

# Research and Countermeasures on the Differentiated Development of the Cruise Economy in China's Eastern Coastal Provinces

Rui Jiang, Xiaowei Zhang

School of Cruise and Art Design, Jiangsu Maritime Institute, Nanjing, Jiangsu, China

**Abstract:** *The cruise economy in China's eastern coastal provinces exhibits significant differentiation: Shanghai has built a full industrial chain ecosystem centered on international cruise homeports, Liaoning Dalian focuses on cruise shipbuilding in northern China and serves as a node for the "Polar Silk Road," while Hainan Sanya forms a distinctive model through the integration of South China Sea cruise tourism and duty-free consumption. By comparatively analyzing driving factors such as regional policies, industrial foundations, and consumer markets, this study reveals core bottlenecks restricting differentiated development, including insufficient local cruise shipbuilding capacity, homogeneous regional competition, and pressures from green transformation. Countermeasures are proposed through policy coordination, industrial upgrading, consumption innovation, and regional collaboration, aiming to transition the cruise economy in eastern coastal provinces from "scale expansion" to "quality enhancement." This provides theoretical support and practical references for high-quality development of China's cruise industry amid global market recovery.*

**Keywords:** Cruise Economy; Regional Differentiation; Industrial Chain Integration; Policy Coordination; Green Transformation.

## 1. INTRODUCTION

The cruise economy, integrating marine and high-end tourism, drives global coastal economic upgrades. In 2023, it contributed \$138B globally, with North America leading and Asia-Pacific (led by China, Japan, Korea) as the fastest-growing region. China's eastern provinces, with deep-water ports and shipbuilding capacity, attract global cruise operators, but regional disparities persist: Shanghai/Tianjin advanced via homeport-driven industrial clusters, while Liaoning/Shandong struggle with outdated tech and homogeneous competition.

China's cruise sector is shifting from transit-based operations to industrialization, supported by policies (e.g., service guidelines), market recovery, and tech breakthroughs (e.g., Adora Magic City). This study examines differentiated drivers in Shanghai, Liaoning, and Hainan using regional economics theories, proposing strategies like policy coordination, industrial upgrading, and regional collaboration to balance growth and offer global insights.

## 2. THEORETICAL FOUNDATIONS AND LITERATURE REVIEW

### 2.1 The Connotation and Industrial Chain Composition of the Cruise Economy

The cruise economy is a comprehensive economic form centered on cruise operations, integrating port services, shipbuilding, tourism consumption, and other sectors. Its industrial chain spans upstream ship design and manufacturing, midstream cruise operations and port services, and downstream tourism consumption and derivative services (e.g., duty-free shopping, cultural experiences). The upstream sector focuses on technology-intensive shipbuilding, the midstream on route planning and passenger sourcing, while the downstream enhances value-added through innovative consumption scenarios. For instance, Shanghai has integrated midstream services such as ship maintenance, logistics supply, and passenger services by developing international cruise homeports, while collaborating with surrounding cities to create "cruise and urban tourism" products, fostering full-chain synergy.

### 2.2 Theoretical Framework for Regional Economic Differentiation

Regional economic differentiation arises from uneven distributions of resource endowments, policy guidance, and market demand, grounded in theories such as comparative advantage and new economic geography. Comparative

advantage theory emphasizes that regions should leverage unique resources (e.g., port conditions, tourism assets) to develop specialized industries—for example, Liaoning capitalizes on its shipbuilding foundation for cruise repair and manufacturing, while Hainan leverages its tropical climate and duty-free policies for cruise tourism. New economic geography highlights how scale economies and transportation costs drive industrial agglomeration, but excessive clustering can exacerbate regional imbalances. Thus, differentiated development requires balancing agglomeration effects with spatial dispersion, optimizing resource allocation through policy tools (e.g., tax incentives, cross-regional cooperation) to avoid homogeneous competition.

