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How Special Economic Zones Influence Economic
Development in East Asia:
A Comparative Study on the Impact of Zouping National
Economic and Technological Development Zone and
Daegu-Gyeongbuk Free Economic Zone
on the Local Economic Development during the Era of
Financialization

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1 INTRODUCTION

Special economic zones (SEZs) are greatly welcomed by the governments worldwide. SEZs are believed as an effective tool for promoting local economic development (Zeng 2011, 3; Farole 2011, 7; Farole and Akinci 2011, 4; Wang 2013, 1). It was reported that, by 2015, more than 100 countries had established and operated about 4,300 SEZs, and a growing number of new zones were being under construction (Farole and Akinci 2011, 19; “Not so Special” 2015). These countries operating or intending to run SEZs include both developing countries and developed countries, and SEZs spread around almost every corner in this world. By 2013, a total number of 74 free zones had been set up within the European Union (Jong 2013, 1). And, a new wave of SEZs is sweeping Sub-Saharan Africa. A growing number of African countries have operated or planned to establish SEZs or industrial parks (Fruman and Zeng 2015). Thomas Farole, a senior economist at the World Bank, made such a conclusion, which can accurately describe the attitudes of the majority of the countries in the world towards SEZs, stating that “any country that didn’t have [an SEZ] ten years ago either does now or seems to be planning one” (“Political Priority, Economic Gamble” 2015). Therefore, most countries in the world expect to develop their economies by means of the establishment of one or several SEZs around the countries.

Over more than past 35 years when the *Chinese Reform and Opening-up Policy* (Chinese: 改革开放; pinyin: gǎigé kāifàng) was launched, Chinese SEZs play a significantly strategic role in promoting Chinese economic development. In 1979, the four SEZs, namely Shenzhen, Zhuhai, Shantou and Xiamen SEZs, were established for an experiment of market liberalization and for the attraction of foreign investment (Wong 1987, 28; Spence 1999, 636, 638; Zeng 2011, 34; Leong 2013, 550-51). After 35-year economic development, Shenzhen, for example, has developed from a small fishing village to a knowledge metropolis, which is home to numerous high-technology companies as well as the Shenzhen Stock Exchange (Carrillo et al. 2014, 117; Berg and Björner 2014, 93). Also, China became the second largest economy and the first exporter in the world after 35 years (Wu 2015, 314). Hence, China is seen by many scholars as “the world’s foremost success story in using SEZs to build up industrial capacity” (Bräutigam and Tang 2011, 30). Even so, not all the SEZs in China were successful. Some of the SEZs in China were mismanaged (Spence 1999, 696). Moreover, due to the decline of the global trade after the 2008 financial crisis, China is seeking economic transformation in order to reduce the reliance on exports.

South Korea had founded various types of SEZs since 1970. The first free export zone was established in Masan in 1970 and then was founded in Iksan in 1973 (Gunsan Free Trade Zone Office 2007). Afterwards, foreign investment zone, free trade zone and free economic zone (FEZ) were respectively founded in 1998, 2000 and 2003 (Song 2015, 1). Notwithstanding trivial differences, all of the three types of zones essentially aim to attract foreign investment and boost domestic economic growth after the Asian Financial Crisis of 1997 (Song 2015, 1-2; Hart-Landsber 2005). The first FEZ was Incheon FEZ, which started to run in 2003. Moreover, South Korea Central Government decided to successively found another seven new FEZs in 2004, 2008 and 2013 (FEZ Planning Office 2015). The Korean Free Economic Zones (KFEZs) have attracted a total amount of 9.96-billion-US-dollar accumulated foreign direct investment by the end of 2014 (FEZ Planning Office 2015). In the same way, the Park Geun-hye Administration is striving to transform the exported-led economy to a creative economy by the drive of the innovation clusters in the FEZs (Ministry of Strategy and Finance 2013).

Japan also plans to resuscitate the stagnant national economy by the establishment of SEZs. In order to get rid of the economic stagnation since the early 1990s, Prime Minister Shinzo Abe proposed Abenomics on December 26, 2012 (Hayashi 2014, 23). Abenomics refers to a set of economic policies put forward by Abe, which consist of “three arrows”, namely, “unconventional monetary policy, expansionary fiscal policy, and economic growth strategies to encourage private investment” (Fukuda 2015, 1). The third arrow tendered the establishment of special economic zones so as to revitalize Japanese economy (Mochizuki 2013). And, he eventually announced the setting up of six new SEZs in May 2014 (Foster 2015). However, the actual impact of these SEZs on Japanese economy may take longer to come out.

Although the governments in the world reach a consensus that SEZs are able to promote local economic development, the debates over the role of SEZs in boosting local economic growth never ends in academia. A large number of economists prefer fully liberalizing economy nationwide to granting a set of less strict regulations or preferential policies within a small and finite economic zone (Leong 2013, 565), whereas some scholars and policymakers such as Thomas Farole point out that the full liberalization of economy in a state, particularly in a developing country, is not always an optimal solution (Farole 2011, 1-2). Due to the lack of mature experience to operate a capitalist market, developing countries can take an economic and political attempt within a SEZ first and promote the entire nation afterwards if this reform is workable. Therefore, SEZs can elude market failure (Farole 2011, 1-2). The discussions on whether the first view is more preferable than the other one still continue, but, as mentioned above, the SEZs are all the rage among governments.

However, an increasing trend in financialization in the world makes this topic more tangled, and the discussions concerning the relationship among SEZs, economic development and financialization seem to be vacant so far. One significant impact of financialization is that, under the era of financialization, the management of SEZs become more complicated. The era of financialization refers to the period in which the financial industry can partially or fully determines economic growth. This tendency emerged from the 2008 financial crisis. The financial crisis of 2007–2008 exposed and accelerated a tendency that had been increasingly captured by the term “financialization” (Epstein 2005, 3). More details on financialization will be explained in the next chapter. Moreover, it is necessary to illustrate the differences between the period of pre-financialization and the era of financialization. For instance, before 2008, stock market was not a main financing channel, but after 2008, an increasing number of firms financed themselves through stock markets. The process of financialization, however, was not completed all of a sudden; instead, the transition was very smooth and languid. In order to make this research more convenient, this thesis sets the year of 2008 as the point of time in this transformation, because the year of 2008 was the point when the financial crisis started. Numerous economists considered the 2008 financial crisis as the worst financial crisis since the Great Depression of the 1930s (Lin et al. 2014, 1; Bordo 2014, 103; Kindleberger and Aliber 2011, 1). This crisis threatened the collapse of large financial institutions and led to the 2008–2012 global recession and the European sovereign-debt crisis. Because this crisis was a liquidity crisis, a negative financial situation characterized by a lack of cash flow in the global financial system heavily influenced the companies in the world, including those in the SEZs. Furthermore, due to the deep degree of globalization and financialization, it is impossible for the SEZs worldwide to prevent any negative influence of the 2008 financial crisis from themselves.

Since the majority of countries in the world continue building more SEZs (Farole and Akinci 2011, 19; “Not so Special” 2015) and since many of the SEZs are virtually not successful (Zeng 2011, 7), a study on the impact of SEZs on economic development during the era of financialization is of greatly pragmatic value. After the relevant literatures on this topic are reviewed, the existing academic readings do not answer the following questions. First, a

comparative study on a special economic zone in a medium city with scant natural resources and a marginalized location is unavailable. Second, there is no research with respect to the comparison of SEZs under the period of pre-financialization with those during the period of financialization. Third, few literatures analyze why some SEZs are efficient or unprofitable. One typical book analyzing the successful and unsuccessful lessons of SEZs is *Special Economic Zones in Africa* written by the senior economist Thomas Farole. However, those works do not cover East Asian region. Last, some scholarships on the subject of the comparative study on SEZs are not updated after the 2008 financial crisis. In light to the reasons listed above, a study on this topic is called for.

In this thesis, the research question is how SEZs promote local economic growth or development in a landlocked region that is disadvantaged by a commonplace location and a relatively poor natural resources. After a comparative study on the performance of each SEZ, this paper attempts to answer a sub-question concerning how the financial sector influences local economic development in such an area where a SEZ is located. Both of these two questions serve for revealing the ultimate question, namely, whether and why it is (or, it is not) still a realistic idea to transplant a successful SEZ model to a second region with a similar circumstance.

This paper will study two SEZs in East Asian region. After deliberately selecting the SEZs in the East Asian region, we choose two SEZs in China and South Korea, namely, Zouping National Economic and Technological Development Zone (Zouping National ETDZ) and Daegu-Gyeongbuk Free Economic Zone (DGFEZ) due to their like surroundings. These two SEZs are chosen according to these standards: first, the SEZs should be located in a small or medium size region; second, the regions of the SEZs was a historically poor agricultural area; third, the locations in which the SEZs are situated should be easily marginalized; last, the SEZs are set in a landlocked region. In line with these four basic criteria, Zouping National ETDZ and the DGFEZ are picked out.

This thesis includes the following chapters. Chapter 1, as shown above, introduces the general background concerning SEZs, the significance of this comparative research as well as the research questions of this thesis. Chapter 2 will explain several new terms and will discuss the relevant theories, such as the theories of economic development and the theories of financialization. Chapter 3 is supposed to elucidate the methodology on the basis of a set of the theories concerned. The facts and data will be applied and be analyzed in Chapter 4. Chapter 5 is the part of comprehensive analysis, in which this thesis attempts to analyze the results that we obtained from Chapter 4 and to answer these three research questions. The last chapter will review the conclusions of this master thesis.

2 TERMINOLOGY AND THEORY

2.1 TERMINOLOGY

2.1.1 Special Economic Zones

2.1.1.1 Definition

Not only the definitions of SEZs but also the titles of SEZs vary from country to country. First of all, the definition of SEZs can be explained in several ways. It depends on which policy applies to a SEZ. There is no standard definition for this term. The definition could be very vague, but sometimes it could be very specific. Each country gives this term their own definition. According to the definition given by the World Bank, “SEZs are geographic concentrations of firms. They are created to provide better infrastructure and R&D, and they offer government incentives not found outside the zones. They are often established by direct industrial policy intervention to promote regional economic growth, where state policy offers incentives to attract anchor companies and other firms to the same location.” (The World Bank 2009, 8). However, this definition regulated by the World Bank cannot fully cover all the essential aspects of this term. Even, within the World Bank, some experts have different opinions. Zeng (2011, 4), the senior economist of the World Bank basically agreed with this definition provided by the World Bank, but he further added that the basic concept of a special economic zone include several specific characteristics: “(a) it is a geographically delimited area, usually physically secured; (b) it has a single management or administration; (c) it offers benefits based on physic location within the zone; and (d) it has a separate customs area (duty-free benefits) and streamed procedures”. Therefore, he concluded that “an SEZ normally operates under more liberal economic laws than those typically prevailing in the country” (Zeng 2011, 4).

However, some scholars argued that this sort of definition interpreted by the World Bank was commonly seen, and that it was not accurate at all. Carter and Harding maintained that they would support this definition if it was two decades ago, suggesting that SEZs were not necessarily clearly defined geographic areas in the 21st century. In some countries, such as Togo, Senegal, Cameroon and Nigeria, a single enterprise can be treated as a geographically defined area, which is equivalent to a SEZ. These firms can be granted the privileges and benefits that once are enforced in a SEZ. In some cases, SEZs are established for a specific need of clearly defined industries or some particular activities. The second point, which is obviously distinct from the common definition of SEZs, is that it is not always true that SEZs are initiated or operated by government. A large quantity of SEZs worldwide are founded and run by the mode of public-private partnership. Many of them even are permitted to govern by a private party. Third, not all SEZs place the attraction of foreign direct investment (FDI) as one of their primary goals. On the contrary, some specialized SEZs provide preferential treatment to the companies that lay stress on their lucrative domestic markets. These domestic firms concerned normally purchase components and assembly kits that are not taxed, and only need to pay particular import duties and taxes after selling their products into the domestic market. One of the purposes of setting up this type of SEZ is that host countries intend to seek skills and technology transfer, namely, spillover effects. However, such an expected goal usually falls through. (Carter and Harding 2011, 3)

As a result of the reasons above, it is very difficult to give a universally accepted definition for the term *SEZ*. Reviewing different definitions of SEZ, we define this term by this way. The term *SEZ* in this thesis denotes any geographically delimited area (such as an enterprise or an economic zone), usually governed by a particular regulatory management, offering preferential

policies not found outside for enterprises to locate or which are located within this specific area, with intention of promoting economic development. Carter and Harding (2011, 4) adopted a similar definition for SEZ, but did not specially underscore “the intention of promoting economic development”. Hence, it is necessary to explain the definitions and correlation of SEZ, the definition of economic development and the definition of financialization in Section 2.2.

2.1.1.2 Types of SEZs

The term *SEZ* is difficultly defined for the reason that various types of zones are built worldwide. Due to distinct objectives, markets and economic activities, a large variety of zones are instituted in the world with different titles, such as free trade zones, export processing zones, free ports, enterprise zones, single factory Export Processing Zones, multi-factory EPZ (commonly known as industrial parks) and so on.

Even, the titles for an identical type of SEZ may vary from country to country. For example, the DGFEZ is a FEZ named by South Korea Central Government, but the basic definition and purpose of the DGFEZ is nothing more special than the zones in China and Japan, such as Shenzhen Special Economic Zone and the National Strategic Special Zone for the Greater Tokyo Area (China Internet Information Center 2000; FEZ Planning Office 2015; Tokyo Metropolitan Government 2015). Hence, a same type of SEZ may have dissimilar names in different countries.

Compared with the classification of SEZs in South Korea, the classification of SEZs in China are more complicated. The titles of SEZs in China are suggested to consider some certain background. Dr. Kwan-Yiu Wong (1987, 27), the Professor of the Department of Geography and Resource Management at the Chinese University of Hong Kong, concluded that:

With the gradual evolution of the SEZs in the past few years, it becomes apparent that the Chinese zones do not belong to any of the categories within the family of free zones now existing in the world. Rather, the SEZ seems to stand on its own as a separate member.

From his perspective, Chinese SEZs range from customs-bonded warehouse (and factories) and export processing zones to free ports or comprehensive free trade zones (Wong 1987, 27). Three new terms “Export Processing Zone”, “Free Port” and “Free Trade Zone” need to be explained here. “Export Processing Zone” (hereafter: EPZ) means an area “offering special incentives and facilities for manufacturing and related activities aimed mostly at export markets” (Akinci and Crittle 2008, 10). Akinci and Crittle (2008, 10) suggested that the EPZs in the world usually could be found in two forms: traditional EPZ model and Hybrid EPZ model. The phrase “Traditional EPZs” denotes an area exclusively for export-oriented enterprises. By contrast, Hybrid EPZs consist of a general zone open to all the industries and a separate zone for export-oriented undertakings (Akinci and Crittle 2008, 10). And, FEZ, also known as commercial free zone or free commercial zone, refers to a small-scale and duty-free area providing “warehousing, storage and distribution facilities for trade, transshipment and re-export operation” (Akinci and Crittle 2008, 10). Whereas, the term “Free Port”, as Akinci and Crittle (2008, 10) argued, implies a much broader concept. In a free port, any economic activities, such as tourism, retail sales and residence, can be permitted. As a result, the size of free port usually is much larger (Akinci and Crittle 2008, 10). From the definitions of these term, we can learn that the SEZs in China are more diverse and are usually mixed with one or several different types of SEZs. Therefore, the classification of Chinese SEZs is a complex task.

In the context of China, SEZs normally exclusively indicate six specific zones, namely, Shenzhen SEZ, Zhuhai SEZ, Shantou SEZ, Xiamen SEZ, Hainan SEZ and newly arrived Kashi SEZ (China Development Gateway 2015). However, in this master thesis, the term SEZ is subject to its own definition that is given in the last section. The term SEZ here refers to any type of SEZs.

According to the official explanation, the conception of FEZs contains one more feature than other types of SEZs in South Korea. The basic definition of FEZs is “an area where business and economic activities of foreign investors are guaranteed by promoting systems and conditions that differ from other areas” (Incheon Free Economic Zone 2014). Moreover, according to the official definition of FEZs, besides this essential definition, an additional feature of FEZs, which distinguishes FEZs from other types of SEZs, is “an international city that offers free economic activities, high quality administrative services and a convenient living environment” (Incheon Free Economic Zone 2014). The conception of FEZs underlines not only preferential treatment but also human environment.

Due to limited space, we will not further discuss the definitions of other types of SEZs. This thesis merely mentions the definitions of two types of SEZs, which are relevant to this case study. Zouping National ETDZ and the DGFEZ are the objectives of this research. They respectively represent two types of SEZs. Their more specific definitions will be examined in Section 4.1.2.

2.1.2 Economic Development

Economic development is the process through which a country or region achieves economic growth as well as structural transformation of its economy. Economic development may reflect the underlying qualitative, structural and institutional changes that are needed to expand a nation’s potentials and capabilities in the utilization of scarce economic resources. However, economic development is not economic growth. Often, they are interchangeably used by some researchers. Admittedly, these two terms are closely related but there is an obvious distinction between them. Economic growth is defined as the increase in an economy’s real gross domestic product (real GDP) and income. Real GDP means the total output of goods and services of an economy during a period of one year (Ezeala-Harrison 1996, 1). Besides, with respect to the concept of economic growth, the increase in the size of population is not taken into account before the rise of classic economics (Robbins 1970, 4). Ezeala-Harrison (1996, 3) argued that “economic growth implies in output and income has been consistently maintained by all aspects of the definition”.

Economic development accompanies economic growth. Where there is no economic growth, there is no economic development. However, where there is economic development, there must be economic growth. The reason behind this argument is that, besides the essential component “economic growth”, economic development also includes some ethically defined goals. Todaro and Smith (2012, 21) suggested that at least three basic components served as the conceptual basis and practical guideline for the notion of economic development, which were sustenance (the ability to meet basic needs), self-esteem (to be a person), and freedom from servitude (to be able to choose). Hence, economic development is composed of economic growth and three ethically defined goals.

2.1.3 Financialization

There is no common definition on financialization so far. The discussions concerning financialization involved numerous researchers. They did not reach a consensus on how to

define financialization, but they merely had used this term to describe one or some aspects of financialization. Therefore, a cohesive view on the definition of financialization is vacant.

However, several scholars attempted to define the term *financialization* since 1994 and proposed their own definitions for financialization. Kevin Phillips, who created the term “financialization” and who first carried out this concept in his book *Boiling Point* in 1993, defined it as “a prolonged split between the divergent real and financial economies” in his 1994 book *Financialization of America* (Foster 2007, 11). The new definition of this term given by him denoted “a process whereby financial services, broadly construed, take over the dominant economic, cultural, and political role in a national economy” (Phillips 2006, 268).

Greta Krippner, one of the earliest researchers discovering the phenomenon of financialization, had attempted to summarize various definitions of financialization. As she summarized, there were four main types of definitions that could be found in the present literatures. Some scholars defined the term *financialization* as the ascendancy of “shareholder value” as a mode of corporate governance. From some researchers’ perspective, *financialization* meant the increasing preeminence of capital market financial systems over bank-based financial systems. Some experts followed Austrian-born Marxist economist Rudolf Hilferding’s idea, which could date back to the beginning of the 20th century, supporting that the term *financialization* indicated the increasing political and economic power of the rentier class. For some writers, *financialization* denoted the explosion of financial trading with the proliferation of new financial instruments. Krippner herself defined the term as “a pattern of accumulation in which profit making occurs increasingly through financial channels rather than through trade and commodity production” (Krippner 2005, 174). “Financial” here referred to the activities that was relevant to the provision or transfer of liquid capital in expectation of future interest, dividends or capital gains (Krippner 2005, 174-75). However, in Krippner’s (2011, 27) new book *Capitalizing on Crisis: The Political Origins of the Rise of Finance*, she slightly modified the previous definition, thereby defining the term *financialization* as “the growing importance of financial activities as a source of profits in the economy”.

However, Gerald Epstein, the Chair of Department of Economics at the University of Massachusetts Amherst, held a slightly different opinion with other scholars’ definitions. He pointed out that “all these definitions capture some aspect of phenomenon we have called financialization”, arguing that “financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (Epstein 2005, 3).

Another scholar questioned Epstein’s view. Palley, once serving as the chief economist for the US–China Economic and Security Review Commission, casted doubt on the accuracy and general applicability of the definition on financialization given by Epstein. Palley (2007, 3) questioned that “the paper focuses on the U.S. economy, which is where financialization seems to be most developed.” “The paper” here indicates Epstein’s paper *Financialization, Rentier Interests, and Central Bank Policy*, and the definition of financialization in this paper is later included in his book *Financialization and the World Economy* published in 2005. However, considering the increase in rentier income share, Palley does not fully oppose to Epstein’s definition regarding financialization. Palley (3) further added that “judging by the increase in rentier income shares, financialization appears to have infected all industrialized economies”. Hence, he slightly modified the definition and gave the definition of financialization that “financialization is a process whereby financial markets, financial institutions, and financial elites gain greater influence over economic policy and economic outcomes” (2).

In terms of this thesis, the term “financialization” particularly refers to the process whereby non-financial corporations (NFCs) increasingly rely on financial markets, financial institutions, and financial elites. The term “NFCs” here indicates the companies that are mainly engaged in financial services sector. This term is narrowly defined in this thesis for the reason that this paper merely studies one of aspects of financialization: how the enterprises in the SEZs react in the era of financialization. Hence, it is not necessary to apply a broad and comprehensive definition here.

2.2 THEORIES

2.2.1 Overview of the Relevant Theories

This master thesis is involved with two theories. The first related theory refers to the theories of economic development, including classic theories and contemporary theories, which can explain how and why SEZs can promote regional economy. The second theory indicates the theories regarding financialization, because this thesis will answer the 2nd research question of how the financial sector influences local economic development.

A variety of theories, models and arguments are in existence in academia, which attempt to explain why and how a locality can develop. Since the academia does not reach a common view, this thesis merely review the major theories of economic development, including the notion of these theories, the origins, the challenges for these theories and the relevance with the other theories. The classic theories provide four major types of economic models. And, the contemporary economic theories contribute two kinds of salient ideas and arguments in respect of economic development. This thesis will start from the discussions of these economic models.

2.2.2 Theories of Economic Development

2.2.2.1 The Linear Stages of Growth Models

These early models, which were carried out in the early years after the World War II, avowed that the injections of capital into a region are able to promote rapid economic growth (Giang and Low 2014, 16). According to the definition of “injections of capital” given by the Organisation for Economic Co-operation and Development (OECD) (2008, 63), this term, commonly called as capital injection, refers to “any payment from government to a public corporation having the characteristics of either a capital transfer or a financial transaction in national accounts”. The transactions may be described in public accounts as “investment grants, capital grants, commutation grants, loans, equity injections, acquisition of share capital or public dividend capital”. And, more normally, such injections are made in cash. (OECD 2008, 63). The definition “capital injection” needed to be mentioned here, because “capital injection” includes investment, one of many types of capital injection. More significantly, among these early models, two noticeable models, which are Rostow’s stages growth model and the Harrod-Domar growth model, emphasized that investment played an essential role in propelling economic growth in a locality.

Rostow’s stages growth model placed an emphasis on another view that the transition from underdevelopment to development would inevitably undergo five stages, namely, the period of traditional society, the transitional period for preparing for economic take-off, the period of take-off, the period of preparing to become a mature society and the period of the mass consumption society (Giang and Low 2014, 16). However, the big challenge for Rostow’s stages growth model is that, in reality, the development process is very nonlinear. Rostow assumed that every country has an identical necessary conditions and unexceptionally develop their economy stage by stage. However, some economists put forward other arguments, which

can be classified as two types. First, in term of a quantitative analysis, because the proportions in which labor, capital and skills can be combined vary from sector to sector and because this model overlooks these factors that are mentioned in the first clause, the change in factor supplies led to a systematic shift in comparative advantage when per capita income increases (Chenery 1960, 625). Second, from the perspective of a qualitative research, economies could skip one or some stages, stagnate in one particular stage or even may regress (Giang and Low 2014, 16).

The second growth model is the Harrod-Domar growth model. Todaro and Smith (2012, 111) defined the Harrod-Domar growth model as “a functional economic relationship in which the growth rate of gross domestic product depends directly on the national net savings rate and inversely on the national capital-output ratio”. “Net savings ratio” means a proportion of disposable national income, and “capital-output ratio” is a ratio showing the units of capital required to produce a unit of output during a given period (112). The problem of this model is that it does not take into account two key components of economic growth, labor force growth and technological progress. It is not always true that labor can be hired as needed in a given proportion to capital investment in a developing country. And, the role of technology in fostering economic growth is overlooked. In reality, technological progress can contribute to more GDP growth for a given level of investment (113).

2.2.2.2 Structural Change Models

Structural change models describe “the mechanism by which underdeveloped economies transform their domestic economic structures from a heavy emphasis on traditional subsistence agriculture to a more modern, more urbanized, and more industrially diverse manufacturing and service economy” (Todaro and Smith 2012, 115). The theories on structural change models are popular during most of the 1960s and early 1970s (Giang and Low 2014, 16). Among these similar models, Giang and Low (2014, 16-17) recommended Lewis two-sector model and Chenery’s structural change and patterns of development as the two typical structural change models.

Lewis two-sector model is “a theory of development in which surplus labor from the traditional agricultural sector is transferred to the modern industrial sector, the growth of which absorbs the surplus labor, promotes industrialization, and stimulates sustained development”. “Surplus labor” in the notion of the Lewis two-sector model theory indicates “the portion of the rural labor force whose marginal productivity is zero or negative” (Todaro and Smith 2012, 115). Although it seems to be outdated after early 1970s, economists still apply it to study the recent growth experience in China and abundant labor forces in developing countries (115). However, for many other cases, some Lewis’ assumptions are invalid. One obvious problem for this model, for example, is that, Lewis idealized the assumption that surplus labor is always available in rural areas and the workforce can always have a job in urban areas. Todaro and Smith (119) pointed out that it was proven by most researchers to be true that surplus labor was scant in rural areas except for rural China and a few other developing countries.

The patterns of development analysis of structural change is a theory of identifying “characteristic features of the internal process of structural transformation that a typical developing economy undergoes as it generates and sustains modern economic growth and development” (Todaro and Smith 2012, 120). Both Lewis two-sector model and the patterns of development analysis of structural change underline “the sequential process through which the economic, industrial, and institutional structure of an underdeveloped economy is transformed over time to permit new industries to replace traditional agriculture as the engine of economic growth” (Giang and Low 2014, 17-18). However, the differences among Lewis two-sector

model, the linear stages of growth models and the structural change model is apparent. Expect for the partial objection suggested by the structural change model, the other two models believe that growing savings and investment jointly promote economic growth in an area. The structural change model supports that increasing savings and investment, as two key preconditions of economic growth, may or may not lead to economic growth. To put it simply, when an economy develops, its economic structure will inevitably be changed. Hence, all economic functions cooperatively determine economic growth, such as the changes in consumer demand, international trade, resource use, urbanization and so on.

Besides, the structural change models assume that the pattern of development is similar in all countries and can be identifiable. However, the founders of the structural change models such as Chenery, Taylor and Syrquin demonstrated from their researches that, since each country has particular set of factors, such as the size of a country, the relevant policies and so on, the pattern of development may differ among countries (Giang and Low 2014, 17-18).

2.2.2.3 International Dependence Models

The “international dependence models”, as an extension of Marxist theory, was widely acceptable in the 1970s and early 1980s. Its main proposition is that “underdevelopment exists because of the dominance of developed countries and multinational corporations over developing countries”. It means that the poor countries have to rely on the market and capital owned by developed countries, but they can only receive a small portion of the rewards from the unequal exchange. (Giang and Low 2014, 18)

However, the main challenge for these models is the contradiction to the reality, at least in terms of some cases. If we review the history, the “Four Little Dragons”, Taiwan, South Korea, Hong Kong and Singapore, achieved obviously great economic success through trading with developed countries in the world during the 1970s and 1980s. Hence, these models are also marginalized since then. (Giang and Low 2014, 18)

2.2.2.4 The Neoclassic Counter-revolution Models

The neoclassic counter-revolution models hold a distinct view with the “international dependence models”. The neoclassical counter-revolution models were created in 1980s, including three approaches totally, namely, the free market approach, the new political economy approach and the market-friendly approach. All these approaches expressed that, it was heavy state intervention and ineffective economic policies instead of developed countries that instigated underdevelopment. As a response to the inefficiency of government, the economists such as Bauer, Lal and Johnson appealed for the promotion of free markets in order to reduce or eliminate governmental intervention. (Giang and Low 2014, 18—9)

2.2.3 Contemporary Theories of Economic Development

2.2.3.1 Overview

Besides these significant economic development models, two key contemporary theories attempt to explain the phenomenon of economic development. One is new growth theory (also known as endogenous growth theory), and the other one is theory of coordination failure.

2.2.3.2 New Growth Theory

The new growth theory argued that it was necessary for governments to influence economic growth in the long term. New growth theory, which emerged in the 1990s, is a theory supporting that increasing returns to the use of knowledge rather than labor and capital result in economic growth (Giang and Low 2014, 20). This argument is further able to reason several important

views. First, the lower levels of complementary investment in human capital (namely, education), infrastructure, and the R&D can substantially constrain a high rate of returns. The term “complementary investment” indicates the investment complementing and promoting other productive factors (Todaro and Smith 2012, 151). Second, investment in knowledge creation can contribute to a sustainable development. The new growth theorists emphasized that, knowledge and technology differed from other economic goods because of the possibility of the spread of knowledge and technology. Once the knowledge became available, it could be reused at zero additional cost. Third, due to the necessity of public and private investment in human capital and knowledge-intensive industries and due to the difficulty that individuals or a single company cannot create new knowledge by their own investment alone, governments should fully apply their inherent advantages to the implement of complementary investment (Giang and Low 2014, 20). The inherent advantages here includes many aspects. For example, governments are able to invest in large-scale infrastructure constructions, to issue some regulations or acts for encouraging private investment in knowledge-intensive industries and so on. Anyway, the new growth theory highlights that, in order to advance the economic growth, the complementary investment enforced by governments become necessary in the long term. Moreover, this theory confronts the following challenges. John Cornwall and Wendy Cornwall (1994, 248) provided a comprehensive argument that can cover the main points raised by skeptics, concluding that:

The significant shortcomings of the new growth theory, which are carried over from neoclassical growth theory, lie in its assumption (implicit or not) of full employment and its level of aggregation which treats the economy as a single firm; inevitably, growth is supply-determined. These are models of growth, but not of development. They neglect entirely the changes that characterize development, the determinants of these changes and their impact on the aggregate growth rate.

2.2.3.3 Theory of Coordination Failure

The last relevant theory of economic development is the theory of coordination failure. Its core thought is that the market may fail to achieve coordination among complementary activities. Complementary activity here means “(an) action taken by one firm, worker or organization that increases the incentives for other agents to take similar actions”, and often involve the investment, the profits of which depend on other investment made by other agents (Todaro and Smith 2012, 156). During 1990s and the early years of the 21st century, many development economists pay much attention to complementarities for successful economic development, and this theory therefore becomes influential during that period. With the aim of having the markets coordinated effectively, a “big push” policy, *scilicet* a government-led massive investment program, is usually applied to an inefficient economy, because it can bring about some complementarities that can spur economic growth (Giang and Low 2014, 21).

However, some doubters criticize that the theory of coordination failure overestimates the role of governments. The doubts can be classified as three voices: first, governments are ineffective and they may choose an unavailing policy; second, if an inefficacious policy is put into effect, it can exacerbate the economy; last, how governments can successfully coordinate the economy is absent in the theory of coordination failure. (Giang and Low 2014, 22)

However, from my perspective, at least one issue is certain. Government policies can influence the local economic growth: they can either promote or impede economic growth. Richard Schragger (2010, 311) concluded that almost all the scholars of urban law and policy tended to assume that government policies could influence local economic growth and decline at the federal, state or local level. Hence, SEZs, as a special area that is governed by a particular

regulatory management and enjoys preferential policies, is a typical example of how policies can influence the local economic development.

2.2.4 Conclusion of the Theories of Economic Development

The mainstream theories of economic development at issue cannot fully explain how a SEZ develop regional economy, because the theories do not take into account the impact of financialization. In spite of different focuses of the major theories of economic development, each essential theory evolved from their last or present theories. However, each theory of economic development has its own limitation. Owing to the lack of the consideration of financialization, some old theories laid down an incompatible view, if no prerequisite was set. For instance, the Lewis Two-sector Model and the Linear Stages of Growth Models underscore the importance of capital in economic growth, but they overlook the negative influence of capital on local and national economies. Moreover, the new growth theory, as John Cornwall and Wendy Cornwall (1994, 248) argued, considers an economy as a single enterprise, so it neglects the outward environment. Due to the deep degree of globalization that is bound together with financialization, exports still determine local economic growth and then local economic development to some extent. The new growth theory therefore does not take into consideration the key factor “financialization” that can considerably influence exports. As a result, it becomes necessary to discuss the theories of financialization.

