

Chapter 2

Related Literatures on Large Country Economy

In Large Countries with vast national territorial area, large population, rich resources and massive market, the economic development has characteristics different from that of small country economy, especially, the attractive resource advantages and huge domestic market have determined their unique track of economic development. Therefore, scholars both at home and overseas started long ago paying attention on the effect of country scale on economic development, conducted some explorations on country scale and Large Country economy, and put forth some views on development of Large Country economy.

2.1 The Evolution of Foreign Literature

2.1.1 *Theoretical Origin*

Research by economists on Large Country economy can be dated back to the earliest ancestor of economics Adam Smith. In his monumental work *An Inquiry into the Nature and Causes of the Wealth of Nations*, he explained the idea that “division of labor is restricted by the scope of market”. “Division of labor originated from the exchange capacity, and the extent of division of labor, is therefore restricted by the exchange capacity, or in other words, by the broadness of market”.¹ A market too small in size cannot encourage people to be engaged in a special work all their lives, therefore many occupations can be operated only in big cities, as broad market can provide good conditions for division of labor and concentration of industries. The feature of economic scale in Large Countries can make the division of labor quite developed both in regions and in countries, and this idea can be regarded as the theoretical origin of scale economy and Large Country economy.

The *Principles of Economics* of Alfred Marshall provided nutrient to the theory of Large Country economy mainly on two aspects: one is that it expounded the completeness and complementarity of economy in big industrial areas. In small industrial areas mainly depending on a single industry, economy can become extremely depressed due to reduced demand or raw materials supply; however, big industrial areas with many different types of well developed industries can avoid such a problem. Second, it expounded the scale effect of large-scale production. “The main interest of large-scale production is an economy of technologies, an economy of machinery and an economy of raw materials”.²

The *Theory of Economic Growth* by Arthur Lewis summarized systematically the factors influencing the economic growth, providing an analysis framework for the economic growth in Large Countries. Just as Lewis said, “I want to draw a blueprint instead of setting a theory”.³ This blueprint covers many factors associated with economic growth, such as economic system, market size, knowledge accumulation, capital accumulation, population and resources. To study the growth of Large Country economy, a blueprint should also be drawn by following such a framework.

In his work *Scale and Scope: the Dynamics of Industrial Capitalism*, Alfred Chandler Jr. specifically analyzed the economies of scale and economies of scope in production. He believed that it was the development of new technologies and opening of new market that led to economies of scale and economies of scope, and reduced transaction cost. “The utilization of economies of scale in production and marketing, the utilization of economy of joint production or joint marketing, or the reduction of relevant transaction cost, have cut cost and led to high efficient utilization of resources”.⁴ The economies of scale and economies of scope in production are mainly demonstrated by reduced unit cost; and the economies of scale and economies of scope in marketing are mainly manifested by the cost advantage of middlemen. Producers and distributors increase the cost advantages by expanding scale and scope, and this is economies of scale and scale efficiency. Large Countries have vast regional space and market space, and can also use their economies of scale and economies of scope to form advantages of Large Country.

2.1.2 Pattern of Large Countries

In the 1960s, in the research of international statistics and comparison, economists started paying attention to the influence of country differences on economic activities. In his book *Modern Economic Growth*, Simon Kuznets made it clear that country was taken as a unit in the study of economic growth, and conducted preliminary exploration on Large Country economy: first, he talked about the concepts of “Large Country” and “small country”, stating that some very small countries are satellite countries of a Large Country or Large Country group to a large extent, and some superpowers are formed by regions with entirely different economic backgrounds in the early period of economic development, therefore

these points should be taken into consideration when a country is taken as a unit in the study of economic growth. Second, he mentioned the internal difference in the economic development in Large Countries, with a view that the analysis of economic structure difference and variations of countries should be linked with the analysis of the regional difference and degree of unification in the economic development stages in Large Countries. Third, he analyzed the dependence of Large Countries and small countries on international trade, concluding that small countries depend more on international trade, and small countries can achieve economic growth only with increased dependence on foreign trade, while Large Countries can achieve economic growth even with a very low proportion of foreign trade, and fourth, he analyzed the advantages of Large Country economy, with a view that in Large Countries, the “domestic market and resources conditions allow them to develop specialization and economies of scale”, if small countries realize the advantages of specialization and economies of scale, they will naturally depend on international trade with Large Countries.⁵

In his book *Economic Growth of Nations*, Kuznets conducted further research on the “effect of size of countries” and analyzed the relationship between the size of country with foreign trade, scale of economy, domestic production structure and economic development level. In his view, “when the size of a country has major effect on the proportion of foreign trade in gross value of production, it produces influence of overseas supply and demand on domestic production value structure”.⁶ To analyze the per capita output value level of different countries, he used population as a scale with 10 million as a demarcation line, to divide countries into big (each with population of over 10 million) and small (each with population below 10 million) ones, and conducted empirical research on issues such as the difference of per capita output value of Large Countries and small countries and the influence of the size of a country on industrial institutions.

