohibits the import of any product

third countries that incorporate these inputs—for example, clothing, textiles, canned tomatoes, etc.—are also subject to the withhold release orders.²⁶² Once the goods are detained, importers have the burden of providing “proof of admissibility” that trace the entire supply chains, from raw materials to final assembly, to demonstrate that the detained merchandise was not produced with forced labor.²⁶³ In 2021, despite objections from industry associations, President Biden signed into law the Uyghur Forced Labor Prevention Act, which creates a rebuttable presumption that imports from Xinjiang are made with forced labor unless “clear and convincing” evidence demonstrates otherwise.²⁶⁴ It is hard to overstate the impact of these measures. Xinjiang accounts for about 85% of China’s cotton production and 20% of cotton production globally.²⁶⁵ In response, brands have started putting their suppliers on notice and crafting strategies to disassociate from Xinjiang.²⁶⁶ China is not the only host state with controversial human rights issues. Cambodia, which for years enjoyed duty-free access to the European Union market under the “Everything But Arms” program, recently lost such preferential treatment due to concerns over its human rights record.²⁶⁷

During a time of growing U.S. political polarization,²⁶⁸ supply chain regulations have somehow achieved the herculean tasks of uniting politicians across the aisle.²⁶⁹ A key part of these sanctions is supply chain traceability

that was mined, produced, or manufactured wholly or in part by forced labor, including forced or indentured child labor and which delegates enforcement authority to U.S. Customs and Border Protection).

262. *Xinjiang Uyghur Autonomous Region WRO Frequently Asked Questions*, U.S. CUSTOMS AND BORDER PROT. (Mar. 2, 2022), <https://www.cbp.gov/trade/programs-administration/forced-labor/xinjiang-uyghur-autonomous-region-wro-frequently-asked-questions> [https://perma.cc/A2CP-52E2].

263. *Id.*

264. See H.R. 1155, 117th Congress (2021).

265. See Ana Swanson, *U.S. Restricts Chinese Apparel and Tech Products, Citing Forced Labor*, N.Y. TIMES (Sept. 14, 2020), <https://www.nytimes.com/2020/09/14/business/economy/us-china-forced-labor-imports.html> [https://perma.cc/GC3C-5TP5] (citing to data from the U.S. Department of Agriculture).

266. See Eva Dou, Jeanne Whalen & Alicia Chen, *U.S. Ban on China’s Xinjiang Cotton Fractures Fashion Industry Supply Chains*, WASH. POST (Feb. 22, 2021), https://www.washingtonpost.com/world/asia_pacific/china-cotton-sanctions-xinjiang-uyghurs/2021/02/21/a8a4b128-70ee-11eb-93be-c10813e358a2_story.html [https://perma.cc/SN65-ZWKJ] (noting the historic nature of these sanctions).

267. See EUR. COMM’N, *Cambodia Loses Duty-Free Access to the EU Market Over Human Rights Concerns* (Aug. 12, 2020), <https://trade.ec.europa.eu/access-to-markets/en/news/cambodia-loses-duty-free-access-eu-market-over-human-rights-concerns#:~:text=AS%20of%20today%2C%2012%20August,EU%20market%20is%20now%20effective> [https://perma.cc/B2J3-LCP5].

268. See Michael Dimock & Richard Wike, *America is Exceptional in the Nature of its Political Divide*, PEW RSCH. CTR. (Nov. 13, 2020), <https://www.pewresearch.org/fact-tank/2020/11/13/america-is-exceptional-in-the-nature-of-its-political-divide> [https://perma.cc/ZGY9-UQLZ] (citing to survey data documenting increasing disagreement between Democrats and Republicans over a wide range of issues including the economy, racial justice, law enforcement, and climate change).

