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Regulation of Shipping Exchanges

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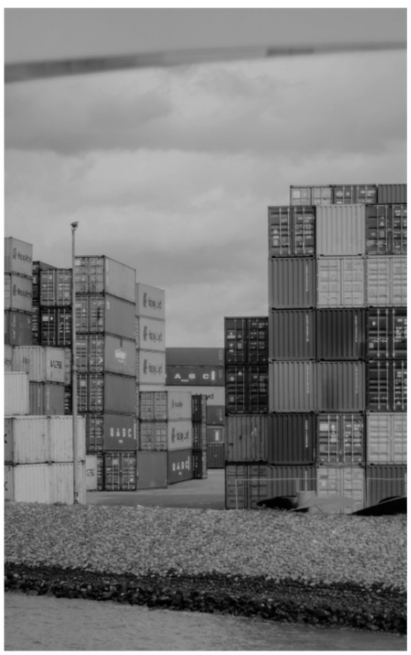

ABOUT THE VANDERBILT POLICY ACCELERATOR

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Executive Summary

Shipping exchanges—digital platforms that match shippers with vessel capacity in real-time—are quickly become a key player in maritime transport. In an industry marked by volatile prices and frequent disruptions, these digital platforms promise to increase price transparency, improve contract performance, and streamline booking processes. Yet, as shipping exchanges grow in adoption, they also have the potential to become powerful gatekeepers that can dictate who can access global shipping networks, on what terms, and at what prices. Left unchecked, shipping exchanges may exacerbate imbalances in bargaining power in the industry, enable discriminatory treatment between market participants, and prevent American farmers and manufacturers from obtaining fair access to global markets.

The Ocean Shipping Reform Act of 2022 (OSRA 2022), passed by Congress in the wake of the COVID-19 pandemic, provides the Federal Maritime Commission (FMC) with an opportunity to set clear rules of the road that facilitate the development and adoption of shipping exchanges, while guarding against common issues that arise within exchanges. In this paper, we propose a regulatory framework for shipping exchange that promotes price transparency for shippers, encourages carriers to compete to offer the best rates and service, and protects against harmful market manipulation. The proposals are centered around five key components:

- Nondiscrimination and equal access requirements to ensure that exchanges provide fair access to both shippers and carriers, regardless of their size or any favored status
- Price transparency requirements for exchanges and shipping indexes to provide market participants with up-to-date pricing information and maximize exchanges' potential for improving price discovery
- Requirements prohibiting common ownership and other conflicts of interest to ensure that all shippers and carriers play on the same level playing field
- Requirements prohibiting exclusionary conduct that could entrench certain exchanges over other exchanges, creating dominant gatekeepers that dictate market access and depriving shippers and carriers of the benefits of competition between exchanges
- Market manipulation mitigation requirements to promote market integrity and ensure that exchanges provide reliable pricing for market participants

Under OSRA 2022, shipping exchanges are required to register with the FMC under rules and conditions set forth by the agency. This paper provides a set of recommendations the FMC should include in those rules and conditions in order to achieve the statutory goals for shipping exchange regulation, as envisioned in OSRA 2022.

Introduction

Every day, thousands of container ships traverse the oceans, carrying goods that power the global economy—from food and consumer electronics to medical supplies and crude oil. More than 80 percent of global trade moves by sea,[1] providing a critical link between producers and consumers around the world. Today, that system is undergoing a significant transition, one marked by the digitization of underlying infrastructure,[2] consolidation among ocean carriers,[3] and advances in contracting practices.[4] Against that backdrop sits one of the most consequential shifts yet: new digital platforms, known as shipping exchanges, that are emerging to match cargo with available vessel capacity, bring transparency to pricing, and reduce the friction that has long characterized maritime shipping contracting.[5]

At their core, shipping exchanges are platforms that connect shippers—from small manufacturers and farmers to multinational importers and exporters—with ocean carriers to transport cargo. Some resemble travel-booking sites or online marketplaces, allowing users to reserve space at real-time market rates. Others offer advanced tools for negotiating long-term freight contracts that link directly into firms' logistics and supply-chain management systems.

How shipping exchanges are structured, and who controls them, will have deep consequences for healthy competition in industries that depend critically on maritime

[1] UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, *2023 Review of Maritime Transport* (2023), https://unctad.org/system/files/official-document/rmt2023_en.pdf.
[2] *See generally* Hugh Morley, *Ready or Not, Digitalization on the Way for Shipping*, J. COM. (Dec. 30, 2017), https://www.joc.com/article/ready-or-not-digitalization-on-the-way-for-shipping-5227765; Kim Link Wills, *Maritime Industry's Need for Digital Transformation Surfaces*, AM. SHIPPER (June 25, 2020), https://www.freightwaves.com/news/maritime-industrys-need-for-digital-transformation-surfaces.
[3] *See infra* notes 16-19 and accompanying text.
[4] *See infra* notes 43-45 and accompanying text (discussing container contracts linked to ocean freight indexes); *infra* II.A (discussing shipping exchanges).
[5] *See infra* II.A (discussing shipping exchanges).

transport. Recent shocks have laid bare American shippers' concerns about fair access to global markets: during the COVID-19 pandemic, for example, farmers saw carriers turn down their cargo in favor of more profitable blank sailings,[6] and price swings left smaller shippers paying far more for container transport than larger shippers.[7] When shipping exchanges stepped in—promising to curb contract violations by imposing automatic financial penalties and to improve price transparency by pegging contracts to real-time rate indexes—they also demonstrated their growing power in determining who can access global shipping networks, on what terms, and at what prices.

Lawmakers recognized the opportunity and the risks presented by shipping exchanges, too. When Congress passed the Shipping Reform Act of 2022 (OSRA 2022),[8] it sought to address the soaring shipping costs faced by American shippers and concerns around unfair practices by ocean carriers. While much of the public attention focused on provisions that reined in excessive or unfair demurrage and detention fees—charges levied on shippers related to container usage time[9]—OSRA 2022 also directed the U.S. Federal Maritime Commission (FMC), the independent regulatory agency that oversees the ocean shipping industry, to establish a national shipping exchange registry and to set, through rulemaking, terms and conditions that exchanges would need to meet in order to register.[10] The statutory deadline for that

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[6] *See infra* notes 50-51.

[7] Miller, *infra* note 53.

[8] Ocean Shipping Reform Act of 2022, Pub. L. No. 117-146, 136 Stat. 1272 (2022); *see also* Press Release, U.S. Senate Comm. on Com., Sci., and Transp., President Biden Signs Cantwell-Championed Ocean Shipping Reform Act (June 16, 2022), https://www.commerce.senate.gov/2022/6/president-biden-signs-cantwell-championed-ocean-shipping-reform-act.

[9] *See* Sarah Zimmerman & Alejandra Carranza, *Biden Just Signed A Law to Lower Shipping Costs. Will It Work?*, SUPPLY CHAIN DIVE (June 16, 2022), https://www.supplychaindive.com/news/biden-signs-osra-ocean-shipping-reform-act/625418/ (noting that "shippers celebrated the legislation [...] including soaring fees"); Press Release, AM. TRUCKING ASS'NS, Truckers Hail Passage of Ocean Shipping Reform Act (June 13, 2022), https://www.trucking.org/news-insights/truckers-hail-passage-ocean-shipping-reform-act (applauding provisions that crack down on "unjustified and illegal fees collected from American truckers").

[10] Ocean Shipping Reform Act of 2022, 46 U.S.C. § 40504(b) ("A person shall register a shipping exchange by filing with the Federal Maritime Commission an application for registration in such form as the Commission, by rule, may prescribe, containing the rules of the exchange and such other information and documents as the Commission, by rule, may prescribe as necessary or appropriate to complete a shipping exchange's registration."); 46 U.S.C. § 40504(d) ("Not later than 3 years after the date of enactment of the Ocean Shipping Reform Act of 2022, the Commission shall issue regulations pursuant to subsection (a), which shall set standards necessary to carry out subtitle IV of this title for registered national shipping exchanges.").

regulation was June 16, 2025,[11] but as of November 2025, the FMC has not yet publicly issued a proposed rule.[12]

Shipping exchanges work largely in the shadows, away from the public eye—even as their growing role in the ocean shipping industry puts them in a powerful position within global trade. OSRA 2022, however, provided the FMC with a broad delegation to establish registration standards for shipping exchanges that further the statutory purposes of the Shipping Act,[13] including nondiscrimination, competitive and economical maritime transportation, and the growth of U.S. exports.[14] The shipping exchange rule provides an opportunity to ensure that these platforms operate within clear rules of the road—a system that promotes transparent prices for shippers, encourages carriers compete to offer the best rates and service, and safeguards against harmful market manipulation, rather than one that exacerbates imbalances in bargaining power in the industry and shuts out shippers from capacity only available to favored customers.

This report proposes a framework and specific recommendations policymakers may consider in regulating shipping exchanges. It begins by discussing underlying dynamics in the ocean shipping industry generally and around the emerging growth of shipping exchanges. Then, it develops five key principles that should underpin shipping exchange regulation and offers specific recommendations to achieve these objectives.

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[11] 46 U.S.C. 40504(d) (establishing a deadline of no later than three years after the enactment of OSRA 2022, which was signed by President Biden on June 16, 2022).