In the book *The Patterns of Development*, Hollis B. Chenery and Moises Syrquin specifically studied the forms of Large Countries and their scale effect, and they stated that, “the most obvious effect of large scale is reflected in production type. Corresponding to a fairly enclosed trade pattern with low degree of specialization is a fairly balanced type of domestic production with little variation, in addition, except for few exceptions, Large Countries adopted the policy of inward development, which has produced effect on other aspects of accumulation and resources allocation”.⁷ The main effect of large scale and low export on resources allocation is that it requires these countries to change the economic structure in fairly early stage of development; on accumulation, the investment and saving levels in Large Countries are high, therefore the economy can grow slightly faster. In the meantime, “Large Countries always focus on the issue of internal development, resulting in a whole set of introverting policies with extensive consequences”.⁸ Because of offsetting by comparatively great difficulties in politics and administration, Large Countries cannot create obvious advantages in the course of development.

Chenery and Syrquin specially analyzed the Large Country pattern in *Industrialization and Growth: A Comparative Study*, and they pointed out three

patterns of state trade, i.e., Large Country pattern, finished product export oriented small country pattern and primary product export oriented small country pattern. In their view, “a Large Country tends to select an introverting policy, which seems more suitable to a Large Country than to a small country”.⁹ And it was also found that a Large Country reaches the quasi-industrial stage at about 250 USD, but it is about 400 USD with standard pattern and about 600 USD for a small country exporting primary commodities. “For the Large Country pattern, early start of industrialization can be attributed to the general adoption of import substituting policy in the manufacturing industry”.¹⁰ Chenery et al. also studied the criteria for a Large Country, by setting the population size as 5 million for a small country, as 20 million for a Large Country, and as 10 million for a country as comprehensive sample. In 1989, he proposed a new criterion, classifying countries with a population between 50 and 150 million in 1980 as Large Countries, and those with population less than 5 million as small countries.

2.1.3 Characteristics of Large Countries

Large Country economy has its own characteristics, and diversification of economy and differences in resources are root causes leading to the difference in the development strategies of Large Countries.

European Union (EU) is a union of countries, and as an integral whole, it has most characteristics similar to the development of a Large Country. Therefore, Bernhardsen (2000) took the EU as a whole and Germany as objects of research, by taking panel data of 12 months to study the relationship between interest rate difference and macro economic variables. It was found in the study that the regression coefficient is substantial to the prediction result, especially, the inflation rate, actual income growth, relative labor cost and current capital accounts have fairly great influence on interest rate difference. Therefore, the macroeconomic policies of various governments influence the interest rate difference to a certain extent. This result is fairly optimistic as compared with earlier studies, and the 1-month and 3-month maturity interest rate can usually embody the variation of interest rate. Although overnight rate should best embody the interest rate difference, it is usually not so stable as it is often manipulated by central banks. If the overnight rate is set at an unbalanced level, market participants have the reason to expect that such an unbalanced interest rate is temporary. In this case, the 1–3-month interest rate will be able to better reflect the fundamentals of economy, which is in line with the results of early studies, the long-term interest rate often fluctuate around the actual interest rate, without too much deviation; this research result has important guiding significance to the economic development in Large Countries, that is, governments of Large Countries and local governments in Large Countries all do their best to avoid frequent change of economic policies and ensure stable fiscal and monetary policies, so as to ensure the stability of economic policies and predicted economic movement in Large Countries.

Investment is important in driving the economic development, and is a factor that must be paid attention to in the research of Large Country economy, however, traditional researches usually focused on the relationship between inventory investment and investment variation. Chikan et al. (2005) overcame the insufficiency of traditional researches and studied the macroeconomic conditions of 14 Large Countries in the world by using the OECD database in the view point of inventory investment, thereby summarizing the macroeconomic characteristics of Large Countries. They first made 7 assumptions, and verified them one by one, and the final verification results showed that, first, in rapid economic development period, the inventory investment is high; second, inventory investment and fixed asset investment are positively related; third, inventory investment and foreign trade are negatively related, and this also implies that inventory change and foreign trade are two substituting tools in macroeconomic regulation. These research results can help us analyze and predict the macroscopic behavior and policy trend of Large Country economies (for example, to the policy-makers of Large Country economy, large-scale investment is required to promote the rapid development of economy). The analysis above only suits short-term analysis, and this conclusion may not be applicable in long term, so it is required that Large Countries follow their own general laws and pay attention to exploration of long-term trend.

Large Country economy is defined and studies macroscopically, and a core in the study of macroeconomic is the fiscal policy. Jin and Zou (2005) made an in-depth research of the financial decentralization, revenue and transfer payment in a big developing country—China. In their view, traditional theoretical studies have proved that the matching between revenue level and transfer payment can allow sectors at all levels in the country to share interests and efficiency, therefore more effectively promote economic growth in a Large Country. However, research about China showed that at national level, it is diffusing instead converging between revenue level and transfer payment; at provincial level in China, the transfer payment and revenue level of government is converging, with the root cause of financial decentralization. A group of data of 30 provinces was used to check the relationship between financial decentralization and economic growth in China in two phases (the financial contract system during 1979–1993 and the system of tax distribution during 1994–1999) in two phases, and it was found that the contradictions between theory and reality can be conciliated in China, and the key is to adopt the effective institutional arrangement of financial decentralization. Development of Large Countries has obvious characteristics of diversity, and this requires Large Countries to take into full account the important bridge role of financial decentralization between revenue and transfer payment in the course of economic development, to promote the effective growth and coordinated development of regional economy.

