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China's OFDI Contributes to the Enhancement of Regional Competitiveness along the Belt and Road[1]

Since global financial crisis, the world economy has slowed down. It is an urgent problem to promote global economic recovery and enhance regional competitiveness. The Diamond Model proposed by Michael Porter provides an important clue about how to enhance regional competitive advantages. Through the extension of production chains driven by OFDI, China participates in "One Belt One Road (OBOR)" and the Investment Plan for Europe, and promotes Eurasian cooperation in factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. Based on synergies between "One Belt One Road" initiative and the Investment Plan for Europe, a Regional Diamond Model with OBOR Characteristics comes into being which lays the foundation for Eurasian prosperity and stability in the long term.

Keywords: Diamond Model of NCA, Outward FDI, the Belt and Road, the Investment Plan for Europe

1. Introduction

Since global financial crisis, the world economy has been in the prolonged adjustment process, and some deep-seated and structural problems still have not been solved. In order to optimize resource allocation and strengthen regional economic cooperation, China has proposed "One Belt, One Road" Initiative (OBOR). In September 2013, Chinese President Xi Jinping proposed the initiative of jointly building the Silk Road Economic Belt (SREB) in a speech at Nazarbayev University in Astana, Kazakhstan. And one month later, he also raised the initiative on jointly construction of the 21st-Century Maritime Silk Road (MSR) during a speech to the Indonesian Parliament. Thereafter SREB and MSR are jointly referred to as the one Belt and one Road. On March 28, the National Development and Reform Commission (NDRC) formally

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released vision and proposed actions outlined on jointly building Silk Road Economic Belt and 21st-Century Maritime Silk Road which lays the foundation for connectivity and cooperation among countries along "One Belt, One Road(OBOR)".

Influenced by the global financial crisis and European sovereign debt crisis, EU has experienced low levels of investments which undermine European economic grow and the enhancement of international competitiveness in the long term. It is estimated that the drop in investment accounts for the largest proportion of the fall in GDP between 2007 and 2013.Last year, Jean-Claude Juncker, the Commission's president, launched the Investment Plan for Europe last year which is intended to fuel the EU's economic recovery by adding investment in infrastructure, education, research, innovation, renewable energy and energy efficiency, to meet the long-term needs of economy by boosting competitiveness in strategic areas and to strengthen the dimension of knowledge, human capital and physical infrastructure, and the interconnections. In order to reach above objects, the Investment Plan for Europe will creating an investment friendly environments by removing obstacles to investment, providing visibility and technical assistance to investment projects and making smarter use of new and existing financial resources.

This paper focuses on the significance of China's OFDI on the enhancement of regional competitiveness of the Belt and Road. Under the international intra-product division of labor, countries with different endowments and institutional environments gain distinct stage-specific comparative advantages. Most countries in Central and Western Asia as well as Africa are abundant in natural resources and labor, China is good at manufacturing and processing, and EU excels in innovative activities. According to the theory on national competitive advantage, the enhancement of competitiveness is determined by the synergies of factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. Through the extension of production chains, China's OFDI develops a Regional Diamond Model with OBOR Characteristics which improves regional competitiveness of the Belt and Road.

