

Business model adaptation for logistics companies entering the U.S. market: transferring Chinese supplier and international supply chain experience

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Abstract

Experience with Chinese suppliers may support U.S. logistics market entry, but national trade trends do not necessarily describe regional opportunities. This study combines descriptive analysis of Census trade and business data, the Quarterly Census of Employment and Wages (QCEW), federal authority histories, and ocean-intermediary records with regulatory document analysis. During 2017 - 2025, China's import share fell from 21.59% to 9.04% nationally and from 16.72% to 8.09% in Florida. Four selected alternative origins gained 11.02 percentage points nationally but only 0.18 points in Florida. Florida freight-arrangement establishments grew more slowly than nationally in both QCEW and County Business Patterns; the QCEW employment-growth advantage did not replicate in the latter source over matched years. Florida micro-establishments remained approximately two-thirds of employer establishments. Federal property-broker grants peaked at 8,626 in 2022 and fell to 3,781 in 2025; 20.4% of the 2017 - 2021 first-observed-grant cohort held active broker status in May 2026. Florida accounted for 22.1% of U.S.-based ocean transportation intermediaries in June 2026. The proposed framework connects supplier routines with regional customer demand, role-specific authorization, local counterparties, and financial controls. These findings establish adaptation conditions; they do not demonstrate firm-level transfer effectiveness, business survival, or causal regulatory effects.

Keywords: business model adaptation, logistics service providers, U.S. market entry, Chinese suppliers, capability transfer, trade reconfiguration, Florida

1. Introduction

Logistics companies expanding internationally bring knowledge accumulated through supplier selection, shipment coordination, documentation, and disruption management. Such knowledge can support new services, but moving it across jurisdictions changes the conditions under which it generates revenue. A business model must connect organizational capabilities to customer value and a workable mechanism for recovering costs [1]. Entry into the United States therefore raises a specific question: which elements of experience with Chinese suppliers remain useful, and which organizational arrangements require local

reconstruction?

The question is commercially relevant for companies whose existing networks were built around international sourcing. A relationship that helps obtain reliable production information does not itself create access to U.S. customers, domestic carriers, or authorized intermediaries. The network perspective on internationalization emphasizes the difficulty of entering unfamiliar business relationships [2]. Treating foreign-market entry as a simple extension of an established forwarding service can consequently obscure changes in responsibility, customer expectations, and cash requirements.

This article addresses the problem through original analysis of public market data rather than a retrospective success narrative. It combines changes in U.S. import origins, the structure of selected logistics industries, and role-specific federal requirements. Florida is examined because it is the stated operating location of the author's U.S. business; its selection precedes the analysis and does not imply that it is the optimal location for every entrant. Neither of the author's companies supplies the empirical observations.

The contribution combines reproducible trade and industry comparisons with a framework translating market conditions and documented requirements into business-model choices. The framework generates propositions about capability transfer rather than estimating its performance effect. This distinction supports subsequent company-level research without presenting aggregate statistics as evidence of individual entrepreneurial success.

2. Literature and analytical expectations

A business model is treated here as the configuration connecting activities, customer value, and revenue capture. Zott, Amit, and Massa's review identifies an emerging system-level perspective while documenting substantial differences in how researchers define the construct [3]. This distinction matters because a list of logistics capabilities is not itself a business model: the same supplier knowledge could support a transaction-based forwarding service, a separately priced coordination service, or an integrated customer relationship, with different costs and responsibilities.

Selviaridis and Spring's review of 114 sources finds a predominance of descriptive empirical research and calls for stronger theoretical grounding and attention to logistics-service design [4]. The present study responds by making the proposed mechanism explicit while keeping its evidentiary status limited. Market statistics describe the context for adaptation; they do not directly observe the activity configuration or its performance consequences.

Research on third-party logistics identifies customer adaptation and general problem-solving capability as distinct dimensions of strategic development. Hertz and Alfredsson show how providers' existing businesses and networks influence their development paths [5]. This suggests that experience creates both opportunities and constraints: a supplier network may facilitate service delivery while encouraging a company to reproduce a familiar offering when the destination market requires a different one.

Marchet and colleagues provide a more specific business-model comparison through a qualitative survey of 44 providers operating in Italy [6]. Their volume-, process-, and innovation-oriented models connect different operating strategies to value creation. Applied to the present question, this suggests that an entrant should identify which customer process it improves before selecting assets or partners. The typology guides interpretation, but Italian provider evidence does not establish that one model will outperform the others in Florida.

Survey evidence from the United Kingdom associates logistics competitiveness particularly with organizational capabilities and service quality [7]. A related Chinese study examines 13 capability constructs and identifies

service quality, including operational and relationship-management dimensions, as especially important [8]. These studies support examining routines and coordination capabilities rather than equating experience with ownership of transport assets. Their geographical settings and perception-based measures, however, do not establish that the same capabilities generate profitable U.S. entry.

Lai's Hong Kong survey identifies distinct logistics-provider capability types and differences in service performance [9]. Together with the British and Chinese studies, this supports distinguishing coordination quality from a provider's scale or asset base. The association does not establish a causal benefit from carrying a particular capability across borders, especially when customer requirements and authorization conditions differ.