Major economies are benchmarks of global economy, the economic movement and development strategies of Large Countries play an important leading role in global economy, and to keep known the evolution of major economies, macroeconomic prediction for Large Countries must be strengthened. Fildes and Stekler (2002)

found in their research that the macroeconomic prediction for Large Countries was extensively used in the cognition of industrial development and economic cycles, it is an important basis for setting Large Country economic development strategy, and more important, the key to grasp the economic fluctuation in Large Countries. They made their researches with the United States and United Kingdom, the two countries with high proportion of economy, as examples, to predict the economy status of these two Large Countries by using substitutable time sequence data and fairly accurate macroeconomic prediction model, and it was found that to the United States, the error rate of using annual data is at least over 25 %, and it would be more effective to use quarterly data, enabling more effective prediction of the relationship between the economic growth rate and inflation rate of the United States, and the research of the UK also supported this viewpoint. Therefore, they believed that in the economic prediction of Large Countries, it would be more scientific and reasonable to use quarterly data, which can more effectively reflect the trend of world economic development.

Daily close economic ties have made the economic fluctuation of Large Countries more likely to conduct to other countries, especially, the economic fluctuation in the United States can produce important impact on all countries in the world. Ireland and Schuh (2008) used the two-phase true economic cycle model and the data of the United States after the World War II to study the relationship between productivity and macroeconomic performance of Large Countries, to determine the impact from different consumptions, investments and commodity production technologies to total factor productivity. It was found in the research that in the 1970s, the slowdown of total factor productivity was caused by lagging of consumption, but that impact was temporary, while the lagging of investment has lasting impact on the total factor productivity, the substantial rise of total factor productivity in the 1990s was an investment impulsion resulted from technological transformation, and it will be quite difficult for the total factor productivity development level in that period to occur again in a period of time in the future. This requires that Large Countries with important global influence should be good at grasping the opportunities of technological transformation, and make full use of the investment drive brought about by technological transformation and rise of total factor productivity to stimulate the development of global economy.

2.1.4 Rise and Fall of Large Countries

At the end of the 20th century, foreign scholars started thinking more about the rise and fall of Large Countries, and the American historian Paul Kennedy published *The Rise and Fall of the Great Powers* (2006). According to Paul Kennedy, the basic features of the rise and fall of great powers are the continual change of relative positions of great powers in world affairs mainly for two causes: the first is the different growing rate of national strength of different countries, and the second is technical breakthroughs and transformation of organizational forms, which can give

more advantages to a country than to another. “We have found a causal relationship between the changes of relative comprehensive economic strength and production capacity and the positions of all great powers in the international system”. Starting from the 16th century, the world trade concentration places gradually shifted from the Mediterranean to the Atlantic and Western and Northern Europe, and in the decades after 1890, the world concentrated producing places of industrial products shifted slowly from Western Europe to other regions, he stated with this example that, “the transfer of economic strength heralds the rise of new great powers”. In addition to economic causes, many factors such as geographic location, military organizations, national morale and union system can govern the national strength of countries. He also grouped the Large Countries in the world today into five systems: the United States, Soviet Union, China, Japan and countries of European Economic Community.

The American scholar Schweitzer (2007) studied the scientific and technological and economic issues of Russia. He believed that, Russia possesses rich technical resources, and the Russian economy will rise again by promoting technological progress, “No matter how dim the economic prospects will be, the leaders in Moscow and other places will insist on their objectives, to make Russia a powerful industrial country again”. German scholar Karl Pilny studied the influence of India and China on the world. He pointed out in his book *How India and China Change the World* (2008): the economic growth rate of these two countries with the largest population in the world has far exceeded the world economic growth rate, and he predicted that they will actively remain as the world economic growth centers, rising to become superpowers in the 21st century. Pilny analyzed the common characteristics of the two countries: a huge population, and with a large rural population; the economic structure is dominated by agriculture; and the economic system is in the transformation process. At the same time, he analyzed the different development patterns of the two countries: the Indian pattern is mainly founded upon the service industry; but it is different in China, where the processing industry is dominating, and its consuming products now dominate the world market. India adopts the elite promoting strategy, and its education system is closed linked with economic demand; China is a country of producers of popular commodities, and it needs to shift from a “world factory” to a national economy founded on knowledge and high technologies.

The subprime crisis in the United States in 2008 triggered a worldwide financial crisis, with drastic depression in American economy. With this as an opportunity, some scholars started thinking the fall of the United States and rise of emerging Large Countries. In his new work *The Post-American World* (2009), the American scholar Fareed Zakaria pondered upon the new order of rise of Large Countries. He vividly described a series of events: “Just one month in 2008, India resolutely refused the proposal from the United States about Doha Trade Talks, Russia took part of Georgia, and China sponsored the most spectacular and expensive Olympic Games in history”. In the newly rising Large Countries of China, India and Brazil, the basic economic volume is massive, and they all have considerable economic activities of their own (from domestic demand). Of course, despite the economic

depression and rise of other countries, the global economic shares of the United States still remain stable. It can be seen that the era of new economic order with rise of Large Countries will be one that the United States and the newly rising Large Countries China, India, Russia and Brazil coexist and fuse together.

