"Statistical Model and Regional
Economic Development in West China:
Trade, Investment and the WTO"
International Conference
Thesis Collection

"统计模型与中国西部区域经济开发 贸易、投资和WTO"

国际会议论文集

王文举 纪宏 主编

北京市品牌专业建设专业,北京市属市管高等学校人才强教计划资助

"Statistical Model and Regional Economic Development in West China: Trade, Investment and the WTO" International Conference Thesis Collection

"统计模型与中国西部区域经济开发: 贸易、投资和WTO"



图书在版编目(CIP)数据

"统计模型与中国西部区域经济开发:贸易、投资和 WTO"国际会议论文集: 英文/王文举,纪宏主编. 一北京:首都经济贸易大学出版社,2007.11 ISBN 978-7-5638-1390-2

I. 统··· II. ①王··· ②纪··· III. ①统计模型—国际学术会议—文集—英文 ②西部大开发(中国)—国际学术会议—文集—英文 IV. C8-53 F127-53 中国版本图书馆 CIP 数据核字(2006)第 122745 号

"统计模型与中国西部区域经济开发:贸易、投资和 WTO"国际会议论文集 王文举 纪 宏 主编

出版发行 首都经济贸易大学出版社

地 北京市朝阳区红庙(邮编100026)

电 话 (010)65976483 65065761 65071505(传真)

网 址 http://www.sjmcb.com

E - mail publish @ cueb. edu. cn

经 销 全国新华书店

照 排 首都经济贸易大学出版社激光照排服务部

印 刷 北京永生印刷有限责任公司

开 本 787 毫米×980 毫米 1/16

字 数 504 千字

印 张 26.25

版 次 2007年11月第1版第1次印刷

书 号 ISBN 978 -7 -5638 -1390 -2/C ⋅ 49

定 价 36.00 元

图书印装若有质量问题,本社负责调换版权所有 侵权必究

Aims of the Conference

The World Trade Organization (WTO) membership, regional economic integration (REI) and such Asian free trade agreements (FTAs) as ASEAN +3, ASEAN +5 (ASEAN 3 + Australia and New Zealand) and Australia-China are expected to enhance trade, investment, development and growth, and as a policy outcome, to reduce poverty in China. While a number of nationally and internationally (eg., ODA) funded projects have devoted to study this trend in China in recent years, only very limited work has been carried out on its impact at the regional level, for example, in the Central West and South West or rural and inland regions of China. These regions however are still in the under-developed stage, have about 200 millions poor people (on World Bank estimates), and currently, of national and international high-priority for economic development. The Seminar is proposed and organized by the Renmin University of China (RUC) and organized by Department of Statistics, Capital University of Economics and Business (CVEB) in Beijing in October 10 to 11 in 2005 with sought assistance from AusAID (The Australia Government's overseas and programme) to assist China: (1) to develop an understanding and acquire skills to manage important issues in WTO membership and the ASEAN + 3. ASEAN + 5 or the proposed Australia-China or ASEAN + India (in which Australia has a very keen interest) FTAs, and (2) how to use these bilateral and multilateral FTAs/REI to contribute to an appropriate design and effective implementation of policies to promote and sustain economic development in these regions in particular and in China in general.

Contents

 Alms of the Conference
SME Capacity Building, Clustering and Regional Competitiveness Charles Harvie (1)
The second secon
Impact of Economic Policy Reform and Regional and Global Shocks on Trade and Growth in East Asia: Econometric Evidence
for China Tran Van Hoa (20)
The Regional Input-output Analysis On Industry Connection in Shanxi Province
A Study on Migration Characteristics of Highly Educated Human
Capital in China's Western Areas and the Reason
Liu Juan (51)
A Competitive Analysis on Eastern and Western Attractive Factor of
FDI in China Zhao Yanyun Cao Qian (60)
An Analysis of Human capital and Chinese Regional Economic
Growth Convergence Li Wenjie Fu Deyin (82)
DN SWEET IN THE SWEET SW
The Distribution of Human Capital and Economic Growth in China
Xia Wanjun Ji Hong (90)
 An Empirical Analysis on the Relationship between Educational Investment and Economy Development in the Western Region of China
The Potentiality and Opportunity of the Western Exploitation in