Wagner and Sutter's four provider - customer innovation cases emphasize joint involvement, complementary investments, and arrangements for sharing benefits [10]. Their findings imply that adaptation can require redesigning the customer relationship itself. Busse and colleagues, studying a European buyer and six Chinese suppliers through 41 interviews and 81 documents, identify contextual obstacles to supplier development [11]. The latter study concerns sustainability rather than market entry, but it demonstrates why coordination practices cannot be assumed to work identically across operating environments.

Knowledge-transfer research provides a further boundary condition. Szulanski's study of 122 best-practice transfers across eight companies identifies difficulties in reproducing knowledge even within organizational boundaries [12]. Cross-border application should therefore be treated as a process requiring interpretation, documentation, and learning. This is a theoretical extension of that evidence, not a claim that the present dataset measures organizational learning or its costs.

Kogut and Zander connect cross-border transfer to the characteristics of organizational knowledge, finding that less codifiable and harder-to-teach capabilities are more likely to be transferred within wholly owned operations [13]. For logistics, this motivates separating documented routines from relationship-dependent judgment. The proposed application is an inference: neither their manufacturing-transfer evidence nor the present public data identify the best ownership arrangement for a particular logistics entrant.

Recent trade research complicates the meaning of experience with China. Freund and colleagues find that declining direct U.S. imports from China coexist with continued supply-chain connections through other countries [14]. Supplier-origin knowledge may thus remain relevant when the final country of shipment changes. Nevertheless, bilateral customs values do not reveal embedded Chinese value added. Recent interview-based work on logistics business-model evolution also highlights collaboration and digital integration [15]; its findings motivate attention to interfaces and service coordination, without establishing the return on any particular technology investment.

Fajgelbaum and colleagues estimate substantial trade responses to the 2018 tariff increases and find that targeted import prices did not fall enough to absorb the duties [16]. This supplies a historically grounded reason to examine the full annual path rather than compare endpoints alone. However, the present aggregate series cannot identify tariff effects separately from the pandemic, prices, product composition, or later policy changes. A visible 2019 movement is therefore interpreted descriptively, not as a formally estimated structural break.

H1 predicts falling China import share and rising combined shares of Mexico, Vietnam, India, and Taiwan during 2017 - 2025. H2 predicts faster freight-arrangement establishment growth in Florida than nationally. The exploratory extension adds H3: Florida has lower China exposure at both endpoints and a smaller percentage-point decline than nationally. H4 predicts faster Florida nonemployer-firm growth than employer-establishment growth over the common 2022 - 2023 interval. H5 is reformulated as an exploratory flow comparison: national property-broker grants in 2025 exceed their 2017 level, but fall below the 2022 level. This reformulation follows inspection of the authority histories and is not a preregistered prediction. P1 states

that supplier experience requires role-specific U.S. organizational complements. These expectations concern market conditions and institutional requirements, not successful transfer by an individual company.

3. Data and methods

The design is a descriptive secondary-data study with structured documentary analysis. A written analysis plan specified the measures and comparisons before the full calculations, following source-availability checks; it was not externally preregistered. The regional-trade, small-business, and licensing extension was specified after the original national-trade and QCEW results had been examined and is explicitly exploratory. The literature component is a focused narrative review of original empirical studies and foundational theory, not a systematic review or meta-analysis. Sources were sought through title and topic searches, then checked against publisher or repository records. Bibliographic metadata, source versions, and DOI verification results were recorded in the study files.

Trade data comprise archived U.S. Census Bureau monthly and annual goods balances for the world and five origins over nine complete calendar years [17]. They yield 54 annual observations and 648 monthly observations. Values are nominal U.S. dollars, reported in millions and not seasonally adjusted. The analysis uses published annual import totals; monthly sums serve as a consistency check. The four comparison origins are illustrative sourcing locations selected in the analysis plan, not an exhaustive set of countries replacing China. Incomplete 2026 observations are excluded.

Nine December state-import NAICS files add 1,615,512 commodity - country - state records [18]. Year-to-date general-import values are summed across commodity codes to form 76,304 observed state - country - year cells. Florida shares use all reported Florida origins as the denominator. Summing all reported destinations, including unidentified destinations and territories, reproduces national country-balance values with a maximum relative discrepancy below 0.0001%. State destination is recorded at entry and can reflect consolidation or distribution locations; it is neither a port measure nor a direct measure of final state consumption [19].

Industry data come from the Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) [20,21]. Thirty-six annual source files cover 2017 - 2025, four industry categories, the 50 states, the District of Columbia, and the national aggregate: 1,872 records. Private ownership and all establishment sizes are selected. The categories are freight transportation arrangement (NAICS 488510), general warehousing and storage (493110), general freight trucking (4841), and all industries (10), the denominator for specialization measures. These are separate business activities, not interchangeable estimates of the logistics market.

QCEW establishments are operating locations rather than unique companies. Employment is covered employment, not full-time-equivalent labor, and excludes important nonemployer activity. National figures are taken directly from the published aggregate rather than reconstructed from selected states. Suppressed employment and wage cells remain missing; published establishment counts are retained. The selected panel contains 29 suppressed employment records, none affecting the Florida - U.S. comparisons. Sources, retrieval information, and checksums identify the archived versions used.