2.2 Views of Domestic Scholars

2.2.1 Views of Large Country Economy

In China, Prof. Zhang Peigang, a famous development economist was the first paying attention to the development of Large Country economy, he stated in the book *New Development Economics* published in 1992 that, development economics should “highlight the focus of research and lay emphasis on the research of developing Large Countries”. This is because since the end of WWII, except for the petroleum exporting countries that quickly became high and middle income countries with their special resources conditions, there are 11 emerging industrialized countries (regions) fairly successful in their development. They all have quite limited territory and population except Brazil. Therefore we can say that the theory and policies of development economics were successful in very few medium and small countries and regions in the third world without typical significance, while late-developing Large Countries including China and India have not yet realized steady takeoff and rapid development up to then. In Chap. 3 of the book, he “tried to make further exploration on issues of development of Large Countries, characteristics of Large Countries, difficulties in the development of Large Countries and special roads of Large Countries”. At that time, Zhang Peigang did not clearly put forth the concept of Large Country economy, but he considered issues of development in Large Countries more in the economic point of view, therefore his ideas actually set the foundation for the research of Large Country economy. After that, Chen (1994) extended the research by Zhang Peigang, and conducted relatively systematic research on the development of Large Countries. Chen Wenke can be said as one of the first scholars making complete exposition on the development contradictions in late-developing Large Countries. Chen (1994) revealed ten major contradictions in the development of Large Countries according to the internal logics: population puzzle, structure puzzle, ecology puzzle, disaster puzzle, shortage puzzle, debt puzzle, market puzzle, system puzzle, puzzle of farmers as well as puzzle of traditional culture. In his view, these ten major puzzles can be classified at least into three categories: the first ones are basically economic factors; the second ones containing both economic and non-economic factors; and the third ones are comprehensive, incorporating political, economic, social, cultural and historical factors. Although the development economics represented by Zhang Peigang and Chen Wenke conducted relatively complete researches on the question of development in Large Countries, it is regretful that neither of them put forth the concept

of Large Country economy, and their researches were made only on the surface of the issue, without systematic analysis of the characteristics, advantages and development strategy of Large Country economy.

In China, it was Li You and Tong Youhao who addressed the issue of Large Country economy in a fairly systematic way. Li (2000) analyzed the country scale and its relationship with the market structure, resource endowment, regional economy, economic opening, industrial policies and management system, revealing the characteristics and patterns of economic development and governmental administration under the restriction by country scale. However, his purpose of research was revealing the characteristics and patterns of economic development and governmental administration in Large Countries, instead of laying the emphasis on the advantages and scale of Large Country economy. Youhao (1999) explored on what Large Country economy is, the main characteristics of Large Country economy, the role of domestic market in Large Country economy, the relationship between Large Country economy and opening economy as well as what economic development strategy China should choose after taking the initial shape of Large Country economy, and this laid a good foundation for the research on Large Country economy. However, Tong Youhao did not go further along his fairly systematic thinking, therefore, no scientific answer was obtained to questions as what economic entities are Large Country economy and the origin of advantages of Large Country economy.

2.2.2 Characteristics and Advantages of Large Country Economy

All researchers on Large Country economy agree that Large Country economy has its own characteristics, with advantages beyond comparison by other economies, but they have not reached agreement on what are the characteristics of Large Country economy and the origin of Large Country advantages.

Youhao (1999) believed that, Large Country economy has characteristics different from small country economy: vast territory, rich resources, large population, huge domestic market, large economic scale, great influence on world economy, and complete industrial sector system. These characteristics of Large Country economy have determined its advantages, that is, a massive domestic market, the advantages of which play an extremely important role in the economic development of the country. Fengde (1988) also accepted this view, while summarizing the general characteristics of Large Country economy, he pointed out that market potential is the foundation of Large Country economy, however, the market potential of Japan is not big as compared with that of the United States and Russia, then why it has become a economic power? So the root cause lies in the market purchasing power, the domestic market of Japan is small, but its market purchasing power is high.

Zhang (2007) stated that by Large Country economy, it refers to an economy entity with national territorial area exceeding 1 million square km² and population exceeding 100 million. Because only with certain national territorial area, the resource endowment structure can be relatively reasonable, to form a complete domestic system for division of labor; only with a given total population size, can there be certain market purchasing power, so that the characteristics and advantages of Large Country economy can be embodied. Large Countries with these characteristics mainly include: Russia, United States, China, Brazil and India. Unbalanced development of productive force with hierarchic levels is a main characteristic of Large Country economy. On this basis, he summed up advantages of Large Country economy on main aspects: resources, division of labor, labor force, market, technological development, scale productive force advancement and resources integration. These advantages function very well for China to give full play to its advantages of Large Country economy, realize the transfer of economic growth centers and boost sustained and steady economic growth.

The Large Country Economy Research Group of Hunan University of Commerce with Ouyang (2006) as an academic leader put forth the concept “comprehensive advantages of Large Country”, and also expounded in a fairly clear and systematic manner its connotation and characteristics. They held that the greatest characteristics of Large Country economy are diversity and adaptability. Diversity has led to difference in development levels, such as differences in technologies, human capital, capital accumulation and regional trade, and by adaptability, it means that the technologies, human capital, capital and trade at different levels can just suit their extent of development, therefore promoting the rapid development of regional economy. On the basis of diversity and adaptability of Large Country economy, they pointed out that the advantages of Large Country economy is comprehensive, and is a special advantage integrating the advantages in technologies, human capital, fund and trade, that is, the comprehensive advantages of Large Country (CAOLC). The theory of CAOLC is about the composing factors and occurring mechanism of CAOLC and its application in regions, industries and enterprises. Their theory about CAOLC not only combines with the views of Zhang Lijie, Tong Youhao and other people, but also covers the researches on issues of characteristics of Large Country economy, origin and functioning mechanism of CAOLC, and development strategy of Large Country economy in a complete and systematic way, therefore representing the systematic researches of Large Country economy in China.