2. Regional Diamond Model with OBOR Characteristics

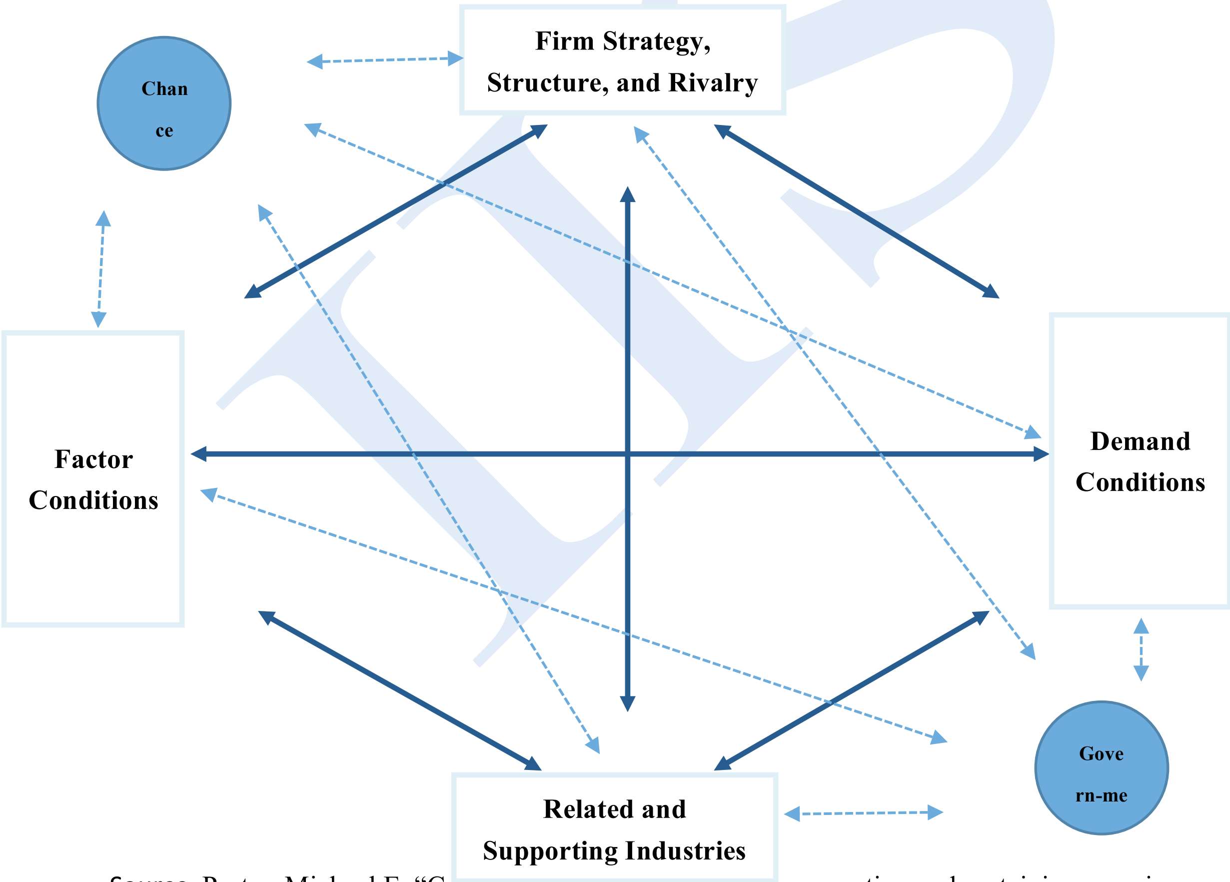
Michael Porter, a Harvard University professor, has developed national competitive advantage (NCA) which is represented visually using a diamond-shaped graphic. The Diamond Model of NCA outlines the framework of four interrelated attributes which determine a firm's innovative capability. [2] The four interrelated determinants are factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. In addition, the government and chance are just viewed as two exogenous parameters which influence the four determinants of the diamond model. Factors can be further divided into basic factors such as raw-material resources and advance factors such as specialized human capital, and the latter are more important than the former. Demand conditions involve customer needs and wants, a company's capacity and growth rate and so on, especially sophisticated buyers prod companies to innovate faster. Internationally competitive related and supporting industries not only deliver the most cost-effective inputs in an efficient, rapid, and sometimes preferential way, but also provide new ideas and technical interchange which speed up the rate of innovation and upgrading. In addition, the modes choice of establishment, organization and management are usually influenced by national circumstances and context, and especially domestic rivalry often spurs innovation of

[2] Porter, Michael E. "Competitive advantage of nations: creating and sustaining superior performance." Simon and Schuster, 2011.

products and processes as well as improvement of quality and service.

However, multinational activities have not been taken into account in Porter's Diamond Model. With trade and investment liberalization and facilitation, the barriers to cross-border movement of factors and goods have been reduced or canceled, the process of regional economic integration has greatly accelerated. Therefore, one country's national competitive advantage are also influenced by the four determinants of other countries. Based on the facts, the expanded diamond models have been developed whereby international flows of factors and goods are formally incorporated into the model. For example, Dunning (1993) views multinational activities as a third exogenous variable except for the government and chance[3];Rugrnan and D'Cruz (1991) propose the Double Diamond Model and North American Diamond based on the Canada-U.S. Free Trade Agreement[4]; Moon, Rugman and Verbeke(1998) develop the Generalized Double Diamond with both domestic and global factors taken into account to assess the global competitiveness of Korea and Singapore. [5]

