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 truequarterbacks of global supply chains. As manufacturing experts, they coordinate and oversee supplier networks spanning Asia, Latin America, and beyond. Acting 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**

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

1. See Hon Hai Precision Indus. Co., 2020 Annual Report 13, 105 (2021), https://image.honhai.com/finance_by_year/%E9%B4%BB%E6%B5%B7109%E5%B9%B4%E5%A0%B1_EN-nv2_(2).pdf [https://perma.cc/7FNA-QX33].
2. Hon Hai Precision Indus. Co., 2019 Corporate Social Responsibility Report 58 (2020), https://www.honhai.com/3/reports/CSR%E5%A0%B1%5%E9%87%87%5%E7%89%88%5%20%E9%B4%BB%E6%95%85%E5%8C%BA%E9%81%93%E5%87%87%E7%89%88/2019%E9%B4%BB%E6%95%85%E5%8C%BA%E9%81%93%E5%87%87%E7%89%88_CSR%2020report_en.pdf [https://perma.cc/CR87-SJJS].
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. By Big Suppliers, I refer to large contract manufacturing corporations, public and private, with presence in multiple jurisdictions, whether through subsidiaries or contracting network. 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. 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. 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. Unsurprisingly, control, coordination, task manage-
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

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10. See, e.g., What is Supply Chain Management?, IBM, https://www.ibm.com/topics/supply-chain-management (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 supra notes 60–76 and accompanying text (summarizing the literature on supply chain governance).


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) (conducted 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 disasters—be it sweatshops, forced labor, or environmental disasters—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.

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. 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. 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. 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).


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. \textsuperscript{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. \textsuperscript{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. \textsuperscript{23} Today, towering firms are no longer just corporations from developed economies. Non-Western transnational 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. \textsuperscript{24} As brands and retailers in the United States, Europe, and elsewhere divested, their foreign-based contracting partners have increasingly scaled up and consolidated. \textsuperscript{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. \textsuperscript{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. \textsuperscript{27} As a result, laws and policies

\textsuperscript{21.} See, e.g., Kishanthi Parella, \textit{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, \textit{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, \textit{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).

\textsuperscript{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).

\textsuperscript{23.} See infra Part I.B (analyzing the rise of transnational suppliers).

\textsuperscript{24.} See infra Part I.A (describing a brief history of outsourcing).

\textsuperscript{25.} See infra Part I.B (describing the consolidation of global value chains at the level of first-tier suppliers).


\textsuperscript{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.  

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. 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. Legal scholarship, on the other hand, has only started to unravel the interplay of economic forms and legal forms of global value chains. Within legal scholarship, this Article is in dialogue with a rich

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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-ECO. 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 (the 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, private and transnational governance, and a more recent critical strand on the role of law in global production.

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.” 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. This only begins to unpack the challenges associated with calls to onshore, re-shore, and restructure global value chains.

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. 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. 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. 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.

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,” 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, and have gone a long way in addressing and educating the public about the problems in an otherwise invisible system of global capitalism. 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. 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 roadblocks. 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.

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


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).

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 lawmakers. 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.” 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. Thanks to inventions such as railroads, steamships, and container shipping, international transportation, once prohibitively expensive, became capable of moving mass products cheaper and faster. 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. This first era of global production was characterized by a boom in trade in final goods—that is, goods pro-


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 7–13. Standardization itself is a highly political process. For an insightful investigation of standard settings by private power, see generally Tim Buthe & Walter
duced and completed at one destination, then shipped to another destination for consumption. Countries competed based on nation-based comparative advantage—that is, production tended to occur wholly within a particular nation, while consumption occurred elsewhere. 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).

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. Firms in developed nations, having already outsourced, could now internationalize. 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. As a result, industrial competitiveness was increasingly defined by production networks rather than by country-level comparative advantage. 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. This business model of decentralized production was the beginning of global value chains as we know them today.


51. See Baldwin, The Great Convergence, supra note 47, at 47–78.
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.
59. See Antrás & 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,” 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. 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. 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.

Governance—how particular actors in the chain of production exert control over others—soon emerged as the centerpiece of supply chain studies. 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. 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/everywhere-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 derisively 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-iSWH].


62. See id.


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

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 Baast, 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.\textsuperscript{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.\textsuperscript{75} Specialty roasters and brand-name manufacturers care much more about bean quality, whereas industrial grinders buy in bulk and compete on price.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{80}
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” and, as detailed below, much of the logistics and coordination required to make this possible are done by highly capable transnational suppliers. 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. 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

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81. See Antrás, 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/8015714685325149436/pdf/588510PUB0Mak101public10B0535816B.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.”).