2.3 THEORIES OF FINANCIALIZATION

The second theory that is relevant to this thesis is the financialization theories. In this section, we will review the origins of financialization, the impact of financialization on economy, the main financialization theories that can be found so far, and the relationship among these theories.

The concept of financialization originally emerges within Marxist political economy a long time ago. Although the definitions of financialization and the understanding towards financialization can vary (Krippner 2005, 174; Epstein 2005, 3) and although the origins of the term “financialization” is unclear (Sawyer 2013, 5; Foster 2007, 1), the academia normally consider that Harry Magdoff and Paul Sweezy, the editors of *Monthly Review* and the leading Marxian economists of the second half of the 20th century, first put forward the concept of financialization (Foster 2007, 1; Lapavistas 2011, 612). To be more accurate, it is Harry Magdoff that first raised the point that US economy growingly relied on debt in 1965, which is mentioned in their collaborated book *The Dynamics of U.S. Capitalism* (Foster 2007, 11). They maintained that finance was of increasing importance in the operation of capitalism and that “the pursuit of financial profits can be partially dissociated from the pursuit of industrial profit” (Sweezy and Magdoff 1972, 141). However, they also indicated that “credit is a useful financial instrument to help a complex economy function smoothly; it is especially useful to lubricate the mechanism of an expanding economy” (Sweezy and Magdoff 1972, 15). Hence, they did not oppose to credit in an expanding economy. But, what they disapproved of was that a semi-stagnant economy could not re-boost their economy by increasing dosages of credit. They listed two reasons: first, debts could result in a cumulative downturn of economy; second, to keep a business with growingly large debts had to make more profits to repay their debt and interest charges (Sweezy and Magdoff 1972, 15).

However, as Crotty (2003, 271) argued, financialization had widely and negatively influenced the operations of NFCs in the United States and worldwide. He stated that “the evolution of financial market in the neoliberal era has create serious problems for large NFCs already harmed by the slow aggregate demand growth and destructive competition” (271). He named this phenomenon as “neoliberal paradox”. Its meaning had two aspects: first, financial markets

required NFCs to gain ever higher profits in order to have NFCs paid an increasing share of their cash flow to financial agents; second, financial market pressures incited NFC's shorter planning horizons and shareholders' speculation (272). Crotty (273) summarized NFCs' three responds, which would worsen the US economy. First, some NFCs might cut employees' wages and welfare for cost saving; second, some NFCs had to deceive shareholders into believing that their company makes many profits, which keeps their stock prices from falling; third, some NFCs were determined to enter to financial services industry, becoming a part of financial market to increase their profits (273).

Palley observed that: first, the financial sector relative to the real sector was of increasingly great importance; second, income from the real sector gradually transferred to the financial sector; third, it fomented income inequality and wage stagnation. He also indicated that:

At the macro level, the era of financialization has been associated with tepid real economic growth, and growth also appears to show a slowing trend. There are also indications of increased financial fragility. Internationally, fragility was evident in the run of financial crises that afflicted the global economy in the late 1990s and early 2000s, and it has surfaced again in the recent U.S. sub-prime mortgage crisis that spread to Europe. (Palley 2007, 3)

He argued that conventional economic theory, could explain the phenomenon of financialization (Palley 2007, 4). Conventional economics, more commonly called as neoclassical economics refer to "an approach which (1) assumes rational, maximizing behavior by agents with given and stable preference functions, (2) focuses on attained, or movements toward, equilibrium states, and (3) excludes chronic information problems (such as uncertainty of the type explored by Frank Knight and John Maynard Keynes)" (Cohn 2015, xix; Hodgson 1998, 169). Similarly, in terms of financialization, this theory can clearly explain the relationship between firms and financial markets, which means that the companies' managers are motivated to maximize profits on behalf of shareholders (Palley 2007, 4). Besides, conventional economic theory support financialization, arguing that the expansion of financial markets is able to improve economic efficiency. Moreover, the conventional economic theory tends to dismiss problems brought by financial speculation because of the Friedman's argument that speculation is stabilizing.

Krippner proclaimed that, in order to evaluate the evidence for the financialization of American economy, the activity-centered view of economic change and the accumulation-centered view of economic change could dramatically display the fundamental shifts that characterized the contemporary US economy. The activity-centered view of economic change meant "the standard way of tracking long-term structural shifts in the basic composition of the economy has been to examine changes in employment or in the 'contribution' of different sectors to gross domestic product (GDP)". By contrast, the accumulation-centered view of economic change focused on where profits were generated in the economy. (Krippner 2005, 177)

With respect to when the phenomenon of financialization started, the relevant academia does not reach a common agreement. Presently, three main arguments can be found. Epstein (2005, 4) claimed that the process of financialization in the world economy should start from the mid-to late 1970s or early 1980s when the economic structural shifts happened in a number of countries that greatly increased in "financial transactions, real interest rates, the profitability of financial firms and the shares of national income accruing to the holders of financial assets". However, the problem of this view is that, a considerable number of developing countries, now becoming important economies, had not taken off yet at that time and just took off for a while. A typical counter-example is the BRICS countries, namely, Brazil, Russia, India, China and

South Africa. They are now the five major emerging economies and newly industrialized developing countries, which totally account for 41.6 percent of the world population by 2013 (“BRICS Joint Statistical Publication” 2015, 17). By the end of 1989, the GDP rankings of the BRICS countries were not included to the top 5 economies worldwide (The World Bank 2015). In 1989, only Russian Federation and Brazil were ranked as one of the ten biggest economies, which respectively took the 8th and 9th places; by contrast, by the end of 2014, China was the 2nd largest economy; Brazil took the 7th place; India and Russia were respectively ranked as the 9th and 10th largest economies (The World Bank 2015). Hence, it is reasoned that this Epstein’s point may particularly apply to a few developed countries, such as the US and Western Europe.

The second view is more influenced by cultural considerations. Sawyer (2013, 6) questioned Krippner’s and Epstein’s argument that such profound transformations occurred in the past thirty years, for example, it could start since 1975. He rebutted that the broad definition of financialization proposed by Epstein was in direct contradiction to this time point (Sawyer 2013, 6). The definition of this term given by Epstein has been discussed in the Section 2.1.3. He defined financialization as “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (Epstein 2005, 3). From the Sawyer’s view, financialization had been processing perhaps for 5,000 years. He argued that, financialization should follow the emergence and development of money, credit, interest rate, and financial instruments from that time on, which Graeber also agreed with. He also added that, financialization had taken various forms and perhaps went into reverse at times in history (Sawyer 2013, 6). As a consequence of the reasons above, he concluded that “as such, the term ‘financialization’ is not limited to a specific period or place, though it would be anticipated that the pace and form of financialization varies across time and space, and indeed there are periods of de-financialization as well as those of financialization” (Sawyer 2013, 7).

However, the Sawyer’s argument also has its own problem and limitation. His ambiguous view is very general and vague, so it makes financialization unknowable. One reason why he presented such an argument is that the definition of financialization is not rigidly defined by the academia, as we have discussed previously. Second, he did not distinguish the difference between finance and financialization. He virtually overlooked the weight of finance in society. When finance emerged and developed 5,000 years ago, the influence of finance at that time is much less than that nowadays. Hence, Sawyer’s theory concentrates more on cultural factors.

Besides, at least three experts considered that that the crisis of 2007-2009 accelerated a tendency titled by the term “financialization” (Cale and Roll 2015, 142; Lapavistas 2011, 622; Palley 2007, 3). For example, Krippner, who was interviewed by Cale and Roll (2015, 142), mentioned that “one of the interesting things to me about the financial crisis of 2008-2009 is that those distributional dilemmas came right back to the surface”. The other two scholars expressed an identical opinion. Furthermore, Hatherly and Kretzschmar (2011, 209) pointed out that the 2008 financial crisis resulted from financialization, which was a feature of this period. Therefore, the year of 2008 was defined by the author as the transition point of the two periods, namely, the times of pre-financialization and the era of financialization.

Significantly, Lapavistas (2011, 623) outlined three major interrelated features for the era of financialization as followed: first, large corporations relied less on banks but more on themselves; second, banks had altered their businesses toward open financial market and households; third, individuals increasingly invested in financial products. This thesis will focus on whether and how the major companies in a SEZ will be self-financialized. Also, this thesis concerns how individuals in a region positively participate in the process of financialization.

Moreover, except for manifold divergences among scholars, the academia share at least two common views. Epstein (2007, 5) concluded that:

Despite their different analytic and policy viewpoints, the authors share at least two common convictions: first, financial phenomena have become increasingly important in much of the world economy. And, second, that some of the effects of financialization- in concert with neoliberalism and globalization- have been highly detrimental to significant numbers of people around the globe.

3 METHODOLOGY

3.1 OVERVIEW

The framework of this thesis consists of four parts, namely, the comparison of the backgrounds of Zouping National ETDZ and the DGFEZ, the impact of SEZs on local economic growth, the impact of SEZs on local economic development and the impact of SEZs on local economic development during the period of financialization. The first part has one measurement, the second part includes five measurements, the third part is composed of one measurement, and the fourth part is made up of one measurement. Among these four parts, the main body is the second part and the fourth part, namely, the impact of SEZs on local economic growth and the impact of SEZs on local economic development during the period of financialization. The measurements in the second part are extracted from the uncontroversial views in the economic growth theories excluding the theory of coordination failure, as the establishment of SEZs is a kind of government investment. Besides, the measurements in the fourth part are based on the financialization theories, some of which refer to many other authors writing on the topic of financialization. More specific elucidations regarding these measurements will be shown in Section 3.3.

3.2 DATA

First of all, in order to make these two SEZs comparable, this thesis adopts three measures. First, the errors can be negligible, when the data of each locality instead of the data of each SEZ are applied. The data which we use will be narrowed down to the local level instead of the specific data for each SEZ, because the accurate data of Zouping National ETDZ and the DGFEZ are neither available nor complete. However, since Zouping National ETDZ and the DGFEZ amass the majority of the pillar industries (Kipnis 2013, 7; Pratuangkrai 2014), the regional data can roughly reflect the performance of each SEZ.

Second, this thesis uses the rates of each measurement. Doing so can further minimize the errors. One of the main tasks in the thesis is studying economic growth. Hence, it would be reasonable to use a rate rather than an exact number. Furthermore, since the size of each region obviously differs, it would be more helpful, if the rates instead of the numbers are compared.

Third, this thesis uses an exchange rate of each currency in the same date. The exchange rates is the ones of July 17, 2015. It aims to protect the fairness of comparison. In this thesis, one US dollar respectively equals 6.20 yuan and 1,150 won.

Last, control groups are introduced in this thesis. In order to compare more efficiently and fairly, this thesis applies several control groups to the measurements. One type of control group is the comparison before and after a SEZ starts to work. Besides, the types of control groups include the comparison of national data and regional data, the comparison of the CPI and individual income per capita and the comparison of urban data and rural data. This information will be thoroughly explained in Section 3.3.

3.3 FRAMEWORK

3.3.1 Comparison of the Backgrounds of Zouping National ETDZ and the DGFEZ

This indicator mainly aims to evaluate whether Zouping National ETDZ and the DGFEZ are comparable. Also, the surroundings of these two SEZs should be like. For example, the type and the rank of these two SEZs should be in the same class. The years of official operations had

better be close, which are under a same period. The similar scales of these two SEZs are also helpful in the comparison. Moreover, the locations of these two SEZs are one of the key criteria for selecting the SEZs. For instance, this indicator will examine whether these two regions are landlocked, whether the two regions historically were a poor agricultural region and whether they have strong competitors around them.

3.3.2 Impact of the SEZs on Economic Growth

3.3.2.1 Comparison of Attraction to Investment

This section examines how Zouping National ETDZ and the DGFEZ attract investment before and after the establishment of each SEZ. This criterion is extracted from the Lewis two-sector model and the linear stages of growth models. This measurement has two parts, the amount of investment and the growth rate of investment. The first indicator measures the size of the investment in the SEZs, whereas the second indicator appraises the growth of investment of each zone. In the second part, the national averages concerning the growth rate of the amount of investment are introduced as a control group, which aims to assess how rapid a region with a SEZ is able to foster the growth of investment in this area. Since the sizes of the national economies and the regional economies unquestionably vary, the comparison between “the amount of the national investment” and “the amount of the regional investment” is omitted.

The data concerning the amount of investment for each SEZ over recent decade are neither counted nor published. By contrast, it is easier to access the data of gross capital formation, which can display the amount of investment in general. The term “gross capital formation” (formerly gross domestic investment) includes the total value of the fixed assets of an economy and the net changes in inventories and acquisitions (The World Bank 2015; OECD 2001). The term “fixed assets” means “land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings”. The term “inventories” indicates the stocks of goods, which the firms in a region possess, in order to deal with “the fluctuations in production or sales” and “work in progress” (The World Bank 2015).

3.3.2.2 GRDP Growth

The criterion evaluates economic growth by means of the transformation of an economic structure. GRDP growth rate is a commonly used indicator that signifies the growth of a regional economy. Todaro and Smith (2012, 113) highlighted the relationship among GDP growth, investment and technological progress. Krippner (2005, 180) argued that “GDP is both a measure of what is produced and a measure of national income”. Due to the enormous difference between GDP and GRDP, GDP growth rate and GRDP growth rate are used instead. Likewise, the national averages of the GDP growth rates of China and South Korea are the control groups so as to evaluate the role of a SEZ in boosting local economic growth.

3.3.2.3 Growth of the Total Exports of Goods and Services

The growth rate of the total exports of goods and services measures whether a SEZ can facilitate exports. This measurement is extracted from the “international dependence models”, which underscores international trade. In the same way, the growth rates of the total exports of China and South Korea are a control group in order to determine whether a region with a SEZ can export more goods and services than the countries can do. Also, this thesis will not compare the total amount of the exports of China and South Korea with the total amount of the regional exports due to the obviously large gap between them.

3.3.2.4 Different Sectors to GRDP

This measurement consists of two indicators, “the rate of the GRDP of different sectors to the total GRDP” and “the rate of the GRDP of the primary sector to the GRDP of secondary sector”. The first indicator can measure the change of regional economic structure. Krippner (2005, 180) mentioned that “how to characterize the evolution of the economy in recent decades relies on shifts in the contribution of different sectors to GDP”. Krippner explained how to assess the evolution of a national economy. Likewise, at the local level, “the rates of the GRDP of different sectors to the total GRDP” will be applied.

The second indicator can assess whether an agricultural economy has transformed to an industrial one. Structural change models underscore the evolution from an agricultural economy to an industrial one (Giang and Low 2014, 17-18). The rate of the GRDP of the primary sector to the GRDP of the secondary sector can accurately measures the shift between them.

3.3.2.5 Change of Labor Force

This criterion is composed of two indicators, the regional labor force growth and the change of rural labor force. The regional labor force growth evaluates the relationship between economic growth and labor force growth. Krippner (2005, 177) argued that the changes in employment was able to track long-term structure shifts in the essential composition of an economy. Besides, the indicator “the change of rural labor force” is based on the Lewis two-sector model. It has two sub-indicators, namely, rural population and urbanization rate. These two sub-indicators are suggested by Giang and Low. They (Giang and Low 2014, 17-18) asserted that all economic functions cooperatively determine economic growth, such as, the changes in consumer demand, urbanization and so on.

Moreover, the statistical data on urbanization rates are based on how the term “urban” is defined by each country. The definition of “urban” normally differs from country to country according to the different criteria measuring the term “urban” (United Nations World Urbanization Prospects 2015; The World Bank 2015), but these two countries roughly define the term “urban” in the same way. The National Bureau of Statistics of China (NBS) (2015) defines this term as “cities and towns”, whereas the urban areas in South Korea exclusively indicates “cities and towns with population of fifty thousand and above” (Eberstadt 2010, 24). Both of these two countries underline that the urban areas in China and South Korea consist of cities and towns instead of cities only.

3.3.3 Impact of the SEZs on Local Economic Development

This section will apply the human development index (HDI) to prove how SEZs influence the economic development in Zouping and Daegu-Gyeongbuk. Since the specific data of the HDI for each region are vacant, the demonstration cannot be verified in a straight way. An alternative method is to manifest whether economic growth is accomplished with economic development in each region. Besides, since the relevant data are not published, this research needs to rely on the statistics from the United Nations Development Programme (UNDP). The HDI has three components: longevity, education and income (UNDP 2014, 156). The accurate data on longevity of Zouping and the Daegu-Gyeongbuk region, one of three essential data of the HDI, are not released. Therefore, the HDI calculated by the UNDP will be directly used, as long as one precondition for the direct usage of the HDI data can be met, which will be discussed in the next paragraph. Additionally, numerous development researchers widely use the HDI in their researches (Wolff, Chong and Auffhammer 2010, 843). Therefore, this thesis needs to use the results of the *Human Development Report 2014*.

One prerequisite, which allows to use the HDI to measure the local economic development of each region, is that, the local economies in Zouping and Daegu-Gyeongbuk are far above each national average during the past 12 or 13 years. Zouping maintained the “Top 100 Counties” status in China over past 12 years (Li 2015; BSZC 2015). The economic development of Zouping should be overall above the national average. Likewise, the Daegu-Gyeongbuk region was a very strong economy nationwide during 2000-2013. Among the 17 first-level administrative divisions of South Korea (excluding Sejong Metropolitan Autonomous City), Gyeongsangbuk-do held the 4th biggest regional economy during 2000-2009 (Statistics Korea 2014). Even if it dropped to the 5th place during 2010-2013 (Statistics Korea 2014), together with the GRDP of Daegu Metropolitan City, the total GRDP of this region was far above the national average of South Korea. As a result, it would be reasonable to use the HDI to measure whether economic growth contributes to economic development in each region.

Further, the criticism of the Human Development Reports has very finite impact on the conclusion of the thesis. First, the data of the HDI have been updated in the new 2014 report. Economists Hendrik Wolff, Howard Chong and Maximilian Auffhammer (2010, 843) pointed out that, since the statistical data of health, education and income were not updated, the data error was available and biased the HDI ranking of the world’s countries. But, the UNDP realized this problem and solved this problem in the *Human Development Report 2014*. The UNDP (2014, 155) mentioned in the Report that:

Because national and international agencies continually improve their data series, the data—including the HDI values and ranks—presented in this Report are not comparable to those published in earlier editions. For HDI comparability across years and countries, which presents trends using consistent data calculated at five-year intervals for 1980–2013.

Second, the thesis merely examines the trends during 2000-2013, which is shown in Table 4.3.1. Certain data during 2000-2013 will be used in order to draw the conclusion on whether economic development initiates from economic growth. Another additional advantage can minimize possible errors. The self-comparison of the economic development in a country can minimize the impact of errors on results, because a set of data of a country perhaps are calculated by a same obsolete method, or because the data are not updated at the same time. As a result, the HDI can reflect the trends in economic development in the main.

3.3.4 Impact of the SEZs on Local Economic Development during the Era of Financialization

3.3.4.1 GDP (GRDP) of Financial Sector to GDP (GRDP) of Real Sector

The rate of the GDP (or, GRDP) of the financial sector to the GDP (GRDP) of the real sector can assess whether the increase in the values of the financial sector increasingly results in the decrease in those of the real sector. This measurement is extracted from Palley’s and Krippner’s arguments (Palley 2007, 3; Krippner 2005, 177). Similarly, the rate of the GDP from the financial sector to the total GDP is a control group. The degree of financialization in a region with a SEZ is compared with that of the whole country. This indicator can demonstrate how a SEZ can accelerate financialization in a locality.

3.3.4.2 Employed Persons in the Financial Industry

This measure includes two indicators, the total number of employed persons in the financial sector and the rate of the number of employed persons in the financial industry to the total number of employed persons in all the industries. The term “employed persons” refers to “persons aged 16 and over who are engaged in gainful employment and thus receive

remuneration payment or earn business income” (NBS 2015). This term covers any labor force who is engaged in the financial sector including the owners of financial firms, the self-employed individuals and the re-employment of retired personnel (NBS 2015). Likewise, the Statistics Korea, as central organization for statistics under the Ministry of Strategy and Finance, applies an identical definition to collect the data in the matter of the number of labor force in the financial sector (Statistics Korea 2015). Moreover, the first indicator aims to compare the scale and the growth of employed persons in the financial industry. The second indicator measures the rate of the number of employed persons in the financial industry to the total number of employed persons in all the industries. This measurement is proposed by Krippner. She (Krippner 2005, 177) suggested using the number of employed persons in the financial sector and the financial sector share of total employment to the measurement of financialization. Additionally, the national average of each indicator acts as a control group.

3.3.4.3 Growth of Individual Income per Capita

This measurement assesses whether financialization will have an impact on individual income growth, which is based on Palley’s and Crotty’s financialization theories (Palley 2007, 3; Crotty 2003, 273). In order to rule out the possibility that inflation may be major impetus driving personal income growth, the indicator “Consumer Price Index” (CPI) is introduced. Governments commonly measure inflation by the CPI each year. The World Bank (2015) explained the function of CPI that “inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly”. The annual growth rates of CPI can evaluate whether individual income per capita growth is slower than CPI growth, so we can know which factor, economic development or inflation, pushes the rise in individual income per capita.

Since the private income growth around Zouping National ETDZ may be much faster than that of the whole county, it is necessary to respectively study the private income growth of the urban and rural areas of Zouping. In the statistics of Zouping, due to obvious difference between urban and rural areas, the growth of individual income per capita is classified into two parts, the urban individual income growth and the rural individual income growth. Therefore, the application of the data on the growth of individual income per capita of the whole Zouping County will reduce the importance of Zouping National ETDZ in raising local private income. Moreover, the growth of individual income per capita of the whole country is a control group.

3.3.4.4 Growth of Private Consumption per Capita

Similar to the measurement “growth of individual income per capita”, this measurement evaluates how financialization influences private consumption per capita. This criterion also originates from Palley’s and Crotty’s financialization theories (Palley 2007, 3; Crotty 2003, 273). The analysis on private consumption growth of Zouping is divided into two parts, as SEZs may have a distinct influence on regional private consumption growth. Also, the growth of individual income per capita of China and South Korea is, respectively, the control group for each region.

3.3.4.5 ICOR

Incremental Capital Output Ratio (ICOR) refers to the ratio of investment to the increment in output produced by capital (Walters 1966, 818; Vanek and Studenmund 1968, 452; Palmer and Hartley 2006, 56), which measures the increment in capital required for producing an additional unit of output (Palmer and Hartley 2006, 56). It is an important analytical tool of both economic growth theory and development planning (Vanek and Studenmund 1968), and is a widely used

indicator of investment efficiency (Hahm 2010, 94). The investment in the formula can be defined “net or gross, depending whether net investment and output, or gross values are used” (Walters 1966, 818). In this thesis, gross capital formation, formerly gross domestic investment, is applied to the ICOR formula. In the same way, the national ICORs are the control group. The comparison of the national ICORs and the regional ICORs aims to assess whether the whole country or the regions with SEZs more efficiently use capital.

3.4 EXPLANATION ON THE RESULTS OF COMPARISONS

The results of comparisons can be classified as “High”, “Medium”, “Low” and “Unknown”. The term “Unknown” here denotes its literal meaning. The denotations of the other terms differ in two different preconditions. First, in the precondition of measuring the comparison of two or more subject matters, the term “High” means that the results of the comparison of the subject matters are almost identical or has few minor differences. The term “Medium” indicates that the results roughly include half of similarities and half of differences. The term “Low” refers to one or more obvious distinctions between two or more subject matters.

The second precondition is when the impact of one subject matter on a second or more subject matters are measured. The term “High” in such circumstances indicates a dominant impact of one subject matter on a second or more subject matters. The term “Medium” means that the influence of one subject matter on a second or more subject matters sometimes is considerable and sometimes is insignificant, depending on more specific classifications. The term “Low” implies that, one subject matter has a minor or no effect on a second or more subject matters.

4 APPLICATION

4.1 COMPARISON OF BACKGROUND

4.1.1 Overview

In this section, this thesis will examine the background of the SEZs. The review will follow the instructions below: the overview of the background and surroundings of the SEZs, the purposes of the establishment of these SEZs and the specific type of each SEZ. The analysis of the region in which the SEZs are located will introduce the geography, economy, administration and transportation. This instruction aimed to comprehensively analyze the advantages and disadvantages of the region in which each SEZ is situated. Last, after the comparison of the background of Zouping National ETDZ and the DGFEZ, the questions on whether these two SEZs are alike and on whether they are comparable will be answered.

4.1.2 Background of the SEZs

4.1.2.1 *Zouping National Economic and Technological Development Zone (2001)*

Zouping National Economic and Technological Development Zone (Chinese: 邹平国家级经济技术开发区; pinyin: zōupíng guójiājí jīngjì jìshù kāifāqū; abbreviation: Zouping National ETDZ), which is established in 2001 and the size of which is 50 square kilometers (Zouping National ETDZ 2012), is one of the 219 National Economic and Technological Development Zones (National ETDZs) in China, and is one of the 15 National ETDZs in Shandong Province (Ministry of Commerce of China 2015). It is located in the county seat of Zouping. The main industries included textile, clothing, food, medicine, new materials and wind energy equipment manufacturing (Zouping National ETDZ 2012). In June 2003, it was approved to hold a provincial ETDZ status, and was upgraded to a national ETDZ in November 2010. It became the first national ETDZ in a county level city of Shandong Province in 2010 (Zouping National ETDZ 2012).

Economic and Technological Development Zone (ETDZ) is a variant of SEZs. The first ETDZ was established in 1984, following the previous successful experience of the four SEZs. Due to various positive changes brought by these four SEZs, the Central Committee of the Communist Party of China authorized the proposal on the expansion of SEZs to 14 more coastal cities and to Hainan Island in 1984 (Spence 1999, 667-68). After 1984, some of new SEZs were re-named as *Economic and Technological Development Zone*, which included, for instance, Dalian, Qinhuangdao, Tianjin, Yantai, Qingdao, Lianyungang, Nantong, Minhang, Hongqiao, Caohejing, Ningbo, Fuzhou, Guangzhou and Zhanjiang during 1984-1988 (China Internet Information Center 2015), whereas the SEZ in Hainan Province was titled *Hainan Special Economic Zone* (Yang 2010, 1).

However, the ETDZs and the SEZs in China are not absolutely identical. They differ in three aspects. The first difference is the scale. SEZs usually are larger than ETDZs. An ETDZ is a relatively small piece of land carved up around the cities (China Internet Information Center 2015). A SEZ usually occupies a much larger scale of land, sometimes indicating an entire city or a whole province (Zeng 2011, 10). For example, Hainan Province as a whole is a SEZ in China and is the largest SEZ so far in China (Yang 2010, 1). Second, SEZs are comprehensive economic zones, which invest in almost all the economic fields, whereas ETDZs place emphasis on production enterprises, or on scientific and technological research institutions that indirectly promote China industrial modernization (Zheng 1987, 72). Third, the preferential treatment that is tailored for SEZs can be applicable to ETDZs, and each ETDZ is free to lay down its own

basic regulations serving as constitutions for itself and has the jurisdiction to enact separate regulations for one or several specific economic fields (Zheng 1987, 74-75). In spite of these minor differences, ETDZs actually is a continuity and outgrowth of SEZs, as both ETDZs and SEZs aim to attract foreign investment by preferential treatment (Zheng 1987, 70).

The rank of ETDZs has two levels: national level and provincial level. National ETDZs are authorized by The State Council of China, constitutionally synonymous with the Central Government of China. Provincial ETDZs are approved by provincial governments that directly manage provincial ETDZs. Some outstanding provincial ETDZs can submit an application to the State Council to request to upgrade to a national ETDZ, as long as the provincial zones meet the requirements regulated by *Approval Principles and Procedures on the Extension of ETDZs* (Chinese: 国家级经济技术开发区扩建审批原则和审批程序; pinyin: guójiājí jīngjì jìshù kāifāqū kuòjiàn shěnpī yuánzé hé shěnpī chéngxù), according to the Ministry of Commerce of China (2005). Among these requirements, the excellent performance of economic growth is one of the most crucial assessments in this evaluation system (Salonen 2010, 28; Ministry of Commerce of China 2005).

The county, in which Zouping National ETDZ is located, is in Shandong Province of China. Zouping (Chinese: 邹平; pinyin: zōupíng) is roughly located in the center of Shandong Peninsula in China. The total area of Zouping is 1,252 square kilometers (Zouping County Bureau of Agriculture 2015). Because the climate is temperate continental monsoon climate and because the northern part of Zouping is plain, Zouping was a traditional agricultural county, mainly planting wheat, corn and vegetables. Due to the decline of the output of cotton since 2007, cotton was excluded as a major commodity crop in 2013 (Zouping County Bureau of Agriculture 2015). Besides, Zouping was a national-level poverty county (Chinese: 国家级贫困县; pinyin: guójiājí pínkùnxian) before 1978, but after a more than 20-year economic development, it was one of the Top 100 Counties in China (Chinese: 中国百强县; pinyin: zhōngguó bǎiqiángxiàn) since 2000 (Li 2015). Although Zouping County is obscure domestically, it is very famed in the sinology academia. It is one of the first destinations for the county-level fieldwork that is open to American sinology academia since 1978 (Zouping County Government 2013).

Zouping has a geographical disadvantage of promoting the local economic growth. It is surrounded by three cities and one county. In the north direction of Zouping, Binzhou (滨州), a prefecture-level city, is about 80 kilometers from Zouping (Google 2015). In its south, another county-level city Zhangqiu (章丘) is not far from Zouping. The distance between these two cities is about 50 kilometers (Google 2015). And, these two counties as well as the other two counties Linzi (临淄) and Guangrao (广饶) all together compose the Shandong Province version “Four Little Dragons” (Xu 2014). In its eastern side, it is the capital of Shandong Province, Ji’nan (济南), which is about 76 kilometers from Zouping (Google 2015). Zibo (淄博), a prefecture-level city, is situated in the western side of Zouping, and is approximately 38 kilometers from Zouping (Google 2015). Therefore, the location of Zouping is an obvious disadvantage of the local economic development, as it is very easy for Zouping County to be marginalized. Furthermore, Zouping needs to compete with its four “neighbors”. Except for Zhangqiu, the other three neighboring cities have a larger urban scale and are granted to have a higher level administrative advantage. Hence, the location of Zouping is a geographical and economic disadvantage for the local economy. Picture 4.1.2.1.1 below displays the location of Zouping and the locations of its surrounding competitors.

Figure 4.1.2.1-1 The Location of Zouping



Source: Google

The transportation of Zouping can be counted as convenient, but the location of Zouping is commonplace in the transportation network of Shandong Province. Zouping is not an important transit point. Zhuang Weimin (267, 2004), the deputy director of the Institute of History at Shandong Academy of Social Sciences, concluded that “the location of Zouping is just commonplace-neither it is in a corner nor it is a valuable point, but the transportation is convenient”. As Zhuang argued, the transportation of Zouping is very ordinary. In the north side of Zouping County, Maotou Town (码头镇) and Taizi Town (台子镇) are located by the Yellow River. In the South, the Jinan-Qingdao Railway and the 309 National Highway run through the Linchi Town (临池镇) of Zouping. However, the transportation of Zouping is convenient. The Qingdao-Yinchuan Expressway goes through the county seat of Zouping, in which Zouping National ETDZ is situated. Raw materials and products can be rapidly transported in and be transported out. Additionally, raw materials and products are easily shipped in and are shipped out by air and ship. Zouping County is 62 kilometers from Jinan Yaoqiang International Airport and 240 kilometers from the Qingdao Port (Wang 2013), one of the busiest ports in the world and ranked 7th in the “Top 50 World Container Ports Rankings 2013” (World Shipping Council 2015). Hence, the transportation of Zouping is quite convenient.

