

FOREIGN-RELATED ACTIVITIES OF THE CHINESE LOCAL GOVERNMENTS

AND AGENTS OF GLOBALIZATION

A CASE STUDY OF 31 PROVINCES IN MAINLAND CHINA

by

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## ABBREVIATIONS

CCP	the Chinese Communist Party
CNNIC	the China Internet Network Information Center
COC	coastal open cities
CPGFA	the Chinese provincial governments' foreign-related activities
FACPG	foreign-related achievements of China's provincial governments
FAO	foreign affairs office
FDI	foreign direct investment
FPGI	Foreign Policy Globalization Index
GDP	gross domestic product/ gross regional product
NCGs	non-central governments
NGO	non-governmental organizations
R&D	research and development
S&E	science and education
S&T	science and technology
SEZ	Special Economic Zone
UCLG	United Cities and Local Governments

**Abbreviations of Provinces, Municipalities and Autonomous Regions in the  
Chinese Mainland**

AH	Anhui	JX	Jiangxi
BJ	Beijing	JL	Jilin
CQ	Chongqing	LN	Liaoning
FJ	Fujian	NX	Ningxia
GS	Gansu	QH	Qinghai
GD	Guangdong	SA	Shaanxi
GX	Guangxi	SD	Shandong
GZ	Guizhou	SH	Shanghai
HA	Hainan	SX	Shanxi
HE	Hebei	SC	Sichuan
HJ	Heilongjiang	TJ	Tianjin
HN	Henan	TB	Tibet
HB	Hubei	XJ	Xinjiang
HU	Hunan	YN	Yunnan
IM	Inner Mongolia	ZJ	Zhejiang
JS	Jiangsu		

## ABSTRACT

China's local foreign-related activities have rapidly developed with the brisk pace of globalization and localization since China opened to the outside world in the late 1970s, bringing about a great impact on its national diplomacy and local economy. Few studies, however, concern why and how the Chinese local governments voluntarily conduct foreign activities, nor how to evaluate or what factors help shape the foreign-related achievements. Based on literature review and empirical evidence, this study examines the foreign activities of China's 31 provincial-level governments in a globalization perspective. It first explores why and how the provincial governments interact with the transnational flow of capital, goods, people and information, which are most important agents of globalization. Second, an index is created to evaluate and rank the foreign-related achievements of China's 31 provincial governments (FACPG) during 2004-2006 by processing the official data collected. Third, 18 factors are tested to make sure whether and to what extent they push up or pull down FACPG. The study finds that: 1) the Chinese local government international involvement did not appear until China opened its door to the outside world in the late 1970s as commonly conceived. The local international involvement can be traced back to the Han Dynasty

and continued to flourish in the Tang Dynasty in ancient China. 2) The provincial governments in the Chinese Mainland are active in promoting foreign activities closely related to the transnational flow of globalization agents in order to benefit their local economy. 3) FACPG shows remarkable disparity during 2004 to 2006. Six coastal provinces and two municipalities directly under the central government ranked at the top consistently. 4) There were significant and positive correlations between factors tested and FACPC with exception of land area. During the observed period, factors associated with provincial acquired international competencies had much stronger positive correlation with FACPG than basic factors.

## Chapter One

### Introduction

“States are not and never have been the only international actors”<sup>1</sup>

Kenneth Neal Waltz

#### 1.1 Practical Background of the Research

When the bloc motion called for Quebec to be recognized as a nation but did not include the word “Canada”, Stephen Harper, Prime Minister of Canada, told the House on November 21, 2006 “Our position is clear. May the Quebecois form a nation within Canada? The answer is yes. Do the Quebecois form an independent nation? The answer is no and the answer will always be no.”<sup>2</sup> Later, Michael Chong, the Intergovernmental Affairs and Sports Minister of Canada resigned on November 27, 2006, demonstrating his opposition to the continuing Quebec-as-nation controversy. He believed that “a Tory motion to recognize the province as a nation will provide fuel to separatists and divide the country.”<sup>3</sup>

Sidestepping the Bush administration's refusal to sign up to binding targets in *the Kyoto protocol*, California's governor Schwarzenegger and Tony Blair, the British Prime Minister at the time, signed a historic agreement--*United Kingdom and California Announcement on Climate Change & Clean Energy Collaboration* in Long Beach,

California on July 31, 2006.<sup>4</sup> The agreement, which was called a snub to the White House by some newspapers and polls, shows that Californians regard climate change as the biggest issue facing the state because they fear that water shortages and heat wave will destroy the state's economy, including its vineyards, within 20 years. As the world's 12th largest carbon emitter, "California will not wait for our federal government to take strong action on global warming," said Governor Schwarzenegger. "Today, we are taking an unprecedented step by signing an agreement between California and the United Kingdom. International partnerships are needed in the fight against global warming and California has a responsibility and a profound role to play to protect not only our environment, but to be a world leader on this issue as well."

To "ensure the voice of the sphere of government closest to the world's citizens is heard loud and clear on the world stage"<sup>5</sup>, nearly 2000 mayors, councilors, and representatives of cities and local and regional governments of the world came together on the island of Jeju in the Republic of Korea for the 2nd UCLG<sup>6</sup> World Congress entitled "Changing Cities Are Driving the World". One of its three plenary sessions was "City Diplomacy - Local governments building peace; 2015: a better world is possible!" UCLG also launched in the Congress its *Global Report on Decentralization and Local Democracy*.

When French government tried to repair China-France relationship, which was hurt

by disruptions to Beijing Olympic torch relay by Tibetan separatists in Paris on April 7, 2008, Paris Mayor Bertrand Delanoë proposed to bestow “honorary citizenship” to Dalai Lama, the head of Tibetan separatists. A few hours after French Senate President Christian Poncelet arrived at Shanghai as the first of three emissaries sent by French President Nicolas Sarkozy to soothe Chinese anti-France sentiment, the Paris city council passed the resolution to make Dalai Lama an honorary citizen. Paris councilors also bestowed honorary citizenship on the dissident Chinese political activist Hu Jia, who was sentenced by the Chinese authorities to three years imprisonment for inciting subversion of the state. Paris move was of course considered as a “severe provocation” by the Chinese government and public.

Those are examples concerning subnational international activities. Globalization and localization have developed hand in hand since the 1970s (Dirlik, 1994) and the two kinds of broad and seemingly paradoxical trends empowered local officials to “think globally and act locally” with strong aspiration and capability (Hobbs, 1994:1).

The involvement of subnational governments in foreign affairs does not only weaken the traditional monopoly of the national/central governments on foreign affairs but also defends their local interests directly affected by the global political economy. A nation-state no longer speaks with only one central-government legitimate voice; the voices of subnational governments can be heard on the international scene. As domestic



policy is gaining an increasing international dimension, subnational governments are playing a significant, though secondary, role on international affairs (Duchacek, 1986b: 13). “The age of local diplomacy is closer,” predicted Young Ho Cho, the fourth President of Korean Local Authorities Foundation for International Relations (KLAFIR)<sup>7</sup>, in 2004. In the era of globalization of local authorities, he adds, the national competitiveness is closely related to the competitiveness of subnational authorities.

Compared to other non-state international actors that are of a non-territorial nature, for instance non-governmental organizations (NGO) or multinational corporations, subnational governments have unique advantages in their administrative “jurisdiction over geographically delineated portions of the territorial whole” (Duchacek, 1990): population, resources, enormous economic power (e.g. local-owned enterprises, revenue, investments and expenditures), and also armed forces for homeland security and emergency preparedness.<sup>8</sup> More importantly, they enjoy more or less constitutionally protected power in legislation such as fiscal, tax, and monetary policies, natural resources and public-goods allocation, etc. Further, they are usually taken more seriously than most individual citizens or NGOs. Feinstein and seven other mayors, for example, successfully persuaded the Soviet Union to allow thirty-six people to emigrate in late 1985 (Shuman, 1987:157). State insurance commissioners in California, New York, and Washington pushed European insurance companies and Swiss banks to respond to claims made by

Holocaust victims and their heirs. (John Kincaid, 125) Sometimes, the trade/tourist missions abroad of regional/provincial authority are viewed and treated as proto-embassies or proto-consulates of a potentially sovereign state (Duchacek, 1986a: 248). These characteristics empower subnational governments with some capabilities similar to those of nation states; hence, some of them are able to disobey or conflict with their national foreign policies and challenge the conventional concept of “state-centric” and a national monopoly in foreign policy. Although subnational international agendas regarding high politics are still controversial, both proponents and opponents agree that the subnational governments’ role on the international arena has become indispensable to today’s interdependent world. A nation that had only one voice in the international community before has turned into a multi-voice actor.

The economic area witnesses most local foreign initiatives. On the one hand, constitutions in almost all countries keep their subnational governments away from high politics and foreign policy in particular. On the other hand, subnational governments are less interested in high political issues due to their vested responsibility. They always put local interest, especially economic growth as top priority (Duchacek, 1988, 1990). That is why they make much effort to boost export, recruit inward investment, attract foreign tourists, and seek technology for local economic development and create more job opportunities. The non-economic but low political areas also see frequent transnational

exchange of culture, sports, and expertise via partnerships, intergovernmental organizations or other channels. High political arena has seen increased subnational international actions since the 1970s. Regions like Quebec in Canada, Catalonia in Spain, Scotland in UK, Basque in Brazil, and Kosova in Serbia, for example, are pursuing distinct national identity and have undertaken nation-building projects to prepare the ground for eventual independence through various international activities. Some subnational activities have been closely related to military security and human rights during the past decades. For instance the comprehensive test ban movement, nuclear-free zone declarations, anti-Apartheid and divestment of local funds from South Africa, and provisions of sanctuary for refugees from Central America became international agendas in American localities during the 1980s (Hobbs, 1994; Shuman, 1987). These actions in high political arenas were not many but highly controversial; their deviation from the long existing fixed rules is more likely to attract considerable political and scholarly attention.

Aldecoa and Keating (1999) claimed that subnational international initiatives have perhaps been most notable in Europe. Soldatos (1990) finds that subnational paradiplomacy appear most often in the advanced industrial federations. Actually, they emerge whenever globalization arrives. China is no exception. Marked by the reform and opening up of its economy in the late 1970s, China has gradually integrated into

globalization and “switched on” with the global “networking society”. (Castells, 2000) Since then, foreigners and agents of globalization<sup>9</sup> thronged into this most populous country that had been blocked from the outside world for dozens of years. Their arrival as well as the strong encouragement from the central government has pushed the local governments<sup>10</sup> at various levels to directly deal with foreign affairs. Being aware that positive foreign-related activities could help attract more foreign capital and tourists, export more local products, increase more jobs, and boost economic growth, local officials have gradually become active promoters of local foreign relations in “China’s internationalization” (Zweig, 2003). Chinese diplomacy is “localizing” (Hocking, 1993).

The Chinese central government, however, has never let go of its control over local foreign affairs. The traditional relevant principles are still in effect. They are usually briefed as “Only the central government has the exclusive power for diplomacy” (*waijiao daquan zai zhongyang*) and “local government’s authority in foreign affairs is limited” (*defang waishi shouquan youxian*). In addition to the Constitution and fixed laws, non-legal soft laws like in-house regulations have been effective to regulate diversified local foreign activities. For example, those promoting local economic growth are strongly encouraged; those promoting cultural exchange are permitted; those promoting the political exchange such as officials’ visits or bilateral foreign agreements such as sister relationships with foreign counterparts are supervised; those related to high politics

are limited or forbidden. There is no tolerance for local foreign initiatives going beyond the central control. As soon as any local action is found to infringe upon the national interest or conflict with the national policy, Beijing administration will stop it uncompromisingly and reprimand the policy-breakers. Generally, aware of their power limitation, the local officials usually follow the higher level orders and seldom trespass the forbidden zones defined by Beijing.

With the above-mentioned political surrounding and unique economic, ideological, and cultural background, the Chinese local governments prefer foreign activities closely related to economic growth. Their efforts are mostly on promoting agents of globalization. To attract more foreign capital, they improve infrastructure and service for potential foreign investors. To increase outflow of local products, in addition to preferential tax policies offered by the central government, they make various local policies like subsidy or rewards for big export companies, and establish local-based financial institutions and export processing zones where foreign enterprises are offered favorable policies. To enhance cross-border flow of people, they simplify procedures for issuing passports or visa application; assist local accredited private enterprises to apply for APEC business travel cards (ABTC)<sup>11</sup> and so on. To hasten flow of information, the governments increase their budget on telecommunication facilities.

Dozens of years of local foreign-related practice have induced local awareness of

global interdependence and have shaped China's diplomacy into a multi-layer pattern, in which national diplomacy is dominant and local ones complementary. More local officials have realized the fact that in the age of globalization, to be a gateway to agents of globalization means more channels to obtain scarce resources from abroad, and their active involvement in foreign affairs have greatly benefited local interests. Disparity among different Chinese localities, however, has appeared and the gap is increasing.

## **1.2 Theoretical Background of the Research**

Nowadays, few argue that foreign affairs is an exclusive area for the central government and more admit that the subnational government is a newly developed force in international affairs. The international academia, yet, knows less than enough about the interaction between subnational foreign activities and globalization. Further, many areas need scrutiny. First, most of the Western literature fixes their attention to subnational governments' foreign involvement in federal states while underestimating and ignoring the rapidly developing subnational foreign relations in unitary states or developing countries in particular.<sup>12</sup> That is why Kincaid (1999:132) asserts, "The emergence of subnational governments as actors on the world scene can be characterized as co-operative dual federalism". Further, little research is found on the factors that influence local foreign-related achievements.

Second, the local foreign-related activities in China are much different from those in the developed, federal, or highly democratic countries. The progress of the Western studies in this field could hardly give convictive and systematic explanations for China's local practice in foreign affairs. For example, the Western subnational actors are rather interested in high political agenda while their Chinese counterparts more prefer activities directly promoting local economic growth. Few local foreign actions or legislations in China violate the national diplomatic policy. Another fine example is concerning "public opinion," one of the major factors affecting local policy-making in the Western world. Public opinion is less important for the Chinese local officials as most of them are appointed rather than elected.

Third, due to certain historical and political reasons<sup>13</sup>, foreign affairs is still a sensitive area in China. It seems too political to attract interests from scholars or professionals in the Chinese Mainland. They would rather stay far from it. Studies in the field did not appear until recent years when the academic atmosphere became more relaxed and free. Zhimin Chen's *Subnational Governments and Foreign Affair* published in 2001 is the first monograph. Later, he examined thirteen Chinese coastal provinces in his *Coastal provinces and China's foreign policy making*. Recent years saw several papers or articles about local external relations of China in journals; however, few books or comprehensive research is found.

Fourth, present theoretical or empirical analysis primarily is concerned with the nature, causes, and consequences of the subnational international activities. There is not any established index to evaluate the foreign-related achievements of subnational government and few empirical studies using statistical methods.

### **1.3 Significance and Purpose of the Research**

By creating an index of foreign-related achievements and analyzing the relevant official data collected, this study looks into the interaction between the provincial governments in the Chinese Mainland and four kinds of agents of globalization. Further, the study examines the 18 presumed factors that might foster or impede foreign-related achievement of 31 Chinese Provincial Governments (FACPG) by statistical methods.

From a theoretical perspective, practice calls for new theories and existing theories need to be updated with time. Local international practice in China at present has outpaced the existing academic explanation. This case study may enrich the current understanding by findings from China, a unitary state and the biggest developing country. It is expected to offer an insight into the interaction between agents of globalization and subnational governments.

From a practical perspective, encouraged by the central government, all the local



governments in Mainland China have been gradually involved in economy-related foreign affairs in varying degrees. With a vast territory and a large population, some provinces and municipalities will certainly become powerful international actors due to their strong intention and competitiveness. Besides, the Chinese central government is inclined to boost local international participation to a higher level. For example, Beijing asked all provincial party secretaries and governors to attend an unprecedented conference on foreign affairs (*zhongyang waishi gongzuo huiyi*) held in Beijing in August 2006. Top leaders including China's President Hu Jintao and Premier Wen Jiabao attended the conference. Hu proposed ways of strengthening and improving work related to foreign affairs. Wen spelled out priorities for foreign affairs now and in the years to come. They required the local governments to "participate in international economic and technological cooperation and competition in a wider area and at a higher level, making full use of both international and domestic markets and resources, making full use of every favorable condition provided by economic globalization and regional cooperation." After the Beijing conference, almost all the local governments above county level have adopted measures to improve their competence on foreign affairs. For instance, most provincial governments have upgraded their foreign affairs office from a subordinate department into a duly constituted department of the provincial government and increased budgets and employee quota for direct foreign affairs. Findings from this study

will certainly benefit the momentum and practitioners in China.

From a research method perspective, this study takes 31 provincial-level governments on the Chinese Mainland as units of analysis. They cover early-opened developed coastal provinces frequently involved with foreign affairs and relatively backward inland provinces rarely involved to prevent lopsidedness and to increase comparability. The index created in this study for evaluating FACPG and its statistical applied approach will pave an alternative way for future researchers.

#### **1.4 Research Questions**

1. Why and how do China's provincial governments conduct voluntary foreign activities?
2. What are the characteristics of the Chinese provincial governments' foreign-related activities from a globalization perspective?
3. How do China's provincial governments interact with agents of globalization?
4. How to evaluate the foreign-related achievements of China's provincial governments?
5. What are the factors that may affect the foreign-related achievements of China's provincial governments? Moreover, to what extent?

The research cases are four municipalities directly under the central government, 22

provinces and 5 autonomous regions, all of which are located on the Chinese Mainland.<sup>14</sup>

The reasons for taking 31 provincial-level governments as the research cases are as follows:

First, among all the local governments in China, the provincial-level ones are on the top tier and enjoy most authority in conducting foreign activities. Second, they all intend to be international actors and some of them are becoming powerful international actors. Taking Guangdong Province as an example, the year of 2006 witnessed its gross regional product accounting for 1/8 of China's GDP, its provincial government revenue accounting for 1/7 of the country's, its amount of imports and exports accounting for 1/3 of the country's, its actually used foreign direct investment (FDI) accounting for 1/4 of the country's. Some of the provinces have managed to sponsor international events or played a leading role in international organizations. For example, Beijing and Shanghai successfully bid to hold the 2008 Olympic Games and the 2010 World Expo. Chongqing has successfully held the fifth Asia-Pacific City Summit in 2005. Nine provinces and megacities in Mainland China have joined in the United Cities and Local Governments (UCLG), the biggest global organization of local governments. Shanghai and Tianjin were elected members of the Executive Bureau of UCLG in 2004. Third, the diversification of those provincial-level governments can increase their comparability. Owing to the dramatic differences in their geopolitical features, resource heritage,

historical and cultural background, the research will be complex but more meaningful.

### **Definitions of key concepts**

Subnational governments are all the governments under the central government. Aldecoa and Keating (1999) employ the term to represent public authorities at the regional level when editing the papers for the seminar in Bilbao in 1999. The term of noncentral governments (NCGs) is also often used to refer to governments below the central government. For instance, Brian Hocking used NCGs when delving into multilayered diplomacy in 1993. Iñaki Aguirre alleged that he preferred the term of NCGs to subnational units because the latter does not emphasize the governmental nature of those new actors on the international scene (Aldecoa & Keating, 1999:206). In federal states like America, local governments or city halls refer to the governments under the state or provincial governments. In unitary states like China, however, the term of local governments covers all the governments under the central government. The connotations of both terms (i.e. subnational governments and noncentral government), therefore, are the same. Provincial-level governments here refers to the first-level administrative governments, such as states in U.S. and Australia, provinces in Canada and China, länder in Germany and Austria, cantons in Switzerland, regions in Spain, prefectures in Japan, and the Walloon and Flemish segments of Belgium. To simplify the expression, this

paper uses provincial governments or provinces to represent provinces, municipalities directly under the central government, and autonomous regions in the Chinese Mainland.

Several neologies have been coined to elucidate this new political phenomenon since the 1980s (Hocking, 1999). Panayotis Soldatos created Paradiplomacy in the early 1980s when he interpreted NCG international involvement. Ivo Duchacek proposed protodiplomacy and microdiplomacy. Aguirre (1999) prefer the term of postdiplomatic or beyond diplomacy to paradiplomacy. Brian Hocking (1993) introduces a new term “multi-layered diplomacy” to contend with “paradiplomacy”. As “diplomacy” has been widely accepted as a general term for the international activity by nation-states and, particular, for negotiation skills, it seems not appropriate to cover the international activities of subnational governments since they still mainly concentrate on economic and the low-level political issues, at most. They seldom touch territorial or sovereignty agendas. That is probably one of the reasons why the literature often prefers to use the term ‘external relations’ rather than ‘foreign policy’. Even in federal states, “paradiplomacy has always been a sensitive issue” (Aldecoa and Keating, 1999: iii). This author employs “foreign-related activities of subnational governments” and “foreign-related activities of Chinese local governments” rather than “paradiplomacy”, “multi-layered diplomacy” or “postdiplomacy”.

Subnational government’s international activities refer to the foreign-related

activities conducted by subnational governments to influence various foreign actors including individuals, organizations, governments, and companies in or out of the provinces. Generally, the activities conducted by China's provinces may be divided into two categories. One is activities directly with foreign actors; the other is local-based but with international influences.

Foreign-related achievements of China's 31 provincial governments (FACPG) refers to local economic and social output within the provincial jurisdiction and directly influenced and brought about by the responding provincial foreign-related activities. This study focuses on the transnational movements of agents of economic globalization, which is influenced by China's provincial government's international activities.

Internationalization and globalization reflect the cross-border flows of production factors. Many define globalization as internationalization but they are different. "Economic internationalization" expresses the process of a relatively independent national economy integrated into the international economy, and this term displays how a relatively closed or partially open economy goes to high-level openness. "Economic globalization" refers to the increasingly free flow and rational allocation of various economic resources around the world. During that process, economies all over the world are interdependent and mixed with each other. Economic internationalization is the prelude for economic globalization. Economic globalization is the development and extension of economic

internationalization. It is the advanced stage and a worldwide internationalization. Economic integration is the highest stage of economic globalization. Zweig (2002) defines internationalization as the expanded flows of goods, services, and people across state boundaries, along with a decline in the level of regulation affecting those flows.

Literature often uses terms like “flows, networks, capacities, distributions, diffusions, and movement” to describe the process of globalization. When Pizarro, Wei, and Benerjee (2004) comment on the impacts of agencies of globalization on developing countries, they replaced the term “flows” with “agency”. They believed that “agency” is more accurate than “flows”, because the stream of globalization among countries is not smooth, coherent and uninterrupted (Pizarro *et al*, 113). Globalization is accomplished, conveyed, or transferred by agencies. “Agencies” is a metaphor equivalent to “vectors, conveyors, agencies or conduits” (Pizarro *et al*, 113).

This paper uses “agents” rather than “agencies” because the former is more human and mobile. Agents of globalization are the carriers or mediums by which globalization spreads. It is an apparent characteristic or token for globalization. Capital, people, information, and culture are major agents of globalization, which are shaping the “space of flows” (Castells, 2000). In the matrix of strength, each single agent is playing its unique role in the social networking. Zweig (2002:3) defines internationalization as the expanded flows of goods, services, and people across state boundaries, along with a

decline in the level of regulation affecting those flows. The related legislation of World Trade Organization and European Union considers commodities/goods, services, capital, and people as objects of globalization. Neither the agent of globalization nor globalization itself has commonly accepted definitions, but none of those definitions could avoid mentioning the agents of globalization. Among the various definitions, the most frequently occurring agents are as follows: capital, people, goods, culture, knowledge, technology, services, information, ideas, and so on. Given accessible, quantifiable and controllable data, this research concentrates on the transnational flows of four major agents of globalization, i.e. capital, goods, people/labor, and information. Based on their transnational flows, foreign-related achievement of China's provincial governments (FACPG) is evaluated.

### **1.5 Research Framework and Organization**

This research is based on the following two presumptions:

1. Assuming that the foreign-related activities of China's 31 provincial governments aim to promoting transnational flow of the agents of globalization for the benefit of themselves. Therefore, the quality and quantity of the transnational flow of the agents of globalization related to each province may be used as the index to assess the foreign-related performance or achievements of the provincial government. Then:



FACPG= capital flows + goods flows + people flows + information flows

An index is created to evaluate and rank PACPG by analyzing relevant official data. Corresponding to the above listed four agents of globalization, the index constitutes four sub-indices made of thirty indicators. The period from 2004 to 2006 is observed.

2. Basic condition as well as acquired international competencies has positive relations with FACPG. Then:

FACPG = F (basic condition, acquired international competencies)

= F (Basic factors, Economic factors, Social factors, Science and educational factors)

This study tests eighteen presumed variables of four categories. The basic factors include three variables: land area, population at year-end and developed area. The economic factors include six variables: regional gross output (namely, GDP), average regional gross output (GDP per capita), revenue and expenditure of local finance, investment for fixed assets, and provincial government expenditure for foreign affairs. The social factors include five variables: the average income and expenditure of the urban residents, the average income and expenditure of the farmers, and the level of urbanization. The S&T and educational factors include four variables: R&D expenditure, provincial government funds for S&T, government funds for education, and population with college or above

education.

It is supposed that the basic condition is a bow, the other three groups of variables a spring, FACPG an arrow, and local economic globalization a target.<sup>15</sup> If quality of the bow is difficult to improve, then to make the spring more elastic or shoot more vigorously and skillfully are the better ways to send the arrow farther. In other words, FACPG will primarily depend on the acquired advantages. Behind the local archers, however, stands a powerful supervisor. The central government stands there controlling the arrow's direction and archers' behavior.

### **Organization of the Paper**

This study includes eight chapters. Chapter Two briefly outlines the main viewpoints and debates about rising subnational governments' foreign-related activities so as to lay a theoretical foundation for exploring the rapidly increased China's local governments' foreign behaviors. Chapter Three examines the evolution of the Chinese subnational governments' foreign-related activities from its preliminary stage i.e. the reign of Han Wudi Emperor (140-87 BC) to the eve of China's opening up to the outside world in 1978. Chapter Four puts forward the theoretical framework and assumptions of the research. It delves into how the twin forces of decentralization and internationalization transformed the Chinese subnational governments into new active actors in international

science. It pays more effort to explore why and how the Chinese local governments conduct voluntary foreign activities and interact with agents of globalization since China opened up to the rest of the world in 1978. Chapter Five creates an index to evaluate foreign-related achievements of China's 31 provincial governments. The index is composed of 30 indicators focusing on the transnational flows of capital, goods, people, and information. Chapter Six evaluates and ranks FACPG during 2004-2006 by analyzing official data collected. Chapter Seven looks into how the assumed eighteen variables regarding either local basic condition or acquired international competencies correlated with FACPG respectively. Finally, Chapter Eight summarizes the research findings and put forward some policy applications.

## Chapter One

### Endnotes

<sup>1</sup> Waltz, Kenneth Neal. Theory of international politics. Mass.: Addison-Wesley Pub. Co., c1979:125.

<sup>2</sup> Quebecers form a nation within Canada: PM.  
<http://www.cbc.ca/canada/story/2006/11/22/harper-quebec.html>

<sup>3</sup> Quebec's nation status costs Harper his first cabinet minister.  
<<http://www.canada.com/topics/news/story.html?id=692b134e-c712-44c5-83ae-bff78fc1a071&k=49129>>.

<sup>4</sup> <<http://gov.ca.gov/index.php/press-release/2770/>>

<sup>5</sup> UCLG Jeju Declaration  
[http://www.cities-localgovernments.org/uclg/upload/news/newsdocs/UCLG\\_Jeju\\_Declaration\\_ENG.doc](http://www.cities-localgovernments.org/uclg/upload/news/newsdocs/UCLG_Jeju_Declaration_ENG.doc)

<sup>6</sup> UCLG was found in Paris in May 2004. Its members are either individual subnational governments or subnational- government organizations. Over 1000 subnational governments across 95 countries are its direct members of UCLG and 112 Local Government Associations (LGAs) are its party members.

<sup>7</sup> KLAFIR was established in a collaborative effort of the Korean central government and the provinces and municipalities throughout Korea to help promote international cooperation and exchanges between Korea's local governments and their foreign counterparts. Since its establishment in 1994, KLAFIR has introduced various programs to support globalization of rural regions in tandem with the trend of globalization and localization.

<sup>8</sup> For instance, each state in U.S. has a Guard composed of part-time soldiers who otherwise live as civilians. Most often, a governor activates the Guard during state and local emergencies such as floods, riots and power outages. Nevertheless, the president also can activate state Guard troops to serve alongside the active U.S. military and its reserves. The National Guard employs 444,000 part-time soldiers between its two branches: the Army and Air National Guards. Seven governors refused to allow or attached condition to their National Guard units' participation in military exercises in Honduras.

<sup>9</sup> Agents of globalization are mediums /materials by which globalization spreads. This study focuses on the interaction between China's local governments and four kinds of carries of globalization, i.e. capital, goods, people/labor, and information.

<sup>10</sup> As China is a unitary state, governments at all level under the central government are local governments.

<sup>11</sup> ABTC cardholders enjoy fast-track entry and exit through special APEC lanes at major airports and multiple short-term entries to these economies for a minimum of 59 days stay each visit. They need not to individually apply for visas or entry permits each time for traveling to any of the participating APEC economies, as the card is a visa. Cards are valid for three years from first issue.

<sup>12</sup> Most literature are on international involvement of American states and local governments, for instance Bilder (1989), Brown & Fry (1993), Chernotsky (2002), Fry (1998), Goldsborough (1993), Hobbs (1988, 1994) and so on. Most papers in the two most popular collections of monographs in this field, i.e. *Paradiplomacy in Action* and *Localizing Foreign Policy*, focus on subnational foreign initiatives in federal states.

<sup>13</sup> Duchacek (1986a) divided the political system into four types: non centralizing federal, centralizing federal, decentralized unitary, or centralized.

<sup>14</sup> China has 4 municipalities directly under the central government, 23 provinces, 5 autonomous regions and 2 special administrative regions. Due to the differences in political system and economic statistics, this study excludes Taiwan Province, Hong Kong and Macao.

<sup>15</sup> Pengfei Ni employs the metaphor of bow and string in his study to interpret the Chinese cities' competitiveness.

## Chapter Two

### Literature Review on Subnational Governments' International Activities

This chapter briefly outlines the main viewpoints and debates about the rising subnational governments' international activities. It helps better understand in what global context has taken place China's local governments' international involvement. It also lays a theoretical background for this empirical study.

#### 2.1 Initial Studies on Subnational Governments' International Activities

According to *Peace of Westphalia*, sovereign states are the exclusive legitimate international actors and subnational governments are confined within their administrative purview as well as low politics. Since the 1970s, however, together with “non-state actors”,<sup>16</sup> more and more subnational governments have become newcomers in the international arena and actively performed.

Practice needs and leads to theory. Early research on subnational governments' foreign related activities might date back to the 1970s. James Caporaso (1972) studied subnational governments' role in US-Canada relationship. Focusing on economic concerns and skipped political dimension, his study was from five theoretical perspectives such as interdependence, international division of labor, network, etc. Pratt

(1976), Alger (1977), Alger & David (1978) noticed and touched some aspects of the phenomena. *Publius* issued the first collection of monographs on the subnational foreign activities in 1984. Among the monographs, Ivo Duchacek's *The International Dimensions of Self-government* is most influential. He divides subnational foreign-related activities into four basic types: "transborder regional microdiplomacy, transregional microdiplomacy, global paradiplomacy, and protodiplomacy, global paradiplomacy and global proto diplomacy" (Duchacek, 1986a: 240). He believes that physical proximity leads to transborder regionalism. Transborder regionalism refers to various formal institutions or informal networks, which turn subnational governments into bi-national or tri-national cooperative associations along and across national boundaries (Duchacek, 1986). The concept "paradiplomacy" he coined in his monograph, along with "multi-level diplomacy", have become two dominant theories in this field up to the present.

Due to deepening of globalization and interdependence, more subnational governments get involved in foreign issues and some of them exert remarkable influence on their national foreign policy as well as international communities with their population, advantaged natural resources or strong economy. That is why they take controversial foreign-related actions, sometimes alone or united, against their central governments. Those actions are not many but draw much public and academic attention

due to their features of high politics or anti-tradition. More monographs appeared during the 1980s. Gordon (1985), Duchacek (1986, 1987, 1988), Shuman (1987, 1988), Weigel (1987), Hobbs (1988), Bilder (1989) and Torres (1989) are some of them. Among them, Duchacek's *The Territorial Dimension of Politics: Within, Among, and Across Nations* published in 1986 is regarded a milestone a new stage of the theory.

## **2.2 Research on the Local Governments' Foreign-related Activities in China**

Duchacek mentioned the paradiplomacy in China's provinces as early as in 1988. Zweig (2002) looked into China's internationalization. His well-known book *Internationalizing China* explains the role played by state leaders, global forces, and domestic actors in China's integration with world economy. He depicts how the central government relaxes its restriction on local foreign exchange and how the local governments boost internationalization. The transnational flow of capital, goods, people, and knowledge were highlighted. Noé Cornago (1999) points out, that Beijing administration is promoting paradiplomacy in some areas. In addition to informal foreign relationship, some provincial governments are authorized to sign agreements with their foreign counterparts in economic, technological, and cultural arena. For instance, there have been some agreements between in Yunnan and northern Burma, Guangxi and Vietnam, Muslim community in Xinjiang and bordering areas between China and Russia. Cheung



and Tang (2001) have not only presented a historical review on provinces' function in Chinese foreign relations but also analyzed regional external relations in an era of reform: including their nature, organization, pattern and various relevant elements.

Studies on local governments' foreign activities appeared rather late in the Chinese Mainland probably due to their highly political sensitiveness. Huang Jinqi (1998) is the first person brought forward the concept "local diplomacy" in his series of monographs on diplomacy. Li Hu worked hard for more than ten years on his masterpiece--*History of Diplomatic Institution: Han & Tang*. He employs many evidences and examples from considerable historical files and illustrates the significant role played by the local governments in complementing the national diplomacy during the Han and Tang Dynasties. Chen Zhimin is the first person to introduce systematically the academic progress on subnational governments' international initials. Taking the United States, Canada, European Union, and Japan as targets, he (2001) looks into their motive mechanism, international agenda, and impact on national diplomacy. He (2005) examines the Chinese 13 coastal provincial governments' efforts on expanding foreign exchange and affecting on China's foreign policymakers. He claims, "The coastal provinces most commonly act as agents and partners of the central government. Occasionally, they produce unwanted consequences." (2005:178) In *Global Politics and China's Foreign Policy*, Wang Yizhou (2003:175) expresses his welcome and expectation for

“paradiplomacy”, calling it “a newly arisen pressure group”. He believes that it will help shape China’s foreign relations into a multileveled pattern. Being a veteran municipal official responsible for foreign affairs, Gong Tieying (2004) highly praises the role of city diplomacy in his *Cities in a Perspective of International Relations: Status, Function and Political Orientation*. Chen Haosu, President of the Chinese People’s Association for Friendship with Foreign Countries, also stresses the significance of city diplomacy in his *On People-to-people Diplomacy*. Mao Weizhun (2007) argues that paradiplomacy is a subnational passive response to internationalization and localization. He attempts to build up a conceptual framework for subnational international behavior. More Chinese scholars and practitioners have currently concerned the local-based foreign-related activities at home and abroad. For example, Liu Jialei (2003), Chen Fushou (2003), Qi Jianhua (2005), Yin Wenqiang (2006), Li Zhengang (2006), and Yang Yong (2007) studied the phenomenon from different perspectives.

### **2.3 Competing Viewpoints**

Subnational governments’ unsolicited involvement in diplomatic fields, which have long been reserved exclusively to the central government and professional diplomats, has led to an ongoing debate that started in the 1980s and generated a substantial literature. The controversies are as follows. What drives the rise or resurgence of subnational

governments' international participation in the late twentieth century? Is it necessary for subnational governments to get involved in international affairs? Does the subnational governments' involvement, especially those agendas in high political fields, harm the foreign relations of sovereign countries? What factors might affect their activities? International academic circle, especially scholars in federal counties proposed various interpretations and policy suggestions for these concerns.

### **Driving Force from Outside or Inside?**

At international level, deepening globalization, growing interdependence, extensive global networking based on advanced information technology, etc have pushed forward the momentum. All studies in this field regard globalization and interdependence as the chief driving forces. It has been a common accepted notion that globalization has blurred the traditional distinction between international and domestic affairs and transformed the division of responsibilities between national and subnational governments (Hocking, 1996). It has also weakened territory country's control over transnational flow of capital, personnel, information and culture (Pizarro, 2003). Subnational governments thus have expanded their global linkages to survive in global competition for several decades (Conlan and Sager, 2001). Aldecoa and Keating (1999) indicate that the phenomenon of paradiplomacy is not new but resurged in the late twentieth century because of

globalization. Kincaid (1999) discovers that American subnational international action is rooted in early constitutional practice and revived during the late 1980s and early 1990s. Clark and Montjoy (2001) agree that American subnational international initiatives dramatically developed when the U.S. economy increasingly exposed to globalization during the past two decades. They simply consider international competition as globalization. Subnational governments have to shift their strategy from “smoke-stack chasing” to “promoting entrepreneurship” because of such international competition.

Many analysts attribute subnational international initiatives to global revolutions in information, communication and transportation. They argue that it is information revolution that eliminates the cost of long distance communication so that “full-scale globalization” can be unfolded (Scholte, 2000:74). In Friedman’s “flattening world”, advanced information communication and transportation technologies offset the disadvantages of subnational governments in conducting international activities (Bilder, 1989), their weakness in getting information abroad for example. Well-equipped by Internet and advanced telecommunication, subnational governments become the nodes of international network society (Castells, 1996). Castells believes that “space of flows” has displaced “place of flows”. The “space of flows” refers to the network society with translocal and transnational technological flows (Graham, 2000). It is a new spatial logic. Capital, people, information, and culture can flow throughout the place, linking

subnetworks to each other and finally leading to a globing network society. With the assistance of Internet and satellite television, local officials can easily get information to make their own foreign policies and copy their foreign counterparts' political participation mode.

Several scholars highly value the special functions of international institutions in promoting international projection of regional governments. European integration and transnational regimes are often considered as an institutional foundation for regional international participation. Luis de Castro (1999) looks into how the Council of Europe and its Congress of Local and Regional Powers of Europe facilitated regional representation. European integration and transnational regimes have eroded the distinction between internal and external policy, hence offering more opportunities for subnational participation. Keating (1999) also attributes the resurgence of the international activities of regions in the late twentieth century to the rise of transnational regimes. He highly appraised the roles played by European Union, Maastricht Treaty, and the Committee of the Regions in boosting the subnational international activities.

Recognition is a prerequisite for reciprocal exchanges in international relations. Jonsson (2006) admits that the international community had not yet even started to address the criteria to include or exclude new actors in terms of recognition. However, under in exceptional circumstances they may be recognized as national liberation

movements and take part in diplomacy. While non-state actors are more and more frequently participating in international affairs, traditional diplomatically accepted standards and their actual deeds have been more inclusive. For example, although Palestinian Liberation Organization did not control territory, it was conferred the membership of observer to the United Nations in 1974, and promoted to delegation in 1988. Some state governors are invited to be present in United Nations Conference on Environment and Development or International Conference on Population and Development. In global convention and multi-lateral forums, non-government organizations and subnational actors have gained more and more participation rights. However, recognition remains the only ticket to enter international arena goes to sovereignty countries, and it only goes to sovereignty countries or a few quasi-nation units. Congress and the president in U.S. have not yet stopped this subnational foreign activism through legislation or with an executive order.

