

## City Profile

### Dual policy to fight urban shrinkage: Daegu, South Korea

#### Abstract:

Daegu is an inland metropolitan city of South Korea, which grew rapidly with a booming textile industry during the country's industrialization under the developmental state. Over the past twenty years however, Daegu has been badly hurt by South Korea's overall slowing down of the economic and population growth as a newly developed economy and rising global competition. Its key challenges are deindustrialization, population decline, and rising socio-spatial inequality with suburbanization and declining inner-city centers – all strikingly similar symptoms shared by many former industrial cities struggling to find a new niche in the fast-paced global economy. This city profile identifies multi-level policy responses that have sought to revive Daegu and confront its urban shrinkage, under South Korea's relatively recent democratization and decentralization. In particular, it highlights the coexistence of two seemingly opposite policy trends: one of pro-growth strategies and another, more inclusive, regenerative approach.

**Keywords:** Daegu, urban shrinkage, urban governance, decentralization, megaprojects, urban regeneration

## 1. Introduction

Daegu is generally known as the third city of South Korea, following Seoul and Busan. It is an inland metropolitan city of 2.5 million, located in North Gyeongsang province, along South Korea's major Gyeongbu expressway that connects Seoul to Busan. Once known as the textile hub of South Korea, Daegu developed in tandem with the country's rapid rise in the global economy led by the developmental state,<sup>1</sup> beginning in the 1960s. The city initially benefited from the global economy, and its textile industry fueled South Korea's export-oriented industrialization, but Daegu is now hurt by globalization as it has struggled to find a new niche amid rising global competition. While Seoul has become one of the key Asian global cities (Hill & Kim, 2000; Kim & Han, 2012), and Busan has emerged as an important international port and,

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<sup>1</sup> South Korea's astonishing economic development achieved under the strong state intervention during the latter part of the 20<sup>th</sup> century, together with Taiwan, Singapore, and Hong Kong, has been studied under the developmental state theory. (See Amsden, 1989; Deyo, 1987). The starting point of South Korea's developmental state was when the military government led by Park Chung-hee took power in 1961, and began the state-led export-oriented industrialization as the state's foremost goal.

although not without challenges (Joo & Park, 2016), continues to work towards being a global hub (Seo *et al.*, 2015); Daegu resembles ‘the rest’ – those cities, both within and outside South Korea, that are suffering from deindustrialization, slow growth, declining population, and decaying city centers, and are increasingly unplugged from the global economy.

Recently, the literature has begun to frame those cities facing structural and durable urban decline in the context of fast-paced global changes as ‘shrinking cities’ (Martinez-Fernandez *et al.*, 2012). Urban shrinkage is not an isolated phenomenon taking place in a few former industrial cores, but is a widely spread spatial manifestation of the other side of contemporary globalization, in opposition to global (and globalizing) cities. At the same time, some studies have underscored shrinking cities’ diverse causes and manifestations across different countries (Mallach *et al.*, 2017; Großmann *et al.*, 2013; Wiechmann & Pallagst, 2012) as well as within a country (Alves *et al.*, 2016). Policy responses have also varied, according to varying institutional and political contexts (Mallach *et al.*, 2017; Couch *et al.*, 2012). Developing a cross-national knowledge on urban shrinkage by bringing together the studies on Western Europe, the United States, and Asia is important (Großmann *et al.*, 2013). Yet, compared to the former two, the literature on shrinking cities in Asia has been rather limited, with few exceptions mostly on Japanese shrinking cities and Chinese mining cities (see Hattori *et al.*, 2017; He *et al.*, 2017). What have been particularly missing in the literature are the experiences of late-industrializers in Asia that have been known for their rapid growth under the developmental state, but now facing equally fast-paced deindustrialization and ageing population.