Zouping, as a small and common county in China, has reached some social and economic achievements. The *de jure* population in 2014 amounted to 796,300, and the *de facto* population in 2014 totaled 732,654 (BSZC and ZITNBS 2015, 19). The *de facto* population here is defined as “a concept under which individuals (or vital events) are recorded (or are attributed) to the geographical area where they were present (or occurred) at a specified time” (OECD 2006a), whereas the term “*de jure* population” means “a concept under which individuals (or vital events) are recorded (or are attributed) to a geographical area on the basis of the place of residence” (OECD 2006b). Besides, the floating population of 2014 was 63,646. The urbanization rate had reached 57.2% in 2014 (BSZC and ZITNBS 2015, 17), which was higher

than the national average of 2004. The urbanization rate of China was 54.8% in 2014 (NBS 2015). Moreover, in 2014, the gross domestic regional product (GRDP) of Zouping County reached 78.0 billion, roughly 12.6 billion US dollars (BSZC and ZITNBS 2015, 1). The GRDP growth rate of 2014 was 5.9%. Zouping National ETDZ contributed a GRDP of 49.6 billion yuan, approximately 8.0 billion US dollars (BSZC and ZITNBS 2015, 2), which accounted for 63.5% of the total GRDP. The unemployment rate of Zouping in 2014 were only 2.18% (BSZC and ZITNBS 2015, 2). Hence, the local economy of Zouping maintained relatively strong.

4.1.2.2 Daegu-Gyeongbuk Free Economic Zone (2008)

Daegu-Gyeongbuk Free Economic Zone (Hangul: 대구경북경제자유구역청; acronym: DGFEZ) was launched by South Korea Central Government as a free economic zone in August 13, 2008. It is composed of eight separate sites, which spread over Daegu Metropolitan City (Daegu) and Gyeongsangbuk-do Province (DGFEZ 2012). These eight sites share the total area of 22.01 square kilometers (KFEZs 2015). Four sites, which are Daegu Technopolis, Suseong Medical District, International Fashion District and Sinseo Medivalley, are located in Daegu Metropolitan City (DGFEZ 2012). The other four sites are distributed throughout Gyeongsangbuk-do. The fifth site, Gyeongsan Knowledge Industry District, is built in Gyeongsan (DGFEZ 2012). Yeongcheon established two sites, Yeongcheon Industry District and Yeongcheon High-tech Park (DGFEZ 2012). The eighth site is Pohang Fusion Tech District, which is situated in Pohang (DGFEZ 2012). The locations of the eight DGFEZ sites are shown in Picture 4.1.2.2.1 below.

Figure 4.1.2.2-1 The Locations of the Eight DGFEZ Sites



Source: DGFEZ

The period of this project covers from 2008 to 2020 (DGFEZ 2015), but numerous companies have continuously started their businesses since May 2010. The whole constructions are divided to two phrases. The first phrase is from 2008 to 2013, and the second phrase will be completed by 2020 (DGFEZ 2015). The first company, Dassault Systèmes R&D Center, officially worked in May 2010. By the end of 2011, a total number of 100 companies started their businesses at Daegu Technopolis and Yeongcheon Industry District (DGFEZ 2012).

DGFEZ focuses on four major aspects, namely, IT convergence, high-technology transportation components, green energy and knowledge services. IT convergence includes electronics, display, biotech, mobile and robot. High-technology transportation touches upon automobile, ship and aviation. Green energy is relevant to solar, fuel cell and wind. Knowledge-based service indicates education, R&D, digital and medical (DGFEZ 2012).

Daegu (Hangul: 대구; Hanja: 大邱; abbreviation: Daegu) is a metropolitan city or commonly known as gwangyeoksi (Hangul: 광역시; Hanja: 廣域市) in South Korea, the fourth largest city after Seoul, Busan and Incheon. Daegu, as a landlocked metropolis, was three largest city after Seoul and Busan, but since 2005, the population of Daegu dropped to the fourth largest one among the metropolitan cities (Statistics Korea 2014). The metropolitan cities in South Korea are the first-level administrative division under the Central Government's direct control.

Daegu is proclaimed to have a convenient location that can boost local economic development, but in fact, as an inland city, it gradually declines. The official document reported that "conveniently located between China and Japan, two of the world's largest markets, Korea lies within an average air travel time of three hours from over 60 cities with a population of 1 million or more" (DGFEZ 2012), but many literatures express an identical view that this city increasingly dwindles. For example, Lee and Park (2008, 101) wrote that "recent decades have seen Daegu downgraded from Korea's top regional center to a mere declining local city". The Daegu Metropolitan City Government once examined the question of why their city falls. The Daegu Metropolitan City Government (2015) concluded that:

Having reached its peak in the 1960s and the 1970s, the textile industry in Daegu entered a slow, yet definite, decline in the 1990s. The number of textile companies in Daegu dropped from 1,000 or so at the beginning of the new millennium to 700 or fewer by 2010. Daegu's reputation as the capital of textiles and fashion no longer seemed to hold true.

Gyeongsangbuk-do (Hangul: 경상북도; Hanja: 慶尙北道), also known as its literal title North Gyeongsang Province and its abbreviation Gyeongbuk, is an agricultural province located in the southeastern region of the Korean Peninsula and is adjacent to the eastern part of East Sea. Gyeongsangbuk-do Provincial Government and Gyeongsangbuk-do Council are placed in Daegu Metropolitan City, but they are not subordinate to each other. Both of them are the first-level administrative divisions (Gyeongsangbuk-do Provincial Government 2015).

The location of Gyeongsangbuk-do is not an advantage for local economic development. First, it is very close to Seoul, the capital of South Korea attracting and occupying a myriad of social resources. The distance between Gyeongsangbuk-do and Seoul is 170-430 kilometers. Second, it also very close to other cities and regions in South Korea, many of which are the competitors of Gyeongsangbuk-do. It is claimed that the visitors in Gyeongsangbuk-do can reach the most regions and the main cities in South Korea by air, rapid transit railways and expressways from 50 minutes to 3 hours (Gyeongsangbuk-do Provincial Government 2015). Therefore, the convenient transportation can intensify the competition between the DGFEZ and the other FEZs in South Korea. Second, expect for the south side, Gyeongsangbuk-do is barricaded by two mountains. Gyeongsangbuk-do is not the shortest route to China, Japan or Russia. The only open route without any barriers is on the south side. On the north and west sides, Sobaeksan Mountain fences Gyeongsangbuk-do. On the east side, Gyeongsangbuk-do is blocked by Taebaeksan Mountain (Gyeongsangbuk-do Provincial Government 2015). As a result, although Gyeongsangbuk-do neighbors East Sea, it actually is a landlocked province. It is obstructed by Taebaeksan Mountain from easily gaining access to the sea, and it is bounded by Sobaeksan

Mountain on the north and west sides. Picture 4.1.2.2.2 shows the topography of the Daegu-Gyeongbuk region.

Like Daegu, Gyeongsangbuk-do confronts a same problem, namely, the decline of this province. The textile machinery industry and the textile industry in South Korea have obviously shrunk over the last decade. The number of the employees working for this industry apparently decreased from 9,063 in 2000 to 3,235 in 2010 (Lee, Yun and Jeong 2015, 59). The number of the textile machinery manufacturers in South Korea decreased from 521 in 2000 to 129 in 2010 (Lee, Yun and Jeong 2015, 59). Like the textile machinery industry in South Korea, the textile industry dramatically fell off during the past ten years. The number of the workers in the textile industry continuously diminished from 327,000 in 2000 to 168,000 in 2009 (Lee, Yun and Jeong 2015, 68-69). The annual rate of losing the workers in this industry reached 7.1% during 2000-2009 (Lee, Yun and Jeong 2015, 68-69). The relevant data demonstrate that, Gyeongsangbuk-do and Daegu, as two regions heavily relying on these two industries in South Korea, could not escape from this national trend over the last decade (Lee, Yun and Jeong 2015, 59, 68-69). Hence, facing an identical problem, Gyeongsangbuk-do and Daegu Metropolitan City expect to cooperate to establish a SEZ with the aim of economic transformation and industrial upgrading (Gyeongsangbuk-do Provincial Government 2012).

Figure 4.1.2.2-2 Topography of the Daegu-Gyeongbuk Region



Source: Gyeongsangbuk-do Provincial Government

The specific economic overview for this region are as followed. The population of this region in 2014 was 5,267,066 (DGFEZ 2015). The population of Daegu was 25,203; the population of Gyeongsangbuk-do was 64,931 (DGFEZ 2015). The unemployment rate of Daegu in 2014 was 3.9%, and the unemployment rate of Gyeongsangbuk-do in 2014 was 3.0% (Statistics Korea 2014). The individual income per capita of Daegu in 2013 was 15,111,000 won, about 13,140 US dollars, and it was 14, 544,000 won in Gyeongsangbuk-do during the same year (Statistics Korea 2014). The GRDP in Daegu-Gyeongbuk region in 2014 was 118.7 billion US dollars (DGFEZ 2015).

4.1.3 Summary of Section 4.1

Table 4.1.2.2-1 Comparison of the Backgrounds of the SEZs

Items/SEZs	Zouping National ETDZ	DGFEZ
Year of Plan	2001	2008
Year of Official Operation	2003	2009
Year of Completion	2003 (Upgrade in 2008)	2020
Type of SEZ	National ETDZ	FEZ
Rank of SEZ	National	National
Cost of Infrastructure	\$10.06 Billion	\$6.95 Billion
Total Area of SEZ	50 Square Kilometers	22.01 Square Kilometers
Administration Level of Location	County	Metropolitan City/Province
GRDP (2014)	\$12.6 Billion	\$118.7 Billion
Population (2014)	796,300	5,267,066
Unemployment Rate (2014)	2.18%	3.9% (Daegu) 3.0% (Gyeongsangbuk-do)
Geography	Shandong Peninsula	Korean Peninsula
Disadvantages	Landlocked; Four Competitors	Landlocked; Many Competitors; Decline of The Region
Similarity	High	

After the comparison of the overview of Zouping National ETDZ and the DGFEZ, we can conclude that their similarities are high, so they are comparable. Both of them are national level SEZs. Zouping National ETDZ and the DGFEZ were respectively invested a similar amount of capital, respectively 10 and 7 billion US dollars. Besides, although Zouping County merely has one SEZ, the eight site of the DGFEZ are evenly distributed around the Daegu-Gyeongbuk region. Therefore, the actual effect of each site on each region is almost identical. Moreover, the problems that curb regional economic growth are highly similar. The regions are landlocked and the cities around them are their competitors. Even, both of them are located in a peninsula. However, they also have several small differences, such as the administrative level and the GRDP of each region. Despite these minor disparities, the location of each SEZ is highly alike, so they are comparable in general.

4.2 IMPACT OF THE SEZs ON ECONOMIC GROWTH

4.2.1 Comparison of Attraction to Investment

4.2.1.1 Amount of Investment

Table 4.2.1.1-1 The Amount of Investment of Zouping, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2000-2014

Year	Zouping		Daegu		Gyeongbuk	
	Original Data (Billion RMB)	Billion RMB to Billion USD	Original Data (Million Won)	Million Won to Billion USD	Original Data (Million Won)	Million Won to Billion USD
2000	N/A	-	6,339,219	5.51	19,565,985	17.01
2001	N/A	-	6,607,183	5.75	18,221,727	15.85
2002	N/A	-	7,410,149	6.44	21,735,468	18.90
2003	N/A	-	8,089,930	7.04	21,593,588	18.78
2004	N/A	-	7,783,830	6.77	24,035,666	20.90
2005	N/A	-	9,281,442	8.07	23,364,314	20.32
2006	N/A	-	9,916,951	8.62	23,468,992	20.41
2007	N/A	-	11,166,388	9.71	22,855,488	19.87
2008	8.80	1.42	11,261,534	9.79	27,987,581	24.38
2009	12.58	2.03	8,747,831	7.61	22,548,641	19.61
2010	16.12	2.60	10,956,591	9.53	29,464,581	25.62
2011	19.40	3.13	11,579,144	10.07	30,162,934	26.23
2012	23.89	3.85	11,269,632	9.80	31,931,663	27.77
2013	20.75	3.35	11,894,260	10.34	29,185,791	25.38
2014	22.33	3.60	N/A	-	N/A	-

Source: BSZC and ZITNBS; Statistics Korea

In general, the total amount of investment constantly increased in these three regions during the past five or ten years. In Zouping, the investment amounted to 1.42 US dollars in 2008, whereas the amount in 2014 was 2.54 times of that in 2008. However, the numbers indicated that the investment in Zouping decreased since 2012.

Daegu and Gyeongsangbuk-do shared a similar situation over the past ten years. The amount of the investment in 2000 was 1.88 times of that in Daegu in 2013, and the investment in 2000 in Gyeongbuk was 1.49 times of that in 2013. During the 2008 financial crisis, both Daegu and Gyeongsangbuk-do failed to attract more considerable capital than before. One year later after the global financial crisis, the 2010 investment was returned to the 2008 level.

Since 2010 or 2011, Zouping, Daegu and Gyeongsangbuk-do could attract a certain amount of investment. Zouping was able to attract the capital worth roughly 3 or 4 billion US dollars per year since 2011. And, since 2010, Daegu and Gyeongsangbuk-do had respectively maintained attracting the investment that was approximately valued at 10 billion US dollars and 26 billion US dollars.

A question on why Zouping could increasingly attract investment, even during the 2008 financial crisis, may arise. According to the 2009 statistic report, several projects were under construction in Zouping National ETDZ during the 2008 financial crisis (BSZC and ZITNBS 2009, 2). The project of Luzhong Yunda Bounded Logistic Center (Chinese: 鲁中运达保税物流中心) was approved in 2007. The investment in this bounded logistic center amounted to 680

million yuan, roughly 109.68 million US dollars (Zouping National ETDZ 2012). The infrastructure started to build in 2008 (BSZC and ZITNBS 2009, 2) and was completed in November 2011 (Shandong Luzhong Yunda Bounded Logistic Center 2015). This center officially ran in January 21, 2015. So far, this center had managed the goods worth 163 million US dollars in total. One thousand seven hundred and fifty customs declarations were lodged by August 31, 2015 (Shandong Luzhong Yunda Bounded Logistic Center 2015). It can be reasoned that the average number was 7.8 customs declarations per day. Therefore, the construction of this center and its later operation brought new economic growth to the locality. Moreover, Zouping National ETDZ were constructing several industrial parks during that year and planned to have a total number of 12 industrial parks within the ETDZ in the following years (BSZC and ZITNBS 2009, 2). Hence, the local government poured considerable capital into the zone and reinvigorated private investment. Zouping therefore could remain an increase in the amount of investment.

By contrast, although the DGFEZ also undergoes and continues building the infrastructure until 2020, the impact of the 2008 financial crisis on the Daegu-Gyeongbuk region was striking. It reflects that the local economies of Daegu and Gyeongsangbuk-do were greatly influenced by the global economy. However, despite the negative impact of the world economy, the local economies recovered very rapidly. The amount of investment in 2010 returned to the quantity of 2008 within one year. One of the main reasons is that, the DGFEZ is still under construction and plans to be completed by 2020 (DGFEZ Authority 2015), so it is normal that a large amount of capital consistently flowed to this region from 2009 to 2013.

4.2.1.2 Growth of Investment

Table 4.2.1.2-1 The Investment Growth Rate of China, Zouping, South Korea, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2000-2014

	China	Zouping	South Korea	Daegu	Gyeongbuk
Unit	%	%	%	%	%
2000	10.3	N/A	19.1	16.2	12.4
2001	13.0	N/A	3.6	4.2	-6.9
2002	16.9	N/A	8.3	12.2	19.3
2003	27.7	N/A	10.4	9.2	-0.7
2004	26.8	N/A	6.7	-3.8	11.3
2005	26.0	N/A	5.6	19.2	-2.8
2006	23.9	N/A	7.9	6.8	0.4
2007	24.8	N/A	7.5	12.6	-2.6
2008	25.9	5.0	7.0	0.9	22.5
2009	30.0	43.0	-10.1	-22.3	-19.4
2010	12.1	28.1	23.6	25.2	30.7
2011	23.8	21.9	6.7	5.7	2.4
2012	20.3	23.2	-1.5	-2.7	5.9
2013	19.1	-8.4	-3.2	5.5	-8.6
2014	14.9	12.2	N/A	N/A	N/A

Source: NBS; BSZC and ZITNBS; Statistics Korea. The rates are calculated by the Author.

From the investment growth rates, we can find that the 2008 financial crisis caused enormous economic losses on the reduction in domestic and regional investment. The investment in Zouping started to reduce in 2008, but soon after, the government expended investment in 2009. The investment growth rate of Zouping reached up to 43.0% in 2009, which was 38% more

than that during the last year. China delayed this negative impact of the 2008 financial crisis until 2010. The growth rate in 2011 was only 12.1%, which was 17.9% less than that in 2009. The main reason of having such a change is that, the 2008–2009 Chinese economic stimulus plan (Chinese: 扩大内需十项措施; pinyin: kuòdà nèixū shíxiàng cuòshī) was implemented during the global crisis in order to minimize the negative impact of the 2008 financial crisis on Chinese economy. The State Council of China proclaimed to disclose this economic stimulus plan on November 5, 2008, which mainly included a four trillion yuan (585.7 billion US dollars) stimulus package, the shift from a “prudent” fiscal policy to a “proactive” one and the move from a “tight” monetary policy to a “moderately loose” one. The four-trillion yuan was invested in infrastructure and social welfare by the end of 2010. For example, the central government funded one trillion yuan to rebuild Wenchuan ruined by the 2008 Sichuan Earthquake in May 12, 2008; 210-billion-yuan fund was spent on energy-saving and eco-friendly projects; 400-billion-yuan investment was for building affordable housing; public facilities in rural areas and industrial restructuring respectively was invested 370 billion yuan; 150-billion-yuan capital was deployed for the health care, education and cultural development sectors; and, the remaining fund was invested in infrastructure constructions (Ministry of Commerce of China 2012). Because of the implementation of this plan, the gross capital formation maintained a positive growth during 2008-2010.

By contrast, the trend in the growth of gross capital formation in Zouping during 2008-2014 was not always in accordance with that of China. In 2008, the growth rate of Zouping slowed down to 5.0%, whereas the growth rate of China was 25.9%. Also, this situation applied to the growth rate in 2013. Moreover, China’s stimulating policies did play an obvious role in 2009. The investment growth rate of Zouping peaked at the end of that year. Afterwards, the growth diminished in a gradual way from 2010 to 2014.

By contrast, the investment growth rates in Daegu, Gyeongsangbuk-do (Gyeongbuk) and South Korea apparently decreased in 2009. It shows that the global financial crisis obviously caused the stagnation and recession in South Korea. The growth rates of Daegu, Gyeongsangbuk-do (Gyeongbuk) and South Korea overall were negative, which respectively were -10.1%, -22.3% and -10.4%.

The global financial crisis hit the economy of South Korea via two ways. First, the capital abruptly flowed out from South Korea; second, due to the influence of the global contraction of demand, the demand for South Korea’s exports drastically decreased by more than 40% in the fourth quarter of 2008 (Yoon 2011, 106). South Korea technically escaped the 2008 financial crisis, the GDP of which grew 0.1% during the first quarter of 2009 (Nam 2009), but it did not forestall the 2008 financial crisis like most countries. Noticeably, the data show that the economy of South Korea recovered very fast. South Korea was one of the three OECD member states avoiding economic contraction in 2009 (Bark 2012, 24).

The recovery of Korean economy was rapid, because South Korea Central Government immediately laid down a set of scrupulous measures against the 2008 financial crisis, when the crisis emerged. These measures touched upon the fiscal and tax policies, the monetary and foreign exchange policies, the further reform of financial institutions, the financial support of business sector and the labor and welfare policies. With respect to fiscal and tax policies, the Korean Central Government adopted an expansionary fiscal policy and reduced tax burden (Kim 2014, 17-18). In terms of monetary policies, Bank of Korea decreased the benchmark interest rate by 3.25 points, and eventually reached 2.0%, the lowest point since May 1999 (19). Moreover, the central government used the bond market stability fund worth 10 trillion won to loan companies (19). In order to the stabilize exchange market, South Korea successively signed a currency swap agreement with the United States, China and Japan in 2008 (19-20).

One of many reforms on financial institutions was that the central government founded a “restructuring fund” with the actual value of 4.4 trillion won (20). In terms of the labor and welfare policies, the government strove to create more jobs. Even, the government itself recruited an increasing number of employees in the public sectors. Like China’s stimulating policies, the government also supplied more long-term public rental housings to the low-income group (Kim 2014, 22). Therefore, South Korea carried out many workable and concrete measures for basic social welfare. Moreover, the central government instituted an “Emergency Economic Council” presided by the president. Its task was organizing different departments, business sector and private professionals to cope with economic crisis (21). Besides, the central government founded a “Crisis Management Council” during the 2008 financial crisis, which aimed to support the Emergency Economic Council and to deal with the high oil price (22). All of these policies brought about the change of the growth rates that switched from a negative double-digit number to a positive double-digit number during 2008-2009.

4.2.1.3 Summary of Section 4.2.1

Table 4.2.1.3-1 Impacts of the SEZs on the Investment Amount and on the Investment Growth

Item	Period	Zouping National ETDZ	DGFEZ
Amount of Investment	Short Term	High	High
	Long Term	Unknown	Unknown
Investment Growth	Short Term	High (Policy-led)	High (Policy-led)
	Long Term	High (Market-led)	High (Market-led)

As long as investors, including governments and enterprises, are keen on investing in this region, a SEZ is able to attract a steady flow of capital until the construction of the infrastructure in this SEZ is completed. Anyway, a relatively long-term and stable capital flows into a region is greatly helpful in boosting local economic growth and economic development. Once the infrastructure finishes building, lasting investment in this region are not guaranteed, which will depends on the domestic and global markets. The impact of governmental investment, however, will be gradually weakened. Also, a financial crisis may reduce the total amount of investment. Private parties may withdraw their capital from the investment in infrastructure construction in this SEZ.

During a short term, both pro-SEZ and con-SEZ policies have a great impact on the growth of investment in a SEZ, no matter it is Zouping National ETDZ or the DGFEZ. The influence of market during this short period becomes less significant, as a local economy continues growing by means of governmental investment in this SEZ. However, for a long term, the growth of investment will rely on the national and world economies. Therefore, the development of local economy will be determined by the domestic and global markets.

4.2.2 GRDP Growth

4.2.2.1 Comparison of GRDP Growth

Table 4.2.2.1-1 Comparison the GRDP Growth of Zouping, Daegu and Gyeongsangbuk-do (Gyeongbuk) with the GDP Growth of China and South Korea during 2000-2014

	China	Zouping	Korea	Daegu	Gyeongbuk
Unit	%	%	%	%	%
2000	8.4	N/A	8.9	8.9	12.3
2001	8.3	N/A	4.5	6.3	4.3
2002	9.1	N/A	7.4	8.6	8.3
2003	10.0	N/A	2.9	5.5	8.8
2004	10.1	N/A	4.9	8.0	13.0
2005	11.3	N/A	3.9	3.2	4.1
2006	12.7	N/A	5.2	4.9	2.4
2007	14.2	N/A	5.5	6.5	4.3
2008	9.6	14.5	2.8	3.1	6.9
2009	9.2	12.4	0.7	1.6	3.4
2010	10.6	13.7	6.5	7.1	10.8
2011	9.5	12.6	3.7	7.4	1.8
2012	7.7	10.5	2.3	3.8	3.8
2013	7.7	8.0	2.9	4.0	4.4
2014	7.3	5.9	3.3	N/A	N/A

Source: NBS; BSZC and ZITNBS; Bank of Korea

First, the GRDP growth rates of Zouping followed the overall trend in the Chinese economy. The GRDP growth rate of Zouping reached the peak in 2008, and the GRDP growth rates gradually slowed down afterward. In 2011, the growth rate momentarily raised again, but still was much lower than that in 2008. The reason behind this fact is the dual influences of Chinese economic stimulus plan and the 2008 financial crisis.

Chinese economic stimulus plan counterbalanced the economic losses and economic recession brought by the global financial crisis. A bounded logistic center and several industrial parks, which this stimulus program mainly targeted at, were built in Zouping National ETDZ at that time. Additionally, the funding for these project usually was very huge. After the stimulus program was expired after 2010, the GRDP growth rate of Zouping slowly went down during 2011-2014.

Second, the GRDP growth of Zouping was obviously faster than that of China except for the year of 2014. For example, the GDP growth rate of China in 2010 was 10.6%, whereas the GRDP growth rate of Zouping in the same year was 13.7%. This trend could be applicable to the GRDP growth during 2008-2013. Even, during the 2008 financial crisis, the hit on Zouping's local economy was less severe. This phenomenon demonstrates the positive effect of Zouping National ETDZ on the local economic growth was significantly evident. The zone in Zouping could somewhat mitigate the hit by the global financial crisis.

Third, the GRDP growth of Zouping became slower than the national average for the first time in 2014. The local economy of Zouping confronted the problem of upgrading the industrial structure. In fact, as early as 2011, due to the imbalance of Chinese economic structure, the former Premier Minister Wen Jiabao announced to adjust the economic structure of China, and stated in his government work report (Chinese: 政府工作报告; pinyin: zhèngfǔ gōngzuò

bàogào) that “here I wish to stress that in setting a slightly lower GDP growth rate, we hope to make it fit with targets in the 12th Five-Year Guideline, and to guide people in all sectors to focus their work on accelerating the transformation of the pattern of economic development and making economic development more sustainable and efficient, so as to achieve higher-level, higher-quality development over a longer period of time” (Xinhua 2012, 1). The major priority in the 12th Five-Year Guideline (Chinese: 五年规划; pinyin: wǔnián guīhuà) was the decrease in the dependence on investment and exports and the increase in the weight of private consumption to GDP (Prasad 2011). However, the bottom line of the Central Government is clear. The government treated some level of economic growth as a fundamental consideration. Some outdated industries were not immediately obsoleted. Hence, on the one hand, in some sense, Chinese economic stimulus plan primarily aimed to recover Chinese economy and to stabilize the society during the 2008 global financial crisis, but on the other hand, this economic stimulus plan suspended the economic slowdown nationwide, such as the situation in Zouping and many other cities and towns in China.

In 2014, China entered a new stage of economic development, which was so-called “New Normal” (Chinese: 新常态; pinyin: xīn cháng tài). It refers to a development model underscoring quality growth (Green and Stern 2015, 3). For more than three decades, China implemented a development model relying on high-investment, export-oriented and energy-intensive manufacturing. However, with the fast economic development in China, numerous new problems had come out, such as overinvestment, overcapacity, environmental pollution and so forth. All of these problems imply that this growth model was economically and environmentally unsustainable, and an economic structural change became increasingly urgent. The determination of replacing the backward industries became greater. The bottom line of maintaining some level of economic growth was not the priority. Although some economists cast doubt on how much and how long China’s economy can be set to slow (Hu 2015), the growth rate of China’s oil consumption, as a signal of the economic structural adjustment, started to decrease in 2014 (“China’s ‘New Normal’ Will Hit Oil Demand” 2015). When the GDP growth rates of China increased at a double-digit number, the oil demand of China grew by an average 0.5 million barrels oil per day from 2003 to 2012; by contrast, in 2014, the oil demand increased by 0.27 million barrels oil per day (Meidan, Sen and Campbell 2015, 2). This phenomenon reflects an economic structural change under way in China (“China’s ‘New Normal’ Will Hit Oil Demand” 2015; Meidan, Sen and Campbell 2015, 12-13).

Likewise, as early as the year of 2008, Zouping County Government had noticed that the local economic structure stunted local sustainable development. The *Zouping County Statistical Report 2008* concluded the following views on the local economy in Zouping: “the contradiction of the economic structure was still conspicuous; the downward pressure on the local economy of Zouping was still relatively large; the enterprises had many difficulties in making a profit; international trading environment was not optimistic; energy saving and environmental protection still was a formidable task” (BSZC and ZITNBS 2009, 3). Although the problems were apparent to the County Government, the transformation of the economic structure was actually very smooth. However, similar to the situation of the whole country in 2014, outdated industries in Zouping National ETDZ were shut down, and other undertakings in the zone were also self-adjusted (Zhao 2014). As a consequence, the GRDP growth of Zouping was slower than the GDP growth of the whole country for the first time since 2008.

In South Korea, although the Korean economy recovered very rapidly, the GDP growth of the whole country and the GRDP growth of Daegu and Gyeongsangbuk-do sharply declined one or two years later, after the policies against the 2008 financial crisis had been implemented.

The GDP growth rate switched from 6.5% in 2010 to 3.5% in 2011. The growth rate reduced 3% during 2010-2011, and the rates retained around 3% during the following three years.

However, this situation does not mean that the SEZs are unhelpful to the economic growth in South Korea. Some other reasons may nullify the advantages of the SEZs. First, the DGFEZ and the other seven FEZs are still under construction. Except for Chungbuk Free Economic Zone, the other seven zones will be completed by 2020 (KFEZs 2015). Chungbuk Free Economic Zone plans to be finished by 2024 (KFEZs 2015). Besides, it needs to be noted that some of the FEZs are not newly planned. The actual construction time of the FEZs in South Korea is very long. It unexceptionally can be divided into three stages. The 1st stage is the phase of the construction of infrastructure; the 2nd stage is the development phase; the 3rd stage is the completion stage (KFEZs 2015). As long as the 1st stage of a FEZ ends, it can officially start to run. For example, Incheon Free Economic Zone is the first FEZ in South Korea, which was designated by Korean Central Government in 2003 and officially started to operate in 2006 (Incheon Free Economic Zone 2014). In 2014, IFEZ finished the development stage and is going to step to the third stage-the completion stage (KFEZs 2015). It had attracted the foreign investment worth 5.06 billion US dollars in total during 2004-2013 (Incheon Free Economic Zone 2014). And, the total cost of infrastructure construction is 58.74 trillion won, about 9.47 trillion US dollars (KFEZs 2015). These data signify how a FEZ make the contribution to the economic growth even if it has not officially worked yet. In other words, if a FEZ that finished the 1st stage and that has worked is unprofitable, the follow-up investment will not continue.

Second, the timelines of instituting these eight FEZs also can falsify the view that the FEZs are unable to function as an engine to boost economic growth. Three zones such as the IFEZ began to run prior to the 2008 financial crisis. Three of the zones including the GDFEZ planned to be constructed during the 2008 financial crisis. Two of them mapped out to be founded in 2013 (KFEZs 2015). Therefore, the FEZs do not lose their positive effects on the national economic growth; on the contrary, South Korea Central Government highly expects that the FEZs can reinvigorate the Korean economy.

Third, due to the adjustment of the economic structure in China, the decrease in the South Korean exports gave rise to the slowdown of the Korean economy. The growth rates of South Korea remarkably dropped in 2010 and had already maintained around 3% for four consecutive years. According to a report published by Yonhap News Agency (2015), the Korea Development Institute (KDI), the leading think tank of South Korea, considered that “China is moving to adjust excessive investments that have accumulated since the 2008 global financial crisis, which could plunge the economy into a hard landing and have a chilling effect on South Korea”. The KDI pointed out that, since China was South Korea’s largest export partner, every 1% drop in the economic growth of China perhaps could drag down South Korea’s growth by up to 0.6% (Yonhap News Agency 2015). Hence, the FDI reckoned that the downturn in China’s imports from South Korea might cause the deceleration of the Korean economic growth. In fact, as early as the end of the 1997 financial crisis, South Korean Central Government had realized that the national economy heavily relied on export-led growth, so the government attempted to switch an export-orientated economy to a knowledge-based one since then (Pillay 2010, 72). For this purpose, the Ministry of Education and Human Resources Development of South Korea carried out two important projects. The 1st project is *Brain Korea 21* (BK 21), which aims to cultivate competitive research universities worldwide and to educate quality research manpower for South Korea (Seong et al. 2008, 1). The ultimate aim is to build up a powerhouse of human resources backed by human knowledge driven growth strategy (Kim and Byeon 2011, 1). This project includes two phases. Phase I of BK 21, running from 1999 to 2005, concentrated on university-level, providing fellowship to graduate students, post-doctoral researchers and university professor (Kim and Byeon 2011, 1). It is less irrelevant to industry.

Phase II, which was put into effect during 2006-2012, placed particular emphasis on department-excellence, which means that, in line with “specialization of universities” principle carried out by Ministry of Education, Science, and Technology of South Korea, each university chose the fields in which it plan to specialize, rather than pursuing excellence in all the disciplines (Seong et al. 2008, 4). Therefore, another significant difference is that Phase II emphasized university-industry link, which potentially was able to attract investment from the industrial community and to create economic growth.

The 2nd project is *New University for Regional Innovation* (NURI). South Korean Central Government funded 13 billion US dollars for the project during 2004-2008. The purpose of this project is to improve regional innovation and to balance local development outside Seoul capital region (OECD 2007, 46). An even economic development was not a new political and economic goal in South Korea. On the one hand, Seoul capital region attracted a large quantity of social and economic resources; on the other hand, it also suffered from this over-concentration (Kim 2007, 6-7). Hence, besides those goals laid down by BK 21, the aim of the NURI underlined the pragmatic cooperation among local universities, local research institutions, local governments, local business and local industry. These parties needed to mold themselves into a team to implement a project, if desiring to be selected to gain financial support from the NURI (Kim 2007, 19; Berg and Hassink 2013, 67).