Figure 1 Diamond Model of National Competitive Advantage

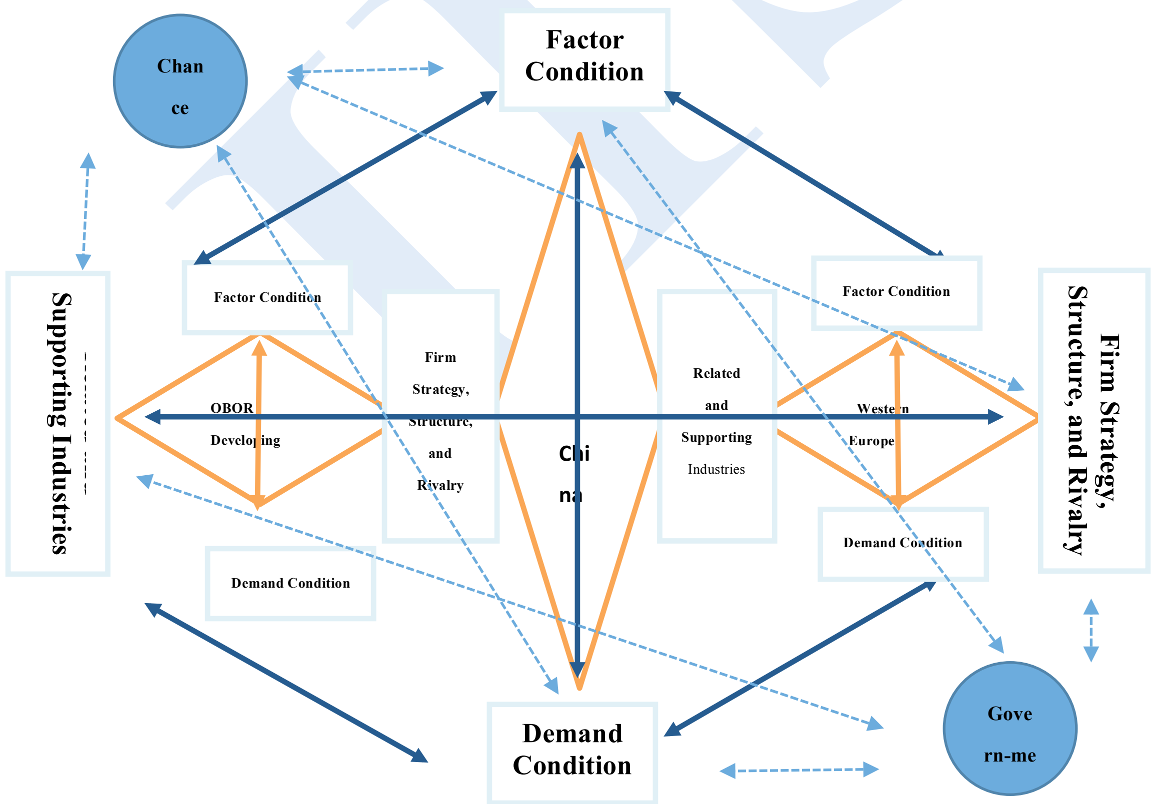


Source: Porter, Michael E. "Competitive advantage of nations: creating and sustaining superior performance." Simon and Schuster, 2011.

3 Dunning JH. "Internationalizing Porter's Diamond." *Management International Review*, 1993, 33(2), pp.8-15.
4 Rugman, A.M., & D'Cruz, J.R. . "The Double Diamond Model of International Competitiveness: Canada's Experience." *Management International Review*, 1993, 33(2), pp. 17-39.
5 Moon,H.C,Rugman,A.M.,Verbeke,A.A. "Generalized Double Diamond Approach to the Global Competitiveness of Korea And Singapore." *International Business Review*, 1998, 7, pp.135-150.

The Belt and Road can develop a Regional Diamond Model of OBOR Competitive Advantage by integrating markets and resources of countries in this region. Expanded Diamond Model of NCA gives the Belt and Road a clue on how to gain regional competitive advantage. The Belt and Road run through the continents of Asia, Europe and Africa, connecting the vibrant East Asia economic circle at one end and developed European economic circle at the other, and encompassing countries with huge potential for economic development. Although many countries in this region simultaneously gain advantage in the four determinants of NCA, they have their own resource advantages and their economies are mutually complementary. The Belt and Road Initiatives will benefit 4.4 billion people accounting for 63％ of the global population, and collective GDP attains $2.1 trillion accounting for 29% of the world's gross output. In Western Europe, there are globally competitive related and supporting industries, specialized factors such as talented personnel, patents and well-known brands, and productive innovation systems to meet sophisticated demands. Most countries in Central and Western Asia as well as Africa are abundant in natural resources and labor, and China has gained strong advantage in manufacturing and processing. In view of above facts, OBOR can develop a Multinational Diamond Model to enhance regional competitive advantage by pooling together their complementary factor conditions, demand conditions, related and supporting industries. In the Multinational Diamond Model, OBOR can enhance competitive advantage based on innovative capability gained in developed countries and resources obtained in developing countries.

Figure 2 Regional Diamond Model with OBOR Characteristics



Source: The figure is originated by author.

