

全球港口城市竞争力

The Competitiveness of Global Port-Cities

——中国·上海案例

—The Case of Shanghai, China



经济合作与发展组织



BETTER POLICIES FOR BETTER LIVES



上海国际航运研究中心

Shanghai International Shipping Institute

真虹, Olaf Merk, 赵楠, 李菁, 等著

 上海浦江教育出版社
Shanghai Pujang Education Press

上海高校知识服务平台建设项目资助(ZF1209)

Subsided by Construction Project of Shanghai University Knowledge Service Platform (ZF1209)

全球港口城市竞争力

The Competitiveness of Global Port-Cities

——中国·上海案例
— The Case of Shanghai, China

真虹, Olaf Merk, 赵楠, 李菁, 等 著

© OECD 2014

图书在版编目(CIP)数据

全球港口城市竞争力: 中国·上海案例: 汉英对照/真虹等著. —上海:
上海浦江教育出版社有限公司, 2014

ISBN 978-7-81121-324-9

I. ①全… II. ①真… III. ①港口经济—经济发展—案例—上海市—
汉、英 IV. ①F552.751

中国版本图书馆 CIP 数据核字(2014)第 220460 号

上海浦江教育出版社出版

社址: 上海海港大道 1550 号上海海事大学校内 邮政编码: 201306

电话: (021)38284910/12(发行) 38284923(总编室) 38284910(传真)

E-mail: cbs@shmtu.edu.cn URL: <http://www.pujiangpress.cn>

上海市印刷十厂有限公司印装 上海浦江教育出版社发行

幅面尺寸: 169 mm × 239 mm 印张: 13.5 字数: 228 千字

2014 年 11 月第 1 版 2014 年 11 月第 1 次印刷

责任编辑: 丁慧 封面设计: 孔庆虎

定价: 48.00 元

前 言

本书是根据 OECD(经济合作与发展组织)港口城市项目的第十项研究案例(中国·上海)内容编写而成的。港口城市项目是 OECD 区域发展系列工作报告的一部分,旨在分析港口对城市的影响,提出强化港口发展对城市积极影响的政策。

《全球港口城市竞争力——中国·上海案例》由 OECD 和上海国际航运研究中心(SISI)共同完成。OECD 方面,研究由 Olaf Merk(港口城市项目负责人)主持,李菁(OECD 顾问)和 César Ducruet(法国国家科学研究中心,巴黎第一大学)参与。SISI 方面,研究由真虹(SISI 秘书长,上海海事大学教授)负责,赵楠(SISI 港口研究室主任,上海海事大学讲师)承担主要编写工作,徐明瑛(SISI 国际合作部主任,上海海事大学讲师)、谢文卿(SISI 港口研究室研究员)、杜旭丰(SISI 港口研究室研究员)和王静改(SISI 港口研究室研究员)参与。

本书是 2013 年第 23 号 OECD 区域发展工作报告的再印出版。

FOREWORD

The book is based on the tenth in a series of case studies within the OECD Port-Cities Programme (Shanghai, China). It is part of a series of OECD Working Papers on Regional Development, which attempts to identify the impact of ports on their territories and possible policies to increase the positive impacts of ports on their territories.

The Competitiveness of Global Port-Cities: The case of Shanghai, China was written in partnership of the OECD with the Shanghai International Shipping Institute (SISI). From the OECD side, the project was led by Olaf Merk (Administrator OECD Port-Cities Programme), with the participation of LI Jing (Consultant OECD) and César Ducruet (CNRS – Université de Paris I Panthéon – Sorbonne). The project team from the SISI side was led by ZHEN Hong (Secretary-General of SISI and professor at Shanghai Maritime University); deputy leader was ZHAO Nan (Director of Port Research Department of SISI and lecturer at Shanghai Maritime University); members of the project team were XU Mingying (Director of International Cooperation Department of SISI, lecturer at Shanghai Maritime University), XIE Wenqing (a member of Port Research Department of SISI), DU Xufeng (a member of Port Research Department of SISI), WANG Jinggai (a member of Port Research Department of SISI).