The FEZs provide a breeding ground for these projects. South Korea sequentially instituted eight FEZs for promoting local economic growth in 2003, which distributed in the whole country. All of them unexceptionally underscored R&D as one of their main businesses. This specific preference was written in the basic plan of each FEZ as well (KFEZs 2015). The DGFEZ proclaimed that the zone aimed to become one of the global and creative-knowledge centers and the Northeast Asia Hub for knowledge-based industry by two advantages: one was the customized financial support; the other one was the excellent R&D infrastructure for business, which included 35 government-funded research institutes, 11 government-designated R&D centers and five industry support centers to provide knowledge and technical support for the sustainable development of the DGFEZ and the region (KFEZs 2015). For example, only in information technology (IT) industry in the DGFEZ, A totally number of 1,399 firms hiring 86,398 employees contributed the GRDP of 65,538,600 million won (about 56.99 billion US dollars) in 2012 (DGFEZ 2012). The GRDP of Daegu-Gyeongbuk was 128,422,005 million won, roughly 111.67 billion US dollars (Statistics Korea 2014). Therefore, the rate of “the DGRP of the IT industry to the GRDP” was 51.0% in this region in 2012. It demonstrates that the knowledge-based industry made a large proportion of contribution for the regional economic growth. As a result, besides the unoptimistic international trading environment, the transition of the Korean economic structure, which fully switched from an export-led economy to a knowledge-based one, could cause the downshift of South Korea’s economic growth as well.

4.2.2.2 Summary of Section 4.2.2

Table 4.2.2.2-1 Impacts of the SEZs on the GRDP Growth

GRDP Growth/SEZ	Zouping National ETDZ	DGFEZ
Short Term	High	High
Long Term	High	High

For a short term or a long term, an effectively operated SEZ is able to promote GRDP growth. The precondition of this conclusion is that this SEZ should effectively work. It implies that, having taken into account various conditions of a SEZ, such as the location, public policies and

the world economy, the management authority of this SEZ is able to enact a pragmatic development strategy. Although the GRDP growth is still greatly influenced by public policies and markets, a local economy with a well-operated SEZ can grow more rapidly than the national economy can do in general for a short term and a long term.

4.2.3 Growth of the Total Exports of Goods and Services

4.2.3.1 Comparison of the Growth of the Total Exports of Goods and Services

Table 4.2.3.1-1 Growth Rate of the Total Exports of Goods and Services of China and Zouping during 2008-2014

	China	Zouping
Unit	%	%
2008	17.2	-0.62
2009	-16.0	-29.40
2010	31.3	32.97
2011	20.3	-18.77
2012	7.9	-10.30
2013	7.8	36.55
2014	6.1	-15.52

Source: NBS; BSZC and ZITNBS

Table 4.2.3.1-2 Growth Rate of the Total Exports of Goods and Services of Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2008-2014

	2010	2011	2012
Unit	%	%	%
South Korea	28.3	19.0	-1.3
Daegu	34.8	24.4	8.4
Gyeongbuk	28.6	21.8	0.1

Source: Statistics Korea

In general, regardless of different countries and regions, the general tendency of the exports growth dramatically decreased. After the 2008 financial crisis, the overall trend in the exports in China and South Korea notably reduced. And so far, there is no indication showing that the amount of exports will recover to the original quantity that is before the 2008 financial crisis. The global financial crisis in 2008 engendered the subsequent economic recession worldwide. This recession dragged down the economic recovery of most economies, including the advanced economies such as South Korea and the emerging market economies such as China. The growth of the global economy has substantially revised downwards since 2011, and the world economy is assumed to maintain weak (Behar and Espinosa-Bowen 2014, 3). Angel Gurría, the current Secretary-General of the Organization for Economic Co-operation and Development, warned that “global trade, which was already growing slowly over the past few years, appears to have stagnated” (Stewart and Ryan 2015). Hence, under this international trading environment, the advantage of a SEZ, which is primarily promoting exports, is very finite. The performance of SEZs on export promotion considerably depends on the overall situation of global trade.

4.2.3.2 Summary of Section 4.2.3

Table 4.2.3.2-1 Impacts of the SEZs on the Growth of Exports

Type of Economy	Growth of Exports/SEZ	Zouping National ETDZ	DGFEZ
Booming Global Economy	Short Term	High	High
	Long Term	High	High
Global Economic Crisis/Recession	Short Term	Low	Low
	Long Term	Low	Low

During a period of a booming global economy, SEZs can function as a major driving force of local economic growth by dint of exports for a short term and a long term. However, a global economic crisis and recession reduces the demand for exports, so this advantage of SEZs is substantially weakened.

4.2.4 Different Sectors to GRDP

4.2.4.1 Comparison of Different Sectors to GRDP

Table 4.2.4.1-1 The Rate of Different Sectors to GRDP of Zouping during 2008-2014

	Primary Sector to GRDP	Secondary Sector to GRDP	Tertiary Sector to GRDP	Primary Sector: Second Sector
Unit	%	%	%	%
2008	4.8	76.5	18.6	6.3
2009	4.8	67.1	28.0	7.2
2010	5.0	65.8	29.3	7.5
2011	4.9	64.3	30.8	7.6
2012	4.8	63.4	31.8	7.6
2013	5.1	63.1	31.8	8.0
2014	5.1	62.1	32.8	8.3

Source: Bureau of Statistics of Zouping. The rates are calculated by the Author.

The economic structure of Zouping maintained constant during 2008-2012 in general. The primary sector maintained around 5% of the GRDP from 2008 to 2014. The secondary sector hold a major role in contributing GRDP; however, since 2008, the rates gradually fell off year by year. According to the *Zouping County Statistical Report 2014*, the local authority indicated for the first time that the profitability of industrial enterprises was weak. The losses of these companies for this year reached 247 million yuan, around 39.8 US dollars (BSZC and ZITNBS 2015, 7). However, the secondary sector was still the major industry in Zouping. In 2014, Zouping National ETDZ contributed the total output value of 49.6 billion yuan, approximately, 8.0 billion US dollars (BSZC and ZITNBS 2015, 2), which took 64.1% of the total GRDP in the same year. Hence, the dominant position of the secondary sector was not changed.

Meanwhile, the rates of “the GRDP of the primary sector to the GRDP of the secondary sector” became progressively high each year, showing that Zouping has been deeply industrialized. The “industrial enterprises above designated size” (Chinese: 规模以上企业; pinyin: guīmó yǐshàng qīyè) numbered 339 in 2014 (BSZC and ZITNBS 2015, 6). According to the official definition regulated by NBS, it refers to the enterprises with an annual turnover over five million yuan (0.8 million US dollars) during 2007-2010, then over 20 million yuan (3.2 million US dollars) since 2011 (Pan et al. 2015, 84). Among these “industrial enterprises above designated size”, 95 firms earned more than 0.1 billion yuan in 2014 (16.1 million US dollars); 17 companies

gained profits worth more than one billion yuan (0.2 billion US dollars); the earnings of five undertakings exceeded 10 billion yuan (1.6 billion US dollars); and last, the annual income of one enterprise was more than 100 billion yuan, about 16.1 billion US dollars (BSZC and ZITNBS 2015, 6). It is impressive to see that several hundreds of industrial undertakings were located within a confined zone and a small county. Moreover, the industries in Zouping are also wide-ranging. The major industries consisted of textile, clothing, food, medicine, manufacturing, smelting, pulp and paper and chemical industries. Meanwhile, the local government and Zouping National ETDZ strove to develop high-technology industries, such as bio-engineering, pharmaceuticals and IT (BSZC 2015). Therefore, in terms of the number of the large industrial enterprises and the scope of the major industries, Zouping can be counted as a highly industrialized region.

In contrast to the GRDP of the secondary sector, the GRDP contributed by the tertiary sector accounted for an increasing proportion of the GRDP each year. This set of data reflected that Zouping National ETDZ contributed the majority of the GRDP every year. Nonetheless, if no substantial industrial updating for the secondary sector is launched, the zone could not be a catalyst for boosting local economic growth any more.

Table 4.2.4.1-2 The Rate of Different Sectors to GRDP of Daegu during 2008-2014

	Primary Sector to GRDP	Secondary Sector to GRDP	Tertiary Sector to GRDP	Primary Sector: Second Sector
Unit	%	%	%	%
2000	0.8	28.6	62.5	2.7
2001	0.8	26.3	64.5	2.9
2002	0.7	26.4	63.8	2.7
2003	0.5	25.3	65.1	2.2
2004	0.5	25.2	63.0	2.0
2005	0.5	26.2	64.8	2.0
2006	0.5	26.4	64.9	2.0
2007	0.5	26.7	65.3	1.8
2008	0.4	25.1	66.5	1.6
2009	0.4	24.3	67.9	1.8
2010	0.4	25.7	67.3	1.5
2011	0.4	26.9	65.8	1.4
2012	0.4	26.3	66.3	1.4
2013	0.3	26.5	66.4	1.2

Source: Statistics Korea. The rates are calculated by the Author.

Table 4.2.4.1-3 The Rate of Different Sectors to GRDP of Gyeongsangbuk-do during 2000-2013

	Primary Sector to GRDP	Secondary Sector to GRDP	Tertiary Sector to GRDP	Primary Sector: Second Sector
Unit	%	%	%	%
2000	8.4	52.2	33.6	16.0
2001	7.8	51.2	34.8	15.2
2002	7.9	51.7	33.8	15.2
2003	6.3	52.8	34.1	11.9
2004	6.9	55.8	31.4	12.3
2005	6.3	55.7	32.2	11.4
2006	6.2	54.4	33.5	11.5
2007	6.0	54.5	33.9	11.0

2008	5.7	54.3	34.1	10.5
2009	5.6	54.3	34.3	10.3
2010	5.5	55.9	32.9	9.8
2011	5.7	53.8	34.2	10.6
2012	6.1	53.4	34.7	11.3
2013	5.6	54.2	34.4	10.2

Source: Statistics Korea. The rates are calculated by the Author.

Some small adjustments could be found, but the economic structure of the Daegu-Gyeongbuk region roughly maintained unchanged during 2000-2013. The rates of “the GRDP of the primary sector to the GRDP” in Daegu slightly and gradually decreased, ranging from 0.8% in 2000 to 0.3% in 2013. Daegu is one of the six Metropolitan Cities in South Korea, so the percentages of “the GRDP of the primary sector to the GRDP” remained small-scale. The percentage of “the GRDP of the primary sector to the GRDP” of Gyeongsangbuk-do peaked in 2000, which was 8.4%. After 2000, the overall trend was that the percentages dwindled. In 2013, it eventually reached 5.6%. Compared with the percentage of “the GRDP of the primary sector to the GRDP” of Daegu, the percentage of Gyeongsangbuk-do in 2013, for example, was more than 18 times of that of Daegu in the same year. Compared with the percentages of “the GRDP of the primary sector to the GRDP” in 2000, the percentage of Gyeongsangbuk-do was roughly 10 times of that of Daegu. These data illustrated that Gyeongsangbuk-do still put a premium on the primary sector. The Gyeongsangbuk-do Government therefore introduced their province by this statement that “Gyeongsangbuk-do is a center of agriculture, with 17.2% of the total population was engaged in the agricultural business” (Gyeongsangbuk-do Provincial Government 2015).

Except that the percentage of “the GRDP of the secondary sector to the GRDP” in 2009 was 24.3% in Daegu, the rest numbers, roughly, ranged from 25% to 26% during 2001-2013. The percentage of “the GRDP of the secondary sector to the GRDP” of Daegu peaked in 2000, which was 28.6%. From 2001 to 2008, the figures were in the range of 25% to 26%. Due to the 2008 financial crisis, it dropped to 24.3%. After 2009, the figures returned to the previous range. Two main reasons may result in such a change. First, the policies against the 2008 global financial crisis were workable. South Korea rapidly and successfully escaped the financial crisis. The secondary sector of Daegu in 2010 successfully returned to the scale that was before the crisis. Second, the ongoing construction and the official operation of the DGFEZ created new economic growth in 2009. The South Korea Central Government invested 7.9887 trillion won, approximately 6.95 billion US dollars, in the infrastructure construction in the DGFEZ (KFEZs 2015). Additionally, a national government project “Medivalley” was launched at Sinseo Meditech District of the DGFEZ in 2009 (DGFEZ 2012). The total cost of this project was 4.6 trillion won, which is equivalent to 4.0 billion US dollars: the Central Government of South Korea invested 1.1 trillion won (1.0 billion US dollars) in the core infrastructure and research support facilities; Daegu Metropolitan City Government spent 0.9 trillion won (0.8 billion US dollars) on the amenities; private capital provided the rest of fund for constructing the research institute district (Daegu-Gyeongbuk Medical Innovation Foundation 2011). The period of infrastructure construction lasted from 2009 to 2013 (Daegu-Gyeongbuk Medical Innovation Foundation 2011). The entire construction of this project is expected to end in 2038 (Daegu-Gyeongbuk Medical Innovation Foundation 2011). Hence, capital flows continue entering this region during 2009-2038. Like other FEZs in South Korea, once the phase of construction is completed, the FEZs will partially function. The pharmaceutical industry, one of many industries in the secondary sector and one of the pillar industries in this region, will maintain a proportion of GRDP.

However, it does not imply that the percentages of “the GRDP of the secondary sector to the GRDP” should grow more in Daegu during 2010-2013. The construction of the DGFEZ is not completed, and it only partially works. Still, it has a long way to go. Industrial upgrading is underway. Besides, although the Korean economy recovered very fast, it was heavily hit by the 2008 financial crisis and the following economic recession that grew out of that crisis (Ciment and Rowley 2015, 454). Last, due to the gradual decline of the pillar industries, namely the textile machinery industry and the textile industry in Daegu (Lee, Yun and Jeong 2015, 59), the transition could not be achieved during a short period of time. Since the percentages of “the GRDP of the secondary sector to the GRDP” roughly remained constant, this set of data expressed that the new industrial system was offsetting the losses brought by the fall of the old dominant industries.

Moreover, the major sector in Daegu is the tertiary sector. The percentages of “the GRDP of the tertiary sector to the GRDP” remained relatively high, ranging from 62.5% to 67.9%. The lowest point was the percentage in 2000, whereas the year of 2009 reached the zenith. Likewise, because of the decay of the secondary sector, which mainly referred to the textile machinery industry and the textile industry, considerable labor force became self-employed in Daegu. Seyoung Kang (2014, 72), the Associate Professor of Women’s Studies at the Keimyung University, observed that “the decline of local industry, especially the textile industry, and the consequent reduction in traditional employment turned self-employment into one of the main economic activities in the region (Daegu)”. However, the percentages of “the GRDP of the tertiary sector to the GRDP” decreased after 2009, and meanwhile, the percentage of “the GRDP of the secondary sector to the GRDP” increased. Except the percentage of “the GRDP of the primary sector to the GRDP” in 2013 remarkably dropped to 0.3%, the rest of the percentages roughly maintained similar. It signified that many employed persons returned to the secondary sector, as the secondary sector could provide more job opportunities. Since 2009, many new enterprises officially worked in the DGFEZ one after another. This phenomenon reflects that a FEZ is able to boost local economic growth during the first several years. Additionally, due to the roughly constant percentages of “the GRDP of the secondary sector to the GRDP” during 2009-2013, the proportions of “the primary sector to the secondary sector” became low.

The economic structures of Gyeongsangbuk-do and Zouping were alike, but the tendency of the shift in the proportion of “the GRDP of each sector to the GRDP” and the share of “the GRDP of primary sector to the GRDP of the secondary sector” varied. Gyeongsangbuk-do and Zouping shared many similarities. The percentage of “the GRDP of the primary sector to the GRDP” remained around 5% in Gyeongsangbuk-do and Zouping during 2008-2013. The secondary sector of Gyeongsangbuk-do played a major role in contributing GRDP, but the tertiary sector of Gyeongsangbuk-do was relatively weak. The GRDP of the primary sector took a very small proportion of the GRDP of the secondary sector. The disparities were also very noticeable. The percentages of “the GRDP of the secondary sector to the GRDP” and the percentages of “the GRDP of the tertiary sector to the GRDP” in Gyeongsangbuk-do nearly maintained invariable. By contrast, the percentages of “the GRDP of the secondary sector to the GRDP” in Zouping tended to decrease, while the percentages of “the GRDP of the tertiary sector to the GRDP” tended to increase. The percentage of “the GRDP of the primary sector to the GRDP of the secondary sector” in Zouping was inclined to grow, whereas it differed in Gyeongsangbuk-do and Daegu. It can be explained that Zouping National ETDZ was losing its traditional advantage, if no substantial industrial upgrading was available. By contrast, although the construction of the DGFEZ has not fully completed yet, some parts of the DGFEZ, which have officially operated, is playing an active role in revitalizing the secondary sector.

The distinction between Gyeongsangbuk-do and Daegu was also greatly evident. The major sector in Gyeongsangbuk-do was the secondary sector, while the tertiary sector was very

advanced in Daegu. Besides these differences, both the share of “the GRDP of the primary sector to the GRDP” and the proportion of “the GRDP of the primary sector to the GRDP of the secondary sector” lessened by degrees. It showed that the secondary sector in Gyeongsangbuk-do and Daegu became increasingly important.

4.2.4.2 Summary of Section 4.2.4

Table 4.2.4.2-1 Impacts of the SEZs on the Economic Structure

Item/SEZ	Zouping National ETDZ	DGFEZ
The Major Industry	Secondary Sector	Tertiary Sector (Daegu); Secondary Sector (Gyeongsangbuk-do)
Primary sector: Second Sector	Low	Low
Impact of SEZs on the Economic Structure	High	Low

Due to rapid economic growth, the weight of the primary sector in Zouping, Daegu and Gyeongsangbuk-do all declines. The primary sector in these three regions maintains a fixed tiny size. Besides, the main sectors of these regions differ. The major industry of Daegu is the tertiary sector. Whereas, the secondary sector is the major industry in Gyeongsangbuk-do and Zouping. Although the economic structures of Gyeongsangbuk-do and Zouping are alike, the growth of the secondary sector and the tertiary sector tends to be dissimilar. The tertiary sector is growing, and the secondary sector nevertheless is lessening in Zouping. By contrast, the economic structure is nearly constant in Gyeongsangbuk-do. Also, the economic structure of Daegu roughly remains unchanged. As a consequence, the impact of Zouping National ETDZ and the DGFEZ on the economic structures of each region may vary. According to the data, Zouping National ETDZ is able to shape the economic structure of Zouping. However, the DGFEZ shows a relatively low impact on the regional economic structure.

4.2.5 Change of Labor Force

4.2.5.1 Labor Force Growth

Table 4.2.5.1-1 The Growth Rate of the Labor Force of China, Zouping, South Korea, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2001-2014

	China	Zouping	South Korea	Daegu	Gyeongbuk
Unit	%	%	%	%	%
2001	-0.1	N/A	1.5	2.5	-0.2
2002	0.8	N/A	2.0	2.5	-0.2
2003	0.6	N/A	0.2	-0.7	-0.6
2004	0.5	N/A	2.0	2.2	0.1
2005	1.1	N/A	1.4	0.7	-0.4
2006	0.3	N/A	1.0	-1.2	-0.3
2007	0.3	N/A	1.0	-1.5	-1.2
2008	0.7	3.8	0.5	-1.3	0.4
2009	0.6	2.3	0.2	1.3	0.2
2010	1.1	1.8	1.5	1.5	1.1
2011	0.2	1.5	1.4	-0.4	-0.5
2012	0.4	-0.4	1.6	2.6	1.5
2013	0.5	0.9	1.5	-0.7	1.2
2014	N/A	N/A	2.6	2.2	2.3

Source: NBS; BSZC and ZITNBS; Statistics Korea

Except for 2012, the labor force growth rates of Zouping overall increased faster than those of China during 2008-2013. The *Zouping County Statistical Report 2012* wrote that the number of labor force decreased 1,984 in Zouping, but the reason why the figure slightly lessened was unreported. Perhaps, some amount of small decrease could be a normal fluctuation. But, the labor force growth gradually dropped year by year during 2008-2013. These data revealed that Zouping National ETDZ, the mainstay of the local economy, employed less employees and workers since 2008. The zone either adjusted the economic structure and upgraded their industries, or was dragged into an economic recession during this period. Or, these two situations simultaneously occurred. Several news media, such as Sina, reported that many of the enterprises had to either “suspend production pending consolidation” (Chinese: 停产整顿; pinyin: tíngchǎn zhěngdùn) or filed for bankruptcy (Zhao 2014). Shandong Changxing Group was labelled as one of the largest cooperation by Zouping National ETDZ (2011). One of its several major subsidiaries, Qunxing Paper, had stopped production. This paper business was one of the main sources of income. On February 2014, Qunxing Paper filed for bankruptcy, and its other subsidiaries continued seeking financing. The reasons of its bankruptcy included two aspects. First, since Changxing Group failed in the investment in a wind power project, it was unable to pay a six-billion-yuan (1.0 billion US dollars) loan in addition to the interests. Second, because of the slowdown of the national and local economic growth, financing became difficult. These two problems perplexed more than 5,000 companies in Zouping (Zhao 2014). Moreover, this report can demonstrate two points. First, the industrial upgrading is not simple. Changxing Group and its subsidiaries Qunxing Paper, as a typical example in Zouping National ETDZ, had noticed the importance of upgrading the industries, but this attempt was not smooth. Second, financialization had eroded the real economy in Zouping. Due to a very high interest rate, some large industrial companies had no choice but went bankrupt. The bankruptcy of Qunxing Paper Company was the case. More details on this topic will be discussed in Section 4.4.

The labor force growth in the Daegu-Gyeongbuk region overall tended to be slower than that in South Korea over the past decade. Except for 2004 and 2009, the labor force in Daegu grew slower than that in South Korea. In 2003, 2006, 2007, 2008, 2011 and 2013, the labor force in Daegu negatively grew. The labor growth rates of Daegu in 2011 and 2013 were respectively -0.4% and -0.7%, whereas the negative growth rates of Daegu during 2006-2008 were relatively high, which were more than -1.0%.

Since 2009, except for the low negative growth in 2011 and 2013, the labor force tended to positively grow in Daegu. The DGFEZ made a significant contribution to the labor force positive growth. On January 2009, the infrastructure in the DGFEZ started to be constructed, and the first company of the DGFEZ, Dassault Systèmes R&D Center, officially worked in May 2010 (DGFEZ, 2012). As a result, the growth rate reached 1.3% in 2009 and it was 1.5% in 2010. The labor force growth of Daegu caught up with the growth of South Korea in 2010. The 2012 Daegu's labor force growth reached the acme during 2001-2014, which was 1.0% higher than that of South Korea. In 2014, Daegu still maintained growing at a rate of 2.2%, which was only 0.4% less than the rate of South Korea.

The year of 2008 was a turning point of the labor force growth in Gyeongsangbuk-do. During 2000-2007, except for the year of 2004, the labor growth negatively grew overall. In 2004, the growth rate merely increased 0.1%. However, the labor force of South Korea and Daegu grew, respectively, at a rate of 2.0% and 2.2% in 2004. These data showed that the local economy in Gyeongsangbuk-do shrank. As previously mentioned, the fall of the two pillar industries in Gyeongsangbuk-do, namely the textile industry and the textile machinery industry, caused a decline in employment since 2000 (Lee, Yun and Jeong 2015, 59). From 2008 to 2014, except for the year of 2011, the number of labor force wholly positively grew, particularly, in 2010, 2012, 2013 and 2014, with a more than one percent annual increase. The rate of 2014 was the highest point during 2001-2014, which was 2.3%. It was even slightly higher than the growth rate of Daegu in 2014. The rate of Daegu was 2.2% in 2014. In terms of a province that was threatened by a gradual decline, a FEZ played a helpful role in the revitalization of the local economy.

4.2.5.2 Change of Labor Force in Rural Areas

Table 4.2.5.2-1 The Rural Population and the Urbanization Rate of Zouping, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2005-2014

	Zouping		Daegu		Gyeongbuk	
	Rural Population (Person)	Urbanization Rate (%)	Rural Population (Person)	Urbanization Rate (%)	Rural Population (Person)	Urbanization Rate (%)
2005	N/A	N/A	0	100	616,189	77.08
2006	N/A	N/A	156	99.99	606,996	77.42
2007	N/A	N/A	522	99.98	604,466	77.46
2008	532,443	50.60	456	99.98	608,729	77.23
2009	533,766	51.60	471	99.98	615,919	76.93
2010	502,921	53.60	183	99.99	630,268	76.57
2011	504,750	52.22	486	99.98	594,562	77.97
2012	503,600	54.32	537	99.98	626,224	76.79
2013	349,600	55.80	533	99.98	618,146	77.10
2014	340,800	57.20	504	99.98	627,926	76.75

Source: BSZC and ZITNBS; Statistics Korea

In Zouping, the number of rural population decreased year by year, as the peasants living in the villages of Zouping preferred to seek a job in Zouping National ETDZ in order to augment family income. In the acme, a total number of 293.6 thousand peasant workers holding rural household registration of Zouping County were engaged in the secondary and tertiary sectors in 2011. This number excluded the peasant workers coming from other counties and provinces in China. The definition of the term “nong min gong” (Chinese: 农民工; pinyin: nóng mǐn gōng), literally peasant worker, generally indicates a peasant who has a rural household registration but works in a city regardless of his or her professions (Li 2012, 4). But, normally, these occupations are urban-based, which exclude the jobs of the primary sector (4).

From the data, we can find that, along with the economic development in Zouping, the rural population grows smaller and the urbanization rates become bigger. The economic development also led Zouping to urbanization. The urbanization rates grew in a gradual way year by year. Besides, while the rural population of Daegu varied over time, the urbanization rates maintained either 99.98% or 99.99% in general. Daegu itself is one of the six metropolitan cities in South Korea, so the city maintained a greatly high urbanization rate. By contrast, Gyeongsangbuk-do kept roughly constant rural populations and relatively sustained high urbanization rates from 2005 to 2014. Since South Korea became an advanced country classified by the International Monetary Fund in 1997 (Nielsen 2011, 17), Gyeongsangbuk-do, as an agricultural center of South Korea, overall had a relatively high urbanization rate than Zouping did.

4.2.5.3 Summary of Section 4.2.5

Table 4.2.5.3-1 Impacts of the SEZs on the Labor Force Growth and on the Changes of the Rural Labor Force

Impact of Labor Force/SEZ	Zouping National ETDZ	DGFEZ
Labor Force Growth (Short Term)	High	High
Labor Force Growth (Long Term)	Unknown	Unknown
Rural Labor Force (Short Term)	High	Low
Rural Labor Force (Long Term)	Unknown	Unknown

During the first two years when SEZs initiate to operate, SEZs can create abundant employment opportunities. The labor force of Zouping National ETDZ and the DGFEZ grew very fast during the first two years when they began to work. Therefore, during a short term, the influence of these two SEZs on the change in the labor force growth is obvious.

By contrast, in spite of the change in the labor force growth in rural areas, the effects of Zouping National ETDZ and the DGFEZ on the changes in the labor force growth are unknown for a long term. The economic performance of each SEZ is essential, which can be jointly determined by the SEZs' capacity for effective governance, the profitability of the undertakings in the SEZs, public policies and the domestic and global markets. Consequently, the impact of Zouping National ETDZ and the DGFEZ on the change in the labor force growth has a high amount of uncertainty for a long term.

Moreover, the impact of each zone on the change in the rural labor force growth differs. China is still a developing country with a large amount of rural surplus labor force. This establishment

and expansion of Zouping National ETDZ contribute to the decrease in the population of the rural area and correspondingly contribute to the acceleration of urbanization, because plenty of the rural surplus labor forces come to the county seat of Zouping and seek a highly paid job in Zouping National ETDZ. However, South Korea has been a developed country in 1997. Such a transformation in South Korea has been completed, so the shift in the rural labor force growth and the urbanization rates are very small. Accordingly, the influence of each zone on the change in the rural labor force growth is distinct.

4.3 IMPACT OF THE SEZs ON LOCAL ECONOMIC DEVELOPMENT

4.3.1 Comparison of the Impact of the SEZs on Local Economic Development

Table 4.2.5.3-1 Human Development Index of China and South Korea during 2000-2013

	China	South Korea
2000	0.591	0.819
2005	0.645	0.856
2008	0.682	0.874
2010	0.701	0.882
2011	0.710	0.886
2012	0.715	0.888
2013	0.719	0.891
Average Annual HDI Growth (%)	1.52	0.65

Source: Human Development Report 2014

As discussed in Section 2.1.2, economic development includes economic growth and three ethically defined goals. As Smith (2011, 21) suggested, the ethically defined goals consist of sustenance (the ability to meet basic needs), self-esteem (to be a person), and freedom from servitude (to be able to choose). The Human Development Index is one of the widely used indicators assessing a country's development status (Wolff, Chong and Auffhammer 2011, 843). In Section 4.3 of Chapter of Methodology, we have discussed the necessity of using the HDI and the reasons the HDI can show the general trends in the development of each region, even if the HDI is an indicator of a country. However, the application of the HDI will not distort the conclusion of this section, because the section places emphasis on trend instead of a particular time point.

The data showed that the HDI gradually grew in both South Korea and China. Since South Korea became an advanced country since 1997 (Nielsen 2011, 17), the HDI ranking of South Korea remains relatively stable. In 2014, it was ranked 15th place in the HDI. Since 2000, South Korea had maintained very high HDI, and the average annual HDI growth rate was relatively high. Hence, South Korea was ranked as one of the countries with very high human development.

The progress of the HDI of China is very conspicuous. The average annual HDI growth rate reached up to 1.52% during 2000-2013, which was the highest growth rate in the list of the countries with high human development. The *Human Development Report 2014* wrote that "of the 47 countries in the low human development group in 1990, 16 are now in the medium group and 1 is in the high group (China)" (UNDP 2014, 35-36). However, the space of improving the HDI was still large. The HDI of South Korea was 0.891 in 2013, whereas the HDI of China was 0.719 in the same year. Overall, the regional economic growth of China and South Korea, which

respectively included Zouping, Daegu and Gyeongsangbuk-do, accompanied the regional economic development.

4.3.2 Summary of Section 4.3

Table 4.2.5.3-1 Impacts of the SEZs on the Regional Economic Development

Item/SEZ	Zouping National ETDZ	DGFEZ
HDI during 2000-2013	High	Very High
Average Annual HDI Growth (%)	Very High	High
Impact of SEZ on Regional Economic Development	High	High

The HDI gradually grew in both South Korea and China since 2000, in spite of the large space of improving the HDI ranking of China. During 2000-2013, the national average of China ranked in the list of “High Human Development”, whereas the national average of South Korea ranked in the list of “Very High Development”. Moreover, the average annual HDI Growth of China more rapidly increased than that of South Korea did during 2000-2013. As a consequence, the overall impacts of these two SEZs on the regional economic development are high. Furthermore, the data demonstrate that the economic growth of these two countries boosts the economic development. Lasting economic growth provides a firm foundation for further economic development, in the case of China and South Korea. If the SEZs can further the regional economic growth, they indirectly promote the economic development in the regions. Accordingly, both Zouping National ETDZ and the DGFEZ played a major role in advancing the economic development in each region.

4.4 IMPACT OF THE SEZs ON LOCAL ECONOMIC DEVELOPMENT DURING THE ERA OF FINANCIALIZATION

4.4.1 GDP (GRDP) of Financial Sector to GDP (GRDP) of Real Sector

4.4.1.1 Comparison of GDP (GRDP) of Financial Sector to GDP (GRDP) of Real Sector

Table 4.4.1.1-1 GDP (GRDP) of Financial Sector to GDP (GRDP) of Real Sector of China, Zouping, South Korea, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2000-2014

	China	Zouping	South Korea	Daegu	Gyeongbuk
Unit	%	%	%	%	%
2000	0.05	N/A	5.96	7.13	2.58
2001	0.05	N/A	6.56	7.99	2.98
2002	0.05	N/A	7.76	9.73	3.67
2003	0.05	N/A	7.48	9.89	3.57
2004	0.04	N/A	6.73	8.99	2.98
2005	0.04	N/A	6.93	8.77	2.94
2006	0.05	N/A	6.85	8.66	3.19
2007	0.06	N/A	7.04	9.18	3.16
2008	0.06	0.79	6.97	8.96	3.12
2009	0.07	1.40	6.68	8.49	2.87
2010	0.07	1.33	6.68	8.01	2.95
2011	0.07	1.67	6.88	7.78	3.33
2012	0.07	2.63	6.44	7.47	2.93
2013	0.08	2.85	5.90	7.00	2.76
2014	0.08	2.55	N/A	N/A	N/A

Source: NBS; BSZC and ZITNBS; Statistics Korea. The rates are calculated by the Author.