At national level, decentralization has removed some obstacles for subnational governments to go global. Pierre and Peters (2000) described several situations of the movement of state power: 1. Moving up, the nation-state sovereignty is shared by international or regional organizations, such as World Trade Organization. 2. Moving down, states delegate more autonomy to their subnational governments, etc. 3. Moving out, governments outsource or authorize non-government organizations or companies to

undertake some less significant responsibilities that previously conducted by governments. Decentralization especially in traditionally highly centralized countries mostly encouraged the local international activities. The widespread perception of federal inefficacy in trade and investment promotion is also a vital reason for local actions (Brown and Fry, 1993). The American Congress did not pass the resolution for freezing nuclear weapons but it got supports from more than 900 subnational governments (Shuman, 1986). Since “central governments federal discretionary spending falls, civilian employment declines” (Conlan and Sager, 2001:14), voters and local interest group ask local governments within their reach to play an expanding role in coping with global competitors. Most subnational international activities in high politics originated from their dissatisfaction upon the national diplomatic policies. When Reagan administration actively supported antigovernment forces in Nicaragua in the 1980s, 86 American cities became sister cities with their Nicaragua counterparts (Shuman, 1992:173). When the White House adopted a policy of “constructive engagement” toward government of South Africa where apartheid policies are carried out in 1982, 158 states and counties passed resolutions to withdraw over \$19.6 billion public fund from local companies that have business with South African partners. Capitol’s final approval of imposing sanctions upon South Africa revealed that local voice have been heard and elicited a response from the federal arena.

At subnational level, the tremendous effect of external connections on local economy, public requirements, and local officials' updated concept and skills enhanced their international activities. As Aldecoa and Keating (1999) indicate, global involvement is most likely associated with economic needs, to the spillover of their domestic competences into the international arena and in some cases to the need to manage ethnic or nationalist conflicts at their borders. *Globalization's Impact on State-Local Economic Development Policy* by Clark and Montjoy (2001) provides a variety of data and cases to demonstrate how American subnational governments conducted international economic activities during the past decades. They find that they subnational international activism did not deteriorate their relationship with the federal government. Chernotsky (2001) concludes that rapidly developed local international activities result from interplaying triple factors, i.e. the growing significance of international economic linkage, the federal withdrawal from urban policy during the Reagan era, and the growing professionalization and entrepreneurship of city hall. *States and Provinces in the International Economy* edited by Brown and Fry (1993), a package of a collaborative research, focuses on why and how the states and provinces of North America respond to global economic challenges. They conclude that constituent governments' international involvement aim at surviving international pressures. Fry (1998) further explores the forces behind the rise of American states and local influence in foreign affairs. In his *the Expanding Role of*



*State and Local Governments in U.S. Foreign Affairs*, he highlights the interdependence between American localities and outside world by displaying a large body of data linked to foreign trade, investment, tourism flows. Goldsborough (1993) wrote: California is adopting foreign policies, for the sake of self-assistance and survival. In order to protect local benefits, several U.S. states ignored the White House's opposition and levied single tax from local-based multinational corporations.

Not few scholars contend that public demands are playing unique role in pushing forward subnational government international activities. Hobbs (1994) regards public dissatisfaction as one of the major reasons for subnational government's involvement in international politics. "Public officials may be forced to act on issues of public interest to grasp their support" (Hobbs, 1988). As ordinary people' daily lives have greatly influenced by influx of foreign products, immigrants, pollution, and terrorists, citizens have to demand City Hall to be more responsive and do something. For example, former-mayor of Los Angeles complained that 9.11 terrorists were meeting at San Diego Park, trained in Florida Aviation School, starting at American domestic airports, but the police departments of those metropolises have no power to supervise domestic airports and ports. He called for subnational governments' participation in anti-terrorist campaign.<sup>17</sup> Michael Shuman (1987) believed that the trend of "thinking globally and acting locally" provided a new channel by which ordinary people can directly influence

global policies with local governments. The neo-Marxists and structuralists often complain that public remains disenfranchised from the governing process. The drive of local interests, promotion of local governments' capabilities, pressure from civil society, regional activism and nationalism activists have collectively raised subnational local foreign activities.

### **Necessary or Unnecessary?**

Many sovereign states still consider subnational governments' international activities as intrusion into their exclusive domain (Aldecoa & Keating, 1999). Not surprisingly, there has been an intense political and academic debate over whether subnational governments may have a louder voice in foreign relations. Some scholars and politicians claim that state and local governments should stay completely out of matters relating to foreign affairs. Some local officials regarded foreign activities as "unnecessary meddling" (Shuman 1987:157). They maintain, "foreign policy must be made in Washington and not in the citizens' backyards" (Spiro, 1988:202). Their key arguments are as follows. (1) A nation should speak with one voice. Subnational governments' involvement in international issues may undermine the consequence of a nation's foreign policy and relations, particularly if local actions contradict national policy. They worried that multi-level diplomacy might lead to Balkanization for a nation's diplomacy so that

external force could destroy a country from various localities and hurt national interests (Weigel, 1987). Fry (1998) listed some such episodes that have obviously embarrassed the federal diplomats. The World Trade Organization (WTO), the European Union, and various nation-states are now insisting that many of their current problems with the U. S. were in state capitols and city halls. (2) Usually, states or localities act on their own interests and that may result in adverse consequences for the nation as a whole. (3) State and local officials are not elected to conduct foreign policy or based on their foreign policy views. State and local governments lack the expertise, information and resources to make sensible public judgments about complex international issues. (4) The proliferation of state and local governments' involvement overseas would negatively influence the efficiency of federal foreign policy.

Other scholars and practitioners believe that the state and local involvement is needed. They argue that the involvement is a necessary adaptation of American politics and federalism to a changing world. The foreign-affair issues such as trade and jobs, environment, human rights, cultural and educational exchange have increasingly affected the lives of the individual Americans. Facing the omnipresent foreign permeation and competition, the misperception that foreign policy should be formulated based on a bipartisan consensus reached by a small group of experts is outdated. In addition, state and local governments have been aware of, and sensitive to, the important constitutional

issues and foreign relations concerns involved, and acted responsibly. Thus, very few of local involvement have caused or to be likely to cause serious foreign relations problems. In many respects, these trends are positive, helping to democratize the foreign policy process and bringing the international arena closer to Main Street USA. Therefore, they wish there is room for a more tolerant, flexible and cooperative attitude toward "grassroots' or constituent diplomacy" (Bilder, 1989; Hobbs, 1987, 1994; Alger, 1992; Fry, 1998, 1993; and Evans, 1998). Scholte (2003:362, 371) urged local governments be granted permission to partly get involved in the formulation and implementation of supraterritorial policies. Local institutions should be more involved in the governance of global relationship than what they are. Not surprisingly, the concepts like Track Two Diplomacy coined by Joseph V. Montville and Multi-track Diplomacy developed in 1989 by Louise Diamond and John McDonald occurred one after the other. Joseph Nye (2001) focused on territory, emphasizing that territorial actors, who had dominated world politics for over four centuries since the end of feudalist era, are playing less role due to the occurrence of non-territorial actors such as multinational corporations, transnational social movements, and international organizations. Since the 1990s, there is a trend to debase state's function and boast the role of "new actors". Pluralism and its branch trans-nationalism claimed that a country is not a unitary actor in international politics, and non-state actors are important actors. Joseph Nye's metaphor of "third chess game"

applauded non-state actors' role in international relations, thus welcomed by subnational "diplomats".

Actually, most scholars admit that there exist conflicts between subnational government's foreign actions and the national diplomacy. As Kincaid (1999) indicates, complained occurred about sanctions imposed on Cuba, Indonesia, Myanmar, Northern Ireland, Nigeria and Tibet by US states and cities. Without coordinating them, fragmentation might be strengthened, and thus threatening the state's general diplomacy and security. However, their international involvement "can no longer be dismissed as simple aberrant, trivial, or unconstitutional", "Unless America becomes a police state" (Shuman, 1987:155, 171).

### **Legal or Illegal?**

"The US Constitution does not deprive the states or local governments of all international competence or deny them access to foreign policy making" (Kincaid, 1999:115). Bilder (1989), Fry (1998) and Kline (1999) believe that American constitution and relevant laws have left enough room for local activism. For example, how to judge which local foreign activities are harmless or the "additional, indirect" influence? Which kind of actions is "infringing" or "disturbing" the federal government's foreign policies? Subnational international actions are governed more by custom, political practice, and

intergovernmental comity than by constitutional and statutory rules. (Kincaid, 1999:118) American Supreme Court's verdict on California's Clark v. Allen in 1947 and Oregon's Zscherning v. Miller in 1968 revealed the absence of a legal basis. Just as a congressional representative said, the reason for Maryland to punish the companies that had business with Nigerian partners is that federal government did not make any policy on it. Shuman (1987) lists a dozen of local-based foreign policies and controversial actions, but he claims that only few of them fell into the forbidden categories designated by the Constitution.

Moreover, central governments have become tolerant toward subnational international participation. For example, when some U.S. states and city hall made controversial foreign policies related to Burma, Switzerland, and Nigeria, the White House mildly criticized those actions instead of stopping. American presidents have often encouraged state international activity, especially in international economic affairs, since the administration of Dwight D. Eisenhower. It was President Dwight D. Eisenhower who proposed in 1956 the People-to-People program, since then over 1,056 U.S. communities have Sister City relationships with 1,688 foreign cities in 117 nations. President Jimmy Carter encouraged the National Governors' Association to form a standing committee in 1978 on International Trade and Foreign Relations (Kincaid, 1999:122). Meanwhile, more and more countries encourage the subnational

governments' international participation by legislation. For example, *Law of dispatching emergency Task Force* (1987), and *Basic Law of Environment* (1993) in Japan granted more autonomy to the Japanese local governments. *Law of Signing Treaties* (1991) of Mexico, *Amendment to the Constitution* (1988) of Austria, and *Constitution* (1999) of Switzerland has granted contracting rights to their members.

### **Parallel or Complementary?**

The debating focus is whether subnational governments can act as independent actors in international arena. In other words, the role played by subnational actors is parallel or complementary to their national diplomacy. Paradiplomacy represented by Soldatos and Duchacek asserts that NCG international involvement can and do exist as independent international actors. They claim that international activities by subnational governments have targets, strategies, tactics, mechanism, policymaking and output of diplomatic policies, which is similar to a country's diplomacy. As a result, subnational governments are independent in conducting international activities, which is parallel to central diplomacy. It is the first systematic theory in international activities by subnational government foreign activities and regarded as a new paradigm in international relations. Francisco Aldecoa and Michael Keating (1999) collected and compiled research papers from several countries into a book: *Paradiplomacy in action: the foreign relations of*

*subnational governments*. When comparing “paradiplomacy” with “microdiplomacy”, Duchacek believed the prefix “para-” is more precise than “micro” because such diplomatic form is “parallel to, coordinated with, and complementary to” the center-to-center macrodiplomacy although the two poles, central and non-central, sometimes conflict with each other. Paradiplomacy is regarded as a label or “an abbreviation of parallel diplomacy” (Criekemans, 2006). In *A Dictionary of Diplomacy*, Berridge and James define “paradiplomacy” as “international activity (typically through lobbying) of regional governments such as Quebec and stateless nations such as the Kurds.” Aldecoa & Keating (1999) define paradiplomacy as “the foreign policy of non-central governments”. Dedushaj (2006) defines it a concept often used to describe international action of regions or entities of federal systems. Aguirre (1999) questions the rationality of “paradiplomacy” and suggested to replace it by “postdiplomatic” or “beyond diplomacy” (1999:205).

Brian Hocking published in 1993 a monograph entitled *Localizing Foreign Policy*, in which he criticized the concept of paradiplomacy, replaced paradiplomacy with his multilayered diplomacy. Concentrating more on the impacts of globalization and localization, Hocking and his followers regard subnational governments’ role as a supplement to national diplomacy. Hocking (1999) uses NCG internationalization to indicate the growing extranational involvement of regional and local governments.



Combination of domestic and international politics has given birth to a multi-layered diplomacy, which consists of international diplomacy and local diplomacy. Subnational government cannot become a completely independent foreign actor.

It is not difficult to discern the difference between the two major theoretical schools on the rising subnational government international involvement. The former emphasizes “parallel”, the emergence of a new kind of international actors, and its unique way of participating in international affairs. It also accentuates the competitions and conflicts between this new actor and the traditional actors (i.e. nation-states in foreign affairs). The latter underlines “multilayered” and considers the NCG’s initiatives as an evolution of the process of national foreign policies. Therefore, multilayered subnational diplomacy could unnecessarily conflict with national diplomacy.

### **Summary**

Subnational international initiative is not a new phenomenon but it resurged as a response, whether passive or active, to interconnected forces from international, national and subnational directions. Nowadays, few argue that international affairs are exclusive to the central government. Few ignore the fact that subnational governments have become increasingly significant new actors on the stage of international affairs. Although most relevant literature concern the phenomenon in the Western federal countries,

especially those in North America and Europe, there have been growing interests and actions in the developing nations under the context of globalization and interdependence.

To survive in fierce international economic competition is the key driving forces behind the momentum. For example, as Kincaid indicated in 1984, American states slowed down their international involvement when the US economy provided sufficient capital, consumption, and exports during the late 1990s and much of the 2000s. Subnational international initiatives became prosperous when the US economy entered a decade-long period of stagflation in 1973. Subnational governments lay particular emphasis upon their international economic competence and promoting trade, tourism and investment through their powers of taxation, regulation, service provision and law enforcement.

Although, they occasionally upgrade local internationalization beyond their jurisdiction, making louder voice in high political issues, they do not intend to violate the central diplomacy. Instead, they aim at protecting specific interests or offsetting the deficiency of the national government when required by the public or interest groups. Except for a few substate elites building or in some cases, preparing for national independence, most substate officials do not seek for distinctive international personalities or to claim diplomatic right. These conflicts, therefore, are not necessarily intractable or incompatible.

The central government's attitudes towards subnational international activities varied from tolerate to supportive. Some, especially those in highly centralized countries, do not happy to see intrusion of substate actors into their traditionally reserved domain. Others, especially in the federal countries, facilitate subnational participation in foreign policymaking. Kincaid (1999) offers several examples to demonstrate how US Department of State, the Office of the US Trade Representative, and US Department of Commerce help subnational governments by providing information, advice and technical support.

## Chapter Two

### Endnotes

<sup>16</sup> Generally, the term of non-state actors excludes subnational actors. It includes non-governmental organizations, multinational/transnational companies, multilateral /intergovernmental organizations, terrorist organizations, etc

<sup>17</sup> Riordan, Richard and Amy Zegart. "City Hall Goes to War." The New York Times. 5 July 2002, Late ed., sec. A: 19.

**Chapter Three**  
**A Review on the Chinese Provincial Governments’**  
**Foreign-related Activities before 1978**

This chapter examines the Chinese provincial governments’ foreign-related activities (CPGFA) from a historical perspective. It attempts to answer the following questions: (1) was any the provincial government involved in foreign affairs before China adopted the open-door policy in 1978? (2) If yes, how were they involved, and (3) what were the characteristics at different historical stages?

It was not until the Han Dynasty that China made the unprecedented opening of its door and established diplomatic relations with the rest of the world. There were frequent diplomatic activities and warfare during the early Qin Dynasty, however, they were actually among substates and within China’s own territory. The evolution of CPGFA can be divided into four primary stages. The first stage is from Han Dynasty to the eve of the Opium War (140BC-1839AD). The second is from the Opium War to the eve of the founding of the People’s Republic of China (1840-1949). The third is from the founding of the People’s Republic of China to the eve of China’s reform and opening up to the outside world (1949-1978); and the fourth is from China’s opening-up to present. This chapter discusses the first three stages and the next chapter focuses on the last one.

### **3.1 The Period from the Han Dynasty to the Opium War (140BC-1839 AD)**

CPGFA in ancient China emerged after the two “Silk Roads” were pioneered in the reign of Han Emperor Wudi (140-87 BC). Zhang Qian, an envoy of the Han Emperor to the Western Region, pioneered an overland transportation route from Chang’an (now known as Xi’an), passing through Gansu, Xijiang, central Asia, and west Asia and connecting all countries in the Mediterranean Sea. The route is well known as “The Silk Road” because, among all the goods traded to the West along the Road, silk products were most influential. During the same dynasty, the “Maritime Silk Road” was also pioneered and was extended due to advances in shipbuilding and navigational technologies. It started from Zayton Port of Fujian Province or Xuwen and Hepu in Guangdong Province to the Korean peninsula in the north, to the seaports along the coast of east Africa, from the western fringe of the Pacific Basin to the Indian Ocean. It provided access to the Roman Empire via India. Both silk roads helped ancient China open to the rest of the world and provided opportunities for the local officials, especially those working in the frontier areas, to deal directly with foreign affairs.

Through the two silk roads, foreign trade and foreigners like envoys and missionaries entered China and increased foreign affairs. An earliest system of diplomatic decision-making and administration was consequently created in the Han Dynasty. From the perspective of diplomatic decision-making, the hierarchal system was

highly centralized with the Emperor authority as its core. According to the significance or emergency of a diplomatic issue, the emperor usually personally consulted with his think tank or held meetings before making final decisions (Li Hu, 1998). From the perspective of diplomatic administration<sup>18</sup>, the system empowered the local governments in frontier areas to deal directly with foreigners and affairs within their jurisdiction. They acted as agencies of the court; instead of, the local officials were only allowed to carry out the foreign decisions made by their emperor. If any tough or vital foreign issues occurred in their jurisdiction, they had to report and ask for the emperor's instructions before taking actions. Actions before reporting or without approval were strictly prohibited. Chen Tang's case is a typical example. Chen Tang was a Han General appointed to defend the western boundary. He led his army to attack the Hun tribes in 36 BC without reporting and getting approval from the Han Emperor, as he believed that the court knew little about the specific situation of the regions and could hardly approved his military attack. Although his troops conquered the Hun tribes and killed Chanyu Zhizhi, the king of Hun Confederation, he was severely punished by the Han Court for a crime of violating the Emperor and diplomatic rules (Li Hu, 1998:47).

Due to China's vast territory and long boundary, the emperors of the Han Dynasty (140BC-220AD), the Three Kingdoms Period (220-265AD), the Jin Dynasty (265-420), the Southern and Northern Dynasties (420-589) and the Sui Dynasty (581-618) all

required the frontier prefectures to perform some diplomatic functions. They were receiving and dispatching diplomatic envoys, bestowing gifts and receiving tribute, managing border trade, and diplomatic representations. In the frontier areas, local governments, military force, and frontier-defense troops jointly administrated local foreign affairs. Besides, a few senior officials were specially appointed by the court to the frontier to supervise the local foreign actions. Dunhuang Prefecture of Gansu Province, for example, acted as a military, political center as well as a port for overland foreign trade in the East Han, Wei and Jin Dynasties particularly. The local officials thus took care of various foreign affairs. Foreign envoys, monks and merchants there had their passports checked or applied for a pass. Some of them stayed there to get familiar with local customs or learn the Chinese language; some ran their shops for trade. The Chinese envoys, officials and soldiers also stayed there for forage and learning foreign languages before setting out for foreign countries. In the Han Dynasty, informal customhouses under the local supervision were set up to check import and export commodities, protect foreign envoys, prohibit contraband. Yunmen Guan and Yang Guan along the overland Silk Road were two well-known gates. To attract and courteously treat foreign traders, most import goods were free duty or with very low taxation (Cai, 1991: 486). Departments especially responsible for foreign trade and affairs (*Yuangbian Jiaoshi Zhi*) were established in the frontier prefectures and under the leadership of local governments



in the Sui Dynasty. During the several-hundred-year period from the Han Dynasty to early Tang Dynasty, the local officials entitled *Jun-tai-shou* or *Zhou-ci-shi* were empowered to add maritime foreign trade into their responsibilities (Cai, 1991:486) For example, according to *Guangdong Chronicle of Foreign Affairs*, maritime foreign trade in Guangzhou was supervised by Linnan local government before the Sui Dynasty (581-618).

During the Tang Dynasty (618-907), feudal China stepped into its most prosperous period. The Tang Court enacted an energetic policy in opening up to the outside world and encouraged localities to interact with foreigners. In 730, the Tang Court designated 59 provinces (*Zhou*) that geographically connected foreign countries by land as “frontier provinces”. The local governments in those areas were authorized to handle foreign affairs directly. The loss of Tang’s troops in Western Regions of China and the rapid growth of maritime foreign trade enabled coastal provinces like Guangdong, Fujian in the Southeast and Shandong in the North to take up more important diplomatic functions than ever before. In 714, the Tang Court appointed the first official position *Shiboshi*<sup>19</sup> in Guangzhou. The position was responsible for maritime foreign trade and affairs. Specifically, their duties were to check foreign ships, levy taxes, purchase precious and rare goods for the Tang emperor, etc (Fu Jie, 2002). The Song, Yuan and Ming Dynasties adopted the system of *Shiboshi*. The system continued for nearly one thousand years (Cai,

1991). A royal order promulgated by the Tang Court in 834 read, “*Jiedushi*<sup>20</sup> (A chief executive officer of local military and political affairs) should take care of foreign merchants in Lingnan, Fujian, and Yangzhou. Except *Bojiao* (customs duties), *Shoushi* (governmental priority and monopoly of trade in valuable goods), and *Jinfeng* (pay tribute of valuable goods to the Court)<sup>21</sup>, the arriving foreign merchants should be given freedom to do their own business and the local governments should not impose other duty on them”<sup>22</sup>. *Jiedushi* had the power to raise or lower customs duty rates and work out specific policies regarding local-based foreign trade. Further, *Shiboshi* and local governments were required by the court to arrange and entertain foreign envoys and merchants when foreign ships arrived at or departed the ports. To treat foreign guests courteously, specially designed guesthouses<sup>23</sup> were built and managed by governments in frontier or port cities. Ningbo of Zhejiang Province, for example, built up the Persia Guesthouse for arriving Persian and Arabian merchants in the Tang Dynasty. The local governments along the Southeastern coast of China were allowed not only to supervise foreign trade but also own the revenue (Zheng Youguo, 2006), hence greatly activating the local foreign initiative. Foreign trade by sea, consequently, exceeded that by land after the mid-Tang Dynasty.

The five dynasties (907-960)<sup>24</sup> after the Tang Dynasty witnessed many favorable policies for foreign trade and cultural exchange. The local officials were active in

promoting foreign trade. Mayor Wang Yanbin of Quanzhou, for example, was awarded and promoted for his remarkable achievement in attracting foreign merchants and ships. He was honorably called “an excellent official in attracting foreign money for locality” (*Zhaobao Shilang*).

The Song Dynasty (960-1127) and Yuan Dynasty (1279-1368) were outstanding in maritime foreign trade. It was primarily because of advanced technology of shipbuilding and navigation, especially the use of the compass. Moreover, as warlords in the central plain and northern China frequently obstructed the land transportation along the overland Silk Road, foreign merchants had to take the “Sea Silk Road”. To foster local foreign trade, the Court set up five customhouses (*Shibosi*) in Guangzhou of Guangdong Province, Hangzhou and Ningbo of Zhejiang Province, Quanzhou of Fujian Province, and Jiaozhou of Shandong Province successively in 971. As import and export tax (*Shiboke*) became a main source for the national fiscal revenue, the Song Dynasty attached importance to foreign trade and took away all taxes. During 1076-1085, the Song Court promulgated the world’s first specific law on foreign trade (*Shibofa*), which stipulated that the department named *Queiyuan*<sup>25</sup> and local customshouses should be responsible for attracting foreign merchants and promoting foreign trade. All their activities, however, should be in accordance with Law of *Queyi*.

The Yuan Dynasty relaxed restrictions on foreign trade and governmental monopoly

after unifying China. Local foreign trade reached the height of its history. During the period, Quanzhou Port of Fujian Province became one of the biggest in the world. Its trade outnumbered that of Alexandrian Port in Egypt (Polo: 192). Guangzhou of Guangdong Province traded with 141 foreign countries and regions during 1297-1307.

The Ming Dynasty (1368-1911) adopted the traditional policy of “cherishing guests from afar”, allowed localities to trade with certain countries or tribes in the name of “paying tribute”, but strictly prohibited trade between local and foreign merchants. To prevent disturbance from pirates or inside conspiracy, the Ming Court prohibited sea trade many times. In 1374, the Qing Court closed customhouses in Fujian, Zhejiang, and Guangdong, which had been operated since the Tang Dynasty; only Guangzhou Customhouse was open to foreign trade. In pursuit of interests, however, the local officials in southeastern coastal provinces often had others to smuggle goods by sea.

The Qing Dynasty (1616-1911) mostly advocated the “closed-door” or “half-closed-door” policy for foreign trade, opening its door to foreign trade only 30 years during the reign of Kangxi Emperor. From 1684 to 1685, the Qing Court reopened customhouses in Fujian<sup>26</sup>, Guangdong, Jiangsu and Zhejiang to administrate foreign merchant-ships and collect tariff. Due largely to the growing violation cases of trade rules by the Western colonists, however, the Court closed all the ports and customs in 1757 except Guangdong Customs, which acted as the only customs in China in the

following 100 odd years. The Qing Court promulgated *Five Provisions on Foreigners* in 1759, *Rules on Trade with Foreigners* in 1809 and *Eight Provisions on Foreigners* in 1835. Those regulations and rules aimed to put the activities of foreign merchants under the control of local governments, which reflected the doubt and precaution of the Qing ruler towards the outside world (Zhihong Shi, 2004). Some provinces also followed suit. The Guangdong administration, for example, promulgated regulations to limit foreign merchants' activities in Guangzhou.<sup>27</sup>

“1. Foreign warships are prohibited into the provincial rivers. 2. Foreign merchants in Guangzhou are prohibited to carry any gun or cannon. 3. Foreigners are prohibited to bring women into Guangzhou without official permission. If violation was found, the merchant would be prohibited to trade and the women would be sent to Macao. 4. Foreigners are not allowed to stay in Guangzhou for a whole year. Especially, they are required to leave during winter season. 5. Foreign companies are restricted in hiring local laborers. 6. If foreigners have something to report or appeal to the government, they should report to the business institutions designated to handle foreign trade. If they accuse the business institutions, they may deliver directly to the local governments. 7. Without formal licenses of *Yinshui* or comprador, foreigners are not allowed to hire labors. 8. Foreigners are prohibited to trade in any places beyond Guangzhou.”

During the 2000-year-long period from the Han Dynasty to the Opium War, most of the feudal dynasties advocated the philosophy of “look up to friendship while look down upon material profits” (*zhongli qingli*) proposed by Confucians. The principles such as “giving more while getting less” (*houwang bolai*), “never to vie profits with foreign

barbarians” (*buyu mangyi zhengli*) prevailed for centuries. When foreign affairs were taken into account, political interests outweighed economic interests for imperial rulers. Under such historical background, the characteristics of the Chinese Provincial Government Foreign-related Activities (CPGFA) may be briefly concluded as follows:

(1) CPGFA was originated from the openness to the outside world. Without the two Silk Road connected with the rest of the world, there would have neither foreign exchanges nor necessity for local involvements. The ancient local foreign involvement was indirectly facilitated by advanced technology of navigation and shipbuilding industries.

(2) Due to China’s vast territory and long boundary, most imperial courts authorized their frontier local governments to deal directly with foreign affairs. Although the local governments were allowed only to carry out the court’s decision and required to report or get approval before taking actions to significant foreign issues, actually, because of poor facilities of communication and transportation, local officials had much room to handle foreign issues to seek either local or their own interests.

(3) The local government played diversified roles ranging from political to services. According to the 10-year research, Hu Li (1998) states that frontier governments in the Han, Wei, Jin, South and North Dynasties carried out nine aspects of foreign-related duties. Their duties in the Tang Dynasty were more than twenty-two. Local

administrations then “enjoyed great and broad authority to foreign interactions”; they were the general representatives of the central government for the local foreign linkage and negotiation (P468-469). They not only provided board, lodge, and interpreters for foreign envoys and merchants, but also negotiated with foreign envoys and dispatched envoys to neighboring foreign countries, and even dealt with issues related to territory cession, etc. They also played a crucial role in territory defense. Guangdong Province, for example, fought to reoccupy Tunmen Island and drive out the Portuguese colonialists in 1521. Led by Zhu Wan, Fujian DuYuShi, the army and people in Fujian Province drove out the Portuguese invader in Zhangzhou Prefecture in 1549. With ten thousand soldiers and two hundred military ships, Governor Nan Juyi of Fujian, defeated the Dutch troops who occupied Penghu Islands (then under jurisdiction of Fujian government) in 1624.

(4) Besides their duties assigned by the imperial courts, sometimes, the local governments conducted foreign initiatives. For example, officials of Quanzhou prefecture applied to the Song Court for preferential policy on shipping tax for several times during 1132 and 1136. Eventually, the Court agreed to reduce the tax rate from 2/10 to 1/30. Quanzhou thus became a port with the lowest shipping tax in China and attracted more foreign ships afterwards. Quanzhou government also improved harbor facilities, built lighthouses for navigation, and created a deep-sea-ship registration system

to encourage foreign trade. When ships went abroad or came back from abroad in batches, Quanzhou officials held ceremonies to pray for safe sailing. Those activities demonstrated dependence of local economy on foreign trade.

### **3.2 The Period from the Opium War to the Founding of the People's Republic of China (1840-1949)**

Losing the Opium Wars forced the Qing Court to sign a series of unequal treaties and give up the closed-door policy. From then on, China became a semicolonial state and opened to the western colonists. According to the *Treaty of Nanking* signed in 1842, five ports-- Guangzhou, Xiamen, Fuzhou, Ninbo and Shanghai-- were open for foreign trade and culture. The one-port-for-foreign-trade situation was replaced. Some countries such as U.S. and U.K. were among the first to establish consulates in port cities. During 1843-1903, Fuzhou and Xiamen in Fujian Province accommodated 25 consulates. Gulang Islet of Xiamen gradually became an "international settlement". The governments, especial those of the trade ports became involved with more foreign affairs.

According to Sino-French Treaty of Whampoa and Sino-American Treaty of Wanghia, the heads of governments of Guangdong, Fujian, Zhejiang, and Jiangsu where the five treaty ports were located had responsibilities for foreign affairs. More importantly, in the eyes of the Qing rulers, the status of the kings of foreign countries was



equivalent to the Chinese governors or ministers. It was unnecessary for the Court to handle foreign trade or affairs. After the Second Opium War, foreign diplomats began to reside in Beijing. The Qing court believed that foreign consuls in China were the representatives of their merchants and missionaries. The Court still had the governors-general and provincial governors to deal with the foreign diplomats and tried to create a situation that “the barbarian residing in the capital will be disappointed and will go back to their home because they have nothing to do here”<sup>28</sup>. Therefore, one of significant features of diplomatic regime in the late Qing Dynasty is that Governors-general (*zongdu*)<sup>29</sup> and Governors (*xunfu*) took primary responsibilities to handle foreign affairs. Take Guangdong for an example. Governor-general of Liangguang was responsible for the provinces of Guangdong and Guangxi, exerting the following foreign-related responsibilities. Usually he needed to personally handle important foreign affairs, or sometimes with assistance of the Governor. Consulates located in Guangzhou often negotiated directly with the Governor-general or Governor at least. The Japanese Consul in Guangzhou negotiated with Governor-general Zhang Renjun in 1908 for the case of a Japanese ship named No 2 Chengwan<sup>30</sup>.

“Submit timely report to the court about diplomatic, political or military activities of foreign institutions or individuals such as missionaries in his jurisdiction; report the foreign-related incidents of official or non-governmental conflicts; report the enforcement and consequences of imperial decrees; request instructions for the local development; propose suggestions regarding handling foreign-related issues

in his jurisdiction; transfer documents from a foreign institution to the imperial government, deliver imperial order or decree to relevant foreign institutions or individuals; contact or negotiate with foreigners if required by the imperial government; deal with any specific issues including businesses with foreign nationals, and disputes between the Chinese locals and foreign missionaries; conduct commercial and trade business and maintain administrative relationship with Guangzhou Customs; and investigate and deter smuggling activities. In short, the governor has the authority and responsibility to look into any foreign-related matters within his jurisdiction.”

After the signing of Sino-British Convention of Peking, the number of open-up ports increased to 16. Local foreign affairs became more difficult to be dealt with, especially being subject to some colonial provisions such as concession, consular jurisdiction, unilateral most-favored treatment, and preaching in inland China, etc. In 1861, the Qing Court established Ministry of Foreign Affairs and set up two positions, Nanyang Minister for Foreign Trade and Beiyang Minister for Foreign Trade to perform the duty of diplomatic representatives when foreign related event happened in ports. Afterward, Governor-general of Liangjiang<sup>31</sup> and Governor-general of Zhili occupied these two positions, respectively. The situation of Governors-general and governors were responsible for foreign affairs had been maintained. Due to the geographical distance, the Governors-general and Governors in the southeastern coastal provinces sometimes could hardly get imperial instruction in time for emergent foreign affairs. In fact, they enjoyed rather high authority in foreign affairs, as the imperial government often had to permit

them to “act up to the situation” (*xiangji banli*). It happens at times, however, if the governor’s disposal did not satisfy the emperor, he would be reprimanded or demoted in a name of “improper proposal.”<sup>32</sup>

Specialized official institutions were set up in provinces to cope with increasing foreign issues. Foreign affairs Bureaus (*Yangwu Ju*) came into being in many provinces during the late 1890s. Sichuan Provincial Foreign Affairs Bureau set up in 1895 might be the first one. Its duties were to intermediate dissension between local people and missionaries, arrange coming foreign guests’ stay and inform relevant provinces about the guest scheduling, etc. After the trade ministers were appointed for the five treaty ports after the Opium War, a mechanism of local officials responsible also for local foreign affairs gradually shaped. The extensive local involvement became a noticeable characteristic of the late Qing diplomacy. Led by Fengtian and Jilin, who initiated to set up Department of Foreign Affairs (*Jiaoshe Shisi*) in 1908, the rest provinces followed suit one after another.

When the Beiyang government of the Republic of China came into power in 1912, they inherited the Late Qin Court’s diplomatic concepts such as “compromise leads to peace” (*weiqu qiuquan*), and “concession avoids troubles” (*xishi ningren*). They also adopted the diplomatic strategy of “controlling the foreign invaders by using their own military power” (*yi yi zhi yi*) and performed “maintained diplomacy” (*weichi waijiao*). The

Beiyang Government promulgated *Regulations on Diplomatic Representatives* in 1913, stipulating that province should dismiss its Department of Foreign Affairs (FAB) and set up “a representative office” for foreign affairs. Every treaty port sub-office should be set up to perform diplomatic representations in all treaty ports. Under the dual leadership of the Ministry of Foreign Affairs and provincial government, commissioners appointed by the Beiyang government acted as heads of the offices. During the period, the Cabinet changed frequently and the national financial budget had difficulties. To ensure the offices’ expenditure, the central government permitted customs supervisors or senior officials in treaty ports to be part-time heads of the offices. When foreign-related conflict emerged between the central and local governments, the representative office always took a side with localities. The Representative Office of Sichuan Province was renamed as Foreign Affairs Department in 1912. Its political-affairs section was responsible for affairs related to commerce such as tariff, bargaining, land lease and purchase, employment of foreigners, etc. The educational-affairs section was responsible for affairs related to foreign missionaries, foreign-funded churches and schools, lawsuits etc.

The Nanjing Nationalist Government of the Republic of China was founded in 1927. To take back the diplomatic right, the Executive Yuan (*xingzhengyuan*) ordered the Ministry of Foreign Affairs in 1929 to withdraw representative offices and sub-offices in each province by stages. The central government handled foreign affairs exclusively; and

local government should not establish organization of diplomatic representations. All the foreign related events should be handled according to China's laws, subject to the restriction by decrees. Actually, local governments received the foreign related cases concerning trade, land lease and transaction, passport issuing, citizenship and consular protection. Afterward, they submitted the cases to the Ministry of Foreign Affairs for final review, particularly the important events or issues.

Provinces made much effort to settle disputes between local residents and foreign missionaries. After the Second Opium War, Western colonists including U.S., U.K. and France forced the Qing Court to sign Treaty of Tianjing in 1858, the Convention of Peking in 1860, in which stipulated that religious preachers and disciples should be protected by local governments from being disturbed by local people. Since then, large quantities of foreign preachers arrived. Sichuan for example, there were 114 foreign Catholic clergy in 1895 and the number of Christian clergy reached 191 in 1901. Conflicts between them and local residents happened frequently and thus became important issues in the local governments' agenda. The incomplete statistics showed that from 1859 to 1934, 154 foreign related religious cases happened in Sichuan province. To handle such cases, Sichuan set up special official institutions in 1869, Shanxi in 1882 and Jiangxi in 1900. From 1870, whether being familiar with foreign affairs became a key criterion in promoting and nominating local officials. Forced by foreign diplomats,

especially those had extraterritoriality, the weak Qing Court tended to order the local government to punish the Chinese side. As for the local officials who did not live up to the expectation of the Court, they would be warned, dismissed or exiled, sometimes even lost their lives.

Local foreign trade flourished significantly although bearing a strong semi-colony feature during this period. The accumulated export and import in Shanghai during 1884-1893 reached 1.01 billion customs tael,<sup>33</sup> 24% up over the total volume in the last 10 years and accounting for 49.4% of the whole country. After the Sino-Japanese War of 1894-1895, several countries got franchises to set up factories in China and foreign investment soared. By 1911, there were 643 foreign-funded enterprises in Shanghai; most of the investment was from U.S., U.K. and Japan. By 1931, foreign investment in Shanghai reached \$1.112 billion, taking up 34% of the national total. Besides inbound foreign goods, culture, and traders, local people began to migrate abroad since early eighteenth century. Immigrants from Guangdong were the most and earliest in China. There were over 300 million Chinese immigrants by contracts during 1801-1925, among them 70% were from Guangdong.

It was tough for the provinces to handle foreign affairs when the central government was weak and forced by unequal treaties during the century from the Opium War to the founding of the People's Republic of China. On the one hand, provinces had to carry out

the diplomatic policy of compromise and concession. For example, in 1845, Shanghai Land Regulations were promulgated. It was the first time that the consular jurisdiction was embodied in local regulations. In addition, most of the foreign related religious conflicts happened in China were ended in favor of the foreign side no matter whether their complaints were reasonable or not. On the other hand, the provincial governments tried to safeguard the state sovereignty and local interests with the support of local people. A victory in a religious case in Muyang village of Fu'an County Fujian Province (1862-1893) is an example. Shanghai successfully defeated the attempt of foreign consuls to expand their jurisdiction in 1905. Fujian helped the central government negotiate with the Japanese government regarding the case of "Taijian incident" in Fuzhou. The Japanese side finally apologized to the Chinese Minister of Foreign Affairs by mail and compensated injured citizens in 1919.

### **3.3 The Period from the Founding of the People's Republic of China to China's Opening-up (1949-1978)**

Suffering from economic containment and isolation policy by the Western powers, the new China founded in 1949 decided to be economically self-reliant and adopted a close-door foreign policy so as "to build a stable, unitary state free of foreign privileges" (Cheung, 92). The local-based international exchanges consequently were limited to the

former Soviet Union and a few socialist countries in East Europe. The culture Revolution (1966-1977) made situation even worse. It “sealed China from the outside world, and almost all transnational exchanges ground to a halt. Only revolutionary movements persisted” (Zweig: 1) In a word, the first three decades of the PRC saw a tight control over foreign affairs at all levels. Only border provinces and metropolises like Beijing and Shanghai had more opportunities to establish and expand their external relations.