[12] Shipping Exchange Registry, Unified Regulatory Agenda, OFF. OF INFO. & REG. AFF. (2024), https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202410&RIN=3072-AC99 (indicating in the Fall 2024 Unified Regulatory Agenda that the Federal Maritime Commission would issue a Notice of Proposed Rulemaking in 2025); Statement of Daniel B. Maffei, Chairman, Fed. Mar. Comm'n, Before the Subcomm. on Coast Guard and Maritime Transp., Comm. on Transp. and Infrastructure, 118th Cong., at 3(Apr. 30, 2024), https://transportation.house.gov/uploadedfiles/04-30-2024_cgmt_hearing_-_daniel_maffei_-_testimony_-_updated.pdf ("I anticipate there will be an announcement on […] Shipping Exchange Registries by the end of the calendar year.").

[13] 46 U.S.C. § 40504(d).

[14] 46 U.S.C. § 40101.

I. Ocean Shipping Industry Background

A. Industry structure

Ocean shipping is a critical channel for global trade, carrying more than 80 percent of shipped goods globally each year.[15] The industry is defined by two basic parties, carriers and shippers, who enter into contracts with one another for transport of cargo. Carriers operate vessels in the ocean and physically transport goods on behalf of shippers. Carriers are frequently known as *vessel operating common carriers* (VOCCs), while shippers are also referred to as *beneficial cargo owners* (BCOs).

As in other transportation industries, ocean carriers have seen a trend of consolidation in recent years. A wave of mergers in the mid-2010s—including China Ocean Shipping Company (COSCO)'s acquisition of Orient Overseas Container Line (OOCL), Hapag-Lloyd's purchase of United Arab Shipping Company (UASC), and Maersk's acquisition of Hamburg Süd—in tandem with the bankruptcy of South Korean carrier Hanjin helped grow the major ocean carriers' scale and global reach.[16] Today, 77 percent of ocean container capacity is controlled by the seven largest global VOCCs: Mediterranean Shipping Company (MSC), Maersk, CMA-CGM, COSCO, Hapag-Lloyd, Ocean Network Express (ONE), and Evergreen.[17] The largest VOCCs are also organized into three global alliances, also known as *vessel-sharing agreements* (VSAs), under which carriers are permitted to coordinate capacity under the oversight of FMC.[18] In 2024, the three alliances together commanded roughly ninety percent market share in both the transatlantic and transpacific trade markets from the U.S.[19]

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[15] UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, *2023 Review of Maritime Transport* (2023), https://unctad.org/system/files/official-document/rmt2023_en.pdf.

[16] Matt Leonard, *Consolidation in Ocean Shipping: A 20-Year Journey Puts Scrutiny on Carriers,* SUPPLY CHAIN DIVE (Aug. 31, 2021), https://www.supplychaindive.com/news/ocean-shipping-consolidation-five-years-from-Hanjin/604803/.

[17] Alphaliner TOP 100 (accessed Nov. 13, 2025), https://alphaliner.axsmarine.com/PublicTop100/.

[18] FED. MAR. COMM'N, 63RD ANNUAL REPORT OF THE FED. MAR. COMM'N, FISCAL YEAR 2024 6 (Apr. 1, 2025) [hereinafter FMC FY2024 Annual Report], https://www.fmc.gov/wp-content/uploads/2025/04/FY-2024-Annual-Report.pdf.

[19] *Id.* at 8-9 (noting that "carriers in the three global alliances held a combined market share of 89 percent of imports and 95 percents of exports in the transpacific trade in 2024" and that "[in] the transatlantic trades, the alliance carriers collectively accounted for 89 percent of imports and 90 percent of exports").

While VOCCs sometimes enter into shipping contracts directly with shippers—particularly higher-volume shippers—contracting often works through two types of intermediaries.

- *NVOCCs.* Non-vessel operating common carriers (NVOCCs) do not own and operate ships. Instead, they purchase capacity from common carriers and resell that space to shippers.[20] From the vantage point of a shipper, NVOCCs carry out all functions of a common carrier;[21] from the vantage point of a VOCC, they are a customer.[22] By consolidating volume across many shippers, NVOCCs can help negotiate more advantageous rates from VOCCs, which can help small- and medium-sized shippers secure cost savings as compared to contracting directly with a VOCC.[23]

- *Freight forwarders.* Freight forwarders help shippers coordinate the entire shipping process, including booking, warehousing, tracking from the warehouse to the port, and customs, all on behalf of shippers.[24] Freight forwarders act as agents who work across every stage of transport.

The Federal Maritime Commission is the U.S. regulatory agency that oversees the ocean shipping industry. It undertakes law enforcement, rulemaking, and market monitoring in order (1) to protect competition in the industry, including by overseeing cross-carrier alliance agreements and agreements between common carriers and ports for anticompetitive conduct;[25] and (2) to protect American shippers from unfair

[20] UPS, Non-Vessel Operating Common Carrier (NVOCC) (accessed Nov. 13, 2025), https://www.ups.com/us/en/supplychain/resources/glossary-term/nvocc.
[21] *See* Fed. Mar. Comm'n, Ocean Transportation Intermediaries (OTI) List (accessed Nov. 13, 2025), https://www2.fmc.gov/oti/NVOCC.aspx.
[22] *See* Shipping Act of 1984, Pub. L. 98-237, 98 Stat. 67, 69 (1984) (defining a "non-vessel-operating common carrier" as "a common carrier that does not operate the vessels by which the ocean transportation is provided, and is a shipper in its relationship with an ocean common carrier").
[23] ICE Global Transport, *NVOCC vs. Freight Forwarder: What's the Difference?* (Feb. 27, 2025), https://www.icetransport.com/blog/nvocc-vs-freight-forwarder.
[24] *See* Shipping Act of 1984, *supra* note 22, *at* 69 (defining an "ocean freight forwarder"); *see also* UPS, Freight Forwarder (accessed Nov. 13, 2025), https://www.ups.com/us/en/supplychain/resources/glossary-term/freight-forwarder.
[25] FMC FY2024 Annual Report, *supra* note 18, at 5, 12.

and deceptive practices, including excessive fees,[26] unreasonable refusal to deal,[27] and retaliation.[28]

Carriers and shippers are required to file service contracts in a database managed by the FMC, which then monitors such contracts for conduct prohibited by the Shipping Act of 1984.[29]

B. Ocean shipping rate instability

The ocean shipping industry is highly volatile, owing to factors that include supply and demand as well as fluctuations in oil prices.[30] In recent years, the industry has been particularly susceptible to a variety of temporary shocks stemming from both demand- and operations-related reasons, including the COVID-19 pandemic, which shifted consumer demand toward shipped, durable goods;[31] interruptions in port infrastructure, including the closure of the Port of Baltimore following the collapse of the Francis Scott Key Bridge and drought-induced restrictions on the Panama Canal;[32] Houthi attacks on commercial vessels in the Red Sea that have forced ships to make lengthy diversions in order to avoid the region;[33] and uncertainty around shifting trade agreements.[34]

A key source of volatility in the industry also arises from the nature of ocean shipping contracts. Typically, shippers secure contracts with carriers at a negotiated rate,

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[26] Demurrage and Detention Billing Requirements, 46 C.F.R. § 541 (2024).
[27] 46 U.S.C. § 41104(a)(10).
[28] 46 U.S.C. § 41102(d).
[29] Fed. Mar. Comm'n, *How to File Service Contracts* (accessed Nov. 13, 2025), https://www.fmc.gov/complaints-and-assistance/how-to-file-service-contracts/.
[30] Rob Carpenter, *Understanding Spot Freight*, FREIGHT WAVES (Feb. 17, 2025), https://www.freightwaves.com/news/understanding-spot-freight.
[31] *See, e.g.*, Peter S. Goodman, *Can Global Shipping Be Fixed? One Regulator Will Try.*, N.Y. TIMES (Aug. 8, 2022), https://www.nytimes.com/2022/08/08/business/supply-chain-federal-maritime-commission.html.
[32] *See, e.g.*, David McHugh, et al., *Baltimore Bridge Collapse and Port Closure Send Companies Scrambling to Reroute Cargo*, AP NEWS (Mar. 26, 2024), https://apnews.com/article/baltimore-bridge-collapse-shipping-disruptions-12a611fc5dece0124a6cc3b7772a34c6; Peter Goodman, *To Save the Panama Canal From Drought, a Disruptive Fix*, N.Y. TIMES (Aug. 14, 2024), https://www.nytimes.com/2024/08/14/business/panama-canal-drought.html.
[33] *See, e.g.*, Yawen Chen, *Red Sea Gives Shipping An Uber-Style Price Surge*, REUTERS (June 24, 2024), https://www.reuters.com/breakingviews/red-sea-gives-shipping-an-uber-style-price-surge-2024-06-24/.
[34] *See, e.g.*, Tim Jay, *U.S. Trade Deals Fail to Stop Falling Shipping Rates*, GLOBAL TRADE (July 31, 2025), https://www.globaltrademag.com/u-s-trade-deals-fail-to-stop-falling-shipping-rates/.

guaranteeing transport for a given amount of cargo for a specific duration of time.[35] However, because market rates—also known as spot rates—can deviate from these contracted rates, both carriers and shippers may sometimes have an incentive to not honor their contracts. When spot rates exceed contract rates, carriers have an incentive to sell slots to shippers on the spot market, delaying—or *rolling*—contracted shippers' cargo to subsequent sailings.[36] This in turn causes shippers to turn to the spot market, further driving rates upward. On the other hand, when spot rates fall below contracted rates, shippers may turn to carriers on the spot market rather than to honor their contracts. This can lead carriers to discount their spot rates in a last-minute push to fill as much empty space as possible and further depressing spot rates downward.[37]

This creates a "vicious cycle" that fosters instability across the ecosystem—leading shippers to book several carriers to ensure their cargo finds its way onto a vessel, and carriers to overbook shippers so their sailings go out as full as possible.[38] Maritime contracts are so poorly managed that in some years, nearly 30 to 50 percent of bookings do not proceed as contracted, leading to significant resources spent on contract renegotiations.[39]

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[35] Index Linking: The Future of Stable, Market-Aligned Contracts, *Freightos* (Feb. 19, 2025), https://www.freightos.com/logistics-technology-insights/logistics-technology/index-linking-freight-contracts-guide/.