An increasing share of “the GDP (GRDP) of the financial sector to the GDP (GRDP) of the real sector” in China and Zouping tended to grow in general. Generally speaking, the real sector means “the sectors in which money can have a value equivalent in the form of goods and services” (Bortis 2010, 13). If the capital from the real sector enters financial markets, it can be a store of value, but the capital in financial markets cannot be counted as a real value equivalent, as it does not produce goods and services. Let's move back to the topic at hand. Compared with 0.05% in 2000, 2001, 2002, 2003 and 2006, the percentages of “the GDP of the financial sector to the GDP of the real sector” of China dropped to 0.04% in 2004 and 2005, but it inclined to take more shares after 2007. In 2014, it eventually reached 0.08%. Likewise, Zouping had a similar tendency. During 2008-2013, the shares of “the GRDP of the financial sector to the GRDP of the real sector” gradually increased each year. However, the percentage of 2014 was 0.3% less than that of the last year. Even so, compared with the 0.79% in 2008, the percentage of 2014 grew more than 3 times faster than that of 2008. And, the percentages of “the GRDP of the financial sector to the GRDP of the real sector” of Zouping even grew much more rapidly than that of China did each year. In 2008, the percentage of Zouping was 0.79%, while the percentage of China was 0.06%. The share of Zouping was more than 10 times bigger than that of China. Moreover, the gap of the share of “the GDP (GRDP) of the financial sector to the GDP (GRDP)” between China and Zouping became increasingly large. Only six year later, the percentage of “the GRDP of the financial sector to the GRDP” of Zouping was more than 35 times larger than that of China in 2013. In terms of the pace and degree of financialization in Zouping, the local economy of Zouping was rapidly and highly financialized.

The year of 2003 is the time of the establishment of Zouping Provincial ETDZ, which had not been upgraded to a national level yet. In Zouping, Shandong Weiqiao Pioneering Group Company (Chinese: 山东魏桥创业集团有限公司; pinyin: shāndōng wèiqiáo chuàngyè jítuán yǒuxiàn gōngsī) and Xiwang Group (Chinese: 西王集团; pinyin: xīwáng jítuán) respectively ranked 11th and 74th in the “Top 100 Largest Taxpayers of Shandong Province 2014” (Ding 2015). They were the two major local enterprises that were so-called township and village enterprises (Kipnis 2013, 7-8).

The definitions of township and village enterprise (Chinese: 乡镇企业; pinyin: xiāngzhèn qǐyè; acronym: TVE) are twofold. In a broad sense, the definition of TVE indicates any enterprise headquartered in rural area, regardless of its ownership. The rural area is strictly limited on the three levels of administrative unit in China, which is county, town and village (Shang and Liu 2003). By contrast, Article 2 of the Law of the People's Republic of China on Township Enterprises defines this term in a narrow sense. The official title of TVE is named “township enterprise” in line with Article 2 of the Law. However, the term “TVE” is more widely used than the official title. The *township enterprise* refers to “the different types of enterprises that are established in townships (including the villages under their jurisdiction) with the bulk of their capital being invested by rural economic collectives or farmers and that undertake the obligations to support agriculture” (The National People's Congress 2011). The difference between the broad and narrow definitions places particular emphasis on the ownership and the location. The broad definition does not strictly regulate the ownership but the location in which TVEs are seated, whereas the narrow definition places stress on the ownership and the economic purpose, but the location can be flexible. The broad definition of TVEs is adopted in the thesis, because almost all the TVEs meeting the legal definition had vanished. Although some of these TVEs still acclaim that their enterprises are invested by rural economic collectives or farmers, the majority of them have already been privatized in China. The privatization of TVE had been noticeably accelerated since 1998, because of the enforcement of 1999 Constitutional Amendment of China. This 1999 Amendment was a further amendment based on the 1982 China's Constitution. One remarkable change in the 1999 Amendment was granting legal status to a private economy, which provides that “the individual, private and other non-public economics” are treated as “major components of the socialist market economy” (Zhang 2008, 336). Due to the massive privatization of TVEs, the share of TVEs remarkably dropped from 19.5% in 1998 to 1.5% in 2010 (Itoh 2013, 157).

In terms of the privatization of TVEs, Zouping is one of many typical examples in China. Zhang Shiping, the founder and the present CEO of Shandong Weiqiao Pioneering Group Company, and his family were the largest shareholder at the company, holding 48.79% shares by 2012 (Song 2013). Similarly, Wang Yong, the Chairman of Xiwang Group, and his family possessed 66% shares by 2012 (He 2013). As a result, the privatization of the TVEs in Zouping is very widespread.

Before Zouping ETDZ was established, only one TVE in Zouping entered financial markets. When Xiwang Group still was a TVE in such a small county and when the ETDZ had not been instituted yet, it had become the first listed company in Zouping. Its subsidiary, Xiwang Food, was listed in Shenzhen Stock Exchange in 1996 (Zouping Media 2013). Until Zouping Provincial ETDZ was founded in 2003, a second public company, Weiqiao Textile Company, was listed on the Hong Kong Stock Exchange in 2003. China Hongcheng Holdings Limited, another key enterprise in Zouping ETDZ that mainly produced home textile products, was listed on Singapore Exchange Limited in 2007. In brief, a total number of nine listed companies in Zouping successively entered financial markets (Zouping Media 2013). In 2014, they raised

23.3 billion yuan in total, about 3.8 billion US dollars, through financial markets (BSZC and ZITNBS 2015, 13).

Moreover, particularly, the difficulty of the financing from banks hastened private lending in Zouping. It was reported that the total capital in 2011, which was loaned, was up to 100 billion yuan, no less than 16.1 billion US dollars. By contrast, the GRDP of Zouping County was 63.2 billion yuan, approximately 10.2 billion US dollars. The loan market even held 5.9 US dollars more than the GRDP in Zouping during the same year. This large-scale private lending began in 2010. Since local banks had very stringent and tortuous loan eligibility requirements and conditions, many firms, especially startup companies, could not meet the basic loan requirements, they had to seek financing from private lending. Gong Dian, who planned to invest in a new energy business, had attempted to apply for small business loans at many local banks in Zouping, but failed eventually. He complained that the loan requirements set by local banks were too strict and the procedures were very complex. But, he never considered loaning from private lending, because of extremely high interest rate. Jiao Liang, a private lender living at Sun Town of Zouping County, disclosed that if one million yuan was loaned, two million yuan normally could be paid back. Since the profits were perceived as highly rewarded, almost all the townsfolk living in the economically developed areas such as the county seat, Sun Town and Weiqiao Town, entirely were engaged in private lending. Zouping therefore was famous for the large-scale private lending business nationwide (Chai 2012). The high interest rate of private lending drove the local financialization to irrationally grow. This problem was eventually exposed, and instigated a financial crisis at the local level in Zouping in 2012. Some funds, merely including loans, could not be punctually paid back, which gave rise to a broken capital chain, thereby it heavily hitting the local economy in 2012. It was reported that, many factories in Zouping had been shut down in 2012 (Chai 2012). According to the *Zouping County Statistical Report 2012*, the “industrial enterprises above designated size” totaled 80 in Zouping National ETDZ in 2011, whereas it decreased to 67 “industrial enterprises above designated size” in 2012 (BSZC and ZITNBS 2012, 2; BSZC and ZITNBS 2013, 2). A total number of 13 “industrial enterprises above designated size” went bankrupt in the county within one year.

By contrast, the percentages of “the GDP (GRDP) of the financial sector to the GDP (GRDP) of the real sector” of South Korea, Daegu and Gyeongsangbuk-do maintained stable. The rates of South Korea roughly ranged from 6% to 8%, the median of which was 6.79%. Daegu maintained the shares at 7%-10%, the median of which was 8.58%. The percentages of “the GRDP of the financial sector to the GRDP of the real sector” ranged around 3% in Gyeongsangbuk-do, the median of which was 2.98%. During 2011-2013, the rates of “the GDP (GRDP) of the financial sector to the GDP (GRDP) of the real sector” slightly decreased. This tendency happened on all of these three regions.

This set of data could be explained that, despite of the whole country of South Korea or the localities in South Korea, the financial industry developed in a smooth way. Compared with the situation in Zouping, the scale of the financial sector appeared not to sharply enlarge or downsize in Daegu and Gyeongsangbuk-do. This phenomenon showed that the Central Government had a significant impact on the development of the financial sector in South Korea during the most periods. As early as the 1960s, the financial sector was governed and operated by the Park Chung-hee Government. During 1962-1971, South Korea aimed to become a newly industrial country by 1970, thereby establishing the Growth and Development Strategy in 1962 (Harvie and Pahlavani 2006, 3). The actual limitation to South Korea is the scarce financial resources, especially in terms of foreign currency. In order to achieve the economic goal, the banks led by the Central Government provided low interest loan to the chaebols (재벌), the family-owned conglomerates in South Korea, so as to help them complete the economic tasks

assigned by the Central Government (Doucette and Seo 2011, 7; Harvie and Pahlavani 2006, 3). Remarkably, compared with other periods from 1966 to 2013 in South Korea, the wealth created by capital gains grew most rapid during 1966-1979. At least 70% of the wealth growth resulted from capital gains (Lee and Yoon 2015, 30). Although the financial system was laggard, it still firmly supported the Korean economy and created the Korean miracle of economic growth (Yang, Kim and Han 2006, 2).

After Park Chung-hee was assassinated in 1979, a liberalization policy of the financial system was officially laid down in the Fifth Five-Year Plan of 1982-1986, which resulted from the pressure of the chaebols and the international community (Cargill 2012, 47; Doucette and Seo 2011, 7). After South Korea was democratized in 1993, Kim Young-sam was elected as the 7th president of South Korea. In 1994, the “Segyehwa” Policy, literally globalization, was put into implement by the Kim Young-Sam Administration. In line with this policy, the capital account was liberalized in South Korea, allowing the chaebols to internationally borrow loans on short-term credit markets (Cha 2008; Doucette and Seo 2011, 8). It rapidly produced massive short-term external debts (Cha 2008). An abrupt short-term credit crisis and sudden depreciation of Korean won eventually engendered the 1997 financial crisis in South Korea (Lim and Jang 2012, 172; Cherry 2008, 62). This crisis almost brought South Korea close to economic and financial collapse (Cargill 2012, 43). On December 3, 1997, the Kim Young-Sam Administration received a 55-billion-US-dollar rescue package from the International Monetary Fund (IMF), including the far-reaching reforms in the financial sector, further liberalization of trade and investment and so on (Kim 2000, 44).

Aiming to recover the Korean economy from the 1997 financial crisis as rapidly as possible, the President Kim Young-Sam’s successor, President Kim Dae-jung, urged the National Assembly to approve a package of financial reform bills on December 29, 1997. One of the bills suggested establishing a single integrated supervisory authority to enact financial policy, to deal with the matters concerning the securities and futures markets, to authorize and rescind the licenses to financial institutions and to provide counsel on the bills concerning the financial sector for the Ministry of Finance and Economy (FSS n.d., 20). The Financial Supervisory Commission, newly titled the Financial Services Commission since February 2008 (Hangul: 금융위원회; acronym: FSC), was founded in April 1, 1998, in the wake of the 1997 Asian financial crisis (FSS n.d., 14), and was merged into the Ministry of Strategy and Finance in 2008 (Ministry of Strategy and Finance 2012).

However, in reality, the FSC has a subordinate executive body, which examines and supervises financial institutions. The Financial Supervisory Service (Hangul: 금융감독원; acronym: FSS), was set up in January 2, 1999. It is guided and supervised by the FSC to “carry out examination of financial institutions along with enforcement and other oversight activities as directed or charged by the FSC” (FSS 2006). Simply put, these reforms including the establishment of two institutions, the FSC and the FSS mainly aim to reach two primary goals. First, South Korea intends to forestall a similar crisis in the future. Second, the financial reforms are expected to institute an effective financial system that is able to stabilize and develop the national economy (Kim 2006, 12). Hence, so to speak, although the financial markets of South Korea are increasingly open, the Central Government concurrently strengthens supervision over the financial sector since the 1997 Asian financial crisis. As a consequence of the establishment of the financial supervisory system, South Korea successfully escaped the 2008 global financial crisis.

Since South Korea Central Government kept an eye on the financial sector, the financial industry in South Korea, Daegu and Gyeongsangbuk-do did not as considerably grew as

Zouping did. Therefore, the shares of the financial sector to the real sector of South Korea, Daegu and Gyeongsangbuk-do remained certain fixed levels.

4.4.1.2 Summary of Section 4.4.1

Table 4.4.1.2-1 Interaction between the SEZs and the Financial Sectors

Item/SEZ	Zouping National ETDZ	DGFEZ
Impact of SEZ on the Financial Sector	High	Low
Impact of the Financial Sector on SEZ	High	High

The weight of the financial sector in Zouping National ETDZ tends to rapidly grow. Because of the difficulty of financing via banking, an increasing number of enterprises expect self-financing in the financial markets. Hence, the impact of Zouping National ETDZ on the development of the financial sector is significant, because the zone accelerates the demand for financing.

By contrast, the size of the financial industry in the DGFEZ roughly remains fixed, because the financial supervisory system, established after the 1997 Asian financial crisis, forestalls an unrestricted expansion of the financial industry. Therefore, the impact of the DGFEZ on the growth of the financial sector in the region is limited.

The development of Zouping National ETDZ also enormously relies on the financial sector. Because it is difficult for companies to gain the loans from banks, the private lending in Zouping rapidly grows. The scale of the private lending in Zouping is also very large. Therefore, the financial industry plays a vital role in the development of Zouping National ETDZ.

Compared with the financial sector in Zouping, the scale of the financial industry tends not to remarkably enlarge or lessen in Daegu and Gyeongsangbuk-do. The financial industry in the Daegu-Gyeongbuk region develops at a stable pace, because the Central Government of South Korea cautiously supervises the financial industry. Hence, the effect of the financial sector on the development of the DGFEZ is crucial as well.

4.4.2 Employed Persons in the Financial Industry

4.4.2.1 Comparison of the Number and Rate of Employed Persons in the Financial Industry

Table 4.4.2.1-1 Data of Employed Persons in the Financial Industry in China and Zouping during 2008-2014 (Unit: Person)

	China			Zouping		
	Financial Industry (FI)	All Industries (AI)	FI:AI (%)	Financial Industry (FI)	All Industries (AI)	FI:AI (%)
2008	4,170,000	755,640,000	0.55	896	162,195	0.55
2009	4,490,000	758,280,000	0.59	984	156,458	0.63
2010	4,701,000	761,050,000	0.62	1,118	160,844	0.70
2011	5,053,000	764,200,000	0.66	1,128	168,863	0.67
2012	5,278,000	767,040,000	0.69	1,197	177,017	0.68
2013	5,379,000	769,770,000	0.70	1,312	177,670	0.74
2014	N/A	772,530,000	-	1,367	172,688	0.79

Source: NBS; Bureau of Statistics of Binzhou City and Bingzhou Investigation Team of NBS

The number of the employed persons in the financial industry and the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” tended to increase in Zouping and China year by year. As mentioned in Section 3.3.4.2, the term “employed persons” covers any labor force, including those who work for the financial sector, such as owners of financial firms, self-employed individuals and re-employment of retired personnel (NBS 2015). Compared with the total number of the employed persons working for the financial sector in Daegu and Gyeongsangbuk-do, the scale of the employed persons in Zouping was not large. In 2008 and 2009, the number was merely less than 1,000 persons, and during the following five years, it was merely around 1,100 or 1,300 persons. However, the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” of Zouping were relatively high, which even were slightly higher than those of China, except for 2008 and 2012. In 2008, the percentage of Zouping was identical to that of China. And, in 2012, the percentage of Zouping was merely 0.1% less than that of China. Apart from these two years, the rest of the percentages of Zouping were slightly higher than those of China since 2008.

Also, massive private lenders in Zouping had not been counted yet. As mentioned above, the high rewards drove many townfolk to be involved in private lending. Almost all the local living in the economically developed regions, which mainly indicated the county seat of Zouping, Sun Town and Weiqiao Town, participated in the private lending business (Chai 2012). The numbers in Table 4.4.2.1.1 merely included the full-time employed persons working in the financial institutions. Therefore, the actual number of the labor force working for the financial sector could be greater than the statistical data collected by the local bureau of statistics. In 2011, the employees living in the county seat added up to 200,724 persons (BSZC and ZITNBS 2012, 16). Except for the total number of the private lenders in Sun Town and Weiqiao Town, about 200,724 locals were engaged in the financial business in Zouping. Accordingly, the actual number was supposed to be much larger than the statistical one.

Table 4.4.2.1-2 Data of Employed Persons in Financial Industry in South Korea and Daegu during 2006-2013
(Unit: Person)

	South Korea			Daegu		
	Financial Industry (FI)	All Industries (AI)	FI:AI (%)	Financial Industry (FI)	All Industries (AI)	FI:AI (%)
2006	620,217	15,435,766	4.02	30,228	721,257	4.19
2007	638,528	15,943,674	4.00	30,648	732,128	4.19
2008	666,466	16,288,280	4.09	32,467	739,022	4.39
2009	682,428	16,818,015	4.06	34,626	766,886	4.52
2010	706,859	17,647,028	4.01	35,188	786,487	4.47
2011	718,459	18,093,190	3.97	35,848	809,381	4.43
2012	715,707	18,569,355	3.85	34,860	833,836	4.18
2013	700,421	19,173,474	3.65	33,599	849,631	3.95

Source: Statistics Korea

In South Korea and Daegu, the total number of the employed persons in the financial sector of 2013 was still much bigger than that of 2006, but the tendency of the number of the employed persons in the financial sector tended to decrease. The number of the employed persons in the financial sector of South Korea and Daegu reached the peak in 2011 because of the implementation of the public policy against the 2008 financial crisis. But, afterward, the numbers of South Korea and Daegu slightly decreased in 2012 and 2013. When compared with the number of 2006, the total number of the employed persons in the financial industry still remarkably rose since 2010. Due to the restructure of the financial sector, a new wave of layoffs hit the financial industry in South Korea. The financial sector intended to be restructured in South Korea, thereby eliminating 8,400 jobs in 2013 and 2014 (Yonhap 2015). Therefore, the number of the employed persons in the financial sector tended to lessen in the whole country.

However, the shares of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” tended to slightly diminish in South Korea and Daegu. In 2008, the rate of South Korea was 4.09%, but it was 3.65% in 2013. Similarly, the rate of Daegu was 4.52% in 2009; however, it lessened to 3.95% in 2013. Kim Hoon, the economist at Bank of Korea, explained that:

In the long run, South Korea does need to focus on growth of its financial sector. It is necessary for the balanced growth between the real economy and the financial sector. (Y. Lee and M. Lee 2012)

Therefore, public policies shaped the development of the financial sector in South Korea, and the rates dropped to a constant level in general.

Overall, the situation in Daegu followed the trend in the whole country. The total number of the employed persons in the financial industry of Daegu was the largest in 2011 during 2006-2013, and gradually reduced later on. In the same way, compared with the number of 2006, an increasing number of the labor force in Daegu worked in the financial industry over the past eight years. This fact showed that the financial industry was profoundly influenced by public policies in South Korea.

Table 4.4.2.1-3 Data of Employed Persons in Financial Industry in South Korea and Gyeongsangbuk-do during 2006-2013 (Unit: Person)

	South Korea			Gyeongsangbuk-do		
	Financial Industry (FI)	All Industries (AI)	FI:AI (%)	Financial Industry (FI)	All Industries (AI)	FI:AI (%)
2006	620,217	15,435,766	4.02	25,633	815,419	3.14
2007	638,528	15,943,674	4.00	25,909	829,586	3.12
2008	666,466	16,288,280	4.09	25,328	844,659	3.00
2009	682,428	16,818,015	4.06	26,257	868,182	3.02
2010	706,859	17,647,028	4.01	26,327	927,308	2.84
2011	718,459	18,093,190	3.97	26,154	945,683	2.77
2012	715,707	18,569,355	3.85	26,400	966,347	2.73
2013	700,421	19,173,474	3.65	25,537	1,004,067	2.54

Source: Statistics Korea

Unlike the increase in the total number of the employed persons in the financial industry in South Korea and Daegu, the total number of the employed persons in the financial industry of Gyeongsangbuk-do remained relatively constant. The shift in the number of the employed persons in the financial sector of Gyeongsangbuk-do remained weensy, which ranged from 25,328 in 2008 to 26,400 in 2012. By contrast, the fluctuation in the number of the employed persons in the financial sector of Daegu was relatively large. The number of the labor force in the financial sector of Daegu fluctuated from 30,228 in 2006 to 35,848 in 2011. Considering that the populations of Daegu and Gyeongsangbuk-do were very close, which were respectively 2,431,774 and 2,575,370 persons in 2010 (Statistics Korea 2014), we can reason that the total number of the employed persons in the financial industry of Gyeongsangbuk-do was supposed to grow rather than decline, but in fact, the total number of the employed persons in the financial industry of Gyeongsangbuk-do roughly stayed invariable or tended to slightly lessen. As a result, Gyeongsangbuk-do, as an agricultural province, may find it difficult to develop the financial industry. Furthermore, it can be reasoned that the financial sector in Gyeongsangbuk-do reached saturation point.

Similar to the decrease in the shares of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” in South Korea and Daegu, the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” tended to gradually drop in Gyeongsangbuk-do. The percentage of Gyeongsangbuk-do in 2006 was 3.14%, whereas it decreased to 2.54 in 2013. As mentioned above, the proportions of South Korea respectively were 4.09% and 3.65% in 2008 and 2013. The percentage of Daegu was 4.52% in 2009, whereas it reduced to 3.95% in 2013. Unexceptionally, the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” gradually declined in these three regions after the 2008 financial crisis.

With respect to the number of the employed persons in the financial sector and with respect to the percentage of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries”, the disparity among Zouping, Daegu and Gyeongsangbuk-do was conspicuous. In China and Zouping, both of these two indicators became bigger during 2008-2014, and the proportions of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” of Zouping grew faster than the national averages did because of the high demand for financing. In South Korea and Daegu, the number of the employed persons in the financial sector tended to grew,

but the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” was apt to decrease. Public policies played an important role in sharing the financial industry. In Gyeongsangbuk-do, the number of the employed persons in the financial sector nearly maintained constant, but the percentages of “the number of the employed persons in the financial industry to the number of the employed persons in all the industries” tended to fall off. As a consequence, Gyeongsangbuk-do, as an agricultural province, had reached saturation point.

4.4.2.2 Summary of Section 4.4.2

Table 4.4.2.2-1 Impacts of the SEZs on the Employment in the Financial Industry

Impact of SEZ/Region	Zouping	Daegu	Gyeongsangbuk-do
Total Number of Employed Persons in Financial Industry	High	Low	Low
Employed Persons in the Financial Industry to Employed Persons in All the Industries	High	Low	Low

The impact of the SEZs on “the total number of the employed persons” and “the percentages of the employed persons in the financial industry to the employed persons in the entire industries” vary. In Zouping, an increasing number of entrepreneurs and business owners need financing to start a new business or expand their businesses in Zouping National ETDZ. Due to the growing demand for financing in Zouping, both of the two indicators increase. Therefore, the zone in Zouping accelerates the rapid growth of the financial sector.

Compared with Zouping, Daegu and Gyeongsangbuk-do weaken the role of the DGFEZ in the fast development of the financial industry. These two indicators tend to reduce in Daegu and Gyeongsangbuk-do, because the expansion of the financial industry is supervised by the FSC and the FSS. Besides, these two indicators of Gyeongsangbuk-do are lower than the national averages. Gyeongsangbuk-do is an agricultural province, so the size of the financial sector in Gyeongsangbuk-do has reached the maximum. Therefore, the impact of the DGFEZ on the growth of the financial sector is finite.

4.4.3 Growth of Individual Income per Capita

4.4.3.1 Comparison of the Growth of Individual Income per Capita

Table 4.4.3.1-1 The Consumer Price Index (CPI) and the Growth Rate of the Individual Income per Capita of China and Zouping during 2008-2014

	CPI		Urban		Rural	
	China	Zouping	China	Zouping	China	Zouping
Unit	%	%	%	%	%	%
2008	5.9	5.3	14.5	9.0	15.0	13.7
2009	-0.7	0	8.8	9.4	8.2	9.4
2010	3.3	2.8	11.3	14.5	14.9	13.9
2011	5.4	4.5	14.1	14.5	17.9	19.6
2012	2.6	2.1	12.6	15.0	13.5	14.3
2013	2.6	2.2	7.7	11.3	19.1	10.5
2014	2.0	1.8	9.0	10.0	11.2	9.9

Source: NBS; BSZC and ZITNBS

Except for the year of 2008, the individual income per capita growth in the urban area of Zouping increased faster than the whole country did during 2009-2014; by contrast, the growth in the rural area of Zouping was slower than the national average except for the slightly faster growth in 2009, 2011 and 2012.

The growth of the individual income per capita of Zouping and China in both urban and rural areas was faster than the CPIs during 2008-2014, no matter it was the CPI of the whole country or it was the CPI of the Zouping. Hence, inflation was not a main reason that drove individual income per capita to grow.

The individual income per capita in the urban area of Zouping tended to grow year by year during 2008-2012. The growth in the urban area bottomed out in 2008 and began to rise afterwards. It implied that the 2008 financial crisis severely hit the local economy, which caused the slowdown of the personal income growth in 2008. Afterward, the yearly individual income per capita tended to grow faster until 2012. Since Zouping National ETDZ was the main cornerstone of the local economy, the zone promoted the local economy and indirectly improved personal income in the urban area. However, because of the adjustment of the economic structure in China since 2010 and because of the global economic slowdown, the exports of Zouping National ETDZ became less. Many outdated or export-led TVEs in Zouping confronted bankruptcy or had filed for bankruptcy. As a consequence, the growth gradually lessened over the recent past two years. Additionally, although the growth of the individual income per capita in the urban area of Zouping slowed down, the growth rates of the individual income per capita in the urban area of Zouping still maintained positive and were bigger than the average grow rates of the whole country. These two advantages can be counted as the contributions of the National ETDZ to the local economic development.

The growth rates of the individual income per capita in the rural area of Zouping during 2008-2014 were smaller than the national averages each year, except for the year of 2009, 2011 and 2012. The growth rates of 2009, 2011 and 2012 were slightly higher than the national averages, respectively. This phenomenon demonstrates two points. First, the rural area of Zouping County still remained relatively poor; and second, a series of the advantages brought by Zouping National ETDZ were restricted to the size of the region and the type of its main industry. As a result, if the size of a region, which a well-operated SEZ attempts to benefit, is too large, the positive influence cannot reach remote rural areas.

Besides, one of the obvious contributions of Zouping National ETDZ is raising the personal incomes of the locals living in the county seat where the zone is located. Andrew Kipnis, the anthropology professor of the Australian National University, once interviewed more than 250 individual residents or households living in Zouping in preparation for his article *Urbanisation in Between: Rural Traces in a Rapidly Growing and Industrialising County City* (Kipnis 2013, 8). Many of the interviewees said that they chose to work in the zone due to a high wage (Kipnis 2013, 12), and that their child or children could receive a quality education (Kipnis 2013, 7-8). Table 4.4.3.1.2 below shows that the county seat of Zouping attracted numerous rural labor force inside and outside Zouping County to work for the second and tertiary sectors.

Table 4.4.3.1-2 The Change of the Rural Labor Force in Zouping during 2008-2014

	Number of the Rural Labor Force in the Secondary and Tertiary Sectors	Number of the Increase in the Rural Labor Force in the Secondary and Tertiary Sectors	Growth Rate of the Rural Labor Force in the Secondary and Tertiary Sectors
Unit	Person	Person	%
2008	237,800	7806	3.4
2009	252,938	15,138	6.4
2010	274,538	21,600	8.5
2011	297,538	23,000	8.4
2012	319,693	22,155	7.4
2013	340,693	21,000	6.6
2014	358,142	17,449	5.1

Source: BSZC and ZITNBS

According to the data in Table 4.4.3.1.2, the growth rates of the numbers of the rural labor force in the second and tertiary sectors gradually increased in 2008 and reached the peak in 2010. Compared with the number of the increase in the rural labor force in the secondary and tertiary sectors in 2008, the number of 2011 was about 2.9 times of that of 2008. After 2010, the growth rates diminished year by year, because the 2008–2009 Chinese economic stimulus plan, mainly investing in infrastructure, ended by 2010. After 2010, the adjustment of the economic structure in China was implemented. Accordingly, the growth of the rural labor force working for the secondary and tertiary sectors slowed down. Zouping, which mainly relied on the secondary industry, gradually provided less employment opportunities during 2011-2014. Nonetheless, the total number of the rural labor force working for the secondary and tertiary sectors in Zouping still continued growing since 2008. The numbers of the rural labor force in the secondary and tertiary sectors were up to 358,142 persons in 2014.

Zouping National ETDZ, mainly focusing on textile, clothing, food, medicine, new materials and wind energy equipment manufacturing (Zouping National ETDZ 2012), led the local economy of Zouping County. In terms of the primary sector, the positive influence of Zouping National ETDZ on the primary sector was rather small. As mentioned in Table 4.2.4.1.1, the shares of “the GRDP of the primary sector to the GRDP” invariably maintained the fixed levels, roughly 5% during 2008-2014. Consequently, due to the large size of the rural area and the distinct economic structures between the urban and rural areas, Zouping National ETDZ played a limited role in enhancing the rural economic growth in Zouping County. Hence, the individual income per capita in rural areas of China more rapidly grew than that in the rural area of Zouping did in general.

Table 4.4.3.1-3 The Growth Rate of the Consumer Price Index (CPI) and the Growth Rate of the Individual Income per Capita of South Korea, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2008-2014

	CPI	Korea (SK)	SK-CPI	Daegu (D)	D-CPI	Gyeongbuk (G)	G-CPI
Unit	%	%	%	%	%	%	%
2001	4.1	4.2	0.1	2.8	-1.3	2.9	-1.2
2002	2.8	5.1	2.3	4.8	2.0	5.9	3.1
2003	3.5	4.6	1.1	4.2	0.7	2.9	-0.6
2004	3.6	6.6	3.0	4.9	1.3	8.9	5.3
2005	2.8	6.7	3.9	7.9	5.1	6.6	3.8
2006	2.2	4.1	1.9	4.3	2.1	3.3	1.1
2007	2.5	6.5	4.0	5.9	3.4	5.6	3.1
2008	4.7	3.9	-0.8	4.0	-0.7	4.5	-0.2
2009	2.8	2.3	-0.5	2.5	-0.3	3.8	1.0
2010	3.0	6.8	3.8	8.7	5.7	5.5	2.5
2011	4.0	4.6	0.6	6.2	2.2	4.2	0.2
2012	2.2	3.8	1.6	3.2	1.0	4.5	2.3
2013	1.3	3.6	2.3	2.8	1.5	3.5	2.2

Source: Statistics Korea

The growth of the individual income per capita of Daegu was more rapid than the national average in 2008, 2009 and 2010. The construction of the DGFEZ began in 2008 and therefore created more employment opportunities in Daegu. Among the eight sites of the DGFEZ, four sites were located in Daegu. The other four sites were situated in Gyeongsangbuk-do, the sizes of which are much larger than those of Daegu. Moreover, the first company in the DGFEZ, Dassault Systèmes' R&D center, started to run in Daegu in 2009, one of the eight sites of the DGFEZ (Malherbe 2010). Many other firms initiated their businesses in 2010 (DGFEZ 2012). During 2008-2009, the individual income per capita of Daegu each year grew faster than that of the whole country did. To some extent, Daegu more successfully escaped the damage from the 2008 financial crisis than the entire country did. Nonetheless, compared with the growth rates of South Korea in 2012 and 2013, the growth rates of Daegu declined in a gradual way. Besides, the decrease in the growth of the individual income per capita after 2010 was apparent. The reason was that the slowdown of the world economy reduced the exports and further weakened the advantages of the DGFEZ.