For origin c and year t , the import share is $s(c,t) = 100 \times M(c,t)/M(\text{world},t)$. Share changes are measured in percentage points, while value growth is measured relative to the initial dollar amount. Industry growth is calculated analogously. An employment location quotient (LQ) divides an industry's share of all private employment in Florida by the corresponding U.S. share. Values above one indicate relative specialization; they do not measure market concentration, labor productivity, or profitability. Establishment-based LQs provide an alternative denominator.

Florida employment change is also separated into a national sector-growth benchmark and a residual. The benchmark equals Florida's 2017 employment multiplied by the proportional change in national employment

in that industry. Subtracting it from observed Florida growth gives an exact accounting residual. This residual includes all remaining differences and is not interpreted as a causal Florida advantage. Robustness checks replace the 2025 endpoint with 2024, compare employment and establishment specialization, and locate Florida within the available state distributions. Descriptive census aggregates are reported without fabricated standard errors or significance tests.

State rankings use a fixed geographical universe and published observations only; suppression changes comparator availability. All 51 state/DC freight-arrangement observations are available in 2025. Monetary comparisons use current dollars. No composite attractiveness score is constructed, because defensible weights would require firm-specific customer and capital information.

County Business Patterns (CBP) supplies exact NAICS 488510 employer-establishment counts, March employment, and the fewer-than-five-employees class for 2017 - 2023 [22,23]. All legal forms are selected, yielding 364 state/DC and national records. Comparisons with QCEW use identical 2017 - 2023 endpoints. CBP's March employment and QCEW's annual average differ in reference timing, coverage, and administrative classification. The ordinary NES bulk files do not isolate this industry; the detailed Nonemployer Statistics by Demographics (NES-D) company-summary table does [24]. Its total-demographic rows provide nonemployer firms, identified geographically through GEO_ID. Florida and national counts are compared over 2022 - 2023, avoiding the earlier NES universe break; disclosure rounding still limits precise growth interpretation [25]. Firms and employer establishments remain separate units and are not added into a purported market population.

The Federal Motor Carrier Safety Administration (FMCSA) legacy Carrier and AuthHist files were last refreshed on May 14, 2026 [26,27]. The snapshot selects active broker authority and an affirmative property flag, counts unique dockets, and restricts the domestic benchmark to U.S. addresses in the 50 states and DC. The history extraction contains 198,464 PROPERTY BROKER records. Annual grants use the original action's served date; revocations use the final disposition's served date. Each docket is counted once per action type and calendar year. These national federal-authority flows include all domiciles and require no historical address assignment. Reinstatements are tabulated separately; grants minus revocations do not identify net stock change or unique new firms.

Cohorts use the first observed dated GRANTED record per docket. Undated events are excluded from annual counts, and dockets with any undated grant are excluded from cohort assignment. The 2017 - 2021 cohort is joined to the Carrier broker-status field at the common May 2026 endpoint. Active-status retention is the proportion marked active among matched dockets; unmatched records are reported separately rather than classified as inactive. This measures endpoint broker status, not uninterrupted authority or business survival. A separate Federal Maritime Commission (FMC) ocean transportation intermediary (OTI) list, dated June 19, 2026, supplies unique-organization counts by current country, state, and listed role [28]. Non-vessel-operating common carrier (NVOCC) and ocean freight forwarder categories overlap.

Five federal guidance documents were purposively selected to cover ocean intermediation, domestic freight brokerage, and customs responsibility [29,30,31,32,33]. Their current content was checked on June 20, 2026; the institutional snapshot therefore follows the quantitative observation period. A structured extraction records regulated role, authorization, personnel, financial security, operational duties, and the resulting adaptation implication. The coding is analytical and source-traceable, with no claim of independent-coder reliability. It is not an exhaustive inventory of federal, state, tax, or product-specific requirements.

The synthesis distinguishes three evidentiary levels: observed market changes, documented institutional obligations, and proposed managerial responses. No interviews, questionnaires, confidential transactions, or company performance records were collected. The framework links existing supplier-management routines to local complements and to a revenue-and-responsibility design. Its arrows indicate a proposed decision

sequence, not coefficients estimated from the statistical panel. All tables and figures are embedded in this document. Table 1 reports annual origin shares, and Appendix Tables A1 - A3 give endpoint sensitivity and state benchmarks.

4. Results

China's share of U.S. goods imports declined from 21.59% in 2017 to 9.04% in 2025, a reduction of 12.55 percentage points (Figure 1). Direct imports from China fell from \$505.2 billion to \$308.7 billion, or 38.9%, while total U.S. goods imports increased by 45.9%. The change therefore reflects both a smaller China numerator and a larger world denominator. It cannot be described solely as a decline in aggregate U.S. import demand.