3. The Driving Forces for OBOR Diamond Model

All-dimensional, multi-tiered and composite connectivity networks lay foundations for the Regional Diamond Model of OBOR Competitive Advantage. The integration of the above four determinants requires orderly and free flow of factors, highly efficient organization of production chains, deep integration of markets and economic policy coordination among countries along the Belt and Road. In order to attain the goal, it is necessary for countries along the Belt and Road to set up all-dimensional, multi-tiered and composite connectivity networks which are policy communication, connecting via infrastructure, facilitation of investment and trade, financial support and people-to-people contact.[6] Intergovernmental policy communication and people-to-people contact not only directly contributes to development of OBOR Diamond Model by promoting common interest, trust and mutual consensus, but also indirectly enhances OBOR competitive advantage by creating an enabling environments for other determinants. Connecting via infrastructure and facilitation of investment and trade benefit expansion of demands and optimization of factor allocation by promoting orderly and free flow of factors and products. Finance is one of the key elements supporting all the determinants of OBOR Diamond Model, and especially vital to infrastructure investments and organization of production chains along the Belt and Road.

Infrastructure construction and required financial support are vital but tough to OBOR connectivity networks. As facilities connectivity bridges regional trade and investment, and helps countries in this region get access to larger market, various resources and more productive production chains, it is a priority area for implementing the OBOR Initiative and at the heart of regional economic architecture. Many developing countries in Asia and Eastern Europe, even some developed countries in Western Europe who are beset by European debt crisis, need to establish new ports or related transport infrastructure or to upgrade existing facilities, but they are short of financing, and have limited access to capital and technology as regional or international lending institutions usually impose foreign sanctions or stringent governance. According to the Asian Development Bank, annual gap between the supply and demand for infrastructure spending in Asia is about $800 billion.

China will play constructive role in financial support and integration of regional economy. On the one hand, on the basis of respecting each other's sovereignty and security concerns, China is keen on strengthening the partnership with these countries in order to expand the infrastructure network, actively participates infrastructure construction along the Belt. China has launched initiatives and established together with other countries the Asian Infrastructure Investment Bank (AIIB), New Development Bank (NDB) and the Silk Road Infrastructure Fund, Shanghai Cooperation Organization Development Fund, and raised funds for infrastructure by issuance of RMB bonds. On the other hand, China pivot role in GVCs helps drive the regional production networks along the Belt and Road. In global production networks, China's capability in manufacturing and processing will help align and coordinate the development strategies of the countries along the Belt and Road through the extension of production chains, which helps deepen regional economic integration, boost cross-border trade and financial flows along the Belt and Road.

[6] Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road, http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html

4. China's OFDI and the Development of OBOR Diamond Model

In global production networks, the international division of labor is beyond industry and into intra-product. Under the circumstances, China's OFDI participates in "One Belt One Road (OBOR)" and the Investment Plan for Europe, and promotes Eurasian cooperation in factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry.

4.1 Build Economic industrial parks and Economic Corridor in Other Developing Countries

There are enormous potential for cooperation between China and Eurasian developing countries in manufacturing and processing segments of the Belt and Road production networks. In general, there are gaps in factor cost, managerial skill, and technical knowledge between China and countries at lower stages of economic development along the Belt and Road. On the one hand, in Central and Western Asia as well as non-EU Eastern Europe, many countries are abundant in natural resources, but insufficient in capital, human resources and infrastructure. On the other hand, China is regarded as the Manufacturing Factory of the Globe in global production networks, but natural resource per head is much lower relative to most countries in the world. Especially, the reserve of coal, oil, natural gas, mineral resources and so on cannot meet the tremendous demand of a world factory at all. What's more China has already entered an aging society with lower GDP per capita, and rising labor costs and aging undermine China's competitiveness of manufacturing and processing sectors.

China's Outward FDI actively takes part in the construction of cooperation platforms for which determinants of competitive advantage play the role. As OBOR Diamond Model enhance regional manufacturing competitiveness by the integration of factors conditions, demand conditions and related and supporting industries which relies on regional production networks, China's OFDI focuses on transfer of production capacity and the construction of cooperation platforms such as economic industrial parks. On land, China and concerned countries jointly build a new Eurasian Land Bridge, and develop China-Mongolia-Russia, China-Central Asia-West Asia and China-Indochina Peninsula economic corridors based on international transport routes and core cities along the Belt and Road. At sea, China and concerned countries collectively construct the China-Pakistan Economic Corridor and the Bangladesh-China-India-Myanmar Economic Corridor on the basis of major sea ports and transport routes.[7]