During 2001-2007, the growth of the individual income per capita of Gyeongsangbuk-do was slower than the national average each year. Before 2008, in the year of 2001, 2003, 2005 2006 and 2007, the growth rates of the individual income per capita of Gyeongsangbuk-do were smaller than those of the whole country. As a result, the individual income per capita each year actually had negative growth. The main reason was the decline of the two pillar industries in this province. Since 2008, the individual income per capita each year had positive growth in the four consecutive years. The reason behind this fact was that the establishment of the DGFEZ stimulated the regional economy and created many employment opportunities. A total number of four sites were under construction in Gyeongsangbuk-do after 2008. In 2010, numerous companies successively started to run at Yeongcheon Industry District of the DGFEZ in Gyeongsangbuk-do (DGFEZ 2012). Therefore, the growth of the individual income per capita of Gyeongsangbuk-do was faster than the national average in 2008 and 2009, and maintained a roughly close growth rates during 2010-2013. In 2009, the growth rates of the individual income per capita of Daegu were only 4.0% in 2008 and 2.5% in 2009, whereas the growth rates were respectively 4.5% and 3.8% in 2008 and 2009. In 2010, the individual income per capita of Daegu grew up to 8.7%, while it was 5.5% in Gyeongsangbuk-do. As a result, Daegu more

effectively eschewed the shock from the global financial crisis than the whole country did, but Gyeongsangbuk-do was even more successful than Daegu in the matter of avoiding the deterioration of the local economy in 2009. But, the more rapid growth of the individual income per capita of Gyeongsangbuk-do merely lasted for two years. Hence, the establishment of a SEZ can be helpful in raising individual income per capita in a region within a short period.

Additionally, the situation of Gyeongsangbuk-do differed from that in the rural area of Zouping. No SEZ was established in the rural area of Zouping, but three sites of the DGFEZ had been built and were evenly distributed in Gyeongsangbuk-do as a whole. Gyeongsan Knowledge Industry District was set up in Gyeongsan City; Yeongcheon City had two sites of the DGFEZ, Yeongcheon Industry District and Yeongcheon High-tech Park; Pohang Fusion Tech District was located in Pohang City. Yeongcheon High-tech Park was still under construction as of 2015. Except for Yeongcheon High-tech Park, the rest of the five sites had worked. Pohang Fusion Tech District had entered the last stage, the development stage. The term *the development stage* means that a site needs further improvement and development after completing the infrastructure construction and having officially operated. Therefore, the locals living in the rural area of Gyeongsangbuk-do gained more profits than the peasants did in Zouping.

4.4.3.2 Summary of Section 4.4.3

Table 4.4.3.2-1 Impacts of the SEZs on Individual Income per Capita

Impact of SEZ on Individual Income per Capita/SEZ	Zouping National ETDZ	DGFEZ
Short Term		
Zouping (Urban)	High	High
Zouping (Rural)	Low	Low
Daegu	High	High
Gyeongsangbuk-do	High	High
Long Term		
Zouping (Urban)	Low	Low
Zouping (Rural)	Low	Low
Daegu	Low	Low
Gyeongsangbuk-do	Low	Low

Table 4.4.3.2-2 Impact of Market on the Performance of the SEZs in Raising Individual Income per Capita

Impact of Market on the Performance of SEZ in Raising Individual Income per Capita/SEZ	Zouping National ETDZ	DGFEZ
Short Term	Low	Low
Long Term	High	High

Both Zouping National ETDZ and the DGFEZ facilitate the increase in the individual income per capita in the localities and the neighboring regions. The personal annual earnings in the county seat of Zouping, Daegu and Gyeongsangbuk-do tended to rise, in spite of the conditions of the domestic and world economies during a short term, because the growth of individual wage could be pushed by government investment and new public policies during a financial crisis. However, when the domestic or international economy suffers from an economic

stagnation or recession for a long term, the influence of these two SEZs on the enhancement of the individual income per capita will be eroded.

Two exceptions need to be mentioned. First, if a SEZ is not effectively operated due to a unsuccessful policy or leadership, the personal annual income of this region still cannot grow, because many of the SEZs actually are unprofitable (Zeng 2011, 7). Second, if a region is relatively far from a SEZ, the advantage of this SEZ gradually diminishes. The rural area of Zouping County is such a case.

4.4.4 Growth of Private Consumption per Capita

4.4.4.1 Comparison of the Growth of Private Consumption per Capita

Table 4.4.4.1-1 The Growth Rate of the Private Consumption per Capita of China and Zouping during 2008-2014

	Urban		Rural	
	China	Zouping	China	Zouping
Unit	%	%	%	%
2008	12.5	17.2	13.5	12.1
2009	9.1	10.7	9.1	6.6
2010	9.8	12.5	9.7	5.3
2011	12.5	11.5	19.2	60.4
2012	10.0	8.5	13.2	7.5
2013	10.9	7.4	26.7	9.8
2014	8.0	5.7	12.0	5.6

Source: NBS; BSZC and ZITNBS

The growth rates of the private consumption per capita in the urban area of Zouping were larger than the national averages during 2008-2010, but were smaller than the national averages after 2010. Although the global financial crisis devastated the world economy in 2008, China successfully escaped the world economic recession by a large easing in monetary and credit policy (Fan and He 2012, 43). According to the statistics of the World Bank (2015), the GDP growth rate of China was 9.2%, whereas the GDP growth rate of the world economy was -2.1%. The GDP growth of China increased again during the 3rd and 4th quarters of 2009 (NBS 2015). After 2010, Chinese economy began the process of soft landing. Chinese economic growth gradually slowed down during 2011-2014, because of the implement of the “new normal” economic growth model. Wayne Hoyer, the Chair of the Department of Marketing at the University of Texas at Austin, Deborah Macinnis, the Professor of Business Administration at the University of Southern California and Rik Pieters (2012, 268), the Professor of Marketing of Tilburg University, argued that “impulse purchasing tends to decline in difficult economic times”. They mentioned that, Japan was a typical example, in which many consumers only bought what they needed during a lengthy economic recession (Hoyer, MacInnis and Pieters 2012, 268). Due to the slowdown of the local economic growth, the locals in Zouping adopted an identical behavior. Hence, the growth of the private consumption per capita in the urban area of Zouping decreased since 2012.

Moreover, the growth rates of the private consumption per capita in the urban area of Zouping after 2010 were even slower than the national averages. For example, in 2011, the national growth rate was 12.5%, while the growth rate of Zouping was 11.5%. This trend continued during 2011-2014. This set of data revealed two points. First, the slowdown of the local economic growth, which resulted from the adjustment of the economic structure in Zouping and from the slowdown of the global economy, caused the reduction in private consumption.

Second, rapid financialization in Zouping undermined the local substantial economy. Many TVEs had shut down because of the rupture of capital chain. This situation would exacerbate the difficulty of the adjustment of the economic structure and the revitalization of the local economy.

In the rural area of Zouping, the growth rates of the private consumption per capita were lower than the average of the rural China except for the year of 2011. The percentage of the growth in 2011 was 60.4%. The growth rate of the private consumption per capita in the rural area of Zouping was remarkably high for the reason that the expenditure of residence per capita grew most rapidly in 2011. The expenditure of residence refers to all the expenditure of residence related to residence, including building or purchasing a new house, home repairs, residential services, rents, water, electricity, fuel and so on (NBS 2015). The growth rate of the expenditure of residence per capita reached up to 128.9% in 2011 (BSZC and ZITNBS 2012, 16). By contrast, in 2011, the growth of the individual income per capita in the rural area of Zouping reached the highest percentage, 19.6%, which was also higher than the national average. What is more, except for the year of 2011, the growth rates of the private consumption per capita of the urban area of Zouping were higher than those of the rural area of Zouping during 2008-2012. However, the gap tended to become smaller over the past three years. The reduction in the difference between the growth rates of the private consumption per capita of the urban area and those of the rural area in Zouping mainly resulted from the slowdown of the local economic growth which the zone pushed in the county seat. As a consequence, the role of Zouping National ETDZ in enhancing the rural living conditions was not obvious.

Table 4.4.4.1-2 The Growth Rate of the Private Consumption per Capita of South Korea, Daegu and Gyeongsangbuk-do (Gyeongbuk) during 2000-2013

	South Korea	Daegu	Gyeongbuk
Unit	%	%	%
2000	12.6	12.2	12.2
2001	9.6	7.1	6.7
2002	11.5	10.6	9.2
2003	2.1	1.5	-0.4
2004	3.2	0.2	0.9
2005	6.3	7.6	5.1
2006	5.9	6.0	5.3
2007	6.3	5.6	5.4
2008	4.9	4.6	5.5
2009	2.4	1.6	3.2
2010	6.7	6.6	7.1
2011	5.7	5.5	5.5
2012	4.0	4.3	3.8
2013	2.4	3.8	3.2

Source: Statistics Korea

The growth rates of the private consumption per capita peaked in South Korea, Daegu and Gyeongsangbuk-do in 2000. At the local level, the year of 2000 was the heyday of the textile industry and the textile machinery industry in Daegu and Gyeongsangbuk-do. They were well known for “the hub of textile industries and a textile machinery cluster” (Lee, Yun and Jeong 2015, 59). At the national level, in 1999 and 2000, the economy of South Korea bottomed out after the severe economic recession. The GDP of South Korea grew at an annual rate of 10.9% in 1999 and 8.8% in 2000 (Lee 2002, 44). In terms of the reasons South Korea could recover from the 1997 Asian financial crisis, two main points could be found. The major voice was that,

the rapid economic recovery after the 1997 financial crisis resulted from the structural reforms that were brought by the IMF bailout package for South Korea (Shin 2014, 1-2). Particularly, the painful structural reforms in the financial sector made a significant contribution to the economic recovery. The scholars who supported this mainstreaming view explained that the Korean economy had the structural problems in the financial sector that caused the 1997 financial crisis, thereby becoming necessary to implement a series of the structural reforms (Shin 2014, 1-2). Jang-sup Shin (2014, 2), the Associate Professor of the Department of Economics at the National University of Singapore, carried out a distinct view that, the expansive fiscal and monetary policies of South Korea contributed to the economic recovery after the crisis. Their discussions at least proved that the financial industry determined the economic growth of South Korea to some degree. Hence, due to the economic recovery, the growth of the private consumption per capita in South Korea reached the peak in 2000 during the period of 2000-2013.

In 2003 and 2004, the growth rates of the private consumption per capita of South Korea, Daegu and Gyeongsangbuk-do significantly reduced because of the credit card crisis in 2003. South Korea incited a credit card crisis in 2003, which disturbed the financial markets in South Korea. Many financial institutions issued credit cards for households during 1999-2003. Nevertheless, many of the household could not pay back the loan and interest, so financial institutions confront bad debts (Kang and Ma 2009, 95). Two reasons provoked this crisis. First, financial institutions sought high returns on household loans (96). Because the expansive monetary policy after the 1997 Asian financial crisis led to the decline of the demand for corporate loan and because Koreans had to rely on the loans to buy an increasingly expensive new house or apartment, many financial institutions preferred to provide loans to households. Particularly, because of the deregulation of the financial markets, it was not difficult for a household to borrow money. Second, the government tended to promote the economic growth with less exports (96). The government intended to expand the domestic demand, such as the real estate industry, so as to drive the development of the other relevant industries. Hence, the rates of household debt to disposable income was up to 64% in 2002, whereas it was 41% in 1999 (97). As a result, the downturn of the private consumption broke out in 2003, which also undermined the real economy. This trend in the reduction in the individual consumption continued until 2004.

During 2008-2011, the growth rates of the private consumption per capita of Daegu were slightly lower than the national averages except for the year of 2009, but gradually became higher than the national averages during 2012-2013. Due to the 2008 financial crisis, the growth of the private consumption per capita of Daegu noticeably decreased in 2009. However, the growth rates rose again after 2009, because of the implement of a set of policies against the 2008 financial crisis and the advantages of the DGFEZ. A total number of three sites of the DGFEZ were located in Daegu. Some sites of the DGFEZ started to operate, and some sites were still under construction. Hence, the establishment of the DGFEZ created many employment opportunities and facilitated private consumption.

From 2008 to 2010, the growth of the private consumption per capita of Gyeongsangbuk-do increased more quickly than that of South Korea and Daegu did. Although the global financial crisis hit the world economy, the policies against the 2008 financial crisis and the newly establishment of the DGFEZ maximized the economic growth of the local economy. With the support of the central government, some sites either newly worked or were under construction. Hence, these investment stimulated the local economic growth and therefore promoted private consumption.

However, the growth rates of the private consumption per capita of South Korea, Daegu and Gyeongsangbuk-do tended to decrease after 2010. Although the Korean economy recovered from the 2008 financial crisis and the following economic recession, the economy after the crisis seemed to be not as strong as the economy that was before the crisis. The policies against the financial crisis successfully helped the economy of South Korea recover in 2009, but the slowdown of the world economy gradually faded the benefits of the short-term economic incentives. Byongwon Bahk (2012, 26), the current chairman of the Korea Federation of Banks, wrote that “Korea’s recovery, however, does not seem firmly entrenched, as private sector demand is not yet healthy enough to drive consumption and investment. Jobless continues to be a problem as overall unemployment rose to 3.6 percent in 2009 while unemployment among twenty to twenty-nine-year-olds jumped to 7.3 percent”. His conclusion has been testified by the different sections in the thesis. For example, although the investment that the Central Government invested in the DGFEZ was a huge investment in this region, the growth rates of the private consumption per capita of Daegu and Gyeongsangbuk-do tended to decrease during 2011-2013. Besides, as mentioned previously, Professor Seyoung Kang (2014, 72) argued that many employees working for the textile industry and other industries left their factories or companies and became self-employed in the Daegu- Gyeongbuk region.

4.4.4.2 Summary of Section 4.4.4

Table 4.4.4.2-1 Impacts of the SEZs on Private Consumption

Impact of SEZ on Private Consumption/SEZ	Zouping National ETDZ	DGFEZ
During A Prosperous World Economy		
Short Term (Urban)	High	Unknown
Long Term (Urban)	High	Unknown
Short Term (Rural)	Low	Unknown
Long Term (Rural)	Low	Unknown
During the 2008 Financial Crisis and the Global Economic Recession		
Short Term (Urban)	High	High
Long Term (Urban)	Low	Low
Short Term (Rural)	Low	High
Long Term (Rural)	Low	Low

Overall, the change in the private consumption per capita in Zouping and the Daegu-Gyeongbuk region is shaped by the world economic conditions. Expect for the rural area of Zouping, the growth of the private consumption per capita, which Zouping National ETDZ propels, is conspicuous, when the global economy effectively runs. Similarly to the growth of the individual income in the rural area of Zouping, the influence of Zouping National ETDZ on the acceleration of the private consumption per capita gradually abates, as the rural area is relatively far from the zone. Since the DGFEZ was founded in 2008, the performance of the DGFEZ during a booming global economy is unknown.

During the 2008 financial crisis and before the implementation of the policies against the financial crisis, the growth of the private consumption per capita in the urban and rural areas of Zouping, Daegu and Gyeongsangbuk-do significantly slowed down. The malaise of the consumption markets indirectly undermines the real economies in Zouping, Daegu and Gyeongsangbuk-do at this point.

In order to attenuate the crisis effects and rejuvenate the national economies, China and South Korea endeavored to stimulate each domestic market by means of the investment in

infrastructure during the 2008 financial crisis. Chinese economic stimulus package invested 4 trillion yuan, approximately 585.7 billion US dollars, in infrastructure and social welfare during the 2008 financial crisis. The private consumption in the urban area of Zouping moderately grows for a short term, because the locals can gain relatively high pay in Zouping National ETDZ that produces construction materials. However, the advantage of Zouping National ETDZ in promoting private consumption per capita does not fully cover the rural area in Zouping. Similar to the urban region in Zouping, the establishment of the DGFEZ in May 2008, which consists of eight sites around the Daegu-Gyeongbuk region, drove a decent raise in the private consumption in the same way during the global financial crisis. But, for a long term, the global economic recession and slowdown will increasingly hinder the growth of the private consumption in these three regions.

4.4.5 Incremental Capital Output Ratio (ICOR)

4.4.5.1 Comparison of ICOR

Table 4.4.5.1-1 The ICOR of China, Zouping, South Korea, Daegu and Gyeongsangbuk-do during 2000-2014

	China	Zouping	South Korea	Daegu	Gyeongbuk
2000	3.43	N/A	3.66	3.44	4.18
2001	3.55	N/A	4.13	4.62	9.97
2002	4.05	N/A	3.33	3.56	5.90
2003	3.57	N/A	5.09	5.61	5.05
2004	2.92	N/A	4.34	3.53	3.52
2005	3.53	N/A	7.25	9.59	9.67
2006	3.46	N/A	6.86	6.57	15.99
2007	2.73	N/A	4.49	5.29	8.48
2008	3.55	N/A	5.89	10.45	6.13
2009	7.78	2.89	7.24	15.86	9.34
2010	3.98	2.41	3.59	4.27	3.75
2011	4.14	2.10	6.63	4.04	20.99
2012	7.49	3.83	9.31	7.16	10.22
2013	8.28	3.69	7.82	6.87	7.82
2014	10.66	7.71	N/A	N/A	N/A

Source: NBS; BSZC and ZITNBS; Statistics Korea. Note: The ICORs are calculated by the Author.

The ICORs of Zouping were lower than the average ICORs of China, and the ICORs of Zouping and China tended to increase after 2010. It means that the productivity of capital in Zouping was more efficient than that of China as a whole. China also had had a very efficient productivity of capital since 2000 except for the year of 2009, 2012, 2013 and 2014. This fact reflected that the adjustment of the economic structure of China was urgent, as the efficiency of production was low during the recent three years. Similarly, Zouping confronted the challenge of the adjustment of the local economic structure, as the productivity tended to gradually weaken. This problem became more acute than ever before over the past six years. This phenomenon was in line with the other results that this thesis had concluded. For example, during the recent years, the amount of investment tended to increase; the GDP growth of China and the GRDP growth of Zouping lessened; the GDP of the financial sector of China and the GRDP of the financial sector of Zouping showed a growing trend; the numbers of the employed persons in the financial industry of China and Zouping continued mounting up; the growth of the individual income per capita of China and Zouping slowed down; and, the growth rates of the private consumption per capita of China and Zouping became lower. All of these facts

demonstrated that the financialization in China had inhibited sustainable economic development.

Generally speaking, during 2000-2010, the ICORs of Daegu were higher than those of South Korea except of the ICOR in 2000. In 2000, the pillar industries of Daegu, the textile industry and the textile machinery industry, were at their zeniths. The rest periods during 2000-2010, the productivity of Daegu was weaker than the average productivity of the whole country, as the two pillar industries had gradually declined since 2000.

After 2010, the ICORs of Daegu were lower than those of South Korea, but the ICORs of Daegu and South Korea in 2012 and 2013 were quite high. The ICORs of Daegu in 2010 and 2011 were distinctively low. A growing number of high-technology enterprises in the DGFEZ started to operate in 2010 and 2011, which produced more GRDP during these two years. In 2012 and 2013, although the ICORs of Daegu were lower than the national averages, the ICORs of Daegu were still too high. This phenomenon showed that the whole economy of South Korea including the economy of Daegu was dragged into the global economic recession. However, the DGFEZ minimized the losses that resulted from the recent great recession. Even if the ICORs tended to grow after 2011, the ICORs in 2012 and 2013 were still much lower than the ICOR in 2008 and 2009. The DGFEZ started to build in 2008; the first company in the DGFEZ officially worked in 2009; and, many firms initiated business in 2010. The official operation of these knowledge-based enterprises implied that a group of emerging industries, such as automotive, IT, green energy and medical companies, gradually replaced the traditional pillar industries. The ICORs of 2010 and 2011 were the two of the lowest numbers since 2008. The productivity of capital in Daegu was enhanced. Hence, for a short term, the effect of the DGFEZ on the improvement in the productivity of capital was impressive. For a long term, the influence of the DGFEZ would be partially or fully reduced by the recession or the stagnation of the world economy.

Gyeongsangbuk-do was a different case. Except for 2004 and 2013, the ICORs of Gyeongsangbuk-do were higher than those of the whole country. It means that the productivity of Gyeongsangbuk-do was lower than the national average. The ICOR of Gyeongsangbuk-do was slightly smaller than that of South Korea in 2014. The difference between them was only 0.82. Furthermore, also due to the global economic recession, the ICOR of Gyeongsangbuk-do reached the highest point in 2011, which was 20.99. The general trend after 2011 was that the ICORs of Gyeongsangbuk-do gradually decreased. In 2013, the ICOR of Gyeongsangbuk-do was equivalent to that of the whole country. Last, Gyeongsangbuk-do, as an agricultural province, had a relatively distinct reflection on the 2008 financial crisis as well as the Central Government's rescue plan. The Central Government's policies against the global financial crisis appeared to be more successful in Gyeongsangbuk-do because of a small-scale financial industry there. However, in 2010, the ICORs of these two regions were around 4, which were one of the lowest records during 2000-2013. It can be explained by the argument that the rescue plan helped Gyeongsangbuk-do and Daegu escape the damage of the 2008 financial crisis. But, the ICOR of Gyeongsangbuk-do became large again in 2011. This fact demonstrated that, the advantages of the DGFEZ can be nullified by the world economic recession or the slowdown of the global economy in the end, if the negative impact on the local economies lasted for a relatively long period (Behar and Espinosa-Bowen 2014, 3).

Additionally, Gyeongsangbuk-do and Daegu shared three similarities. First, the ICOR of Gyeongsangbuk-do and Daegu of 2000 remained relatively low, as their pillar industries still maintained a quite efficient productivity. Second, the ICORs of Gyeongsangbuk-do and Daegu of 2010 were remarkably low, as many more undertakings began to work in the DGFEZ this year. The ICOR of 2010 was the 2nd lowest among the ICORs of Gyeongsangbuk-do during 2000-2013. The ICOR of Daegu was merely 4.27 in 2010, whereas it was up to 15.86 last year.

Third, the economic recession and stagnation inhibited further advancement of the productivity of capital.

4.4.5.2 Summary of Section 4.4.5

Table 4.4.5.2-1 Interaction between the SEZs and financialization

Item/SEZ	Zouping National ETDZ	DGFEZ
ICOR	High	High
Degree of Financialization	High	Medium
Counterbalance to Financialization	Low	Medium

The ICORs of Zouping, Daegu and Gyeongsangbuk-do entirely had a tendency to increase during 2000-2013, but the main reasons that brought about low productivity of capital differed. Due to a high degree of financialization without any substantial supervision, the ICORs of Zouping tended to become increasingly high. By contrast, owing to the impact of the 2008 financial crisis and the succeeding economic recession, the ICORs displayed a tendency to increase during 2000-2013. Although South Korea established a financial supervisory system that grew out of the previous financial crises and although South Korea maintained a relatively limited weight of the financial sector, the reduction in exports led to the high ICORs of Daegu and Gyeongsangbuk-do during the periods of the 2008 financial crisis and the succeeding world economic recession.

Both Zouping National ETDZ and the DGFEZ were expected to minimize the losses from the 2008 financial crisis and the global economic recession with the help of industrial upgrading. For a short term, this strategy was workable. The high ICORs temporarily diminished to a small degree. However, industrial upgrading could not thoroughly cancel out the negative effects of financialization. Accordingly, it becomes continuously necessary to keep an eye on the financial sector for a long term.

5 COMPREHENSIVE ANALYSIS

Table 5-1 Key Findings

Items/SEZs	Zouping National ETDZ	DGFEZ
Comparison of the Backgrounds of Zouping National ETDZ and the DGFEZ		
Similarity	High	
Economic Growth		
Attraction to Investment	High (Short Term) Unknown (Long Term)	High (Short Term) Unknown (Long Term)
Growth of Investment	High (Short Term, Policy-led); High (Long Term, Market-led)	High (Short Term, Policy-led); High (Long Term, Market-led)
Growth of GRDP	High (Short Term and Long Term)	High (Short Term and Long Term)
Growth of Exports	High (Booming Global Economy); Low (Global Economic Crisis/Recession)	High (Booming Global Economy); Low (Global Economic Crisis/Recession)
The Impact on Economic Structure	High	Low
Growth of Labor Force	High (Short Term); Unknown (Long Term)	High (Short Term); Unknown (Long Term)
Economic Development		
Impact of SEZs on Regional Economic Development	Very High	High
Impact of SEZs on Local Economic Development during the Period of Financialization		
	Zouping	Daegu-Gyeongbuk
Impact of SEZs on the Financial Sector	High	Low
Impact of the Financial Sector on Economic Development	High	High
Impact of SEZs on the Increase in the Size of Financial Sector	High	Low
Total Number of Employed Persons in Financial Industry	High	Low
Employed Persons in the Financial Industry to Employed Persons in All the Industries	High	Low
Impact of SEZs on Individual Income	High (Urban); Low (Rural)	High
Impact of SEZ on Private Consumption	High (Urban: Short Term and Long Term, During A	High (Urban and Rural: Short Term, During the 2008

	Prosperous World Economy; Short Term, During the 2008 Financial Crisis and the Global Economic Recession); Low (Rural; Urban: Long Term, During the 2008 Financial Crisis and the Global Economic Recession)	Financial Crisis and the Global Economic Recession); Low (Urban and Rural: Long Term, During the 2008 Financial Crisis and the Global Economic Recession)
ICOR	High	High

5.1 OVERVIEW

In the Introduction, this thesis carried out three research questions: how SEZs promote local economic development in a landlocked region which is disadvantaged by a commonplace location and a relatively poor natural resources; how the financial sector influences local economic development in such an area; and, whether it is still a realistic idea to transplant a successful SEZ model to a second region with a similar circumstance. After a deliberately selection, two successful SEZs in East Asia are chosen, namely Zouping National ETDZ and the DGFEZ, which are comparable due to their like conditions. After comparison, it can be found that Zouping, Daegu and Gyeongsangbuk-do confronted kindred challenges. For example, historically, all of them were poor agricultural areas. Until now, except for Daegu which is a metropolis, both Zouping and Gyeongsangbuk-do are agricultural regions. The rural populations were still large. Besides, the other common problems include geographical disadvantage, intense regional and global competitions and the challenges from industrial upgrading.

5.2 HOW SEZs PROMOTE LOCAL ECONOMIC DEVELOPMENT IN A LANDLOCKED REGION

To reply the first research question, the answer is that SEZs can continue playing a major role in promoting local economic development in a landlocked region, but two prerequisites should be met. First, a SEZ needs to be efficiently managed. Each year, many new SEZs are established, and meanwhile, numerous SEZs are shut down (Zeng 2011, 7). In general, Zouping National ETDZ and the DGFEZ are relatively successfully operated, as they created considerable GRDP growth each year.

The second prerequisite is that the world economy needs to be fairly strong. It is one of the very foundations of attracting investment and exports. Relying on a set of favorable policies, which normally imply tax reduction and tax exemption, Zouping National ETDZ and the DGFEZ could attract domestic and foreign investment. Due to the fiscal support from the Central Governments of China and South Korea, the scope and strength of tax incentives for Zouping National ETDZ and the DGFEZ are greatly large, which are hardly comparable to the governmental support for a SEZ with a lower rank. For example, the corporate income tax rate of foreign and foreign-invested productive industries is 15% in a National ETDZ, while it is 30% outside the National ETDZs (China Association of Development Zones 2001). Moreover, local governments usually tailor some preferential policies for the enterprises in SEZs. For example, the part of property tax levied by Daegu Metropolitan City Government and Gyeongsangbuk-do Provincial Government is exempted for 15 years when a company starts to run (DGFEZ 2012). When the global economy is relatively booming, these preferential policies for SEZs substantially provide a breeding ground to largely attract domestic and foreign investment. Moreover, due to the increase in the investment in SEZs, a growing number of rural

labor forces enter the companies and factories. On the one hand, GRDP grows owing to the rise in exports and domestic consumption. On the other hand, the economic structure is gradually altered. The sizes of the secondary and tertiary sectors become larger than that of the primary sector. Employed persons can gain more profits in the secondary and tertiary sectors. The individual income correspondingly leaps up, so the private consumption is enlarged as well, which further promotes local economic growth.

5.3 HOW THE FINANCIAL SECTOR INFLUENCES LOCAL ECONOMIC DEVELOPMENT

A new variable “financialization” alters the pattern of regional economic development. The 2008 financial crisis further intensified the tendency of financialization, just as Lapavitsas (2011, 622), Palley (2007, 3) and Cale and Roll (2015, 142) argued. Financialization changes the path of traditional economic growth. The ways of changes slightly varied from Zouping National ETDZ to the DGFEZ. Because the startups and the expansion of large corporations highly demanded financing in Zouping National ETDZ, the financial sector was able to determine the pace of the local economic growth to some degree. In order to seek financing, a total number of nine largest NFCs, the major companies of Zouping National ETDZ, successively were listed on the domestic and international stock exchanges since 1996 (Zouping Media 2013). Remarkably, the financial industry in Zouping was highly fragmented. The supervision over the local financial market was weak. Private lending was glutted with the financial sector in the locality. Due to profitable rewards, many young labor forces chose to work as private lenders rather than sought work in factories. Just as Lapavitsas (2011, 623) wrote, financialization can be characterized by three features: “first, large corporations rely less on banks and have acquired financial capacities; second, banks have shifted their activities toward mediating in open financial markets and transacting with households; third, households have become increasingly involved in the operations of finance”. The 2nd point mainly indicates the characteristic of banking system, which this thesis does not cover. The rest of two points, which Lapavitsas mentioned, can be found in Zouping. Hence, the degree of financialization in Zouping was very high.

A Zouping-edition financial crisis had crippled the local economy in 2012. Due to a very high interest rate, the loans could not be paid back. The capital chain was broken. It was reported that, many factories in Zouping had gone bankrupt in 2012. Also, most private lenders became new debtors (Chai 2012). The real economy in Zouping was greatly damaged by private lending. By contrast, after the DGFEZ was established in 2008, no similar crisis occurred in the Daegu-Gyeongbuk region, as South Korea was very cautious of the financial sector after 1997 Asian financial crisis.

Since the 2008 financial crisis, these two SEZs confronted two identical difficulties. First, the 2008 financial crisis and the following world economic recession urged China and South Korea to change economic growth model. The economies of China and South Korea are both export-oriented. The global trade is bound up with the world economy that the financial industry profoundly influences. The 2011 “Adjustment of Economic Structure” and the 2015 “New Normal” policies attempted to extricate Chinese economic growth from relying on exports. South Korea also expected to reduce the reliance on exports. In 2008, the Lee Myung-bak Administration instituted the Ministry of Knowledge Economy, renaming it the Ministry of Trade, Industry and Energy after President Park Geun-hye took office in 2013, who aimed to promote the transformation of the export-led economy to a knowledge-based one (Ministry of Trade, Industry and Energy 2011). In 2013, Park Geun-hye (Hangul: 박근혜), Park Chung-hee’s eldest daughter and the first female president of South Korea as well as East Asia, was

elected the 11th president of South Korea. In President Park Geun-hye's inauguration address on February 25, 2013, she stated that "economic revitalization is going to be propelled by a creative economy" (Yonhap 2013). The term "creative economy" officially refers to an economy which "creates added value through innovative technologies and creative ideas" (Ministry of Trade Industry and Energy 2014). The Park Geun-hye Administration considered that the old economic growth pattern of South Korea had reached its limitation and that the global economic paradigm was transforming a knowledge economy to a creative economy (Jeon and Limb 2014). Hence, as stated in the inauguration address, "economic revitalization was going to be propelled by a creative economy and economic democratization" (Yonhap 2013). The development of the creative economy in South Korea had become one of the key components in Three-Year Plan for Economic Innovation, which will end in 2017 (Jeon and Limb 2014).

As a respond at the local level, both Zouping and the Daegu-Gyeongbuk region increased the expenditures of R&D, respectively, since the adjustment of the economic structure in China and since the implementation of the Three-Year Plan for Economic Innovation. The R&D expenditures mainly invested in the SEZs of each region. For example, according to the *Zouping County Statistical Report 2014*, the high-technology companies were entirely located in Zouping National ETDZ (BSZC and ZITNBS 2015, 13-14). Therefore, the R&D financial support was actually invested in Zouping National ETDZ. Likewise, the R&D spending in South Korea was currently investing in various universities, research institutes and R&D centers in a region in order to establish an innovation cluster. President Park Geun-hye explained in the Three-Year Plan for Economic Innovation that:

The innovation centers for the creative industries will be at the core of developing a creative economy, as well as developing regional economies and helping to make a cradle that will nurture human resources. For that purpose, we will combine the abilities of the central government, the regional governments and the private sector. (Jeon and Limb 2014)

At the beginning of the institution of the DGFEZ, the DGFEZ Authority expressed that the DGFEZ aimed to "establish a comprehensive cluster of knowledge-based industries and researchers in this free economic zone" (Lee 2009). Therefore, as a part of the national strategy and as a main objective of the DGFEZ, the DGFEZ had 35 government funded research institutes, 11 government designated R&D centers and 5 industrial support centers by 2012 (DGFEZ 2012).