269. See, e.g., Marco Rubio, *Rubio, Merkley, Colleagues Re-Introduce Uyghur Forced Labor Prevention Act* (Jan. 27, 2021), <https://www.rubio.senate.gov/public/index.cfm/2021/1/rubio-merkley-colleagues-re-introduce-uyghur-forced-labor-prevention-act> [https://perma.cc/6L9G-JJD6] (noting that, in addition to Marco Rubio (R-FL), the proposed Uyghur Forced Labor Prevention Act bill was sponsored by Senators Elizabeth Warren (D-MA), Tom Cotton (R-AR), Cory Booker (D-NJ), Susan Collins (R-ME), among others).

and transparency, governed by a system of origin certifications that, for purposes of trade and imports, represents a “passport” documenting the constructed nationality of the final assembled products.²⁷⁰ In the apparel and textile context, suppliers have started to reconfigure their supply chains, though transparency remains poorly observed and enforcement is uncertain.²⁷¹ Both the Xinjiang withhold release orders and the Uyghur Forced Labor Prevention Act hinge on U.S. importers’ ability to trace the origin of their products and produce documents demonstrating so.²⁷² At a minimum, this complex documentation regime necessarily involves cooperation from suppliers, whose control over and proximity to the production process reasonably enables greater supply chain traceability compared to end-of-chain buyers.²⁷³

Given the connectedness of global supply chains, it remains to be seen how transnational suppliers will adapt in response to this proliferation of trade sanctions and regulations from the United States and elsewhere.²⁷⁴ For SMIC—China’s semiconductor champion—adaptation has come in the form of ambitious expansion. In 2021, SMIC unveiled two expansion plans totaling over US\$11 billion in Shenzhen and Shanghai, focusing on both regular and advanced microchips.²⁷⁵ This expansion was partly funded by China, whose party-state has declared an industrial policy goal of “Made in China 2025” that seeks “technological dominance” and independence in high-tech manufacturing.²⁷⁶ SMIC’s expansion was declared as part of a domestic effort to build up Chinese technology independence and capacity in order to catch

270. See *Certificates of Origin*, INT’L CHAMBER OF COM., <https://iccwbo.org/resources-for-business/certificates-of-origin> [<https://perma.cc/W8GR-5LAK>] (last visited Oct. 8, 2022) (noting that certificates of origin “declare the ‘nationality’ of the product and also serve as a declaration by the exporter to satisfy customs or trade requirements”); see also Dylan Geraets, Colleen Carroll & Arnoud Willems, *Reconciling Rules of Origin and Global Value Chains: The Case for Reform*, 18 J. INT’L ECON. L. 287 (2015) (arguing that the system of rules of origin under international trade law is cumbersome and ill-suited for the reality of global value chains and proposing a more flexible rule).

271. See Dou, Whalen & Chen, *supra* note 266 (citing to worker rights advocates’ skepticism).

272. See *supra* notes 260–66 and accompanying text.

273. See, e.g., *FTA Certificates of Origin*, U.S. DEP’T OF COM., INT’L TRADE ADMIN., <https://www.trade.gov/fta-certificates-of-origin> [<https://perma.cc/L8XZ-MLA7>] (noting that certificates of origin are usually filled out by the exporters; however, because the producer “is in the best position to have the necessary knowledge” about a product’s origin, a producer may also be asked to fill out a declaration).

274. After the United States, the United Kingdom has also banned the use of Huawei equipment, and other U.S. partners such as Canada, Germany, the Netherlands, and New Zealand are considering similar sanctions. See Lindsay Maizland & Andrew Chatzky, *Huawei: China’s Controversial Tech Giant*, COUNCIL ON FOREIGN REL. (Aug. 6, 2020), <https://www.cfr.org/backgrounder/huawei-chinas-controversial-tech-giant> [<https://perma.cc/NF49-AM5G>].

275. See BLOOMBERG, *Top China Chipmaker to Invest \$8.9 Billion in Shanghai Plant* (Sept. 3, 2021), <https://www.bloomberg.com/news/articles/2021-09-03/top-china-chipmaker-to-invest-8-9-billion-in-shanghai-plant#xj4y7vzkg> [<https://perma.cc/293R-FSD6>].