2.2.3 Patterns and Strategies of Large Country Economy

Large Country economy has advantages and characteristics different from those of other economic entities, therefore, its development patterns and strategies also have their own characteristics, of course, such characteristics must be based on the reality and foundation of Large Country economy.

Jing (2000) studied development patterns of Large Country economy, and stated that in Large Countries all over the world, the economic growth is mainly pushed by the domestic market demand. In their active participation in international economic and trade exchanges, economic development has always been focused on domestic demand, and mainly depending on the expansion of domestic demand is a basic pattern of the development of Large Country economy, and it is also a typical demand pushing pattern. According to Zhang (2001), the main supporting force for economic growth in Large Countries is the domestic market demand, and consumption contributes most to economic growth, with investment being the main driving force of economic growth; his view is investment pushing pattern, which has advanced further on the basis of demand pushing pattern.

Youhao (2001) stated that, Large Country economy has a huge domestic market, which makes the international market less important, resulting in less opening to the outside world, therefore efforts in the development of foreign trade can more effectively promote the development of Large Country economy. The foreign trade pushing pattern of Tong Youhao has been favored by scholars, Zhang et al. (2006) analyzed the mechanism of trade and opening up as well as out-bound direct investment promoting regional economic development in the view angle of Large Country economy, and also explored on the effect and difference of trade and opening up as well as out-bound direct investment in the east, central and west regions of China, taking China as an example. Researches have shown that, opening up is conducive to knowledge accumulation and economic growth, however, custom tariff reduction produced the most obvious effect on the east region, while the preferential policies for foreign direct investment with development zones as platforms have the most obvious function in the central region. After comparing the development patterns of Large Country economy and small country economy, Tian (2001) stated that Large Country economy should make more efforts in internationalization to achieve the economic development goals.

The development strategy of Large Country economy has long been a focus of argument in the academic circle, especially on the strategy in selecting industrial sectors. Haibing (2005) pointed out that, as an economic development strategy, Large Countries should concentrate on science and technology, culture and public health, which form the foundation for development of Large Country economy, and the Large Country economy development strategy proposed by him is a massive system consisting of national defence construction strategy, economic development strategy, education development strategy and special development strategy.

Economic strategies must be finally materialized in the selection of specific industries. Qi (2006) supposed that in a country, there are only two types of industries: one is labor-intensive and the other knowledge-intensive, and he referred in brief the development pattern dominated by labor intensive industries as “China pattern”, and that dominated by knowledge-intensive industries as “India pattern”. Then he respectively established labor force market models for labor intensive industries and knowledge-intensive industries, to compare and research the China and India patterns. His conclusions show that, to have more people enjoy the welfare of economic development, the China pattern is better than the India pattern.

Because the China pattern enables both labor-intensive and knowledge-intensive industries to coordinate and fully develop, and can solve the problem of unemployment to the maximum extent. This research result has fairly strong reference significance, and also well explains the China pattern and India pattern, the two entirely different Large Country economy development strategies. Yang and Yang (2007) put forth the concept of “limited catch-up”, and measured and calculated the limited catch-up indices of 112 countries during 1965–2000. Their cross-nation analysis showed that, in Large Country economies, countries adopting “limited catch-up” have achieved development results obviously better than those not adopting this strategy, and it also indicated that while developing comparative advantage industries, China also endeavors to develop some medium and high end industries, which is in line with the demand of “limited catch-up”, therefore has achieved good results in economic development.

Xu and Ma (2007), on the basis of comparing the difference between Large Country economy and small country, further stated that, Large Country economy, with vast territory, rich resources, large population, domestic market and huge economic scale, exerts major influences on the world, therefore it is appropriate to adopt the import substituting strategy to actively expand domestic demand, without excessively depending on foreign trade.

2.2.4 Comparative Study of Large Country Economies

Large Countries in the world have their own particularities as well as some things in common, therefore, it is necessary to perform comparative study for Large Country economies. This study is represented by Fudan University World Economy Research Institute, the research group (2006), with the big economic countries in the world as objects, made an overall analysis of the tracks of development of Large Country economies such as the United States, Japan, Germany and Russia since the 1990s, and made clear the institutional transition in the development of Large Country economies and the background, measures and effects of structural readjustment, providing very good reference to the Large Country economy development in China. In the meantime, Cheng and Li (2006), taking the United States, Soviet Union, Brazil, India and China as objects, studied their experience and lessons in economic development, which are of more direct reference value to the economic development in China. Bai (2008) discovered by comparing the economic rising of China and India that, although the two countries selected two different roads, they now face common difficult issues in their development, and the root cause is the extra-large scale of the country. The rise of China and India calls for late-developing Large Countries to innovate development patterns, and it is a global subject of the times to explore roads for sustainable development of economy in Large Countries like China and India. Wang (2008) conducted comparative study on the economic development in the United States and Brazil, analyzed in detail the general conditions of economic development and economic development