-1-

terms of Consumption Model Li Feng (112)
Efficiency Evaluation of Agriculture Financial Expenditure in Western Area of China Huang Sining (125)
Viewpoints about the Development of the Service Industry in Inner Mongolia Autonomous Region
An Empirical Analysis on Regional Disparity in China
Macro-thinking on the Capital Formation of the West and Narrowing the Area Economic Disparity between the East and the West
The Influence of Education on Income Inequality: Empirical Evidence from Different Regions of China
A Partial Least Square Comprehensive Evaluation of West China's Economic Development Based on Structure Equation Modeling Ruan Jing Ji Hong (168)
A Comprehensive Evaluation of the Science and Technology Capability for the 12 Western Provinces Zhu Meihong (179)
The Hopf Bifurcation of Stochastic Dynamical Price Model Li Jiao Rui Wang Zhen Long (189)
Comparative Analysis and Thinking on the Development of Tourist Trade in West China Dong Hanqing (197)
Innovation Studies on the Housing Finance during the Western Development in China ··· Chen Hongmei Huang Shisong (203)
Studies on Non-agricultural Land Use in West China

Investment Persistence and Investment—Fixed Assets Investment in
the West Sun Jiping Liu Yulong (220)
An Empirical Analysis on the Strategy of Yielding Market to Exchange Technology in the Eastern, Middle and Western
Regions of China Chen Chao Ma Liping (230)
An Empirical Analysis on Residents' Consumption of Western Cities and Towns Based on Panel Data
Zhao Yi Ma Liping (237)
A Professional Structure Analysis for West China's Fixed Assets Investment
11 I I I I I I I I I I I I I I I I I I
The Effect of FDI on Economic Growth in West China
Hao Ran (253)
Western Regions Tourism to Its Own Economic Development Influence and Related Conclusion in China
Liu Hongwei Ji Hong (262)
A Present Situation Analysis of Regional Balanced Development in
China's Western Regions and the Choice of Strategy
Sun Xiaodan (269)
The Research on Cointegration Relations between the Fixed Assets Investment and the Economy Growth of Shanxi Province
Liang Zhijun (278)
A Relevant Analysis of Agricultural Investment and Output Volume of Main Farming in Qinghai Province Guo Jianchuan (285)
An Association Analysis of S&T Investment and Economic Growth in the Western Regions
Terrange and the second
Strategies for Attracting Foreign Investment in the Western Regions of China

The Measure and Calculation of the Personal Income Tax Erosion

in China Liu Liming Liu Lingling (308)
Foreign Exchange Risk Premium in the Financial Markets and Its
Measurement Techniques He Sihui Wang Zhenlong (318)
A Study on the Development of Cultural Industry in Beijing
The Application of Cluster Analysis in Web Data Mining
Zhang Nan (335)
Measures of the Contribution Rate of Tradable Knowledge Assets
-Improvement Based on the Production Function
Liu Juan Li feng Lu Chong (346)
The Error Correction Model Building of the Copper Futures Prices
between SHFE and LME Wu Fang Liu Juan (354)
An Empirical Analysis of the Relationship between Finance
An Empirical Analysis of the Relationship between Finance Expenditure Structure and Economic Growth
Expenditure Structure and Economic Growth
Expenditure Structure and Economic Growth Zhang Yuchun (362) An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371)
Expenditure Structure and Economic Growth Zhang Yuchun (362) An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing Lu Chong (379)
An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing Lu Chong (379) Policies on Stabilizing Inflation Targeting in a Multi-region Economy
Expenditure Structure and Economic Growth Zhang Yuchun (362) An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing Lu Chong (379)
Expenditure Structure and Economic Growth Zhang Yuchun (362) An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing
An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing Lu Chong (379) Policies on Stabilizing Inflation Targeting in a Multi-region Economy Zhang Guangxian (386) A Research on Public Medical Information Management System by
Expenditure Structure and Economic Growth Zhang Yuchun (362) An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing
An Economic Development Analysis of BDA Wu Shaoping Guo Hongwei (371) An Analysis on the Influence of the Financial Industry Development on the Economic Investment in Beijing Lu Chong (379) Policies on Stabilizing Inflation Targeting in a Multi-region Economy Zhang Guangxian (386) A Research on Public Medical Information Management System by

SME Capacity Building, Clustering and Regional Competitiveness

Charles Harvie (University of Wollongong, Australia 2522)

E-mail: charles_harvie@ uow. edu. au

Abstract: In conjunction with increased economic integration of East Asia and APEC, there are increased recognition by regional governments of the potential for a substantial increase in the participation by small businesses in the generation of regional income, employment, exports, investment and expanded economic growth. Advances in information and communication technology add credence to this potential. In addition, developing economies are especially seeing small businesses as potential instruments for the alleviation of poverty and regional development. The small and medium enterprise (SMEs) sector can play a key role in the attainment of such objectives. This paper reviews the contribution of the SMEs sector to the growth and development of the East Asian economies, and their increasing importance in the attainment of a sustained recovery of the region. It also identifies: barriers to their development; key factors essential for their capacity building; strategies to enhance their competitiveness in the global marketplace; key components relating to their export success; and their role and importance in facilitating regional economic development, reducing income inequality, and empowering regional involvement in the global economy.