276. See JOST WÜBBEKE, ET AL., MERCATOR INST. FOR CHINA STUD., *MADE IN CHINA 2025*, at 14, 20 (Dec. 2016), <https://merics.org/sites/default/files/2020-04/Made%20in%20China%202025.pdf> [<https://perma.cc/M4C2-S3MQ>]; James McBride & Andrew Chatzky, *Is ‘Made in China 2025’ a Threat to Global Trade?*, COUNCIL ON FOREIGN REL. (May 13, 2019), <https://www.cfr.org/backgrounder/made-china-2025-threat-global-trade> [<https://perma.cc/4VSS-QBF3>].

up to Western powers.²⁷⁷ As U.S.-China tensions mount, transnational suppliers like SMIC appear to be taking on even more outsized roles, serving both economic as well as political and geopolitical goals.

5. *Geopolitics*

By now, it should be evident that global value chains are intimately entwined with geopolitics.²⁷⁸ Moving “up” from the previous section’s concerns with private contracting and domestic policies, this section turns to macro structures of global commerce, particularly China’s Belt and Road Initiative (“BRI”) and a wave of recent regional trade agreements, to analyze their connections vis-à-vis global value chains and transnational suppliers.

Unveiled in 2013, the BRI, aptly described by one scholar as “state-mobilized globalization,” is China’s megadevelopment plan that promises lucrative infrastructure investments in projects from Asia to Africa.²⁷⁹ Structured as a series of bilateral agreements with host countries, the BRI focuses on investing in infrastructure such as roads, bridges, and ports—all of which are critical for the flow of global value chains.²⁸⁰ Scholars have pointed out that the BRI is a mechanism through which China aims to build up Chinese-led global value chains—defined broadly as commerce, trade, and investment organized out of China, including the Belt and Road Initiatives, rather than those catering to consumption elsewhere.²⁸¹ As part of a new legal trend, the BRI pioneers a model of one-stop shop adjudications, providing alternative dispute resolution mechanisms such as arbitration, negotiation, mediation, and diplomacy in addition to traditional litigation.²⁸² While China previously designed law and policy to enable access to the neoliberal architecture of global production and international investment, it is now arguably laying down its own infrastructure, legal and

277. See McBride & Chatzky, *supra* note 276.

278. See Keith Johnson & Robbie Gramer, *The Great Decoupling*, FOREIGN POL’Y (May 14, 2020), <https://foreignpolicy.com/2020/05/14/china-us-pandemic-economy-tensions-trump-coronavirus-covid-new-cold-war-economics-the-great-decoupling> [https://perma.cc/3EQ5-VS94]; Thomas Pepinsky & Jessica Chen Weiss, *The Clash of Systems?*, FOREIGN AFFS. (June 11, 2021), <https://www.foreignaffairs.com/articles/united-states/2021-06-11/clash-systems> [https://perma.cc/5DTP-A8T4].

279. See MIN YE, *THE BELT, ROAD, AND BEYOND: STATE-MOBILIZED GLOBALIZATION IN CHINA: 1998–2018* (2020) (arguing that the Belt and Road Initiative is first and foremost a nationalist strategy to address domestic problems rather than evidence of Chinese imperialist ambitions); *but see* Gregory Shaffer & Henry Gao, *A New Chinese Economic Order?*, 23 J. INT’L ECON. L. 607, 607–09 (2020) (arguing that China’s many economic and legal initiatives, of which the BRI is a part, amount to a potentially distinct economic order with impacts well beyond China).

280. See YE, *supra* note 279, at xi-xiii.

281. See Henry Gao & Gregory Shaffer, *The Role of Law in Chinese Value Chains*, J. CHINESE ECON. BUS. STUD. 197, 198–99 (2021).