Especially from a policy perspective, how a country with a relatively recent past of developmental state and its growth-first strategies responds to the new challenge of shrinking cities demands attention. Indeed, South Korean urban development in the latter half of twentieth

century has prioritized on growth – an ideology not entirely unlike from that of neoliberalism – guided by the national level planning (Park *et al.*, 2012). Such celebration and unquestioned pursuit of growth are what the shrinking city literature has been trying to tackle, through shaping the shrinking city discourse to bring about non-growth planning paradigm for urban shrinkage (Hospers, 2014; Sousa & Pinho, 2015). The main argument is that traditional growth-oriented strategies cannot bring sustainable and successful development to shrinking cities due to their changed economic and population structures. Outside the academic circle, however, shrinkage remains a stigmatized concept, especially in the U.S. cities with the history of strong urban growth agendas (Wiechmann & Pallagst, 2012; Audirac, 2017; Mallach, 2017). Being second to none when it comes to growth orientation, and also a latecomer to decentralization and democratization, how South Korean cities would approach their newly emerging problem of urban shrinkage is uncertain and remains to be examined.

This city profile draws attention to the economic, demographic, and socio-spatial challenges that Daegu has been struggling with, and the various policy responses that have sought to revive the city and to confront urban shrinkage. Daegu is one of the earlier metropolitan cities facing shrinkage problems amid South Korea's slowing down of economic and population growth. Its labor-intensive manufacturing has significantly waned since the 1990s, and in 2000, the city's ranking within the country fell to fourth largest in terms of population, as Incheon – a city located in the capital region<sup>2</sup> – emerged as South Korea's major air and sea port.

In the process of studying the Daegu's ongoing challenges and policies with multilevel analysis, the paper identifies two groups of strategies with somewhat opposing goals – a top-down

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<sup>2</sup> The capital region includes Seoul, its surrounding Gyeonggi Province, and Incheon.

approach, dictated by typical growth agendas and seeking new growth engines, and another more inclusive and alternative approach that seeks to work within local conditions. What we observe is a dual policy trend as Daegu tries to fight its way back to being a competitive metropolitan city once more.



Figure 1. Location of Daegu  
Source: Authors

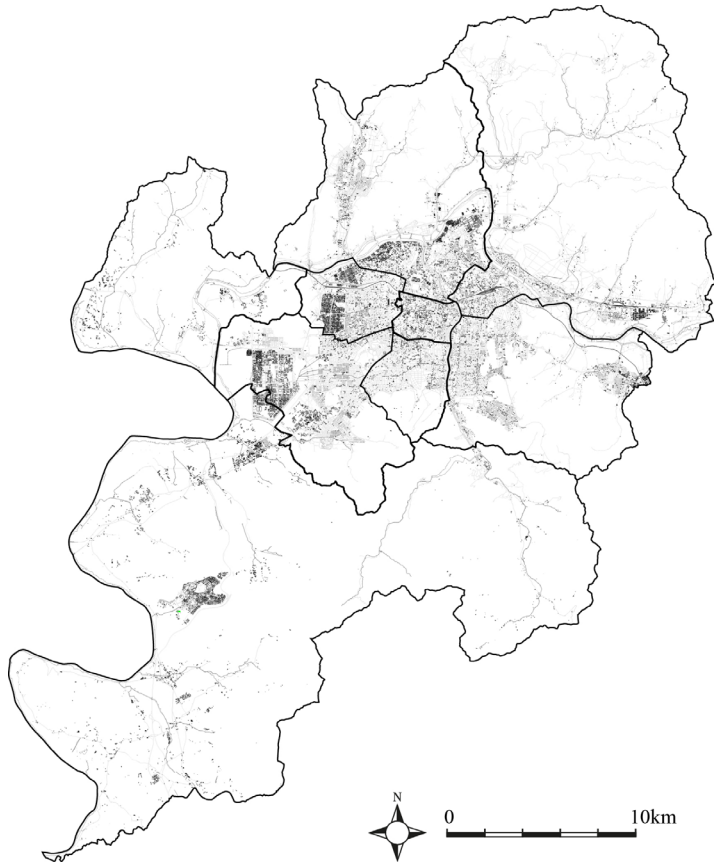


Figure 2. A map of Daegu

Source: Authors reproduced based on the Daegu GIS map provided by DMG.

