



贸易、环境与城市化

基于开放经济的理论、模型与实证研究

Trade, Environment and Urbanization
Research on Theory, Model and Empirical
Based on the Opening Economy

刘耀彬 / 著



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摘 要

当前,协调贸易、环境与城市化是全球共同面对的富有挑战性的科学热点问题:一方面,贸易自由化在促进经济发展、技术进步和提高福利的同时,也给人类赖以生存的生态环境带来了史无前例的冲击,环境问题日益引起世界各国的关注,并成为国际经济和政治领域内的焦点之一;另一方面,贸易与城市化是可持续发展过程中的两个重要议题,随着人们对全球气候变暖的关注和对温室气体减排的要求,贸易、环境与城市化的协调发展正日益受到各国政府及相关机构的高度重视。而今,中国在国际贸易中扮演着愈加重要的角色,中国高速的城市化发展在世界范围内备受瞩目,中国的环境问题也备受国际组织的高度关注。“互利共赢的开放战略”、“健康的城市化道路”和“资源节约、环境友好的两型社会构建”是国家“十一五”规划强调的战略重点,而“优化格局,促进区域协调发展和城镇化健康发展”、“绿色发展,建设资源节约型、环境友好型社会”和“互利共赢,提高对外开放水平”已成为国家“十二五”规划的三个战略发展方向,这表明在世界经济走势情景下,如何既促进区域的协调发展和城镇化健康发展,又能够进行生态文明建设和推进循环经济的发展正成为我国中长期规划发展中必须破解的难题。因此,基于开放经济的背景,将贸易开放、环境约束与城市化问题纳入一个整体的研究框架,分析其互动效应,构建出开放经济下的贸易、环境与城市化的传导机制和内生增长关系模型,对其协调发展进行政策评价和情景分析,并提出相应的对策建议,无疑具有很强的理论意义与现

实价值。

本书坚持规范分析与实证研究相结合的原则,遵循现象分析→理论提炼→模型构建→实证研究→政策应用以及“从封闭到开放”的研究思路。本书在回顾相关理论和系统梳理国内外文献的基础上主要探讨如下问题:第一,从开放经济下的贸易、环境与城市化的互动效应现象入手,利用静态均衡、市场均衡和优化方法对贸易与环境、贸易与城市化、环境与城市化之间的关系进行分析;第二,在对开放经济下的贸易、环境与城市化传导机制的概念与内涵进行界定和阐释的基础上,利用两两互动效应分析结果,分别以贸易、环境和城市化作为工具目标,采用经济学的比较静态均衡分析方法分析不同组合条件下的传导过程,进而采用联立方程组建模思想构建出开放经济下的贸易、环境与城市化的传导机制模型;第三,利用包含环境要素的开放经济下的内生经济增长模型、城市化二元结构模型以及城市化与经济增长关系模型,通过市场均衡分析和优化分析构建出开放经济条件下的贸易、环境与城市化三者之间的内生增长关系模型;第四,基于协同学技术构建出开放经济条件下的贸易、环境与城市化的协调发展评价模型,并基于情景分析方法建立情景模拟模型;第五,从这些理论出发,基于时间序列和面板数据,分别采用时间序列计量方法、面板联立方程组、面板动态方法、协同分析技术和情景分析方法从四个方面对长三角(16个城市)的贸易、环境与城市化两两互动效应、三者传导机制与内生增长关系、协调发展类型和情景发展模式进行了实证检验与分析:一是基于VAR模型的时序系统分析技术,实证考察了1990~2009年长三角(16个城市)的贸易与环境、贸易与城市化、环境与城市化两两之间的长期均衡关系、Granger因果关系以及相互动态影响效应;二是采用面板计量模型和面板联立方程组估计方法,实证检验了1990~2009年长三角(16个城市)的贸易、环境与城市化三者之间的长期均衡关系以及传导机制;三是采用面板计量模型和面板FMOLS和DOLS估计方法,实证检验了1990~2009年长三角(16个城市)的贸易、环境与城市化三者之间的内生增长关系;四是基于协调评价模型对2009年长三角(16个城市)的贸易、环境与城市化协调状况进行了评价和分类,并基于情

景分析方法对长三角（16个城市）协调情景进行了政策模拟，由此提出了开放经济下的贸易、环境与城市化协调发展的政策建议。最后，选取美国和欧盟作为参考对象，在总结其处理贸易与环境关系、贸易与城市化关系以及城市化与环境关系的措施和经验的基础上提出启示，以期为中国开放经济下的贸易、环境与城市化协调发展提供政策建议。