282. See Matthew S. Erie, *The New Legal Hubs: The Emergent Landscape of International Commercial Dispute Resolution*, 60 VA. J. INT’L L. 225, 230–31 (2019) (describing the rise of “new legal hubs” in offshore jurisdictions).

physical, though it remains unclear what final form its divergent path will take.²⁸³

At the same time, a new wave of mega-regional free trade agreements, including the eleven-country Comprehensive and Progressive Agreement on Trans-Pacific Partnership (“CPTPP”) and the fifteen-country Regional Economic Partnership Agreement (“RCEP”), signaled a potential regionalization of global supply chains.²⁸⁴ With heavy participation from the Asia Pacific region, these two trade agreements notably do not involve the United States.²⁸⁵ RCEP, now the world’s largest trading bloc, aims to harmonize an existing web of trade rules among its members, which include the ten member countries of the Association of Southeast Asian Nations as well as China, Japan, South Korea, Australia, and New Zealand.²⁸⁶ Unlike other free trade agreements, both have also adopted an open-accession clause that enables accessions from not only nation-states but also sub-national territories.²⁸⁷ RCEP’s more liberal rules-of-origin regime, which mandates relatively low “nationality” requirements for granting duty-free or reduced duty for imports, will create attractive incentives for businesses to source from the region when it comes into effect.²⁸⁸

Taken together, all these developments may signal yet another pendant shift in the economic arrangements of global value chains. The BRI points towards a vision of China-led global value chains that caters to domestic and ally consumption, whereas the emergence of several mega-regional trade agreements seems to suggest a possible path towards breaking up global production into regional value chains. As the economics of cross-border commerce evolve, so will its legal organization. But just as the existing architecture of the first unbundling did not fade away but found ways to co-exist with and benefit from the current era of dispersed production, likewise, the dominant players in the current version of global value chains, transna-

283. See Gao & Shaffer, *supra* note 281, at 3–19 (analyzing the roles of Chinese law in the country’s participation in and transformation of global value chains); SHAFER, *supra* note 33, at 25–33 (documenting the process through which Chinese participation in global trade led to the mutual transformation of both China and international economic law); see also Matthew Eric, *Chinese Law and Development*, 62 HARV. INT’L L.J. 51 (2021) (arguing that, at least for now, China is more interested in harmonizing regional laws, rather than in exporting its model globally or changing other states’ domestic laws).

284. See PASHA HSIEH, *Introduction to NEW ASIAN REGIONALISM IN INTERNATIONAL ECONOMIC LAW* 1, 1 (2021) (arguing that the CPTPP and RCEP are part of a new Asian regionalism that can “reinvigorat[e] the role of developing countries in shaping international trade norms”).

285. *Id.* at 14 (noting the member countries of the CPTPP and RCEP).

286. See RCEP: *Asia-Pacific Countries Form World’s Largest Trading Bloc*, BBC (Nov. 16, 2020), <https://www.bbc.com/news/world-asia-54949260> [<https://perma.cc/2QZV-QHLE>].

287. See HSIEH, *supra* note 284, at 15 (noting that London has applied for CPTPP membership and Hong Kong has voiced intention to join RCEP).

288. See Pramila Crivelli & Stefano Inama, *Making RCEP Successful Through Business-Friendly Rules of Origin*, ASIAN DEV. BANK BLOG (Feb. 12, 2021), <https://blogs.adb.org/blog/making-rcep-successful-through-business-friendly-rules-of-origin> [<https://perma.cc/5SFU-L3D6>] (noting that the success of RCEP’s rules of origin regime will hinge on timely implementation guidelines to provide clarity to businesses); see also *supra* notes 268–70 (explaining the importance of rules of origin in trade and trade sanctions).

tional suppliers included, will likely continue to find firm footing in the future of global capitalism, whichever form it may yet take.