Table 1. A brief overview of Daegu (as of 2015)

Area (sq. km)	883.56
Population (persons)	2,513,970
Household	982,360
Administrative districts	7 districts, 1 county
GRDP	46,592 billion Won (3.1% of South Korea)
Distance from Seoul	300 km (1hr 50mins by express train)
Average temperature	26°C (August), 1.4°C(January)

Source: DMG (2016b)

## 2. Historical development of Daegu

Since the 1600s, Daegu has functioned as the provincial capital based on its significance in the military, administrative, and commercial activities. Literally meaning ‘large hills’ in Korean, Daegu is surrounded by mountains, but is well-connected to other regions due to its

advantageous geographical location. Since 1601, it has housed the Provincial Office of Gyeongsang<sup>3</sup>, and has carried out key administrative functions for Korea's southeast region (CHCCD, 1993b). In 1896, Gyeongsang province divided into North Gyeongsang (Gyeongbuk) and South Gyeongsang (Gyeongnam), and since then, Daegu has been the principal city of Gyeongbuk. It is still the key metropolitan city of the province, but in 2016, the Provincial Office relocated to the city of Andong.

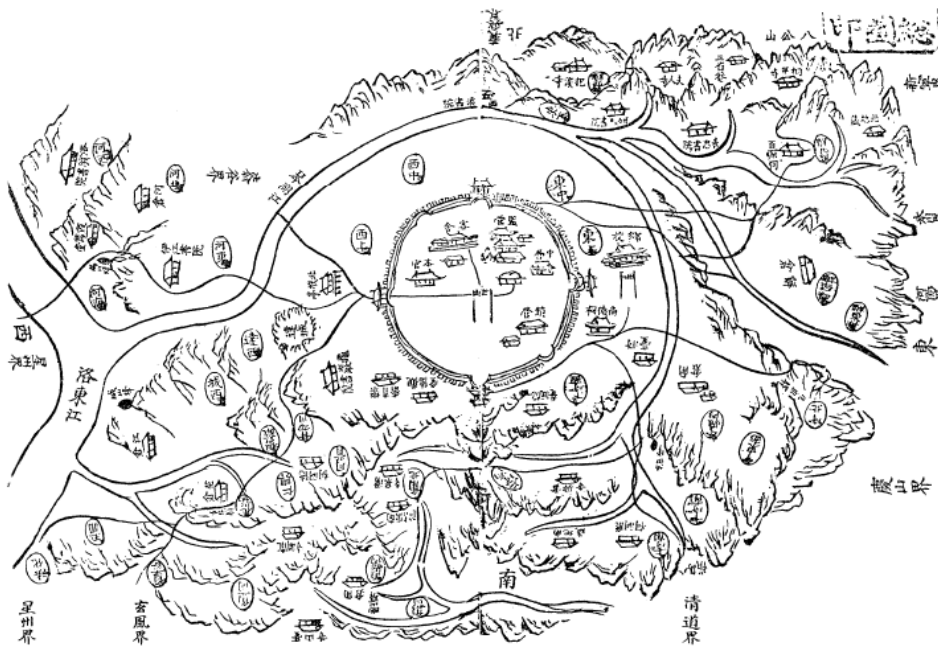


Figure 3. A map of Daegu in the 1700s  
 Source: RRIKS (1982); Quoted in CHCCD (1993b, p.608).

Daegu's first wave of industrialization, focused on cloth, iron, timber production, and food processing industries, took place under the Japanese Occupation (1910–1945). After the Sino-Japanese War broke out in 1937, a large number of factories and logistics facilities were

<sup>3</sup> During the Chosun dynasty, there were 8 provinces, one of which was Gyeongsang. For nearly 300 years, before Gyeongsang divided into Gyeongbuk and Gyeongnam, Daegu was the sole provincial capital of Korea's southeast region.

built in Daegu and other major Korean cities in order to supply munitions to the Japanese army. Daegu had 254 factories in 1937; by 1941, the number had increased to 927 (CHCCD, 1993a).