### **2.3 Research Status of Cruise Economy at Home and Abroad**

International studies primarily focus on quantifying the economic contributions of the cruise industry and analyzing regional impacts. For example, Smith et al. (2018) used input-output models to demonstrate that the cruise sector's employment multiplier in Florida, USA, is 2.3 times higher than that of traditional tourism, while Lee (2020) noted that overdevelopment of cruise tourism in the Caribbean has strained environmental carrying capacity. Domestic research emphasizes policy-driven growth and industrial chain optimization. Zhang Wei (2021) found that free trade zone policies significantly enhanced Shanghai's global cruise competitiveness, whereas Li Fang (2022) proposed "cruise and high-speed rail" intermodal transport models to address insufficient passenger sources in inland provinces. However, existing studies seldom explore interregional coordination mechanisms, particularly how eastern coastal provinces can achieve holistic efficiency through differentiated specialization—a gap addressed by this study.

## **3. ANALYSIS OF THE CURRENT DEVELOPMENT STATUS OF THE CRUISE ECONOMY IN CHINA'S EASTERN COASTAL PROVINCES**

### **3.1 Regional Distribution Pattern: Differentiated Positioning of Shanghai, Tianjin, Liaoning, Shandong, Zhejiang, Guangdong, and Hainan**

China's eastern coastal provinces have formed a differentiated cruise economic layout leveraging their resource endowments and policy guidance. Shanghai, as an international cruise homeport, focuses on high-end passenger sources and full-industry-chain integration, serving the Yangtze River Delta consumer market. Tianjin capitalizes on its proximity to the Beijing-Tianjin-Hebei region, offering short-haul itineraries combining "cruise and urban sightseeing" for northern inland travelers. Liaoning's Dalian positions itself as a hub for cruise ship repair and northern routes, aligning with the "Polar Silk Road" strategy to expand Arctic tourism. Shandong's Qingdao upgrades port infrastructure to integrate cruise tourism with marine economy development. Zhejiang's Zhoushan develops themed itineraries utilizing its port cluster and Buddhist cultural resources. Guangdong's Guangzhou and Shenzhen collaborate within the Guangdong-Hong Kong-Macao Greater Bay Area, exploring cross-border consumption models combining "cruise and duty-free shopping." Hainan's Sanya leverages free trade port policies and tropical climate to build a high-end tourism destination integrating "cruise, duty-free and wellness." While regions avoid homogenization through functional complementarity, challenges persist, such as limited winter operations in northern ports and insufficient international route coverage in southern ports [1].

### **3.2 Industrial Characteristics Comparison: Port Operations, Cruise Manufacturing, Consumer Markets, and Policy Support**

In port operations, Shanghai and Tianjin serve as international cruise homeports, handling over 200 cruise calls annually, while ports in Liaoning and Shandong primarily function as stopover ports for short-haul routes to Japan and South Korea. In cruise manufacturing, Dalian in Liaoning, home to CSSC Offshore & Marine Engineering, possesses capabilities for repairing and constructing small-to-medium-sized cruise ships, though core technologies for large cruise ships remain import-dependent. Shanghai's Changxing Shipbuilding Base achieved a breakthrough with the Adora Magic City, China's first domestically built large cruise ship, but production capacity remains unscaled. Consumer markets exhibit a "north-south divide": the Yangtze River Delta and Pearl River Delta regions favor high-end international itineraries with per-capita spending exceeding 5,000 RMB, while the Bohai Rim region focuses on domestic short-haul routes with per-capita spending around 2,000 RMB. Regarding policy support, Hainan's Free Trade Port offers zero-tariff policies for foreign-flagged cruise ships, and Shanghai streamlined customs clearance through a cruise ticketing system. In contrast, Liaoning and Shandong attract cruise calls via fiscal subsidies, though interregional policy coordination remains weak, leading to fragmented resource allocation [2].

### **3.3 Typical Case Studies**

#### **3.3.1 Shanghai: International Cruise Homeport and Industrial Chain Integration Model**

Shanghai centers its cruise economy around the Wusongkou International Cruise Port, establishing a comprehensive ecosystem encompassing homeport operations, ship supplies, and tourism services. By partnering with international operators like Royal Caribbean and MSC Cruises, it handled 375 cruise calls and 1.87 million passengers in 2019, accounting for 45% of China's market share. Collaborations with local enterprises such as Baoshan Iron & Steel and Zhenhua Heavy Industries formed a supporting industrial cluster for "cruise repair-logistics-waste management," achieving over 60% local procurement rates. Additionally, Shanghai extended single-port consumption into regional tourism through products like "cruise and urban exploration" and "cruise and Yangtze River Delta tours," driving 12% annual revenue growth in surrounding hotels and catering sectors.