1. Introduction

SMEs can play a key role in economic growth and equitable development in developing countries, whose contribution to employment generation, output, exports, poverty alleviation, economic empowerment, and wider distribution of wealth and opportunities for developing countries. However, this potential is often not realized due to a number of factors relating to the size of SMEs, their isolation of locational (regional) operation, and in terms of interaction with other similar sized enterprises. Hence, there is the potential that with closer cooperation between SMEs and relevant supportive institutions.

One important route through which SMEs can address some of the previous problems as well as enhancing their competitiveness is network. By coordinating their activities, enterprises can collectively achieve economies of optimal scale in the use of machinery and pool production capacities to meet large-scale orders. Inter-enterprise cooperation also enables SMEs to specialize in their core businesses and give way to an external division of labor thereby improving their efficiency in production. Joint work also encourages enterprises to learn from each other, exchange ideas and experience to improve product quality and take over more profitable market segments.

However, evidence from developing and developed countries shows that cooperative relations and joint action are more likely when enterprises operate in close geographical proximity, within a region, and share business interests such as markets for products, infrastructure needs or challenging external competition. Within such clusters² enterprises' joint initiatives are stronger, more cost effective due to

① A network is a group of firms that cooperate on joint project development complementing each other and specializing in order to overcome common problems, and achieve collective efficiency and penetrate markets beyond their individual reach. Whether horizontal or vertical, networks can be developed within, or independently of, clusters.

② Clusters are sectoral and geographical (regional) concentrations of enterprises that produce and sell a range of related or complementary products and, thus, face common challenges and opportunities.

shared fixed costs and easier to coordinate, with proximity fostering mutual knowledge and trust. Small companies tend to concentrate in a core of well-known competencies, while they outsource components from other small companies. Within a true cluster, there is a capacity for exploration, for experimenting new processes, new products, or new markets. It is also important of SMEs support systems and institutions concerned with aspects such as the regulatory environment, logistics, financing, and telecommunications. There is ample evidence that SMEs operating in the same or in related industrial sectors tend to cluster close to one another.

The paper proceeds as follows. Section 2 briefly provides background information on the role and significance of the SME sector in the economies of East Asia and APEC more generally. Section 3 discusses the major barriers to the further development of the SME sector and key areas for capacity building that will enable this sector to make the maximum gains from regional trade and investment development. Section 4 discusses the important role of government in supporting the development of SMEs. Section 5 discusses SMEs and regional competitiveness strategies. Section 6 presents the major conclusions and policy implications from this paper.

2. Background—the Role and Significance of the SME Sector in East Asian Economic Development[®]

SMEs have been recognized as a priority area for the East Asian economies, and the need to develop more adaptable and flexible economies and business sectors, has resulted in increased emphasis on the development of the SME sector.

Although SMEs are important across the region, there are considerable differences in the role of SMEs in various economies. For example, SMEs play a larger structural role in Taiwan (China), China,

① This section draws extensively upon Hall (1995).

Japan, Thailand and Vietnam where they contribute over 70 percent of employment, than they do in Indonesia or Malaysia where they contribute only around 40 percent. In addition, the contribution of the SME sector to exports, and hence the extent of their global integration, also varies widely. They are relatively more export oriented in China, Korea and Taiwan(China) than they are in Japan, Indonesia, Thailand, Malaysia and Singapore. Similarly, the dynamic role that SMEs have played has varied between the various countries and regions. More recently in the case of China, and somewhat reluctantly in the case of Vietnam, entrepreneurial private SMEs and rural enterprises^①, during the early part of the reform process, have been pivotal in the transition process from a planned to market oriented economy.

They have contributed to more efficient resource allocation, the marketisation of these economies, and are increasingly important in creating new jobs and in expanding exports. Recognizing this requirement, the government has been actively assisting in this process.

Table 1 summarizes key common features, differences and policy issues, in the profile of SMEs in East Asia/APEC that have been discussed in this section.

Table 1 A summary profile of SMEs in East Asia/APEC

	Key features	Regional differences and policy issues
Number of enterprises	 There are about 20 to 30 million SMEs in East Asia. They account for 98% of all enterprises. Micro-enterprises account for about 73% of all private sector enterprises. On average, there are about 85 people for every SME. 	million) and Japan (5 million) and Korea (2.6 million), which together have 70% of the SMEs in East Asia. 2. In developed economies, there are only

① The so-called township and village enterprises (TVEs).