Take Shanghai, a long-standing international metropolis, as an example. According to Shanghai Municipal Chronicles of Foreign Economy and Trade<sup>34</sup>, during the period from 1949 to 1978, the accumulated import and export volume was \$27.865 billion, among which the import volume was only \$1.775 billion, accounting for 6.37% of the national total. In 1953, the export volume of Shanghai was \$0.183 billion, accounting 17.9% of the national total. The export to the former Soviet Union and socialist countries in East Europe accounted for 48.07% and 12.97%, respectively. In 1959, the export volume of Shanghai increased to \$0.742 billion, accounting for 32.81% of the national total, among while export to the former Soviet Union and other socialist countries in East Europe accounted for 47.22% and 16.43%, respectively. Located opposite to Taiwan cross the Taiwan Straits, Fujian province received only 79 foreign guests from Vietnam, Albania, DPRK, Cuba, and Malaysia from 1961 to 1965. The period from 1972 to 1978 saw only 336 foreign visitors in Fujian.<sup>35</sup> During this period, provinces were required by



the central government to provide economic aid to foreign countries. Between 1955 and 1978, Shanghai participated in 220 programs of economic aid covering 25 countries of Asia, Africa and East Europe, among which there were 109 programs in Vietnam. In addition to financial aid, 5480 experts were dispatched abroad. From 1953 to 1978, China trained 10957 people from aid-receiving countries.

CPGFA during this period had the following features. (1) Regional external relations were restricted to socialist countries. Some provinces undertook foreign-related tasks assigned by the central government “but they did not have their own foreign affairs agendas” (Cheung, 93). (2) Provinces had little autonomy in international contacts. Local officials were at a respective distance from foreign affairs. On one hand, the central government prohibited its local officials to touch foreign affairs without permission. On the other hand, local officials could hardly forget the past events that happened during the “Cultural Revolution”. People who had relatives in foreign countries or close relations with foreigners were often treated and politically discriminated against as foreign-dispatched spies. The past lessons made the local officials fear and shy away from foreign-related affairs as a political minefield. Besides, the area seemed rather abstruse for local officials. Few officials were willing to handle foreign affairs unless instructed by the central government. (3) During the period, political interests always prevailed over economic consideration, which was due primary to the political

background, planned economy system and ideology at that time. For instance, around 1950, all provinces established foreign-related organizations such as Branch of Sino-Soviet Union Friendship Association, Branch of World Peace Movement of Chinese People, local sub-council under the Chinese Council of Anti-American Aggression, and provincial People's Association of Anti-American and Aiding Korean.

### **Summary**

The Chinese provincial governments' foreign-related activities (CPGFA) can be traced back to the Han Dynasty. During the past two centuries, China remained a unitary<sup>36</sup> and highly centralized nation. Generally, imperial courts (140BC-1911AD), the national government of the Republic of China (1912-1949) and the central government of PRC (1949-1978) dictated diplomacy. Occasionally, they brought into play the functions of its local governments when dealing with foreign affairs. During some historical periods, the Court relied heavily on CPGFA. For example, the Tang and Yuan Dynasties saw flourishing local foreign trade. The late Qin Dynasty witnessed how Governors-general and governors actively interacted with foreign diplomats and traders in treaty ports. Aware of the significance of local foreign affairs, elites and veterans were selected and appointed to well-designed official positions such as trade superintendence and foreign-affairs commissioners in the Qing Dynasty. The local official institutions such as

customhouses, foreign affairs departments, and foreign guesthouses were set up with the central requirements and financial aid.

Generally, local officials were reluctant to be involved in foreign affairs, especially, when their central government was weak. Considering themselves as “parents” of the local residents in their jurisdiction, local officials had to protect their “children people” when foreign-related conflict appeared. CPGFA before 1978 were more political than economic. Provinces were mostly required to manage customhouses, defend boundaries, receive and arrange foreign merchants and envoys, etc. They had few initiatives for foreign affairs because foreign trade was not that significant to the provincial economy. For most of the provinces, foreign trade was regarded as attachment to political consideration. It was common that most local officials were unwilling to be involved in foreign affairs and they lacked relevant skills. Local officials were aware of the positive influence of foreign trade on local finance and economic prosperity over time. The coastal provinces were among the first active group in foreign trade. Local officials of Quanzhou in Fujian and Guangzhou in Guangdong, for example, applied respectively to the Qing Court for setting up local-based customhouses and foreign guesthouses. Some local governments successfully persuaded the Qing Court to give them preferential policies such as low taxation, funding for port infrastructure, establishment of frontier markets, etc.

The ups and downs of CPGFA depended greatly on China's economic strength and international status. When China's economy was prosperous, it opened the door wider to the outside world and permitted more local authorities in foreign affairs. The powerful Tang Dynasty, for instance, experienced active transnational interaction at local level. The weak Qin Dynasty before the Opium War had to prohibit maritime foreign trade along Southeast provinces and close several customhouses for fear of pirates and foreign attacks.

## Chapter Three

### Endnotes

<sup>18</sup> It was constituted of three levels of administrative institutions. On the top were specially established departments responsible for diplomatic affairs in the court. On the middle were departments of the court related or partly responsible for diplomatic affairs. On the base were local governments related or partly responsible for diplomatic affairs.

<sup>19</sup> Shiboshi is a title of the ancient official responsible for foreign trade. It was created in the Tang Dynasty and they are the earliest official positions for dealing with foreign trade. Shibosi is a name of the official department responsible for foreign trade. It was first set up in the Song Dynasty and they are the earliest official institutions for dealing with foreign trade.

<sup>20</sup> The position was set up in Tang Dynasty and named as a set of ritual things including Jie, which was conferred when someone was appointed.

<sup>21</sup> Bojiao, Shoushi and Jinfeng are the main tasks of a Jiedushi in administrating foreign ships. Bojiao means collecting duties from foreign ships, incarnating a country's sovereignty; Shoushi means government's monopoly and priority over trade of precious goods, which is hold by Chief Executive in ten days upon the earrival of ships; Jinfeng means paying tribute of valuable goods to the Court after Shoushi.

<sup>22</sup> Seventy-fifth volume of Quan Tang Wen

<sup>23</sup> Foreigners' guesthouses were built in capital and ports to offer free rooms, board, and transportation for foreign envoys, merchants, and outbound imperial envoys. Normally, the local governments not only administrated the guesthouses but also provided free special-household-based servants and daily necessities. Emerged from foreign exchange of the ancient China, they were different from the foreigners entertaining hotels in current China.

<sup>24</sup> After Zhu Quanzhong usurped the Tang Dynasty and founded the Latter Liang Dynasty (907-923), there were sequentially four dynasties after that, namely Latter Tang (923-936), Latter Jin (936 - 946), Latter Han (947-950) and Latter Zhou (951-960). All these five dynasties were called Five Dynasties in Chinese history.

<sup>25</sup> Queyi yuan is a department of the central government set up in the Song Dynasty. It and its branches named Quechang set up in the boundary connected with Liao, Jin and Xia were responsible for tariff and boundary trade.

<sup>26</sup> All the customs in Fujian are generally called as Custom of Min, with two administrations in Fuzhou and Xiamen. In 1723, custom is also taken care by the Governor of Fujian. In 1746, upon the approval of the Court, Custom of Min is divided into 6 branches and 31 sub-branches.

<sup>27</sup> Editorial Committee of Guangdong Chorography. Guangdong Chronicle of Foreign Affairs. Guangdong: Guangdong People Press, 2005: 103.

<sup>28</sup> China History Association ed. The Second Opium War Volume 5. Shanghai People Press, 1978: 347.

<sup>29</sup> There were eight governors-general (Viceroy) at the period.

<sup>30</sup> Editorial Committee of Guangdong Chronicle. Guangdong Chronicle of Foreign Affairs. Guangdong: Guangdong People Press, 2005: 56.

<sup>31</sup> Governor-general of Liangjiang was responsible for the provinces of Jiangxi, Anhui, and Jiangsu. Governor-general of Zhili was responsible for the provinces of Zhili, Henan and Shandong.

<sup>32</sup> Editorial Committee of Guangdong Chronicle. Guangdong Chronicle of Foreign Affairs. Guangdong: Guangdong People Press, 2005: 45.

<sup>33</sup> A monetary unit formerly used in China, equivalent in value to this weight of standard silver.

<sup>34</sup> <http://www.shtong.gov.cn/node2/node2245/node69969/node69974/node70024/index.html>>

<sup>35</sup> Editorial Committee of Fujian Provincial Chronicle. Fujian Provincial Chronicle of Foreign Affairs. Beijing: Chorography Press, 2001:65.

<sup>36</sup> Unitary system is based on centralization and would favor centralism in handling relations between central and local governments. Federal system is based on decentralization, containing a number of relatively independent member units (state, nation, and republic) and would favor decentralism in handling relations between central and local governments.

## Chapter Four

### Theoretical Framework and Assumptions

The Chinese provincial governments' foreign-related activities (CPGFA) have thrived since 1978. They happened neither by chance nor by fate. To set up the theoretical framework and assumptions of the research, this chapter examines why and how China's central government has encouraged its provinces to interact with the four agents of globalization, and why and how the provinces in the Chinese Mainland have actively interacted with the four agents of globalization. This examination is expected to lead to a conclusion that the four agents of globalization rather than others may be regarded as four major indicators of FACPG.

#### **4.1 Why the Chinese Central Government Encourages its Provinces to Interact with the Agents of Globalization**

By the Constitution, there are four levels in Chinese administrative hierarchy, i.e. national, provincial, municipal, and county. The 31 provincial-level administrative units include 4 municipalities directly under the central government, 23 provinces, 5 autonomous regions and 3 special administrative regions. In a unitary country, they are no more than agents of the central government are. The provincial foreign activities are

characterized by non-sovereignty, subordination, and limitation. The extent to which China opens to the outside world or controls deregulation greatly affects the pattern of local internationalization and ultimately the nature and achievement of the regime (Zweig, 2003:277).

Economic development has been China's top-priority since 1978. Military security and political interests had been an overwhelming consideration of Chinese diplomacy for centuries. Having realized that "Development is the absolute principle." (*fazhan shi ying daoli*) and "it is impossible to develop China rapidly without opening its door to the outside world" (Deng Xiaoping, 1993:64), Beijing Post-Mao administration adopted a flexible attitude toward capitalism. Economic growth rather than ideological struggle helps solve problems both at home and abroad<sup>37</sup>. It was decided at the third plenum of the 11<sup>th</sup> CPC Congress in December 1978 that over-centralized administration in economy should be transformed and an opening-up policy be adopted. Accordingly, China shifted its diplomatic concern, though slowly but gradually, from politics-first to economy-first. To develop a foreign-oriented economy, the Chinese top leaders encouraged the coastal provinces to establish economic relations with their foreign partners, either governmental or nongovernmental. Before that, there had been a discrimination against coastal provinces and major efforts were made to establish industries in the interior. There was a need for defense consideration in 1960s because of



the perceived military attack on China would come from Taiwan, Korea and other place near the coast. (Wei Yehua Dennis, 2000) In July 1979, Beijing granted Guangdong and Fujian provinces a number of incentive policies for attracting FDI and foreign traders. In May 1980, it designated four special economic zones (SEZs)<sup>38</sup> in Guangdong and Fujian. In 1984, it granted SEZs and 14 Coastal Open Cities (COCs) with more freedom in foreign-related economic activities and preferential taxation for foreign-fund enterprises. All these set free the local officials in directly handling foreign affairs and turned on “a green light” for inflowing agents of globalization. Interaction between the province and agents of globalization initiated thereafter. The following figures demonstrate that during the past decades, such interactions were frequent and fruitful. FDI actually used in China reached \$691.9 billion from 1979 to 2006, 433.2 times of that in 1978. Over 600,000 foreign-funded enterprises were set up by the end of 2006, making China the largest foreign-invested country in the world. Meanwhile, China has set up 10,673 overseas enterprises in over 160 countries and regions. Outbound direct investment (non-financial) accumulated to \$16.13 billion, ranking 13<sup>th</sup> in the world. Total value of imports and exports reached \$1.7607 trillion, 85.3 times of that in 1978, with an annual increase over 16%, ranking third in the world. Foreign tourists’ arrival amounted to 124.9 million, 69 times of that in 1978. Foreign exchange earnings in tourism summed up to \$33.949 billion, 129 times of that in 1978. The outbound Chinese labors numbered 675,000 and

the turnover from contracted projects and labor service with foreign countries was \$35.7 billion in 2006.

National diplomacy needs assistance from the provincial governments. From the perspective of population under the Chinese provincial administration, in 2006, three provinces (Henan, Shandong and Guangdong) had population exceeding 90 million each; nine provinces had more than 50 million population each; and nineteen provinces had over 30 million population each. Each equals a large country in the sense of population. From the perspective of the ratio of officials of the central government in the national total, it is above 30% in European countries and 16-17% in America. In China, however, there are only thirty thousand officials working for the central government, it is lower than 7%, making the Chinese central government the smallest in the world. The Chinese central government thus can hardly handle and, it is unnecessary to handle all the foreign affairs at local levels. Moreover, the central government needs its provinces to share some foreign affairs at the national level, such as receiving state guests, undertaking nationwide foreign activities, handling national boundary affairs, and providing aids according to bilateral or multilateral treaties. For example, in 2006, the Yunnan Provincial Foreign Affairs Office (FAO) welcomed and arranged 69 foreign official delegations to visit Yunnan, among which nine delegations were invited as the state guests. The FAO conducted a boundary survey between China and Vietnam (Yunnan

section), completing 54.56 Km and confirming 286 positions for boundary stones. The Public Security Department of Yunnan took over 609 Chinese citizens, who were arrested as illegal immigrants, from Burma<sup>39</sup>, successfully detected 10,729 cases of cross-border drug trafficking, arrested 12,926 suspects and confiscated 10.15 tons of drugs. Opium, heroin and “ice” confiscated took up 88.7%, 73% and 58.5% of the national total, respectively<sup>40</sup>. Fujian has acted as an organizer for China’s annual International Fair for Investment & Trade since 1996 and Guangdong for China’s annual International Hi-tech Research Findings Fair since 1999. Hainan has held the annual Bo’ao Forum for Asia<sup>41</sup> since 2001. Chongqing held the 5<sup>th</sup> Asia-Pacific City Summit in 2005. Entrusted by the central government, Anhui undertook the construction of an office building for the Foreign Affairs & Cooperation Ministry of Mozambique and a large public transportation project in Madagascar.

As the provincial governments are more flexible and less concerned with high-political issues, they may play a special role under circumstances when it is improper or difficult for the central government. For instance, when contacting with a country without official diplomatic relations, or when a predicament appears between top governments, or when it is unnecessary or unequal for the central government to have a dialog with foreign subnational units, etc. In 2003, when chemical poison gas bombs abandoned by the Japanese army in World War II was discovered in Heilongjiang

Province, the local government of Qiqihar was in a better position to negotiate with the Japanese side on behalf of the local victims (Chen Fushou, 2003:28). When serious contamination occurred to the Songhua River, Jilin and Heilongjiang in 2005, the provincial governments involved took emergency measures immediately and effectively alleviated the pollution for the residents in Russia and other countries along the river.

Acting between the central government and grassroots units, provincial governments are able to exert the role of “mediators” (Hocking, 1993: 46) in coping with foreign activities concerns by non-governmental organizations (NGO) or ordinary individuals. For example, when local-based domestic NGOs and people misunderstand the national foreign policy or react improperly, it is the provincial governments’ duty to help mediate and mitigate such occurrences. The demonstrations against Japan happened in several provinces during March-April, 2005 are typical cases. Since provincial governments pay more attention to its economic agenda, their external relationship is unlikely to be hurt due to discord at the national level. External relations at provincial level are characterized by stable, long-term, and mutual benefits. For instance, stalemate between Chinese and Japanese summits during recent years could hardly stop interaction at local levels. Encouraged or permitted by national governments, economic collaboration and cultural exchanges among the 37 pairs of Sino-Japanese sister provinces or sister cities have remained normal. In 2007, the Nagasaki Governor and speaker, Okinawa deputy

governor and speaker, led, respectively, a large official delegation to Fujian, celebrating the 25<sup>th</sup> and the 10<sup>th</sup> anniversary of establishing sister-province relationship.

#### **4.2 How the Chinese Central Government Encourages its Provinces to Interact with the Agents of Globalization.**

China's Opening-up Policy and decentralization have helped transform the provinces into international actors. When founding the new China as a developing socialist country<sup>42</sup> in 1949, the CCP followed suit of the Soviet Union and adopted the Stalinist practice of central planning for resource allocation, suppression of light industries and services in favor of heavy industries, and minimization of trade and financial linkages with the capitalist economies (Demurger, 2001). An over centralized administration was a serious problem of the Chinese economic system (Deng Xiaoping, 1978). Since the Third Plenum of the Eleventh Party Congress in 1978, China has carried out an opening-up policy and gradual decentralization. The opening-up policy aims to attract FDI and increase export in selected areas. The area targeted during early 1980s was Guangdong and Fujian; during the middle to end of the 1980s, the 14 coastal open cities were designated; Early 1990s saw further extension of opening-up to all the inland provinces. The Fiscal system is a vital benchmark for intergovernmental relations. The essence of the fiscal decentralization in China was a five-year-long tax-revenue-sharing formula

individually negotiated and set between the central government and the provinces. As the marginal tax rate set by the central government varied tremendously across provinces, the provinces' incentive to generate tax revenue accordingly varied. The study (1999) of Hehui Jin *at al* found the average retained earning was only 0.17 yuan for every yuan the local government increased during 1970-70 whereas 0.75 yuan was retained during 1982-92. Due to the fiscal system, the national revenue declined from 35 percent of GDP in 1978 to 14 percent in 1992. To restore the national fiscal capacity to help the poorer provinces, China readjusted its fiscal system in 1994 by undertaking a tax reform, which introduced a value-added tax. The Budget Law enacted in 1995 designates the responsibility and authorities of various-level governments in budgeting, approving and actualizing budget. It grants local governments the right to make, approve and actualize their own budgets. Generally, China's fiscal system is highly decentralized compared with foreign countries. Take the proportion of fiscal expenditure of the central government in the national total for example. In European countries, fiscal expenditure of the central government usually accounts for 50-60% of the total, 90% in England, and nearly 50% in the US. However, China's central government took up only 24.7% in 2006. The provincial extra-budgetary expenditure accounted for 91.3% of the national total extra-budgetary expenditure in 2005. "Decentralization is the touchstone of federalism" (Edmond Orban, 2003:236). The abovementioned reforms led to "developmental

localism” in China (Zheng Yongnian, 1994). Orban *at al* points out: “China’s post Mao *de facto* federalism is launching provincial and sub-provincial governments on a booming economic trajectory (2003:236).” Except for tariffs and exchange rate, today’s provincial governments enjoy much more authorities in foreign decision-making, which greatly enhanced the provincial motivation in foreign-related activities.

Provincial governments in China do not have “residuals”<sup>43</sup> or “reserved power” (Qi Jianhua, 2005:40). Powers exercised by the local governments are granted by the central government in the form of the Constitution and those not listed in the law all belong to the central government. The current Constitution issued in 1982 defined: firstly, a unitary system is the basis and supplemented are autonomous regions of minority nationalities and special administrative regions; secondly, democratic centralism refers to function division between the central and local governments, which are able to play an active role under the leadership of the central government. Local governments are subordinate to the central government and must abide by its leadership. The Constitution further defines that diplomatic affairs and national defense are exclusively under the control of the central government. The State Council conducts foreign affairs. This means that local authorities are not delegated with such power. Thereby, the Constitution prohibits local governments to touch upon international agenda concerning sovereignty over the territory and military security. Late premier Zhou Enlai stated, “Issues concerning

foreign policy must be reported to the central government” (Yong Gao, 1987:442). Local officials are often warned that “power over foreign affairs exclusively belong to the central government” (*waijiao daquan zai zhongyang*), or that “there are no trifles in diplomacy” (*waijiao wu xiaoshi*), or that “Diplomatic authorization is limited”<sup>44</sup> (*waijiao shouquan youxian*). For instance, the central government demands its localities to strictly fulfill promises in the *Protocol on the Accession of the People’s Republic of China* signed by the Chinese central government and WTO, namely, “China’s local regulations, rules and other measures of local governments at the subnational level shall conform to the obligations undertaken in the WTO Agreement and this Protocol.”

China has not yet empowered its provinces to conduct high-political foreign activities. Local foreign activities should be in accordance with the national foreign policy and secondly promote the local economic development. Actually, the central government has made clear what foreign agendas are encouraged and what are prohibited for localities. Foreign activities to promote economic growth are strongly encouraged, especially those attracting FDI, inviting tourists, increasing export and introducing advanced technology. Non-economic or low-political foreign activities exchange is under supervision, especially those related to inviting foreign high-ranking officials, signing agreements of sister-city relationship, joining in international organizations, etc. High-political activities are forbidden, especially those concerning territory sovereignty and military security.



Foreign-related laws and regulations have been made to narrow the provincial foreign activities into interaction between localities and agents of globalization. In other words, the purpose of opening-up is to speed up economic development, make full use of resources abroad, and integrate China into the international community.

To encourage FDI, the most effective accelerator of economic development, *Income Tax Law on Chinese-foreign Equity Joint Ventures* and *Income Tax Law of Foreign-funded Enterprises* issued respectively in 1980 and 1981 provide favorable taxation and simplified procedures for Sino-foreign equity joint ventures and foreign-funded enterprises. *Interim Provisions on Alleviation or Exemption of Income Tax and Consolidated Industrial & Commercial Tax in Special Economic Regions and the 14 Coastal Harbor Cities* issued in 1984 and *Provisions on Encouraging Foreign Investment* issued in 1986 established the framework and pattern of foreign-funded enterprises in China. The provincial governments were empowered to approve FDI projects below \$30 million and to decrease or exempt income tax and land use fees within their jurisdiction. To narrow the regional gap, the State Council empowered the inland provinces to approve FDI projects from a maximum \$10 million to below \$30 million in 1996. State Administration of Foreign Exchange in August 2007 gave its permission to domestic individuals to invest in overseas securities markets with proprietary or purchased foreign exchange through relevant channels in the pilot area.

This is a further effort to encourage capital outflow.

The central government has adopted three incentive policies to encourage export since 1978. They were financial subsidies granted to export enterprises, especially before the mid 1990s; export rebates since the late 1990's; and modulation of RMB exchange rate, depreciating RMB exchange rate before 1994. Thanks to the policies, export dependence surpassed import dependence. From 1990 to 2005, the average export dependence was above 20% and 30% at the most; that means every year 20% of GDP came from exports. Second, every 10% increase in exports has brought about 1% increase in GDP, while every 10% increase in imports has brought about a negative increase of 0.56% in GDP (Chunmei Liu, 2007:52). To get rid of the negative impact in the Asian Financial Crisis in 1998, China brought up the rate of export rebates in 1999, up from 6% to 15% on the average. The past four years saw China's trade surplus soar. It accounted for 7 percent of the country's GDP in 2006.

To promote cross-border movement of people, China has endorsed policies to simplify entry and exit formalities. It implemented *Law on Control of the Entry & Exit of Aliens* and *Measures for the Administration of Examination and Approval of Foreigners' Permanent Residence in China* in 1985, abolished exit visas and designated residences for inbound foreigners, etc. Before enforcement of *Law on Control of the Entry and Exit of Aliens*, only about 200 places were opened to foreigners. By the end of 2005, the

places amounted to 2800. Transnational movement of the Chinese citizens is most dramatic. During 1949-1979, only 280,000 Chinese citizens went abroad. Shortly after the opening-up, *Law on Control of Exit & Entry of Chinese Citizens* and *Measures for the Administration of the Overseas Tours of Chinese Citizens* went into effect respectively. According to the China National Tourism Administration (CNTA), 34 million Chinese traveled abroad in 2006, making China the sixth largest source of outbound tourists. The UN World Tourism Organization forecasted that China would become the fourth largest by the mid-2010s and the number will exceed 100 million by 2020. According to CNTA, 2.35 million tourists traveled between China and the US in 2006. The US contributed about 1.71 million of them, a year-on-year increase of 9.95 percent. For better mutual understanding, CNTA led 26 provincial tourism directors to meet with their US counterparts in late October 2007. China and the US were both working hard to add the US to Chinese tourists' destination list, which already includes 132 countries and regions. Before 1999, official outbound always outnumbered those of the personal outbound. After 2000, due to the simplified procedures of applying for passports, personal outbound departures, especially for tourism increased dramatically and began to outnumber those of official ones. *Passport Law of China* enacted in 2007 displays the Chinese government's determination to speed up the transnational flow of Chinese citizens.

Information is a vital productive factor than capital in a networking society. Cross-border flow of information is mainly through the Internet, fax, correspondence, telephones, and the press. Among them Internet is the most important as it enables “space of flows” to displace “space of places”<sup>45</sup>. Information via the Internet depends on the Internet coverage and the proportion of users to the total population. The Internet first appeared in China in 1986. It was an international Internet project-Chinese Academic Network (CANET) between Beijing Research Institute of Applied Computer Technology and German University of Karlsruhe. In September 1987, CANET established the first E-node in China and sent out the first E-mail of China on September 14, reading, *“Across the Great Wall we can reach every corner in the world”*, which initiated Chinese access to the Internet. Over the 20 years, China’s Internet has seen a rapid growth in application. According to a survey issued by the China Internet Network Information Center (CNNIC), the number of Internet users in the Chinese Mainland reached 137 million with 843,000 websites at the end of 2006, second only to the United States. Furthermore, China issued a set of regulations on December 2006 saying that when foreign journalists interview a person in the run-up to, and during the 2008 Olympic Games, they only need the consent of the interviewer. The statute removed some restrictions that had been in place since the Regulations on the Supervision of Foreign Journalists and Resident Foreign News Organs were issued in 1990. The scope of coverage may include politics,

the economy, society, culture and other fields.

#### **4.3 Why the Chinese Provinces Actively Interact with the Agents of Globalization.**

The provinces confine their foreign activities to interaction with agents of globalization mainly because (1) agents of globalization tremendously promote local socioeconomic development; (2) the central government allows them to act only with agents of globalization.

The Constitution stipulates that the primary responsibilities of the provincial government are to develop economy and maintain social stability. Local officials in China act as the equivalent of a board of directors and sometimes more directly as the chief executive officers and the CCP secretary are at the helm of this corporate-like organization (Oi, 1995). Zweig considers local communist leaders as the directors of transnational corporations (2002:1). Economic development is always the top-priority of the provincial top leaders. Bai Enpei, Secretary of Yunnan Provincial Committee, told his subordinates “to accelerate the development is the most fundamental task of Yunnan Province”. Su Rong, Party Secretary of Gansu states, told his subordinates “The most important political agenda of Gansu Province is to develop”. Xu Guangchun, Party Secretary of Henan Province, stressed, “Our top-priority is to make local people’s life better off”. As agents of globalization are obviously promoters for local economic

development, the local governments have to demolish obstructions on the way of flow of the agents of globalization.

Local governments welcome agents of globalization because of their awareness of the remarkable positive impacts of agents of globalization on economic growth. The agents initially flooded into Guangdong, Fujian and then SEZs in more provinces, where have geopolitical advantages, better infrastructure, preferential taxation, efficient administration and service, etc. Isolated from the outside world for decades, the local officials lacked experience in handling alien merchants, travelers, exotic commodities and cultures. They were curious but worried that globalization would hurt local economy and society. However, the officials at coastal areas realized readily that the pioneer provinces became “nodes” and “floating space” connecting the domestic and international network and developed far more rapidly than other inland provinces. Globalization has transferred previously conceived disadvantages such as coastal area, overseas Chinese networks, and historical overseas linkages into advantages for economic development.

Transnational flow of capital and goods are two main propellers of GDP growth. Guangdong Province, which took the lead in opening up, is an excellent example. In 2006, it attracted \$14.5 billions foreign capital, accounting for over a quarter of the nation. Its foreign trade totaled \$527.2 billion, about 1/3 of the nation. Its GDP surpasses

\$325 billion, taking up 1/8 of the nation. Its GDP per capita reached \$3509, twice that of the nation. Its revenue totaled \$65 billion, representing 1/7 of the nation. Jiangsu Province ranked first in paid in FDI during 2002-2006 and has established the most long-term relationship provinces with foreign counterparts in China. For instance it has 175 foreign sister provinces and cities in 2006. The group composed of 14 COCs is another convincing example. Their GDP totaled \$539 billion in 2006, accounting for 19.3% of China; that is, 1/13 population created 1/5 GDP of the country. Their paid in FDI totaled \$30.4 billion, representing 43.7% of China; the increase rate was 20.9%, much higher than the national average level. The average urban and rural income was 127% and 178% of that of the national average level respectively. Foreign trade improves local employment, income and financial revenue. Take export processing as an example. The population engaged in export processing totaled five million in Fujian Province, representing 27% of the total employment of the province. The export of processing industry reached \$16.2 billion, accounting for 46.51% of the provincial total exports; the import of processing industry was \$ 8.778 billion, taking up 43.3% of the total import.

As more cities were designated as SEZs or COCs and granted preferential policies,<sup>46</sup> the competition for international sources became more intense. The thirst for FDI and information is just like drought fields needing water. The governments, no matter in

coastal or bordering or inland provinces, all attempted to persuade Beijing to grant them more authority in handling foreign affairs so that they could be more competitive in the transnational flow of globalization agents. Shambaugh and Lampton (2001) highlighted the great effort made by the provincial governments in attracting FDI. Chen Zhimin (2005) and Cheung (2001) offer a vivid picture of how the provincial officials influenced the national policymakers by lobbying. Gerald Segal (1999) depicts a situation of how the Chinese local governments compete with each other by offering preferential policies to foreign investors or traders. To attract more FDI, Governors of the provinces treat visiting foreign officials and big entrepreneurs as VIPs. For example, Yunnan provincial leaders held over 200 formal meetings with foreign visitors in 2005<sup>47</sup>. In 2006, Yunnan Governor Xu Rongkai made a special trip to Guangxi Province for meeting the premiers of Myanmar, Singapore, Kampuchea, Malaysia, Thailand and Viet Nam, who were attending the summit conference of the 15<sup>th</sup> anniversary of China-ASEAN Dialogue. During his visit, he exchanged views with the premiers of the six countries on the trade, investment, infrastructure like Pan-Asia Railway, drug-banning and alternative plant, travel, personnel training etc. between Yunnan and the six countries.<sup>48</sup> To develop long-term stable bilateral cooperation with foreign counterparts, the 31 provinces had set up 443 sister-provinces by the end of 2006. Shanghai ranks at first and Beijing second, with 51 and 39 provinces respectively. Turning away from empty talk, more provinces



are seeking economic benefits from foreign sister-provinces. After over 30 years of practice, local officials are more open-minded, pragmatic, skillful and experienced, acting as the propellers in the progress of China's internationalization (Zweig, 2003). Some provincial governments annually sponsor their officials to study international politics, international relations, and public administration in the developed countries like the USA, UK, Japan, Singapore, etc. Preferential policies are also formulated for recruitment of the returnees from abroad to act as government officials (Zweig, 2004). Besides, well informed by advanced IT, the local people have been interested in international issues and their opinion has exerted larger influence on the provincial foreign policymaking. As the public opinion is no longer limited to empty talk, there has been consciousness of public participation and a distinct tendency of practice in foreign activities (Sun Hong, 2006).

Decentralization in China does not set free provinces to encroach into the high political fields. Neither does it weaken the central control over the local foreign affairs. Under the current political system and diplomatic administration, the central government can absolutely avoid the zero-sum effect in foreign affairs. It gives specific guidance and strict control over local foreign affairs by not only the laws and regulations but also "soft law". Among them, the most effective way is the personnel system of evaluation, promotion and appointment of local officials (Jae Ho Chung, 1995:503). Once the central

government discovers that the local foreign activities conflict with the national diplomatic policies or might damage the national interest, it will stop the activities or punish the actors (Jingqi Huang 2003). Apart from that, the lessons from history have helped the local officials better understand what is encouraged and what is prohibited. As a result, the provincial governments keep a cautious attitude toward non-economic foreign affairs. For this reason, most of them have not yet joined the United Cities and Local Governments. The local governments seldom get rid of the central control or violate the national foreign policies. The provincial governments, for example, undertake crackdowns on the illegal activities such as smuggling, illegal immigrants, infringement of intellectual property, etc.

#### **4.4 How the Chinese Provinces Interact with the Agents of Globalization.**

Provincial foreign activities are either in foreign countries or local-based. The first category includes visits abroad, trade missions, promotion fairs, sister-cities, membership in international organization, etc. For instance, 2174 groups composed of 15,089 persons in Yunnan Province went abroad in 2006 for official purposes, among them, 44 groups were leaders at the provincial level.<sup>49</sup> In 2005, Zhejiang Governor Lv Zushan led a big delegation to Paris and hosted a France-Zhejinang Fair. Yunnan Governor Xu Rongkai led a delegation to Tokyo and hosted “Yunnan Travel Promotion and Merchant

Invitation”. In 2007, Heilongjiang Deputy-Governor Su Zhanshu led an economic and trade delegation to hold a Heilongjiang Promotion Fair in Los Angeles and the debut of “Charm of Heilongjiang” TV program and the two years’ anniversary of Heilongjiang Satellite TV’s entering North America. Guangdong sponsored “2007 Economy and Trade Cooperation Fair between China Guangdong--Tanzania”. During the fair, the two sides signed contracts of \$1.8 billion, covering trade, construction projects, investment cooperation, merchant invitation, etc. More than 20 provinces are members of international or regional government organizations, such as UCLG, World Association of Major Metropolises, and Asia-Pacific City Summit, etc. In June 2005, 13 governors and mayors of the Chinese Mainland attended the conference of UCLG Council and the Forum of World Mayors and discussed the function of the local governments in realizing the development goal of the UN in the millennium summit and the disaster management. Asia Kyushu Summit of Local Governments has been held ten times, and the leaders of Fujian Province attended the meeting twice upon invitations. Most of the foreign activities are local-based due to provincial budgets as well as strict check-approval for going abroad. Besides undertaking tasks assigned by Beijing, most foreign activities at provincial level are related to agents of globalization.

Most provincial foreign activities focus on attracting more foreign capital because 19.3% is contributed by FDI among each one percentage of GDP growth in China (Jinfan

Jiang 2004). First, the provinces takes advantage of the various resources to persuade the central government to grant lower income tax rate, higher retained proportion of foreign exchange, freer administration for foreign trade, and more simplified procedure in foreign affairs, etc. The tax rate exerts a greater influence on the flow of FDI than the market potential and investment environment (Benassy-Quere and Fontagne 2001), on the base of preferential policies stipulated by the state. Therefore, provinces grant tax reduction or exemption for foreign investment; or extend the preferential period upon expiration of that stipulated by the laws of the state. Second, the provinces delegate the foreign-related approval power to the local governments below them and simplify procedure to raise efficiency. E.g., Fujian empowered all its county-level governments and the main development zones to approve the foreign investment projects below \$30 million provided that the project is not prohibited or restricted by the state, nor does it go against the laws and regulations of the state concerning environment protection.<sup>50</sup> Third, provinces protect legal rights of foreign-funded enterprises and the individuals, e.g. to regulate the fees beyond the tax to mitigate their burden. Fourth, the developed coastal provinces began to support the provincial-owned enterprises to invest in foreign countries. By June 2007, the number of enterprises and institutions investing aboard from Zhejiang Province amounted to 2809, with total investment of \$1.64 billion, among which the Chinese investment accounted for \$1.3 billion.

The provinces also strive for quick transnational flow of goods, especially for export and earning foreign exchanges. Apart from the export policies of the central government, each province has full uses of their authority to make competitive simulative policies. The local-based provincial common practice are: totally or partly refund export tax, give awards to local foreign trade enterprises with remarkable achievement, promote local famous brands to international markets, provide finance guarantee for small and medium enterprises, assist the local enterprises to fight against trade barriers, etc. In terms of import, the *Rules of Fujian Province on Awarding the Expansion of Import* was formulated in 2007 to encourage the import of key technology and advanced equipment from aboard.

From the perspective of transnational movement of people, provinces usually pay more attention to attracting foreign visitors and exporting labor force. Take Fujian for example, under the full support of the governments, Wuyi Mountain in Fujian was conferred the title of World Natural and Cultural heritage by United Nations Educational, Scientific, and Cultural Organization in 1999, the Big Golden Lake in Fujian won the title of World Geopark in 2005. Since then, they have attracted more foreign visitors and thus become new resources of local revenue. Jiangsu Province sent 112, 421 labors abroad in 2006 and the business turnover reached \$4.4 billion. In terms of officials' foreign trips, those closely related to economic and trade purposes were much easier to

get approval than others were. For example, 31600 officials of Mainland China went abroad on business in 2005, among them 19100 were from economic or trade departments.

Flowing information is mostly invisible but it strengthens a provincial competitiveness. Capital always flows into an area with abundant information. The provinces, thus, attach much importance to speed up transnational flow of information by developing IT networks and industry. Each province had established a new department and provincial-owned company to facilitate information flow from the perspectives of governments and quasi-governmental enterprises respectively. Led by Guangdong and Fujian, more provinces have worked hard to turn themselves into “Strong Province in IT” respectively. The business turnover of telecommunication of Guangdong in 2006 amounted to \$34 billion, accounting for 17.5% of the country. The number of telephone households in Guangdong exceeded 100 million in February 2006. At that time, only six countries<sup>51</sup> in the world had more than 100 million telephone householders. The fixed assets investment of Fujian in the communication industry amounted to \$1.13 billion in 2006, increasing by 11.5% and accounting for 2.74% of the provincial total FAI. The average consumption expenditure in telecommunication accounts for 10.26% of the total.

Meanwhile, provinces are making much effort to introduce more foreign people and projects with expertise. Particularly after China’s accession to the WTO, talents with the

skills of foreign trade, legal knowledge or those possessing an international MBA are in great demand for regional development (Zweig, 2004). For example, during recent years, Shandong Province has employed 82,000 professionals and sent more than 11,000 locals abroad for training. The province has spent \$9.6 million on talent-exchange projects. With the help of foreign expertise, Dezhou-based Himin Solar Energy Group of Shandong Province is now the world's leading manufacturer of solar water heaters.

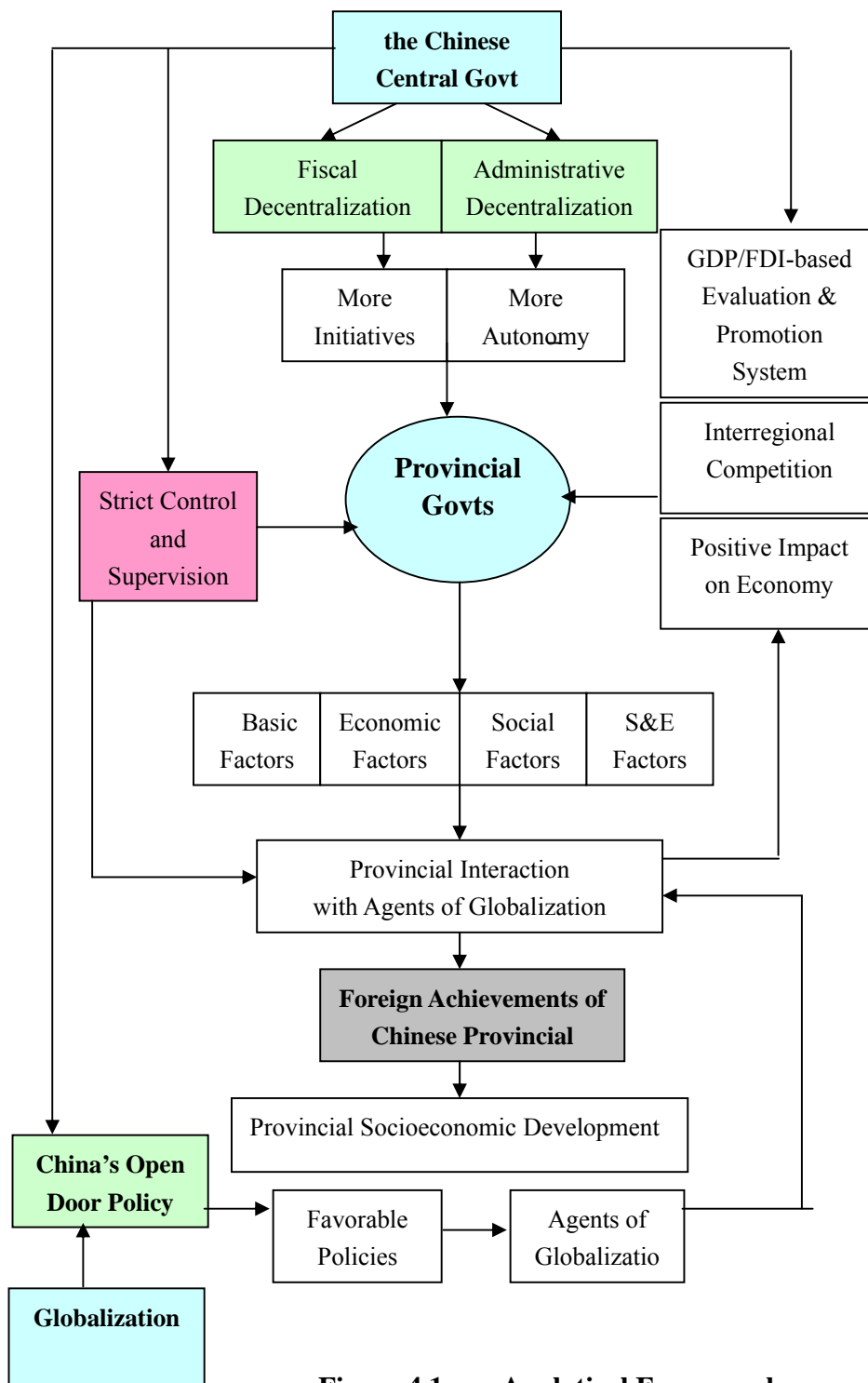
#### **4.5 Research Framework and Assumptions**

The provincial foreign initiatives are results from twin forces of pouring globalization and up-down decentralization. This research is within a multivariate framework and explores how the complex interplay of national, local and global forces shaped the activities and achievements. Figure 4.1 on the next page shows a brief picture of the analytic framework. Obviously, there are three leading actors: globalization, the Chinese central and the provincial governments (blue colored). The central government has turned on two "green lights" to let in globalization and its provincial governments' transnational interactions. The final aim of CPGFA is neither to interact with agents of globalization nor FACPG. It is pursuing for more rapid economic development.