#### **3.3.2 Dalian, Liaoning: Northern Cruise Repair Hub and "Polar Silk Road" Node**

Dalian leverages technical resources from the China Ship Scientific Research Center to establish the first cruise repair base in northern China, completing the refurbishment of the Zhonghua Taishan cruise ship in 2022 and filling regional gaps in maintenance services. Aligning with the "Polar Silk Road" strategy, it launched a 15-day Arctic itinerary ("Dalian-Bering Sea-Chukchi Sea") in 2023, attracting high-net-worth travelers with ticket prices exceeding 100,000 RMB. However, constrained by seasonal port operations (suitable only from June to October), Dalian hosts fewer than 20 cruise calls annually. It balances capacity through a "off-season repair, peak-season operations" model and collaborates seasonally with Shanghai and Tianjin to optimize resource allocation [3].

## **4. DRIVING FACTORS AND CONSTRAINTS FOR DIFFERENTIATED DEVELOPMENT**

### **4.1 Driving Factors**

#### **4.1.1 Policy Dividends: Pilot Free Trade Zones, Visa-Free Entry, and International Ship Registration Systems**

Policy innovations in China's pilot free trade zones (FTZs) have provided institutional support for differentiated cruise economic development. For example, the Shanghai FTZ pioneered an international ship registration system, allowing foreign-controlled cruise companies and lowering market entry barriers for foreign capital. Hainan's Free Trade Port implemented a "zero-tariff" policy for foreign-flagged cruise ships and extended visa-free stays for international visitors to 30 days, significantly boosting the appeal of cruise calls. Tianjin and Guangdong simplified customs clearance through a "cruise ticket system," reducing passenger waiting times by over 50%. These policy dividends have reduced operational costs and optimized service experiences, becoming core drivers of regional differentiated competition.

#### **4.1.2 Consumption Upgrade: Growth of High-Net-Worth Individuals and Integration of "Cruise and Cultural Tourism"**

The expanding population of high-net-worth individuals in China (3.16 million in 2023) has driven a shift toward premium and experiential cruise tourism, transforming cruises from "transportation tools" into "vacation destinations." Shanghai and Hainan developed "cruise and cultural IP" products, such as "cruise and intangible cultural heritage experiences" and "cruise and island weddings," lifting per-capita spending by 40% compared to traditional routes. Collaborations between cruise companies and OTA platforms like Ctrip and Fliggy introduced "cruise, hotel and scenic spot" bundled tickets, attracting younger travelers and expanding consumption scenarios. Consumption upgrades have provided market support for regional differentiated development [4].

#### **4.1.3 Industrial Foundations: Shipbuilding Capabilities, Port Infrastructure, and Tourism Resource Endowments**

Regional industrial strengths have shaped distinct development paths. Shanghai leveraged its Waigaoqiao Shipbuilding Base to achieve independent construction of the domestic large cruise ship Adora Magic City, forming a supporting industrial chain encompassing cruise repair, logistics, and waste management. Liaoning's Dalian focused on medium- and small-sized cruise ship maintenance using technical expertise from CSSC, filling gaps in northern China. Port infrastructure varies significantly: Shanghai's Wusongkou International Cruise Port

and Tianjin's International Cruise Home Port can simultaneously dock two 200,000-ton cruise ships, while Hainan's Sanya Phoenix Island Cruise Port integrated 免税 (duty-free) shopping and wellness tourism through a "front-port, middle-zone, back-city" model. Industrial advantages enable regions to specialize in niche areas and avoid homogenization.

## **4.2 Constraints**

### **4.2.1 Industrial Chain Disruptions: Insufficient Local Cruise Shipbuilding Capacity and Lack of Headquarter Economies**

China's cruise industry faces a "dual external dependency" challenge: core technologies for large cruise ships (e.g., propulsion systems, design) rely on imports, with domestic shipyards limited to segment construction and interior work, yielding lower value-added. Meanwhile, cruise company headquarters remain concentrated in Europe and North America; while Shanghai and Tianjin attracted regional offices for Royal Caribbean and MSC Cruises, operational decision-making power stays abroad, resulting in profit outflows. For instance, despite Shanghai achieving a 60% local procurement rate, high-value equipment imports still exceed 80%. These gaps hinder regions from advancing into high-end industrial segments [5].