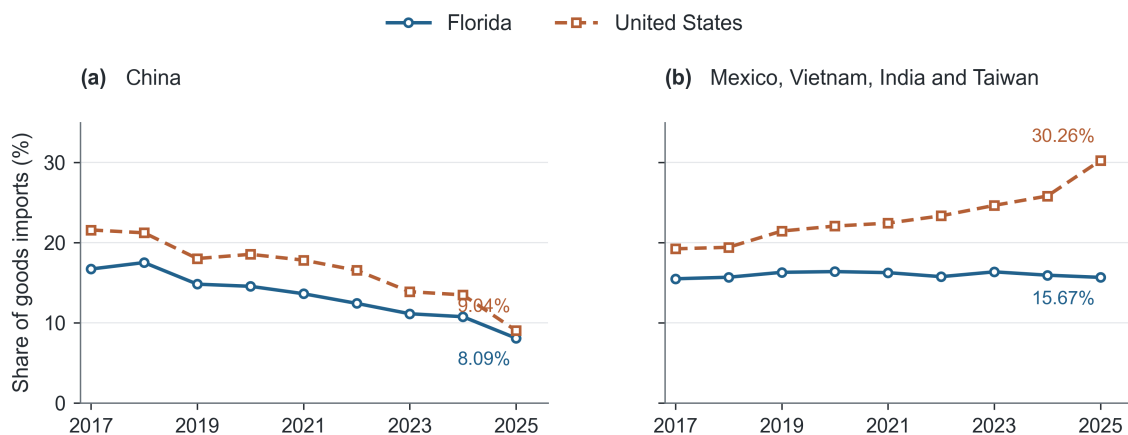


Figure 1. Annual import shares in Florida and the United States, 2017 - 2025. Panel (a): China; panel (b): Mexico, Vietnam, India, and Taiwan combined. Each geography uses its own world-import denominator. Source: Census [17,18]; own calculations.

The combined share of Mexico, Vietnam, India, and Taiwan rose from 19.24% to 30.26%. Their individual gains ranged from 0.96 percentage points for India to 4.08 points for Taiwan (Appendix Table A1). H1 is supported as a descriptive comparison. These gains are not matched shipment transfers from China: products, prices, production locations, and final assembly may have changed simultaneously. The data identify recorded import origins and values, not the supplier nationality or upstream content of each shipment.

The main direction survives exclusion of 2025. China's share had already fallen to 13.49% in 2024, while the four selected origins jointly reached 25.83%. The sharper final-year decline thus amplifies an earlier pattern rather than creating it. Monthly and annual totals agree within \$0.2 million, consistent with published rounding. For business-model design, the evidence favors testing a service proposition that can accommodate changing origins; it does not imply that Chinese supplier relationships have become economically irrelevant.

Florida differs substantially from the national sourcing pattern. Its China share declined from 16.72% to 8.09%, or 8.63 percentage points, compared with 12.55 points nationally. H3 is supported descriptively. More strikingly, the selected four origins increased only from 15.50% to 15.67% of Florida imports, versus an 11.02-point national gain. Mexico's Florida share fell from 8.86% to 7.53%, despite its national increase. Thus, the nationally expanding origin basket does not describe an equally expanding share of Florida's import mix.

Table 1 exposes the timing. China's share fell sharply in 2019 in both geographies, following a Florida increase in 2018. Florida's subsequent China decline was largely absorbed by origins outside the selected four-country basket. Total Florida imports nevertheless grew from \$75.3 billion to \$115.9 billion, while imports from China fell from \$12.6 billion to \$9.4 billion. These are changes in recorded goods values and composition; they do not show which intermediary handled a shipment or whether supplier relationships were retained.

Table 1. Annual import shares: Florida and U.S. comparison (%).

Year	China Florida	China U.S.	Four origins Florida	Four origins U.S.
2017	16.72	21.59	15.50	19.24
2018	17.53	21.23	15.69	19.43
2019	14.83	18.02	16.31	21.46
2020	14.56	18.55	16.40	22.08
2021	13.63	17.83	16.27	22.44
2022	12.43	16.55	15.76	23.36
2023	11.14	13.89	16.36	24.66
2024	10.77	13.49	15.95	25.83
2025	8.09	9.04	15.67	30.26

Note: Four origins = Mexico, Vietnam, India, and Taiwan. These shares do not identify Chinese value added embodied in other origins. Source: Census [17,18]; own calculations.

In QCEW, Florida freight-arrangement establishments (Table 2) increased from 2,008 to 2,444, or 21.7%, compared with 33.1% nationally. H2 is not supported. QCEW employment increased from 16,302 to 20,878, or 28.1%, exceeding national growth of 20.0%. The contrast between establishments and employment shows why a single growth indicator would give an incomplete assessment of regional expansion (Figure 2). In 2025 both Florida establishment counts and employment were below their 2024 levels.

Table 2. Industry growth, 2017 - 2025, and Florida specialization.

Industry	Establishments FL / US, %	Employment FL / US, %	FL LQ 2025
Freight arrangement	21.7 / 33.1	28.1 / 20.0	1.21
General warehousing	54.8 / 40.6	217.7 / 95.4	0.86
General freight trucking	64.5 / 49.7	26.8 / 3.5	0.61

Note: Private-employment LQ; NAICS 488510, 493110, and 4841. Source: QCEW [20,21]; own calculations.