Globalization assisted by advanced information technology has begun to knock China's door since the late 1960s (Jane Stewart, 2003). China did not let it in until the

open door policy adopted in 1978. Principle of regional economic self-reliance and self-sufficiency were carried out during 1960s and 1970s. Considering the coastal provinces as less safe area, many factories were moved from Shanghai and other coastal cities to the Northwest inland provinces. The Third Five-Year Plan (1966-70) allocated 71 percent of national investment in the inland provinces (Demurger *at al*, 2001). In a word, it was the opening-up policy that made it possible for globalization to enter and gradually penetrate into this long-standing largest isolated market. The favorable, well-designed policies have been not only an effective promoter but also an efficient screen that let in only those are considered must or necessities for economic growth. These necessities are foreign capital, equipment, visitors, advanced technology and overseas channels for exports.





**Figure 4.1 Analytical Framework**

Through the screen “have passed a rapidly expanding quantity of goods, services, capital, and people” (Zweig: 3). Without opening-up to the outside world, no provinces in China could have interacted directly with agents of globalization.

Decentralization is another wing for the rising CPGFA. With more autonomy in fiscal and administrative decision-making, the provinces have more initiatives to expand their international contact and activities. The decentralization has been gradual and limited. The central government has not yet devolved any power regarding high politics to its provinces. Even low political but non-economic issues like official contact or sister-city relationship with foreign counterparts are still under strict control. In addition to the favorable policies, the provincial government performance and achievement have been evaluated largely based on indicators like the growth rate of GDP, FDI, exports, etc. This further has encouraged the provinces to concentrate their efforts to interact with the agents of globalization actively.

Regulated by specially designed favorable policy and economic-growth-oriented incentive personnel system, the provincial governments have been most interested in attracting foreign investment and visitors, promoting foreign trade and introducing information related to economic development. Therefore, the degree to which the four agents of globalization flow in a certain period may be indicators of foreign-related

achievement of China's provincial government. Specifically, bidirectional and transnational flow are underlined.

Disparities in FACPG are reasonable and causal. Scattered on a land of 9.6 million square kilometers, the provinces can hardly obtain same achievements based on greatly diversified comparative advantage such as different historical background and geographical features. To evaluate FACPG is to find causes for the disparity. Which factors might cause excellent or unsatisfactory FACPG and to what extent? Which of them positive and which negative? Which of them can be controlled or adjusted? Obviously, dozens of factors may be accounted into the list responsible for disparities in FACPG. This research targets 18 factors according to two principles. Firstly, priority and more scrutiny should be given to basic, economic, social, and science and education (S&E) factors. Second, factors tested should be (1) mostly used in socioeconomic research such as population and GDP, (2) mostly related to FACPG such as investment in fixed asset, expenditure for foreign affairs, (3) mostly controllable or adjustable by the provincial governments such as provincial expenditure for R&D and S&E, etc. Therefore, analysis of the Chinese provinces may provide useful references for other developing countries that are undergoing similar interaction between subnational governments and agents of globalization.

## Chapter Four

### Endnotes

<sup>37</sup> Excerpt from Deng Xiaoping's Opening Speech at 12<sup>th</sup> Party Congress

<sup>38</sup> They are Shenzhen, Zhuhai, Shantou, and Xiamen.

<sup>39</sup> "Provincial Chronicle of Yunnan Foreign Affairs 2006".  
<<http://www.yfao.gov.cn/show.aspx?id=796>>.

<sup>40</sup> Xinhua News.  
<[http://news.xinhuanet.com/legal/2007-06/06/content\\_6204396.htm](http://news.xinhuanet.com/legal/2007-06/06/content_6204396.htm)>.

<sup>41</sup> Boao Forum for Asia was formally inaugurated in February 2001, initiated in 1998 by Fidel V. Ramos, former President of the Philippines, Bob Hawke, former Prime Minister of Australia, and Morihiro Hosokawa, former Prime Minister of Japan. It is a non-government, non-profit international organization.  
<<http://www.boaoforum.org/html/adoutjs-en.asp>>

<sup>42</sup> The basis of the socialist economic system is socialist public ownership of the means of production. In the primary stage of socialism, the State owns the public means of production on behalf of the society, which requires the government, the central government representing people's interests in particular, to be involved in social economy so as to have better control over it and grasp more social resources. The basis of the capitalist economic system is private ownership of the means of production, which puts more stress on the function of market mechanism. Therefore, in handling the relations between the central and local government, socialist countries are inclined to centralization, while capitalist countries to decentralization.

<sup>43</sup> The term "residual" was first mentioned in the Amendment 10 of US Constitution, which says, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." In federal countries, residuals belong to the states.

<sup>44</sup> Those are quotations of the late Premier Zhou Enlai.

<sup>45</sup> In network society, space may be divided into "place of flows" and "place of places". The "space of flows" refers to the network society with translocal and transnational technological flows. "Place of places" refers to "the geographic spaces and communities of everyday life in cities". (Graham, 2000) The former is a computer-based

material organization of time-sharing social practice via flows. Place of flows is a hierarchy model. Electronic network acts as its basic tier. Nodes and hubs make up its middle tier. The spatial organization of the managerial elites dominates its top tier. It is rather difficult to tell which layer is most important although Castells underscores the top one.

<sup>46</sup> For example, the foreign-funded enterprises in SEZs or COCs pay the enterprise income tax at the lowest rate; local governments in SEZs and COCs had authority to exempt the foreign-funded enterprise within their jurisdiction of local enterprise income tax.

<sup>47</sup> “Provincial Chronicle of Yunnan Foreign Affairs 2005”.  
<<http://www.yfao.gov.cn/show.aspx?id=852>>.

<sup>48</sup> “Provincial Chronicle of Yunnan Foreign Affairs 2005”.  
<<http://www.yfao.gov.cn/show.aspx?id=796>>.

<sup>49</sup> “Provincial Chronicle of Yunnan Foreign Affairs 2005”.  
<<http://www.yfao.gov.cn/show.aspx?id=796>>.

<sup>50</sup> “Decision on Delegation of Power of Examination and Approval of Foreign Investment Project and Simplification of Examination and Approval Procedures”.  
<<http://www.fj-info.com/Html/zcfg/150431067609543071046625.html>>.

<sup>51</sup> They are China, USA, Japan, Germany, Brazil and India.

## **Chapter Five**

### **Index of Foreign-related Achievements of China's Provincial Governments**

The Chinese provinces in Mainland China have obtained great achievements by conducting international activities since China was open up in late 1970s. There are, however, few competent evaluations of the effectiveness of subnational government promotional activities in international arenas (Kincaid, 1999). There is no index in literature to evaluate the achievements of subnational government international activities. This chapter creates an index to evaluate the foreign-related achievements of China's 31 provincial governments (FACPG), hence examines the characteristics of the current interaction between China's provinces and agents of globalization.

#### **5.1 Existing Indices for Reference**

The term "diplomatic power" first appeared in *Japanese Overall National Strength* published by the Economic Planning Department of Japan in 1987. It is weighed 2/30 of the index and composed of four indicators, i.e. staff number of Ministry of Foreign Affairs, diplomatic budget, visits of states chief, and number of overseas broadcasting center. Huang Shuofeng (1999) adopted the term as a sub-index when he studied soft national power in 1999. Huang's "diplomatic power" is also made of four indicators, i.e.

foreign policy, foreign-related activity, foreign trade and international influence. In her *Comparison of the Overall National Strength of World's Major Powers* published in 2006, Wang Ling believes that diplomatic power is the most important part of soft power. She ranked the diplomatic power of world's ten major countries with six indicators, i.e. (1) diplomatic power of proposal, (2) any alliance with other countries, (3) status in the U.N, (4) relationship with neighboring countries, (5) economic and military assisting ability, and (6) diplomatic independence.<sup>52</sup>

There have appeared some comprehensive indexes recently to evaluate a country's diplomatic power, which bear certain referential values to the setting of the index for evaluating FACPG. For example, A.T. Kearney Company created Foreign Policy Globalization Index (FPGI) to evaluate a country's level of global integration FPGI includes (1) the inward and outward flows of international trade and investment, (2) transnational flows of people, (3) international telephone traffic and number of Internet users, and (4) the memberships in international organizations. In 2006, this company evaluated and ranked 62 countries that account for 96% of world's GDP and 85% of the global population. Swiss Institute for Business Cycle Research created KOF Index of Globalization to evaluate a country's globalization level from the economic, social and political dimensions. By analyzing the 25 valuables, the globalization level of 122 countries during 1997-2004 was evaluated in 2007.<sup>53</sup> Openness Index shows the level of

a country's openness towards international trade and international visitors. It is an aggregate index combining the Visa Index and Tourism Openness Index. Index of Global Economic Freedom<sup>54</sup>, jointly set up by the American Heritage Foundation and *Wall Street Journal*, has been issued for consecutive 11 years. It comprises 50 indicators that are divided into 10 categories, i.e. (1) foreign trade policy, (2) government's fiscal burdens, (3) degree of government interference in the economy, (4) monetary policy, (5) capital flows, foreign investment, banking and financial conditions, salary and price, property rights, industry supervision as well as labor flows. Index of degree of city's internationalization introduced by Xie Dihui in 2001 can be divided into economic internationalization, international service, and international exchanges. Recently, the American magazine *Foreign Policy* issued a report on the degrees of 62 countries' internationalization. Its major indicators include free flows of capital and people, convenience of outbound tourism, popularity of internet and communication and so on.<sup>55</sup>

## **5.2 The Basic Principles for Establishing the Index of FACPG**

The Chinese provincial governments are required and supervised by the central government to implement the national diplomatic policies and promote local economic and social development with designated foreign-related activities. The activities are both organizational behaviors and local officials' individual behaviors. The index is designed



to indicate as much of the achievements as possible by carefully selected indicators. To create a scientific index that conforms to the situation of China, the following principles are underscored.

**To be scientific and accurate.** Based on the aforementioned understanding of the interaction between China's provincial-government international activities and globalization agents, this index focuses on qualitative and quantitative flow of four primary agents of globalization. FACPG discussed can be divided into direct and indirect. The latter is economy-related but non-economic. As FACPC in non-economic sectors are difficult to quantify, this index gives priority to indicators closely related to the transnational inflow and outflow of capital, goods, people, and information so as to undertake a comprehensive and objective evaluation. All indicators bear clear connotations to be conducive to qualitative and quantitative analysis.

**To be valid and dynamic.** This study covers three years from 2004 to 2006 to avoid data missing and ensure reliability. For example, authorized data about outbound investment and Internet-related facilities of 31 provinces have been unavailable until 2004. More importantly, China carried out its first national economic census in 2004. The census results in *The First National Economic Census Yearbook* and standardizes primary economic and social statistic criteria. Most of the data employed in this study are from the national or provincial statistical Bureaus and their publications. Specifically, the

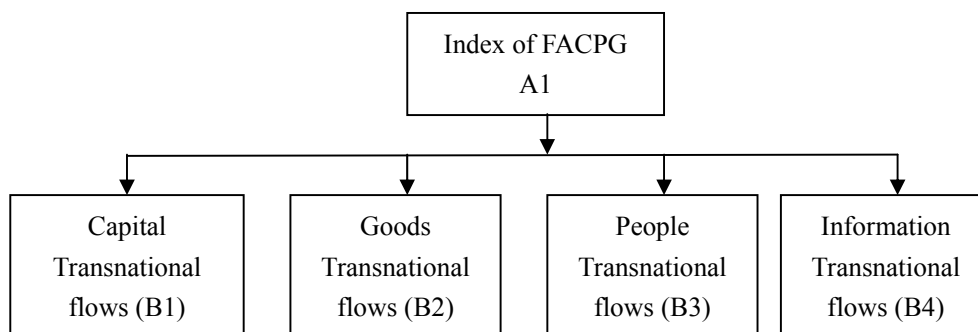
data of capital and goods transnational flow come from the website of Ministry of Commerce of China and statistical yearbook of provinces. The data of transnational flow of people/labor are from *The Outline of China Tourism Statistics* by National Tourism Administration of China. The data of information transnational flows are from the *Annual report on China Communication Statistics* by Ministry of Information Industry of the PRC and *The Statistical Report of Internet Development Status in China* by China Internet Network Information Center. To demonstrate status quo, changes, and make comparisons, the index applies gross data, per-capita data and growth rate to reflect the total and average flow, tendency and potential respectively.

**To be Creditable and Feasible.** Generally, an ideal index should include subjective indicators. For example, local government officials' attitude toward international activities might directly affect their behaviors and achievements as well. The pretest of survey conducted in Fujian Province, however, showed that it is hard to get high response rate and creditable answer. Probably the topic discussed is so sensitive that some officials are reluctant to fill out the questionnaires, and some even refuse to be the participants of the survey. The pretest ended with few responses and in the return questionnaires, some questions were left blank.<sup>56</sup> To give priority to credibility, this study adopts and analyzes only objective data. Furthermore, owing to the current Chinese statistical system, some useful data are unavailable, such as outbound visitors to foreign

countries, international remittance, international letters, talking hours of coming-in international calls, foreign population in the provinces, budget directly for PGFA, etc. Some data are incomparable. For instance Taiwan, Hong Kong, Macao's data are with different statistic criterion. The study, therefore, excludes them.

### 5.3 Establishment of the Index

Index of FACPG is a comprehensive multiple index for evaluating FACPG over a certain period through the inflows and outflows of four globalization agents in the observed regions. It consists of four sub-indexes and thirty indicators. (Figure 5.1)



**Figure 5.1 the Index of FACPG**

Capital Transnational flows (B1) indicates the achievements of the provincial governments in promoting transnational flow of capital, especially in attracting inflow of foreign capital. It consists of six indicators. Transnational Inflow: FDI actually used (C11) and its growth rate (C12), and per-capita FDI actually used (C13) indicate the inflow of

foreign capital amount, per-capita amount, and its developing tendency respectively. Transnational Outflow: Overseas Direct Investment (C14), per-capita Overseas Direct Investment (C15) and growth rate of Overseas Direct Investment (C16) indicate the outflow of local capital amount, per-capita amount and development potential respectively.

Goods Transnational Flows (B2) indicates the achievements of the provincial governments in promoting foreign trade and local market openness. The export can greatly benefit local economy by foreign exchange earning, job increasing, and promoting local reputation. The governments, therefore, have attached importance to foreign trade. To promote export is one of their priority international activities. In addition, export not only shows the competitiveness of local goods in the international market but also reflects the extent to which the local economy has integrated with the world economy. It consists of five indicators: Transnational Inflow: Import value (C21) and its growth rate (C22) indicate the inflow of foreign goods and its development potential respectively. The percentage of import value in GDP (C23) reflects the dependence of local economy on import. Transnational Outflow: Export value (C24) and its growth rate (C25) indicate the outflow of local goods and its development potential respectively. The percentage of export value in GDP (C26) reflects the dependence of local economy on export.

**Table 5.1 Composition of the Index of FACPG**

Sub Indexes		Indicators
<b>B1</b> Capital Transnational flows  (Weight: 0.25)	C11	FDI actually used (Paid in FDI)
	C12	Growth rate of FDI actually used over previous year
	C13	Per-capita FDI actually used
	C14	Overseas direct investment by the local investors (non-financial investment)
	C15	Per-capita overseas direct investment by the local investors
	C16	Growth rate of overseas direct investment over previous year (%)
<b>B2</b> Goods Transnational flows  (Weight: 0.25)	C21	Imports
	C22	Growth rate of imports over previous year (%)
	C23	Percentage of imports in GDP
	C24	Exports
	C25	Growth rate of exports over previous year (%)
	C26	Percentage of exports in GDP
<b>B3</b> People Transnational flows  (Weight: 0.25)	C31	Number of inbound foreign visitors
	C32	Growth rate of inbound foreign visitors over previous year (%)
	C33	Foreign exchange earnings from inbound foreign tourism
	C34	Growth of the foreign exchange earning from inbound foreign tourism (%)
	C35	Foreign exchange earning from inbound foreign tourism in GDP (%)
	C36	Year-end number of outbound labor contracted
	C37	Accomplished revenue from engineering projects, labor contracts, and design consultation with foreign countries and regions
	C38	Growth of Accomplished business revenue through contracted overseas engineering projects and labor contracts over previous year (%)
	C39	Number of outbound visitors on official purposes
	C310	Number of sister cities with foreign counterparts

**Table 5.1 Continued**

Sub Indexes		Indicators
<b>B4</b> Information Transnational flows  (Weight: 0.25)	C41	Number of internet users
	C42	Growth rate of internet users over previous year (%)
	C43	Coverage of Internet users of the province population
	C44	Talking hours of outgoing calls to foreign countries <sup>57</sup>
	C45	Growth of talking hours of international calls over previous year (%)
	C46	Coverage of fixed Telephone subscribed of the province population
	C47	Coverage of mobile phone users of the province population
	C48	Number of internet websites

People Transnational Flows (B3) indicates the achievements of the provincial governments in promoting the transnational flows of personnel, encouraging multilateral official visits, enhancing the economic and trade cooperation and cultural exchanges, increasing the labor export as well as improving the capability to earn foreign exchange through inbound foreign tourism, etc. It consists of ten indicators.

Transnational Inflow: The number of inbound foreign visitors (C31) <sup>58</sup> and its growth rate (C32) indicate the inflow of foreign visitors and its development potential respectively. Foreign exchange earnings from inbound foreign tourism (C33) and its growth rate (C34) indicate the benefit from foreign tourism and its development potential respectively. Percentage of foreign exchange earning from foreign tourism (C35) in the provincial GDP reflects the contribution of inbound foreign tourism to the local

economy.

Transnational Outflow: the number of labor working abroad as contracted workers at the year-end (C36) indicates the degree of labor export. Accomplished revenue from engineering projects, labor contracts, and design consultation with foreign countries and regions (C37) and its growth rate (C38) reflects the benefit from labor outflow and its development potential respectively. The number of outbound visitors on official duty (C39)<sup>59</sup> shows the frequency of overseas visits by the officials working in local governments or provincial-own enterprises.

Two-way transnational flows: number of international sister cities (C40) indicates the formal and frequent exchanges between the provincial subnational governments and their counterparts.

Information Transnational Flows (B4) indicates the governments' achievements in improving telecommunication and relevant facilities. Different from capital, goods or people's flow, information flow is rather difficult to measure as data. Eight third-grade indicators are selected to demonstrate three dimensions related to information transnational flow. They are verbal information exchange via various types of telephones, written information exchange via Internet, and local telecommunication facilities.

Internet: the number of internet users at the year-end (C41), its growth rate (C42) and percentage of internet users to the population of the province (C43) indicate the scale of

internet use, the development potential of internet and the popularization of internet respectively. International call: Talking hours of out-going call to foreign countries (C44) reflects the amount of information transnational flow via various kinds of telephones. The growth of the talking hours (C45) reveals the development potential. Telecommunication facilities: popularization/coverage of fixed telephone (C46), popularization of mobile phones (C47) and number of internet websites (C48) indicate indirectly the financial input of the provincial governments to the facilities necessary for information transnational flows respectively.



## Chapter Five

### Endnotes

<sup>52</sup> Scores of the 10 major powers are as follows: U.S (98.64), Russia (87.46), France (82.12), U.K (78.52), China (78.52), Germany (72.25), Japan (66.57), Canada (61.14), Korea (54.35), and India (50.42).

<sup>53</sup> <<http://globalization.kof.ethz.ch/>>.

<sup>54</sup> Other famous index of economic freedom includes *Report on Economic Freedom* issued by The Frazer Institute of Canada and *Annual Report on World Economic Freedom* by The Cato Institute of U. S. However, different institutes have different methods for establishing the indices.

<sup>55</sup> Ma, Yufeng. "Singapore with coexisting internationalization and tradition." *Forum on United Morning Newspaper* <<http://www.zaobao.com/special/china/general/letter091203.html>>.

<sup>56</sup> Kincaid (1999:121) also complains that data on the attitudes of American state officials are not available.

<sup>57</sup> It includes the international calls with fixed telephones, mobile phones and IP telephones.

<sup>58</sup> According to the State Statistics Bureau, the term of foreign visitors refers to foreigners, overseas Chinese, Chinese compatriots from Hong Kong, Macao and Taiwan coming to provincial regions for sightseeing, visits, tours, family reunion, vacations, study tours, conferences and other activities of a business, scientific and technological, cultural, education and religious nature. It does not include representatives and employees of resident institutions of foreign countries such as embassies, consulates, news agencies and offices of foreign companies and organizations, nor does it include long-term foreign experts or students residing in the provincial regions, or persons in transition without spending a night in those regions.

<sup>59</sup> Chinese citizens going abroad can be divided into two categories. Most people are for private purpose and holding private passports. Others are on official duty and holding business passports. Most provinces have not yet released their data either for private or official duty as the data is regarded as internal-used. This study uses the data of labors working abroad from each province to reflect the situation of private visitors

abroad. The data of visitors on official duties with local application for visa is employed to indicate the situation of official visitors. According to the official statistics about visitors abroad in the whole country (excluding Hong Kong, Macao and Taiwan), those who are on the official duty with locally applied visa accounts around 17% of the total visitors abroad on official duty in each province. Before 1999, the number of going abroad on official duty is far much bigger than that for private purpose. Since China simplified the procedures for its citizens to apply private passports in 2000, the number of visitors for private purpose has gradually exceeded that for official duty. The data from the *Statistical Report on the Socioeconomic Development of China in 2006* shows that the number of visitors for private purpose in 2006 reached 83.4% from 41% in 1992.

## Chapter Six

### Evaluation of FACPG during 2004-2006

Based on the theoretical framework and Index of FACPG established in previous chapters, this chapter reports the results from Principal Component Analysis (PCA) approach to derive indicators of FACPG by analyzing the transnational flow of goods, capital, people and information in the period from 2004 to 2006. Software like SPSS 13.0 for Windows and Excel are used to process the official data collected.

#### 6.1 Interpretation of the Evaluation of FACPG in 2006

To shorten the length of the paper, only the processing steps concerning the goods transnational flow are illustrated here. To evaluate transnational flow of goods in China's provinces, six indicators are selected. They are import value, growth rate of import over previous year, percentage of import value in GDP, export value, growth rate of export value over previous year, and percentage of export value in GDP. The former and the latter three indicators respectively represent the transnational inflow and outflow of goods. The data process is as follows:

Step 1: Standardization of the raw data, i.e. transform raw data into standard ones through the process explained in the last part of my Chapter Five. For example, the raw data in Table 6.1 are transformed into standardized data in Table 6.2 after standardization.

**Table 6.1 The Raw Data of Transnational Flow of Goods in 2006**

Provinces	Import (\$10000)	Growth Rate of Import	% of Import in GDP	Export (\$10000)	Growth Rate of Export	% of Import in GDP
Anhui	542077	37.9	7.06	683833	31.8	8.91
Beijing	12019305	27.0	124.55	3797921	23.0	39.36
Chongqin	211867	19.5	4.86	335192	33.0	7.69
Fujian	2139783	9.3	22.82	4126491	18.4	44.01
Gansu	231053	50.1	8.12	150960	38.4	5.31
Guangdong	22526319	18.7	69.40	30195337	26.8	93.02
Guangxi	307352	33.3	5.12	359297	24.9	5.99
Guizhou	57836	6.2	2.04	103844	20.9	3.66
Hainan	147045	-3.2	11.18	137562	34.5	10.46
Hebei	569402	10.6	3.92	1284022	17.5	8.84
Heilong jiang	442058	26.4	5.69	843598	39.0	10.86
Henan	316154	19.9	2.03	669575	31.6	4.30
Hubei	550211	18.9	5.87	626068	41.4	6.68
Hunan	225721	0.2	2.41	509182	35.9	5.44
Inner Mongolia	381792	23.1	6.38	214092	20.7	3.58
Jiangsu	12357660	17.7	45.88	16041885	30.5	59.56
Jiangxi	244048	50.2	4.23	375307	53.9	6.50
Jilin	491736	21.1	9.26	299670	21.5	5.64
Liaoning	2007189	14.2	17.35	2831918	20.8	24.47
Ningxia	49450	77.1	5.60	94346	37.2	10.68
Qinghai	11752	30.4	1.47	53422	65.3	6.67
Shaanxi	173123	15.4	3.16	362976	18.0	6.62
Shandong	3661492	19.6	13.41	5859978	27.1	21.46

**Table 6.1 Continued**

Provinces	Import (\$10000)	Growth Rate of Import (%)	% of Import in GDP	Export (\$10000)	Growth Rate of Export (%)	% of Import in GDP
Shanghai	11393834	19.2	88.52	11359127	25.2	88.25
Shanxi	248749	23.3	4.83	414030	17.3	8.04
Sichuan	439693	37.4	4.07	662406	40.9	6.13
Tianjin	3098218	19.6	57.14	3350187	22.4	61.79
Tibet	10618	164.9	2.93	22222	34.4	6.13
Xinjiang	196404	-32.3	5.20	713923	41.7	18.92
Yunnan	284035	35.1	5.68	339143	28.4	6.78
Zhejiang	3825385	25.1	19.56	10089771	31.4	51.58

**Table 6.2 Standardized Data of Transnational Flow of Goods in 2006**

Provinces	Import	Growth Rate of Export	% of Import in GDP	Export	Growth Rate of Export	% of Import in GDP
Anhui	-0.39427	0.346	-0.39107	-0.38811	0.09451	-0.47643
Beijing	1.85534	0.00112	3.66832	0.10677	-0.71119	0.73538
Chongqin	-0.45899	-0.23618	-0.46708	-0.44351	0.20438	-0.52498
Fujian	-0.08111	-0.5589	0.15345	0.15899	-1.13235	0.92044
Gansu	-0.45523	0.732	-0.35445	-0.47279	0.69878	-0.6197
Guangdong	3.91479	-0.26149	1.76284	4.30176	-0.36327	2.87088
Guangxi	-0.44028	0.20045	-0.4581	-0.43968	-0.53723	-0.59264
Guizhou	-0.48919	-0.65698	-0.56452	-0.48028	-0.90346	-0.68537
Hainan	-0.4717	-0.9544	-0.24872	-0.47492	0.34171	-0.41475
Hebei	-0.38891	-0.51777	-0.49956	-0.29273	-1.21475	-0.47922
Heilongjiang	-0.41388	-0.01786	-0.43841	-0.36272	0.75372	-0.39883
Henan	-0.43855	-0.22352	-0.56486	-0.39037	0.0762	-0.6599
Hubei	-0.39268	-0.25516	-0.43219	-0.39729	0.97345	-0.56518
Hunan	-0.45628	-0.84682	-0.55173	-0.41586	0.46989	-0.61453
Inner Magnolia	-0.42569	-0.12227	-0.41457	-0.46276	-0.92177	-0.68855
Jiangsu	1.92166	-0.29313	0.9502	2.05254	-0.02451	1.53928
Jiangxi	-0.45269	0.73517	-0.48885	-0.43714	2.11791	-0.57234

**Table 6.2 Continued**

Provinces	Import	Growth Rate of Export	% of Import in GDP	Export	Growth Rate of Export	% of Import in GDP
Jilin	-0.40414	-0.18555	-0.31506	-0.44916	-0.84852	-0.60657
Liaoning	-0.1071	-0.40387	-0.03554	-0.04674	-0.91261	0.14281
Ningxia	-0.49083	1.58627	-0.44152	-0.48179	0.58892	-0.40599
Qinghai	-0.49822	0.1087	-0.58421	-0.48829	3.16166	-0.56558
Shaanxi	-0.46659	-0.3659	-0.52582	-0.4391	-1.16897	-0.56757
Shandong	0.21716	-0.23301	-0.17167	0.43447	-0.33581	0.02302
Shanghai	1.73275	-0.24567	2.42345	1.30837	-0.50976	2.68105
Shanxi	-0.45177	-0.11594	-0.46812	-0.43098	-1.23306	-0.51106
Sichuan	-0.41434	0.33018	-0.49438	-0.39151	0.92768	-0.58707
Tianjin	0.10675	-0.23301	1.33924	0.03562	-0.76612	1.62802
Tibet	-0.49844	4.36424	-0.53377	-0.49325	0.33256	-0.58707
Xichuan	-0.41434	0.33018	-0.49438	-0.39151	0.92768	-0.58707
Xinjiang	-0.46203	-1.87511	-0.45534	-0.38333	1.00092	-0.07807
Yunnan	-0.44485	0.2574	-0.43875	-0.44288	-0.21678	-0.5612
Zhejiang	0.24928	-0.05899	0.04081	1.10665	0.05789	1.2217

Step 2: Establishing the correlation matrix. (Table 6.3)

Step 3: Use the correlation matrix to calculate the eigenvalues, eigenvector and the principal component's contribution rate to decide how many principal components should be extracted. (Table 6.4)

**Table 6.3 Correlation Matrix of Transnational Flow of Goods in 2006**

	Import	Growth Rate of Import	% of Import in GDP	Export	Growth Rate of Export	% of Export in GDP
Import	1.000	-.109	.813	.929	-.198	.861
Growth rate of import	-.109	1.000	-.100	-.125	.186	-.167
% of import in GDP	.813	-.100	1.000	.583	-.269	.785
Export	.929	-.125	.583	1.000	-.160	.859
Growth rate of export	-.198	.186	-.269	-.160	1.000	-.241
% of export in GDP	.861	-.167	.785	.859	-.241	1.000

**Table 6.4 Total Variance Explained of Flow of Goods in 2006**

Initial Eigenvalues			Extraction Sums of Squared Loadings
Total	% of Variance	Cumulative %	Total
3.528	58.795	58.795	3.528
1.095	18.257	77.052	1.095
0.82	13.669	90.721	0.82
0.409	6.81	97.531	
0.145	2.425	99.956	
0.003	0.044	100	

Extraction Method: Principal Component Analysis

In Table 6.4, the principal component's eigenvalues and contribution rates of variance are descending. Table 6.4 shows that the first three principal components can explain 90.72%

of the total variances. Following the instruction of Jolliffe (1986) and Rencher (1995) that the accumulative contribution rates usually should be higher than 85%, this study extracts 3 principal components.

Step 4: Calculate the coefficient of principal components and fix their matrixes. After the above process, initial loading matrix (Table 6.5) and principal component matrix (Table 6.6) are figured out.

**Table 6.5 Initial Loading Matrix of Transnational Flow of Goods in 2006**

	Component		
	1	2	3
Import	.965	.151	.041
Growth Rate of Import	-.207	.774	-.596
% of Import in GDP	.856	.043	-.113
Export	.904	.153	.122
Growth Rate of Export	-.329	.666	.659
% of Export in GDP	.947	.062	.042

**Table 6.6 Principal Component Matrix of Flow of Goods in 2006**

	Component		
	1	2	3
Import	0.514	0.144	0.045
Growth Rate of Import	-0.11	0.74	-0.658
% of Import in GDP	0.456	0.041	-0.125
Export	0.481	0.146	0.135
Growth Rate of Export	-0.175	0.636	0.728
% of Export in GDP	0.504	0.059	0.046



**Transnational Flow of Goods in 2006.** To evaluate transnational flow of goods in China's provinces, six indicators are selected. They are: (1) FDI actually used, (2) Per-capita FDI actually used, (3) Growth rate of FDI actually used over previous year, (4) overseas direct investment by the local individuals and companies, (5) Per-capita overseas direct investment, and (6) Growth rate of overseas direct investment over previous year. The former three indicators and the latter three respectively represent the transnational inflow and outflow of capital. By PCA, the initial loading matrix and three principal components reflecting the capital transnational flow are obtained. Table 6.5 and 6.6 show that F1 primarily describes import value, export value, and their percentage in GDP; F2 and F3 describes growth rate of both import and export. In other words, the ranks of transnational flow of goods primarily depend on import value, export value, their percentage in GDP, growth rate of import and export. The principal component matrixes are as follows:

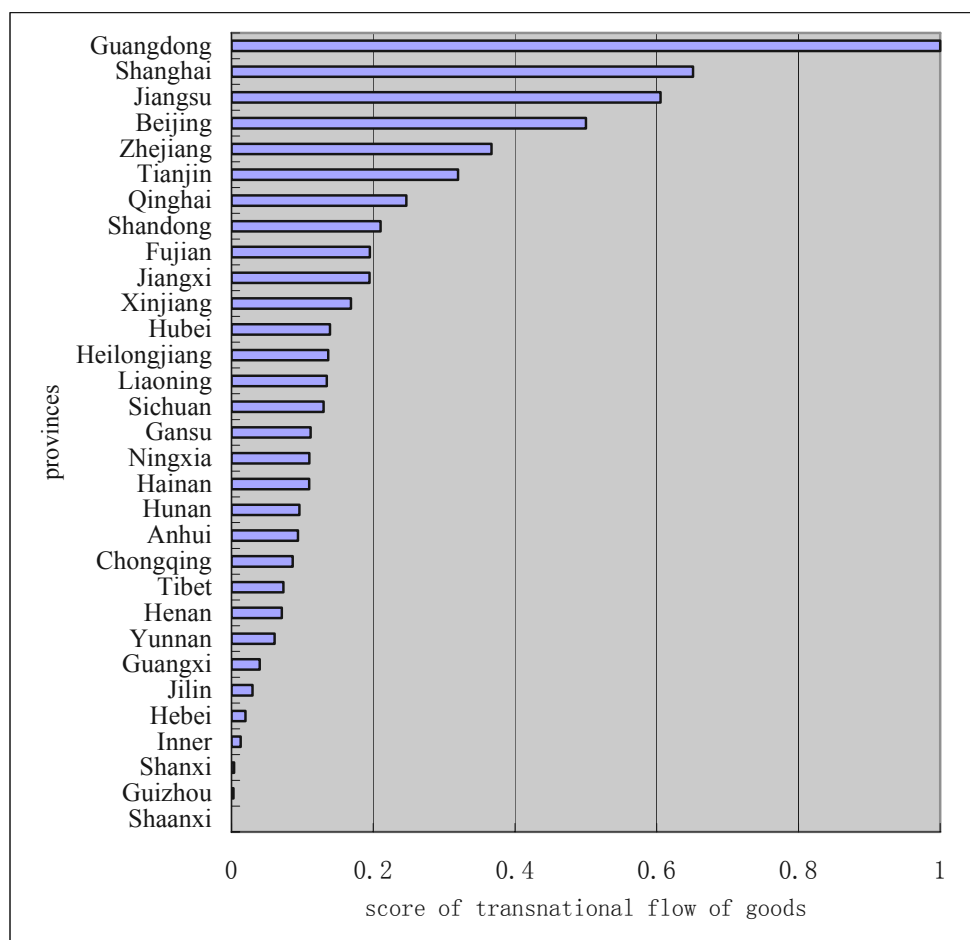
$$F_1 = 0.514z_{x_1} - 0.11z_{x_2} + 0.456z_{x_3} + 0.481z_{x_4} - 0.175z_{x_5} + 0.504z_{x_6}$$

$$F_2 = 0.144z_{x_1} + 0.74z_{x_2} + 0.041z_{x_3} + 0.146z_{x_4} + 0.636z_{x_5} + 0.059z_{x_6}$$

$$F_3 = 0.045z_{x_1} - 0.658z_{x_2} - 0.125z_{x_3} + 0.135z_{x_4} + 0.728z_{x_5} + 0.046z_{x_6}$$

Then we get a comprehensive principal component matrix by using the principal component functions:  $F = 0.5880F_1 + 0.1826F_2 + 0.1367F_3$ .

Step 5: Calculate the score of each principal component and the total score, and rank the FACPG according to the score. (Table 6.7 and Figure 6.1).



**Figure 6.1 Ranks of Transnational Flow of Goods in the Provinces in 2006**

Table 6.7 and Figure 6.1 show there is great disparity in goods transnational flow in China's 31 provinces. Guangdong, Shanghai and Jiangsu rank the top three.

**Table 6.7 Scores and Ranks of Transnational Flow of Goods in 2006**

Provinces	F1	Ranks	F2	Ranks	F3	Ranks	F	Ranks
Guangdong	3.42	1	0.97	5	0.64	7	2.28	<b>1</b>
Shanghai	2.18	2	0.18	12	-0.15	16	1.29	<b>2</b>
Jiangsu	1.71	3	0.45	8	0.54	9	1.17	<b>3</b>
Beijing	1.69	4	0.02	14	-0.93	29	0.87	<b>4</b>
Zhejiang	0.69	6	0.25	10	0.32	11	0.49	<b>5</b>
Tianjin	0.89	5	-0.47	20	-0.54	22	0.36	<b>6</b>
Qinghai	-0.86	31	1.81	2	2.41	1	0.16	<b>7</b>
Shandong	0.18	8	-0.28	17	0.00	14	0.05	<b>8</b>
Fujian	0.44	7	-1.01	28	-0.46	21	0.01	<b>9</b>
Jiangxi	-0.75	29	1.63	3	1.12	3	0.01	<b>10</b>
Xinjiang	-0.34	11	-0.86	26	2.14	2	-0.06	<b>11</b>
Hubei	-0.54	25	0.25	11	0.92	5	-0.15	<b>12</b>
Heilongjiang	-0.49	21	0.30	9	0.58	8	-0.15	<b>13</b>
Liaoning	0.10	9	-0.86	25	-0.44	20	-0.16	<b>14</b>
Sichuan	-0.60	26	0.63	7	0.46	10	-0.17	<b>15</b>
Gansu	-0.61	27	0.76	6	-0.05	15	-0.22	<b>16</b>
Ningxia	-0.62	28	1.30	4	-0.74	28	-0.23	<b>17</b>
Hainan	-0.40	15	-0.63	22	0.89	6	-0.23	<b>18</b>
Hunan	-0.52	23	-0.49	21	0.95	4	-0.27	<b>19</b>
Anhui	-0.46	18	0.15	13	-0.22	17	-0.27	<b>20</b>
Chongqing	-0.50	22	-0.22	16	0.28	12	-0.29	<b>21</b>
Xizang	-0.84	30	3.10	1	-2.96	31	-0.33	<b>22</b>
Henan	-0.53	24	-0.29	18	0.19	13	-0.34	<b>23</b>
Yunnan	-0.49	20	-0.12	15	-0.42	19	-0.37	<b>24</b>
Guangxi	-0.46	19	-0.36	19	-0.63	25	-0.43	<b>25</b>
Jilin	-0.37	13	-0.81	23	-0.62	24	-0.45	<b>26</b>
Hebei	-0.29	10.00	-1.25	31	-0.62	23	-0.48	<b>27</b>
Inner Mongolia	-0.43	16.00	-0.83	24	-0.72	27	-0.50	<b>28</b>
Shanxi	-0.36	12.00	-1.00	27	-0.95	30	-0.53	<b>29</b>
Guizhou	-0.45	17.00	-1.21	30	-0.30	18	-0.53	<b>30</b>
Shaanxi	-0.39	14.00	-1.15	29	-0.72	26	-0.54	<b>31</b>

**Transnational Flow of Capital in 2006.** To evaluate transnational flow of capital, six indicators are selected. They are (1) FDI actually used; (2) Per-capita FDI actually used; (3) Growth rate of FDI actually used; (4) Overseas direct investment; (5) Per-capita overseas direct investment; (6) Growth rate of overseas direct investment. The former three indicators represent transnational inflow of capital, while the next three represent transnational outflow of capital.