Abstract

Nowadays, the problem of trade, environment and urbanization is a challenging scientific hot issue that faced equally by all nations. On the one hand, trade liberalization brings an unprecedented impact on our living environment as well as boosts the economic development, promotes technology progress and improves benefits. The issues of environment increasingly attract worldwide attention and become one of the focuses in international economy and political field. On the other hand, trade and urbanization are two important issues in the process of sustainable development. The coordinated development of trade, environment and urbanization is highly valued by governments and relevant institutions, as people pay more attention to global warming and request the reduction of greenhouse gas emission. At the present, China plays a more and more important role in international trades, and its high-speed development of urbanization has got worldwide attention, which also makes China's environmental problems be much concerned about by the international organizations. "Win-win strategy of opening-up", "Healthy urbanization" and "Construction of resource-conserving and environment-friendly society" are key strategies emphasized by "the Eleventh Five-Year Plan", and "Optimization pattern, regional coordinating development promotion and healthy development of urbanization", "Green development, building resource-conserving and environment-friendly society",

“Improve opening-up level and win-win” have become three strategic development directions of “the Twelfth Five-Year Plan”, which suggests that under the influence of world economy trends, how to promote regional coordination, develop healthy urbanization, construct ecological civilization and promote the development of recycle economy at the same time are becoming a key problem that must be solved in China’s long-term planning. Accordingly, this paper put trade, environment and urbanization into a analytical framework, to analyze their interaction effect, to build transmission mechanism and endogenous growth relationship model, as well as to evaluate their coordinating development and to simulate scenario. We put forward the corresponding suggestions for the coordinating development, which undoubtedly has significant theoretical and practice value.

The book keeps on the principle of combining normative analysis and empirical research, and the study thought line is from the phenomenon description to theoretical analysis, then to construct models contracting and empirical study, last to policy suggestions.

Firstly, with the description of the interactive effect of trade, environment and urbanization under the open economy, the book uses static equilibrium, market equilibrium and optimization method to analyze the relationship between trade, environment and urbanization.

Secondly, with interpreting the concept of transmission mechanism and referring to the interactive effect analyzing results, the book employs comparison equilibrium analysis method to analyzing the different conductive processes using trade, environment and urbanization as tool targets respectively. And then, the book uses the simultaneous equations modeling thought to construct the transmission mechanism model of opening economy trade, environment and urbanization.

Thirdly, the book takes the advantages of the opening economy endogenous

growth model which contain environment element, the opening economy urbanization model and the relationship model of urbanization and economic growth to set up the endogenous growth relationship model between opening economy trade, environment and urbanization through market equilibrium and optimization analysis.

Fourthly, the book uses the synergetic technology to build the coordinated development evaluation model of opening economy trade, environment and urbanization. Furthermore, the book applies scenario analysis method to establish scenario simulation model.

Fifthly, the book employs the above analyzing framework and theories, based on time series and panel data, to use time series metering method, panel simultaneous equations, panel dynamic method, collaborative analysis technology and scene analysis method respectively to make empirical test on the interactive relationship of trade, environment and urbanization, their transmission mechanism, endogenous growth relationship, coordinated growth and scene development of Yangtze River delta (16 cities). First of all, the book made on the timing system analysis technology of VAR model to inspect the long-term equilibrium relationship, Granger causal relationship and dynamic influence effects of trade, environment and urbanization between 1990 – 2009 in Yangtze River delta (16 cities). Then, the book made use of panel measuring model and panel simultaneous equations estimation method to investigate the long-term equilibrium relationship and transmission mechanism between trade, environment and urbanization. And then, next, the book uses panel measuring model, panel FMOLS and DOLS estimation method to examine the endogenous growth relationship of trade, environment and urbanization for then during 1990 – 2009. At last, the book evaluates and classifies the coordination situations, and bases on scenario analysis method to simulate them. According to that, the book summarizes the conclusions and puts forward the policies and proposals for

coordinated development in Yangtze River delta.

Lastly, in order to make the theory to normative practice, the book chooses U. S. A. and EU as the most typical objects to compare their implemented policies. By summarizing the useful experiences and measures which they aim to coordinate the relationships between urbanization and environment, international trade and urbanization, international trade and environment, the book expects to give China policy suggestions to contribute to the coordinated development of the relationships among international trade, environment and urbanization.

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