[36] Ocean Freight Contract Season: Winners, Losers, and the Illusion of Stability, *Freight Right* (May 31, 2024), https://www.freightright.com/news/ocean-freight-rates-2024. Some cases in which carriers fail to honor contracts with shippers may be illegal under the Shipping Act. *See, e.g.*, Initial Decision, *OJ Commerce v. Hamburg Südamerikanische Dampfschifffahrts-Gesellschaft*, FMC Docket No. 21-11 (June 7, 2023) (finding that Hamburg Süd violated the Shipping Act's prohibitions on retaliation, 46 U.S.C. § 41104(a)(3), and refusal to deal, 41104(a)(10), after the carrier failed to honor its contract). However, owing at least in part due to insufficient enforcement resources, the FMC is unable to police all such instances of law violations. *See* Peter Goodman, *What One Importer's Legal Fight Says About the Power of Cargo Giants*, N.Y. TIMES (Nov. 14, 2022), https://www.nytimes.com/2022/11/14/business/federal-maritime-commission-global-shipping.html (describing the FMC as outgunned).

[37] Barbara Wyker, *Issue of No-Show Containers Highlights Industry's Inefficiencies*, J. COM. (Sept. 25, 2016), https://www.joc.com/article/issue-of-no-show-containers-highlights-industrys-inefficiencies-5669566 ("[t]o fill empty space that may be tied to no-show containers, carriers will lower rates as the date of the sailing approaches…").

[38] *Special Coverage: Ocean Freight Industry Enters a Pivotal 2017*, AM. SHIPPER (Jan. 25, 2017), https://www.freightwaves.com/news/special-coverage-ocean-freight-industry-enters-a-pivotal-2017.

[39] *NYSHEX Charts Course for Calmer Contractual Waters*, FREIGHT WAVES (Jan. 29, 2021), https://www.freightwaves.com/news/nyshex-charts-course-for-calmer-contractual-waters; *see also* Wyker, *supra* note 37 (the CEO of Hapag-Lloyd noting that one in four container bookings in 2016 were no-shows).

Several tools have emerged in the industry in order to help shippers and carriers address price volatility and improve predictability of sailings.

- *Freight indexes.* Freight indexes provide an up-to-date average of shipping rates for specific routes or types of freight, and inform shipping rates on the spot market.[40] Two commonly used indexes are the Freightos Baltic Index (FBX), published by freight transport company Freightos in collaboration with the Baltic Exchange, and the Shanghai Containerized Freight Index (SCFI), published by the Shanghai Shipping Exchange.[41] Other indexes include Xeneta and Drewry.[42]

- *ILCCs.* Index-linked container contracts (ILCCs) replace a fixed rate in a shipping contract with a rate formula based on a real-time freight index.[43] ILCCs reduce risk for both parties: when spot rates rise, the carrier has less incentive to roll forward contracted cargo in favor of the spot market, and when spot rates fall, the shipper has less incentive to eschew agreed-upon contracts in favor of the spot market.[44] ILCCs have increased in popularity, though exact market-wide usage is difficult to determine.[45]

Though not the focus of this paper, the volatility of freight rates has also led to the development of freight derivatives, including forward contracts, futures, swaps, and options.[46] Container derivatives may similarly be pegged to shipping indexes, but instead of shippers entering into a contract with a carrier, they involve a shipper

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[40] Freightos Baltix Index (FBX): Global Container Pricing Index, *Freightos* (accessed Nov. 13, 2025), https://terminal.freightos.com/freightos-baltic-index-global-container-pricing-index/.
[41] Peter Yang, *The History of the Shanghai Containerized Freight Index (SCFI)*, FLEXPORT (May 13, 2016), https://www.flexport.com/blog/shanghai-containerized-freight-index-scfi-history/.
[42] *Id*.
[43] Index Linking, *supra* note 35.
[44] *Id*. A typical index-linked contract might take the real-time freight index and apply an adjustment factor. An adjustment factor smaller than 100% helps smoothen peaks and troughs.
[45] For instance, a 2014 survey indicated that roughly 10 percent of individual shippers and 28 percent of freight forwarders used ILCCs. *Global Forwarders Favour Index-Linked Contracts*, MARINELINK (Mar. 25, 2014), https://www.marinelink.com/news/indexlinked-forwarders365909. Some recent reports also indicate that ILCC use has "tapered off" as shipping rates fell following the pandemic peak. Eric Johnson, *NYSHEX Says Will Launch Ocean Freight Rate Indexes Next Year*, J. COM. (Nov. 19, 2024), https://www.joc.com/article/nyshex-says-will-launch-ocean-freight-rate-indexes-next-year-5820643.
[46] Helen Atkinson, *Are Container Freight Contract Derivatives Finally the Solution to Market Volatility?*, SUPPLYCHAINBRAIN (Aug. 28, 2024), https://www.supplychainbrain.com/articles/40268-are-container-freight-contract-derivatives-finally-the-solution-to-market-volatility.

hedging their future risk on the market. Shippers may trade container derivatives in combination with both fixed rate contracts and index-linked contracts. Financial regulators such as the Commodity Futures Trading Commission (CFTC) may wish to further scrutinize freight derivatives for compliance with all relevant requirements.

C. Market power dynamics in the shipping industry

Consolidation among ocean carriers active along key maritime lanes—with seven carriers controlling 77 percent of global shipping and many of those carriers organized into alliances that coordinate and share capacity[47]—has illustrated how market power among carriers can lead to greater costs and worse service for American shippers.

During the COVID-19 pandemic, disruptions to global supply chains—including port closures, labor shortages, and imbalances in container availability—dramatically reduced available vessel capacity for U.S. exports.[48] Combined with surging consumer demand for imported goods that made inbound cargo more profitable than outbound cargo, ocean carriers came to enjoy significant leverage over shippers, allowing them to impose surcharges like demurrage and detention fees for additional time storing cargo at ports.[49] Ocean carriers routinely refused cargo from U.S. exporters at U.S. ports, preferring instead to operate empty sailings to Asia to retrieve higher-margin imports.[50] U.S. shippers, including agricultural producers, had little recourse against large carriers as their exports sat in warehouses and marine terminals.[51]

Smaller shippers are also at a distinct disadvantage when it comes to working with large ocean carriers. The Ocean Shipping Reform Act of 1998 ("OSRA 1998") catalyzed the industry's transition away from publicly-filed, per-route tariffs toward negotiated

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47 *See supra* notes 16-19 and accompanying text.

48 *See, e.g.*, Peter Goodman, *supra* note 31.

49 Fed. Maritime Comm'n, Fact Finding Investigation 29 Final Report at 45 (May 31, 2022), https://www.fmc.gov/wp-content/uploads/2022/06/FactFinding29FinalReport.pdf; *see also* Demurrage and Detention Billing Requirements, 46 C.F.R. § 541 (2024).

50 *Id.* at 30 (noting "reports that carriers were declining to ship U.S. agricultural commodity exports"); Arnav Rao, Charting a New Course: Steering U.S. Maritime Policy Towards Security and Prosperity, Open Markets Institute at 16 (2025), https://www.openmarketsinstitute.org/publications/charting-a-new-course-steering-us-maritime-policy-towards-security-and-prosperity.

51 Peter Goodman, *How America's Farmers Got Cut Out of the Supply Chain*, N.Y. Times (Apr. 20, 2022), https://www.nytimes.com/2022/04/20/business/supply-chain-california-farmers.html.

service contracts,[52] which opened the door to smaller shippers paying more for ocean freight transport than larger shippers.[53] Large importers, including retailers such as Walmart and Target, are able to use the promise of guaranteed volume to secure long-term contracts with carriers at below-market rates not available to smaller shippers.[54] During times of constrained capacity, carriers may also prioritize meeting the needs of larger importers, sidelining smaller shippers and delivering worse service.[55] Finally, small and mid-sized freight forwarders have reported frustrations around working with large carriers as well as receiving differentiated treatment and pricing terms compared to the largest forwarders.[56]

II. Shipping Exchanges

Congress passed the Ocean Shipping Reform Act of 2022 (OSRA 2022) in response to high shipping costs following the COVID-19 pandemic and concerns from American businesses around unfair fees and practices by ocean carriers.[57] It defined a shipping exchange as:

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[52] Fed. Maritime Comm'n, THE IMPACT OF THE OCEAN SHIPPING REFORM ACT OF 1998 at 8 (Sept. 2001) [hereinafter FMC OSRA 1998 Report], https://www.fmc.gov/wp-content/uploads/2019/04/OSRA_Study.pdf.