**Table 6.8 Initial Loading Matrix of Transnational Flow of Capital in 2006**

	Component		
	1	2	3
FDI actually used	.928	.046	-.002
Per-capita FDI actually used	.681	-.490	-.447
Growth rate of FDI actually used	-.275	.520	-.477
Outward direct investment	.832	.009	.033
Per-capita outward direct investment	.482	.693	.458
Growth rate of outward direct investment	-.153	-.601	.480

Table 6.8 shows that F1 primarily represents FDI actually used, Per-capita FDI, and Outward direct investment; F2 represents Growth rate of FDI and Per-capita outward direct investment; F3 represents growth rate of outward direct investment.

**Table 6.9 Scores and Ranks of Capital Transnational Flow in 2006**

Provinces	F1	Rank1	F2	Rank2	F3	Rank3	F	Rank
Guangdong	3.0522	1	0.70683	7	1.06186	5	1.97877	<b>1</b>
Jiangsu	2.07784	2	0.37916	12	-0.13101	16	1.15453	<b>2</b>
Shandong	1.21555	4	0.82732	6	1.14184	2	1.08648	<b>3</b>
Henan	-0.0616	12	1.55767	1	0.86452	7	0.59434	<b>4</b>
Zhejiang	1.21162	5	-0.21528	22	-0.04758	15	0.54938	<b>5</b>
Sichuan	-0.15312	14	0.97115	4	1.13267	3	0.42449	<b>6</b>
Hunan	0.00118	11	0.61635	8	0.81076	8	0.33739	<b>7</b>
Heilongjiang	0.47323	8	-0.07351	21	0.44382	11	0.30561	<b>8</b>
Hebei	-0.11549	13	0.48843	10	1.08069	4	0.29087	<b>9</b>
Shanghai	1.78062	3	-1.64483	30	-1.47772	28	0.14606	<b>10</b>
Fujian	0.75199	6	-0.63335	24	-0.39941	22	0.12255	<b>11</b>
Hubei	-0.20716	15	0.29477	14	0.70953	10	0.11584	<b>12</b>
Liaoning	0.33081	10	0.29931	13	-0.83339	27	0.10017	<b>13</b>
Anhui	-0.60299	21	1.5328	2	-0.68192	24	0.01499	<b>14</b>
Jiangxi	-0.2318	16	0.02316	19	0.26402	12	-0.06199	<b>15</b>
Guangxi	-0.50624	17	0.12629	16	0.77329	9	-0.07556	<b>16</b>
Guizhou	-0.58027	19	-0.24339	23	1.02717	6	-0.17487	<b>17</b>
Yunnan	-0.72584	25	0.89197	5	-0.38252	21	-0.18111	<b>18</b>
Shaanxi	-0.68354	22	0.42856	11	-0.23631	19	-0.26894	<b>19</b>
Shanxi	-0.70537	23	0.54357	9	-0.71932	26	-0.33787	<b>20</b>
Jilin	-0.58033	20	0.08467	17	-0.5486	23	-0.37721	<b>21</b>
Beijing	0.4525	9	-1.06449	28	-1.55151	29	-0.37802	<b>22</b>
Chongqing	-0.71725	24	0.06467	18	-0.15492	17	-0.37863	<b>23</b>
Inner Mongolia	-0.52861	18	-0.007	20	-0.68609	25	-0.40396	<b>24</b>
Gansu	-0.86488	28	0.25271	15	-0.29059	20	-0.4245	<b>25</b>
Tianjin	0.5423	7	-1.60174	29	-1.96792	31	-0.57029	<b>26</b>
Xinjiang	-1.18314	31	1.06447	3	-1.75213	30	-0.62518	<b>27</b>
Ningxia	-0.81075	27	-0.76896	25	0.02786	14	-0.63896	<b>28</b>
Qinghai	-0.75347	26	-0.83473	27	-0.16995	18	-0.66663	<b>29</b>
Xizang	-0.92409	29	-0.77119	26	0.08888	13	-0.68622	<b>30</b>
Hainan	-0.95389	30	-3.29538	31	2.60397	1	-0.97153	<b>31</b>

Table 6.9 shows a remarkable imbalance of capital transnational flow. Guangdong, Jiangsu and Shandong ranked at top three. Fujian, ranked 11<sup>th</sup> in the country, bears distinctive advantages in attracting foreign investments, but per-capita overseas direct investment by the local investors and its growth rate are rather weak.

**Transnational Flow of People in 2006.** To evaluate transnational flow of people, ten indicators are selected. They are: (1) Number of inbound foreign visitors; (2) Growth rate of inbound foreign visitors over previous year; (3) Foreign exchange earnings from inbound foreign tourism; (4) Growth rate of the foreign exchange earning from inbound foreign tourism; (5) Foreign exchange earning from inbound foreign tourism in GDP; (6) Year-end number of outbound labor contracted; (7) Accomplished revenue from engineering projects, labor contracts, and design consultation with foreign countries and regions; (8) Growth of accomplished revenue from engineering projects, labor contracts, and design consultation with foreign countries and regions; (9) Number of outbound visitors on official purposes; and (10) Number of sister cities with foreign counterparts. The former five indicators represent the transnational inflow of people while the next four and the last one respectively represent the outflow of people and two-way flow of people.

**Table 6.10 Initial Loading Matrix of Transnational Flow of People in 2006**

	Component		
	1	2	3
Number of inbound foreign visitors	.807	-.218	.213
Growth rate of inbound foreign visitors	-.371	.664	.360
Foreign exchange earnings from inbound foreign tourism	.920	-.270	.174
Growth rate of the foreign exchange earning from inbound foreign tourism	-.222	.383	.817
Foreign exchange earning from inbound foreign tourism in GDP	.604	-.487	.372
Year-end number of outbound labor contracted	.617	.657	-.255
Accomplished revenue from the economic cooperation abroad	.934	.179	-.013
Number of outbound visitors on official purposes	.883	.037	.050
Number of sister cities with foreign counterparts	.690	.642	-.169

Table 6.10 shows that F1 primarily represents revenue from outbound economic cooperation, foreign exchange earnings from inbound foreign tourism, inflow and outflow people; F2 represents growth rate of inbound foreign visitors; F3 represents growth rate of foreign exchange earning from inbound foreign tourism.

**Table 6.11 Scores and Ranks of Transnational Flow of People in 2006**

Provinces	F1	Rank1	F2	Rank2	F3	Rank3	F	Rank
Jiangsu	2.26468	3	2.54067	1	-1.11387	29	1.83211	<b>1</b>
Guangdong	3.13688	1	-1.41862	30	1.27669	5	1.75325	<b>2</b>
Shanghai	2.3903	2	-1.21731	29	-0.09754	14	1.1445	<b>3</b>
Shandong	0.84278	6	2.25908	2	-0.59561	23	0.97464	<b>4</b>
Zhejiang	1.03388	4	0.38388	13	0.32228	10	0.77046	<b>5</b>

**Table 6.11 Continued**

Provinces	F1	Rank1	F2	Rank2	F3	Rank3	F	Rank
Liaoning	0.37102	7	1.04406	3	-0.12494	15	0.46143	<b>6</b>
Heilongjiang	-0.38155	17	0.84656	4	1.28903	4	0.16437	<b>7</b>
Beijing	0.96455	5	-2.13252	31	0.56424	8	0.15174	<b>8</b>
Hainan	-0.58141	24	-0.05316	15	3.10045	1	0.09169	<b>9</b>
Fujian	0.31531	8	-0.21992	16	-0.61306	24	0.04776	<b>10</b>
Hunan	-0.46689	20	0.7585	6	0.67916	7	0.00078	<b>11</b>
Sichuan	-0.37206	16	0.67557	9	0.29309	11	-0.01876	<b>12</b>
Henan	-0.38626	18	0.72822	7	-0.07649	13	-0.06926	<b>13</b>
Anhui	-0.32851	14	0.59226	10	-0.16448	16	-0.0802	<b>14</b>
Shanxi	-0.8314	30	0.76525	5	1.38113	3	-0.11564	<b>15</b>
Jiangxi	-0.72554	28	0.67577	8	0.82101	6	-0.15582	<b>16</b>
Hubei	-0.38931	19	0.41191	12	-0.40141	20	-0.19614	<b>17</b>
Jilin	-0.27621	12	0.54778	11	-1.10251	28	-0.19792	<b>18</b>
Yunnan	-0.27204	10	-0.41387	20	0.35185	9	-0.21427	<b>19</b>
Tianjin	-0.29538	13	-0.40387	18	0.09327	12	-0.26429	<b>20</b>
Hebei	-0.27275	11	0.00432	14	-0.92394	27	-0.30164	<b>21</b>
Xizang	-0.76121	29	-0.32054	17	1.4443	2	-0.32777	<b>22</b>
Shaanxi	-0.24095	9	-0.53071	23	-0.66664	25	-0.37441	<b>23</b>
Guangxi	-0.35518	15	-0.51135	22	-0.41764	21	-0.40241	<b>24</b>
Inner Mongolia	-0.57569	23	-0.40605	19	-0.29177	18	-0.49242	<b>25</b>
Chongqing	-0.49668	21	-0.67238	24	-0.49662	22	-0.53942	<b>26</b>
Xinjiang	-0.62284	25	-0.67357	25	-0.22357	17	-0.57612	<b>27</b>
Qinghai	-0.84076	31	-0.41981	21	-0.31459	19	-0.6605	<b>28</b>
Guizhou	-0.69947	27	-0.76479	26	-0.67056	26	-0.71108	<b>29</b>
Gansu	-0.50723	22	-0.99395	27	-1.62835	30	-0.79147	<b>30</b>
Ningxia	-0.64008	26	-1.08141	28	-1.69289	31	-0.90317	<b>31</b>

**Transnational Flow of Information in 2006.** To evaluate transnational flow of information, eight indicators are selected. They are: (1) Number of internet users, (2) Growth rate of internet users over previous year, (3) Coverage of Internet users of the



province population, (4) Talking hours of out-going calls to foreign countries, (5) Growth rate of talking hours of international calls over previous year, (6) Coverage of fixed Telephone subscribed of the province population, (7) Coverage of mobile phone users of the province population, and (8) Number of Internet websites. The former three indicators represent the local level of Internet utility and coverage, the next two and the last three respectively reflect the situation of international calls and telecommunication facilities. (Table 6.12 and 6.13)

**Table 6.12 Initial Loading Matrix of Flow of Information in 2006**

	Component		
	1	2	3
Number of internet users	.652	-.199	.673
Growth rate of internet users	-.344	.681	-.017
Popularity of Internet users (percentage in population)	.908	.095	-.311
Talking hours of outgoing calls to foreign countries	.927	.053	.176
Growth rate of talking hours of international calls	.021	.818	.296
Popularity of fixed Telephone subscribed	.887	.212	-.293
Popularity of mobile phone users	.942	.041	-.268
Number of internet websites	.933	-.016	.193

Table 6.12 shows that F1 represents popularity of mobile phone users, Number of internet websites, Talking hours of outgoing calls to foreign countries, Popularity of Internet users; F2 presents Growth rate of talking hours of international calls and Growth rate of internet users; F3 represents Number of internet users.

**Table 6.13 Scores and Ranks of Transnational Flow of Information in 2006**

Provinces	F1	Rank1	F2	Rank2	F3	Rank3	F	Rank
Guangdong	2.65343	1	-0.14908	21	3.07636	1	2.20385	<b>1</b>
Shanghai	2.46841	3	0.58863	6	-1.42072	29	1.64197	<b>2</b>
Beijing	2.63243	2	0.12278	16	-1.73305	30	1.63308	<b>3</b>
Zhejiang	1.21849	4	0.41645	8	-0.02603	16	0.91806	<b>4</b>
Jiangsu	0.78089	5	0.102	17	1.01816	3	0.68894	<b>5</b>
Fujian	0.54055	7	-0.08481	20	-0.45335	22	0.30334	<b>6</b>
Shandong	0.33137	8	-0.83576	26	1.6024	2	0.28187	<b>7</b>
Liaoning	0.19392	9	0.16825	13	-0.19059	20	0.14095	<b>8</b>
Xinjiang	-0.28349	13	1.34438	3	0.07342	15	0.05344	<b>9</b>
Tianjin	0.62659	6	-0.76462	24	-2.19065	31	0.02263	<b>10</b>
Hubei	-0.2539	12	0.18466	11	0.89831	4	-0.03029	<b>11</b>
Hainan	-0.5125	20	2.24559	2	-0.66157	25	-0.03644	<b>12</b>
Hebei	-0.23757	10	-0.07583	19	0.67329	7	-0.09398	<b>13</b>
Shanxi	-0.41834	18	0.83666	5	0.1004	14	-0.12794	<b>14</b>
Shaanxi	-0.31981	16	0.33228	9	0.23818	13	-0.13264	<b>15</b>
Xizang	-0.991	30	2.51831	1	-0.12467	17	-0.25245	<b>16</b>
Heilongjiang	-0.24937	11	-0.56167	23	-0.16146	19	-0.29434	<b>17</b>
Anhui	-0.58764	23	0.12655	15	0.56212	8	-0.31489	<b>18</b>
Jiangxi	-0.77517	29	0.99194	4	0.35157	11	-0.31642	<b>19</b>
Yunnan	-0.67825	27	0.16595	14	0.82964	5	-0.33713	<b>20</b>
Gansu	-0.69282	28	0.44865	7	0.26662	12	-0.36735	<b>21</b>
Jilin	-0.31013	14	-0.31537	22	-0.75973	26	-0.36762	<b>22</b>
Sichuan	-0.31866	15	-1.37825	28	0.70295	6	-0.38025	<b>23</b>
Inner Mongolia	-0.6118	25	0.28099	10	-0.35277	21	-0.41905	<b>24</b>
Hunan	-0.52984	21	-0.77116	25	0.36657	10	-0.46038	<b>25</b>
Qinghai	-0.65903	26	0.18277	12	-0.49188	23	-0.48698	<b>26</b>
Henan	-0.55438	22	-0.86869	27	0.37587	9	-0.49375	<b>27</b>
Ningxia	-0.59424	24	-0.05027	18	-0.78272	27	-0.52036	<b>28</b>
Guangxi	-0.49794	19	-1.55842	29	-0.13254	18	-0.64223	<b>29</b>
Chongqing	-0.36575	17	-1.81435	30	-1.09716	28	-0.71763	<b>30</b>
Guizhou	-1.00444	31	-1.82854	31	-0.557	24	-1.096	<b>31</b>

Table 6.13 shows that Guangdong has a prominent edge over other provinces and with Shanghai and Beijing closely running after it. The middle and western provinces take the back seats. Fujian, ranks 6<sup>th</sup> in the country, bears some advantages in infrastructures, but the number of internet users and talking hours of outgoing calls to foreign countries are weak.

### Overall Evaluation of FACPG of 2006

To get the final comprehensive scores and ranks of FACPG in 2006, the four-dimension scores calculated above are put together and processed using the method of Principal Component Analysis as well.

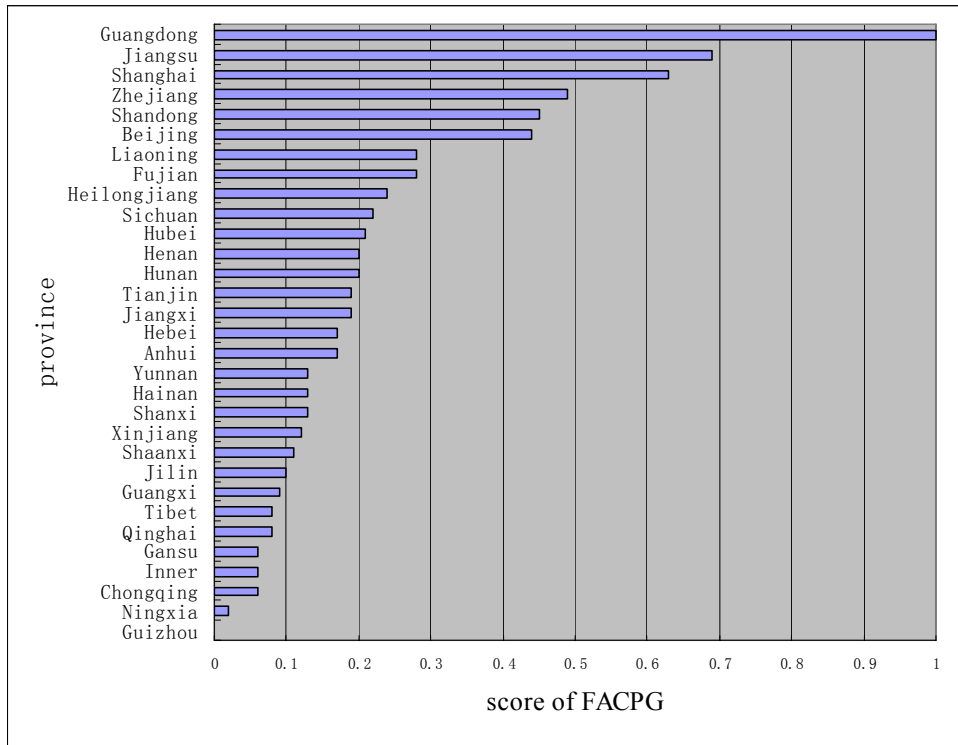
**Table 6.14 Initial Loading Matrix of FACPG in 2006**

	Component
	1
Transnational flow of Capital	.920
Transnational flow of Goods	.797
Transnational flow of People	.942
Transnational flow of Information	.897

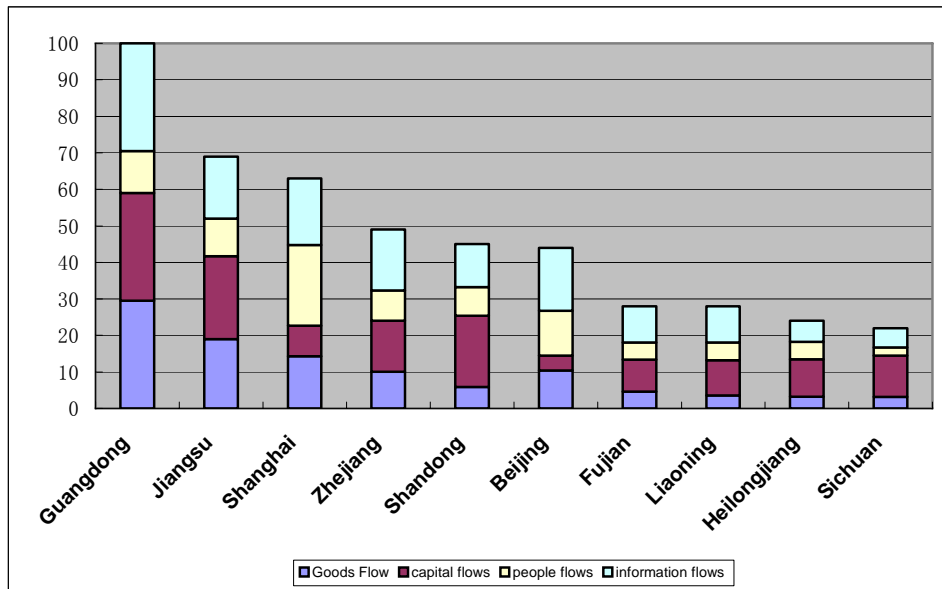
F in Table 6.14 represents the transnational flow of four agents of globalization. It is also the final indicator of FACPG. Table 6.15, 6.16 and Figure 6.2 demonstrate that Guangdong's is far better than its 30 counterparts in Mainland China. Jiangsu, Shanghai, Zhejiang, Shandong and Beijing are better than others.

**Table 6.15 Ranks of Overall FACPG in 2006**

Provinces	Goods Flow	Capital Flow	People Flow	Information Flow	F	Comprehensive FACPG
Guangdong	1	1	2	1	2.80315	1
Jiangsu	3	2	1	5	1.94827	2
Shanghai	2	10	3	2	1.45291	3
Zhejiang	5	5	5	4	0.99198	4
Shandong	8	3	4	7	0.9647	5
Beijing	4	22	8	3	0.61049	6
Liaoning	14	13	6	8	0.36005	7
Fujian	9	11	10	6	0.22165	8
Heilongjiang	13	8	7	17	0.09453	9
Sichuan	15	6	12	23	0.03555	10
Hubei	12	12	17	11	-0.02652	11
Henan	23	4	13	27	-0.05994	12
Hunan	19	7	11	25	-0.08189	13
Tianjin	6	26	20	10	-0.08784	14
Jiangxi	10	15	16	19	-0.20301	15
Hebei	27	9	21	13	-0.22931	16
Anhui	20	14	14	18	-0.23775	17
Yunnan	24	18	19	20	-0.31406	18
Hainan	18	31	9	12	-0.32402	19
Shanxi	29	20	15	14	-0.40728	20
Xinjiang	11	27	27	9	-0.4596	21
Shaanxi	31	19	23	15	-0.51581	22
Jilin	26	21	18	22	-0.53326	23
Guangxi	25	16	24	29	-0.56547	24
Xizang	22	30	22	16	-0.58942	25
Qinghai	7	29	28	26	-0.64464	26
Gansu	16	25	30	21	-0.70627	27
Inner Mongolia	28	24	25	24	-0.79969	28
Chongqing	21	23	26	30	-0.85186	29
Ningxia	17	28	31	28	-0.89992	30
Guizhou	30	17	29	31	-0.94572	31



**Figure 6.2 Ranks of FACPG in 2006**



**Figure 6.3 FACPG of the Top Ten Provinces in 2006**

Figure 6.3 shows that among the top ten are three municipalities directly under the national government and seven coastal provinces. Beijing and Shanghai are especially strong in people flow; Guangdong, Jiangsu and Shandong are especially strong in capital flow. Among its four agencies of globalization, people flow is not remarkable in Guangdong.

## 6.2 Dynamic Analysis of FACPG during 2004-2006

By analyzing the data of 2004-2006, we can clearly see the change and potential of FACPG through each dimension during the three years. For the sake of space economy, here only final ranks based on their comprehensive scores in 2004 and 2005 are displayed. Their detailed scores and ranks are provided in the appendices.

**Table 6.16 Rank Change of Transnational Flow of Goods (2004-2006)**

Provinces	2004	2005	2006	Rank Change
Anhui	14	13	20	-6
Beijing	22	2	4	18
Chongqing	23	17	21	2
Fujian	11	8	9	2
Gansu	25	26	16	9
Guangdong	1	1	1	0
Guangxi	16	19	25	-9
Guizhou	17	29	30	-13
Hainan	31	28	18	13
Hebei	9	23	27	-18

**Table 6.16 Continued**

Provinces	2004	2005	2006	Rank Change
Heilongjiang	8	9	13	—5
Henan	4	21	23	—19
Hubei	12	14	12	0
Hunan	7	24	19	—12
Inner Mongolia	24	15	28	—4
Jiangsu	2	4	3	—1
Jiangxi	15	20	10	5
Jilin	21	12	26	—5
Liaoning	13	11	14	—1
Ningxia	28	27	17	11
Qinghai	29	31	7	22
Shaanxi	19	16	31	—12
Shandong	3	10	8	—5
Shanghai	10	3	2	8
Shanxi	20	30	29	—9
Sichuan	6	25	15	—9
Tianjin	26	5	6	20
Xinjiang	27	7	11	16
Tibet	30	18	22	8
Yunnan	18	22	24	—6
Zhejiang	5	6	5	0

Table 6.16 shows that 28 provinces' ranks of transnational flow of goods changed except Guangdong, Hubei and and Zhejiang. Qinghai and Henan experienced the biggest change. Qinghai's ranks upped 22 places; Henan's dropped 19 places. Table 6.17 shows that in the aspect of capital flow, Henan and Beijing experienced biggest changed in their ranks. Henan moved up 22 places and Beijing dropped down by 20 places. Ranks of Chongqing, Tibet and Yunnan remained unchanged.

**Table 6.17 Rank Change of Transnational Flow of Capital (2004-2006)**

Provinces	2004	2005	2006	Rank Change
Anhui	19	19	14	5
Beijing	2	3	22	-20
Chongqing	23	26	23	0
Fujian	14	13	11	-3
Gansu	16	5	25	-9
Guangdong	4	4	1	3
Guangxi	28	28	16	12
Guizhou	29	30	17	12
Hainan	21	20	31	-10
Hebei	12	11	9	3
Heilongjiang	11	8	8	3
Henan	26	2	4	22
Hubei	22	16	12	10
Hunan	25	10	7	18
Inner Mongolia	15	18	24	-9
Jiangsu	8	9	2	6
Jiangxi	24	14	15	9
Jilin	6	29	21	-15
Liaoning	5	21	13	-8
Ningxia	17	25	28	-11
Qinghai	27	22	29	-2
Shaanxi	13	24	19	-6
Shandong	10	7	3	7
Shanghai	1	1	10	-9
Shanxi	31	31	20	11
Sichuan	20	15	6	14
Tianjin	9	12	26	-19
Xinjiang	3	23	27	-24
Tibet	30	27	30	0
Yunnan	18	17	18	0
Zhejiang	7	6	5	2



**Table 6.18 Rank Change of Transnational Flow of People (2004-2006)**

Provinces	2004	2005	2006	Rank Change
Anhui	14	14	14	0
Beijing	9	6	8	1
Chongqing	26	23	26	0
Fujian	8	13	10	-2
Gansu	23	22	30	-7
Guangdong	2	1	2	0
Guangxi	20	16	24	-4
Guizhou	21	26	29	-8
Hainan	30	7	9	21
Hebei	11	30	21	-10
Heilongjiang	18	25	7	11
Henan	12	11	13	-1
Hubei	15	8	17	-2
Hunan	6	17	11	-5
Inner Mongolia	25	15	25	0
Jiangsu	1	2	1	0
Jiangxi	22	18	16	6
Jilin	13	20	18	-5
Liaoning	7	9	6	1
Ningxia	28	27	31	-3
Qinghai	31	29	28	3
Shaanxi	16	21	23	-7
Shandong	4	5	4	0
Shanghai	3	3	3	0
Shanxi	17	10	15	2
Sichuan	10	28	12	-2
Tianjin	19	19	20	-1
Xinjiang	27	31	27	0
Xizang	29	24	22	7
Yunnan	24	12	19	5
Zhejiang	5	4	5	0

**Table 6.19 Rank Change of Transnational Flow of Information (2004-2006)**

Provinces	2004	2005	2006	Rank Change
Anhui	15	24	18	-3
Beijing	2	2	3	-1
Chongqing	25	29	30	-5
Fujian	8	7	6	2
Gansu	26	21	21	5
Guangdong	1	1	1	0
Guangxi	17	25	29	-12
Guizhou	27	31	31	-4
Hainan	22	8	12	10
Hebei	11	12	13	-2
Heilongjiang	14	18	17	-3
Henan	20	15	27	-7
Hubei	18	20	11	7
Hunan	21	26	25	-4
Inner Mongolia	24	19	24	0
Jiangsu	6	5	5	1
Jiangxi	28	22	19	9
Jilin	19	17	22	-3
Liaoning	9	9	8	1
Ningxia	30	30	28	2
Qinghai	29	13	26	3
Shaanxi	13	14	15	-2
Shandong	5	10	7	-2
Shanghai	3	3	2	1
Shanxi	12	11	14	-2
Sichuan	10	16	23	-13
Tianjin	7	6	10	-3
Xinjiang	16	28	9	7
Tibet	31	23	16	15
Yunnan	23	27	20	3
Zhejiang	4	4	4	0

**Table 6.20 Rank Change of Overall FACPG (2004-2006)**

Provinces	2004	2005	2006	Rank Change
Anhui	17	19	17	0
Beijing	3	3	6	-3
Chongqing	25	28	29	-4
Fujian	10	9	8	2
Gansu	24	12	27	-3
Guangdong	2	2	1	1
Guangxi	22	26	24	-2
Guizhou	28	31	31	-3
Hainan	27	15	19	8
Hebei	11	13	16	-5
Heilongjiang	13	10	9	4
Henan	18	8	12	6
Hubei	19	16	11	8
Hunan	16	14	13	3
Inner Mongolia	20	18	28	-8
Jiangsu	4	4	2	2
Jiangxi	26	17	15	11
Jilin	12	22	23	-11
Liaoning	7	11	7	0
Ningxia	29	30	30	-1
Qinghai	30	29	26	4
Shaanxi	15	23	22	-7
Shandong	6	7	5	1
Shanghai	1	1	3	-2
Shanxi	23	24	20	3
Sichuan	14	20	10	4
Tianjin	8	6	14	-6
Xinjiang	9	25	21	-15
Tibet	31	27	25	6
Yunnan	21	21	18	3
Zhejiang	5	5	4	1

Table 6.18 shows seven provinces' ranks maintained stable. Hainan and Hebei experienced the biggest change. Hainan moved up by 21 places and Hebei dropped down by 10 places.

Table 6.19 shows that Tibet moved up by 15 places and Sichuan dropped down by 13 places. Guangdong, Inner Mongolia and Zhejiang's ranks remained unchanged.

Table 6.20 shows that 29 provinces' overall FACPG changed during 2004-2006. Among them Jiangxi moved up by 11 places, Xinjiang and Jilin dropped down by 15 and 11 places, respectively. Ranks of Anhui and Liaoning remained the same for all three years.

### 6.3 Cluster Analysis of FACPG in 2006

**Isometry Analysis.** China's 31 provinces can be classified into four categories according to their FACPG in 2006.  $d = (3.47417 + 1.05274) / 4 = 1.132$ .

Group A: FACPG ranging from 2.342 to 3.474

Group B: FACPG ranging from 1.210 to 2.342

Group C: FACPG ranging from 0.078 to 1.210

Group D: FACPG ranging from -1.054 to 0.078

**Table 6.21 Four Groups based on FACPG in 2006**

Provinces	Scores	Ranks	Grade
Guangdong	3.47417	1	A
Jiangsu	2.07926	2	B
Shanghai	1.7935	3	B
Zhejiang	1.14298	4	C
Shandong	1.00106	5	C
Beijing	0.94743	6	C
Liaoning	0.22547	7	C
Fujian	0.1929	8	C
Heilongjiang	0.01299	9	D
Sichuan	-0.0624	10	D
Hubei	-0.12034	11	D
Henan	-0.13825	12	D
Hunan	-0.16591	13	D
Tianjin	-0.17253	14	D
Jiangxi	-0.21177	15	D
Hebei	-0.27254	16	D
Anhui	-0.27531	17	D
Yunnan	-0.46816	18	D
Hainan	-0.47108	19	D
Shanxi	-0.48022	20	D
Xinjiang	-0.51327	21	D
Shanxi	-0.57307	22	D
Jilin	-0.58862	23	D
Guangxi	-0.65451	24	D
Xizang	-0.67085	25	D
Qinghai	-0.67578	26	D
Gansu	-0.76403	27	D
Inner Mongolia	-0.77234	28	D
Chongqing	-0.80222	29	D
Ningxia	-0.9638	30	D
Guizhou	-1.05274	31	D

**Cluster Analysis.** Using Ward's method and Squared Euclidean Distance, the provinces can be classified into six clusters by their overall FACPG in 2006. (Figure 6.4)

Group One (1): Guangdong

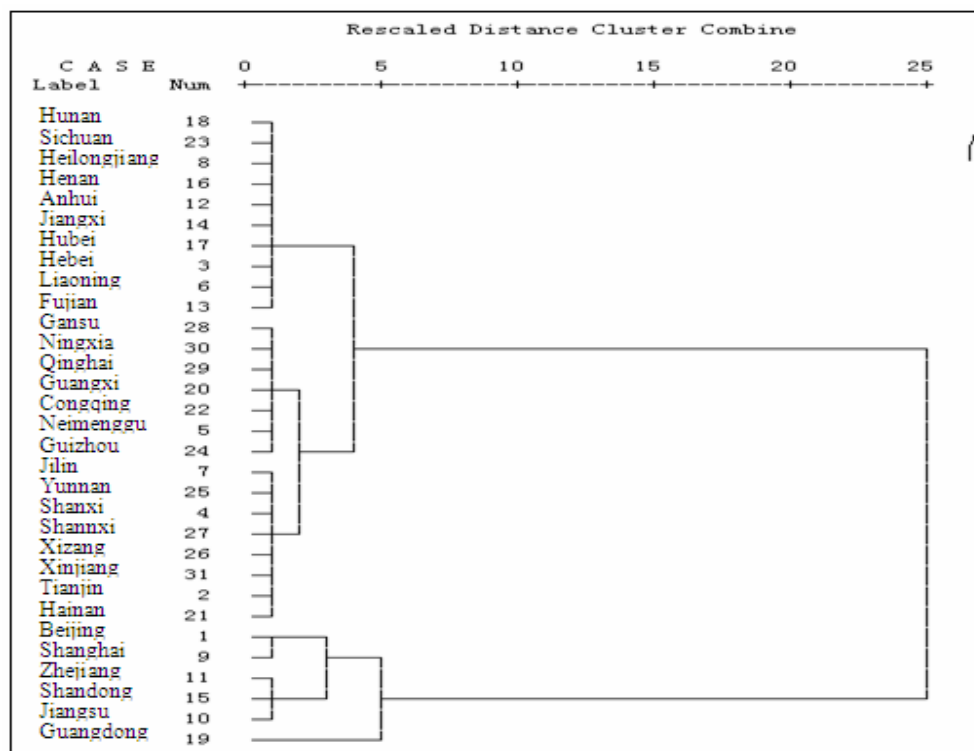
Group Two (2): Shanghai, Beijing

Group Three (3): Jiangsu, Zhejiang, Shandong

Group Four (10): Hebei, Liaoning, Heilongjiang, Anhui, Fujian, Jiangxi, Henan, Hubei, Hunan, and Sichuan

Group Five (8): Tianjin, Shanxi, Jilin, Hainan, Yunnan, Tibet, Shaanxi, Xinjiang

Group Six (7): Inner Mongolia, Guangxi, Chongqing, Guizhou, Gansu, Qinghai, Ningxia



**Figure 6.4 Cluster Analysis Based on Overall FACPG in 2006**

#### **6.4 The Regional and Geopolitical Features of FACPG**

The final evaluation results of FACPG in 2004-06 demonstrate strong regional and geographical features. Four groups by regions differed remarkably in FACPG. (Table 6.22) The Eastern group greatly exceeded other three groups, particularly the Western one. Eight Eastern provinces were among the top ten during the period observed. Ten among twelve Western provinces ranked among the last ten in FACPG in 2006.

Table 6.23 indicates geographical advantages had notable influence on FACPG. Firstly, the outcome of the evaluation differed from the common conceive that the administrative status of municipalities directly under the central government could exert much influence. Tianjin and Chongqing ranked at 14<sup>th</sup> and 29<sup>th</sup> in 2006 respectively. Even Beijing, the capital megacity, legged behind five coastal provinces in 2006. Secondly, coastal provinces keep ahead in FACPG. Seven among eleven coastal provinces consistently ranked among top ten for three years. Of nine inland provinces, only Sichuan appeared among the top ten in 2006. This disparity may be attributed to geographical differences and coastal development strategy decreed in 1988. Third, contrary to the traditional belief, the border provinces, especially those along land borders did not rank better than those do not. Most of them took the back seats for the period of 2004-06. It is probably because most of the Chinese neighboring countries are relatively underdeveloped.

**Table 6.22 Regional Features from the Perspective of FACPG**

Regions	Provinces	Ranks in 2004	Ranks in 2005	Ranks in 2006
Eastern Provinces (11)	Beijing	3	3	6
	Fujian	10	9	8
	Guangdong	2	2	1
	Hainan	27	15	19
	Hebei	11	13	16
	Jiangsu	4	4	2
	Liaoning	7	11	7
	Shandong	6	7	5
	Shanghai	1	1	3
	Tianjin	8	6	14
	Zhejiang	5	5	4
Central Provinces (8)	Anhui	17	19	17
	Heilongjiang	13	10	9
	Henan	18	8	12
	Hubei	19	16	11
	Hunan	16	14	13
	Jiangxi	26	17	15
	Jilin	12	22	23
	Shanxi	23	24	20
Western Provinces (12)	Chongqing	25	28	29
	Gansu	24	12	27
	Guangxi	22	26	24
	Guizhou	28	31	31
	Inner Mongolia	20	18	28
	Ningxia	29	30	30
	Qinghai	30	29	26
	Shanxi	15	23	22
	Sichuan	14	20	10
	Tibet	31	27	25
	Xinjiang	9	25	21
	Yunnan	21	21	18



**Table 6.23 Geopolitical Features from the Perspective of FACPG**

Provinces	2006 Ranks	2005 Ranks	2004 Ranks	Municipality	Coast	Border	Inland
Guangdong	1	2	2		√		
Jiangsu	2	4	4		√		
Shanghai	3	1	1	√	√		
Zhejiang	4	5	5		√		
Shandong	5	7	6		√		
Beijing	6	3	3	√			
Liaoning	7	11	7		√	√	
Fujian	8	9	10		√		
Heilongjiang	9	10	13			√	
Sichuan	10	20	14				√
Hubei	11	16	19				√
Henan	12	8	18				√
Hunan	13	14	16				√
Tianjin	14	6	8	√	√		
Jiangxi	15	17	26				√
Hebei	16	13	11		√		
Anhui	17	19	17				√
Yunnan	18	21	21			√	
Hainan	19	15	27		√		
Shanxi	20	24	23				√
Xinjiang	21	25	9			√	
Shaanxi	22	23	15				√
Jilin	23	22	12			√	
Guangxi	24	26	22		√	√	
Tibet	25	27	31			√	
Qinghai	26	29	30				√
Gansu	27	12	24			√	
Inner Mongolia	28	18	20			√	
Chongqing	29	28	25	√			√
Ningxia	30	30	29				√
Guizhou	31	31	28				√

## **Chapter Seven**

### **Factors Affecting FACPG**

Few scholars examine the variables regarding FACPG by statistical approaches. Among them, Heidi Hobbs did an excellent job when she delved into the controversial international agendas initiated in the 1980s by the American cities. Focusing on the comprehensive test ban movement, nuclear free zone declarations, divestment of local funds from South Africa, and provisions of sanctuary for Central American refugees, she tests eight variables: (1) land area, (2) population, (3) education level, (4) poverty level, (5) per capita income, (6) median household income, (7) housing, and (8) the structure of local governments. Her research reveals that the American cities particularly active in foreign issues are significantly larger in land area and population with more minorities than the non-active domestic counterparts. The active cities have a greater percentage of population below the poverty level and are economically less well off in terms of median household income. They almost double the number of renters and are facing with extremely high housing costs (1994:55).