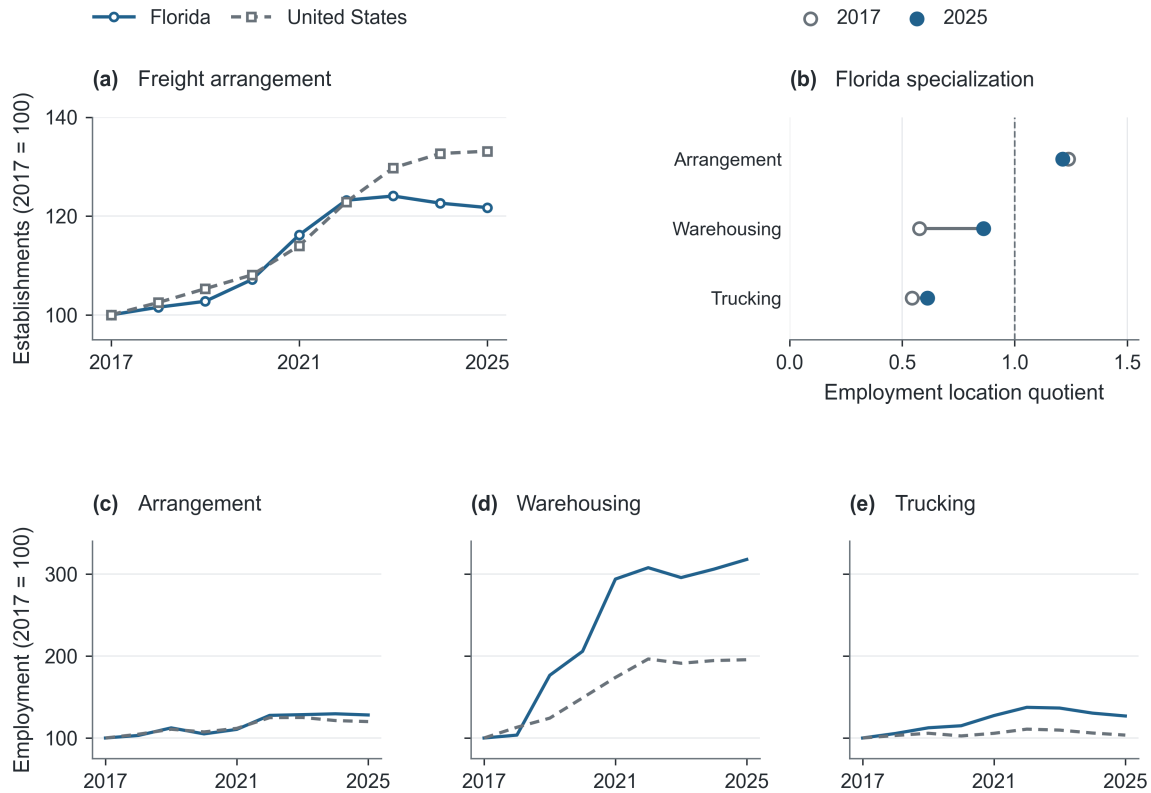


Figure 2. Regional logistics trajectories. (a) Freight-arrangement establishments, 2017 = 100. (b) Florida private-employment location quotients; the vertical line marks one. (c - e) Industry employment, 2017 = 100, with identical vertical scales. Source: QCEW [20,21]; own calculations.

Freight arrangement remained a Florida specialization, but its private-employment LQ declined slightly from 1.24 to 1.21. The 2025 establishment LQ was 1.35. Florida ranked eighth among the 51 state/DC observations by employment LQ in this industry. The distinction matters: faster QCEW sector employment growth than nationally does not necessarily increase specialization when the broader regional employment base also grows.

The comparison industries followed different paths. Florida general-warehousing employment rose by 217.7%, against 95.4% nationally, yet its 2025 employment LQ remained below one at 0.86. General freight trucking employment increased by 26.8%, compared with 3.5% nationally, but its LQ was only 0.61 (Table 2). Growth and relative specialization therefore identify different features of the market. The employment trajectories are shown in Figure 2c - e.

Florida's 4,576 additional freight-arrangement jobs separate into 3,261 associated with the national industry-growth benchmark and a residual of 1,315. The corresponding residuals are 38,689 jobs in warehousing and 7,698 in trucking; these remain accounting comparisons. Freight-arrangement annual pay averaged \$78,379 in Florida, 92.1% of the national figure. Pay is nominal and excludes other operating costs, so this ratio is not a complete cost advantage. Ending the QCEW analysis in 2024 preserves its result: slower establishment growth but faster employment growth in Florida freight arrangement.

QCEW employment per establishment supplies another descriptive contrast. In Florida freight arrangement it increased modestly, from 8.12 to 8.54; in general warehousing it rose from 53.82 to 110.47. These ratios are consistent with very different operating scales across the two activities. They are averages across establishments, however, and cannot distinguish expansion within existing locations from entry, exit, or

changes in the composition of establishments. Accordingly, a company considering a coordination service should not use warehousing employment growth as direct evidence of demand for its own offering.

The small-business extension does not support H4 in the published comparison. Florida NES-D nonemployer firms in freight arrangement decreased from 1,200 to 1,100 during 2022 - 2023, while CBP employer establishments decreased from 2,242 to 2,216 (-1.2%). The rounded nonemployer counts imply approximately -8%, but their precision does not support a sharp test of the growth-rate difference. National published nonemployer counts rose from 4,800 to 4,900. Over the longer CBP interval, Florida's micro-establishment share was stable around two-thirds: 65.4% in 2017 and 65.6% in 2023, with annual values between 64.6% and 67.5%. National endpoint shares were 55.3% and 54.8%. The one-year Florida decline from 66.5% to 65.6% therefore does not establish a sustained shift away from micro-establishments.