6. *Summary*

To sum up, this Part canvassed five distinct substantive legal and policy areas implicated by the changing forms of global value chains. While the extraterritorial nature of supply chains has always raised thorny issues, the presence of transnational suppliers has refocused those issues in different ways. Again, three key features stand out.

First, at the international level, transnational suppliers are a significant source of economic and political power for their home states. As national champions for export-oriented economies, these enterprises receive significant investments from their home governments and wield political and regulatory powers. Taiwan's delegation of its COVID-19 vaccine negotiation to its two national champions, Foxconn and TSMC, at a moment of heightened geopolitical tension with China shows a rare observable instance of public-private diplomacy. Likewise, home governments' delegation of pandemic responses to transnational suppliers during COVID-19 outbreaks demonstrates these companies' increasing quasi-regulatory roles, while simultaneously raising equitable and distributive concerns.

Second, at the domestic level, transnational suppliers are at the core of trade-related regulatory efforts by outside states. In the United States, policy efforts to address supply chain vulnerabilities as well as sanctions through the National Defense Authorization Act, the Uyghur Forced Labor Prevention Act, withhold release orders, and other administrative regulations have largely evolved around supply chain traceability and transparency. Thanks to their proximity to the production process and supply chain management capability, transnational suppliers are likely in a better position than their end-of-chain buyers to trace and map relevant supply chains. As a result, impacted businesses may need cooperation from their lead suppliers, more now than ever, as they navigate new and complex trade and import regulations.

Finally, at the private ordering level, transnational suppliers are key actors in cross-border private governance. This insight is applicable to both commercial activities and social responsibility efforts. On the commercial side, corporate buyers and their key suppliers operate in a highly enmeshed, "sticky" ecosystem of global value chains. Relational contracting norms such as flexible negotiations and long-term planning—rather than "hard" contractual terms—may thus be the practical driving force of supply chain restructuring, especially among deeply enmeshed buyers and their lead suppliers.

On the corporate social responsibility side, the insight that buyers do not have as much control over their lead suppliers as previously believed carries policy consequences for private governance, public law, and grassroots

movements alike. Laws and policies targeting suppliers through their buyers, as well as consumer movements to promote responsible business, have traditionally been built around an underlying assumption that buyers can in fact exert pressure on their suppliers. Relaxing this assumption, at least where transnational buyers are involved, means departing the well-traveled road and finding new avenues of intervention. The good news is these avenues do exist. Offshore stock exchange regulations, such as the Hong Kong stock exchange's "comply or explain" rule, open up new paths to gain information and insight into the practice of Big Suppliers, even as a potential basis for enforcement.²⁸⁹

B. *Toward Conceptualizing "Norm Assembly"*

Private ordering is highly influential in cross-border commerce, especially where governance gaps exist in global production.²⁹⁰ By virtue of their size and scale, both economically and physically, Big Suppliers are poised to become important players in the creation, interpretation, implementation, and even resistance of a range of business and legal norms. While the previous section takes stock of the legal and policy implications of transnational suppliers, this section starts to develop the idea of "norm assembly" and situates it within existing legal theories regarding private actors and transnational lawmaking.

"Norm assembly," as the name suggests, is inspired by the physical work of manufacturing, though the process is neither linear nor so neatly organized. It envisions a co-production process, whereby economic actors, by virtue of their agency, economic arrangements, or business practice, contribute to the creation, interpretation, implementation, and resistance of a range of business and legal norms. In the case of transnational suppliers, reconceptualizing one-way enforcement "chains" as a sort of co-production is significant because it recognizes the relevance, organizational logic, and regulatory potential of these important economic actors.