This chapter examines eighteen assumed factors that might affect FACPG from basic condition or acquired international competencies. The factors are categorized into four groups: basic, economic, social, scientific and educational.

## 7.1 Assumed Factors and Steps of Analysis

Basic Condition includes land area, population, geographical location, transportation facility, natural resources, etc. Several studies have underlined the impact of geographical location on the transnational flows of globalization agents. Hobbs finds that 47% of the 353 American cities particularly active in the abovementioned high political issues are located in the Northeast. Specifically, 50 of them are in Massachusetts and 55 in New Jersey. Possibly, due to its border territory and relative larger Hispanic population, the western region is the most active on the sanctuary issue, constituting 50% of the total. The South-Sun Belt area is the least active for the most issues probably because they are too busy with their economic issues to be more attentive to the world around it (1994:45). Demurger *at al* (2002) finds that the effects of geography on China's provincial growth rates in 1996-99 are remarkable. Their contributions were 2.5 percentage points for the provincial-level metropolises, 0.6 for the northeast provinces, 2.8 for the coastal provinces, 2.0 for the central provinces, 0 for the northwestern provinces, and 0.1 for the southwestern provinces. He points out that the coastal dummy variable used in many studies is a mixture of "pure geography effects" and "preferential-policy effects". Zweig (2002), Cheung (2001), and Zhimin Chen (2003) believe that the Chinese provinces along the southeast coast far outperform the interior regions in foreign trade and FDI largely because of the advantages of their geographical location. Chapter Six of this

paper also discovers that FACPG during 2004-2006 spans is positively related to their geographic location. However, as geographical location is unchangeable or difficult to change, this research will not select it as a variable.

Territory is a key precondition for existence and function of a subnational government. Larger land area may not only provide natural resources but also expands local tax bases. The territory-based authority enables subnational governments to be superior to NGOs and sometimes to compete with a nation-state under some situations. The *Foreign Policy Globalization Index* by A.T. Kearney regards size of land area as a key indicator and discovers that the size of countries plays a role in determining levels of globalization. Hobbs holds that the larger cities of land area have been more responsive to divestment (1988:54-56). In China, however, it seems that the land area under provincial jurisdiction has negative relationship with FACPG. For example, Tibet, the second largest province, and Qinghai, the third largest, both ranked after the 25<sup>th</sup> place in terms of FACPG from 2004 to 2006, while the three smallest ones, Shanghai, Tianjin and Beijing, occupied the front seats for three straight years. Furthermore, as majority of China's territory is countryside, the size of developed area (actually urbanized areas) is growing and expected to have something to do with flows of globalization agents. This paper thus attempts to seek a further evident with the help of statistical analysis.

Population, the subject each subnational government provides public goods to, is the

demanders, consumers and exporters of the agents of globalization. They might have relations with FACP or the fluidity of the globalization agents. For example, more people in a province might consume more foreign commodities or lower labor wages to attract more FDI. Conlan and Sager (2001) finds that the subnational international initiatives of the American states differ considerably from one another in term of population. The average international trade budget in the ten most populous U.S. states was \$3.3 million in 1994 whereas in the ten least populous states it was \$377,550, which was little more than one-tenth of the former. The ten most populous states had an average of 5.5 overseas offices in 1994 whereas the ten least populous states averaged less than one office apiece. Seven of the then smallest states had no overseas offices at all in 1994. Hobbs upholds that size, change and density of population of a region are important variables to its international involvement (1988:54-56). A larger population may result in stronger urban support for local foreign policy. Local international activism also has obvious demographic features. Hobbs discovers that American cities with a higher than average percentage of blacks were more active in addressing special foreign issues such as divestment while those with a higher than average percentage of Hispanics were more active in addressing the sanctuary issues (1994:43). This paper attempts to test whether population size positively correlate with FACP.

Acquired international competencies are based most on foreign-related political,

economic, social factors. Some scholars and institutes have explored how political factors affect paradiplomacy. For example, when *KOF Index of Globalization* selected 25 variables in 2007 from the economic, social and political perspectives to measure a country's globalization, hidden import barriers and capital restrictions are taken as variables. *Index of Economic Freedom* employs ten indicators to represent foreign-related achievements in 2007, namely, trade policy, government financial burden, government intervention in economy, monetary policy, capital flow and foreign investment, banking and financial conditions, salary and price, property right, industry regulation, and labor fluidity. Most of them are associated with government policy. Duchacek argues that the diversified forms, goals, intensity, frequency and importance of subnational government's foreign participation depend on intervening variables such as coordinating mechanisms, self-confidence of the national center, political climate, and the nature of the political system, etc (1986a: 240). Sager and Conlan (2001) conclude that American subnational internationalization depend largely on political leadership and business support. A change in governor or a lack of interest by the small business sector undercut many states' international efforts. (Kincaid, 1999) believes that subnational international actions are influenced more by custom, political practice, and intergovernmental comity than by enforcement of constitutional and statutory rules. Hobbs (1994) questions whether mayor-councils or council-manager local governments act more readily on

broader policy issues such as the test ban or divestment. She also asserts that a more favorable political climate such as that of California may push forward local activism. Demurger (2001) and Zweig (2002) expatiate how the central government's deregulation policy set free the local transnational contacts in the Chinese provinces. Undoubtedly, foreign-related preferential policy granted to the coastal provinces in China is crucial for their FACPG. As incentive policies can speed up flows of globalization agents, all the Chinese local governments are thriving after preferential policies. Cheung (2001) and Zhimin Chen (2003) believe that Guangdong and Fujian have achieved rapid economic growth partly because the top leaders of the two provinces successfully persuaded Deng Xiaoping, then the number one economic reformer of China, to grant them a deregulation policy at the very beginning of China's internationalization. That is "special policy and flexible measures". However, most of the research takes preferential policies as dummy variables as those policies are very complicated. Meanwhile, the negative effects of preferential policies have gradually been distinct. Policies like low-rent land, low tariff, tax-free or reduction, export subsidy and tax rebate are enforced at the cost of state or local revenue. Exemption and reduction caused the loss of state revenue of over \$8.8 billion in 1995 (Huang, Guixiang, 1997). Tax rebate in Fujian Province reached US\$ 3.64 billion in 2007. Wang Dan *at al* (2004) discovers that deduction- taxation policy does not work when an investment project has particular requirements for location or a cluster of

related sectors. Instead, tax increase may be a superior choice. Since China's accession into the WTO, the central government has abolished some previously granted preferential policies to create a fair competition environment. Since July 1, 2007, the Chinese government has carried out an export stringent policy, abolished or slashed tax-rebates for 2,831 commodities, which take up 37% of the total products in the customhouse's list. These are high energy-consumed or high resource-consumed products, etc. Most important, *Law on Corporate Income Tax* made by the national government began to levy a unitary tax rate (25%) on both domestic and foreign enterprises from Jan. 1, 2008. This signals that the central government is increasing adjustment and reduction of preferential policies to foreign enterprises and individuals. As the preferential policies are under frequent adjustment, this paper does not select it as a variable.

Economic factors are expected to have much correlation with paradiplomatic achievement. For instance, Soldatos (1990) finds that subnational international involvement has appeared most often in advanced industrial federations as well as in those with substantial amount of own financial resource. Conlan and Sager (2001) finds that budgetary difficulties restrain U.S. states from becoming as active as they might like to be. Economic complementarity leads to more transnational interaction. Some studies (Fleisher and Chen 1997, Mody and Wang 1997, and Demurge 2001) approved that infrastructure investment has statistically significant positive impact on foreign trade.



Social variables are also measures of subnational initiatives. Clavel Kann and others attribute the American local foreign initiatives on foreign policy to the middle class radicalism. Hobbs examines (1994) several variables such as poverty level, per capita income, median household income, and housing. Interestingly, her observations do not support the middle-class radical profile as the results suggest that active cities have more people below the poverty level and less above the national level. House renters are more active than house owners.

Scientific and educational factors are concerned. Duchacek (1986) gave a close look at the quality and skill of subnational elites to handle foreign affairs as well as ethnic/lingual heterogeneity whereas Hobbs investigated whether those American cities particularly active in the controversial international issues in both 1980 and 1990 have larger population with better education. Clark and Montjoy (2001) introduce a new incentive strategy called “promoting entrepreneurship”. It encourages business transnational expansion by exploring new markets or by providing human capital development or support for R&D, etc.

This chapter tests three basic factors, six economic factors, five social factors, and four scientific and educational factors. The period from 2004 to 2006 is targeted. The ranks of FACPG are from Chapter Six of this paper. The ranks of the sixteen factors are processed from the original data given by *China Statistical Yearbooks* compiled annually

by National Bureau of Statistics of China and published by China Statistics Press. The ranks of Expenditure on R&D and Government Appropriation for science and technology are processed from the original data given by *Statistical Communiqués on National Expenditures on Science and Technology* released annually by National Bureau of Statistics of China, Ministry of Science and Technology and Ministry of Finance.<sup>60</sup>

**Table 7.1 Assumed Factors related to FACPG**

	Variables
Basic factors <sup>61</sup> (3)	Population at the Year-end
	Land Area
	Developed areas
Economic factors (6)	GDP
	Per Capita GDP
	Local Government Revenue
	Local Government Expenditure
	Investment in Fixed Assets
Social factors (5)	Expenditures for Foreign Affairs
	Per Capita Disposable Income of Urban Households
	Per Capita Consumption Expenditure of Urban Households
	Per Capita Net Income of Rural Households
	Per Capita Consumption Expenditure of Rural Households
Scientific and Educational factors (4)	Urbanization Rate (%) <sup>62</sup>
	R&D Expenditure
	Government Appropriation for Science and Technology
	Government Appropriation for Education
	Population with College or Higher Education

### Steps of Analysis

This chapter adopts Spearman's product-moment correlation coefficient, a nonparametric

method based on ranks, to measure the linear relationship between the eighteen assumed factors and FACPG for three different years from 2004 to 2006. The steps are as follows:

Step 1: To rank the two variables (here FACPG and 18 assumed factors) and mark them as  $U_i$  and  $V_i$  respectively, then come to the sum  $D_i^2$ .

The equation is:

$$\sum_{i=1}^n D_i^2 = \sum_{i=1}^n (U_i - V_i)^2$$

Step 2: To use the following formula and get Spearman's  $\rho$ <sup>63</sup>.  $R = 1 - \frac{6 \sum D_i^2}{n(n^2 - 1)}$

(Where:  $R$  is the coefficient,  $D$  is the difference between the two ranks for each subject,  $n$  is the number of subjects. Both 1 and 6 are constants)

Step 3: Using the  $R$ , to find and interpret whether and to what extent those assumed factors correlate with FACPG during 2004-2006.

## 7.2 Correlation between Factors and FACPG

The  $R$  between Assumed Factors and FACPG during 2004-06 are as follows. Detailed data and ranks of the eighteen variables during the three-year period can be found in the appendixes. As shown in Table 7-2 on the next page, the eighteen assumed factors, except land area, seventeen factors have positive correlation with FACPG and they are all significant at the 0.01 level.

**Table 7.2 Correlation between Factors and FACPG in 2006**

Assumed Factors		2004	2005	2006
		FACPG	FACPG	FACPG
1. Land Area	Correlation Coeffici Sig. (2-tailed)	-.321 .078	-.421* .018	-.268 .145
2. Population	Correlation Coefficient Sig. (2-tailed)	.389* .031	.340 .061	.514** .003
3. Developed Areas	Correlation Coefficient Sig. (2-tailed)	.737** .000	.646** .000	.788** .000
4. GDP	Correlation Coefficient Sig. (2-tailed)	.788** .000	.767** .000	.856** .000
5. Per Capita GDP	Correlation Coefficient Sig. (2-tailed)	.829** .000	.735** .000	.683** .000
6. Local Government Revenue	Correlation Coefficient Sig. (2-tailed)	.762** .000	.793** .000	.872** .000
7. Local Government Expenditure	Correlation Coefficient Sig. (2-tailed)	.797** .000	.691** .000	.824** .000
8. Investment in Fixed Assets	Correlation Coefficient Sig. (2-tailed)	.732** .000	.676** .000	.750** .000
9. Expenditures for Foreign Affairs	Correlation Coefficient Sig. (2-tailed)	.649** .000	.583** .001	.536** .002
10. Per Capita Urban Income	Correlation Coefficient Sig. (2-tailed)	.630** .000	.617** .000	.664** .000
11. Per Capita Urban Consumption Spending	Correlation Coefficient Sig. (2-tailed)	.598** .000	.494** .005	.824** .000
12. Per Capita Rural Income	Correlation Coefficient Sig. (2-tailed)	.825** .000	.820** .000	.812** .000
13. Per Capita Rural Consumption Spending	Correlation Coefficient Sig. (2-tailed)	.763** .000	.748** .000	.791** .000
14. Urbanization Rate	Correlation Coefficient Sig. (2-tailed)	.669** .000	.615** .000	.552** .001
15. R&D Expenditure	Correlation Coefficient Sig. (2-tailed)	.600** .000	.779** .000	.831** .000

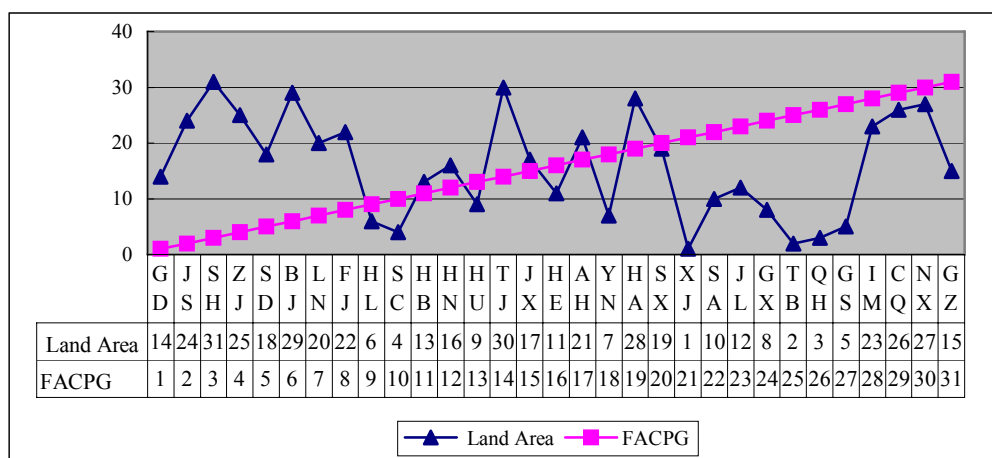
**Table 7.2 Continued**

Assumed Factors		2004	2005	2006
		FACPG	FACPG	FACPG
16. Government Spending for S&T	Correlation Coefficient	.866**	.805**	.879**
	Sig. (2-tailed)	0	0	0
17. Government Spending for Education	Correlation Coefficient	.748**	.714**	.814**
	Sig. (2-tailed)	0	0	0
18. Population with College or above Education	Correlation Coefficient	.603**	.706**	.852**
	Sig. (2-tailed)	0	0	0

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

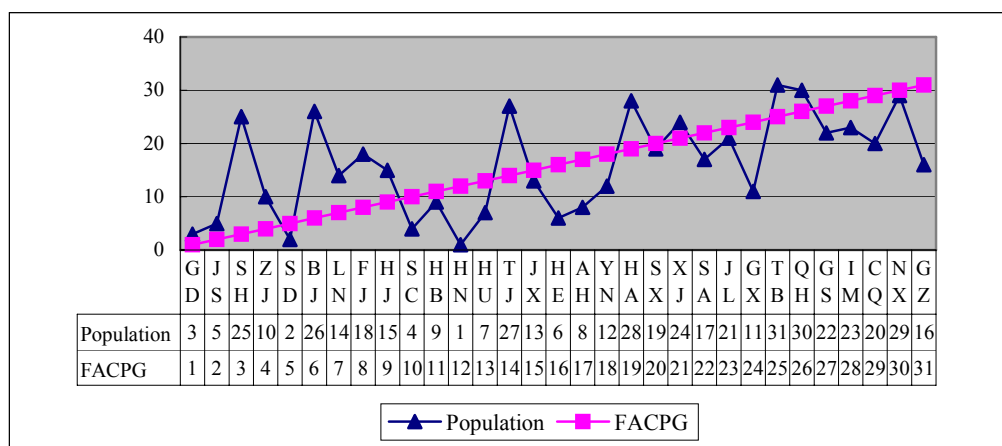
**7.21 Correlation between the Basic Factors and FACPG in 2006**



**Figure 7.1 Ranks of Land Area and FACPG**

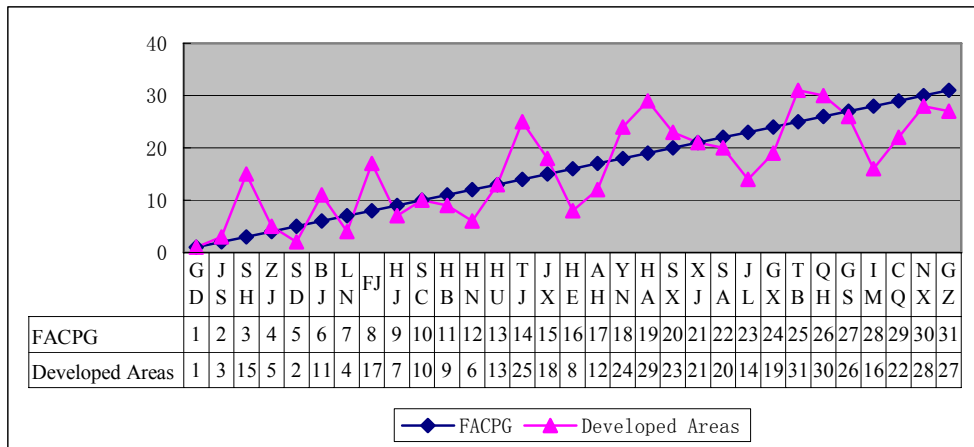
According to the *R* (-.268, *P* is 0.145), there is no relationship between land area and FACPG. Figure 7.1 shows that land area of Shanghai, Beijing and Tianjin, the three largest megacities in China, rank at the last three while their ranks of FACPG are on the

top. Meanwhile, the three provinces with largest land area (Xinjiang, Tibet and Qinghai) ranked at bottom in FACPG. This implies that (1) the magnet effect of the metropolises is distinct for attracting the four agents of globalization; (2) the flow of agents of globalization showed no strong demand for land recourses or land-related natural resources during the period under study. (3) Land is a state-own natural resource. Land users including foreign individuals or enterprises have to acquire land use rights directly by leasing from the government.<sup>64</sup> Since the central government allowed local governments to hold their land-related income as a part of local extra-budgetary revenue in 1994, land has been a primary source of the local government's fiscal revenue. A recent study conducted by Development Research Center of the State Council of China reveals that in most localities, land-related income accounts of 60-90% of local extra-budgetary revenues



**Figure 7.2 Ranks of Population and FACPG**

The  $R$  (0.514) indicates a weak positive correlation between population and FACPG. However, the  $R$  does not interpret the practical situation in China. (1) Why big cities like Beijing and Shanghai have small population but rank at top in FACPG? The problem is probably the demographic data of urban areas. The official data count only people with permanent urban IDs and exclude a large number of floating populations like migrant workers and foreign tourists. As Demurger *at al* (2002) point out, the household registration system makes the movement of the rural poor to prosperous areas illegal. Accordingly, the real number of residents of central cities is likely to be much bigger than reported whereas the real number of inland like provinces might be much smaller because millions farmers in the inland provinces have migrated to the coastal areas or big cities for better-paid jobs. Henan, Sichuan, Anhui, for example, are most populous provinces as well as biggest labor-export provinces to the coastal developed areas. It is rather difficult to estimate the influence of the floating population on the transnational flows of globalization agents. For instance, the rural-to-urban migrants working in large quantities of joint ventures, export-processing zones, information and capital brought in by foreign tourists, etc. (2) Some coastal provinces with a huge number of permanent urban residents like Guangdong, Jiangsu, Zhejiang, and Shandong rank at top in population and FACPG. They are good cases to suggest that there should be a strong positive relationship between population and FACPG.



**Figure 7.3 Ranks of Developed Area and FACPG**

The  $R$  (0.788) between developed area and FACPG in 2006 outstands from the basic factors. The ranks of Guangdong, Sichuan, Hunan, Xinjiang and Shanghai are found same in both developed area and FACPG.

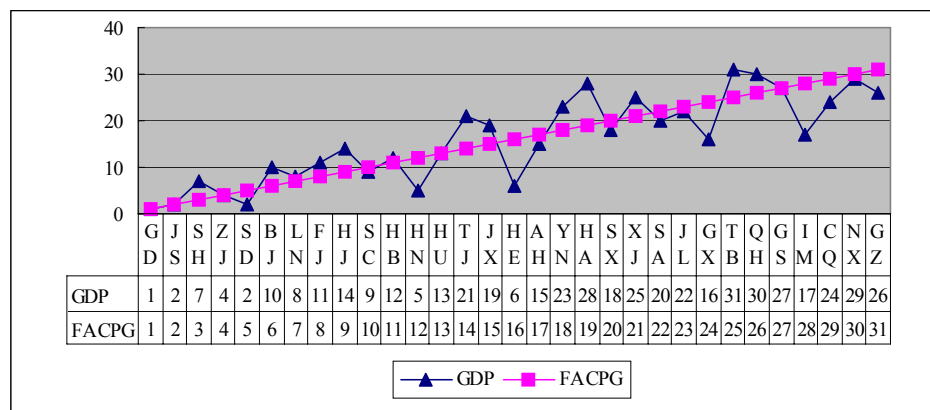
### 7.22. Correlation between the Economic, Social, S&E Factors and FACPG in 2006

Due to the space limit, this paper only give further analysis on the following nine factors whose  $R$  is above 0.8.

- (1) GDP/Gross Regional Product (.856)
- (2) Local government revenue (.872)
- (3) Local government expenditure (.824)
- (4) Per capita annual net income of rural households (.812)

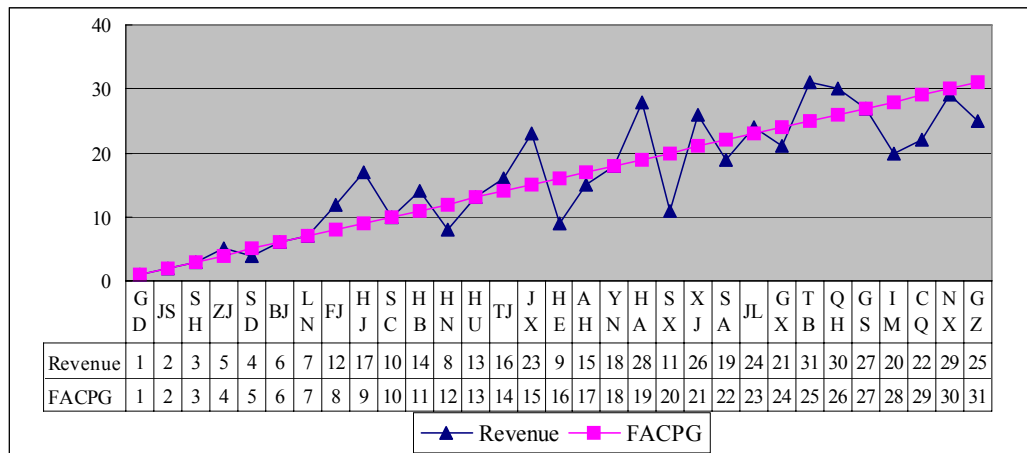


- (5) Per capita Urban Consumption Expenditure (.824)
- (6) R&D Expenditure (.831)
- (7) Government appropriation for science and technology (.879),
- (8) Government appropriation for education (.814)
- (9) Residents with college or above education (.852)



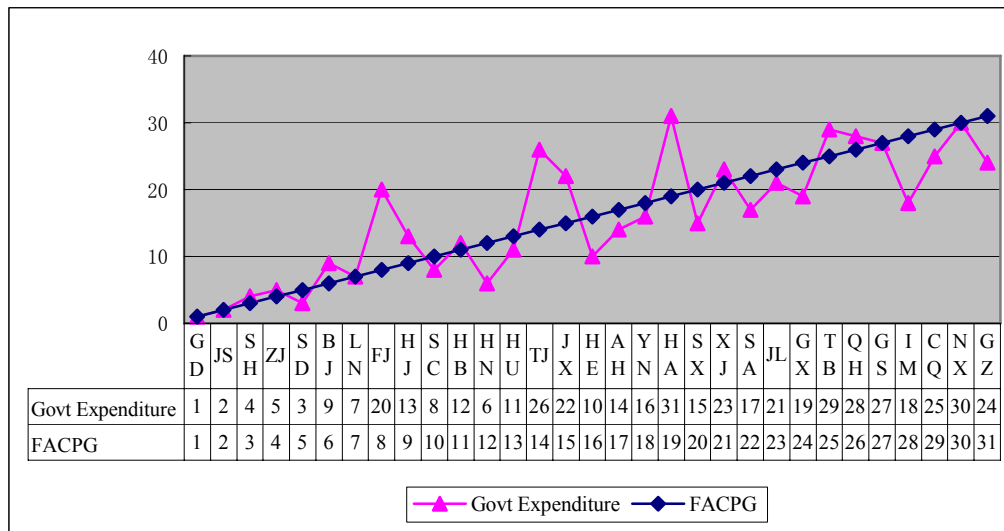
**Figure 7.4 Ranks of GDP and FACPG**

GDP is a key indicator internationally used to gauge a country or a region’s economic strength. It is also a benchmark to assess FACPG. From Figure 6.3, the two zigzag lines are found a tendency to overlap. The seven provinces among the top ten of GDP are among the top eight of FACPG. The GDP ranks of five provinces (Guangdong, Jiangsu, Zhejiang, Hunan and Gansu) match well with their FACPG ranks. These results somehow differ from Hobbs’ argument that most American active cities are located in the Snow Belt or Rust Belt as Sun Belt cities are too busy with economic development to be involved in.



**Figure 7.5 Ranks of Local Government Revenue and FACPG**

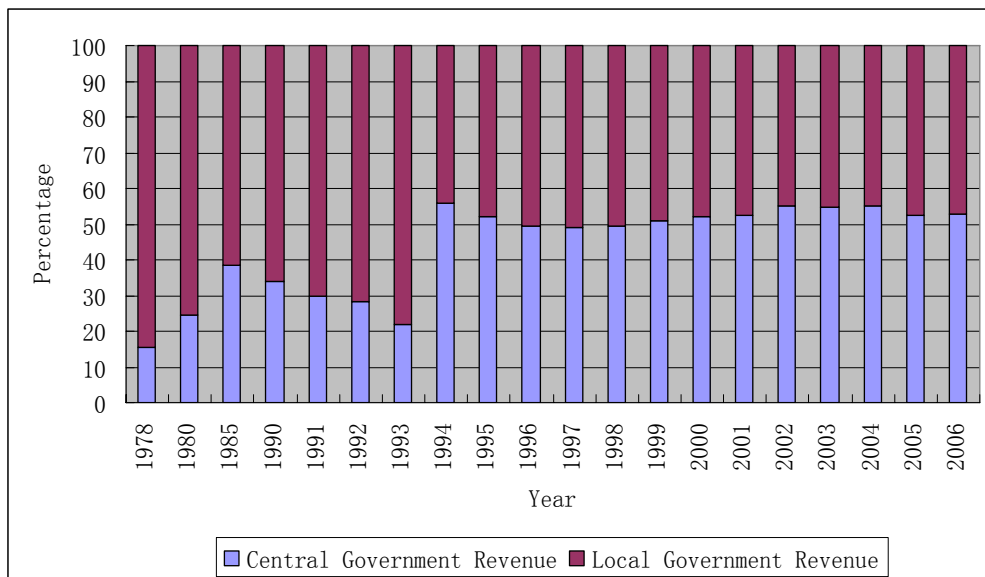
The correlation between provincial government revenue<sup>65</sup> and FACPG (0.872) is very strong. Figure 7.5 shows that the top seven provinces in revenue are also the top seven in FACPG. Nine provinces rank similarly in both. Provincial revenue is the financial prerequisite for their foreign-related activities. To intensify taxation supervision and prevent tax evasion and decrease preferential policies are some alternatives to increase revenues. For example, the newly enforced *Corporate Income Tax Law* abolished those special taxation exclusively enjoyed by foreign-funded enterprises. According to a static analysis of Fujian Province, the province will increase over \$1.47 billion revenue annually after the law put into action in 2008.



**Figure 7.6 Ranks of Local Government Expenditure and FACPG**

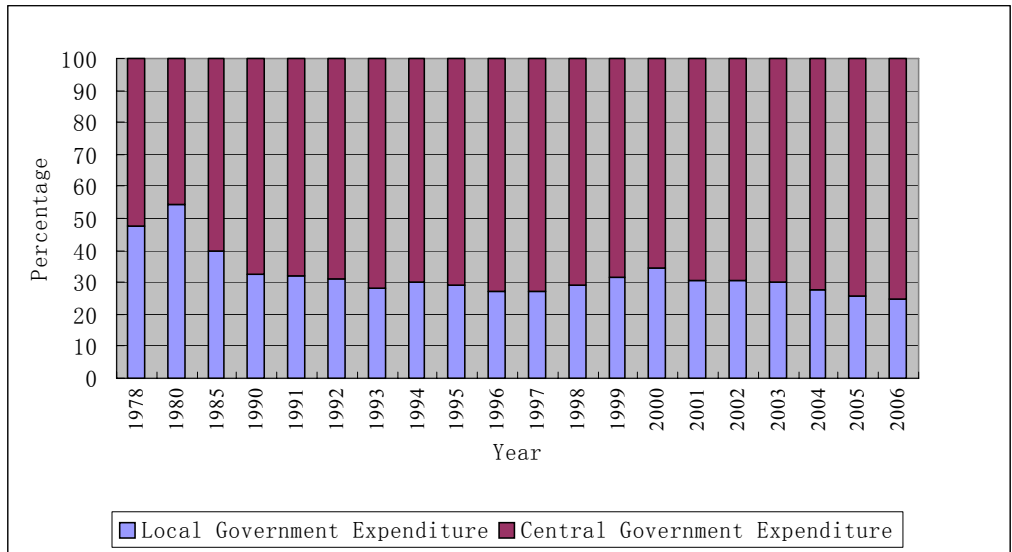
The *R* between provincial government expenditure and FACPG (0.824) indicates a strong positive correlation. Figure 7.6 shows that the top seven provinces in expenditure are among the top nine in FACPG. Five provinces ranked similarly in expenditure and FACPG.

The past decades witnessed how composition of the government revenue and expenditure changed. Figure 7.7 shows that the local governments' revenue accounted for 84.5% of total government revenue in 1978 but it dropped down to 47.2% in 2006. The figure also illustrates that the central government's revenue gradually exceeded the local governments' revenue from 1994.

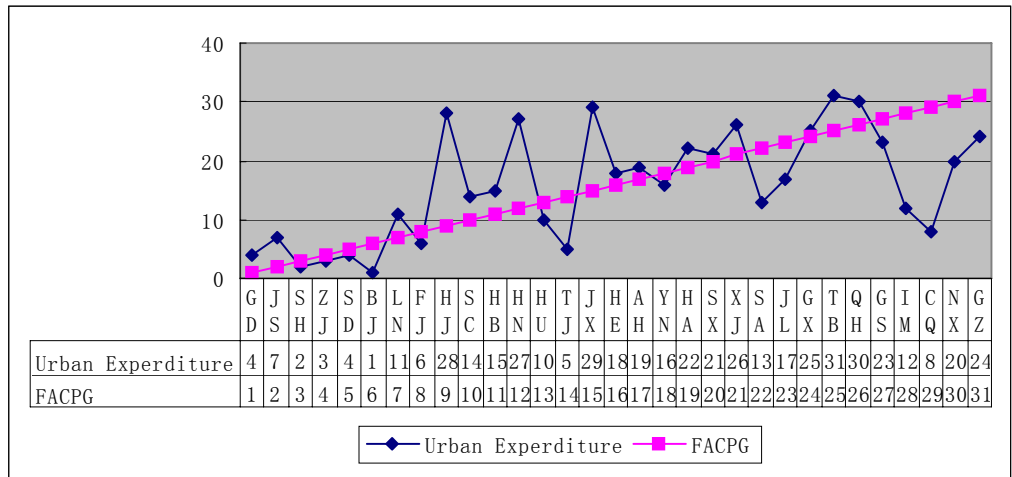


**Figure 7.7 Comparison of the Central and Local Governments' Revenue**

In 1978, the local governments' expenditure accounted for only 47.4% of total government expenditure in the Chinese Mainland but it moved up to 75.3% in 2006. Figure 7.8 illustrates that the percentage of local governments' expenditure greatly increased during the past two decades. With decreasing share in the national revenue, local governments may make more efforts to increase local revenue by promoting foreign trade and tourists, etc. Meanwhile, they may exert more influence on FACPG by increasing budget.



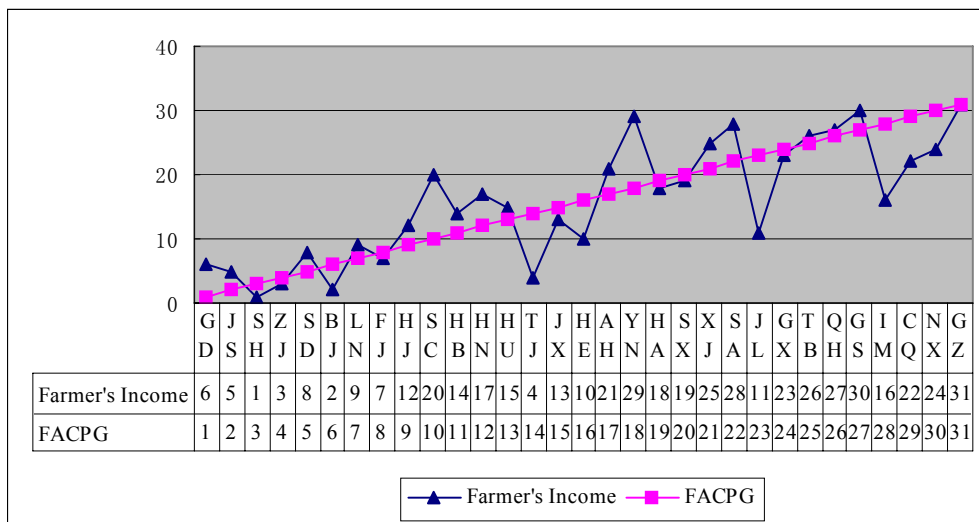
**Figure 7.8 Comparison of Expenditure of Central and Local Government**



**Figure 7.9 Ranks of Average Urban Consumption Expenditure & FACPG**

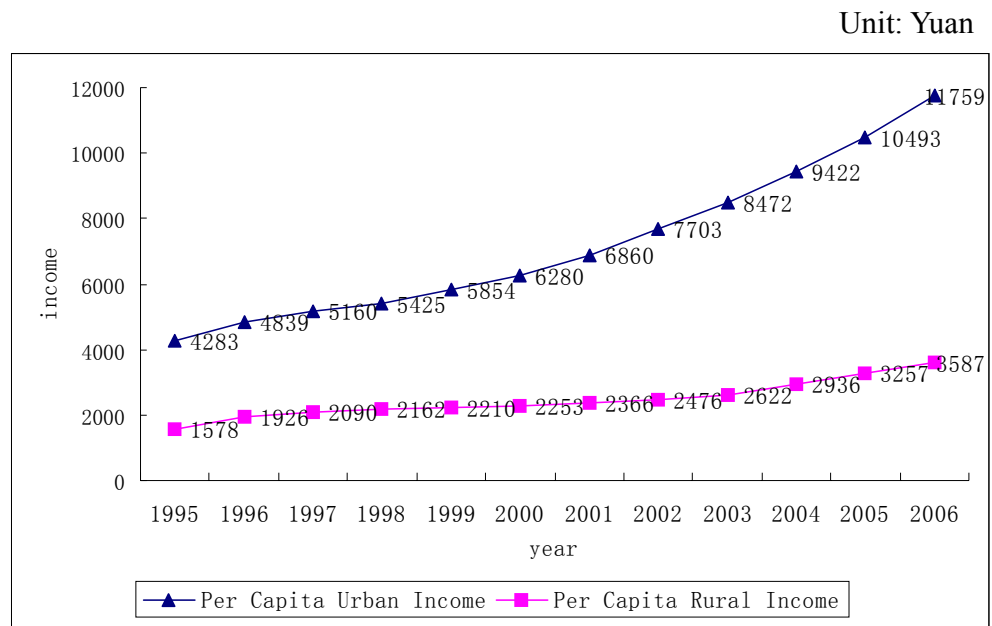
The *R* between FACPG and average urban and rural consumption expenditure are 0.824 and 0.791 respectively. Each represents a strong positive relationship. Urban per capita

consumption expenditure (8697 RMB) was more than 3 times of that of farmers (2829 RMB) in 2006. Due to the income gap, ownership of PC in urban areas is 47.2 per 100 households but only 2.7 in rural areas.



**Figure 7.10 Ranks of Average Rural Income and FACPG**

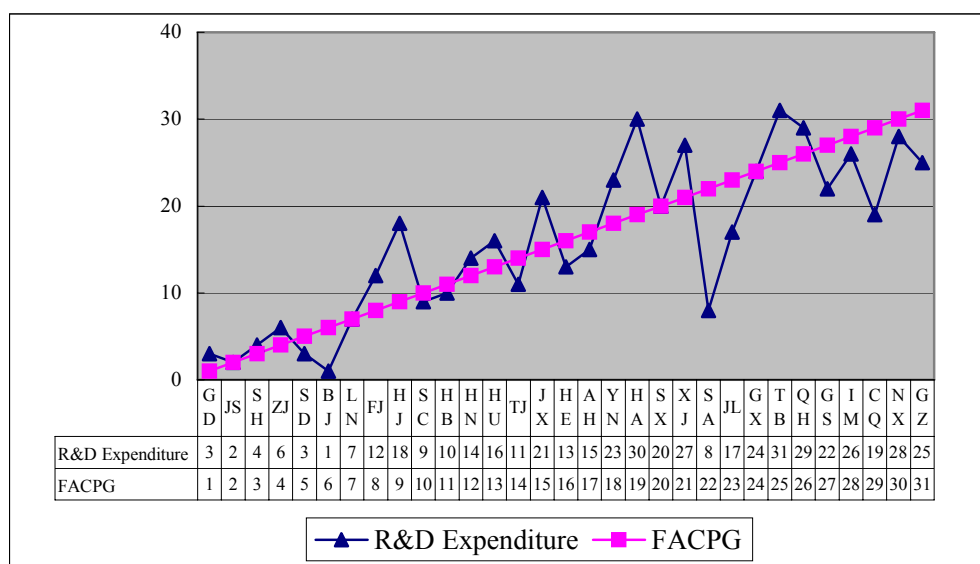
The *R* between average rural income and FACPG (.812) indicates a strong positive correlation. Figure 7.10 shows that most provinces rank at top in farmer’s income also rank high in FACPG. Tianjin ranked at 4th in farmer’s income but 14th in FACPG. Perhaps it is because of its small proportion of farmers in their population.



**Figure 7.11 Average Urban and Rural Income from 1995 to 2006**

Figure 7.11 illuminates that per capita urban income increased much greater than that of farmers during the past decade. China is an agricultural country dominated by rural population.<sup>66</sup> In 2006 the national population was 1.3 billion, among which 737 million were farmers, accounting for 56.1%. Average rural income is a key indicator of a rural household's income and consuming power. The urban average income was 3.28 times of that of farmers in 2006. To raise farmers' income will boost their consumption capability, promote outbound travel, increase the use of PCs, cell phones and Internet, and subsequently speed up the flows of agents of globalization. The governments have carried out policies such as exemption of agricultural taxes, etc. More advanced planting

and breeding technologies have been brought in from abroad to enhance the production of grain, milk, pigs and edible oil to safeguard food supplies and curb price hikes.