4.2 Participate in the Investment Plan for Europe

The Investment Plan for Europe is intended to boost EU competitiveness, but faced with huge financial gap. According to European Commission estimations, current investment levels in the EU are € 230 to € 370 billion below the historical norm, and EU should have invested an additional € 540 billion in 2012-2013 in order to keep up with the pace of investment in the U.S. , there will be at least € 315 billion of additional investment in next three years, and the initial investment provided by the EU and the European Investment Bank will be €21 billion, but up to

[7] Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road, http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html

now just nine EU Member States have announced contributions to a little more than one tenth of the total Investment Plan, the plan still requires additional funding from other investors to realize a multiplier effect of 1:15 in real investment in the economy.

China's participation in the Investment Plan will further enhance OBOR competitiveness by full utilization of European advanced factors as well as internationally competitive related and supporting industries. In order to enhance connectivity between Asia and Europe, China has invested and upgraded the European various facilities such as Greek Piraeus port and the railway projects in CEE. According to the statistics of Rhodium Group, Chinese investment in European companies has reached US$ 18 billion in 2014. On 28 September 2015, the EU and China agreed on the EU-China Connectivity Platform to promote cooperation in areas such as infrastructure, equipment, technologies and standards, and China announced its intention to contribute to the Investment Plan for Europe. The synergies between "One Belt One Road" initiative and the EU's connectivity initiatives will help integrate Eurasian market which creates enormous demands, enrich advanced factors such as specialized human capita, brand, management know-how and technology, and promote cooperation between upstream and downstream industries.

5. Concluding Comments

The Economics of Globalization enriches and enlarges the Diamond Model of NCA proposed by Michael Porter. In a closed economy, the four interrelated determinants which are factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry determine National Competitive Advantage. In addition, the government and chance are just viewed as two exogenous parameters which influence the four determinants of the diamond model. In an open economy, the flow of factors and international intra-product division of labor enrich and enlarge above four interrelated determinants.

China's outward FDI play a pivot role in the development of Regional Diamond Model with OBOR Characteristics. China's outward FDI links "One Belt One Road" initiative to Investment Plan for Europe. The Belt and Road runs through the whole of Eurasia, it borders on the Asia-Pacific Economic Circle on the East, and enters the European Economic Circle on the West. Through outward FDI, China not only contributes to the construction of economic industrial parks and economic corridor in developing countries along the Belt and Road, but also takes part in the Investment Plan and enhances the cooperation in infrastructure, equipment, technologies and standards.

The OBOR Diamond Model improves the competitiveness along the Belt and Road. The Belt and Road is intended to promote further economic cooperation. SREB and MSR are a network of regional infrastructure projects comprising overland road and rail routes, oil and natural gas pipelines, ports and other coastal infrastructure projects. Based on such infrastructure projects, SREB and MSR build up the platform for policy coordination, financial integration, trade liberalization, and people-to-people connectivity across countries along the Belt and Road. In addition, the synergies between "One Belt One Road" initiative and the Investment Plan for Europe will help create an enormous market, pool rich natural resources and labor in Central and Western Asia as well as non-EU Eastern Europe, strong manufacturing and processing capabilities in China and excellent innovative capabilities in Western Europe, and integrate related and supporting industries along regional production chains.

Reference:

World Economic Forum. “The Global Competitiveness Report 2014-2015.” http://www.weforum.org/reports/global-competitiveness-report-2014-2015

Kraemer, Kenneth, Greg Linden, and Jason Dedrick. "Capturing value in Global Networks: Apple’s iPad and iPhone." University of California, Irvine, University of California, Berkeley, y Syracuse University, NY. http://pcic. merage. uci. edu/papers/2011/value_iPad_iPhone. pdf. Consultado el 15 (2011).

Porter, Michael E. “Competitive advantage of nations: creating and sustaining superior performance.” Simon and Schuster, 2011.

Dunning JH. “Internationalizing Porter's Diamond.” Management International Review, 1993, 33(2), pp.8-15.

Rugman, A.M., & D’Cruz, J.R. . “The Double Diamond Model of International Competitiveness: Canada’s Experience.” Management International Review, 1993, 33(2), pp. 17-39.

Moon,H.C,Rugman,A.M.,Verbeke,A.A. “Generalized Double Diamond Approach to the Global Competitiveness of Korea And Singapore.” International Business Review, 1998, 7, pp.135-150.

Li Guoxue. “Cross-Border Institutional Matching and Upgrading of Industrial Structure：An Explanation on Outward FDI from Developing Countries.” Journal of Central University of Finance & Economics, 2015, 6, forthcoming.

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