Table 5.3-1 The Expenditure and Expenditure Growth of Research and Development, the Rate of Expenditure of Research and Development to Gross Regional Domestic Product (GRDP) in Zouping before and after the Adjustment of the Economic Structure in China

Year/Unit	Zouping		Growth Rate	Expenditure:GRDP
	Million RMB	Billion USD	%	%
2010	1250.0	0.20	83.3	2.3
2011	N/A	-	N/A	N/A
2012	1,845.8	0.30	32.6	2.66
2013	1,898.0	0.31	2.8	2.53
2014	2,091.6	0.34	10.2	2.68

Source: BSZC and ZITNBS. The rates are calculated by the Author.

Table 5.3-2 The Expenditure and Expenditure Growth of Research and Development, the Rate of Expenditure of Research and Development to Gross Regional Domestic Product (GRDP) in Daegu and Gyeongsangbuk-do before and after the Implementation of Three-Year

Daegu			Growth Rate	Expenditure:GRDP
Year/Unit	Million Won	Billion USD	%	%
2012	1,251,762	1.08	15.4	2.9
2013	1,318,272	1.15	5.3	5.7
Gyeongsangbuk-do			Growth Rate	Expenditure:GRDP
Year/Unit	Million Won	Billion USD	%	%
2012	4,881,716	4.24	14.0	5.7
2013	5,105,346	4.44	4.6	11.2

Source: Statistics Korea. The rates are calculated by the Author.

In general, Zouping, Daegu and Gyeongsangbuk-do augmented the spending on R&D. Before the economic restructuring in China, the expense was 1250.0 million yuan in 2010, nearly 0.2 US dollars, and the rate of the R&D expenditure to the GRDP was 2.3% that year. By contrast, in 2014, the R&D investment was 2,091.6 million yuan, and the rate had reached 2.68%. Overall, the annual R&D expenditures had maintained positive growth in Zouping since 2010. Also, the annual R&D expenditures in Daegu and Gyeongsangbuk-do increased in 2012 and 2013. Notwithstanding the slowdown of the R&D spending growth in both Daegu and Gyeongsangbuk-do, the shares of R&D expenditure to GRDP almost doubled in 2012 and 2013. Table 5.2 and Table 5.3 show how R&D spending remarkably increased in Zouping and the Daegu-Gyeongbuk region before and after a new policy was put into effect.

Table 5.3-3 The Total Number of and the Growth Rate of the Applications for Intellectual Property (IP), the Growth Rate of the GRDP in Zouping before and after the Adjustment of the Economic Structure

Item/Year	2010	2011	2012	2013	2014
Number of Application (Cases)	611	1,366	1,213	1,218	581
Growth Rate of IP Applications (%)	61.2	123.6	-11.2	0.4	-52.3
GRDP Growth (%)	13.7	12.6	10.5	8.0	5.9

Source: BSZC and ZITNBS. The rates are calculated by the Author.

Table 5.3-4 The Total Number of and the Growth Rate of the Applications for Intellectual Property (IP), the Growth Rate of the GRDP in Daegu and Gyeongsangbuk-do before and after the Implementation of Three-Year Plan for Economic Innovation

Item/Year	2012	2013	2014
Daegu			
Number of Application (Cases)	7,280	8,160	8,756
Growth Rate of IP Applications (%)	6.5	12.1	7.3
GRDP Growth (%)	3.8	4.0	N/A
Gyeongsangbuk-do			
Number of Application (Cases)	8,824	9,286	8,926
Growth Rate of IP Applications (%)	8.1	5.2	-3.9
GRDP Growth (%)	3.8	4.4	N/A

Source: Statistics Korea. The rates are calculated by the Author.

The industrial upgrading was full of uncertainty in Zouping, Daegu and Gyeongsangbuk-do. Table 5.4 and Table 5.5 displayed the numbers of the applications for intellectual property in these three regions, the growth rates of the number of IP applications and the GRDP growth rates before and after an industrial upgrading was launched in each region. In Zouping, the total number of the IP applications was not many each year. The annual total number of the IP applications tended to be instable and to negatively grow. Only 581 IP applications were submitted in 2014. And, the GRDP growth of Zouping gradually slowed down. However, as shown in Table 5.2, the R&D expenditure of Zouping grew each year during 2010-2014. These data demonstrate that the industrial upgrading had not been finished yet, and that new high-technology companies did not become a pillar industry in Zouping National ETDZ. Hence, the ratios of R&D outputs to inputs of Zouping were low.

However, the R&D investment tended to have a positive outcome in Daegu. The number of the IP applications was nearly as large as the number of the IP applications of Gyeongsangbuk-do. The growth of the number of the IP applications of Daegu had been relatively strong since 2012. Besides, although the GRDP grew at a slow pace, it had a tendency to positively increase. These two tendencies, the growth of the number of the IP applications and the GRDP growth, imply that Daegu is more likely to succeed in the upgrades of the local industrial structure.

Similar to the tendency of Zouping, the output of the R&D spending of Gyeongsangbuk-do tended to negatively grow. The number of the IP applications remained a positive increase in 2012 and 2013, but it rapidly slipped to -3.9% within one year, which was negative growth in 2014. But, Gyeongsangbuk-do had a more optimistic situation than Zouping did. The number of the IP applications of Gyeongsangbuk-do per year was sizable, which was roughly 7 times of that of Zouping in 2012 and 2013 and which was nearly 15 times of that of Zouping in 2014. However, as shown in Table 5.3, the share of the R&D expenditures to the GRDP in Gyeongsangbuk-do also was relatively large in 2012 and 2013, which was 5.7% in 2012 and 11.2% in 2013. The R&D costs of Gyeongsangbuk-do was also 4 times bigger than that of Daegu. But, the GRDP of Daegu each year was similar to that of Gyeongsangbuk-do. It shows that the ratios of R&D outputs to inputs of Gyeongsangbuk-do were still not high. Therefore, technology-centric enterprises were more adapted in metropolitan areas, which had sizeable universities and research institutions. The SEZs in the rural areas might be gradually de-functioned.

5.4 THE TRANSPLANTATION OF A SUCCESSFUL SEZ MODEL TO A SECOND ALIKE REGION

For the third question, the transplantation of a successful SEZ model to a landlocked area is increasingly impossible. The transplantation of the SEZs for traditional industries still has a possibility, although domestic markets, global markets and public policy matter on whether a SEZ for traditional industries can grow. However, it is greatly difficult if a SEZ for high-technology industries are transplanted in a rural area, because many R&D infrastructures, as the core of technology-centric enterprises, cannot be moved there.

The local and national governments of China and South Korea attempts to revitalize their economies by upgrading industries in the zones. Since the industrial upgrading still is ongoing in the zones, the transformation of the economic structures in these two countries involves several uncertainties. Notwithstanding the title of an economy, the knowledge economy or the creative economy, SEZs cannot uphold the growth of a new type of economy on their own during a period of financialization. Also, SEZs cannot unilaterally catalyze the formation of an innovation cluster. Moreover, high-technology industries are more adapted in metropolitan areas. As a consequence, SEZs were the driving force of the local economic development during

the times of pre-financialization; nonetheless, during the era of financialization, public policy determines the performance of SEZs for a short term. Domestic and global markets led by the financial industry shapes the role of SEZs in promoting local economic development. Accordingly, in contrast to the major role of SEZs in promoting local economic development during the times of pre-financialization, SEZs merely act as a breeding ground for economic development during the era of financialization.

6 CONCLUSION

The thesis demonstrates the high degree of similarity between Zouping National ETDZ and the DGFEZ, so they are comparable. The limitations that curbed the local economic growth were roughly identical. The locations of the SEZs are historically a poor agricultural region. They are landlocked respectively in Shandong Peninsula and Korean Peninsula. They are easily marginalized, because several counties or cities as their competitors surround Zouping and the Daegu-Gyeongbuk region. An additional challenge for Daegu and Gyeongsangbuk-do was the decline of this region.

The role of two SEZs in attracting investment during a short term was remarkable. But, for a long term, their performances are unknown. For a short term, public policy could attract a large amount of investment. For a long term, the attractions of the SEZs for investors greatly depend on domestic and international markets. Public policy gradually becomes less significant.

If a SEZ is effectively operated, it is able to promote GRDP growth for a short term and for a long term. Although public policy and the domestic and global markets jointly determined the performance of a SEZ, the management authorities of these two SEZs could boost economic growth by means of formulating a practical development strategy. Even, during the 2008 financial crisis, the SEZs with a long-term planning could minimize the losses and can create GRDP growth.

During a period of a booming global economy, the SEZs played a role of strong engine in fostering the local economic growth for a short term and for a long term. However, due to the decrease in the demand for exports, which resulted from a global financial crisis and the following economic recession, the advantages of these two SEZs were substantially weakened.

The influences of Zouping National ETDZ and the DGFEZ on each economic structure were very diverse. The common point is that the weight of the primary sector in Zouping, Daegu and Gyeongsangbuk-do overall reduced owing to their rapid economic growth. The primary sector in these three areas maintained a fixed small size. The main sectors of these three region were different. The major industry of Daegu was the tertiary sector. However, the secondary sector was the main sector in Gyeongsangbuk-do and Zouping. Although the economic structure of Gyeongsangbuk-do and Zouping were alike, the growth of the secondary and tertiary sectors varied. In Zouping, the tertiary sector was growing, but the main sector of Zouping, namely the secondary sector, was becoming smaller. By contrast, the economic structure of Gyeongsangbuk-do nearly remained constant. Likewise, the economic structure of Daegu roughly maintained unchanged. As a result of these findings, the impact of Zouping National ETDZ on the local economic structure was more remarkable than that of the DGFEZ.

Zouping National ETDZ and the DGFEZ attracted considerable labor force during the first two years when the zones started to run. Therefore, the influences of these two zones on the changes in the labor force were apparent for a short term. However, regardless of the changes in the labor force in the rural areas, the influences of these two zones on the changes in the labor force are unknown for a long term. The economic performance of each SEZ fundamentally determines how the labor force in each region switches. Also, the change in the labor force is jointly determined by the SEZs' capacity of effective governance, the profitability of the enterprises in the SEZs, public policy and the domestic and global markets. Moreover, the impact of each zone on the change in the rural labor force differed. Zouping National ETDZ attracted an amount of rural surplus labor force to find a highly paid work (Kipnis 2013, 12). Therefore, the population of the rural area in Zouping decreased, and the urbanization rates correspondingly increased. However, the shift in the rural labor force and the urbanization rates

were very small, because South Korea, as a developed country, had completed this transformation.

Since the levels of the local economies in Zouping and the Daegu-Gyeongbuk region were far above each national average after 2000, the HDI can be applied to measure each local economic development. During 2000-2013, The HDI gradually grew in both South Korea and China, in spite of the large space of improving the HDI ranking of China. Therefore, the economic growth of these two countries implied the economic development. Also, Zouping National ETDZ and the DGFEZ, as a driving force of the local economic growth, indirectly furthered the economic development in the regions.

The impacts of these two SEZs on each financial sector were distinct, while the financial sectors had a great influence on the development of the SEZs and the local economic development. Owing to the difficulty of financing via banking, an increasing number of companies in Zouping National ETDZ expected self-financing in the financial markets. Therefore, the zone accelerated the demand for financing and the development of the financial industry. By contrast, because the establishment of the financial supervisory system aimed to forestall an unrestricted expansion of the financial industry, the impact of the DGFEZ on the growth of the financial sector was limited. Furthermore, the companies in Zouping National ETDZ enormously relied on the financial sector. Due to the high demand for financing, the private lending in Zouping had rapidly grown and had formed a very large scale in 2010. However, the sizes of the financial industry in Daegu and Gyeongsangbuk-do did not remarkably enlarge or lessen because of the strict supervision of the financial supervisory system. It is proved that the Central Government of South Korea considered the financial sector to be crucial in the local and national economies.

“The total number of employed persons in the financial industry” and “the proportion of the number of employed persons in the financial industry to the number of employed persons in all the industries” varied. In Zouping, these two indicators continued increasing, because many entrepreneurs and business owners needed financing to start a new business or to expand their businesses in Zouping National ETDZ. By contrast, these two indicators tended to slightly decrease in Daegu and Gyeongsangbuk-do, because the growth of the financial industry was closely supervised by the FSC and the FSS. Besides, both of the two indicators in Gyeongsangbuk-do were lower than those of South Korea. Since Gyeongsangbuk-do was an agricultural province, the scale of the financial sector had reached saturation point.

Both Zouping National ETDZ and the DGFEZ were able to increase the individual income per capita in the localities and the neighboring regions. For a short term, notwithstanding the conditions of the domestic and global economies, the personal yearly earnings in the county seat of Zouping, Daegu and Gyeongsangbuk-do tended to grow, because the individual wage growth in the SEZs could be driven by governmental investment and new public policies even during a financial crisis. When an economic stagnation or recession endured for a relatively long time, the impact of the SEZs on the improvement of the individual annual income would be gradually weakened. Nonetheless, two exceptions may conflict with this sub-conclusion. First, an unprofitable SEZ will not lead to the growth of the yearly wages of workforce. Second, the influence of a SEZ will become gradually small when the surrounding areas are increasingly far from this SEZ. The rural area of Zouping County is such a case.

The change in the private consumption per capita in Zouping and the Daegu-Gyeongbuk region was determined by the world economy. Except for the rural area of Zouping, Zouping National ETDZ propelled the growth of the private consumption. Due to the less rapid growth of the individual income in the rural area of Zouping, the growth of the private consumption correspondingly reduced. The performance of the DGFEZ during a prosperous world economy

is unknown, because it was established when the 2008 financial crisis erupted. During the 2008 financial crisis and before the enforcement of the policies against the financial crisis, the growth of the private consumption per capita in the urban and rural area of Zouping, Daegu and Gyeongsangbuk-do significantly declined. Besides, the malaise of the consumption markets further undermined the real economy in Zouping, Daegu and Gyeongsangbuk-do at this point. In order to attenuate the crisis effects and rejuvenate the national economies, China and South Korea strove to stimulate each domestic market by means of the investment in infrastructure during the 2008 financial crisis. The private consumption in the urban area of Zouping moderately grew for a short term because the locals can gain relatively high pay in Zouping National ETDZ, which produced construction materials. However, the advantage of Zouping National ETDZ in promoting private consumption per capita did not fully cover the rural area in Zouping. Similar to the reaction of the urban region in Zouping, a decent raise in the private consumption of the Daegu-Gyeongbuk region was driven by the DGFEZ consisting of eight sites around the region to provide adequate employment opportunities, during the global financial crisis. However, for a long term, the global economic recession and stagnation would increasingly hinder the growth of the private consumption in these three regions.

The ICORs of Zouping, Daegu and Gyeongsangbuk-do entirely had a tendency to increase during 2000-2013, but the main reasons that brought about the low productivity of capital differed. Due to a high degree of financialization without any substantial supervision, the ICOR of Zouping tended to be increasingly high. By contrast, owing to the impact of the 2008 financial crisis and the succeeding economic recession, the ICORs displayed a tendency to increase during 2000-2013. Although South Korea established a financial supervisory system that grew out of the previous financial crises and maintained a relatively limited weight of the financial sector, the decline of the exports led the ICOR of Daegu and Gyeongsangbuk-do to becoming relatively high during the periods of the 2008 financial crisis and the succeeding world economic recession. Moreover, both Zouping National ETDZ and the DGFEZ expected to minimize the losses from the 2008 financial crisis and the global economic recession with the help of industrial upgrading. For a short term, this strategy was workable. The high ICORs temporarily diminished to a small degree. But, the measure “industrial upgrading” could not fundamentally cope with the negative effects of financialization. Therefore, it becomes continuously necessary to keep a close watch on the financial sector for a long term.

SEZs can continue playing a major role in promoting local economic development in a landlocked region, but two prerequisites should be met: first, a SEZ needs to be efficiently managed; second, the world economy needs to be fairly strong. It is one of the very foundations of attracting investment and exports.

A new variable “financialization” alters the pattern of regional economic development. Financialization changes the path of traditional economic growth. The ways of changes in Zouping National ETDZ and the DGFEZ slightly varied. In Zouping National ETDZ, because the startups and the expansion of large corporations highly demanded financing, the financial sector was able to control the pace of local economic growth to some degree. In order to seek financing, a total number of nine largest NFCs, the major companies of Zouping National ETDZ, had successively decided to be listed on the domestic and international stock exchanges since 1996. Remarkably, the financial industry in Zouping was highly fragmented. The supervision over the local financial market was extremely weak. Private lending was glutted with the financial sector in the locality. Due to the profitable rewards, many young labor forces chose to work as private lenders rather than sought work in the factories. Besides, a Zouping-version financial crisis had crippled the local economy in 2012. The real economy in Zouping was greatly damaged by private lending. Many factories in Zouping had gone bankrupt that year. By contrast, after the DGFEZ was established in 2008, no similar crisis occurred in the Daegu-

Gyeongbuk region, as South Korea was very cautious of the financial sector after the 1997 Asian financial crisis.

Since the 2008 financial crisis, these two SEZs confronted two identical difficulties. First, the 2008 financial crisis and the following world economic recession urged China and South Korea to change their economic growth models. Both China and South Korea expected to reduce the reliance on exports by industrial upgrading. As a respond at the local level, both Zouping and the Daegu-Gyeongbuk region increased the expenditures of R&D, respectively, since the adjustment of the economic structure in China and since the implementation of the Three-Year Plan for Economic Innovation. The R&D expenditures mainly invested in the SEZs of each region. However, the industrial upgrading was still full of uncertainty in Zouping, Daegu and Gyeongsangbuk-do. The R&D investment tended to have a positive outcome in Daegu. Therefore, technology-centric enterprises are more adapted in metropolitan areas, which have copious universities and research institutions. The SEZs in rural areas may be gradually de-functioned.

For the third question, the transplantation of a successful SEZ model to a landlocked area is increasingly impossible. The successful transplantation of a SEZ for traditional industries still has a possibility, although domestic markets, global markets and public policy jointly matter on whether this SEZ can grow. However, it is greatly difficult if a SEZ for high-technology industries is effectively transplanted in a rural area, because many R&D infrastructures, as a core of technology-centric enterprises, cannot be moved there.

The local and national governments of China and South Korea attempts to revitalize their economies by upgrading industries in the zones. Since the industrial upgrading still is ongoing in the zones, the transformation of the economic structures in these two countries involves several uncertainties. Notwithstanding the title of an economy, the knowledge economy or the creative economy, SEZs cannot uphold the growth of a new type of economy on their own during a period of financialization. Also, SEZs cannot unilaterally catalyze the formation of an innovation cluster. Moreover, high-technology industries are more adapted in metropolitan areas. As a consequence, SEZs were the driving force of the local economic development during the times of pre-financialization; nonetheless, during the era of financialization, public policy determines the performance of SEZs for a short term. Domestic and global markets led by the financial industry shapes the role of SEZs in promoting local economic development. Accordingly, in contrast to the major role of SEZs in promoting local economic development during the times of pre-financialization, SEZs merely act as a breeding ground for economic development during the era of financialization.

This thesis still has one limitation. For example, this research greatly relies on statistical data. Due to the lack of the statistical data for Zouping National ETDZ and the DGFEZ, the regional statistical data are applied if no specific data of Zouping National ETDZ and the DGFEZ are available. But fortunately, Zouping National ETDZ and the DGFEZ amass the majority of the pillar industries, so the regional data can roughly reflect the performance of each SEZ.

Last, the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership perhaps will partially or fully nullify the advantages of SEZs. It could be very likely that SEZs would be replaced by a full liberalization of the global economy, so it could become the next hot spot in the next decade.

7 REFERENCES

- Akinci, Gokhan, and James Crittle. 2008. "Zone Definition and Development Trends." In *Special Economic Zones: Performance, Lessons Learned, and Implications for Zone Development*, 9-22.
<http://documents.worldbank.org/curated/en/2008/04/9915888/special-economic-zone-performance-lessons-learned-implication-zone-development>.
- Bark, Taeho. 2012. "The Changing Global and Korean Economies." In *South Korea and the Global Economy in Transition*, 19-42. Stanford: Shorenstein Asia-Pacific Research Center.
- Behar, Alberto, and Jaime Espinosa-Bowen. "Export Spillovers from Global Shocks for the Middle East and Central Asia." *International Monetary Fund*. IMF. Last modified May 9, 2014. <https://www.imf.org/external/pubs/cat/longres.aspx?sk=41546.0>.
- Berg, Su-hyun, and Robert Hassink. 2012. "Emerging Green Clusters in South Korea? The Case of the Wind Power Cluster in Jeonbuk Province." *STI Policy Review* 3 (1).
https://www.kdevelopedia.org/Resources/all/emerging-green-clusters-south-korea--05201301020124216.do?fldIds=TP_IND%7CTP_IND_SC%7CTP_TER%7CTP_TER_EN#.VpKLmf0GLU.
- Bordo, Michael. 2014. "The Federal Reserve's Role: Actions Before, During, and After the 2008 Panic in the Historical Context of the Great Contraction." In *Across the Great Divide: New Perspectives on the Financial Crisis*, edited by Martin Baily and John Taylor, 103-26. Stanford: Hoover Press.
- Bortis, Heinrich. "The Real and the Financial Sector of a Monetary Production Economy in the Perspective of Classical-Keynesian Political Economy." *University of Fribourg*. University of Fribourg. Last modified May 2010.
<https://www.unifr.ch/withe/assets/files/Publikationen/Bortis-Real-Financial-Sector.pdf>.
- Br äutigam, Deborah, and Xiaoyang Tang. 2011. "African Shenzhen: China's Special Economic Zones in Africa." *The Journal of Modern African Studies* 49 (1): 27-54.
doi:10.1017/S0022278X10000649.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2009. *2008 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2008 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2008].
http://www.zptj.gov.cn/html/shower_2089.html.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2010. *2009 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2009 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2009].
http://www.zptj.gov.cn/html/shower_2088.html.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2011. *2010 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2010 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2010].
http://www.zptj.gov.cn/html/shower_2087.html.

- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2012. *2011 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2011 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2011]. http://www.zptj.gov.cn/html/shower_2086.html.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2013. *2012 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2012 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2012]. http://www.zptj.gov.cn/html/shower_2085.html.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2014. *2013 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2013 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2013]. http://www.zptj.gov.cn/html/shower_2084.html.
- BSZC (Bureau of Statistics of Zouping County), and ZITNBS (Zouping Investigation Team of NBS). 2015. *2014 nian zoupingxian guomin jingji he shehui fazhan tongji gongbao* 2014 年邹平县国民经济和社会发展统计公报 [The Statistical Bulletin of the Economic and Social Development of Zouping County 2014]. http://www.zptj.gov.cn/html/shower_2083.html.
- BSZC (Bureau of Statistics of Zouping County). "Zouping gaikuang" 邹平概况 [Overview of Zouping]. *Zouping Statistical Information Net*. Bureau of Statistics of Zouping County. Accessed November 15, 2015. <http://www.zptj.gov.cn/html/gaikuang.html>.
- Bureau of Statistics of Binzhou City, and Bingzhou Investigation Team of NBS. n.d. *Binzhou Statistical Yearbook*. Accessed November 15, 2015. <http://www.bztj.gov.cn/yearbook/index.aspx>.
- Cargill, Thomas. 2012. "An Odyssey of the Korean Financial System and the September 2008 Financial Shock." In *South Korea and the Global Economy in Transition*, 43-72. Stanford: Shorenstein Asia-Pacific Research Center.
- Carrillo, Francisco, Tan Yigitcanlar, Blanca Garc ía, and Antti Lönqvist. 2014. "Pursuing Knowledge as a Means for Development." In *Knowledge and the City: Concepts, Applications and Trends of Knowledge-Based Urban Development*, 105-30. Routledge Studies in Human Geography. New York: Routledge.
- Carter, Connie, and Andrew Harding. 2011. "SEZs: Policy Incubators or Catalysts for Development?" In *Special Economic Zones in Asian Market Economies*, edited by Connie Carter and Andrew Harding, 1-14. 1st ed. Routledge Studies in the Growth Economies of Asia. Abingdon and New York: Routledge.
- Carter, Connie, and Andrew Harding. 2011. "SEZs: Policy Incubators or Catalysts for Development?" In *Special Economic Zones in Asian Market Economies*, edited by Connie Carter and Andrew Harding, 1-14. Routledge Studies in the Growth Economies of Asia. Abingdon and New York: Routledge.
- Cha, Myung-soo. "The Economic History of Korea." *EH.Net Encyclopedia*. Economic History Association. Last modified March 16, 2008. <http://eh.net/encyclopedia/the-economic-history-of-korea/>.

- Chai, Gang. 2012. "Baiqiangxian zouping shenxian gaolidai xuanwo, zong guimo da 1000 yi" 百强县邹平深陷高利贷漩涡, 总规模达 1000 亿 [Top 100 County Zouping Deeply Sinks into Usury, the Scale Is up to 100 Billion Yuan]. *Beijing Sina*, June 10. <http://finance.sina.com.cn/china/20120610/144512271833.shtml>.
- Chenery, Hollis. 1960. "Patterns of Industrial Growth." *The American Economic Review* 50 (4): 624-54. <http://www.jstor.org/stable/1812463>.
- Cherry, Judith. 2008. "'Dismal Leadership' or Macroeconomic Fatigue? An Analysis of the Kim Young-Sam Administration's Role in the 1997 Economic Crisis." In *South Korea: Challenging Globalisation and the Post-crisis Reforms*, edited by Young-Chan Kim, Doo-Jin Kim, and Young Kim, 55-84. 1st ed. Chandos Asian Studies Series. Oxford.
- China Association of Development Zones. "Tax Policies Concerning Foreign-funded Enterprises and Foreign Enterprises in National ETDZs." *National Economic and Technological Development Zones*. China Internet Information Center. Last modified June 6, 2001. <http://www.china.org.cn/english/difang/76259.htm>.
- China Internet Information Center. *National Economic and Technological Development Zones*. Accessed November 15, 2015. <http://www.china.org.cn/english/SPORT-c/76751.htm>.
- China Internet Information Center. "Special Economic Zones and Open Coastal Cities." *China in Brief*. China Internet Information Center. Last modified July 13, 2000. <http://www.china.org.cn/e-china/openingup/sez.htm>.
- London Petroleum Economist*. 2015. "China's 'New Normal' Will Hit Oil Demand." April 7, ProQuest. <http://search.proquest.com/docview/1679845306?accountid=14682>.
- Ciment, James, and Chris Rowley. 2015. "Korea, South." In *Booms and Busts: An Encyclopedia of Economic History from the First Stock Market Crash of 1792 to the Current Global Economic Crisis*, edited by James Ciment, 450-54. Vol. 1-3. Abingdon and New York: Routledge.
- Cohn, Steven. 2015. Preface to *Reintroducing Macroeconomics: A Critical Approach*, xix-xx. Abingdon and New York: Routledge.
- Cornwall, John, and Wendy Cornwall. 1994. "Growth Theory and Economic Structure." *Economica* 61 (242): 237-51. doi:10.2307/2554960.
- Crotty, James. 2003. "The Neoliberal Paradox: The Impact of Destructive Product Market Competition and Impatient Finance on Nonfinancial Corporations in the Neoliberal Era." *Review of Radical Political Economics* 35 (3): 271-79. doi:10.1177/0486613403255533.
- Daegu Metropolitan City Government. "Storytelling Daegu." *Daegu*. Daegu Metropolitan City Government. Last modified 2015. <http://english.daegu.go.kr/cms/cms.asp?Menu=910&Category=0&Key=&Keyword=&Page=3&BoardId=14950&Action=view&Current=0&type=2>.
- Daegu-Gyeongbuk Medical Innovation Foundation. *DGMIF*. Last modified 2011. https://www.medivalley.re.kr/eng/page.htm?mnu_siteid=eng&mnu_uid=166&.
- Dassault Systèmes. "Dassault Systèmes to Open R&D Center in Korea in April." *Dassault Systèmes*. Dassault Systèmes. Last modified March 12, 2010.

- <http://www.3ds.com/press-releases/single/dassault-systemes-to-open-rd-center-in-korea-in-april/>.
- DGFEZ (Daegu-Gyeongbuk Free Economic Zone). *DGFEZ*. Last modified 2012. <http://www.dgfez.go.kr/eng/>.
- DGFEZ (Daegu-Gyeongbuk Free Economic Zone). "Quick Facts." *DGFEZ*. DGFEZ Authority. Last modified June 2015. http://www.dgfez.go.kr/eng/page.php?mnu_uid=342&.
- Ding, Yufei. 2015. "Shandong binzhou 4 jia qiye ruwei 2014 nian quansheng nashui baiqiang" 山东滨州 4 家企业入围 2014 年全省纳税百强 [Four Companies in Binzhou Ranks Top 100 Largest Taxpayers of Shandong Province 2014]. *Ji'nan Xinhua Shandong*, April 16. http://www.sd.xinhuanet.com/lh/2015-04/16/c_1114989850.htm.
- Doucette, Jamie, and Bongman Seo. 2011. "Limits to Financialization? Locating Financialization within East Asian Exportist Economies." *Hitotsubashi Invited Fellow Program Discussion Paper Series*, September. <http://hermes-ir.lib.hit-u.ac.jp/rs/handle/10086/19325>.
- Eberstadt, Nicholas. 2010. "Comparative Performance of the Two Korean Economies: 1945-91." In *Policy and Economic Performance in Divided Korea during the Cold War Era: 1945-91*, 9-33. Washington D.C.: The AEI Press.
- Epstein, Gerald. 2005. "Introduction: Financialization and the World Economy." In *Financialization and the World Economy*, edited by Gerald Epstein, 3-16. Northampton, MA: Edward Elgar Publishing. <http://www.peri.umass.edu/fileadmin/pdf/programs/globalization/financialization/chapter1.pdf>.
- Ezeala-Harrison, Fidelis. 1996. "Economic Growth and Development: Concepts and Measurement." In *Economic Development: Theory and Policy Applications*, 3-20. 1st ed. Westport, CT: Praeger.
- Fan, Gang, and Liping He. 2012. "A Prediction of China's Economy in 2012: Soft Landing and Back to the Normal." In *A New Economic Growth Engine for China: Escaping the Middle-income Trap by Not Doing More of the Same*, edited by Wing-Thye Woo, Ming Lu, Jeffrey Sachs, and Zhao Chen. London and Singapore: Imperial College Press and World Scientific Publishing Co. Pte. Ltd.
- Farole, Thomas, and Gokhan Akinci. 2011. "Introduction." In *Special Economic Zones Progress, Emerging Challenges, and Future Directions*, edited by Thomas Farole and Gokhan Akinci, 1-22. Washington, D.C.: The World Bank. <http://documents.worldbank.org/curated/en/2011/01/14813550/special-economic-zones-progress-emerging-challenges-future-directions>.
- Farole, Thomas. 2011. "Overview." In *Special Economic Zones in Africa Comparing Performance and Learning from Global Experiences*, 1-16. Washington, D.C.: The World Bank. <https://openknowledge.worldbank.org/handle/10986/2268>.
- Federal State Statistics Service. "BRICS Joint Statistical Publication 2015." *Federal State Statistics Service*. Federal State Statistics Service, Russian Federation. Last modified 2015. http://www.gks.ru/free_doc/doc_2015/BRICS_ENG.pdf.
- FEZ Planning Office (Free Economic Zones Planning Office). *Korean Free Economic Zones*. Last modified 2015. <http://www.fez.go.kr/global/en/index.do>.