[53] Greg Miller, *Beware 'Nasty Side Effects' If Government Targets Ocean Carriers*, FREIGHTWAVES (Aug. 5, 2021), https://www.freightwaves.com/news/beware-nasty-side-effects-if-government-targets-ocean-carriers (maritime industry executive noting that the "price differential between what you pay on contracts if you're a very large importer and what you pay on spot if you're a very small importer is normally in the hundreds of dollars"); Adina Ardelean & Volodymir Lugovskyy, *It Pays to Be Big: Price Discrimination in Maritime Shipping*, 153 EUROPEAN ECON. REV. 104403 (2023) (finding that "importers in the 10th percentile pay 18% higher freight rates than importers in the 90th percentile"); Stuart Chirls, *Big Fish Getting Better Bite at Trans-Pacific Container Spot Rates*, FREIGHTWAVES (Sept. 5, 2025), https://www.freightwaves.com/news/big-fish-getting-better-bite-at-trans-pacific-container-spot-rates (finding greater increases for freight rates for smaller-volume shippers than for larger-volume shippers);

[54] Rhea Basarkar, *US Retailers Paying Premium to Place Big Bets on Holiday Sales*, FIN. TIMES (July 8, 2024), https://www.ft.com/content/17bb8aef-9ce2-437c-a450-16deb4d92880.

[55] Craig Fuller, *Transportation Rates Likely to Surge During Tariff Pause*, FREIGHTWAVES (May 12, 2025), https://www.freightwaves.com/news/transportation-rates-likely-to-surge-during-tariff-pause.

[56] Peter Tirschwell, *Smaller Forwarders Tap Into Frustration of Overheated Ocean Market*, S&P GLOBAL (July 31, 2024), https://www.spglobal.com/market-intelligence/en/news-insights/research/smaller-forwarders-tap-into-frustration-of-overheated-ocean-ma (noting carriers limiting some forwarders' use of named-account pricing).

[57] Ocean Shipping Reform Act of 2022, Pub. L. No. 117-146, 136 Stat. 1272 (2022); *see also* Press Release, U.S. Senate Comm. on Com., Sci., and Transp., President Biden Signs Cantwell-Championed Ocean Shipping Reform Act (June 16, 2022), https://www.commerce.senate.gov/2022/6/president-biden-signs-cantwell-championed-ocean-shipping-reform-act.

> a platform (digital, over-the-counter, or otherwise) that connects shippers with common carriers for the purpose of entering into underlying agreements or contracts for the transport of cargo, by vessel or other modes of transportation.[58]

OSRA 2022 directed FMC to establish a national shipping exchange registry[59] and to establish standards for such exchanges through a rulemaking process, with a deadline of June 16, 2025.[60]

A. Types of shipping exchanges

Online booking platforms

The simplest exchanges are freight shipping platforms that allow shippers to obtain quotes and enter into contracts for cargo transport. Sometimes, these platforms may provide an array of carrier options spanning air and ocean transport. Different platforms may also be directed toward different types of shippers. For example, Freightos WebCargo targets freight forwarders and offers a selection of ocean, air, and ground carriers.[61]

NYSHEX

Owing to the volatility of the industry, shipping exchanges have adopted features to help carriers and shippers manage costs and streamline contracts. The New York Shipping Exchange (NYSHEX) is a platform that was developed with a focus on increasing contract enforceability between shippers and carriers, in particular arising from carriers rolling cargo and shippers turning to the spot market during periods of rate volatility. In addition to serving as a platform that matches shippers with carriers, its value-add is acting as a payment intermediary between both parties, imposing financial penalties in case either party fails to uphold its side of the contract.[62]

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[58] Ocean Shipping Reform Act of 2022, 46 U.S.C. § 40504(e).
[59] Ocean Shipping Reform Act of 2022, 46 U.S.C. § 40504(c).
[60] Ocean Shipping Reform Act of 2022, 46 U.S.C. § 40504(d).
[61] WebCargo by Freightos (accessed Nov. 13, 2025), https://www.webcargo.co/.
[62] Kyle Wiggers, *Nyshex Lands a Fresh $25M to Match Shippers With Ocean Carriers*, TECHCRUNCH (Sept. 14, 2022), https://techcrunch.com/2022/09/14/nyshex-lands-a-fresh-25m-to-match-shippers-with-ocean-carriers/; Peter Tirschwell, *NYSHEX keeps core vision while evolving in volatile container shipping market*, J. COM. (Nov. 26, 2024), https://www.joc.com/article/nyshex-keeps-core-vision-while-evolving-in-volatile-container-shipping-market-5833589.

Prior to NYSHEX, some carriers had attempted to introduce stricter, contractually-imposed penalties with their shippers, but these efforts failed to move the needle because shippers could simply turn to a different carrier on the same route that did not use those contractual provisions.[63] NYSHEX works across several carriers—as of August 2025, it had signed on six carriers, with the notable exception of Chinese carrier COSCO, which recently ceased its relationship with NYSHEX[64]—so that both carriers and shippers using its platform could reap the benefits of these enforceable contracts.

In May 2025, NYSHEX launched its own freight index, working in collaboration with Intercontinental Exchange (ICE), the operator of global financial exchanges such as the New York Stock Exchange.[65]

Shanghai Shipping Exchange

The Shanghai Shipping Exchange (SSE)—jointly owned by the Chinese Ministry of Transport and the Shanghai Municipal People's Government[66]—is another key player. It serves several key functions: (1) overseeing the filing of freight contracts, in a capacity resembling the FMC; (2) publishing freight indexes, including the popular Shanghai Containerized Freight Index (SCFI); (3) operating a spot market; and (4) issuing financial instruments, including freight futures on the Shanghai International Energy Exchange.[67]

SSE-issued freight indexes have drawn particular scrutiny from U.S. lawmakers. Rate indexes controlled by the Shanghai Shipping Exchange, such as the SCFI, are commonly used for shipping to and from China.[68] A February 2024 letter to the FMC notes that the Shanghai Shipping Exchange "has a stranglehold on rate indexes to and from the China region" and raises concern about a "[Chinese Communist Party]-

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63 Special Coverage, *supra* note 38 (noting that "Maersk Line last unveiled such a plan in mid-2011").

64 Agreement by Ocean Common Carriers to Participate in the Governance of the Exchange, FMC Agreement No. 201234-007 (Nov. 13, 2025) [hereinafter NYSHEX index agreement FMC filing], https://www2.fmc.gov/FMC.Agreements.Web/Public/Document/126395.

65 Eric Johnson, *NYSHEX Enters Container Index Fray Targeting Floating Rate Contract Adoption*, J. COM. (May 02, 2025), https://www.joc.com/article/nyshex-enters-container-index-fray-targeting-floating-rate-contract-adoption-5996516.

66 Shanghai Shipping Exchange, *Brief Introduction* (accessed Nov. 13, 2025), https://en.sse.net.cn/brief/introen.jsp.

67 *Id*.

68 *Id*.

controlled index dictating the perceived health of the global ocean shipping market or being used as an unreliable benchmark for shipping contracts worldwide."[69]

First-party booking platforms

While shippers have traditionally relied on freight forwarders and NVOCCs to access liner capacity, carriers have introduced direct booking tools, such as Maersk Spot and Hapag-Lloyd Quick Quotes, that allow shippers to obtain quotes and confirm space directly with the carrier.[70] While these services may not intuitively constitute an exchange—an "exchange" typically evokes platforms that connect many shippers with many carriers—they meet the plain language definition of shipping exchanges articulated in OSRA 2022, which simply refers to *any platform*, including digital, that connects shippers with carriers for purposes of entering into a shipping contract.[71] These services also offer features intended to reduce overbookings that resemble those offered by platforms like NYSHEX.[72]

By helping shippers find available capacity and enter into shipping contracts, these first-party platforms perform the same functions as multi-carrier shipping exchanges. Policymakers should therefore ensure that these services, including any that may be offered by VOCCs and NVOCCs, fall within the scope of FMC oversight. Particularly in already-concentrated trade lanes, first-party platforms may grow to exert significant

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[69] Letter from Rep. Dusty Johnson, Member of Congress, et al., to Daniel B. Maffei, Chairman, Federal Maritime Commission (Feb. 1, 2024), https://dustyjohnson.house.gov/sites/evo-subsites/dustyjohnson.house.gov/files/evo-media-document/2.1.24-letter-to-fmc-on-shipping-exchanges.pdf. Lawmakers were interested in granting the FMC further authority to further scrutinize Chinese influence on the maritime industry: the House of Representatives approved subsequent legislation in 2023 that authorized the FMC to "investigate foreign shipping exchanges like the Shanghai Shipping Exchange to preempt improper business practices" and directed the U.S. Department of Transportation (DOT) to work with an independent auditor to examine how the Chinese government influences the Shanghai Shipping Exchange. Press Release, Rep. Dusty Johnson, Johnson, Garamendi Lead Ocean Shipping Reform 2.0 (Mar. 28, 2023), https://dustyjohnson.house.gov/media/press-releases/johnson-garamendi-lead-ocean-shipping-reform-20. However, the House legislation was not taken up by the Senate.