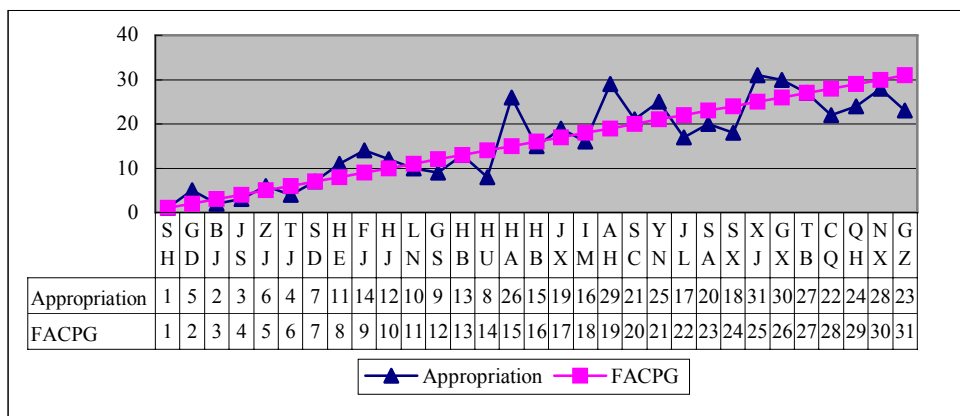


**Figure 7.12 Ranks of R&D Expenditure and FACPG**

R&D expenditure includes basic research, applied research and experimental development. It represents the technical strength of a province and lures agents of globalization. The *R* between R&D expenditure and FACPG (.831) indicates a strong positive correlation. There are nine provinces spent more than 10 billion yuan on R&D in 2006. Their total expenditures reached at 215.4 billion yuan, accounting for 71.7 % of the national expenditures. Guangdong, Jiangsu, Shanghai, Zhejiang, Shandong, Beijing and Liaoning were the top seven in FACPG. China spent 3003.1 billion yuan on S&T in 2006, up by 22.6% compared with the previous year, ranking 6<sup>th</sup> in the world. It made up

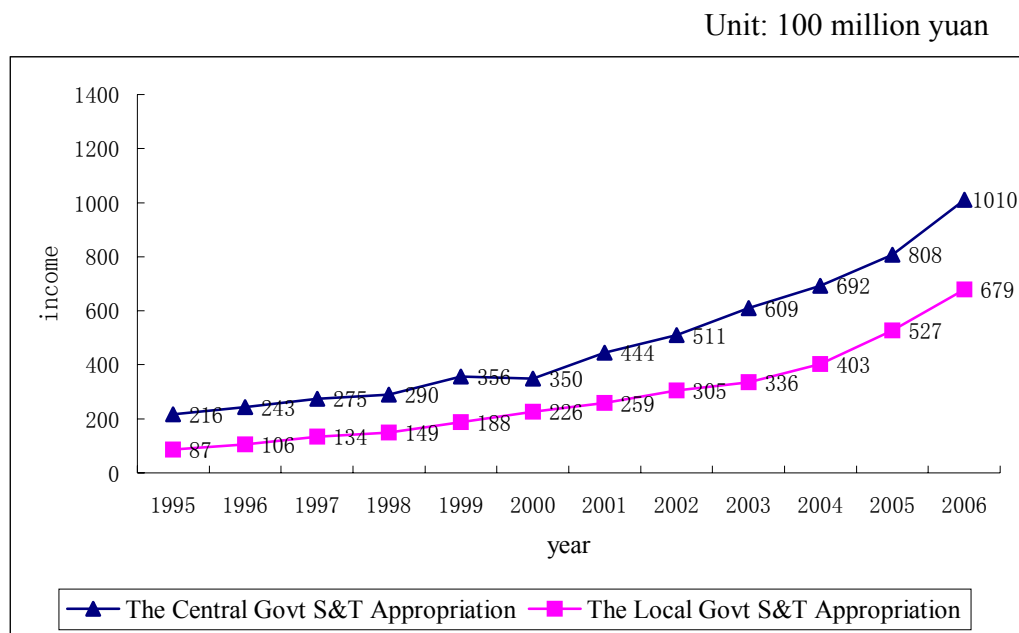


1.34% of GDP that year<sup>67</sup>. In *Key Indicators of Science and Technology 2007/1*, Organization of Economic Cooperation and Development (OECD) released the latest data of R&D spending in its 30 member countries and 8 non-OECD countries, China, Russia, Argentina, South Africa, Israel, Singapore, Romania, and Slovakia<sup>68</sup>. The data show that in a period of ten years, from 1996 to 2006, R&D spending in China grew at an annual rate of 19.7%, far outweighing the growth rate of main developed countries. However, there still exists a big gap compared with the developed countries. In 2006, China's R&D spending accounted for only 4.3% of these 38 countries' total, while USA accounted for 38.8%, Japan 17.1%, Germany 7.8%, and France 5.1%. Moreover, R&D spending in a large majority of the developed countries exceeded 2% of their GDP. It was over 4% in Israel. In the UK, Australia and Canada, the government is the major source of R&D expenditure. Government funding in Australia made up 44.4% of the total R&D spending. Great efforts are devoted to R&D in these countries.



**Figure 7.13 Ranks of Local Government S&T Appropriation and FACPG**

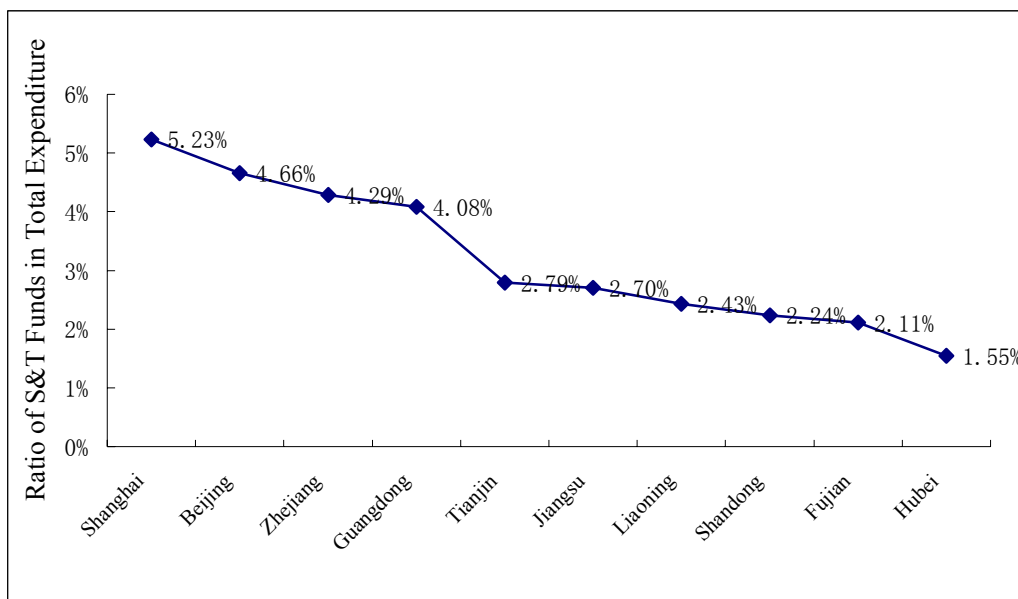
Local Government science and technology (S&T) Appropriation refers to the money the local financial departments spent in a statistical year to S&T projects including special project funds for S&T, operating funds, capital funds and others. It not only enhances local independent innovation capability and international competitiveness, but also brings about “catchment area” effect to the agents of globalization. The  $R (.879)$  indicates the strongest positive correlation. Figure 7.13 illustrates that the first half of the two lines tend to overlap but the rear half do not. The seven provinces spent most of the funds on S&T in 2006 also ranked the top seven in FACPG.



**Figure 7.14 S&T Funds of the Central and Provincial Governments**

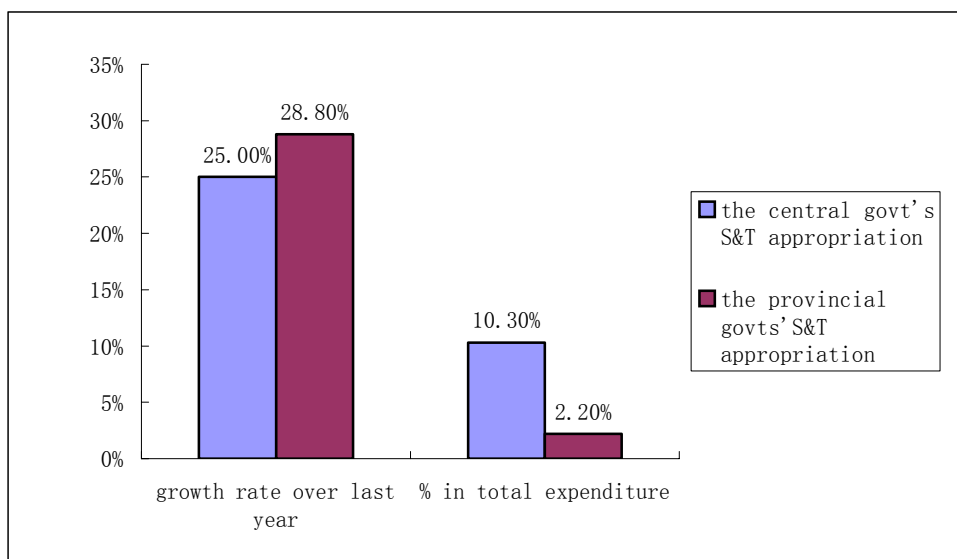
Source: China S&T Statistics Data Book 2006  
<http://www.sts.org.cn/sjkl/kjtjdt/data2006/cstsm06.htm>

Figure 7.14 illustrates an increasing tendency of S&T appropriation by the central and provincial governments during the past decade. S&T appropriation by the provinces in 2006 is 6.4 times of that in 1996.



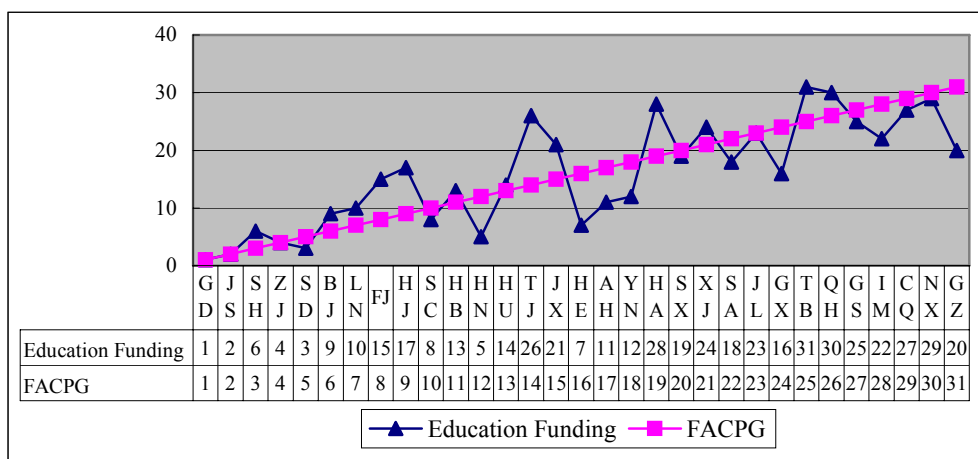
**Figure 7.15 Ratio of S&T Funds in Total Expenditure of Top Ten in 2006**

Figure 7.15 shows that the S&T appropriations of the provinces were rather small compared with their total expenditure. Even Shanghai spent only 5.23% of its expenditure for S&T. Besides, there is an apparent disparity even among the top ten provinces in S&T appropriation.



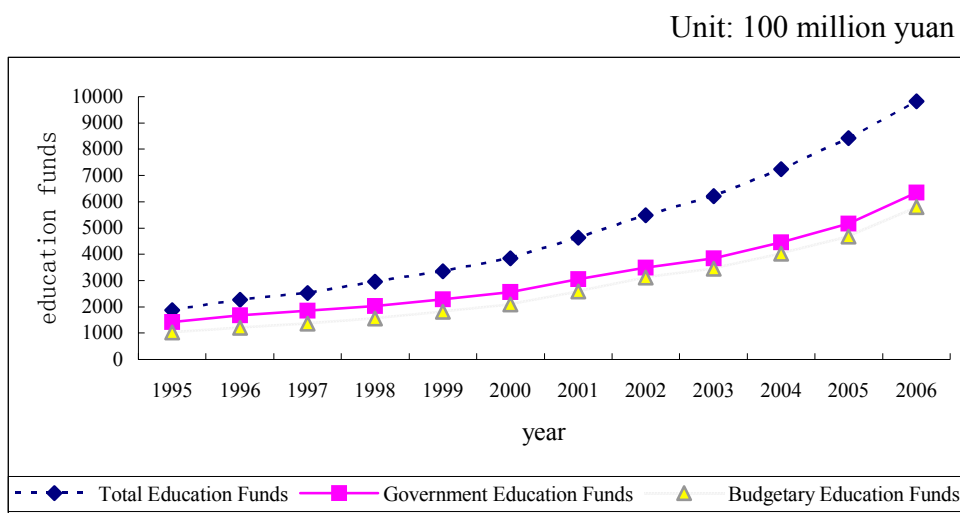
**Figure 7.16 Growth of the Central and Provincial Government S&T Funds**

Figure 7.16 shows that the growth rate of the local S&T funds is higher than that of the central one, but the ratio of local S&T to their total expenditure is lower than that of the central government.



**Figure 7.17 Ranks of Government Appropriation for Education & FACPG**

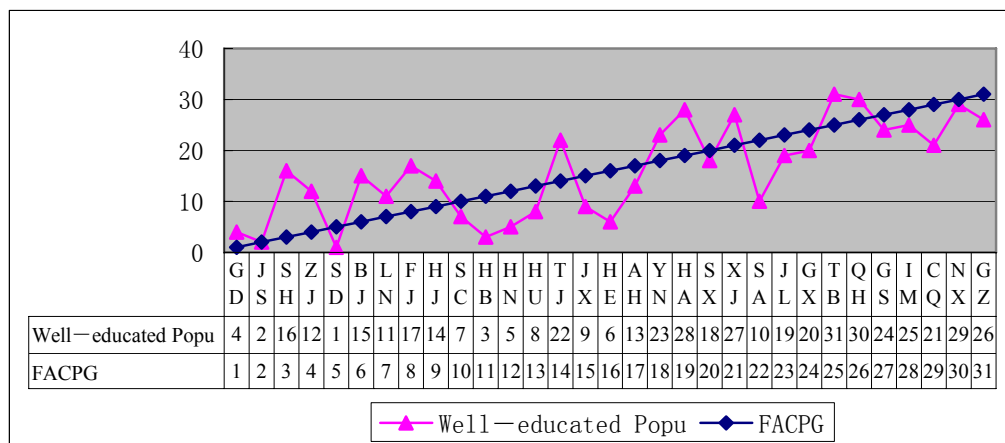
Government appropriation for education refers to State budgetary fund for education, tax and fees collected by governments at all levels that are used for education purpose, education fund for enterprise-run schools, income from school-run enterprises, work-study program and social service that are used for education purpose. The  $R (.814)$  indicates a strong positive correlation. Four provinces (Guangdong, Jiangsu, Zhejiang, and Jilin) ranked similarly. The eye-catching fact is that the educational appropriation of the capital city Beijing spent fewer funds on education than several less internationalized provinces, i.e. Hainan, Henan and Sichuan.



**Figure 7.18 Education Funds During 1995-2006**

Figure 7.18 shows that the total education funds<sup>69</sup> increased more rapidly than government or budgetary ones<sup>70</sup>. In 2006, education fund by the central government accounted for 3.01% of the GDP and below the target (4%) set by the State Council<sup>71</sup>.

Ten provinces in 2006 did not increase their education appropriation along with the growth of their financial income as required by *Education Law*.



**Figure 7.19 Population with College or above Education and FACPG**

A greater population with college and above education often represents a larger skilled labor force and a competitive region for agents of globalization. The *R* went up from 0.603 in 2004 to 0.852 in 2006. Obviously, the demand for a skilled labor force by the flows of agents of globalization in China is growing. Additionally, provincial employment of overseas experts (EOE) should not be ignored. More than 479,006 foreign experts were employed by the Chinese localities in 2005. Among them, 229,298 are long-term employees, 390,052 are in economic sectors and 97,471 in cultural and educational sectors. Table 7-3 shows the ranks of FACPG and EOE in the top ten provinces in 2004 and 2005. It is not surprising that EOE in Guangdong in 2004 and 2005 account to 35.5% and 34.3% of that of the country respectively.

**Table 7.3 The Top Ten Provinces in Employment of Overseas Experts**

	2004				2005			
	Ranks of FACPG	Ranks of EOE	Number of EOE	%	Ranks of FACPG	Ranks of EOE	Number of EOE	%
Total	-	-	454649	100	-	-	487523	100
Guangdong	2	1	166040	36.5	2	1	167218	34.3
Shanghai	1	2	62844	13.8	1	2	73193	15.0
Jiangsu	4	3	43444	9.6	4	3	42405	8.7
Beijing	3	4	36329	8.0	3	4	40919	8.4
Zhejiang	5	6	27355	6.0	5	5	34416	7.1
Liaoning	7	5	29283	6.4	11	6	29605	6.1
Tianjin	8	7	14042	3.1	6	7	17027	3.5
Shandong	6	8	13358	2.9	7	8	15000	3.1
Fujian	10	9	12508	2.8	9	9	12574	2.6
Sichuan	14	10	10416	2.3	20	10	8878	1.8

Source: 2004-2005 Collection of Statistic Documents on Overseas Experts working in the Chinese Mainland compiled by National Statistic Bureau of China and State Administration of Foreign Experts Affairs

**Summary:**

“A test is said to be reliable if its results are consistent,” stated Fred Pyrczak (2002: 116).

From above analysis, the following findings can be concluded.

1. The three basic factors have less correlation with FACPG than those in other three groups during the period observed. (a) Land area has neither discernible relationship with FACPG, nor statistical significance. Due to the difference between China and in USA, Hobbs’ findings cannot explain the case of FACPG. (b) Population did not show a positive relationship with FACPG until 2006. It is expected to show an increasingly

strong correlation in the near future as the central government began to adjust the unreasonable household registration system by employing a new demographic method. The official data of population will approach to the reality. (c) Developed area is consistently significant correlated with FACPG. Follow up and further observation on the basic factors is needed in the coming years.

2. The six economic factors all have strong relationship with FACPG. In 2006, coefficients of the three factors' were above 0.8 and four increased compared with those in 2004 with exception of per capita GDP. Surprisingly, expenditure for foreign affairs had moderate correlated with FACPG during three years. This is probably because the data cover only the budget of the foreign affairs offices, whose duties and budgets, however, are much different in different provinces.

3. The five social factors all have positive relationship with FACPG. Among them, average urban consumption expenditure and average rural income have an outstanding and consistent correlation with FACPG in three years running. Surprisingly again, urbanization rate had moderate correlation with FACPG and came down year by year. The reason for this change is not clear.

4. Coefficients of the four scientific and educational factors' had all gone up from 2004 to 2006. This group always showed stronger positive correlation during the period investigated. It might be the most important group of factors related to a province's



potential competitiveness to the flow of globalization agents.

5. The test of the consecutive period from 2004 to 2006 finds a tendency of gradually increasing correlation between most factors and FACPG. The  $R$  of 13 factors grew bigger in 2006 than in 2004. Only four became smaller. They are GDP per capita, Expenditure for Foreign Affairs, Average Farmer's Income, and Urbanization Rate. The  $R$  above 0.8 increased from three in 2004 to nine in 2006.

Figure 7.20-22 are scattergrams<sup>72</sup> for the rankings of provinces for 16 factors. They show the distribution of  $R$  of 31 provinces in the three years. Provinces in the lower left-hand corner of the scattergrams ranked at top in both FACPG and 16 factors. Provinces in the upper right-hand corner ranked at bottom in both FACPG and 16 factors. Provinces in the upper left-hand area performed good in FACPG but lagged behind in 16 factors. Provinces in the lower right-hand area were weak in FACPG but strong in 16 factors. During the period investigated, Guangdong, Jiangsu, Shanghai, Zhejiang, Shandong, Beijing and Liaoning were seven "standing committee members" staying consistently at the top ten in both FACPG and 16 Factors. Five of them are coastal provinces; two of them are megacities directly under the central government. Another group of "standing committee members" includes Guizhou, Ningxia, Qinghai, Gansu, Tibet, Chongqing and Guangxi, who ranked consistently at the bottom in both FACPG and Factors. Most of them are from Northwest part of China. Only one is from coastal

area and a municipality directly under the central government.

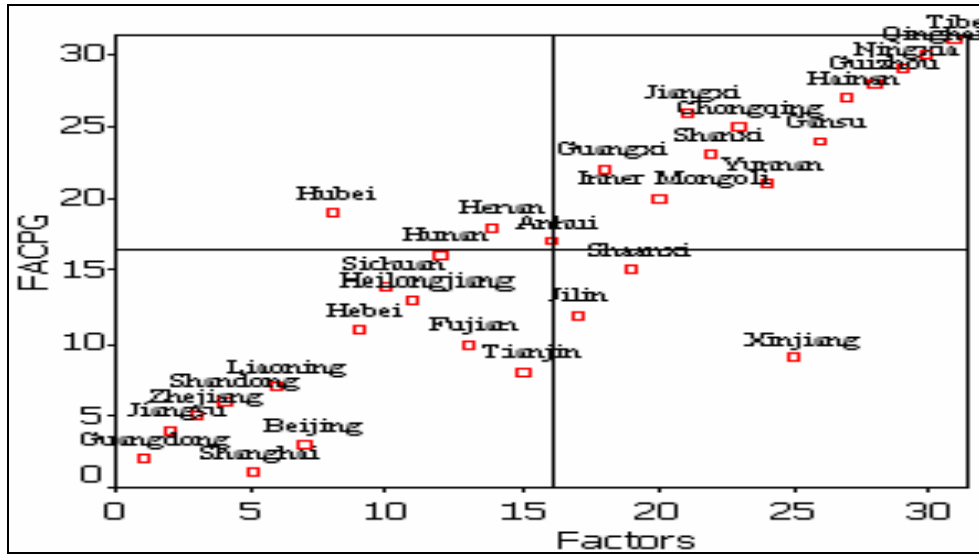


Figure 7.20 Scattergram for 16 Factors and FACPG in 2004

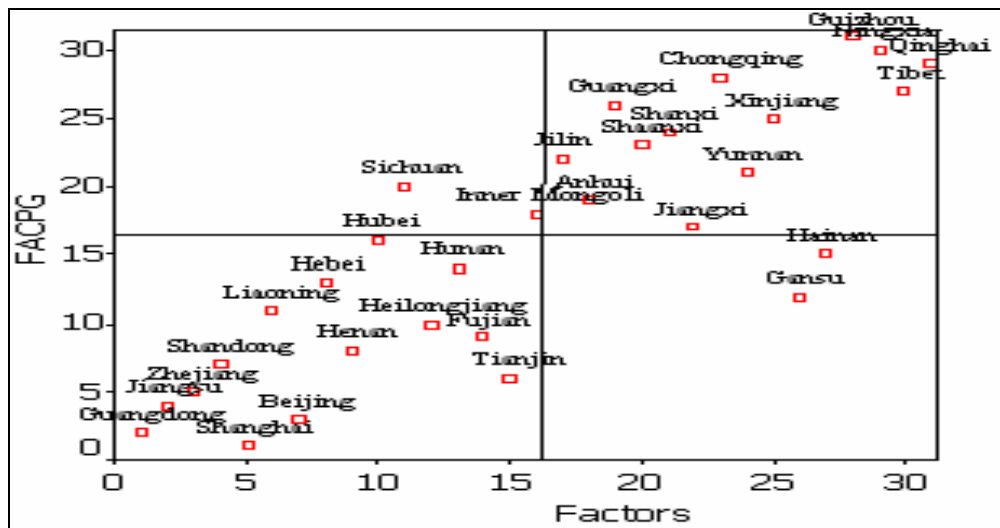


Figure 7.21 Scattergram for 16 Factors and FACPG in 2005

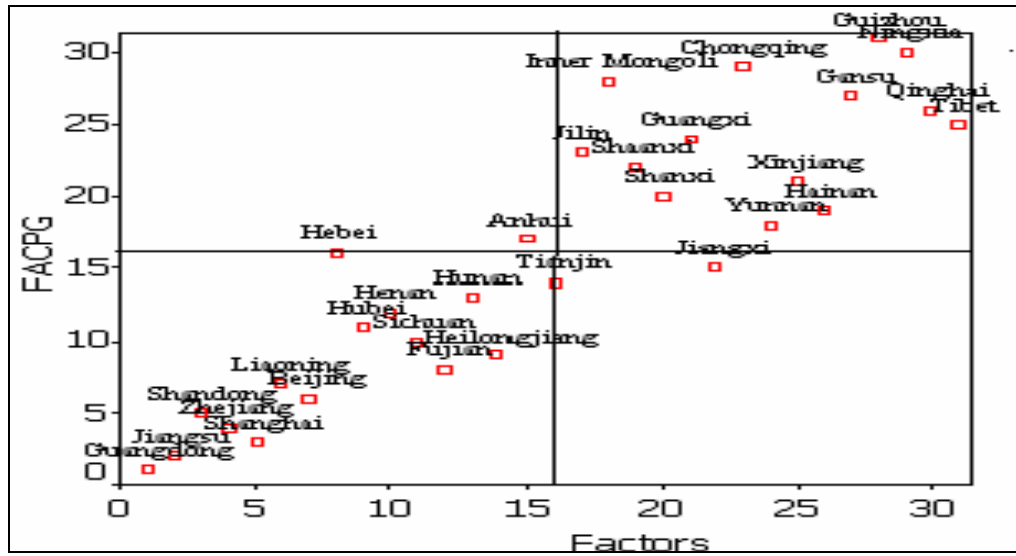


Figure 7.22 Scattergram for 16 Factors and FACPG in 2006

Importantly, the factors except for land area tested in this study can be changed by policymaking. Although the results do not necessarily infer causal relationship, it implies that FACPG can be promoted most likely from these perspectives.

## Chapter Seven

### Endnotes

<sup>60</sup> Ministry of Science and Technology. “China S&T Statistics Data Book 2005-2007.” <<http://www.sts.org.cn/sjkl/kjtjdt/data2007/cstsm07.htm>>.

<sup>61</sup> Ray S. Cline (1975, 1980) categorizes numerous factors affecting a nation’s strength into five basic, constant and long-term factors. The first one is basic strength, which is composed of land and population and makes up 100/500.

<sup>62</sup> It is the ratio of urban population to total population. According to the State Bureau of Statistics of China, the urban population refers to the permanent residents in urban areas while the rest is regarded as rural population. A large number of farmers have migrated into and are working in urban areas, especially in big cities, but they are still calculated as rural population due to the existing dualistic household register system. Therefore, the urbanization rate based on the demographic data is much lower than the real situation.

<sup>63</sup> R is used for ease of reading in this paper.

<sup>64</sup> Land grant is the most commonly used means of acquiring land use rights in China. Government authorities enter into a land grant contract with land users under which the land user is required to pay land grant premiums to government in exchange for land use rights for a fixed period.

<sup>65</sup> A provincial government’s revenue mainly comes from business tax, corporate income tax, personal income tax shared by the local coffers except interest tax, urban land use tax, fixed assets investment tax, public utilities tax, property tax, vehicle and ship transporting tax, stamp tax, animals slaughtering tax, agriculture and husbandry tax, agricultural specialty tax, arable land requisition tax, lease tax, land’s added value tax, paid use of land, 25% of the added value, 6% of the securities’ stamp tax, and tax on resources other than offshore oil.

<sup>66</sup> Urban Population refers to total population of districts under the jurisdiction of a city with district establishment, the population of street committees under the jurisdiction of a city without district establishment, population of resident-committees of towns under the jurisdiction of a city without district establishment, and the of resident-committees of towns under the jurisdiction of a county. Rural Population refers to total population except urban population. Urban Population/ Rural Population is classified according to

the Regulation of Statistics Classification on Urban and Rural Population (Draft), formulated by the National Bureau of Statistics in 1999.

<sup>67</sup> USA and Japan spent US\$ 312.5 billion and US\$145.9billion respectively, ranking No.1 and No.2 in the world, while Germany, France and the UK US\$68.4 billion, US\$ 44.3 billion and US\$34 billion respectively, ranking 3<sup>rd</sup> to 5<sup>th</sup>, and Canada and South Korea US\$19.41 billion and US\$19.37 billion respectively, ranking 7<sup>th</sup> and 8<sup>th</sup> behind China.

<sup>68</sup> “Comparison of China’s R&D spending with other countries.”  
<[http://www.most.gov.cn/kjtj/tjbg/200801/t20080116\\_58513.htm](http://www.most.gov.cn/kjtj/tjbg/200801/t20080116_58513.htm)>.

<sup>69</sup> The total education funds include (1) government education appropriation, (2) funds from social organizations and citizens for running schools, (3) donations and fund-raising for running schools, (4) tuition and miscellaneous fees, and (5) other educational funds.

<sup>70</sup> Government appropriation for education includes both budgetary and extra-budgetary fund for education.

<sup>71</sup> The ratio in the developed countries was over 6% on average and 4% in India and Brazil.

<sup>72</sup> As land area had an uncertain relationship with FACPG and population a weak or inconsistent relationship with FACPG consistent from 2004 to 2006, the following scattergrams cover only 16 factors.

## Chapter Eight

### Conclusions

China's provincial foreign-related activities have rapidly developed since the late 1970s, bringing about a great positive impact on the national diplomacy and local economy. This reconfirms the popular argument that "states are not omnipotent" (Zweig, 2002:276). In Kenichi Ohmae's "borderless world," the Chinese regional governments can and do play a new role in world economy by active interaction with agents of globalization, among which, capital, goods, people and information are most salient. "Relationship can be measured by volume of interaction and by number of partners." (Soldatos, 1990:35) These qualitative and quantitative analyses targeting the transnational flows of the four major agents of globalization lead to the following findings.

First, the Chinese provincial governments' foreign-related activities (CPGFA) are not a new phenomenon. It is different from the common sense that the Chinese local governments did not get involved in foreign affairs until China opened its door until the late 1970s. CPGFA appeared shortly after the two "Silk Roads" pioneered in the reign of Han Emperor Wudi (140-87BC) and occasionally flourished in some historical periods such as the Tang and Yuan Dynasties. The late Qin Dynasty, for example, relied heavily on Governors-general and governors in term of dealing with foreign diplomats and traders in treaty ports. Various local-based official institutions such as customhouses,

foreign affairs departments and foreign guesthouses set up in Ancient Chinese provinces were typical examples. Ancient provincial international participation boasted both similarities and differences when compared with today's CPGFA. From the perspective of the characteristics, both are non-sovereign, non-territorial, subordinate, limited, and governmental. What is different is that the former served more to a political purpose and were less concentrated in economic interests. From the perspective of functions, both undertake responsibilities to defend territory integration and supervise foreign trade, handle local foreign affairs, etc. The former was confined within their jurisdiction and within narrow scope. The latter covers nearly all the fields except for the sovereignty-related and military areas. Besides outstanding positive impact on local economy, CPGFA is now an indispensable part rather than a supplementary one for the national diplomacy. From the perspective of transnational linkages, local officials before 1978 had neither international contacts nor chance to go abroad whereas nowadays provinces enlarge their influence internationally by frequent visits abroad, overseas offices, province-owned enterprises abroad, international sister provinces, joining international organizations, etc. From the perspective of the attitude and competence, officials before 1978 were mostly reluctant and unskillful in disposing foreign affairs whereas the current officials are active and experienced, especially in promoting agents of globalization.

Second, globalization should not be overvalued as the most important driving force for the rising CPGFA since 1978. As discussed earlier, globalization has flourished and knocked at China's door since the late 1960s (Jane Stewart, 2003), China did neither let in nor let go of the absolute central control over CGGFA until 1978. It was the open door policy that ended the long-standing isolation and lowered the barriers to global linkages, hence allowing agents of globalization to flow in and out of China. In other words, without opening up to the outside world, few agents of globalization could flow in and out of China. Until recently, China has not yet opened all its regions for the outside world. For instance, if foreigners want to go to Tibet for a visit, they need to apply for a visa with the consent of the Tourism Administration of the Tibet Autonomous Region or any one of its foreign representative offices. Moreover, the well-designed preferential policies regarding FDI and trade have acted not only as effective promoters but also efficient screen machines, through which flows only those are considered must or necessities for economic growth.

Third, decentralization in China did facilitate the rising CPGFA but it devolved only power regarding low politics to its provinces. Under the unitary political system, provincial governments most commonly act as agents of the central government but they have not yet been upgraded to "the partners of the central government" as Zhiming Chen



stressed (2005:178). The GDP and FDI based achievement evaluation system further focuses the CPGFA in economic arena. Not surprising, the provinces are most active in interacting with agents of globalization while they spend little effort and budget on non-economic agenda such as cultural exchange or building regional soft power. They keep far away from high politics. Occasionally, they do produce unwanted consequences as Zhiming Chen indicated, but those seldom related to high politics.

Fourth, there is a remarkable disparity in FACPG from 2004 to 2006. Six coastal provinces (Guangdong, Jiangsu, Zhejiang, Shandong, Liaoning, and Fujian) and two municipalities (Shanghai and Beijing) rank at top consistently. Geographical advantage shows strong impact on FACPG. In term of FACPG, the eastern provinces greatly exceeded those in China's central and western parts. Eight eastern provinces were among the top ten during the period observed, whereas most of the western provinces take a back seat. This disparity may be more attributed to geographical differences than coastal development strategy decreed in 1988. Although the western provinces were also granted preferential policies since the past decade, still, ten among twelve western provinces ranked among the last ten in 2006. Municipalities did not all rank on the top in FACPG, as assumed before study. Tianjin and Chongqing ranked at 14<sup>th</sup> and 29<sup>th</sup> in 2006, respectively. Even Beijing, the capital megacity, lagged behind five coastal provinces in

2006. Contrary to the traditional belief, the land border provinces did not rank better than those who do not. Except for Liaoning and Heilongjiang, all border provinces took the back seat from 2004 to 2006. It is probably because most of the Chinese neighboring countries are relatively underdeveloped.

Fifth, the economic, social and S&E factors have much strong correlation with FACPG than basic factors. The statistical outcomes refused the previous assumption that population and land area had strong positive relationship with FACPG and confirmed 15 factors' positive correlation with FACPG during three years. Moreover, the correlation coefficients gradually increased over time. There were only three *Rs* above 0.8 in 2004 but the number reached nine in 2006.

Three recommendations might be particularly useful for practitioners in China or in other developing unitary states.

First, thirty-year foreign-related practice and achievement have updated the Chinese officials' attitude and trained them into international actors. Yet, as Shuman (1997) suggested that further consciousness-raising, measures are needed. Policymakers in Beijing, especially executives in various ministries, should be more open-minded and flexible to further bring down the barriers and embrace diversified agents like alien ideas, religion, information, etc. Many officials at lower levels or in inland areas are shy and

know little about how to deal with foreign affairs. Policymakers at higher levels should further encourage and teach them to become veterans. Meanwhile, public diplomacy and people-to-people diplomacy should be promoted to raise the public participation and a regional soft power.

Second, soft law in this field thus seems more than formally promulgated law local participation in foreign issues is gradually and exploratory. Sometimes, the former is more powerful or superior to the latter. CPGFA are often instructed by in-house, unpublished documents, or in many cases according to unwritten instructions of relevant upper leaders. More specific, transparent foreign-related legislations are expected to demarcate, by law rather than by poorly defined documentation, which activities are encouraged, which are discouraged, and which are prohibited.

Third, to further promoting FACPG, provincial governments may make more efforts on their GDP, average GDP, revenue and expenditure, average urban consumption expenditure, farmers' incomes and expenditure, funding for R&D, S&T, and education. The analysis found that the resources of land area and population in the central and western provinces are not yet fully utilized, when human resources and investment environment are improved, their advantages of abundant natural resources and flexible work force will become attractive. As labor cost is rising in coastal provinces, more

agents of globalization will turn their eyes on provinces with large population. Currently, to develop labor-intensive industries in the more populous but inland provinces are a better way to transfer their potential advantage in labor force to practical advantage. Meanwhile, it will create the best opportunity to train workers in inland provinces. A skillful and flexible work force will in turn attract more foreign investors. To catch up their counterparts in coastal areas, inland provinces should place increasing emphasis on the “promoting entrepreneurship” suggested by Clark and Montjoy’s (2001). Since the opening up in 1978, the Chinese local governments have focused on the conventional strategies called “smoke-stack chasing”, which promote local economic development by subsidizing business inputs (e.g., capital, land and labor) or by lowering political costs (i.e., taxes and regulation). However, the new strategies are by providing advanced supports that stimulate business operation and internationalization (e.g., human capital or support for R&D). How to reduce massive subsidies for export-oriented public-owned business and increase budget for human capita development create a policy paradox for policymakers particular for those in poor inland provinces.

The policy suggestions presented here are necessarily tentative and primitive because this is the first phase of an attempt to understand this developing collective behavior fueled by globalization and decentralization since 1978.

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## Appendix A

### Statistical Method for Index of FACPG

In order to weight the indicators of the index in an objective way, the multivariate evaluation approach based on Principal Component Analysis is employed. Principal Component Analysis (PCA) is a classical statistical method of data reduction. It reduces the dimension of the representation but preserves as much as possible of the original information content. Suppose that a dozen variables that are correlated. PCA can reduce them to a few principal components through linear combination of raw variables with little original information lost, thus enabling to give a more focused and representative description of characteristics of variables discussed. E.C. Rhodes coined a multivariate index based on the first principal component in 1937. M.G. Kendall carried out a principal component analysis on ten main crops in forty-eight British counties and ranked their productivity using the first principal component in 1939. J. R. N. Stone employed PCA to analyze seventeen American national economic statistic indicators during the period from 1922 to 1938 and discovered that all original indicators might be replaced by three principal components. With PCA, M. Scott reduced his 57 indicators to 5 principal components when he measured the development of 157 British towns in 1961. PCA has been widely applied since W. F. Massy made it better in 1965. Besides, software like SPSS 13.0 for Windows and Excel are used to process the data collected.

Assume  $p$  variables whose sample capacity is  $n$ , then replace the observed data of the  $p$  ( $k < p$ ) original variables with the  $n$  times of observed data of those  $k$  variables, meanwhile, losing very little original information. The approach is to transform the original variable  $X_i$  into principal component (expressed as  $F$ ). i.e. to integrate  $X_1, X_2, \dots, X_p$  into  $k$  ( $k < p$ ) variables ( $F_1, \dots, F_k$ ).  $F_1, F_2, \dots, F_k$  are called 1, 2, ...,  $m$ .  $K$  principal component respectively and the percentage of  $F_1, F_2, \dots, F_k$  is descending in the total variance.

The data process is as follows:

Step 1: Standardization of raw data is needed if their dimensions are different due to various indicators. First, to transform the raw data into:

$$y_{ij} = x_{ij} - \bar{x}_j \quad (i=1,2,\dots,n \quad j=1,2,\dots,p) \quad . \quad \text{Among them, } \bar{x}_j = \frac{1}{n} \sum_{i=1}^n x_{ij}$$

represents the mean of each variable. After the transformation, we get a new matrix:

$Y_{n \times p} = (y_{ij})_{n \times p}$ . Next is standardized processing of the data, i.e., to transform the data in the matrix  $Y_{n \times p} = (y_{ij})_{n \times p}$  into  $y_{ij}^* = y_{ij} / s_j$ . Among them

$$s_j = \sqrt{\frac{\sum_{i=1}^n (x_{ij} - \bar{x}_j)^2}{n-1}}$$

is the quadratic mean variance of each indicator. After the

centralization and standardization of the data, we get the new matrix  $Y_{n \times p}^* = (y_{ij}^*)_{n \times p}$ .