This book is a reprint of the OECD Regional Development Working Paper No. 2013/23, the original version of this publication.

摘要和关键词

摘要：通过评估上海港发展现状和政策，分析港口对城市的影响。在回顾过去数十年上海港发展情况的基础上，归纳港口发展的主要贡献因素，研究和量化分析港口对经济和环境的影响，评价港口管理、交通和经济发展、环境、空间规划等方面的政策。基于研究的主要发现，提出提升上海港口绩效、强化港口积极影响的建议。

关键词：港口；区域发展；区域增长；城市发展；区域内贸易；交通运输

ABSTRACT AND KEY WORDS

Abstract: To offer an evaluation of the performance of the port of Shanghai, an analysis of the impact of the port on its territory and an assessment of policies in this field. It examines port performance over the last decades and identifies the principal factors that have contributed to it. The effect of the port on economic and environmental questions is studied and quantified where possible. The major policies governing the port are assessed, along with policies governing transport and economic development, the environment and spatial planning. Based on the findings, recommendations are proposed with a view to improving port performance and increasing the positive effects of the port of Shanghai.

Key words: port; regional development; regional growth; urban development; inter-regional trade; transportation

目 录

概述	2
第 1 章 港口发展现状分析	6
1.1 上海港发展现状	6
1.1.1 港口吞吐量增长情况	6
1.1.2 港口货种结构特点	24
1.1.3 港口集疏运体系发展	30
1.1.4 港口生产效率	36
1.1.5 上海港内河码头	44
1.2 上海港与周边主要港口(长三角沿海地区)协同性分析	50
1.2.1 港口功能定位比较	50
1.2.2 货源腹地重叠情况	60
1.2.3 远洋航线及港口重叠情况	62
1.2.4 港口间竞争现状	68
1.2.5 港口间合作现状	74
第 2 章 港口对城市发展的影响分析	80
2.1 港口对城市社会经济影响分析	80
2.1.1 港口相关产业对城市就业及经济的直接贡献	80
2.1.2 港口相关产业对城市就业及经济的间接与波及贡献	92
2.2 港城交界面	102
2.2.1 土地利用与空间规划	102
2.2.2 交通连接	110

CONTENTS

EXECUTIVE SUMMARY	3
1 PERFORMANCE	7
1.1 Performance of Shanghai Port	7
1.1.1 Growth in Throughput	7
1.1.2 Cargo Structure	25
1.1.3 Collection, Distribution and Transport	31
1.1.4 Port Cargo Handling Efficiency	37
1.1.5 Inland River Ports	45
1.2 Synergies	51
1.2.1 Functional Orientations	51
1.2.2 Overlaps in Hinterland	61
1.2.3 Overlaps in International Shipping Routes and Correlation of Ports	63
1.2.4 Competition	69
1.2.5 Cooperation	75
2 IMPACT	81
2.1 Socioeconomic Impact	81
2.1.1 Port-related Employment and Value Added	81
2.1.2 Indirect and Induced Employment and Value Added	93
2.2 Port-City Interface	103
2.2.1 Land Use and Spatial Layouts	103
2.2.2 Access	111

2.3 港口对城市环境的影响分析	114
2.3.1 船舶排放的影响	114
2.3.2 港区运作的影响	116
2.3.3 货物运输的影响	120
第3章 港口政策与管理	122
3.1 港口发展战略规划	122
3.2 港口与城市协调发展	128
3.2.1 优化集疏运体系	128
3.2.2 城市空间与港口协调发展	134
3.2.3 绿色港口政策	144
3.3 港口作为大都市发展的有效资产	150
3.3.1 国际航运中心的建设	150
3.3.2 教育、科研与创新	174
3.3.3 航运文化和邮轮旅游	178
3.4 港口管理体制机制	184
3.4.1 内部结构	184
3.4.2 与城市的关系	188
3.4.3 经营管理体制	190
参考文献	198
后记	204