patterns of both countries, and also did detailed comparison of the development of agriculture and industries in the United States and Brazil; he explored on the different roles of the governments of both countries in forming the economic development factors, and analyzed the causes of rapid economic development in the United States and slow development in Brazil, with the conclusion that it was related to the importance attached to the role of market in the United States and negligence of the role of market in Brazil. Shen et al. (2008) conducted comparative study on the economic development in China and India, and stated that both China and India are Large Countries with large population and territory, and also developing countries with most rapid economic growth in the world today, but both of them face the test of lagged urbanization, increasing environmental pressure and expanding income distribution gap; these problems are mainly on the institutional and social levels, only these bottlenecks are broken can they get the development space in the future and improve the quality of economic and social development. On this basis, Lu (2008) made an overall analysis of the urbanization strategy, globalization strategy, industrialization strategy in the economic development in Large Countries, together with systematic carding of the political and social foundation for Large Country economy development, providing very good reference to the Large Country economy development in China.

These comparative studies are qualitative. Today with daily increasing economic globalization, are there certain links between Large Country economies, and has the economic fluctuation between Large Country economies something in common? Quite few scholars gave their empirical answers to these questions with quantitative analysis as a tool. Song and Fang (2007) analyzed the interaction and influence of economic fluctuation in China and the world, and their results obtained after a series of metering and tests showed that, the correlation of China economy and world economy experienced a course of strong to weak and the gradually becoming strong again, but the overall correlation is fairly low; the economic fluctuation in China economy lagged behind that of world economy, indicating a fairly heavy dependence of China economy on world economy; and at the 10 % significance level, the two are in Granger causality, but the world economy has greater influence on China economy. There are many linking ties between Large Country economies, and FDI is one of the most important, Zong (2007) chose this tie, and made empirical analysis on how the fluctuation of economy in world Large Countries represented by G7 influences the economic fluctuation in China via the FDI in China by using such metering methods as cointegration, VAR impulse response and variance decomposition, on the basis of the economic data of 1980–2006. The results showed that the FDI growth rate in China is correlated to the GDP growth rate in China; in China's FDI variance decomposition, components explained by economic factors of China are much more than those explained by economic factors in other Large Countries in the world, and in the GDP variance decomposition of G7 and China, components explained by economic factors of the opposite side are on the trend of rising, indicating daily deepening mutual influence in economic fluctuation between China and the other Large Countries in the world.

2.2.5 The Large Country Economy Strategy of China

China is facing problems much more severe and complicated in its economic development than those faced by the United States and other developed countries, and they must be dealt with squarely in developing the Large Country economy in China. Jinyong (2005) noticed frequent trade frictions between China and the United States and between China and Europe, with occasional intensifying, and he pointed out after surveying the important roles of other free trade areas on Large Country economy development strategy that, to go to a Large Country economy, China must adopt the form of free trade area to combine with other economic entities, so as to effectively cope with trade frictions and conflicts in the course towards a Large Country economy, and provide a favorable environment for the economic development. Gao (2007) conducted systematic researches on the problems and challenges faced by China in developing Large Country economy, and stated that the Large Country economy of China should accomplish the dual transformation from a planned economy to market economy and from an underdeveloped economy to a developed economy, this has determined that the Large Country economy of China will face not only bigger tests from overseas pressure, but also potential challenges from the uncertainty of internal development, which are mainly demonstrated in 6 aspects of industrial structure, regional difference, resources utilization, environmental protection, domestic consumption and trade structure; he further stated that the basic schema to deal with external challenges for China to advance to a Large Country economy should be transforming the development ideas and economic growth pattern, so that the economic growth in China can change from mainly depending on expansion of factor input to mainly depending on increase of efficiency.

As a developing Large Country economy, what development strategy should China select? This is a long debated topic, and also a hot question in the academic circle researches in recent years. To sum up, there are mainly four viewpoints.

1. Catch-up strategy

This strategy originates from the theory of later-mover advantage. Lu (1999) put forth the “development motive force theory” framework based on later-mover advantage, stating that by learning-based catch-up, the development gap between China and early-mover countries will be narrowed gradually, but a certain constant gap will remain at all times; this requires us to upgrade and change the motive force of development, i.e., from the previous importation and learning to self-reliance innovation. Xibao (2002), starting from the basic theory of development economics, studied the economy catch-up theory of the west, and stated that China should take a catch-up strategy based on later-mover advantage, and proposed a complete framework on aspects of human capital, technological innovation and institutional innovation. Gaolan (2003) studied the relationship between later-mover advantage theory and economic catch-up strategy, and concluded that it is the effective use of later-mover advantage and following the general law of economic catch-up that created the “China Miracle”. On the basis

of the later-mover advantage theory, many economists held that developing countries, especially China, as a late-developing Large Country, should adopt the catch-up strategy in economic development. However, quite a few scholars, such as Lin and Cai (1999), stated that catch-up strategy has some defects in itself: this strategy will result in growth in developing countries being mainly in industrial sectors, leading to an unbalanced industrial structure; the modern industries built up in catch-up strategy cannot well combine with the traditional industries and small and medium-sized enterprises, resulting in dual economic structure, and industrial sectors cannot play a linked role in driving up economic development; the industries built up in this way can hardly have self-production capacity and will be lacking in competing power; the intensive interference of economy by the government will seriously distort resource allocation, making market allocation difficult to play its role.