[70] *See, e.g.*, Press Release, Maersk, Maersk Introduces Maersk Spot, A New Fully Online Product That Simplifies the Buying Process for Customers (June 25, 2019), https://www.maersk.com/news/articles/2019/06/25/maersk-introduces-maersk-spot; Press Release, Hapag-Lloyd, Hapag-Lloyd Digitalises Quotes and Speeds Up Customer Processes (Aug. 14, 2018), https://www.hapag-lloyd.com/en/company/press/releases/2018/08/hapag-lloyd-digitalises-quotes-and-speeds-up-customer-processes-.html.

[71] *See* Ocean Shipping Reform Act of 2022, 46 U.S.C. § 40504(e).

[72] *See, e.g.*, Maersk Introduces Maersk Spot, *supra* note 70 ("In case of booking cancellations, fees apply at the customer's charge. If cargo is rolled, Maersk compensates the customer.").

influence on shippers seeking to access capacity on that lane. Allowing these services to fall outside of the FMC's purview would give carriers an incentive to displace bookings from open, regulated marketplaces in favor of closed, proprietary platforms. Such a shift would undermine the very purpose of shipping exchange regulation by closing off market participants from visibility into how rates are set, particularly during volatile spot-pricing cycles, and depriving shippers of important protections from manipulative conduct.

What does not count
Some entities use the word "exchange" in their name but do not perform exchange functions. For example, despite its name, the Baltic Exchange serves primarily as a hub for sharing information, but does not provide a platform to connect shippers and carriers. Instead, it works with Freightos to publish the Freightos Baltic Index.

B. Relationship to shipping indexes

While shippers may enter into an ILCC underpinned by any freight index,[73] relationships between shipping exchanges and freight indexes warrant additional FMC scrutiny. For instance, Freightos publishes the Freightos Baltic Index in collaboration with the Baltic Exchange while operating distribution platforms such as Freightos WebCargo; NYSHEX recently launched a shipping index in collaboration with Intercontinental Exchange and also operates as its core product a shipping exchange; and the Shanghai Shipping Exchange publishes the important Shanghai Containerized Freight Index while operating a spot market.

Indeed, Congress' attention toward shipping exchanges appears to have stemmed from the Shanghai Shipping Exchange's "stranglehold on rate indexes to and from the China region"[74] through its Shanghai Containerized Freight Index and SCFI's potential to become an "unreliable benchmark for shipping contracts worldwide."[75] Congress' goal in directing FMC to promulgate the shipping exchange rule appears to be to

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[73] For instance, many of the leading indexes do not have an associated shipping exchange platform, and their utility lies in shippers and carriers linking contracts to their indexes. *See* Eric Johnson, *Confusion Around Ocean Freight Indexes Limits Their Usefulness: Shippers*, S&P GLOBAL (Oct. 20, 2022), https://www.spglobal.com/market-intelligence/en/news-insights/research/confusion-around-ocean-freight-indexes-limits-their-usefulness (noting that "Freightos is the only rate index provider that also offers shippers the ability to get a quote and book an actual shipment directly on its platform" and that "Drewry, Xeneta, the SCFI, and Platts, do not offer such capabilities").
[74] Letter from Rep. Dusty Johnson, et al., *supra* note 69.
[75] *Id*.

create “regulatory clarity” for U.S.-based shipping exchanges in order for them to “provide maximum value to the industry” and “provide a fair, competitive, and reliable counterbalance to the Shanghai Shipping Exchange.”[76] Shipping indexes may benefit from their affiliation with an exchange operator through more accurate data. However, regulators should also scrutinize such arrangements in order to ensure that exchanges cannot manipulate indexes to the benefit of certain carriers or shippers, or to its own benefit.

C. Shipping exchanges’ commercial incentives

Developing a regulatory framework for shipping exchanges begins with understanding their role in the marketplace and the incentives that shape how they transact with other market participants.

Shipping exchanges provide shippers access to vessel capacity and connect carriers with shippers. While public information on shipping exchanges’ commercial operations is limited, such platforms typically derive revenue by collecting transaction fees from shippers who make bookings and by collecting other fees, such as access fees, from carriers.[77] These fees may fund development of shipping exchange platforms and facilitate their ability to offer features such as real-time pricing visibility, contract enforcement, and supply-chain management functionality to shippers and carriers. Through the visibility that they have into activity across global maritime markets, shipping exchanges are also well-positioned to offer freight indexes, from which the exchanges may derive additional revenue.

These commercial incentives reward shipping exchanges that can achieve scale, which reduces the exchanges’ per-transaction cost while improving indexes’ accuracy over market-wide rates. However, left unregulated, such scale could also harm shippers and carriers: in the absence of competition of other exchanges, a powerful exchange could increase transaction fees while exerting influence over rate indexes, without recourse for shippers who pay those rates.

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[76] *Id*.

[77] *See, e.g.*, CRS Rule*, infra* note 95, at 32551 (discussing fees imposed by reservation systems in the passenger aviation industry).

Shipping exchanges also operate in an industry defined by increasingly dominant ocean carriers, as well as the presence of several large shippers.[78] In such an ecosystem, the defection of a large carrier could reduce or foreclose shippers' access to certain routes, while the defection of a large shipper could reduce volume toward carriers. These dynamics may lead exchanges to enter into agreements or relationships with certain carriers or shippers in order to provide guaranteed volume in exchange for financial incentives, while disadvantaging other disfavored customers.

III. Key Objectives of Shipping Exchange Regulation

Shipping exchanges serve an important function in the maritime sector by providing shippers with access to liner capacity held by carriers and providing carriers with access to cargo to fill vessel space. However, recent shocks have highlighted American shippers' concerns about their ability to access vessel space on nondiscriminatory terms: during the COVID-19 pandemic, for example, American farmers saw carriers forgo their cargo in favor of more profitable blank sailings,[79] and price swings left smaller shippers paying far more for cargo transport than larger shippers.[80] As shipping exchanges grow in prominence, OSRA 2022 provides policymakers with an opportunity to ensure that these platforms enable shippers to have fair and equal access to markets—including both pricing and terms of service—rather than exacerbating imbalances in bargaining power between smaller and large players.

Shipping exchanges can help level the playing field for shippers by making real-time shipping rates and available capacity visible to all shippers—rather than hiding them behind opaque and lengthy contract negotiations—and encouraging carriers to compete to offer the best rates and service. The Shipping Act has long prohibited ocean carriers from engaging in "unfair or unjustly discriminatory" practices in refusing shippers' cargo or in charging rates,[81] and powerful shippers should not be permitted to leverage the introduction of otherwise unregulated shipping exchanges to demand

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[78] *See, e.g.*, Basarkar, *supra* note 54 (discussing contracting practices of large importers like Walmart and Target).
[79] *See supra* notes 50-51.
[80] Miller, *supra* note 53.
[81] 46 U.S.C. §§ 41104(a)(3)-(4).

better rates and terms from ocean carriers—and, during periods of increased demand, shut out smaller or disfavored shippers from available capacity.

In developing regulation for shipping exchanges, policymakers have an opportunity to ensure that shipping exchanges sit as neutral platforms that help shippers obtain the best rates for transporting cargo, promote competition among carriers, and provide safeguards against market manipulation. This section outlines five, mutually reinforcing principles that should underpin regulation of shipping exchanges:

- Provide fair access for both sides of the market
- Promote unbiased and transparent price discovery
- Mitigate conflicts of interest
- Promote competition between exchanges
- Promote market integrity and limit market manipulation

A. Provide fair access for both sides of the market

Fair access to markets has long underpinned the legal and policy framework across critical sectors of the economy. Across railroads, telecommunications, energy transmission, and beyond, policymakers sought to ensure that all users and providers could access infrastructure networks on equal terms.[82] In the maritime sector, such common carrier obligations extend to ocean carriers under the Shipping Act of 1984: among other provisions, the Act prohibits carriers from engaging in "unfair or unjustly discriminatory" practices.[83] Particularly as the post-1998 rise of confidential service contracts has presented heightened concern for discriminatory practices against shippers,[84] shipping exchange regulation must ensure the introduction of exchanges—

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[82] *See, e.g.*, 49 U.S.C. § 10741(a)(1) (prohibiting rail carriers from subjecting "a person, place, port, or type of traffic to unreasonable discrimination"); 47 U.S.C. § 202(a)) (prohibiting communications services from engaging in "any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services" and from providing "any undue or unreasonable preference or advantage to any particular person, class of persons, or locality"); Order 888, Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 61 Fed. Reg. 21540 (regulations promulgated by the Federal Energy Regulatory Commission requiring electricity transmission networks to provide equal access to all buyers and sellers).
[83] 46 U.S.C. § 41104(a)(4).
[84] During the 1990s, in legislative debates leading up to the passage of the Ocean Shipping Reform Act of 1998, both shippers and policymakers raised concerns that the use of confidential service contracts

platforms that do not carry the same statutory nondiscrimination obligations as do carriers—does not erode shippers' ability to fairly access vessel capacity.

Shipping exchanges are not the only way that shippers can contract with carriers: many shippers and carriers will continue to transact via confidential service contracts, and freight forwarders can offer important services for shippers. But the growing network effects and informational advantages generated as market participants turn to digital exchanges for real-time pricing and capacity data will position exchanges to play a growing role in mediating shipping contracts.