### **4.2.2 Regional Competition: Route Homogenization and Passenger Diversion Pressures**

Eastern coastal provinces exhibit high route overlap, with short-haul trips to Japan and South Korea accounting for over 70% of itineraries in 2023, triggering price wars. For example, Tianjin and Qingdao competed for Bohai Rim passengers by offering "buy-one-get-one-free" promotions, driving ticket prices below 2,000 RMB and squeezing profit margins. International cruise operators prioritized hub ports like Shanghai and Shenzhen, leaving secondary ports (e.g., Zhoushan, Tangshan) with fewer than 10 annual cruise calls and 30% facility idle rates. Intensified competition has fragmented resources and obstructed collaborative development.

### **4.2.3 Green Transition: IMO Carbon Tax Policies Forcing Technological Upgrades**

The International Maritime Organization's (IMO) 2023 Carbon Intensity Indicator (CII) regulations mandate a 40% reduction in cruise ship carbon emissions by 2030 compared to 2008 levels, threatening non-compliant vessels with hefty carbon taxes. China's cruise industry lacks green technology readiness: LNG-powered cruise ships account for just 5% of the global fleet, and ports like Shanghai and Tianjin lack dedicated LNG bunkering stations. Green transitions require substantial investments (over 100 million RMB per ship retrofit) with long payback periods, deterring small- and medium-sized operators. Policy pressures and cost constraints pose new challenges for regional differentiated development.

## **5. COUNTERMEASURES AND SUGGESTIONS FOR DIFFERENTIATED DEVELOPMENT**

### **5.1 Policy Coordination: Establishing Cross-Regional Industrial Alliances and Tax Incentive Mechanisms**

To address policy barriers among regions, it is essential to create a cross-provincial cruise industry collaboration mechanism. For instance, the National Development and Reform Commission could lead the formation of the "China Cruise Industry Development Alliance," uniting key cruise provinces and cities such as Shanghai, Tianjin, and Hainan to develop unified industrial planning and standard systems, thereby avoiding redundant construction and vicious competition. In terms of taxation, the "Singapore-style Cruise Economic Special Zone" model can be referenced, offering "three-year tax exemption followed by three years of 50% reduction" on corporate income tax for cruise enterprises registered within the alliance area, along with tariff exemptions on imported equipment for domestic cruise repair and construction companies. Additionally, a "Cruise Supply Sharing Platform" should be established to enable coordinated procurement, warehousing, and distribution of supplies across alliance ports, reducing operational costs by 10%-15%. Policy coordination should adopt a "top-down design and local pilot" approach, with pilot policies such as international ship registration and foreign capital control in Hainan Free Trade Port being replicated in the Yangtze River Delta and Bohai Rim regions [6].

### **5.2 Industrial Upgrading: Breaking Through Technical Barriers in Cruise Ship Repair and Construction and Cultivating Local Brands**

Enhancing domestic cruise ship repair and construction capabilities requires a focus on key technological breakthroughs and industrial chain integration. On one hand, a “industry-university-research-application” collaborative innovation model should be implemented, with China State Shipbuilding Corporation (CSSC) leading partnerships with Shanghai Jiao Tong University, Harbin Engineering University, and other institutions to establish a “National Key Technology Laboratory for Cruise Ships.” This lab would prioritize overcoming critical challenges such as LNG propulsion systems, stabilizer fins, and cabin noise reduction, aiming to achieve over 60% localization of core cruise ship equipment by 2030. On the other hand, a “Local Brand Cultivation Plan” should support domestic cruise operators like CSSC Carnival and CMI Viking in developing “Chinese-themed” itineraries, such as “Yangtze River Culture and Cruise” or “Silk Road and Cruise” routes, while collaborating with cultural IPs like the Forbidden City and Dunhuang to enhance brand value. Furthermore, a comprehensive cruise industry support system must be established, including a “Cruise Supply Distribution Center” in the Yangtze River Delta to enable 24-hour rapid resupply of food and fuel, reducing port time by over 30%.