Before canvassing the literature, it is first helpful to understand what "norms" refer to. At the broadest level, a norm is defined as "an authoritative standard," custom, or practice that guides behavior.²⁹¹ Norms can be obligations laid down by the authority of law, or models and standards that are widely accepted, voluntarily or involuntarily, by society or large groups.²⁹² Private norms have been shown to play particularly outsized roles

289. See *supra* notes 231–33 and accompanying text.

290. See *supra* note 17 and accompanying text (defining the governance gap in global value chains).

291. See *Norm*, MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/norm> [<https://perma.cc/99HP-Q9AX>] (defining "norm" as "an authoritative standard" or "a principle of right action binding upon the members of a group and serving to guide, control, or regulate proper and acceptable behavior").

292. *Norm*, BLACK'S LAW DICTIONARY (11th ed. 2019) (defining "norm" as "[a] model or standard accepted (voluntarily or involuntarily) by society or other large group, against which society judges someone or something").

in business settings as well as transnational space, where public regulations may be crowded out by other options or lacking altogether.²⁹³ Much has been written about how private actors use various methods to advance their own private ordering.²⁹⁴ Business actors can act as “norm entrepreneurs” to influence legislative processes such as treaty-making, international agenda setting, and international lobbying.²⁹⁵ Once laws and norms “cascade” and settle,²⁹⁶ private actors can further shape their meanings through post-hoc interpretation, either through litigation²⁹⁷ or by creating complementing or contradicting industry norms.²⁹⁸ Private institutions sometimes engage in enforcement by incorporating international rules and norms in their corporate policies and contracts.²⁹⁹ Where public law stops short or is ambiguous, private ordering has filled in through a range of contested space, for example, through standard settings, corporate social responsibility, modern slavery laws, and environmental regulations.³⁰⁰

One common thread that runs through the private ordering literature is agency. Norm entrepreneurs, as the name suggests, display entrepreneurial spirit.³⁰¹ These private actors are purposeful and goal-oriented, able to wield corporate resources strategically to influence regulators and public opinions.³⁰² This focus perhaps explains why much of the literature has coalesced around big corporations and lead firms.³⁰³ At the same time, studies on global-to-local norm diffusion have revealed that actors constrained by resources, political will, and other structural impediments can also play im-

293. See *supra* note 17 and accompanying text (defining the governance gap in global value chains); see also *supra* notes 221–24 and accompanying text (summarizing the literature on relational contracts).

294. See Gregory C. Shaffer, *How Business Shapes Law: A Socio-Legal Framework*, 42 CONN. L. REV. 147, 172–73 (2009) (describing the pathways through which private actors can affect norms in international business settings); Kenneth W. Abbott, Devid Lei-Faur & Duncan Snidal, *Theorizing Regulatory Intermediaries: The RIT Model*, 670 ANNALS AM. ACAD. POL. & SOC. SCI. 14 (2017).

295. See Martha Finnemore & Kathryn Sikkink, *International Norm Dynamics and Political Change*, 52 INT’L ORG. 887, 890–95 (1998) (conceptualizing “norm cascades” as a process through which nonstate actors such as NGOs and firms act as “norm entrepreneurs” in treaty making); Melissa Durkee, *International Lobbying Law*, 127 YALE L.J. 1742 (2018) (revealing how corporate access to international organizations creates a phenomenon of private international lobbying).

296. See Finnemore & Sikkink, *supra* note 295, at 895.

297. See Julian Arato, *Corporations as Lawmakers*, 56 HARV. INT’L L.J. 229, 229–37 (2015) (describing how investor-state arbitrations enable private investors to define the terms of bilateral investment treaties).

298. See Melissa Durkee, *Interpretive Entrepreneurs*, 107 VA. L. REV. 431, 433–40 (2021) (describing how businesses actively push their own interpretations of international norms through trade associations and third-party experts).

299. See Jay Butler, *The Corporate Keepers of International Law*, 114 AM. J. INT’L L. 189, 209–10 (2020) (noting financial institutions’ codification of the Equator Principles in their lending agreements as an example of corporate enforcement of international law).

300. See BÜTTE & MATTLI, *supra* note 50, at 1–17 (summarizing the case studies).

301. See *supra* notes 294–300 and accompanying text (summarizing the literature on norm entrepreneurship and private governance).