		, , , , , , , , , , , , , , , , , , , ,
+: :-	Key features	Regional differences and policy issues
	5. SMEs employ about 60% of the	3. In developing economies (below about
		US\$15 000 per head income), SMEs
	total workforce.	employ about 75% of people, above
	6. Micro-enterprises employ about 21%	\$15 000 the level is closer to 50%.
	of total APEC wide employment.	Japan is a major exception, Japan's SMEs
erterla .	7. Over 95% of enterprises employ less	a
		4. More developed economies seem to
	less than 5 people.	have more medium sized SMEs and they
Employment	The state of the s	play a greater role. Developing economies
	employment growth.	seem more likely to have a "missing
		middle".
		5. In developed economies, most of this
	about 15% in the manufacturing sector.	growth probably comes from fast growth
		firms, in developing economies, a higher
	employers/self employed in APEC	
	mainly in micro-enterprises	ups.
PRESIDE WITH	manny in inicio chiciprises	ups.
Output	11. SMEs contribute about 50% of	6. The contribution varies from lows of
measures	sales, value added or output.	15% (Singapore) and 30% (Australia)
(sales, value		to about 60% for most other economies.
added etc.)	A Jon I	9
1-01 - 1000 T	12. SMEs generate about 30% of direct	7. SME exports figures are difficult to
	exports (US\$930 billion in 2000),	verify, but they range from about 5% or
	much less than the SME contribution to	less (Indonesia) to around 40%
	employment (about 60% to 70%) or	(Korea) of total exports.
	output (about 50%).	8. Tariff cuts have increased total APEC
Exports	13. SMEs contribute indirectly to trade	member trade, but the SME contribution
Laports	through supply chain relationships with	to direct exports has remained static or
	other firms. SME contribution to total	declined. Reductions in tariffs have not
	trade could rise to 50%.	benefited SMEs, more emphasis needs to
		be put on tackling non tariff barriers if
		SMEs are to benefit from trade
onla n n n	Francisco de la composición del composición de la composición de l	expansion.
FDI	14. SMEs generate about 50% of cases	9. Korean, Japanese and Chinese Taipei
	of FDI, but only less than 10% of value	SMEs contribute most FDI originating in
1 - Annathir	of FDI.	the East Asian region.

F 1 - 1 - 1 To	Key features	Regional differences and policy issues
and the	15. SMEs already contribute the bulk of	10. The developing economies need to
	growth, and SMEs could make a much	create about 50 to 70 million more SMEs
	bigger contribution to the Asian regional	if they are to achieve "benchmark" levels
. 60	economy if efforts were made to address	of SME activity.
	impediments to SME internationalization.	11. To achieve maximum gain from trade
	This could add as much as \$1.18 trillion	it is essential to improve governance,
	in trade over a 5-year period.	building capacity, reducing transaction
	16. SMEs move towards services and	costs, promoting further liberalization,
Entrepren-	away from agriculture and manufacturing.	addressing non tariff barriers, increasing
eurial		internet access and facilitating trade and
engine,		investment to improve the capacity of
international	o per 1 y ex	SMEs to export.
potential,		12. Capacity building includes: access to
and the new	and the first of the second	finance; improved professional skills
economy	Marine 15 mm	(IT, management, accounting and
,		entrepreneurship); improved business
		infrastructure; removal of trade barriers
		that particularly adversely affect SMEs.
		13. E-commerce use of SMEs lags larger
		enterprises. Important for cost saving and
		growth potential. Usage of technology a
	A	problem due to: set up and usage costs;
	I I mg mi	lack of adequate infrastructure and IT
- 197	0 0 1 191	skills.

Source: Hall (2002) supplemented by information from APEC (2002).

3. SME Capacity Building

3.1 General Capacity Barriers

Building capacity, improving governance, reducing transaction costs, promoting further market liberalisation, addressing non-tariff barriers, increasing internet access, and facilitating trade and investment are all directly relevant to improving the capacity of small businesses to

exploit export market opportunities and for their regional growth.

At the Ottawa meeting of APEC in September 1997, for example, five key areas of importance to the capacity building of SMEs were emphasized. These are access to: markets, technology, human resources, financing and information.