- Financial Supervisory Service. "Financial Supervisory System in Korea." *Financial Supervisory Service*. Financial Supervisory Service. Accessed November 15, 2015. <http://www.fss.or.kr/download.bbs?bbsid=1289364537633&fidx=1288206439592>.
- Financial Supervisory Service. "Overview." *Financial Supervisory Service*. Financial Supervisory Service. Last modified 2006. <http://english.fss.or.kr/fss/en/eabu/int/est.jsp>.
- Foster, John. 2007. "The Financialization of Capitalism." *Monthly Review* 58 (11): 1-12. <http://search.proquest.com/docview/213214866?accountid=14682>.
- Foster, Martin. 2015. "Is Japan Losing Focus on Special Economic Zones?" *Tokyo Japan Today*, August 11. <http://www.japantoday.com/category/business/view/is-japan-losing-focus-on-special-economic-zones>.
- Fruman, Cecile, and Douglas Zeng. "How to Make Zones Work Better in Africa?" *Private Sector Development* (blog), The World Bank, July 27, 2015. <http://blogs.worldbank.org/psd/how-make-zones-work-better-africa>.
- Fukuda, Shin-ichi. 2015. "Abenomics: Why Was It So Successful in Changing Market Expectations?" *Journal of the Japanese and International Economies* 37 (June): 1-20. doi:10.1016/j.jjie.2015.05.006.
- Giang, Dang, and Sui-Pheng Low. 2014. "Theories of Economic Development." In *Infrastructure Investments in Developing Economies: The Case of Vietnam*, 11-26. Singapore: Springer.
- Giang, Dang, and Sui-Pheng Low. 2015. "Theories of Economic Development." In *Infrastructure Investments in Developing Economies: The Case of Vietnam*, 11-26. Singapore: Springer. doi:10.1007/978-981-287-248-7_2.
- Google. *Google Maps*. Accessed November 15, 2015. <https://www.google.com/maps/>.
- Green, Fergus, and Nicholas Stern. "China's "New Normal": Structural Change, Better Growth, and Peak Emissions." *LSE and the Grantham Research Institute on Climate Change and the Environment*. LSE. Last modified June 8, 2015. <http://www.lse.ac.uk/GranthamInstitute/publication/chinas-new-normal-structural-change-better-growth-and-peak-emissions/>.
- Gunsan Free Trade Zone Office. "FTZ." *Gunsan Free Trade Zone Office*. Gunsan Free Trade Zone Office. Last modified 2007. <http://www.ftz.go.kr/gunsan/homeEng/GunsanFreeTradeArea/freeTradeArea.jsp>.
- Gyeongsangbuk-do Provincial Government. *Gyeongsangbuk-do*. Last modified 2015. <http://www.gb.go.kr/eng/main.jsp>.
- Gyeongsangbuk-do Provincial Government. "Win-Win Relation between Gyeongbuk and Daegu-Gyeongbuk Free Economic Zone to Promote Investments." *Gyeongsangbuk-do Division of Investment Promotion*. Gyeongsangbuk-do Provincial Government. Last modified May 9, 2012. http://invest.gb.go.kr/eng/info/01.html?cid=&skin=eng&no=37&start=40&mode=view&table=board_eng01&category=board_eng01.
- Hahm, Joon-ho. 2010. "The Government, the Chaebol and Financial Institutions before the Economic Crisis." In *Economic Crisis and Corporate Restructuring in Korea: Reforming the Chaebol*, edited by Stephan Haggard, Wonhyuk Lim, and Euysung Kim, 79-101. Cambridge Asia-Pacific Studies. Cambridge, UK: Cambridge University Press.

- Harding, Robin, and Leo Lewis. 2015. "The Third Arrow of Abenomics: A Scorecard." *London The Financial Times*, September 9. <http://www.ft.com/cms/s/0/ee40a73c-521d-11e5-8642-453585f2cfd.html#axzz3wPLB9bU4>.
- Hart-Landsberg, Martin. 2005. "South Korea: The Unraveling of an Economy." *Monthly Review*, August. <http://mrzine.monthlyreview.org/2005/hartlandsberg150805.html>.
- Harvie, Charles, and M. Pahlavani. "Sources of Economic Growth in South Korea: An Application of the ARDL Analysis in the Presence of Structural Breaks – 1980-2005." *Research Online*. Department of Economics, University of Wollongong. <http://ro.uow.edu.au/commwkpapers/153>.
- Hatherly, David, and Gavin Kretzschmar. 2011. "Capital and Income Financialization: Accounting for the 2008 Financial Crisis." *Accounting Forum* 35 (4): 209–216. doi:10.1016/j.accfor.2011.06.010.
- Hayashi, Toshihiko. 2014. "Is It Abenomics or Post-Disaster Recovery? A Counterfactual Analysis." *International Advances in Economic Research* 20 (1): 23-31. doi:10.1007/s11294-013-9450-z.
- He, Laura. 2013. "China Mints Another Billionaire, Wang Yong, As Consumption of Food Sweeteners Grows." *Forbes*, January 30. <http://www.forbes.com/sites/laurahe/2013/01/30/china-mints-another-billionaire-wang-yong-as-consumption-of-food-sweeteners-grows/#2715e4857a0b2c8d914777f8>.
- Hodgson, Geoffrey. 1998. "The Approach of Institutional Economics." *Journal of Economic Literature* 36 (1): 166-92. <http://www.jstor.org/stable/2564954>.
- Incheon Free Economic Zone Authority. "The Free Economic Zone (FEZ)." *Incheon Free Economic Zone*. Incheon Free Economic Zone Authority. Last modified 2014. <http://www.ifez.go.kr/eng/en/m1/ifez/screen.do>.
- Itoh, Makoto. 2013. "Theoretical Possibilities of a Socialist Market Economy and the Chinese Road." In *Industrialization of China and India: Their Impacts on the World Economy*, edited by Nobuharu Yokokawa, Jayati Ghosh, and Bob Rowthorn, 151-70. 1st ed. Abingdon and New York: Routledge.
- Jeon, Han, and Jae-un Limb. "President Park Announces Three-year Plan for Economic Innovation." *Korea.net*. Korean Culture and Information Service. Last modified February 27, 2014. <http://www.korea.net/NewsFocus/Policies/view?articleId=117839>.
- Jong, Willemijn. "Establishing Free Zones for Regional Development." *European Parliament Think Tank*. European Parliament. Last modified March 12, 2013. [http://www.europarl.europa.eu/thinktank/en/document.html?reference=LDM_BRI\(2013\)130481](http://www.europarl.europa.eu/thinktank/en/document.html?reference=LDM_BRI(2013)130481).
- Kang, Seyoung. 2014. "Behind the Family's Common Interest: Battles between Korean Entrepreneur Couples." In *Gender and Family in East Asia*, edited by Siumi Tam, Wai-ching Wong, and Danning Wang, 54-74. Routledge Research on Gender in Asia Series. Abingdon and New York: Routledge.
- Kang, Taesoo, and Guonan Ma. 2009. *Credit Card Lending Distress in Korea in 2003*. Vol. 46. BIS Papers. Basel: Household Debt: Implications for Monetary Policy and Financial Stability. <http://www.bis.org/publ/bppdf/bispap46.pdf>.
- Kim, Haknoh. "Regional Innovation Policy of South Korea, Compared with, and Learning from, the European Union." *K-Developedia*. K-Developedia. Last modified April 24, 2007. <https://www.kdevelopedia.org/Resources/government-law/regional-innovation->

- policy-south-koreacompared-with-learning-europeunion--
05201411250135546.do?fldIds=TP_GOV%20TP_GOV_GO#.VpKSDPn0GIU.
- Kim, Kihwan. "The 1997-98 Korean Financial Crisis: Causes, Policy Response, and Lessons." *International Monetary Fund*. IMF. Last modified 2006.
<https://www.imf.org/external/np/seminars/eng/2006/cpem/pdf/kihwan.pdf>.
- Kim, Seong-jin, and Soon-cheon Byeon. "An Evaluation on the Effect of Brain Korea 21 Phase II Program." *EISTA 2011*. International Institute of Informatics and Systemics. Last modified 2011.
http://www.iiis.org/CDs2011/CD2011SCI/EISTA_2011/PapersPdf/EA787TA.pdf.
- Kim, Soon-yang. 2014. "South Korea's Policy Responses to Global Economic Crisis." *Global Business Research Journals*, October.
<https://www.kdevelopedia.org/resource/view/05201508170139491.do#.VpJ5fvn0GIU>.
- Kindleberger, Charles, and Robert Aliber. 2011. "Financial Crisis: a Hardy Perennial." In *Manias, Panics and Crashes: A History of Financial Crises*, 1-25. 6th ed. Basingstoke: Palgrave Macmillan.
- Kipnis, Andrew. 2013. "Urbanisation in Between: Rural Traces in a Rapidly Growing and Industrialising County City." *China Perspectives* 2013 (3): 5-12.
<http://search.proquest.com/docview/1441240806?accountid=14682>.
- Krippner, Greta. 2005. "The Financialization of the American Economy." *Socio-Economic Review* 3 (2): 173-208. doi:10.1093/SER/mwi008.
- Krippner, Greta. 2011. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press.
- Krippner, Greta. 2015. "Financialization and Social Theory: An Interview with Dr. Greta Krippner." By Grace Cale and Shanklin Roll. *disClosure: A Journal of Social Theory* 24 (1). <http://uknowledge.uky.edu/disclosure/vol24/iss1/11>.
- Lapavistas, Costas. 2011. "Theorizing Financialization." *Work Employment & Society* 25 (4): 611-26. doi:10.1177/0950017011419708.
- Lee, Doowon. 2002. "The Economic Outlook for Reconciliation and Reunification." In *Korea Briefing: 2000-2001: First Steps toward Reconciliation and Reunification*, edited by Kongdan Oh and Ralph Hassig, 43-75. Asia Society Briefings. Armonk, New York: Routledge.
- Lee, Kong-rae, JinHyo Yun, and Eui-Seob Jeong. 2015. "Convergence Innovation of the Textile Machinery Industry in Korea." *Asian Journal of Technology Innovation* 23 (June): 58-73. doi:10.1080/19761597.2015.1011260.
- Lee, Kyung-Min. 2009. "DGFEZ Strives to Become Hub in Northeast Asia." *Seoul Korea IT Times*, July 8. <http://www.koreaittimes.com/story/4048/dgfez-strives-become-hub-northeast-asia>.
- Lee, Shi-chul, and Seungkeun Park. 2008. "Spatial Regeneration and Beyond: Daegu, Korea." In *Sustainable City Regions: Space, Place and Governance*, edited by Tetsuo Kidokoro, Noboru Harata, Leksono Subanu, Johann Jessen, Alain Motte, and Ethan Seltzer, 101-26. Vol. 7. cSUR-UT Series: Library for Sustainable Urban Regeneration. Tokyo: Springer.
- Lee, Woojin, and Younghoon Yoon. "Capital in South Korea: 1966-2013." *School of Economics and Finance of Queen Mary University of London*. Queen Mary University

- of London. Last modified June 13, 2015.
<http://econ.qmul.ac.uk/Documents/157949.pdf>.
- Lee, Youkyung, and Minji Lee. 2012. "Breeding Top Global Banking Firm Still Elusive Dream for Korea." *Seoul Yonhap News Agency*, February 26.
http://english.yonhapnews.co.kr/n_feature/2012/02/13/31/4901000000AEN20120213008700320F.HTML.
- Leong, Chee-kian. 2013. "Special Economic Zones and Growth in China and India: An Empirical Investigation." *International Economics and Economic Policy* 10 (4): 549-67. doi:10.1007/s10368-012-0223-6.
- Li, Linda. 2012. "Introduction." In *Rural Tax Reform in China: Policy Processes and Institutional Change*, 1-18. 1st ed. Routledge Studies on China in Transition. Abingdon and New York: Routledge.
- Li, Yunheng. 2015. "Zouping ruwei 2015 quanguo baiqiangxian" 邹平入围 2015 全国百强县 [Zouping Ranks Top 100 Counties of 2015]. *Guangzhou NetEase*, August 25.
<http://news.163.com/15/0825/20/B1T21HP800014AED.html>.
- Lim, Hyun-chin, and Jin-ho Jang. 2012. "Which Democracy? South Korea under Globalization Revisited." In *Globalization and Development in East Asia*, edited by Jan Pieterse and Jongtae Kim, 166-81. 1st ed. Routledge Studies in Emerging Societies. Abingdon and New York: Routledge.
- Lin, Carol, Leif Edvinsson, Jeffrey Chen, and Tord Beding. 2014. "Introduction." In *Navigating Intellectual Capital after the Financial Crisis*, 1-3. 1st ed. New York: Springer.
- Magdoff, Harry, and Paul Sweezy. 1972. "Problems of United States Capitalism." In *The Dynamics of U. S. Capitalism: Corporate Structure, Inflation, Credit, Gold, and the Dollar*, 7-30. Vol. 1. Economic History As It Happened. New York: Monthly Review Press.
- Meidan, Michal, Amrita Sen, and Robert Campbell. "China- 'The New Normal.'" *The Oxford Institute for Energy Studies*. University of Oxford. Last modified February 16, 2015.
<http://www.oxfordenergy.org/2015/02/china-new-normal/>.
- Ministry of Commerce of China. "Guojiaji jingji jishu kaifaqu 219 ge" 国家级经济技术开发区 219 个 [219 National ETDZs]. *Ministry of Commerce of China*. Ministry of Commerce of China. Accessed November 15, 2015.
<http://www.mofcom.gov.cn/xglj/kaifaqu.shtml>.
- Ministry of Commerce of China. "Fujian : 《guojiaji jingji jishu kaifaqu kuojian shenpi yuanze he shenpi chengxu 》" 附件: 《国家级经济技术开发区扩建审批原则和审批程序》 [Annex: The Principle and Procedure of the Approval for the Expansion of National Economic and Technological Development Zones]. *Ministry of Commerce of China*. Ministry of Commerce of China. Last modified November 6, 2005.
<http://www.mofcom.gov.cn/aarticle/bh/200511/20051100727031.html>.
- Ministry of Commerce of China. "Backgrounder: China's Stimulating Policies in Financial Crisis." *Ministry of Commerce of China*. Ministry of Commerce of China. Last modified May 22, 2012.
<http://english.mofcom.gov.cn/aarticle/zm/201205/20120508139232.html>.

- Ministry of Strategy and Finance. 2013. "The Park Geun-hye Administration's Creative Economy Blueprint." *Seoul Korea.net*, June 11.
<http://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=2263>.
- Ministry of Strategy and Finance. "History." *Ministry of Strategy and Finance*. Ministry of Strategy and Finance. Last modified 2012. <http://english.mosf.go.kr/>.
- Ministry of Trade, Industry and Energy. "Introduction." *Ministry of Trade, Industry and Energy*. Ministry of Trade, Industry and Energy. Last modified 2011.
<http://english.motie.go.kr/?cat=52>.
- Ministry of Trade, Industry and Energy. "Korean Industrial Initiative for the Creative Economy." *Publications*. Ministry of Trade, Industry and Energy. Last modified October 24, 2014. <http://english.motie.go.kr/wp-content/uploads/2014/10/Koean-Industrial-Initiative-for-the-Creative-Economy.pdf>.
- Mochizuki, Takashi. 2013. "Japan Plans "Abenomics Zones" to Boost Economy." *New York The Wall Street Journal*, June 3.
<http://www.wsj.com/articles/SB10001424127887324063304578523211256673322>.
- Nam, In-soo. 2009. "South Korea Economy Avoids Recession, Grows 0.1%." *New York The Wall Street Journal*, April 24. <http://www.wsj.com/articles/SB124053088380050309>.
- The National People's Congress. 2011. "Law of the People's Republic of China on Township Enterprises." *Beijing China.org.cn*, February 12.
http://www.china.org.cn/china/LegislationsForm2001-2010/2011-02/12/content_21908177.htm.
- NBS (National Bureau of Statistics of China). "National Data." *NBS*. NBS. Accessed November 15, 2015. <http://data.stats.gov.cn/english/>.
- Nielsen, Lynge. 2011. *Classifications of Countries Based on their Level of Development: How It Is Done and How It Could Be Done*. Washington, D.C.: IMF Press.
<https://www.imf.org/external/pubs/ft/wp/2011/wp1131.pdf>.
- "Not so Special." 2015. *The Economist*, April 4.
<http://www.economist.com/news/leaders/21647615-world-awash-free-trade-zones-and-their-offshoots-many-are-not-worth-effort-not>.
- OECD (Organisation for Economic Co-operation and Development). 2007. "Barriers to Regional Engagement of Higher Education." In *Higher Education and Regions: Globally Competitive, Locally Engaged*, 45-66. Paris: OECD Publishing.
doi:10.1787/9789264034150-en.
- OECD (Organisation for Economic Co-operation and Development). 2008. *OECD Glossary of Statistical Terms*. Paris: OECD Publishing. doi:10.1787/9789264055087-en.
- OECD (Organisation for Economic Co-operation and Development). "De Facto Population." *Glossary of Statistical Terms*. OECD. Last modified January 4, 2006.
<http://stats.oecd.org/glossary/detail.asp?ID=571>.
- OECD (Organisation for Economic Co-operation and Development). "De Jure Population." *Glossary of Statistical Terms*. OECD. Last modified January 4, 2006.
<https://stats.oecd.org/glossary/detail.asp?ID=580>.

- OECD (Organisation for Economic Co-operation and Development). "Gross Capital Formation." *Glossary of Statistical Terms*. OECD. Last modified November 2, 2001. <https://stats.oecd.org/glossary/detail.asp?ID=1158>.
- Palley, Thomas. 2007. "Financialization: What It Is and Why It Matters." *Working Paper No. 525*, December. <http://EconPapers.repec.org/RePEc:uma:periwp:wp153>.
- Pan, Jiahua, Guiyang Zhuang, Shouxian Zhu, and Ying Zhang. 2015. "Supporting Indicators in the LCCC Indicator System and Application Guidelines." In *Reconstruction of China's Low-Carbon City Evaluation Indicator System: A Methodological Guide for Applications*, 49-136. Singapore: World Scientific Publishing Co. Pte. Ltd.
- Park, Jong-soo. 2012. "Balanced Development of Different Segments of the Korean Financial Industry." *Capital Market Perspective* 4 (2): 2-5. <http://www.kcmi.re.kr/common/downloadw.asp?fid=4554&fgu=002001&fty=004003>.
- Phillips, Kevin. 2006. "Soaring Debt, Uncertain Politics, and the Financialization of the United States." In *American Theocracy: The Peril and Politics of Radical Religion, Oil, and Borrowed Money in the 21st Century*, 265-309. New York: Viking Press.
- Pillay, Pundy. 2010. "South Korea." In *Linking Higher Education and Economic Development: Implications for Africa from Three Successful Systems*, 71-97. City of Cape Town: Centre for Higher Education Transformation.
- "Political Priority, Economic Gamble." 2015. *The Economist*, April 4. <http://www.economist.com/news/finance-and-economics/21647630-free-trade-zones-are-more-popular-everwith-politicians-if-not>.
- Prasad, Eswar. "China's Approach to Economic Development and Industrial Policy." *Brookings*. The Brookings Institution. Last modified June 15, 2011. <http://www.brookings.edu/research/testimony/2011/06/15-china-economic-development-prasad>.
- Pratruangkrai, Petchanet. 2014. "S Korea Eyes More FDIs at Its Free Economic Zones." *Bangkok The Nation*, December 5. <http://www.nationmultimedia.com/business/S-Korea-eyes-more-FDIs-at-its-free-economic-zones-30249166.html>.
- Robbins, Lionel. 1968. "General View." In *The Theory of Economic Development in the History of Economic Thought*, 1-21. 1st ed. London and Basingstoke: Macmillan Publishers.
- Sawyer, Malcolm. 2013. "What Is Financialization?" *International Journal of Political Economy* 42 (4): 5-18. doi:10.2753/IJP0891-1916420401.
- Schragger, Richard. 2010. "Rethinking the Theory and Practice of Local Economic Development." *The University of Chicago Law Review* 77 (1): 311-39. <http://www.jstor.org/stable/40663035>.
- Seong, Somi, Steven Popper, Charles Goldman, David Evans, and Clifford Grammich. 2008. "Introduction." In *Brain Korea 21 Phase II: A New Evaluation Model*, 1-8. Santa Monica, CA: RAND Corporation.
- Shandong Luzhong Yunda Bounded Logistic Center. "The Overview of Shandong Luzhong Yunda Bounded Logistic Center." *Shandong Luzhong*. Shandong Luzhong Yunda Bounded Logistic Center. Last modified 2015. <http://www.kjbsg.com/html/yqjs/>.
- Shang, Lie, and Xiaoxuan Liu. "Zhongguo xiangzhen qiye de fazhan yu bianhua" 中国乡镇企业的发展与变化 [The Development and Change of the Chinese TVEs]. *Institute of*

- Economics, Chinese Academy of Social Sciences*. Institute of Economics, Chinese Academy of Social Sciences. Last modified 2003.
<http://ie.cass.cn/yjlw/01.asp?id=125>.
- Shin, Jang-sup. 2014. "Introduction-Re-writing the 'Official History' of the Korean Economy and Financial Crises in Emerging Markets." In *The Global Financial Crisis and the Korean Economy*, 1-8. Abingdon and New York: Routledge.
- Song, Sophie. 2013. "A List of China's Super-rich, and Their Stories." *New York International Business Times*, May 8. <http://www.ibtimes.com/list-chinas-super-rich-their-stories-1243241>.
- Song, Yeongkwan. "Evaluation of Special Economic Zone Policy and Suggestions for Vitalization of Free Economic Zone." *KDI*. Korea Development Institute. Last modified October 28, 2014.
http://www.kdi.re.kr/kdi_eng/brief/brief_view.jsp?yearmonth=20150227.
- Spence, Jonathan. 1999. "Re-entering the World." In *The Search for Modern China*, 587-728. 2nd ed. New York and London: W. W. Norton & Company.
- Statistics Korea. "Statistical Database." *KOSIS KOREAN Statistical Information Service*. Statistics Korea. Last modified 2014.
http://kosis.kr/eng/statisticsList/statisticsList_01List.jsp?vwcd=MT_ETITLE&parmTabId=M_01_01#SubCont.
- Statistics Korea. "Statistical Terms." *Statistics Korea*. Statistics Korea. Accessed November 15, 2015.
<http://kostat.go.kr/portal/eng/resources/4/index.action?bmode=language&type=class&cls=ALL>.
- Stewart, Heather, and Fergus Ryan. 2015. "The Global Economy Is Slowing Down. But Is It Recession-Or Protectionism?" *London The Guardian*, November 14.
<http://www.theguardian.com/business/2015/nov/14/global-economy-slowing-down-recession-or-protectionism>.
- Todaro, Michael, and Stephen Smith. 2012. *Economic Development*. 11st ed. Boston: Addison-Wesley.
- Tokyo Metropolitan Government. "National Strategic Special Zone." *Invest Tokyo: Tokyo's Special Economic Zones*. Tokyo Metropolitan Government. Accessed November 15, 2015. http://www.seisakukikaku.metro.tokyo.jp/invest_tokyo/english/invest-tokyo/nssz.html.
- UNCTAD (The United Nations Conference on Trade and Development). "Foreign Direct Investment (FDI)." *United Nations Conference on Trade and Development*. United Nations Conference on Trade and Development. Last modified 2013.
[http://unctad.org/en/Pages/DIAE/Foreign-Direct-Investment-\(FDI\).aspx](http://unctad.org/en/Pages/DIAE/Foreign-Direct-Investment-(FDI).aspx).
- UNDP (United Nations Development Programme). 2014. *Human Development Report 2014*. Washington, D.C.: Communications Development Incorporated.
<http://hdr.undp.org/en/content/human-development-report-2014>.
- United Nations World Urbanization Prospects. "Glossary of Demographic Terms." *The 2014 Revision of World Urbanization Prospects*. United Nations. Last modified 2015.
<http://esa.un.org/unpd/wup/General/GlossaryDemographicTerms.aspx>.

- Vanek, J., and A. Studenmund. 1968. "Towards a Better Understanding of the Incremental Capital-Output Ratio." *The Quarterly Journal of Economics* 82 (3): 452-64. <http://www.jstor.org/stable/1879517>.
- Walters, A. 1966. "Incremental Capital-Output Ratios." *The Economic Journal* 76 (304): 818-22. doi:10.2307/2229085.
- Wang, Dege. 2013. "Shandong zouping jiben gaikuang ji gongye jingji" 山东邹平基本概况及工业经济 [The Overview of Shandong Zouping and of the Industrial Economy]. *Beijing Phoenix New Media*, November 4. http://sd.ifeng.com/zt/baiqiangxian/fenbu/detail_2013_11/04/1412025_0.shtml.
- Wang, Xiao. 2013. "Introduction." In *The Role of Economic Development Zones in National Development Strategies*, 1-5. Santa Monica, CA: RAND Corporation. http://www.rand.org/pubs/rgs_dissertations/RGSD320.html.
- Wolff, Hendrik, Howard Chong, and Maximilian Auffhammer. 2011. "Classification, Detection and Consequences of Data Error: Evidence from the Human Development Index." *The Economic Journal* 121 (553): 843–870. doi:10.1111/j.1468-0297.2010.02408.x.
- Wong, Kwan-yiu. 1987. "China's Special Economic Zone Experiment: An Appraisal." *Geografiska Annaler* 69 (1): 27-40. doi:10.2307/490409.
- The World Bank. "Urban Population (% of Total)." *The World Bank*. The World Bank. <http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>.
- The World Bank. *The World Bank*. Last modified 2015. http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?order=wbapi_data_value_1989+wbapi_data_value&sort=desc&page=5.
- World Shipping Council. "Top 50 World Container Ports." *World Shipping Council*. World Shipping Council. Accessed September 15, 2015. <http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports>.
- Wu, Mark. 2015. "The WTO and China's Unique Economic Structure." In *Regulating the Visible Hand?: The Institutional Implications of Chinese State Capitalism*, edited by Benjamin Liebman and Curtis Milhaupt, 313-52. New York: Oxford University Press.
- Xinhua. 2012. "China Lowers GDP Target for Quality Growth." *Beijing China Daily*, March 12. http://www.chinadaily.com.cn/business/2012-03/12/content_14815119.htm.
- Xu, Hui. 2014. "Shandong zhongbu jueqi xianyu 'si xiao long': zouping linzi zhangqiu guangrao" 山东中部崛起县域“四小龙”：邹平临淄章丘广饶 [The Middle Part in Shandong Rises to Become "Four Little Dragons": Zouping, Linzi, Zhangqiu and Guangrao]. *Ji'nan iqilu.com*, August 17. <http://news.iqilu.com/shandong/yuanchuang/2014/0817/2106578.shtml>.
- Yang, Joon-mo, Tae-wan Kim, and Hyun-Ok Han. 2006. "Understanding the Economic Development of Korea from a Co-evolutionary Perspective." *Journal of Asian Economics* 17 (4): 601–621. doi:10.1016/j.asieco.2006.05.003.
- Yang, Xiaobing. 2010. "Hainan Province-China's Largest SEZ." *Beijing Review*, February 3. http://www.bjreview.com.cn/Cover_Story_Series_2010/2010-02/03/content_244683.htm.

- Ye, Lin, and Guangming Zhang. 2014. "Promoting Mega-city Development through Metropolitan Governance: the Case of the Pearl River Delta Region." In *Branding Chinese Mega-Cities: Policies, Practices and Positioning*, edited by Per Berg and Emma Björner, 91-105. Cheltenham UK and Northampton USA: Edward Elgar.
- Yonhap. 2013. "Full Text of Park's Inauguration Speech." *Seoul Yonhap News Agency*, February 25.
<http://english.yonhapnews.co.kr/national/2013/02/25/95/0301000000AEN20130225001500315F.HTML>.
- Yonhap. 2015. "S. Korean Economy to Take Hit from China's Slowdown: Think Tank." *Seoul Yonhap News Agency*, November 9.
<http://english.yonhapnews.co.kr/news/2015/11/09/0200000000AEN20151109004100320.html>.
- Yonhap. 2015. "New Wave of Layoffs to Hit Korean Financial Sector." *Seoul The Korea Herald*, November 22. <http://www.koreaherald.com/view.php?ud=20151122000188>.
- Yoon, Deok-ryong. 2011. "The Korean Economic Adjustment to the World Financial Crisis." Abstract. *Asian Economic Papers* 10 (1): 106-27. doi:10.1162/ASEP_a_00058.
- Zeng, Douglas. 2011. "How Do Special Economic Zones and Industrial Clusters Drive China's Rapid Development?" *Policy Research Working Papers*, March. doi:10.1596/1813-9450-5583.
- Zhang, Mo. 2008. "From Public to Private: The Newly Enacted Property Law and the Protection of Property Rights in China." *Berkeley Business Law Journal* 5 (2): 317-63. <http://scholarship.law.berkeley.edu/bblj/vol5/iss2/4>.
- Zhao, Xiaofei. 2014. "Shandong gongye qiangxian zouping bian'ge min'gan qi: chuan duojia qiye chu wenti" 山东工业强县邹平变革敏感期：传多家企业出问题 [The Transitive Period of the Strong Industrial County of Shandong Province: Many Enterprises Have Problems]. *Beijing Sina*, April 26.
<http://finance.sina.com.cn/china/dfjj/20140426/074518932469.shtml>.
- Zheng, Henry. 1987. "The Legal Structure of Economic and Technological Development Zones in the People's Republic of China." *Berkeley Journal of International Law* 5 (1). doi:10.15779/Z38M93W.
- Zhuang, Weimin 庄维民. 2004. "Minguo shiqi zouping de xiangcun zhili" 民国时期邹平的乡村治理 [The Rural Governance of Zouping during the Period of the Republic of China] In *Chinese Rural Governance in the Past and Nowadays: Cases Studies of Dingxian, Zouping and Jiangning Counties*, edited by Xiuli Xu, 260-310. Beijing: Social Sciences Academic Press.
- Zouping County Bureau of Agriculture. "Zouping nongye" 邹平农业 [Zouping Agriculture]. *Agricultural Information Network of Zouping County*. Zouping County Bureau of Agriculture. Accessed September 15, 2015. <http://www.zpny.com/design1/zpny.aspx>.
- Zouping County Government. "Xianqing jianjie" 县情简介 [The Profile of Zouping]. *Zouping Media*. Zouping County Government. Last modified May 31, 2013. <http://www.zpxc.gov.cn/mlzp/zpgk/1191.html>.
- Zouping Media. "Zouping shangshi qiye gaikuang" 邹平上市企业概况 [The Overview of Zouping Listed Enterprises]. *Zouping Media*. Zouping County Government. Last modified May 27, 2013. <http://www.zpxc.gov.cn/jingji/2013/0531/1209.html>.

Zouping National ETDZ (Zouping National Economic and Technological Development Zone). *Zouping National Economic and Technological Development Zone*. Last modified 2012. <http://www.zpedz.gov.cn>.

ABBREVIATIONS

BSZC	Bureau of Statistics of Zouping County
CPI	Consumer Price Index
DGFEZ	Daegu-Gyeongbuk Free Economic Zone
Free Economic Zone(s)	FEZ(s)
FSC	Financial Services Commission
FSS	Financial Supervisory Service
FTZ(s)	Free Trade Zone(s)
GRDP	Gross Regional Domestic Product
HDI	Human Development Index
ICOR	Incremental Capital Output Ratio
KFEZ(s)	Korean Free Economic Zone(s)
KOSIS	Korean Statistical Information Service
(National) ETDZ	(National) Economic and Technological Development Zone
NBS	National Bureau of Statistics of China
NFC(s)	Non-financial Corporation(s)
R&D	Research and Development
(Real) GDP	(Real) Gross Domestic Product
SEZ(s)	Special Economic Zone(s)
UNDP	United Nations Development Programme
ZITNBS	Zouping Investigation Team of National Bureau of Statistics of China
Zouping National ETDZ	Zouping National Economic and Technological Development Zone

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APPENDIX I: ABSTRACTS

ABSTRAKT

Die meisten L änder weltweit erwarten auf der einen Seite, ihre Volkswirtschaften neu zu beleben und die wirtschaftliche Entwicklung von Sonderwirtschaftszonen zu fördern. Auf der anderen Seite beeinflusst eine neue Variable "Finanzialisierung" zunehmend die Weltwirtschaft und damit wieder die Gestaltung der Rolle der Sonderwirtschaftszonen in der Förderung der lokalen wirtschaftlichen Entwicklung. Diese Forschung zielt darauf ab, die Beziehung zwischen zwei Sonderwirtschaftszonen (Zouping Nationale Wirtschaftliche und Technologische Entwicklung Zone und Daegu-Gyeongbuk Freie Wirtschaftszone), die wirtschaftliche Entwicklung und Finanzialisierung zu untersuchen. Diese Forschung legt besonderen Interesse an der Rolle der Sonderwirtschaftszonen ohne Meereszugang. Auch diskutiert sie die Machbarkeit einer Transplantation eines erfolgreichen SEZ Modells in eine zweite Binnen Region unter dem Einfluss der Finanzialisierung.

Schl üsselwörter: Sonderwirtschaftszonen, Wirtschaftliche Entwicklung, Finanzialisierung, Zouping, Daegu und Gyeongsangbuk-do

ABSTRACT

Most countries worldwide, on the one hand, expect to reinvigorate their economies and to promote economic development by special economic zones. On the other hand, a new variable "financialization" increasingly influences the world economy, thereby re-shaping the role of special economic zones in promoting local economic development. This research aims to study the relationship among two special economic zones (Zouping National Economic and Technological Development Zone and Daegu-Gyeongbuk Free Economic Zone), economic development and financialization. This research places particular interest in the role of special economic zones in a landlocked region. Also, under the impact of financialization, it discusses the feasibility on the transplantation of a successful SEZ model to a second landlocked region.

Key Words: Special Economic Zones, Economic Development, Financialization, Zouping, Daegu and Gyeongsangbuk-do

APPENDIX II: CURRICULUM VITAE

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Education

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