Shipping exchanges must have a nondiscrimination obligation towards shippers.

- First, shipping exchanges should be required to permit access to any shipper who seeks to access its platform. This universal access rule would extend the core nondiscrimination principle that underpins the Shipping Act to apply to exchanges. Regulators should adopt a clear universal access rule rather than regimes that permit exchanges to admit only those shippers who meet minimum criteria set by the exchange: a bright-line rule is not only more administrable, but would also prevent exchanges from setting arbitrarily narrow or specific criteria met only by certain shippers—criteria like minimum volume requirements on specific routes that have the practical effect of favoring specific shippers. Carriers could then create opaque pools of capacity on the exchange, potentially at exclusive or more beneficial terms, not available to other shippers.

- Second, once admitted to the platform, the exchange should provide all shippers with the ability to receive the same rates on the same terms. In other

could lead to discrimination against certain classes of shippers. *See, e.g.*, Testimony of Geoffrey N. Giovanetti, Managing Director, Wine and Spirits Shippers Association, Before the S. Comm. on Com., Sci. & Transp. 104th Cong., *at* 49 (Nov. 1, 1995), https://www.google.com/books/edition/S_1356_Ocean_Shipping_Reform_Act_of_1995/_2XxB8LvOEEC ("This bill guarantees that the real marketplace in ocean shipping will be completely confidential shipping contracts to which no regulatory or legal constrains will apply [...] Thus, the carriers will use these contracts to reward favored shippers and gouge disfavored shippers."); Statement of Harold J. Creel, Jr., Chairman, Fed. Maritime Comm'n, Before the S. Subcomm. on Surface Transp. and Merchant Marine, Comm. on Com., Sci. & Transp., 105th Cong., *at* 41 (Mar. 20, 1997), https://books.google.com/books/about/S_414_the_Ocean_Shipping_Reform_Act_of_1.html?id=g1UkqVFnchoC ("Another concern I have regarding service contracts is that the bill specifically permits carriers to be unjustly discriminatory between shippers or ports with respect to their service contract rates, and would also allow carriers and conferences to subject shippers, forwarders, ports, and others to undue or unreasonable prejudice or disadvantage.").

words, carriers should not be able to negotiate preferential rates, terms, or capacity with certain shippers but not others, and exchanges should be required to charge all shippers the same transaction fees.

While public concern has mostly centered around shipper access to carrier capacity, regulators should also ensure that exchanges do not exacerbate carriers' existing market power.[85] Larger carriers on a given trade lane could gain an advantage over competitors by demanding better placement or lower transaction fees from exchanges. (In some cases, this may involve payments from carriers to exchanges that constitute conflicts of interest, a scenario which we further address in Section III.C.) While shipping exchanges alone may not reverse longstanding consolidation among ocean carriers, they can help ensure carriers servicing a given trade lane compete on the merits of offering the best rates, service, and terms.

- First, shipping exchanges should be required to permit access to any carrier that seeks to offer services on its platform. Mirroring the above provisions for shippers, such an equal access provision for carriers ensures that all carriers can compete for shippers on the exchange, even those who may not be dominant on a given route. Robust carrier participation also reinforces scale in access to shippers: by ensuring that shippers can utilize one exchange to compare price and service options across many carriers, rather than consulting several exchanges to compare options whose selection may have been influenced by the exchange, shippers have greater incentive to use an exchange.

- Second, shipping exchanges should be required to treat all carriers equally and fairly. If exchanges rank offers, they should be required to rank carrier options using objective, disclosed criteria, such as total transport time or price.[86] Exchanges would also be required to offer the same commercial terms, such as transaction fees, to all carriers, putting all carriers on a level playing field.[87]

Nondiscrimination and equal access provisions toward both shippers and carriers mutually reinforce each other to promote maritime competition. Without them, for

[85] *See infra* notes 16-19 and accompanying text.
[86] For a historical analogy in the passenger aviation industry, *see* CRS Rule, 14 C.F.R. § 255.4(a), *infra* note 95, for how regulators treated preferential ranking in airline reservation systems.
[87] *See* CRS Rule, 14 C.F.R. § 255.6, *infra* note 95 (rule prohibiting booking intermediaries in the airline from discriminating in the fees charged to participating air carriers).

example, an exchange could emerge that serves only preferred shippers who transact with a set of dominant carriers at rates and terms not available to the general public, tilting the playing field against smaller market participants. It is worth noting that equal access provisions do not require every shipper and every carrier to participate on the exchange—they merely require exchanges to accept any shipper or carrier who wishes to access the exchange. Exchanges remain free to compete with one another by offering innovative features, superior technology, or specialized services designed to attract their target customers, while giving shippers and carriers the ability to decide where they wish to transact.

B. Promote unbiased and transparent price discovery

Since 1998, pricing information for ocean freight has become opaque, typically hidden behind private negotiations.[88] In practice, shippers face significant friction when comparing prices offered by different carriers on the same route, and two shippers transporting identical goods on the same route may encounter vastly different rates. This process makes it difficult for shippers to compare prices and services across competing carriers, and it fragments the market by allowing shippers to be charged different, potentially discriminatory rates.

Just as exchanges have done in other industries, shipping exchanges have the potential to increase price transparency by allowing shippers to easily compare up-to-date pricing across carriers. By facilitating efficient price discovery and forcing carriers to compete on the same level playing field, shipping exchanges can incentivize carriers to compete for shippers on the basis of rates and service, rather than hiding behind opaque contracting processes.

To ensure that shipping exchanges can facilitate price discovery, policymakers should first require exchanges to make freight rates on its platform publicly available.

- Exchanges should be required to publicly report, in real-time, freight rates offered on given routes for a given service, allowing shippers to compare offers from carriers across multiple exchanges. Such information should be published in a standardized format to ensure that exchanges do not prevent efficient price comparison through the use of proprietary or differentiated data formats. This would allow shippers and forwarders, particularly smaller players and those that

[88] *See supra* notes 52-53 and accompanying text.

are more dependent on spot quotes rather than pre-negotiated contracts, to see the full range of available market offers.

- After transactions are executed, exchanges should then be required to submit anonymized, post-transaction data to a centralized ledger administered or overseen by the FMC. This ledger would aggregate de-identified information about contracts, such as route, volume, price, demurrage and detention fees, and other terms of service, in order to give market participants an accurate picture of price trends and provide a way to both benchmark contracted rates as well as create accountability for index providers.

Together, a real-time offer disclosure system and anonymized post-transaction ledger work to enhance price discovery for shippers and promote competition among shippers, all while providing market participants an accurate record of pricing data to inform business decisions.

Such a regime would be a significant shift for the industry in the post-OSRA 1998 landscape. Prior to 1998, ocean carriers were required to file their tariffs with the FMC, making all rates, terms, and conditions publicly available.[89] OSRA 1998 permitted most freight to move under confidential service contracts that allowed pricing information, other than certain base terms, to remain private.[90] Ocean freight quickly shifted toward these confidential contracts, a system that allows for shippers to be charged different rates for moving similar goods on similar lanes of trade.[91] The system we propose here creates a simple price disclosure regime only for transactions flowing through exchanges, imposed as a condition for reaping the advantages of exchanges—including both the price discovery mechanisms provided by all exchanges as well as any differentiated features that individual exchanges may choose to offer. Unlike the pre-1998 regime, the system we propose allows for dynamic, market-driven pricing, rather than requiring carriers to adhere to fixed tariffs previously filed with the FMC—and it allows carriers to continue to set their own prices across different distribution channels as they see fit.

[89] *See supra* note 52.
[90] *Id*.
[91] *See supra* note 53. *See also supra* note 84.

It is worth noting that requiring exchanges to publish pre-transaction rates invites a risk of tacit coordination among carriers,[92] who could use information about competitors' rates to price their own services. This risk may be particularly acute given concentration on key routes. In other sectors that mandate price publication, regulators seek to mitigate the risk of tacit collusion by introducing small delays in rate publication or requiring market participants to submit rates during simultaneous and periodic intervals, rather than publishing rates continuously. FMC should further assess which of these safeguards would be most effective in the maritime sector and adopt them accordingly, while undertaking vigilant monitoring and law enforcement against collusive activity.

Increasing price transparency also requires scrutiny into shipping indexes, particularly given public reporting highlighting how the lack of clarity around how indexes are calculated creating sharp divergences between different index prices on the same route—leaving shippers with little explanation when rates suddenly spike without justification. [93] While shipping indexes sometimes exist as separate entities from shipping exchanges, policymakers can increase accountability for indexes by introducing requirements for shipping exchanges that offer index-linked contracts or for shipping exchanges that are affiliated with an index.

- Indexes used on shipping exchanges should be required to disclose the methodology for their calculation, and such methodology should be based on a mathematical calculation designed to assess the typical price on a route or set of routes. Such information may include the weighting given to specific price inputs and the data sources used as inputs. Without clear disclosure of methodologies, shippers cannot verify whether indexes reflect actual market conditions or are skewed by biased data sources or calculations.