2. Comparative advantage strategy

Lin and Cai (1999), Lin and Li (2003) on the basis of Ricardo's concept of "comparative advantage", stated that by adopting catch-up strategy, governments of developing countries choose to develop in priority industries and technological structures not matching with the comparative advantage determined by factor endowment, and it will result in lacking of self-surviving capacity in sectors developed in priority on a competing market. However, the governments, to enable these enterprises lacking in viability to establish and survive, must distort interest rate, exchange rate and prices, and allocate resources by administrative means to subsidize or protect these enterprises. So the market role is suppressed, rent-seeking behavior prevails, and the end outcome will be very poor performance in economic development. Therefore, the best strategy for backward countries to catch up with developed countries is the comparative advantage development strategy. After that, many scholars in China conducted empirical researches on the comparative advantage strategy. The empirical researches by Zhang and Xiaozhong (2001), and Tao (2005) verified that the revealed comparative advantage index of China has gradually matched with its endowment of labor resources. Yu and Gu (2005) expounded the transformation of factor endowment structure in China resulted from the application of comparative advantage strategy under the conditions of open economy and the transform of industrial and trade structure arising from it, analyzed the logic relationship between foreign trade, circulation of international production factors, economic growth, changes in resources factor endowment as well as economic structure changes by means of HOV model and metering model, and pointed out the guiding position of the utilization of comparative advantage and its dynamic principle in the economic growth and structural regulation of China. In addition, scholars such as Wei (2001), Hou and Jiang (2004), Zheng and Ren (2005), Guan (2007), Yang (2007) conducted in-depth researches on it, and they pointed out that in the economic development of China, the comparative advantage development strategy should be adopted, to realize leap-forward development of economy at the minimum cost.

3. Comprehensive comparative advantage strategy

This strategy is an important viewpoint of the new classical economics, that is, every country should make full use of the comprehensive comparative advantages formed by exogenous comparative advantage, endogenous (division of labor) advantages and transaction efficiency comparative advantage, and avoid trade with products with comparative disadvantage. Yang and Zhang (2001) stated that the viewpoint of comprehensive comparative advantage has taken into account the factors neglected by the afore-said catch-up strategy and comparative advantage strategy, and therefore should be affirmed, however, they are also questioned by other economists because they took the transaction efficiency as the only prerequisite for economic growth and the constitutional framework as the only condition for economic development. Wei (2004) put forth a hypothesis that the competitiveness of a region is jointly determined by comparative advantage and competitive advantage, stating that the regional competitiveness is determined by the regional resource endowment differences as well as the enterprise competitive advantages at microscopic level, and is the outcome of comprehensive effect of them, they also classified the regional development strategy into four basic types on the basis of the magnitude of regional comparative advantage and enterprise competitive advantage, as a basis for China to select its Large Country economy strategy.

4. Strategy of comprehensive advantages of large country

Amidst the debates over economic development strategies for developing countries, the Large Country Economy Research Group of Hunan University of Commerce put forth the strategy of comprehensive advantages of Large Country, in studying the Large Country economy, they noticed the differences, stages and adaptability in the development of Large Country economy, and systematically stated that the comprehensive advantages of Large Country originate from the diversity and adaptability of technologies, human capital and regional differences, the comprehensive advantages of Large Country has integrated the comparative advantage and competitive advantage, early-mover advantages and later-mover advantage, providing a basis for Large Countries to work out economic development strategy in a scientific way. The theory of comprehensive advantages of Large Countries shows that, the unbalanced development of regional economy requires selection of different regional economy development strategies, and this has made clear the direction for the coordinated development of regional economy, and also provided a basis for industrial selection and development.

2.3 Summary and Reviews

It can be found in summarizing the above analyses that, there is a long history in foreign countries in the research of country scale and Large Country economy: Simon Kuznets analyzed the effect of the size of country on structure of sectors,

Hollis B. Chenery studied the types of Large Countries and their scale effect, and some other scholars studied the economic characteristics of Large Countries as well as the laws of rise and fall of Large Countries. However, probably because factors involved in Large Country economy are complicated, it is difficult to set restricting conditions, and especially it is not easy to make analysis with numerical models, no scholar has made systematic research on Large Country economy, and comparatively speaking, there have been more researches on small country economy. For example, Hollis B. Chenery studied the small country pattern of economic development, Robert. J. Barrow specifically studied the inventory and output behavior of a small country economy, Gillis et al. specially studied the balance of open economy in small countries.

The economy today is becoming dominated by Large Country economy, and the daily frequent economic ties has made the research of Large Country economy a key for us to understand the world economic development, therefore, Large Country economy is gradually becoming a hot field of research in the academic circle. In particular, new progress has been made in the Large Country economy research since Goldman Sachs of the United States, in search of strategic opponents, put forth the concept of BRIC as an emerging market in the world. Since the 1990s, domestic scholars have made a lot of research on Large Country economy, and reached common view on four aspects:

- First, Large Country economy has an important position in the world economic situation. They have realized the importance of Large Country economy, and that Large Country economy has become an engine of world economic development, therefore, grasping the law and characteristics of development of Large Country economy means grasping the impulse of world economic development.
- Second, Large Country economy has significant characteristics different from small country economy. They have analyzed the characteristics of Large Country economy on national territorial area, population size, resources conditions, market potentials, and economic scale, including the differences and diversity of economic development factors of Large Countries, and are gradually coming to the essential characteristics of Large Country economy.
- Third, Large Country economy has the obvious advantages in pushing ahead economic growth. They have come to know the existence of Large Country advantages in the reality of rise of Large Countries, studied the comparative advantage, later-mover advantage and comprehensive advantages from different points of view, and made initial analysis of the internal mechanism of Large Country advantages promoting economic development.
- Fourth, Large Country economy has a development pattern different from small country economy. They have initially cognized the characteristics and unique advantages of Large Country economies, the development strategy patterns determining the Large Country economy are different from those for small country economy, and Large Country economy must choose a development strategy built on this advantage foundation.