The second industrial boom in Daegu took place in the wake of the Korean War (1950–1953). Due to the perimeter defense along the *Nakdong* River that runs north to south along the western border of the city, Daegu's factories and infrastructure remained relatively unscathed amid the destructive warfare, and the city received a large influx of refugees. During South Korea's post-war reconstruction and economic development, labor-intensive industries for export, such as textile and machineries, began to grow rapidly and became the key economic bases throughout the 1970s and 1980s (Seo, 2009). Its textile industry, in particular, has contributed considerably to promoting the city's export performance in line with the developmental state's first phase of national economic development plans (1962 –1971) (CHCCD, 1993a; Lee, 2010). From 1970 to 1980, textile was South Korea's top export good; as one of the country's key textile hubs, the growth of Daegu was significant.

Daegu's notable economic growth can also be tied to its political importance. From 1961 to 1992, all the presidents of South Korea were from Daegu.<sup>4</sup> The city thus traditionally demonstrated a strong advocacy for the ruling political parties and formed a favorable relationship with the national government based on its unconditional political support. Hence, it is generally considered that the 'pork barrel' policies of the central government have implicitly contributed to the development of Daegu (Lee, 2013).

In short, during the state-led industrialization period (1960s-1980s), Daegu grew rapidly as an important political and economic hub. Its growth was driven and guided by the national

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<sup>4</sup> Roh Tae-woo (1988-1992) was born and raised in Daegu, Chun Doo-hwan (1980-1988) moved to Daegu when he was 5 years old, and Park Chung-hee (1961-1979) was born in Gumi, a small town less than one-hour away from Daegu. Park moved to Daegu when he was 15 years old, and his daughter, Park Geun-hye (2013-2017), was born in Daegu.

government under the highly centralized authoritarian regime; South Korea democratized only in 1987, and popular local elections began to be held in 1995. From 1953 to 1968, Daegu's population jumped from 390,000 to more than one million, with an influx of migrants seeking to take advantage of the city's early economic development (CHCCD, 1993b). Through its continued population growth in the 1970s and 1980s, Daegu officially became the third largest metropolitan city in 1995, with a population of 2.47 million<sup>5</sup> (National Archives of Korea, 2006).

### **3. City in challenge: The decline of the textile city**

#### **1) Economic stagnation and population decline**

Following South Korea's overall economic development and democratization, both of which led to an increase in wages,<sup>6</sup> and the rise of China in the global economy, Daegu lost its competitiveness as a labor-intensive, low-cost production factory. Daegu's growth had been largely dependent on low-cost labor-driven industries, and the city faced difficulties in restructuring itself into a post-industrial city. Without successful restructuring, the decline of the textile industry dragged down the city's economy in the 2000s, and as of 2014, its GRDP per capita (18.9 million Won) ranked the lowest among South Korea's 16 metropolitan cities and provinces, far behind the national average of 29.4 million Won (KOSIS, 2017). In addition, in the 2013 Regional Development Index, Daegu was ranked the second lowest of seven metropolitan cities in South Korea, in terms of local economy and quality of citizens' lives (REDIS, 2016).

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<sup>5</sup> In the same year, Seoul (the capital city)'s population was 10.59 million and Busan (second largest city)'s population was 3.89million.

<sup>6</sup> Following democratization, labor movements started to take place across the country, and the democratized state could not continue to forcefully suppress the wages as the authoritarian state had done.



Following the Asian Financial Crisis in 1997, which hit South Korea's manufacturing sectors hard, the national government financed the five-year 'Milan Project (1999-2003)' in Daegu under the Regional Strategic Industry Promotion Projects. The project was inspired by Milan, Italy's success in textiles, and aimed to revitalize Daegu's economy by upgrading and restructuring its textile industry with an investment of 680 billion Won. However, restructuring the traditional textile industry into a high value-added fashion design and smart textile production was difficult, and the state-led project, which mostly focused on expanding the hardware infrastructure, failed to bring a positive outcome (Ha & Kim, 2002; Lee, 2010).