302. See, e.g., Durkee, *supra* note 298, at 461–65 (documenting, for example, how aircraft carriers band together to lobby air transportation regulations); Butler, *supra* note 299, at 199–200 (theorizing corporate incentives in enforcing public international law).

303. For examples, see sources cited *supra* notes 291–97.

portant roles in the success and failure of norm implementation.³⁰⁴ This literature, too, has focused on the capacity and technical know-how of local actors, alongside structural issues such as political, cultural, and institutional constraints.³⁰⁵

In supply chain settings, first-tier suppliers may influence a norm's life cycle through agency, but they may do so simply as a by-product of firms' organizational logic, economic arrangement, or infrastructure.³⁰⁶ As the vignette case studies above demonstrate, norms can be "assembled" through a deliberate economic arrangement (for example, the vendor managed inventory contract between TAL Apparel and JCPenney).³⁰⁷ It could also be driven simply by the ways in which a particular supplier organizes its business functions (for example, how corporate social responsibility diffusion is limited by Yue Yuen's customer-specific production lines).³⁰⁸ When Big Suppliers operate supply chain cities that resemble "company towns," how these employers organize their buildings, factory floors, and work shifts becomes the de facto regulation of significant aspects of individual lives.³⁰⁹ As transnational suppliers often operate in "regulatory laboratories" such as special economic zones and other types of carve-out jurisdictions with more leeway given to local authorities and private actors,³¹⁰ their norm-influencing roles are especially pronounced.

To know exactly what norms are being formed and shaped by transnational suppliers, through what process, and by which "epistemic communities"³¹¹ raise interesting questions for future research. Suffice to say, such undertaking underscores the importance of understanding not only the macro-level organization of global value chains, but also the economic structure of each industry and its key actors.

CONCLUSION

This Article traces the rise of a new crop of global capitalists in the form of transnational suppliers and explores their legal and policy implications.

304. For a seminal work in this field, see SALLY ENGLE MERRY, *HUMAN RIGHTS AND GENDER VIOLENCE: TRANSLATING INTERNATIONAL LAW INTO LOCAL JUSTICE* 219–22 (2006) (describing a process of "vernacularization" where international human rights norms were constantly being translated among different local actors).

305. *Id.*; see also Sally Engle Merry, *Transnational Human Rights and Local Activism: Mapping the Middle*, 108 *AM. ANTHROPOLOGIST* 38 (2006).

306. On infrastructures and economic arrangements as regulations, see Benedict Kingsbury, *Infrastructure and InfraReg: On Rousing the International Law "Wizards of Is"*, 8 *CAMBRIDGE INT'L L.J.* 171 (2019).

307. See *supra* Part II.A.1.

308. See *supra* Part II.A.2.

309. See *supra* Part II.A.3.

310. See *supra* notes 211–12 and accompanying text (describing special economic zones).

311. See SUSAN BLOCK-LIEB & TERENCE C. HALLIDAY, *GLOBAL LAWMAKERS: INTERNATIONAL ORGANIZATIONS IN THE CRAFTING OF WORLD MARKETS* 135–42 (2017) (describing norm-influencing actors as an "epistemic communit[y]" of such norm).

Dominating supply chain management and in charge of a million-strong workforce around the globe, these actors have taken on multi-faceted roles as employers, trade coordinators, landlords, and quasi-regulators, with implications for global commerce, security, human rights, global health, and geopolitics. In analyzing the rise and functions of these suppliers, this Article updates our understanding of how global value chains function and challenges the paradigm of “buyer-driven” globalization that has long undergirded important law and policy designs. Above all, in calling attention to the shifting power dynamics in today’s highly enmeshed global value chains, it opens up new potential venues for inquiries and interventions that, one may dare hope, can make a positive contribution to an interdisciplinary field that is at once personal to our daily lives and far-ranging in its consequences.