- Exchanges that offer index-linked contracts should be required to offer a choice of two or more shipping indexes, which would allow shippers to compare pricing histories between two indexes. Providing shippers with a choice would create

[92] *See, e.g.*, ORG. FOR ECON. CO-OPERATION & DEV., ALGORITHMS AND COLLUSION: COMPETITION POLICY IN THE DIGITAL AGE at 21 (2017), https://www.oecd.org/content/dam/oecd/en/publications/reports/2017/05/algorithms-and-collusion-competition-policy-in-the-digital-age_02371a73/258dcb14-en.pdf ("Other two important structural characteristics are market transparency and frequency of interaction, both of which make industries more prone to collusion.").
[93] *See* Miller, *supra* note 53.

competitive accountability and could provide index publishers with an incentive to publish accurate indexes.

Public pricing provisions complement, rather than substitute for, greater transparency into shipping indexes. Pricing transparency allows shippers to compare available pricing information with published indexes, providing an additional layer of accountability for indexes and ultimately increasing market confidence in the accuracy and reliability of those indexes.

C. Mitigate conflicts of interest

For shippers to realize the benefits of lower costs, better service, and increased capacity availability, exchanges must ensure that ocean carriers compete on a level playing field. As discussed above, nondiscrimination requirements and transparent pricing systems can help ensure that exchanges serve as neutral marketplaces that treat all carriers equally.

One specific mechanism through which platforms can undermine core nondiscrimination principles is through conflicts of interest that give the exchange an incentive to direct shippers toward certain carriers. These conflicts of interest can take several forms. Payments from carriers to an exchange, functioning like kickbacks, may result in preferential placement for those carriers, discriminating against competitors without such arrangements. In other cases, an exchange that has entered into a joint venture with an ocean carrier or shares a common owner with a carrier could have a structural incentive to favor that carrier on its platform. Whichever form they take, however, there is no way at present to ensure regulators know when such arranagements exist.

These conflicts of interest can erode pro-competitive effects of exchanges by rewarding carriers with the bargaining power and financial ability to secure such arrangements. Rather than serving as a neutral platform, exchanges may help reinforce powerful carriers' market positions by steering shippers toward favored carriers and away from rivals. For shippers, the result is a loss of competitive pressure on carriers to innovate or compete on the basis of price, reliability, and service quality. Deeper cooperative arrangements between exchanges and carriers could also lead to sharing of competitively sensitive data: carriers that could access data about shippers' booking behavior on an exchange, including bookings involving competitors, might use that information to alter their own pricing models or adjust capacity in ways that harm competing carriers and lead to higher prices for shippers.

Such conflicts of interest may also arise on the shipper and freight forwarder side of the market. An exchange could pay shippers or offer freight forwarders rebates for routing orders through its platform, even when doing so is not in the best interest of the cargo owner. Deeper ties, such as joint ventures or common ownership, could lead an exchange to offer preferential booking options, visibility, or pricing tools to affiliated shippers or forwarders that are unavailable to others. These arrangements can give favored shippers or forwarders a cost or access advantage, distorting competition among shippers and among exchanges. At the same time, such arrangements can help the exchange cement dominance over competing exchanges, reducing competitive pressure to improve service or lower costs—a dynamic we discuss below.

Regulators have previously recognized how conflicts of interest between transportation carriers and platform intermediaries can harm competition. In the airline industry, booking networks known as global distribution systems (GDSs) play a similar role as shipping exchanges in the maritime sector: airlines list available fares on these platforms, which are then used by travel agents to book tickets on behalf of passengers. In the 1980s, however, the ownership structure of these platforms exhibited clear conflicts of interest: American Airlines owned Sabre, and United Airlines owned Apollo, two of the largest platforms at the time.[94] Competing airlines soon reported that their flights were ranked under flights from American and United when accessed through their affiliated distribution network. In response, the Civil Aeronautics Board (CAB), the agency that regulated passenger aviation in the United States, issued a set of regulations,[95] including a requirement that all such platforms provide unbiased displays that ranked flights based on objective criteria.[96]

While the CAB regulation did not require a full separation of business activities between distribution platforms and airlines, it came to have that effect: over time, all of

[94] In the 1980s, GDS platforms were more commonly known as computerized reservation systems (CRS).
[95] Carrier-Owned Computer Reservation Systems, 49 Fed. Reg. 32540 (1984) [hereinafter CRS FRN], *codified at* 14 C.F.R. § 255 (1999) [hereinafter CRS Rule], https://www.govinfo.gov/content/pkg/CFR-1999-title14-vol4/pdf/CFR-1999-title14-vol4-part255.pdf. In addition to provisions requiring unbiased ranking, the CAB 1984 Rule also included provisions that required CRS to permit any airline to list their flights on the CRS, akin to the equal access requirement we discuss earlier in the paper, and provisions that prohibited CRSs from locking in travel agencies, akin to the nonexclusivity requirements we discuss later in the paper. The CAB 1984 Rule was amended several times.
[96] CRS Rule, 14 C.F.R. § 255.4(a), *supra* note 95.

the U.S. airlines that owned such a platform had divested their ownership interests, thus removing any structural incentive for the intermediary to favor certain airlines over others.[97] Such "structural separations" may present key advantages over prescriptions or prohibitions on specific conduct because they reduce burden on regulators and are more straightforward to administer.

In line with these principles, regulators should introduce similar structural separations in the maritime sector between shippers, exchanges, and carriers.

- An exchange should be prohibited from owning, being owned by, sharing common ownership with, sharing board members with, entering into joint ventures with, or collaborating with (for purposes beyond interoperability) any common carrier, shipper, or forwarder. Such a provision would include an exception permitting carriers to operate their own first-party booking platforms, as we discuss in Section IV.

- An exchange should be prohibited from providing or receiving payments from a carrier, shipper, or forwarder that result in preferencing of that party's services or platform.

- An exchange should be prohibited from sharing competitively sensitive information (other than public data displayed on the exchange for all participants) with any carrier, shipper, or forwarder beyond information about that party's own bookings.

These structural separation rules would not require any divestments and breakups. Instead, they outline clear rules of the road for market participants and create an administrable framework for regulators to enforce, ensuring that act as neutral, pro-competitive marketplaces.

D. Promote competition between exchanges

Shipping exchanges have developed in part to address certain challenges in ocean shipping, ranging from the lack of price transparency for shippers to persistent unenforceability of ocean container contracts. Shippers and carriers may choose to

[97] Responding to this shift in market structure, DOT sunset the CRS rule in 2004, arguing that the rule was no longer necessary. CRS Sunset Final Rule, 69 Fed. Reg. 976 (2004).

use one exchange due to features it provides compared to other exchanges or over directly contracting with each other, and exchanges may develop features that cater to certain types of customers, such those designed to facilitate the transport of specialized types of cargo.

Shipping exchange regulation can play an important role in promoting continued competition between exchanges by not only ensuring that exchanges continue to innovate and offer new functionality, but also by preventing any single exchange from attaining significant market power that affords it gatekeeper status and the ability to dictate transaction fees and market access for both shippers and carriers. Encouraging competition among shipping exchanges also helps promote resilience in a critical infrastructure layer of the industry: a market with a single dominant exchange creates a vulnerable single point of failure, leaving the door open to a cyberattack or other technical outage disrupting global supply chains at scale.[98]

Several principles discussed earlier reinforce competition between exchanges. Public disclosure of offers and a public ledger of executed contracts help shippers more efficiently compare booking options across exchanges and choose the one that best suits their needs. Strong structural separations and prohibitions against conflicts of interest not only ensure shippers, forwarders, and carriers compete on a level playing field with each other—they also prevent carriers and shippers from using their market power to tilt the playing field toward one exchange. For example, separating exchanges from carrier ownership reduces the risk that a carrier might withhold capacity from rival exchanges to favor its own. Likewise, separating exchanges from shippers and forwarders prevents commercial arrangements that could deny competing exchanges access to pools of shipper demand. Together, these measures preserve the ability of new exchanges to attract both carriers and shippers, increasing the likelihood that exchanges can reach the scale needed to compete effectively.

In addition to conflicts of interest, restrictive contract terms also have the potential to suppress competition among exchanges. Such provisions may lock in shippers and

[98] Numerous incidents in recent years have illustrated how cyberthreats can threaten resilience in critical infrastructure industries. The 2017 NotPetya ransomware attack crippled ocean carrier Maersk's operations and caused extensive disruption to global supply chains. *See* Andy Greenberg, *The Untold Story of NotPetya, the Most Devastating Cyberattack in History*, WIRED (Aug. 22, 2018), https://www.wired.com/story/notpetya-cyberattack-ukraine-russia-code-crashed-the-world/. The 2021 Colonial Pipeline ransomware attack not only led to outages but also induced shortages and price instability in gas markets. *See* Marisa Iati, *How the Colonial Pipeline Hack Is Affecting Gas Prices and Supply*, WASH. POST (May 17, 2021), https://www.washingtonpost.com/business/2021/05/12/faq-gas-shortages.

carriers to existing exchanges, increasing barriers to entry for new exchanges to reach sufficient scale:

- *Exclusivity agreements.* An exchange could require a shipper or carrier to work exclusively with the exchange, depriving rival exchanges access to enough carriers or shippers to gain traction. Regulators recognized that such contracts could restrain competition: the rule prohibited GDS platforms from using certain contract terms that locked in travel agents to those platforms by preventing them from using rival systems,[99] and capped the maximum term for travel agency contracts at five years.[100]

- *Rebates.* As discussed above, an exchange could pay shippers or forwarders for routing transactions through its platform, effectively discouraging shippers from using another exchange even without an explicit exclusivity clause.[101]

- *Price parity clauses.* An exchange could prohibit a carrier from listing its services on another exchange at a lower price than its own, which could restrain competition from an exchange that could offer the same services at a lower cost. While the competitive effect of such clauses can be a fact-specific inquiry, regulators in recent years have closely scrutinized how online platforms' use of these clauses may reduce competition and raise prices for consumers.[102] FMC should proactively examine the use and impact of such clauses in the marketplace, regulating their use as facts necessitate.