3.1.1 Access to markets

Despite cuts in average tariffs in APEC from 12 percent in 1995 to 8 percent in 2000 that resulted in an estimated growth rate in merchandise exports of 4. 7 percent per annum during 1995 ~ 2000, there is a perception that small businesses have been unable to fully exploit opportunities to export. The SME contribution to direct exports has remained static or declined. Reductions in tariffs have not benefited SMEs, and more emphasis by regional governments needs to be put on tackling non-tariff barriers (customs procedures, mobility of business people, standards of labeling requirements, access to finance, recognition of professional qualifications, consumer protection particularly regarding on line transactions, and intellectual property rights) if SMEs are to benefit from trade expansion and to enhance their exporting capacity.

3.1.2 Access to technology

In a knowledge-based economy, applications of information and communication technology can be a great leveler for SMEs. However, when SMEs have limited access or understanding of these technologies, their prospects of acquiring and utilizing these for their benefit is reduced.

3.1.3 Access to human resources

Human resource development for SMEs requires a comprehensive approach, including social structures and systems such as broad educational reforms; encouragement of entrepreneurship, business skills acquisition and innovation in society; mechanisms for self learning and ongoing training and enhancement of human resources; and appropriate governmental support programs. Among small and micro enterprises, shortage and cost of skills in information technology is a major hindrance to business growth.

3.1.4 Access to financing

Many SMEs lack awareness of financing resources and programs

available from commercial banks and other private sector and government sources, and that they have difficulty in defining and articulating their financing needs. Financial institutions need to be responsive to their needs and for continuing simplification of trade documentation.

3.1.5 Access to information

Accurate and timely information on, for example, market opportunities, financial assistance and access to technology is crucial for SMEs to compete and grow in a global market environment. This is an important role that both the government and relevant business organizations can play.

In addition to these key areas for capacity building, another relates to the development of business networks, including the development of strategic alliances and joint ventures.

Inter-firm networking. A network is a group of firms using combined resources to cooperate on joint projects. Networks have come to encompass agreements with research bodies, education and training institutions and public authorities, moreover, can allow accelerated learning, can allow the sharing of overhead costs and the exploitation of specific scale economies present in collective action. Furthermore, networks need not to be geographically concentrated. Once trust among participants is established, and the strategic direction agreed, operation dialogue could be facilitated through electronic means.

Innovation. Small firms account for a disproportionate share of new product innovation despite their low R&D expenditures (Acs and Audretsch,1990). In addition, they have also been innovative in terms of improved designs and product processes and in the adoption of new technologies. Scherer (1988) has suggested that SMEs possess a number of advantages relative to large firms when it comes to innovative activity. First, they are less bureaucratic than highly structured organizations. Second, many advances in technology accumulate on a myriad of detailed inventions involving individual components, materials and fabrications techniques. Third, it is easier to sustain high interest in innovation in small organizations where the links between challenges, staff and potential rewards are tight.

3.2 Barriers to SME Development in a Developing Transition Economy—the Case of Vietnam

3.2.1 Access to Land

SMEs have experienced major difficulties in accessing land. About 70 percent of transactions in land use rights take place in the unofficial market, where SMEs lease land from SOEs, non state enterprises and households. Obtaining land in such a way, however, could result in punishment of the SME, and cannot serve as a basis for sustained growth of the business. The current situation relating to land use rights is clearly acting as a hindrance to the growth and development of new SMEs as well as the growth of existing SMEs. A new Land Law that is simple, transparent, and enables the speedy transfer of land ownership/usage will be essential for the future growth of the SME sector.

3.2.2 Access to Finance

A survey of SMEs conducted in 1999 by the Vietnam Chamber of Commerce and Industry (VCCI) found that: 55 percent of enterprises had difficulty in obtaining capital; 67. 5 percent of enterprises had to borrow from relatives and friends; 25 percent of enterprises had to deliver materials in advance; only 42.5 percent of enterprises borrowed from the banks; and 20 percent of enterprises borrowed from other financial organizations (VCCI,1999). Some surveys of SMEs suggest that reliance on personal savings, friends and family, and retained earnings accounted for 85 percent of total financing, with financial intermediaries accounting for the rest (15 percent). Other surveys of SMEs by government management agencies and other organizations also point out that the share of bank loans allocated to non-state enterprises has tended to increase, but not in accord with their number and their contribution to GDP.

Difficulty in accessing financial resources by SMEs has partly resulted from the obstacles created by some of the policies and regulations on capital mobilization. First, the majority of external resources, such as Foreign Direct Investment and Official Development Assistance, have been allocated to the state sector. Second, there are still irrational regulations that seriously hamper the capital mobilization of SMEs. For example, the regulations on short-term credit issued by the State Bank