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

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. 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. 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 offshore 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. 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. As a result, low labor cost is but one driver of whether to outsource. 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 Antrás, 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”).
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 Staritz, 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

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 MOSKOWSKI INST. PUB. ENTER. (2014) (criticizing the company’s aggressive acquisition tactics and sourcing strategy).
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. Manufacturing tasks are outsourced to electronic contractors—themselves 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.

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. 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. 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.

Though headquartered in Taiwan, Foxconn first built its factories—in mainland China to take advantage of favorable tax treatment, migrant workers’ low wages, and excellent manufacturing infrastructure. 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-

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).
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 XIAOPENING 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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{110} This led to lobbying efforts for import controls, culminating in a series of regulations that restricted trade in cotton textiles.\textsuperscript{111} As protectionist efforts centered on cotton, imports started to shift to synthetic fiber, replicating the same tension.\textsuperscript{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.\textsuperscript{113}


\textsuperscript{108} See Kana Ianagaki, Sharp Sees Foxconn as “Ticket to Becoming Global,” Fin. Times (June 27, 2019), https://www.ft.com/content/9057832a-4a3a-11e9-bde6-79eaa5acbf64 [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, 53 World Dev. 549 (2005).


\textsuperscript{111} Id. at 8–11.

\textsuperscript{112} Id.

\textsuperscript{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.\footnote{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.} 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.”\footnote{U.S. Int’l Trade Comm’n, supra note 110, at vi.} 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").\footnote{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).} This quota regime was a major departure from the basic GATT principles of trade liberalization and nondiscrimination.\footnote{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).} Under the MFA, importing economies (i.e., developed countries) could impose item-by-item, country-specific quotas against exporters (i.e., developing economies).\footnote{See Kyle Bagwell & Robert Staiger, The Economics of the World Trading System, 71–94 (2004).} 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.\footnote{See Gary Gereffi, International Trade and Industrial Upgrading in the Apparel Commodity Chain, 48 J. Int’l Econ. 37, 49–50 (1999).} 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.\footnote{See Gary Gereffi, International Trade and Industrial Upgrading in the Apparel Commodity Chain, 48 J. Int’l Econ. 37, 49–50 (1999).} 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.\footnote{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.  

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. 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.

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. 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. 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. 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.

While consolidation in the textile and apparel industry was driven in no small part by international trade law, 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

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123. Id.
124. Id.
125. See Gereffi & Frederick, supra note 89, at 219–20.
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.\textsuperscript{130} As such, the semiconductor supply chain is tightly integrated with other highly-regulated industries, including automobiles, air transportation, telecommunication, and defense equipment.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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).\textsuperscript{134} Two main types of companies make up the industry, largely mirroring this specialization: chip makers do only designs, while foundries focus on manufacturing.\textsuperscript{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.\textsuperscript{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”).\textsuperscript{137} TSMC, by way of an example, was started as a joint venture

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\textsuperscript{130.} See \textit{Varas}, supra note 101, at 7.
\textsuperscript{131.} Id.
\textsuperscript{133.} See \textit{Varas}, supra note 101, at 13.
\textsuperscript{134.} Id. at 9–13; see also \textit{Accenture, Going Vertical: A New Integration Era in the Semiconductor Industry} 5–6 (2021), https://www.accenture.com/_acnmdata/assetmedia/PDF-158/Accenture-Vertical-Integration-POV-Virtual.pdf [https://perma.cc/9L8Q-AIDB].
\textsuperscript{135.} See \textit{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.
\textsuperscript{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).
\textsuperscript{137.} For an overview of the so-called “Asian miracle” economies and their domestic industrial policies aimed at developing the semiconductor industry, see generally \textit{Alice Amsden \& Wan-Wen Chi, Beyond Late Development: Taiwan’s Upgrading Policies} (2003) (attributing Taiwan’s success in developing its high-tech industry to critical government interventions); \textit{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); \textit{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. Now the biggest foundry in the world, it is slated to open a chip factory in Arizona in 2024. Samsung Foundry, a subsidiary of Samsung Electronics, is the world’s second-largest contract chip producer, just after TSMC. It offers foundry services to its own parent company as well as other semiconductor companies. Shanghai-based SMIC, a publicly-listed multinational enterprise, is mainland China’s largest semiconductor foundry, controlling about 4% of the industry’s market share. 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.