2.3 Environmental Impact 115

2.3.1 Discharge by Vessels 115

2.3.2 Port Operations 117

2.3.3 Cargo Transport 121

3 POLICIES AND GOVERNANCE 123

3.1 Strategic Planning 123

3.2 Coordinating Port-City Relations 129

3.2.1 Optimising Cargo Handling and Distribution 129

3.2.2 Spatial Development of Port-City 135

3.2.3 Green Port Policies 145

3.3 Assets for Metropolis Development 151

3.3.1 Shanghai as International Shipping Center 151

3.3.2 Education, Research and Innovation 175

3.3.3 Shipping Culture and Cruise Travel 179

3.4 Port Governance 185

3.4.1 Organizational Structure 185

3.4.2 Port-City Relationship 189

3.4.3 Port Operation and Management 191

REFERENCES 199

AFTERWORD 205

全球港口城市竞争力

The Competitiveness of Global Port-Cities

——中国·上海案例

— The Case of Shanghai, China

概述

上海港口发展惊人。过去 10 年,上海港吞吐量已增长 2 倍多,2012 年达到 7.36 亿 t。2008—2012 年,尽管存在经济危机负面影响,但上海港货物吞吐量仍以年均 4.9% 的速度保持稳定增长。2010 年起,上海港跃升为世界第一大集装箱港口,2012 年集装箱吞吐量达 3 250 万 TEU,创历史新高。上海港作业效率高,港口通达性强,体现为船舶周转时间短(过去 10 年来大幅提升)、与长江沿岸内陆港口联动范围广。位于洋山的新港区(通过一座长为 31 km 的跨海大桥与上海城区陆地相连)开发,缓解了港口拥堵,同时让出原有港口用地支持城区改建。

港口发展对上海城市经济贡献巨大。2010 年,港口相关产业对上海经济总增加值贡献(包括直接、间接和波及贡献)约为 3 550 亿元,占上海 GDP 总量的 21%;港口相关产业直接就业人数达 230 万人,占城市就业总人口的 21%。近 40% 的经济贡献为直接贡献,港口间接经济贡献主要来自于航运、航运金融和货物装卸。

环境可持续发展成为上海港面临的一大挑战。上海正努力发展成为绿色生态港口城市。当局加强对上海港散货码头的管理,制定降低 CO₂ 排放、减少能源消耗和废物废水排放的目标。有助于实现节能减排目标的措施可能包括改进设备(如 RTG 等)、使用码头岸电、优化集卡拖车运输体系等。

EXECUTIVE SUMMARY

Shanghai has witnessed spectacular port development. Its port volume almost tripled over the last decade to 736 million tonnes in 2012. Despite the impact of the global crisis, Shanghai has experienced steady growth in cargo output: on average 4.9% per year over 2008 – 2012. Since 2010, Shanghai is the world's largest container port, with recorded volume of 32.5 million containers (TEUs) in 2012. Shanghai is an efficient and well-connected port: it has low vessel turnaround times (improved significantly over the last decade) and an extensive network of connections with inland ports along the Yangtze. New port development located in Yangshan, an offshore port connected by a 31-kilometre bridge, has eased port-related congestion and freed up old port land for urban redevelopment.

This port development has substantially contributed to the urban economy of Shanghai. The total value added generated by the port-related sectors (direct, indirect and induced) was approximately RMB 355 billion in 2010, which represented 21% of Shanghai's GDP. The total port-related employment was 2.3 million jobs, accounting for 21% of total employment in Shanghai. Approximately 40% of these economic impacts were direct economic effects. Indirect economic impacts of the port were largest in shipping, ship finance and cargo handling.

One of Shanghai's main challenges is environmental sustainability. Shanghai is striving to develop itself as a green and ecological port city. Management of bulk terminals is currently being improved and the government has set targets for reduction of CO₂ emissions, energy consumption, waste and waste-water. Measures that should help to achieve these targets include retrofitting equipment (such as RTCs), implementation of onshore power, operation of "container truck-and-trailer transport platform".