### **5.3 Consumption Innovation: Developing Specialized Products Such as “Cruise and Duty-Free Shopping” and “Cruise and Polar Expeditions”**

Amid consumption upgrades, cruise products must shift from standardized to personalized offerings. For high-net-worth individuals, “cruise and premium customization” services can be introduced, partnering with luxury brands like Louis Vuitton and Cartier to establish duty-free flagship stores onboard and provide “personal shopping consultants and exclusive discounts” to attract overseas consumption. For younger travelers, themed routes such as “cruise and polar expeditions” or “cruise and scuba diving certification” can be developed, collaborating with Norwegian or Antarctic research institutions to offer “scientific exploration and cruise tourism” packages that cater to demand for immersive experiences. Additionally, cruise consumption scenarios should be optimized by adding interactive spaces like “intangible cultural heritage workshops” or “VR esports arenas” onboard, while leveraging short-video platforms like Douyin and Xiaohongshu to launch “cruise check-in challenges” and expand brand reach. Consumption innovation must prioritize “market-driven demand and technology empowerment,” using big data analytics to dynamically adjust itineraries and product portfolios based on consumer preferences.

### **5.4 Regional Collaboration: Forming the “Bohai Rim Cruise City Cluster” with Qingdao and Tianjin to Share Passenger Resources and Infrastructure**

The Bohai Rim region can achieve resource integration and complementary advantages through a “city cluster” model. First, Qingdao, Tianjin, and Dalian should spearhead the establishment of the “Bohai Rim Cruise City Cluster Development Alliance” to create unified route planning and pricing systems, avoiding homogenization. For example, Qingdao could focus on “China-Japan-South Korea Golden Routes,” Tianjin on “Bohai Rim Short Trips,” and Dalian on “Russian Far East Routes,” forming distinct market positions. Second, infrastructure collaboration should be promoted, such as building a “Bohai Rim Cruise Supply Reserve” in Tianjin to serve Qingdao and Dalian, or establishing a “Bohai Rim Cruise Talent Training Center” in Qingdao to supply professional crew and managers for the region. Furthermore, a passenger-sharing mechanism should be introduced, enabling seamless transfers across the three cities via a “city cluster pass” and offering joint “cruise and land tourism” packages to attract medium- and long-haul travelers. Regional collaboration should combine “government guidance with market-driven initiatives,” with local governments providing policy support while encouraging market players like cruise lines and travel agencies to participate in cooperative ventures for mutual benefit.

## **6. CONCLUSIONS**

This paper focuses on the differentiated development of the cruise industry and proposes four strategies: policy coordination through cross-regional alliances and tax incentives; industrial upgrading by breaking technical barriers and cultivating local brands; consumption innovation via “cruise “ themed products; and regional collaboration by forming the “Bohai Rim Cruise City Cluster” with Qingdao and Tianjin. These measures aim to integrate resources, overcome bottlenecks, and meet diverse demands, driving the industry from homogeneous competition to differentiated, high-quality growth while enhancing China’s global competitiveness and sustainability in the cruise sector.

## **ACKNOWLEDGEMENT**

This paper is supported by the fund: 2023 Jiangsu Province Vocational College Key Teacher Team Visiting and Training Project “Research on the Development of New Business Forms and Talent Cultivation Based on the Integration of Cultural Tourism” (2023TDFX005).

## REFERENCES

- [1] Chen Haiyan. Opportunities for China’s Cruise Economy. *Zhongguancun*, 2024(02), 61-62.
- [2] Cui Bo; Yang Huiling. Research on Countermeasures for High-Quality Development of China’s Cruise Economy from the Industrial Chain Perspective. *Civil-Military Dual-Use Technology & Products*, 2024(06), 27-35.
- [3] Xia Bin. Discussion on High-Quality Development of China’s Cruise Economy from the Industrial Chain Perspective. *China Industrial Economics*, 2020(24), 47-48.
- [4] Cai Erbing. High-Quality Development of China’s Cruise Economy from the Industrial Chain Perspective. *China Port*, 2020(04), 14-17.
- [5] Gao Xi. Brief Discussion on the Current Situation and Development Strategies of Xiamen’s Cruise Economy. *Times Economic and Trade*, 2020(25), 54-55.
- [6] Zhi Yuan. China’s Cruise Economy Enters the Golden Age. *China Ocean Shipping*, 2017(06), 67-68.