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


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).

markets. 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. 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. A bilateral trade partner since 2001, Vietnam has grown into the United States’ second-largest supplier of footwear, just behind China. In the United States, while 99% of purchased footwear is made offshore, 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. 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. Unlike Nike, which has almost completely outsourced manufacturing to offshore contractors, New Balance employs a hybrid model of insourcing and outsourcing—in fact, it

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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#xjyv7ekg; 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 RESEARCH SERVICE, TPP Countries Sign New CPTPP Agreement without U.S. Participation, CRS INSIGHT (Mar. 9, 2018), https://crsreports.congress.gov/product/pdf/IN/IN10822; 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 (showing that, in 2019, Vietnam accounted for 25.8% of U.S. footwear imports, second to China’s share of 49.6%).


remains the sole U.S. athletic footwear brand to have a manufacturing presence in the United States today. 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.

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. TAL manages its inventory through an “electronic data interchange” software system to facilitate “vendor-managed inventory” (“VMI”). 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.” TAL’s VMI contract with JCPenney, for example, reflects an arrangement whereby it takes

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154. Id. at 2.

full responsibility for maintaining JCPenney’s inventory levels, from generating purchase orders through delivery. 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. 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. 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. Furthermore, all these actions can occur without JCPenney tracking and submitting purchase orders, as usually required in purchasing agreements. 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.”

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. 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. JCPenney was at first reluctant to enter into VMI but agreed to a pilot after years of partnering with TAL. 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. As a result, JCPenney was able to eliminate physical warehouses in the United States, cut costs, and realize higher profit margins. 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

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159. Id.

160. Id.


162. See Bonachich & 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.\footnote{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.\footnote{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.\footnote{169}

This logistic arrangement marked, to some observers, "a radical power shift" from retailers to their contract manufacturers.\footnote{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.\footnote{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.\footnote{172} Footwear, like apparel, is considered a trend-sensitive, labor-intensive industry located at a lower rung of the value chain ladder.\footnote{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

\footnotesize{167. \textit{Id}.}
\footnotesize{168. See \textit{Wallace & Hill}, supra note 157, at 77–78; \textit{Kahn}, supra note 161.}
\footnotesize{169. See \textit{Deloitte}, supra note 153, at 1; \textit{TAL Apparel}, supra note 155.}
\footnotesize{170. \textit{Id}.}
\footnotesize{172. See \textit{Locke}, supra note 42, at 5.}
\footnotesize{173. \textit{Id}. at 1–13.}
customer demands for quick turnarounds. 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. Nike became an early adopter of corporate social responsibility, soon followed by other brands. 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. 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. Furthermore, workers’ varying working conditions and standards can also produce diverging interests among workers that may impede an integrated approach to labor organizing.

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, 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

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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).
179. Id.
180. Id. (quoting NGO advocates).
“race to the top” when it comes to regulations. 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). The “Brussels effect,” coined by legal scholar Anu Bradford, extends this concept to the global economy, using case studies from the European Union. 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. In order to access European Union (“E.U.”) markets, private companies have to meet these higher standards. 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.

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. In these communities, an enterprise built, owned, and operated the entire town, including public services such as utilities, sewage management, and garbage collection. The corporate owners of these towns exercised extensive control over their workers’ lives, including
regulating behaviors such as curfew, drinking, smoking, gambling, and speech. While company towns have more or less faded out in developed countries, 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. 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. 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. 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. 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. “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.” 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. 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

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191. See Green, supra note 188, at 120–25.


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


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/GYE3-4FF3].

196. Id.

197. Id.

198. See Appelbaum, supra note 85, at 8 (noting Luen Thai’s model of “design to store”).
fabric mills. The Luen Thai complex also has its own police and fire station, which it apparently sometimes lends to the city of Dongguan.

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. 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. 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. 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. At Longhua, workers typically eat subsidized meals, and can choose to live rent-free in company dormitories inside the walls or off campus. They work exceedingly long hours, sometimes 29 days a month, during shifts where no talking or eating is allowed. The series of workers’ suicides have been attributed to the high-stress work culture and subpar living conditions of the Longhua campus.