The longer CBP panel also qualifies the QCEW results. Over matched 2017 - 2023 endpoints, freight-arrangement establishments increased by 1.3% in Florida and 2.2% nationally in CBP, versus 24.1% and 29.8% in QCEW. Thus, both sources contradict the prediction in H2, while the magnitude is source-dependent. Employment reverses the ranking: CBP reports Florida growth of 17.0% versus 22.5% nationally, whereas QCEW reports 28.5% versus 25.0%. Different reference periods and administrative populations are possible contributors, but the present data do not decompose the discrepancy. Florida's relative employment advantage should be attributed specifically to QCEW.

The FMCSA snapshot contains 23,493 domestic active broker-authority dockets with a property flag, including 1,985 in Florida (8.45%). Florida ranks third, after Texas and California. All Florida dockets have distinct nonblank USDOT identifiers. Excluding records also flagged for household goods leaves 1,907 Florida dockets. This current population is distinct from the national flow series; neither historical Florida location nor state-specific entry growth is inferred from present addresses.

National property-broker grant counts were 3,114, 4,484, 8,541, 6,224, and 3,781 in 2017, 2019, 2021, 2023, and 2025, respectively; corresponding revocation counts were 2,852, 3,764, 4,694, 9,618, and 5,206. Grants peaked at 8,626 in 2022, then fell 56.2% by 2025, while remaining 21.4% above 2017. This meets H5's exploratory comparison. Revocations exceeded grants in 2023 - 2025, but reinstatements and other status changes prevent treating the difference as a population balance. In 2025 there were 1,022 reinstated dockets. Of 25,552 candidate first-grant dockets from 2017 - 2021, one was excluded for an undated grant; all remaining 25,551 matched the status file. Active broker status was recorded for 5,207 (20.4%). Requiring a current property flag as well reduced this to 5,184 (20.3%). These are endpoint status proportions, not firm failure rates.

The FMC list identified 1,141 Florida organizations among 5,169 U.S.-based OTIs (22.1%), ranking the state second after California. Florida ranked first in listed ocean freight forwarders, with 814, and had 980 NVOCCs; organizations may hold both roles. Of 4,700 foreign-based OTIs, 2,093 were located in China. These counts establish the presence of potential partners and competitors within the regulated ocean-intermediary market. They suggest that Chinese-market familiarity may already be available from established providers, although addresses do not measure supplier capabilities, shipment activity, or commercial performance [28].

The documentary evidence supports P1 at the level of formal requirements. FMC guidance distinguishes U.S.-based ocean freight forwarders and non-vessel-operating common carriers, requires licensing, and specifies qualifying experience and financial responsibility [29]. NVOCC tariff duties and conditional negotiated-rate exemptions introduce further operational distinctions [30]. FMCSA materials separately require property-broker authority and financial security, with updated security provisions effective in January 2026 [31,32]. Customs guidance states that using a broker does not remove the importer's ultimate responsibility [33]. Supplier experience alone establishes none of these authorizations.

5. Discussion

5.1. From accumulated experience to a differentiated offering

Taken together, the findings support selective adaptation rather than replication of an existing service package. The trade results challenge a business proposition defined exclusively by direct China - U.S. shipment volume. The industry results challenge the assumption that every Florida logistics segment is simultaneously expanding faster and becoming more specialized. Neither finding negates entry opportunities. Instead, both require specifying the customer problem, the relevant service activity, and the evidence that would justify investment.

The regional comparison sharpens this implication. A national diversification narrative would emphasize growth across the four selected origins, whereas Florida's combined share was nearly stationary. An entrant could therefore test a geographically broader customer base, or target Florida customers with specific supplier-coordination needs, instead of assuming that national origin shifts generate local demand in the same proportions. These are alternative strategies to evaluate through customer and shipment evidence; the aggregate results do not establish which is commercially preferable.

Supplier experience can be translated into services such as coordinating production milestones, reconciling commercial documents, and managing exceptions across time zones. These are candidate transferable routines, not capabilities observed in the author's firms. Their commercial value depends on whether customers recognize a reduction in delays, errors, or coordination effort. The proposed framework therefore begins with a defined service problem and requires evidence of customer willingness to pay before a broader capability portfolio is built (Figure 3).

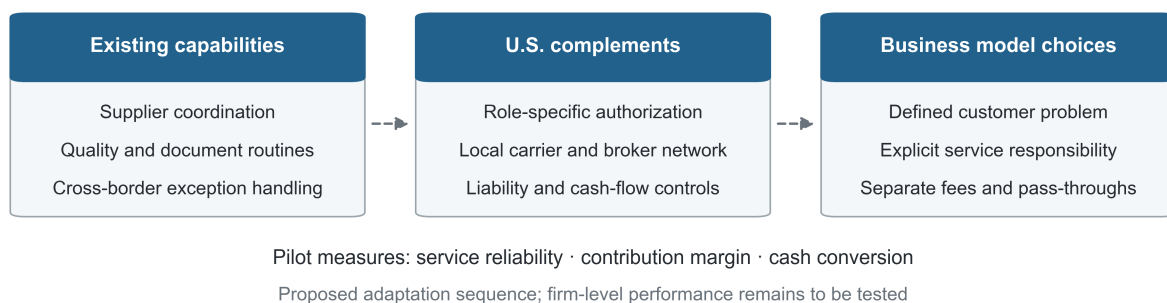


Figure 3. Proposed adaptation framework. Arrows indicate a decision sequence, not estimated effects. Supplier routines require customer validation, role-specific local complements, and a revenue-and-responsibility design. Source: study synthesis [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,29,30,31,32,33].