Step 2: Establishing the correlation matrix  $R$  based on sample data collected.

$$R = \frac{1}{n} (Y^*)' Y^*$$

Step 3: Use the correlation matrix to calculate the eigenvalues and eigenvector.

Use the above correlation matrix  $R$  to solve the eigenequation and get eigenvalue  $\lambda_i$  ( $i = 1, 2, \dots, k$ ). Eigenvalue, the variance of each principal component, reflects the role that principal component plays in depicting the subjects evaluated.

Step 4: Figure out the principal component's contribution rate

$F_k$ :  $\alpha_i = \lambda_i / \sum_{i=1}^k \lambda_i$  and accumulative contribution rates:  $\sum_{i=1}^k \lambda_i / \sum_{i=1}^p \lambda_i$ . Usually, we extract the first, the second, .....  $k$  ( $k < p$ ) principal components that corresponding  $\lambda_1, \lambda_2, \dots, \lambda_k$  until their accumulative contribution rates above 80% and below 90% .

Step 5: calculate the score of each principal component and the total score.

First, calculate the score of each principal component:

$$\begin{cases} F_1 = a_{11}X_1 + a_{21}X_2 + L + a_{p1}X_p \\ F_2 = a_{12}X_1 + a_{22}X_2 + L + a_{p2}X_p \\ \quad \quad \quad L \\ F_k = a_{1k}X_1 + a_{2k}X_2 + L + a_{pk}X_p \end{cases}$$

Next, calculate the total scores. Make  $F_1, L, F_k$  to be a linear combination and take  $\alpha_i$ , the variance contribution rate of each principal component  $F_k$ , as the weight to form a comprehensive evaluation function:  $F = \alpha_1 F_1 + \alpha_2 F_2 + L + \alpha_i F_k$ .

Step 6: to rank the CPGFA of each province in each observed years.

According to the index designed above, use the PCA to process the data collected about interaction between 4 agents of globalization and China's 31 provincial governments. From all principal components' scores matrixes, corresponding scores matrixes  $Y_j$  with accumulation contribution rates above 85% is extracted. By using the model  $F_j = \sum W g_{ij} j$ , we get the two-level score  $F_k$  about the four dimensions and total score  $F$ , which demonstrates the disparity and characteristics as well as the rank of the foreign-related achievements of China's provincial governments.

**Appendix B-1. Scores and Ranks of FACPG of 2004**

Provinces	Flows of Goods		Flows of Capital		Flows of People		Flows of Information	
	Scores	Ranks	Scores	Ranks	Scores	Ranks	Scores	Ranks
Anhui	0.015	14	-0.332	19	-0.157	14	-0.194	15
Beijing	-0.378	22	1.383	2	0.1579	9	1.6182	2
Chongqing	-0.379	23	-0.401	23	-0.465	26	-0.544	25
Fujian	0.1226	11	-0.124	14	0.2244	8	0.2999	8
Gansu	-0.425	25	-0.309	16	-0.423	23	-0.626	26
Guangdong	1.9788	1	0.63	4	1.6957	2	2.1177	1
Guangxi	-0.076	16	-0.52	28	-0.35	20	-0.231	17
Guizhou	-0.175	17	-0.522	29	-0.383	21	-0.637	27
Hainan	-0.972	31	-0.392	21	-0.618	30	-0.366	22
Hebei	0.2909	9	0.055	12	-0.058	11	0.0335	11
Heilongjiang	0.3056	8	0.062	11	-0.287	18	-0.1	14
Henan	0.5943	4	-0.43	26	-0.077	12	-0.275	20
Hubei	0.1158	12	-0.394	22	-0.247	15	-0.232	18
Hunan	0.3374	7	-0.413	25	0.4388	6	-0.314	21
Inner Mongolia	-0.404	24	-0.214	15	-0.444	25	-0.417	24
Jiangsu	1.1545	2	0.303	8	1.9918	1	0.4945	6
Jiangxi	-0.062	15	-0.405	24	-0.421	22	-0.677	28
Jilin	-0.377	21	0.344	6	-0.102	13	-0.263	19
Liaoning	0.1002	13	0.364	5	0.3631	7	0.1361	9
Ningxia	-0.639	28	-0.321	17	-0.521	28	-0.766	30
Qinghai	-0.667	29	-0.447	27	-0.62	31	-0.689	29
Shaanxi	-0.269	19	-0.104	13	-0.272	16	-0.022	13
Shandong	1.0865	3	0.239	10	0.9461	4	0.6394	5
Shanghai	0.1461	10	2.522	1	1.0267	3	1.3644	3
Shanxi	-0.338	20	-0.709	31	-0.277	17	0.0285	12
Sichuan	0.4245	6	-0.391	20	-0.046	10	0.0757	10
Tianjin	-0.57	26	0.302	9	-0.291	19	0.3423	7
Tibet	-0.686	30	-0.565	30	-0.58	29	-1.066	31
Xinjiang	-0.625	27	0.808	3	-0.495	27	-0.197	16
Yunnan	-0.181	18	-0.325	18	-0.429	24	-0.371	23
Zhejiang	0.5494	5	0.305	7	0.7183	5	0.8359	4



**Appendix B-2 Scores and Ranks of FACPG of 2005**

Provinces	Flows of Goods		Flows of Capital		Flows of People		Flows of Information	
	Scores	Ranks	Scores	Ranks	Scores	Ranks	Scores	Ranks
Anhui	-0.2479	13	-0.2783	19	-0.0648	14	-0.4935	24
Beijing	2.01873	2	0.36926	3	0.31078	6	1.90458	2
Chongqing	-0.3784	17	-0.4374	26	-0.3652	23	-0.6387	29
Fujian	0.20483	8	0.04131	13	0.00577	13	0.41514	7
Gansu	-0.5483	26	0.3243	5	-0.3607	22	-0.4221	21
Guangdong	2.34421	1	0.34565	4	2.11741	1	1.97213	1
Guangxi	-0.426	19	-0.441	28	-0.2145	16	-0.508	25
Guizhou	-0.7326	29	-0.4895	30	-0.5098	26	-0.8878	31
Hainan	-0.6053	28	-0.3317	20	0.27759	7	0.17407	8
Hebei	-0.4531	23	0.13856	11	-0.6397	30	-0.0735	12
Heilongjiang	0.14677	9	0.22662	8	-0.5089	25	-0.2541	18
Henan	-0.4508	21	0.70058	2	0.04814	11	-0.2263	15
Hubei	-0.2749	14	-0.222	16	0.1664	8	-0.4084	20
Hunan	-0.4552	24	0.17858	10	-0.2243	17	-0.5314	26
Inner Mongolia	-0.2905	15	-0.2373	18	-0.1689	15	-0.3125	19
Jiangsu	1.38368	4	0.18745	9	1.46403	2	0.5468	5
Jiangxi	-0.4335	20	-0.0172	14	-0.2497	18	-0.4545	22
Jilin	-0.0804	12	-0.4564	29	-0.3166	20	-0.2533	17
Liaoning	0.0194	11	-0.3716	21	0.1597	9	0.14289	9
Ningxia	-0.5972	27	-0.4117	25	-0.539	27	-0.6575	30
Qinghai	-1.0854	31	-0.3828	22	-0.6083	29	-0.1263	13
Shaanxi	-0.3455	16	-0.4052	24	-0.3433	21	-0.2242	14
Shandong	0.09875	10	0.23955	7	0.77315	5	0.10674	10
Shanghai	1.72576	3	3.0576	1	0.98521	3	1.48897	3
Shanxi	-0.8236	30	-0.5575	31	0.11835	10	-0.0068	11
Sichuan	-0.4879	25	-0.1257	15	-0.5544	28	-0.2472	16
Tianjin	0.93275	5	0.09732	12	-0.2597	19	0.49858	6
Tibet	-0.4119	18	-0.4407	27	-0.4192	24	-0.4552	23
Xinjiang	0.24638	7	-0.3974	23	-0.9081	31	-0.6221	28
Yunnan	-0.4516	22	-0.2249	17	0.02799	12	-0.5779	27
Zhejiang	0.45853	6	0.32146	6	0.80066	4	1.13135	4

**Appendix B-3 Scores and Ranks of FACPG of 2006**

Provinces	Flows of Goods		Flows of Capital		Flows of People		Flows of Information	
	Scores	Ranks	Scores	Ranks	Scores	Ranks	Scores	Ranks
Anhui	-0.27	19	0.01499	14	-0.0802	14	-0.3149	18
Beijing	0.87	4	-0.378	22	0.15174	8	1.63308	3
Chongqing	-0.29	21	-0.3786	23	-0.5394	26	-0.7176	30
Fujian	0.01	9	0.12255	11	0.04776	10	0.30334	6
Gansu	-0.22	16	-0.4245	25	-0.7915	30	-0.3674	21
Guangdong	2.28	1	1.97877	1	1.75325	2	2.20385	1
Guangxi	-0.43	25	-0.0756	16	-0.4024	24	-0.6422	29
Guizhou	-0.53	30	-0.1749	17	-0.7111	29	-1.096	31
Hainan	-0.23	17	-0.9715	31	0.09169	9	-0.0364	12
Hebei	-0.48	27	0.29087	9	-0.3016	21	-0.094	13
Heilongjiang	-0.15	12	0.30561	8	0.16437	7	-0.2943	17
Henan	-0.34	23	0.59434	4	-0.0693	13	-0.4938	27
Hubei	-0.15	13	0.11584	12	-0.1961	17	-0.0303	11
Hunan	-0.27	20	0.33739	7	0.00078	11	-0.4604	25
Inner Mongolia	-0.5	28	-0.404	24	-0.4924	25	-0.4191	24
Jiangsu	1.17	3	1.15453	2	1.83211	1	0.68894	5
Jiangxi	0.01	10	-0.062	15	-0.1558	16	-0.3164	19
Jilin	-0.45	26	-0.3772	21	-0.1979	18	-0.3676	22
Liaoning	-0.16	14	0.10017	13	0.46143	6	0.14095	8
Ningxia	-0.23	18	-0.639	28	-0.9032	31	-0.5204	28
Qinghai	0.16	7	-0.6666	29	-0.6605	28	-0.487	26
Shaanxi	-0.54	31	-0.2689	19	-0.3744	23	-0.1326	15
Shandong	0.05	8	1.08648	3	0.97464	4	0.28187	7
Shanghai	1.29	2	0.14606	10	1.1445	3	1.64197	2
Shanxi	-0.53	29	-0.3379	20	-0.1156	15	-0.1279	14
Sichuan	-0.17	15	0.42449	6	-0.0188	12	-0.3803	23
Tianjin	0.36	6	-0.5703	26	-0.2643	20	0.02263	10
Tibet	-0.33	22	-0.6862	30	-0.3278	22	-0.2525	16
Xinjiang	-0.06	11	-0.6252	27	-0.5761	27	0.05344	9
Yunnan	-0.37	24	-0.1811	18	-0.2143	19	-0.3371	20
Zhejiang	0.49	5	0.54938	5	0.77046	5	0.91806	4

**Appendix B-4 Final Scores and Ranks of FACPG during 2004-06**

Provinces	2004		2005		2006	
	Scores	Ranks	Scores	Ranks	Scores	Ranks
Anhui	-0.311	17	-0.4	19	-0.275	17
Beijing	1.466	3	1.424	3	0.947	6
Chongqing	-0.626	25	-0.645	28	-0.802	29
Fujian	0.134	10	0.209	9	0.193	8
Gansu	-0.602	24	-0.168	12	-0.764	27
Guangdong	1.9335	2	1.94	2	3.474	1
Guangxi	-0.497	22	-0.585	26	-0.655	24
Guizhou	-0.689	28	-0.882	31	-1.053	31
Hainan	-0.649	27	-0.242	15	-0.471	19
Hebei	0.0579	11	-0.211	13	-0.273	16
Heilongjiang	-0.059	13	-0.022	10	0.013	9
Henan	-0.319	18	0.238	8	-0.138	12
Hubei	-0.377	19	-0.294	16	-0.12	11
Hunan	-0.205	16	-0.232	14	-0.166	13
Inner Mongolia	-0.464	20	-0.356	18	-0.772	28
Jiangsu	1.0658	4	0.995	4	2.079	2
Jiangxi	-0.64	26	-0.325	17	-0.212	15
Jilin	0.014	12	-0.446	22	-0.589	23
Liaoning	0.3756	7	-0.135	11	0.225	7
Ningxia	-0.717	29	-0.735	30	-0.964	30
Qinghai	-0.786	30	-0.702	29	-0.676	26
Shaanxi	-0.172	15	-0.484	23	-0.573	22
Shandong	0.7848	6	0.383	7	1.001	5
Shanghai	2.2985	1	2.979	1	1.794	3
Shanxi	-0.498	23	-0.529	24	-0.48	20
Sichuan	-0.157	14	-0.412	20	-0.062	10
Tianjin	0.1729	8	0.402	6	-0.173	14
Tibet	-1.002	31	-0.612	27	-0.671	25
Xinjiang	0.1646	9	-0.575	25	-0.513	21
Yunnan	-0.48	21	-0.428	21	-0.468	18
Zhejiang	0.7853	5	0.851	5	1.143	4

### Appendix C-1 Original Data of Assumed Factors in 2004

Provinces	Basic Factors (3)		
	Land Areas (sq. km)	Population (10 000)	Developed Areas (sq. km)
Anhui	139600	6461	1123.4
Beijing	16808	1493	1182.3
Chongqing	82370	3122	514.3
Fujian	121400	3511	628.3
Gansu	454300	2619	495.5
Guangdong	178500	8304	3306.1
Guangxi	236700	4889	709.7
Guizhou	176100	3904	332.3
Hainan	33900	818	164.3
Hebei	187700	6809	1248.4
Heilongjian	454000	3817	1417.6
Henan	167000	9717	1422.4
Hubei	185900	6016	1432.1
Hunan	211800	6698	1002.7
Inner Mongolia	118300	2384	699.3
Jiangsu	102600	7433	2252.9
Jiangxi	166900	4284	631.6
Jilin	187400	2709	884.7
Liaoning	145900	4217	1737.3
Ningxia	66400	588	236.4
Qinghai	720000	539	103.3
Shaanxi	205600	3705	675.0
Shandong	156700	9180	2395.6
Shanghai	6340	1742	781.0
Shanxi	156300	3335	541.3
Sichuan	487630	8725	1393.9
Tianjin	11305	1024	500.1
Tibet	1228400	274	72.4
Xinjiang	1660400	1963	585.4
Yunnan	394000	4415	428.4
Zhejiang	101800	4720	1508.5

**Appendix C-1 1 continued**

Provinces	Economic Factors (6)		
	Gross Regional Product (100 million yuan)	Per Capita GRP	Local Govt Revenue (10 000 yuan)
Anhui	4759.32	7768	4812.68
Beijing	6060.28	37058	4283.31
Chongqing	2692.81	9608	2665.39
Fujian	5763.35	17218	6053.14
Gansu	1688.49	5970	1558.93
Guangdong	18864.62	19707	16039.46
Guangxi	3433.50	7196	3320.1
Guizhou	1677.80	4215	1591.9
Hainan	798.90	9450	769.36
Hebei	8477.63	12918	8768.79
Heilongjian	5511.50	13897	5303.004
Henan	8553.79	9470	8815.09
Hubei	5633.24	10500	6309.92
Hunan	5641.94	9117	5612.26
Inner Mongolia	3041.077	11305	2712.077
Jiangsu	15003.60	20705	15403.16
Jiangxi	3456.70	8189	3495.94
Jilin	3122.01	10932	2958.21
Liaoning	6672.00	16297	6872.652
Ningxia	537.16	7880	460.35
Qinghai	466.10	8606	465.73
Shaanxi	3175.58	7757	2883.51
Shandong	15021.84	16925	15490.73
Shanghai	8072.83	55307	7450.27
Shanxi	3571.37	9150	3042.41
Sichuan	6379.633	8113	6556.013
Tianjin	3110.97	31550	2931.88
Tibet	220.34	7779	211.54
Xinjiang	2209.09	11199	2200.15
Yunnan	3081.91	6733	2959.48
Zhejiang	11648.70	23942	11243

**Appendix C-1 2 continued**

Provinces	Economic Factors (6)		
	Local Govt Expenditure (10 000 yuan)	Investment in Fixed Assets (100 million yuan)	Expenditure for Foreign Affairs (10 000 yuan)
Anhui	6015280	1935.3	4024
Beijing	8982756	2528.2	1859
Chongqing	3957233	1537.1	671
Fujian	5166787	1893.9	2027
Gansu	3569366	733.9	2585
Guangdong	18529500	5870.0	5901
Guangxi	5074721	1236.5	8281
Guizhou	4184181	865.2	1851
Hainan	1272006	317.0	1558
Hebei	7855591	3218.8	8360
Heilongjian	6975516	1430.8	2822
Henan	8799580	3099.4	791
Hubei	6462888	2264.8	1001
Hunan	7195435	2072.6	2335
Inner Mongolia	5641117	1788	1345
Jiangsu	13120404	6557.1	5760
Jiangxi	4540598	1713.2	1025
Jilin	5077758	1169.1	4029
Liaoning	9313979	2979.6	17847
Ningxia	1230177	376.2	1320
Qinghai	1373363	289.2	750
Shaanxi	5163052	1508.9	2059
Shandong	11893716	6970.6	5573
Shanghai	13825254	3050.3	9289
Shanxi	5190569	1443.9	1305
Sichuan	8952534	2818.4	3689
Tianjin	3750212	1245.7	4669
Tibet	1338335	162.4	421
Xinjiang	4210446	1147.2	651
Yunnan	6636354	1291.5	4235
Zhejiang	10629355	5781.4	6781

**Appendix C-1 3 continued**

Provinces	Social Factors (5)				
	Per Capital Urban Disposable Income (yuan)	Per Capita Urban Consumption Expenditure (yuan)	Per Capital Rural Net Income (yuan)	Per Capita Rural Consumption Expenditure (yuan)	Urbanization Rate (%)
Anhui	7511.43	6367.67	2499.33	2196.232	27.81
Beijing	15637.84	13244.2	6170.33	5315.709	77.54
Chongqing	9220.96	8623.29	2510.41	2142.121	33.09
Fujian	11175.37	8794.41	4089.38	3292.632	41.57
Gansu	7376.74	6529.2	1852.22	1819.579	24.01
Guangdong	13627.65	11809.87	4365.87	3707.733	55.00
Guangxi	8689.99	7032.8	2305.22	2349.601	28.15
Guizhou	7322.05	6159.29	1721.55	1552.387	23.87
Hainan	7735.78	5928.79	2817.62	1969.086	40.11
Hebei	7951.31	6699.67	3171.06	2165.722	26.08
Heilongjiang	7470.71	6178.01	3005.18	2544.649	51.54
Henan	7704.90	6038.02	2553.15	1891.571	23.20
Hubei	8022.75	6736.56	2890.01	2430.188	40.22
Hunan	8617.48	7504.99	2837.76	2756.426	29.75
Inner Mongolia	8122.99	6928.6	2606.37	2446.17	42.68
Jiangsu	10481.93	8621.82	4753.85	3567.109	41.49
Jiangxi	7559.64	6109.39	2786.78	2483.699	27.67
Jilin	7840.61	6794.71	2999.62	2305.976	49.68
Liaoning	8007.56	7369.27	3307.14	2805.94	54.24
Ningxia	7217.87	6404.31	2320.05	2094.483	32.43
Qinghai	7319.67	6245.26	1957.65	1976.025	34.76
Shaanxi	7492.47	6656.46	1866.52	1896.48	34.91
Shandong	9437.80	7457.31	3507.43	2735.772	38.00
Shanghai	16682.82	13773.41	7066.33	7277.943	88.31
Shanxi	7902.86	6342.63	2589.6	1877.696	32.26
Sichuan	7709.87	6891.27	2518.93	2274.173	26.69
Tianjin	11467.16	9653.26	5019.53	3035.961	71.99
Tibet	9106.07	8617.11	1861.31	1723.764	18.93
Xinjiang	7503.42	6207.52	2244.93	1924.412	33.82
Yunnan	8870.88	6996.9	1864.19	1788.997	23.36
Zhejiang	14546.38	12253.74	5944.06	5432.953	48.67

**Appendix C-1 4 continued**

Provinces	Technological and Educational Factors (4)			
	R&D Expenditure (100 million yuan)	Local Govt S&T Appropriation (100 million yuan)	Government Expenditure for Education (10 000 yuan)	Population with College or Higher Education
Anhui	37.9	5.5	1055638	501290
Beijing	317.3	32.6	1213881	499524
Chongqing	23.7	5.0	497847	284546
Fujian	45.9	11.6	1008963	325727
Gansu	14.4	3.3	536579	200282
Guangdong	211.2	65.4	2879522	726866
Guangxi	11.9	6.8	905379	281044
Guizhou	8.7	5.1	737679	179852
Hainan	2.1	1.0	179249	57883
Hebei	43.8	9.9	1423523	697440
Heilongjiang	35.4	12.2	918029	465703
Henan	42.4	10.8	1532898	702846
Hubei	56.6	9.5	1045080	892018
Hunan	37.0	9.4	1043285	639001
Inner Mongolia	7.8	5.0	662206	198709
Jiangsu	214.0	26.8	2143705	994808
Jiangxi	21.5	4.3	737127	489854
Jilin	35.5	4.6	607409	362191
Liaoning	106.9	23.5	1210028	583465
Ningxia	3.1	1.5	161044	41448
Qinghai	3.0	1.0	152629	29483
Shaanxi	83.5	5.3	743497	583926
Shandong	142.1	22.8	2048284	946124
Shanghai	171.1	39.3	1553500	415701
Shanxi	23.4	6.3	802684	345318
Sichuan	78.0	10.8	1225217	637340
Tianjin	53.8	11.5	553991	285655
Tibet	0.4	0.7	151132	14731
Xinjiang	6.0	4.5	613943	163127
Yunnan	12.5	8.4	1118233	216308
Zhejiang	115.5	38.4	2000797	572759



## Appendix C-2 Original Data of Assumed Factors in 2005

Provinces	Basic Factors (3)		
	Land Areas (sq. km)	Provinces	Land Areas (sq. km)
Anhui	139600	6120	1260.4
Beijing	16808	1538	1200.0
Chongqing	82370	2798	582.5
Fujian	121400	3535	672.6
Gansu	454300	2594	507.4
Guangdong	178500	9194	3619.1
Guangxi	236700	4660	772.2
Guizhou	176100	3730	371.9
Hainan	33900	828	194.2
Hebei	187700	6851	1316.4
Heilongjian	454000	3820	1496.0
Henan	167000	9380	1572.0
Hubei	185900	5710	1417.3
Hunan	211800	6326	1032.9
Inner Mongolia	118300	2386	824.4
Jiangsu	102600	7475	2378.6
Jiangxi	166900	4311	663.6
Jilin	187400	2716	942.9
Liaoning	145900	4221	1779.9
Ningxia	66400	596	248.9
Qinghai	720000	543	105.9
Shaanxi	205600	3720	709.3
Shandong	156700	9248	2675.5
Shanghai	6340	1778	819.9
Shanxi	156300	3355	561.7
Sichuan	487630	8212	1442.9
Tianjin	11305	1043	530.0
Tibet	1228400	277	74.8
Xinjiang	1660400	2010	595.5
Yunnan	394000	4450	472.4
Zhejiang	101800	4898	1679.7

**Appendix C-2 1 continued**

Provinces	Economic Factors (6)		
	Gross Regional Product (100 million yuan)	Per Capita GRP	Local Govt Revenue (10 000 yuan)
Anhui	5375.12	8675	3340170
Beijing	6886.31	45444	9192098
Chongqing	3070.49	10982	2568072
Fujian	6568.93	18646	4326003
Gansu	1933.98	7477	1235026
Guangdong	22366.54	24435	18072044
Guangxi	4075.75	8788	2830359
Guizhou	1979.06	5052	1824963
Hainan	894.57	10871	686802
Hebei	10096.11	14782	5157017
Heilongjian	5511.50	14434	3182056
Henan	10587.42	11346	5376514
Hubei	6520.14	11431	3755217
Hunan	6511.34	10426	3952651
Inner Mongolia	3895.55	16331	2774553
Jiangsu	18305.66	24560	13226753
Jiangxi	4056.76	9440	2529236
Jilin	3620.27	13348	2071520
Liaoning	8009.01	18983	6752768
Ningxia	606.10	10239	477216
Qinghai	543.32	10045	338222
Shaanxi	3675.66	9899	2753183
Shandong	18516.87	20096	10731250
Shanghai	9154.18	51474	14173976
Shanxi	4179.52	12495	3683437
Sichuan	7385.11	9060	4796635
Tianjin	3697.62	35783	3318507
Tibet	251.21	9114	120312
Xinjiang	2604.19	13108	1803184
Yunnan	3472.89	7835	3126490
Zhejiang	13437.85	27703	10665964

**Appendix C-2 2 continued**

Provinces	Economic Factors (6)		
	Local Govt Expenditure (10 000 yuan)	Investment in Fixed Assets (100 million yuan)	Expenditure for Foreign Affairs (10 000 yuan)
Anhui	7130633	2525.1	4957
Beijing	10583114	2827.2	1597
Chongqing	4873543	1933.2	616
Fujian	5930663	2316.7	1791
Gansu	4293479	870.4	2372
Guangdong	22890691	6977.9	6826
Guangxi	6114806	1661.2	8929
Guizhou	5207261	998.3	1483
Hainan	1512421	367.2	1731
Hebei	9791635	4139.7	8429
Heilongjian	7877854	1737.3	2673
Henan	11160412	4311.6	1396
Hubei	7787159	2676.6	1767
Hunan	8734181	2629.1	3070
Inner Mongolia	6818772	2643.6	2358
Jiangsu	16733965	8165.4	6762
Jiangxi	5639525	2176.6	1065
Jilin	6311212	1741.1	3241
Liaoning	12043636	4200.4	18811
Ningxia	1602509	443.3	1226
Qinghai	1697547	329.8	1025
Shaanxi	6389627	1882.2	1345
Shandong	14662271	9307.3	4639
Shanghai	16462550	3509.7	10410
Shanxi	6687508	1826.6	1456
Sichuan	10821769	3585.2	3627
Tianjin	4421207	1495.1	6260
Tibet	1854502	181.4	675
Xinjiang	5190179	1339.1	1277
Yunnan	7663115	1777.6	3680
Zhejiang	12655345	6520.1	8049

**Appendix C-2 3 continued**

Provinces	Social Factors (3)				
	Per Capital Urban Disposable Income (yuan)	Per Capita Urban Consumption Expenditure (yuan)	Per Capital Rural Net Income (yuan)	Per Capita Rural Consumption Expenditure (yuan)	Urbanization Rate (%)
Anhui	8470.68	6367.67	2640.96	2196.232	35.50
Beijing	17652.95	13244.2	7346.26	5315.709	83.62
Chongqing	10243.46	8623.29	2809.32	2142.121	45.20
Fujian	12321.31	8794.41	4450.36	3292.632	47.30
Gansu	8086.82	6529.2	1979.88	1819.579	30.02
Guangdong	14769.94	11809.87	4690.49	3707.733	60.68
Guangxi	9286.70	7032.8	2494.67	2349.601	33.62
Guizhou	8151.13	6159.29	1876.96	1552.387	26.87
Hainan	8123.94	5928.79	3004.03	1969.086	45.20
Hebei	9107.09	6699.67	3481.64	2165.722	37.69
Heilongjiang	8272.51	6178.01	3221.27	2544.649	53.10
Henan	8667.97	6038.02	2870.58	1891.571	30.65
Hubei	8785.94	6736.56	3099.20	2430.188	43.20
Hunan	9523.97	7504.99	3117.74	2756.426	37.00
Inner Mongolia	9136.79	6928.6	2988.87	2446.17	47.20
Jiangsu	12318.57	8621.82	5276.29	3567.109	50.11
Jiangxi	8619.66	6109.39	3128.89	2483.699	37.00
Jilin	8690.62	6794.71	3263.99	2305.976	52.52
Liaoning	9107.55	7369.27	3690.21	2805.94	58.70
Ningxia	8093.64	6404.31	2508.89	2094.483	42.28
Qinghai	8057.85	6245.26	2151.46	1976.025	39.25
Shaanxi	8272.02	6656.46	2052.63	1896.48	37.23
Shandong	10744.79	7457.31	3930.55	2735.772	45.00
Shanghai	18645.03	13773.41	8247.77	7277.943	89.09
Shanxi	8913.91	6342.63	2890.66	1877.696	42.11
Sichuan	8385.96	6891.27	2802.78	2274.173	33.00
Tianjin	12638.55	9653.26	5579.87	3035.961	75.11
Tibet	9431.18	8617.11	2077.90	1723.764	26.65
Xinjiang	7990.15	6207.52	2482.15	1924.412	37.15
Yunnan	9265.90	6996.9	2041.79	1788.997	29.50
Zhejiang	16293.77	12253.74	6659.95	5432.953	56.02

**Appendix C-2 4 continued**

Provinces	Technological and Educational Factors (4)			
	R&D Expenditure (100 million yuan)	Govt S&T Appropriation (100 million yuan)	Government Expenditure for Education (10 000 yuan)	Population with College or Higher Education
Anhui	45.9	6	1386903.9	29007
Beijing	382.1	37.6	2983476.1	48001
Chongqing	32	6	826797.5	16122
Fujian	53.6	13.6	1391027.1	21877
Gansu	19.6	3.8	727916.5	13637
Guangdong	243.8	83.8	4217378.9	66510
Guangxi	14.6	7.8	1060559.5	22556
Guizhou	11	7.8	816926.9	14897
Hainan	1.6	1.3	248164.2	5524
Hebei	58.9	11.2	1754771.2	40036
Heilongjiang	48.9	11.9	1370091.6	30888
Henan	55.6	13.8	1966366.2	48450
Hubei	75	11.4	1531661.1	36287
Hunan	44.5	12.3	1409498.3	34917
Inner Mongolia	11.7	7	855424.3	23660
Jiangsu	269.8	35.7	3099409.2	63909
Jiangxi	28.5	4.9	831076.3	19946
Jilin	39.3	6.9	985194.0	22832
Liaoning	124.7	28	1774299.7	44404
Ningxia	3.2	2	223603.9	4895
Qinghai	3	1.3	190741.6	4682
Shaanxi	92.4	6.8	1144359.2	28734
Shandong	195.1	26.5	2561587.9	50909
Shanghai	208.4	79.3	2285942.5	40549
Shanxi	26.3	6.5	1012934.1	23197
Sichuan	96.6	12.7	1828023.3	35297
Tianjin	72.6	13.7	781629.6	18601
Tibet	0.3	0.8	222773.7	293
Xinjiang	6.4	6.2	924891.6	21340
Yunnan	21.3	10.5	1391479.8	18117
Zhejiang	163.3	50	2853665.1	33115

**Appendix C-3 Original Data of Assumed Factors in 2006**

Provinces	Basic Factors (3)		
	Land Areas (sq. km)	Population (10 000)	Developed Areas (sq. km)
Anhui	139600	6110	1135.9
Beijing	16808	1581	1254.2
Chongqing	82370	2808	631.4
Fujian	121400	3558	780.1
Gansu	454300	2606	523.8
Guangdong	178500	9304	3705.7
Guangxi	236700	4719	738.3
Guizhou	176100	3757	404.7
Hainan	33900	836	196.5
Hebei	187700	6898	1417.0
Heilongjian	454000	3823	1467.2
Henan	167000	9392	1678.6
Hubei	185900	5693	1298.1
Hunan	211800	6342	1037.0
Inner Mongolia	118300	2397	830.1
Jiangsu	102600	7550	2583.0
Jiangxi	166900	4339	758.0
Jilin	187400	2723	1013.2
Liaoning	145900	4271	1859.6
Ningxia	66400	604	269.4
Qinghai	720000	548	109.5
Shaanxi	205600	3735	733.9
Shandong	156700	9309	2895.1
Shanghai	6340	1815	860.2
Shanxi	156300	3375	628.6
Sichuan	487630	8169	1272.9
Tianjin	11305	1075	540.0
Tibet	1228400	281	78.0
Xinjiang	1660400	2050	673.9
Yunnan	394000	4483	542.3
Zhejiang	101800	4980	1744.2

**Appendix C-3 1 continued**

Provinces	Economic Factors (6)		
	Gross Regional Product (100 million yuan)	Per Capita GRP (yuan)	Local Government Revenue (10 000 yuan)
Anhui	6148.73	10055	4280265
Beijing	7870.28	50467	11171514
Chongqing	3491.57	12457	3177165
Fujian	7614.55	21471	5411707
Gansu	2276.7	8757	1412152
Guangdong	26204.47	28332	21794608
Guangxi	4828.51	10296	3425788
Guizhou	2282	5787	2268157
Hainan	1052.85	12654	818139
Hebei	11660.43	16962	6205340
Heilongjian	6188.9	16195	3868440
Henan	12495.97	13313	6791715
Hubei	7581.32	13296	4760823
Hunan	7568.89	11950	4779274
Inner Mongolia	4791.48	20053	3433774
Jiangsu	21645.08	28814	16566820
Jiangxi	4670.53	10798	3055214
Jilin	4275.12	15720	2452045
Liaoning	9251.15	21788	8176718
Ningxia	710.76	11847	613570
Qinghai	641.58	11762	422437
Shaanxi	4523.74	12138	3624805
Shandong	22077.36	23794	13562526
Shanghai	10366.37	57695	15760742
Shanxi	4752.54	14123	5833752
Sichuan	8637.81	10546	6075850
Tianjin	4359.15	41163	4170479
Tibet	291.01	10430	145607
Xinjiang	3045.26	15000	2194628
Yunnan	4006.72	8970	3799702
Zhejiang	15742.51	31874	12982044

**Appendix C-3 2 continued**

Provinces	Economic Factors (6)		
	Local Govt Expenditure (10 000 yuan)	Investment in Fixed Assets (100 million yuan)	Expenditure for Foreign Affairs (10 000 yuan)
Anhui	9402329	3533.6	6078
Beijing	12968389	3296.4	3172
Chongqing	5942543	2407.4	661
Fujian	7286973	2981.8	2745
Gansu	5285946	1022.6	2830
Guangdong	25533399	7973.4	5835
Guangxi	7295172	2198.7	10942
Guizhou	6106411	1197.4	2087
Hainan	1745366	423.9	1645
Hebei	11803590	5470.2	9223
Heilongjian	9685255	22365	2678
Henan	14400878	5904.7	1704
Hubei	10470041	3343.5	2696
Hunan	10645177	3175.5	3393
Inner Mongolia	8121330	3363.2	3699
Jiangsu	20132502	10069.2	6778
Jiangxi	6964361	2683.6	1407
Jilin	7183588	2594.3	3555
Liaoning	14227471	5689.6	17894
Ningxia	1932089	498.7	1748
Qinghai	2146628	408.5	1262
Shaanxi	8241805	2480.7	1929
Shandong	18334400	11111.4	4905
Shanghai	17955660	3900.0	11117
Shanxi	9155698	2255.7	1827
Sichuan	13473951	4412.9	3989
Tianjin	5431219	1820.5	6263
Tibet	2001969	231.1	323
Xinjiang	6784723	1567.1	1079
Yunnan	8935821	2208.6	3754
Zhejiang	14718593	7590.2	8906



**Appendix C-3 3 continued**

Provinces	Social Factors (5)				
	Per Capital Urban Disposable Income (yuan)	Per Capita Urban Consumption Expenditure (yuan)	Per Capital Rural Net Income (yuan)	Per Capita Rural Consumption Expenditure (yuan)	Urbanization Rate (%)
Anhui	9771.05	7294.73	2969.08	2420.94	37.1
Beijing	19977.52	14825.41	8275.47	5724.5	84.33
Chongqing	11569.74	9398.69	2873.83	2205.21	46.7
Fujian	13753.28	9807.71	4834.75	3591.4	48
Gansu	8920.59	6974.21	2134.05	1855.49	31.09
Guangdong	16015.58	12432.22	5079.78	3885.97	63
Guangxi	9898.75	6791.95	2770.48	2413.93	34.64
Guizhou	9116.61	6848.39	1984.62	1627.07	27.46
Hainan	9395.13	7126.78	3255.53	2232.19	46.1
Hebei	10304.56	7343.49	3801.82	2495.33	38.44
Heilongjiang	9182.31	6655.43	3552.43	2618.19	53.5
Henan	9810.26	6685.18	3261.03	2229.28	32.47
Hubei	9802.65	7397.32	3419.35	2732.46	43.8
Hunan	10504.67	8169.3	3389.62	3013.32	38.71
Inner Mongolia	10357.99	7666.61	3341.88	2771.97	48.64
Jiangsu	14084.26	9628.59	5813.23	4135.21	51.9
Jiangxi	9551.12	6645.54	3459.53	2676.6	38.68
Jilin	9775.07	7352.64	3641.13	2700.66	52.97
Liaoning	10369.61	7987.49	4090.4	3066.87	58.99
Ningxia	9177.26	7205.57	2760.14	2246.97	43
Qinghai	9000.35	6530.11	2358.37	2178.95	39.26
Shaanxi	9267.7	7553.28	2260.19	2181	39.12
Shandong	12192.24	8468.4	4368.33	3143.8	46.1
Shanghai	20667.91	14761.75	9138.65	8006	88.7
Shanxi	10027.7	7170.94	3180.92	2253.25	43.01
Sichuan	9350.11	7524.81	3002.38	2395.04	34.3
Tianjin	14283.09	10548.05	6227.94	3341.06	75.73
Tibet	8941.08	6192.57	2435.02	2002.24	28.21
Xinjiang	8871.27	6730.01	2737.28	2032.36	37.94
Yunnan	10069.89	7379.81	2250.46	2195.64	30.5
Zhejiang	18265.1	13348.51	7334.81	6057.16	56.5

**Appendix C-2 4 continued**

Provinces	Technological and Educational Factors (4)			
	R&D Expenditure (100 million yuan)	Local Government S&T Appropriation (100 million yuan)	Government Expenditure for Education (10 000 yuan)	Population with College or Higher Education
Anhui	59.3	8.9	1520858	663684
Beijing	433.0	60.5	1751755	565779
Chongqing	36.9	7.5	786380	376118
Fujian	67.4	15.4	1362444	461341
Gansu	24.0	4.4	874820	263691
Guangdong	313.0	104.1	3926235	1008577
Guangxi	18.2	9.3	1354638	387447
Guizhou	14.5	7.6	1119194	221546
Hainan	2.1	1.7	278479	90138
Hebei	76.7	13.5	1895526	862618
Heilongjiang	57.0	13.6	1337055	592000
Henan	79.8	17.6	2331485	974096
Hubei	94.4	16.2	1454723	1092274
Hunan	53.6	14.3	1422621	830181
Inner Mongolia	16.5	7.9	950332	252917
Jiangsu	346.1	54.4	2982252	1306181
Jiangxi	37.8	6.0	1037596	770525
Jilin	40.9	8.5	912752	435065
Liaoning	135.8	34.5	1668888	720548
Ningxia	5.0	2.0	246179	55931
Qinghai	3.3	1.5	243755	35983
Shaanxi	101.4	10.3	1280080	726219
Shandong	234.1	41.1	2922839	1338122
Shanghai	258.8	94.9	2054600	466333
Shanxi	36.3	8.1	1208708	446428
Sichuan	107.8	14.6	1818699	860640
Tianjin	95.2	18.3	815828	357382
Tibet	0.5	0.9	205964	23327
Xinjiang	8.5	7.3	892786	199251
Yunnan	20.9	11.4	1503948	284230
Zhejiang	224.0	62.9	2690418	719869