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. 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. 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
its prevailing regulatory framework.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{213} This was an exception to the then-regulation that COVID-19 exposures were subject to mandatory quarantine in military-operated camps.\textsuperscript{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.\textsuperscript{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.\textsuperscript{216}

\begin{thebibliography}{99}
\bibitem{footnote} See Douglas Zhihua Zeng, \textit{How Do Special Economic Zones and Industrial Clusters Drive China’s Rapid Development?}, in \textit{Building Engines for Growth and Competitiveness in China} 1, 9 (2010).
\bibitem{footnote} See Hoang, \textit{supra} note 213; Nguyen & Pearson, \textit{supra} note 213.
\end{thebibliography}
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


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


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. 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. 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.

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). 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.

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. Faced with changing economic and geopolitical conditions, buyers and contractors anticipated a foreseeable future of contract negotiations. But hard contract

222. See id.
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 Antr`as, 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).
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. 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.229

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.230 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.231 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 lawmaker 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).
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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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,\textsuperscript{239} while Samsung provided free dormitories and food to encourage workers to stay within its industrial park.\textsuperscript{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.\textsuperscript{241} By outsourcing the negotiation to its two most powerful companies, Taiwan

\begin{itemize}
\item \textsuperscript{236} See supra Part II.A.3.
\item \textsuperscript{237} Id.
\item \textsuperscript{238} See Chia Woon Eunice Chua & Nguyen Dieu Tu Uyen, \textit{Factory Sleepovers Help Guard Vietnam’s Workers From Virus Outbreaks}, \textit{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).
\item \textsuperscript{241} See \textit{Taiwan Tech Giants Foxconn and TSMC to Buy 10m COVID Jabs}, \textit{BBC} (July 12, 2021), https://www.bbc.com/news/business-57801031 [https://perma.cc/M58P-RPT9].
\end{itemize}
was able to sideline a conflict with China, who reportedly blocked the self-governing island from directly negotiating with vaccine providers for geopolitical reasons.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{245}

4. \textit{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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

\begin{itemize}
\item \textsuperscript{244} See id.
\item \textsuperscript{246} See \textit{infra} notes 247–266 and accompanying text (summarizing recent supply chain–related restrictions and sanctions).
\item \textsuperscript{247} See generally U.S. \textbf{WHITE HOUSE}, \textit{supra} note 227.
\item \textsuperscript{248} See \textit{id.} at 4.
\end{itemize}
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.\footnote{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).} 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.\footnote{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”). Viators risk disqualification, contract termination, and liability under the False Claims Act, which carries treble damages in certain circumstances.\footnote{251. See National Defense Authorization Act, supra note 249, § 889(a)(1)(B); see also False Claims Act, 31 U.S.C. § 3729 (1985).} 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.\footnote{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).} 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.\footnote{253. H.R. 4459, 116th Cong. (2019).} 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.\footnote{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).} 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.\footnote{255. David W. Oplerbeck, 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).} This effectively shuts off Chinese companies from being able to acquire the most advanced microchips, which are largely de-
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

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

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271. See e.g., 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. DEPT OF COM., INT’L TRADE ADMIN., https://www.trade.gov/fta-certificates-origin [https://perma.cc/LbXXZ-MLA7] (noting that certificates of origin are usually filled out by the exporter; 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/N4C2-S3MQ].


up to Western powers. 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. 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. 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. 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. 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. 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.
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-xii.
physical, though it remains unclear what final form its divergent path will take.  

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. With heavy participation from the Asia Pacific region, these two trade agreements notably do not involve the United States. 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. 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. 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.

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-

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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); Shaffer, 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 Erie, 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 “reinvigorate[] the role of developing countries in shaping international trade norms”).

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


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).

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. Business actors can act as “norm entrepreneurs” to influence legislative processes such as treaty-making, international agenda setting, and international lobbying. Once laws and norms “cascade” and settle, private actors can further shape their meanings through post-hoc interpretation, either through litigation or by creating complementing or contradicting industry norms. Private institutions sometimes engage in enforcement by incorporating international rules and norms in their corporate policies and contracts. 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.

One common thread that runs through the private ordering literature is agency. Norm entrepreneurs, as the name suggests, display entrepreneurial spirit. These private actors are purposeful and goal-oriented, able to wield corporate resources strategically to influence regulators and public opinions. This focus perhaps explains why much of the literature has coalesced around big corporations and lead firms. 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).


295. See Martha Finnemore & Katheryn 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 293, at 895.


300. See BÜTHE & 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.
important roles in the success and failure of norm implementation. 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.

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. 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). 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). 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. 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, 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” 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.

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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).


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).

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.