This interpretation extends the distinction between capabilities and business-model design [1]. A capability may improve execution without providing a sustainable revenue mechanism. A provider might devote substantial effort to documentation or exception handling while earning only a small freight margin. Separating service fees, freight pass-throughs, and clearly assigned liabilities would make that effort economically visible. Whether customers accept such a structure remains a testable proposition, not an outcome established by the market data.

5.2. Local complements, partners, and financial discipline

Local relationships are complements to overseas supplier knowledge. The internationalization literature's emphasis on network access [2] helps explain why an established supplier relationship cannot substitute for customer acquisition, domestic delivery capacity, or local professional services. The innovation cases

reviewed above also suggest that customer participation and complementary investments can shape service development [10]. The practical implication is to define ownership of each task and information handoff, including escalation when performance falls short.

Four adaptation decisions follow: document supplier checks, assign service responsibilities, separate service revenue from freight pass-throughs, and control customer credit and payment reconciliation. Partnering can provide access to specialized services, but it does not automatically eliminate the focal company's own authorization requirements. The selected role and actual conduct remain decisive. Likewise, the financial-security amounts described by regulators represent security obligations rather than simple estimates of startup expenditure. Treating them as the entire funding requirement would omit payroll, supplier payment timing, claims, technology, and customer credit exposure.

Digital integration should initially make responsibilities and exceptions visible. A usable record connecting purchase orders, shipment milestones, documents, and customer commitments may matter more than the breadth of a software portfolio. Recent qualitative evidence on logistics platforms supports examining coordination across providers [15]. Our framework does not assume that adopting an advanced platform or automation necessarily improves profitability. Investment should follow a demonstrated process problem and measurable service improvement.

Implementation can be organized around a limited pilot with explicit decision criteria. Before accepting a shipment, the company would identify its contractual role, verify the relevant counterparties, and establish which party supplies each required document. After delivery, it would reconcile the quoted service with actual staff effort, exceptions, and payment timing. Expansion would depend on repeatable service quality and adequate contribution after those costs. This sequence is an operationalization of the proposed framework, not a description of an implemented intervention or a substitute for measuring its outcomes.

5.3. Interpretation, limitations, and future tests

The original empirical contribution is the joint reading of trade-origin changes, regional industry trajectories, and role-specific institutional constraints. It exposes a useful tension: Florida retains freight-arrangement specialization, while establishment expansion underperforms the national benchmark. This combination is compatible with several explanations, including business consolidation, differences in establishment size, and regional demand composition. The available data cannot select among them or measure competitive intensity faced by an individual entrant.

Several limitations constrain inference. Nominal import values mix price, quantity, and product-composition changes and cover all goods rather than a logistics company's addressable customers. Recorded origins cannot identify indirect Chinese content. QCEW and CBP agree on slower Florida establishment growth but disagree on the employment-growth ranking over matched years; an unconditional claim of faster Florida employment growth would therefore be unjustified. CBP and NES-D partly address small-business coverage, but the short detailed nonemployer interval, distinct units, and disclosure protections cannot identify whether entrants, exits, or incumbent expansion generated aggregate change. Broader NES categories cannot substitute for a seven-year NAICS 488510 test. Florida's selection is context-driven; it is not evidence of national representativeness. The sources are combined analytically rather than linked at firm level.

The five-document institutional corpus is deliberately narrow and reflects guidance available after the statistical period. It neither reconstructs historical compliance costs nor estimates the effect of regulation on entry. The narrative review is also selective. Most importantly, no observation measures the adaptation process, customer retention, or profitability of the author's companies or another entrant. The framework should therefore be evaluated through prospective shipment and customer records, with a clearly defined starting service and

comparison period.

National authority histories establish a cycle in grant and revocation flows without dated addresses. They also show why initial authorization and maintaining active status are separate business-model concerns. However, the common May 2026 endpoint gives older cohorts longer exposure; reinstatement, transfer, and administrative changes preclude interpreting inactive status as business failure. The revised financial-responsibility provisions required compliance from January 16, 2026 [32], after the annual flow window. The 2022 - 2025 contraction cannot therefore identify their enforcement effect. Historical Florida populations still require contemporaneous addresses; a flat share of current Florida addresses across cohorts would not rule out offsetting migration and selection. Prospective company-level evidence should link authority maintenance, financial controls, service delivery, and customer outcomes to test P1 beyond formal requirements.

A subsequent study could record documentation defects, on-time delivery, claim incidence, gross contribution after service effort, and cash-conversion intervals before and after implementing specific routines. Comparable customer or shipment cohorts would help distinguish adaptation from changes in cargo mix. A stronger design would also account for selection into entry and for market shocks. Until such evidence is available, the present results support disciplined service design and explicit hypotheses about transfer, not claims of a proven superior business model.

6. Conclusion

Experience with Chinese suppliers is a potential input to U.S. logistics entry, but its value depends on local demand and organizational complements. National origin-share changes were not reproduced proportionately in Florida. The state retained freight-arrangement specialization, while its establishment expansion lagged nationally in both QCEW and CBP; relative employment growth depended on the source. Micro-establishments remained prevalent, without evidence of nonemployer-led expansion in the short detailed comparison. National broker grants contracted after 2022, and approximately one-fifth of the older first-grant cohort held active broker status in May 2026. Florida's substantial ocean-intermediary population supplies a further measure of an established service environment. These findings support assessing customer scope, operating role, partner responsibilities, and continuing financial controls. They identify conditions for testing adaptation and do not establish a proven company-level performance advantage.