Regulators should also ensure that carriers do not prohibit exchanges from offering cross-alliance routings should an exchange wish to offer them. Some shipping exchanges may wish to leverage their visibility into many carriers' sailing schedules—including those from different alliances—to provide multi-leg routings that a carrier may not offer on its own. Particularly given recent consolidation among ocean

[99] *See* CRS Rule, 14 C.F.R. § 255.8(b), *supra* note 95.
[100] *Id*. at § 255.8(a).
[101] The CRS Rule recognized that financial inducements could distort competition by steering travel agents toward particular systems. *See, e.g.*, CRS FRN, 49 Fed. Reg. at 32545 (noting that large agents "may receive substantial cash inducements, in the form of free systems or incentive payments, to switch systems"). The Rule ultimately adopted a broad provision that prohibited CRS systems from "directly or indirectly imped[ing] a subscriber from obtaining or using any other system." 14 C.F.R. § 255(b).
[102] United States v. Apple, 952 F. Supp 2d 638 (S.D.N.Y. 2013), aff'd, 791 F.3d 290 (2d. Cir. 2015); *see also* Booking.com et al. v. 25hours Hotel Company Berlin et al., C-264/23, EU:C:2024:764.

carriers,[103] such functionality could benefit shippers by providing more choice of routings. While such capability may be technically complex and not every exchange might wish to undertake its implementation, a carrier should not be able to prevent a shipping exchange from doing so through its operational contracts with the exchange.

E. Promote market integrity and limit market manipulation

As shipping exchanges grow in importance and as the shipping industry becomes increasingly digitized, they may present new methods for market manipulation that can harm shippers, carriers, and the integrity of the market. Potential market manipulation was a key concern that led Congress to scrutinize shipping exchanges under OSRA 2022, including manipulation that may occur due to lack of transparency behind the indexes that dictate the rates shippers pay.[104]

Market manipulation in the context of shipping exchanges could include:

- Manipulation of shipping indexes, including by influencing the methodology or underlying data sources in a way that could benefit certain parties;
- Executing large contracts or placing large bookings in order to move market rates without intent to eventually fulfill those orders, mirroring spoofing in financial markets;
- Carriers misrepresenting available capacity on a given route in ways that could lead to inflated rates;
- Using exchanges to signal pricing or capacity information to competitors in ways that could facilitate tacit collusion, particularly in markets or on routes with few competitors;

Several mechanisms discussed under previous principles can help mitigate these risks. Publicly accessible pre-transaction rates and a public ledger of executed transactions make it more difficult to covertly manipulate indexes or spot prices. Strong structural separations between carriers and exchanges reduce opportunities for carriers to

[103] *See supra* notes 18-19 and accompanying text.
[104] *See supra* notes 74-76 and accompanying text.

access confidential competitor booking data that could inform collusive conduct in setting capacity or rates.

In particular, the major freight carriers' participation in the development of NYSHEX's freight index raises concerns that affiliated carriers, through their "development, implementation, modification[,] and auditing" of the index, could do so in a way that raises prices. The major ocean carriers' filed agreement with NYSHEX, which is currently pending before the FMC for approval, prohibits express collusion on prices.[105] FMC issued a request for additional information to "better understand the potential competitive effects" of these changes.[106] It should consider whether the carriers' role in developing an index may tacitly lead to shippers paying higher prices for contracts linked to the NYSHEX index. Mechanisms to promote index competition discussed previously, such as requirements for exchanges to offer an array of index options, can also help ensure that competition from alternative, potentially lower-priced indexes can discipline such behavior.

Because shipping exchanges may be used by other actors to facilitate manipulation, the regulatory framework for shipping exchanges should provide affirmative obligations on exchanges for detection and enforcement. As part of the registration progress for shipping exchanges, FMC could require any registered exchanges to adopt systems to detect and report manipulation, including suspicious booking patterns and capacity reporting. Congress could also consider giving FMC anti-manipulation authority, comparable to statutory authority granted to the Commodity Futures Trading Commission,[107] to take enforcement action against shippers or carriers engaged in manipulative behavior.

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[105] NYSHEX index agreement FMC filing, *supra* note 64, at 5 ("Nothing in this Agreement authorizes any of the Parties [...] to discuss, exchange or agree upon the ocean freight rates, surcharges, or accessorials that will be applicable to ocean transportation provided by a Party via NYSHEX.") (internal parentheticals removed).

[106] Press Release, Fed. Mar. Comm'n, FMC Issues Request for Additional Information Regarding NYSHEX Agreement Amendment (Mar. 14, 2025), https://www.fmc.gov/articles/fmc-issues-request-for-additional-information-regarding-nyshex-agreement-amendment/.

[107] 7 U.S.C. § 9.

IV. Recommendations for FMC Shipping Exchange Regulation

Under OSRA 2022, 46 U.S.C. § 40504(a), shipping exchanges may not operate in the United States unless they register as a national shipping exchange under terms and conditions set forth by FMC regulation.[108] In addition, 46 U.S.C. § 40504(d) provides the FMC with a broad delegation to issue regulations in order to advance the statutory purposes of the Shipping Act:[109] (1) to establish nondiscriminatory common carriage in the maritime sector, (2) to ensure efficient, competitive, and economical ocean commerce, (3) to encourage development of a US fleet of vessels, and (4) to promote a competitive and efficient system for carriage of goods by water in foreign commerce.[110] OSRA 2022 directed FMC to issue those regulations by June 16, 2025, a deadline that has passed.[111]

To accomplish those goals, the FMC should promulgate the statutorily required rule, and set the following terms and conditions to register as a national shipping exchange:

- Nondiscrimination towards shippers
    - *Equal access for shippers.* An exchange must provide access to any shipper or forwarder who seeks to access its platform.
    - *Nondiscrimination for shippers.* An exchange must provide all shippers with the ability to book all services listed by carriers on the exchange, at rates and terms available to all shippers on the platform—including rates charged by carriers as well as transaction fees imposed by exchanges.
    - *Structural separations for shippers.* An exchange may not own, be owned by, share a common owner with, share a board member with, or enter into a joint venture with any shipper or forwarder.

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[108] 46 U.S.C. § 40504(a).
[109] 46 U.S.C. § 40504(d) ("Not later than 3 years after the date of enactment of the Ocean Shipping Reform Act of 2022, the Commission shall issue regulations pursuant to subsection (a), which shall set standards necessary to carry out [the Shipping Act] for registered national shipping exchanges.").
[110] 46 U.S.C. § 40101.
[111] 46 U.S.C. § 40504(d).

- Nondiscrimination towards carriers—these provisions would apply to any platform that is not a *first-party platform*, where a first-party platform is defined as a platform that connects shippers with a single ocean carrier for purposes of entering into freight contracts and is owned or operated by that carrier.
    - *Structural separations for carriers.* An exchange may not own, be owned by, share a common owner with, share a board member with, enter into a joint venture with, or collaborate with (for purposes beyond facilitating the interoperability of technical systems) any common carrier.
    - *Equal access for carriers.* An exchange must be accessible to any carrier that seeks to offer its services on the exchange.
    - *Nondiscrimination for carriers.* An exchange must rank carrier options using objective, disclosed criteria and must offer the same commercial terms, including transaction fees, to all carriers.
    - *Prohibition on sharing competitively sensitive data.* An exchange may not share competitively sensitive information, other than data posted publicly for exchange participants, with any carrier beyond information about that party's own bookings, including data regarding other shippers or other carriers.

- Index transparency
    - *Disclosure of methodology.* Indexes that are used on shipping exchanges or affiliated with shipping exchanges must disclose the methodology for their calculation, and such methodology must be based on a mathematical calculation designed to assess the typical price on a route or a set of routes.
    - *Index choice on exchanges.* An exchange that offers index-linked contracts must offer a choice of two or more shipping indexes.

- Contract price transparency
    - *Real-time offer disclosure.* Exchanges must publicly report, in real-time, freight rates offered on given routes for given services that are available on its platform. Such information must be published in a standardized format.

- *Anonymous post-transaction ledger.* Exchanges must submit anonymized, post-transaction pricing data for executed data to a centralized ledger administered or overseen by the FMC.

- Restrictive contracts and rebates

  - *Payments.* An exchange may not receive payments from a carrier, shipper, or forwarder that result in preferencing of that party's services.
  - *Rebates*. An exchange may not provide payments to a carrier, shipper, or forwarder to incentivize use of the exchange.
  - *Exclusivity agreements.* An exchange may not enter into a contract that requires a shipper or carrier to work exclusively with the exchange.
  - *Cross-carrier and cross-alliance route flexibility.* An exchange may not enter into an agreement with a carrier that prohibits the exchange from selling multi-segment routes across different carriers or carriers from different alliances.

- Market integrity and manipulation

  - *Detection obligations.* An exchange must adopt systems to detect and stop manipulation, including but not limited to suspicious booking patterns and false capacity reporting.