机遇在握,上海港或成为全球最大转运枢纽中心。上海港虽然是全球第一大集装箱港口,但它并非是通达性最佳的港口。新加坡和香港在港口网络中处于更中心的位置,堪称全球主要港口枢纽中心。这其中的原因与上海港相对较小的水水中转比例(货物吞吐量的 1/5)有关。港口发展战略的三大支柱之一是让上海港成为东北亚地区主要转运枢纽。洋山离岸港区是发展转运的绝佳地点。按照目前的发展速度,到 2020 年,洋山港吞吐能力可能扩大至 2 500 万 TEU。沿海捎带试点将促进上海转运中心发展。

上海可发展成为全球领先航运服务中心。这一目标是上海市政府发展战略的一部分。2009 年,上海市政府提出“两个中心”建设,将上海打造成为国际金融中心和国际航运中心。为了推动上海国际航运中心的发展,上海市政府实施了一系列的政策和措施,涉及税收和通关、船舶管理、航运经纪、航运金融、航运教育和研究等。1996 年,上海航运交易所成立;2009 年,上海集装箱运价指数发布,也是扶持性政策措施得以实施的体现。在与港口相关的诸多自由区内开展海运业务也获得积极鼓励。

上海或将成为中国首个国际自由港。随着中国新一轮改革开放步伐的加快,2013 年 10 月中国(上海)自由贸易试验区应运而生。区内货物、资本的自由流通等管理措施的推出使上海对外开放层次得到进一步提升,同时管理型政府向服务型政府的职能转变也将使上海更具国际吸引力。

Shanghai has the opportunity to become one of the world's largest trans-shipment hubs. Although it is the world's largest container port, Shanghai is not the best-connected port; Singapore and Hong Kong play a more central role in port networks, and can be considered the main global port hubs. This is related to the relatively limited share (one-fifth of the port volume) of ship-to-ship trans-shipment in Shanghai. One of the three pillars in the port strategy is to develop Shanghai as the main trans-shipment hub in Northeast Asia. The offshore port area of Yangshan is well positioned for trans-shipment; with ongoing expansion, its capacity will reach 25 million TEU by 2020. Lifting the national cabotage restrictions would help to develop Shanghai as a trans-shipment hub.

Shanghai could develop into a world leading maritime services center. This goal is part of a larger strategy of the Shanghai government, the "Two Center" initiative, launched in 2009. This aims to develop Shanghai as an international center for finance and shipping. Policies to promote Shanghai as a shipping center include preferential tax and customs policies, ship management, shipping brokerage, shipping finance, shipping education and research, as well as the Shanghai Shipping Exchange, established in 1996, and the Shanghai Containerised Freight Index, launched in 2009. Maritime businesses are encouraged to locate in the various free zones related to the port.

Shanghai is to rise as the first international free port in China. As part of China's new round of reform, China (Shanghai) Pilot Free Trade Zone was established in October 2013. Facilitating measures such as free flow of cargo and capital within the Zone, have intensified the opening up of Shanghai to the outside world while the transformation of government into a more service-oriented role aims to improve the city's international appeal.

第1章 港口发展现状分析

1.1 上海港发展现状

1.1.1 港口吞吐量增长情况

上海港位于长江三角洲前缘,居中国大陆海岸线的中部,扼长江入海口,处长江东西运输通道与海上南北运输通道的交汇点,是中国主要的沿海枢纽港。在过去10年中,中国经济高速增长,上海港凭借优越的地理位置和得天独厚的海岸线资源实现快速发展。货物吞吐量从2002年的2.64亿t增长到2012年的7.36亿t,增幅达到178.96%。其中,外贸货物吞吐量和集装箱吞吐量增长尤为迅速,2012年较2002年分别增长238.32%和277.72%。2005—2011年,上海港货物吞吐量已连续7年保持世界第一,而集装箱吞吐量也在2010年超越新加坡,连续3年位居世界第一(见表1.1)。

表 1.1 上海港历年货物与集装箱吞吐量

年份	货物吞吐量/ 万 t	外贸货物吞吐量/ 万 t	集装箱吞吐量/ 万 TEU
2002	26 384	10 609	861.2
2003	31 621	12 968	1 128.3
2004	37 896	15 836	1 455.4
2005	44 317	18 492	1 808.5
2006	53 748	21 268	2 171.9