Declarations

Funding: Awaiting author confirmation of funding sources and any funder role.

Author contributions: Ilia Eryashev is the sole named author. Allocation of CRediT roles and final scientific approval await his confirmation.

Competing interests: The author is the Founder and Head of X Logistic LLC, Florida, USA, and the Founder and CEO of Proximo Group, Russia. These companies operate in business areas related to the subject of this study.

Data availability: This study uses publicly accessible datasets from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the Federal Motor Carrier Safety Administration, and the Federal Maritime Commission. Source datasets and documentation are identified in References; observation periods, extraction criteria, and calculation methods are specified in Methods. All tables and figures are included in this manuscript. No confidential company data were used.

Appendix. Embedded robustness tables

Values are rounded for presentation; pp = percentage points; FL = Florida; US = United States. The endpoint comparisons and state benchmarks correspond to the three robustness tables described in Methods.

Table A1. Trade endpoints and sensitivity to excluding 2025.

Origin	End year	Imports \$bn	Value Δ 2017, %	End share %	Share Δ 2017, pp
World	2024	3,263.9	+39.5	100.00	+0.00
World	2025	3,414.5	+45.9	100.00	+0.00
China	2024	440.3	-12.8	13.49	-8.10
China	2025	308.7	-38.9	9.04	-12.55
Mexico	2024	503.1	+60.9	15.41	+2.05
Mexico	2025	534.3	+70.9	15.65	+2.28
Vietnam	2024	136.3	+193.3	4.18	+2.19
Vietnam	2025	193.9	+317.1	5.68	+3.69
India	2024	87.3	+79.8	2.67	+0.60
India	2025	103.8	+113.8	3.04	+0.96
Taiwan	2024	116.3	+174.1	3.56	+1.75
Taiwan	2025	201.4	+374.7	5.90	+4.08

Note: All changes are relative to 2017. The World share is 100 by definition. National 2017 import values (\$bn): World 2,339.6; China 505.2; Mexico 312.7; Vietnam 46.5; India 48.5; Taiwan 42.4. Source: Census [17]; own calculations.

Table A2. Industry endpoints and sensitivity to excluding 2025.

Area / NAICS	End year	Estab.	Estab. Δ , %	Jobs	Jobs Δ , %	LQ
FL / 488510	2024	2,462	+22.6	21,113	+29.5	1.22
FL / 493110	2024	888	+51.0	96,787	+205.9	0.84
FL / 4841	2024	7,517	+71.2	43,059	+30.3	0.62
US / 488510	2024	24,748	+32.7	262,763	+21.2	1.00
US / 493110	2024	17,324	+36.5	1,755,061	+94.4	1.00
US / 4841	2024	123,570	+55.3	1,059,478	+6.0	1.00
FL / 488510	2025	2,444	+21.7	20,878	+28.1	1.21
FL / 493110	2025	910	+54.8	100,530	+217.7	0.86
FL / 4841	2025	7,223	+64.5	41,902	+26.8	0.61
US / 488510	2025	24,835	+33.1	260,059	+20.0	1.00
US / 493110	2025	17,848	+40.6	1,764,202	+95.4	1.00
US / 4841	2025	119,084	+49.7	1,034,213	+3.5	1.00

Note: Changes are relative to 2017. NAICS 488510 = freight arrangement; 493110 = general warehousing; 4841 = general freight trucking. LQ uses all private employment; the national LQ is one by definition. Counts are operating locations and covered jobs. Source: QCEW [20,21]; own calculations.

Table A3. Florida specialization within state/DC distributions.

Year / NAICS	LQ basis	Florida LQ	Rank	Available states/DC	Median LQ
2017 / 488510	Jobs	1.24	9	49	0.62
2017 / 488510	Estab.	1.54	4	51	0.83
2017 / 493110	Jobs	0.58	34	51	0.95
2017 / 493110	Estab.	0.66	38	51	0.93

Continued on next page

Year / NAICS	LQ basis	Florida LQ	Rank	Available states/DC	Median LQ
2017 / 4841	Jobs	0.54	42	51	0.95
2017 / 4841	Estab.	0.79	32	51	0.99
2024 / 488510	Jobs	1.22	7	48	0.63
2024 / 488510	Estab.	1.33	5	51	0.80
2024 / 493110	Jobs	0.84	25	49	0.84
2024 / 493110	Estab.	0.69	33	51	0.83
2024 / 4841	Jobs	0.62	40	51	0.86
2024 / 4841	Estab.	0.82	30	51	0.94
2025 / 488510	Jobs	1.21	8	51	0.64
2025 / 488510	Estab.	1.35	6	51	0.81
2025 / 493110	Jobs	0.86	26	48	0.88
2025 / 493110	Estab.	0.70	31	51	0.83
2025 / 4841	Jobs	0.61	40	51	0.86
2025 / 4841	Estab.	0.83	29	51	0.92

Note: Rank 1 is the largest LQ; ties share the minimum rank. Availability excludes suppressed observations for the selected measure. Employment and establishment LQs each use their respective all-private-sector denominators. Source: QCEW [20,21]; own calculations.

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