However, in general, scholars both at home and overseas have not made sufficient systematic and in-depth research on Large Country economy, and they are not quite clear about many questions, lacking in scientific definition, therefore, the researches on Large Country economy are not systematic, only at shallow level. Specifically, obvious defects can be found in the following aspects:

First, there is no clear boundary and classification for “Large Country”. Some equal “Large Country economy” to “big economic country”, and some equal “Large Country” to “powerful nation”, but no scientific classification criterion and evaluation system has been put forward. When studying the history of rising of Large Countries, many scholars referred some economically and politically powerful countries as “Large Countries”, these countries are not big in area and population, and actually they are “powerful nations”. Some scholars put forth the ideas of “big petroleum country” and “big iron and steel country”, but actually they were talking about “big industrial country” or “big economic country”. A small number of scholars defined “Large Country” or “late developing Large Country”, but the definition seems not complete and specific.

Second, the essential characteristics of Large Country economy advantages have not been well grasped. Superficially, Large Countries have vast national territorial area, fairly large population and rich natural resources, and these are the realistic foundation for the research of economic characteristics of Large Countries. However, there are essential things at deeper levels under these phenomena, for example, the scale advantages and advantages of division of labor derived from the characteristic of “big size”, the adaptability and compatibility resulted from difference and diversity, as well as independence and stability resulted from large scale. In short, difference, large scale and adaptability are critical factors in forming the Large Country economy advantages. But it is a pity that present researches have not realized the compatibility and adaptability in Large Country economy development factors, and have not well grasped the essential characteristics of Large Country economy advantages.

Third, no systematic strategic pattern has been put forth for Large Country economy development. There is obvious unbalance in the development of Large Country economy, therefore, suitable development patterns and strategies must be adopted according to the reality of difference, to effectively promote the coordinated development of regional economy. However, most of the present researches try to pursue for a unified pattern and strategy, neglecting the differences and adaptability of development strategies and patterns. Furthermore, in the research of Large Country economy development in China, scholars always start from certain theories in foreign countries, either intentionally or unintentionally, and then apply this theoretical framework to China, instead of really analyzing the characteristics and development pattern of Large Country economy on the basis of the national conditions of China.

To overcome these defects and make the researches more systematic and deeper, we need to strengthen the research on Large Country economy, mainly on three aspects: the first is to deeply and systematically define and study Large Country

economy on theory; the second is to study deeply and systematically the particularity and universality of Large Country economy; and the third is to study deeply and systematically Large Country economy characteristics and strategic pattern of China. After grasping the above three points, we can further expound and test the basic theories about Large Country economy, and explore on Large Country economy development patterns that suit the national conditions of China.

Notes

1. Adam Smith is the originator of modern economics, and almost all economics theories can be traced to his *An Inquiry into the Nature and Causes of the Wealth of Nations*. For theories of Large Country economy, origin can also be found in his analysis of the relationship between scope of market and division of labor. Refer to: Adam Smith: *An Inquiry into the Nature and Causes of the Wealth of Nations*, the Commercial Press 1972 Edition, page 16.
2. [UK] Alfred Marshall: *Principles of Economics*, the Commercial Press 2005 Edition, page 291.
3. [UK] Arthur Lewis: *The Theory of Economic Growth*, the Commercial Press 2002 Edition, page 12.
4. Although Chandler analyzed the function of scale and scope on economic development from the viewpoint of industries and enterprises, it has reference value to the study of the role of economic scale of countries. Refer to: Alfred Chandler Jr.: *Scale and Scope: the Dynamics of Industrial Capitalism*, Huaxia Publishing House 2006 Edition, page 16–17.
5. [US] Kuznets: *Modern Economic Growth*, Beijing Institute of Economics Publishing House 1989 Edition, page 14, page 262–265.
6. [US] Kuznets: *Economic Growth of Nations*, the Commercial Press 1985 Edition, page 144–152.
7. [US] Hollis B. Chenery, [US] Moises Syrquin: *The Patterns of Development*, Economic Science Press 1988 Edition, page 94–126.
8. Same as [US] Hollis B. Chenery, [US] Moises Syrquin: *The Patterns of Development*, Economic Science Press 1988 Edition, page 107.
9. [US] Chenery, [US] Syrquin: *Industrialization and Growth: A Comparative Study*, Shanghai Sanlian Bookstore, Shanghai People's Publishing House 1995 Edition, page 87–88.
10. Same as [US] Chenery, [US] Syrquin: *Industrialization and Growth: A Comparative Study*, Shanghai Sanlian Bookstore, Shanghai People's Publishing House 1995 Edition, page 101.

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