In contrast with textile manufacturing, Daegu's local machine industry has made some progress in the past two decades. However, this has not substantially enhanced, or even maintained, the economic performance of the city. In Daegu, 85% of the companies are small-scale, with less than four employees (as of 2014) (KOSIS, 2016a). Given the lackluster job opportunities, local college graduates move to the capital region, where the headquarters of big conglomerates and international companies are mostly located, or to adjacent large-scale industrial cities that house the branch firms of conglomerates (Kim, 2012). In the last two decades, out-migration has almost always surpassed in-migration, resulting in an average annual loss of 12,800 inhabitants solely based on migration (DSI, 2016a).

Throughout the 2000s, the population of Daegu has declined slowly but steadily. After peaking at 2.54 million in 2003, the population has dropped, reaching 2.49 million in 2016.<sup>7</sup> This trend is in line with national overall demographic changes, as the country witnesses a slowdown in population growth due to a low fertility rate and an aging society. The fertility rate

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<sup>7</sup> For sure, Daegu is not the only city in South Korea that has undergone population decline. According to the 2003 and 2016 data, Seoul's population decreased from 10.17 million to 9.93 million, and Busan's population decreased from 3.69 million to 3.50 million. However, Seoul's population decrease is a reflection of 'suburbanization' taking place to Gyeonggi Province, together which continues to comprise nearly half of the country's population.

in South Korea has dropped significantly, from 2.8 in 1980 to 1.2 in 2015, lower than 1.5 of Japan (KOSIS, 2015). Its annual population growth rate decreased from 2.18% in 1970 to 0.45% in 2016, and the South Korean population is expected to shrink from 2032 onwards (KOSIS, 2016b). Taking these factors into consideration, the national statistical agency has projected that the population of Daegu is expected to fall further to 2.2 million by 2040 (KOSIS, 2016b).<sup>8</sup>

A closer look at Daegu's population trends shows a more alarming finding. While Seoul's out-migration occurs among mid-aged households wishing to move to its neighboring Gyeonggi Province for more affordable housing, half of Daegu's out-migrants are aged between 20 and 29, who seek better job opportunities elsewhere. Since 2000, Daegu has been 'competing' with Busan for the first or second highest ranking of net migration of young population (Statistics Korea, 2015). In 2014, those from Daegu made up the largest portion of in-migrants in Seoul (31%) (Statistics Korea, 2015). Also since 2000, the unemployment rate of Daegu's young working population (aged 15 to 29) has consistently been higher than the national average (Figure 4), and their average income was also at the lowest level – about 17% less than the national average – among South Korea's seven metropolitan cities (Kim, 2012). According to the 2014 Social Indicators survey conducted by Daegu Metropolitan Government (DMG), one third of individuals aged 20 to 30 planned to move to other cities within three years to pursue more attractive employment (DMG, 2014b). Despite having relatively more higher-education institutions than other cities, Daegu suffers from 'brain drain'.<sup>9</sup> Without successful economic restructuring and the absence of sustainable growth engines, the city will continue to shrink and

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<sup>8</sup> While the national population is expected to increase up to year 2032, the national statistical agency estimated a continuation of population decrease for four (out of seven) metropolitan cities – Seoul, Busan, Daegu, and Kwangju – from 2015 to 2040. Busan, Daegu, and Kwangju could in fact be precedents of shrinking metropolitan cities in South Korea, as more will be succumbed to similar fate after 2032.

<sup>9</sup> Currently there are four universities and ten colleges within and near Daegu.

age with substantial out-migration of the younger generation.



Figure 4. Unemployment rate of young population 2000-2011 (per cent)  
 Note: (Unemployed population/economically active population)\*100  
 Source: Extracted from Kim (2012) and reproduced by authors

## 2) Suburbanization and socio-spatial inequality

Despite the slowdown in growth, Daegu continues to expand physically, causing uneven development. Since the early 1900s, its industrialization and population growth had been accompanied by necessary physical expansion. (See Figure 5). What is notable is that while the economic and population growth has stopped, the physical growth has not. From 1987 to 2014, the total area of Daegu increased 19%; in the 2000s, its urbanized area nearly doubled from that of the previous decade, taking up 30% of the total land by 2014 (Table 2).

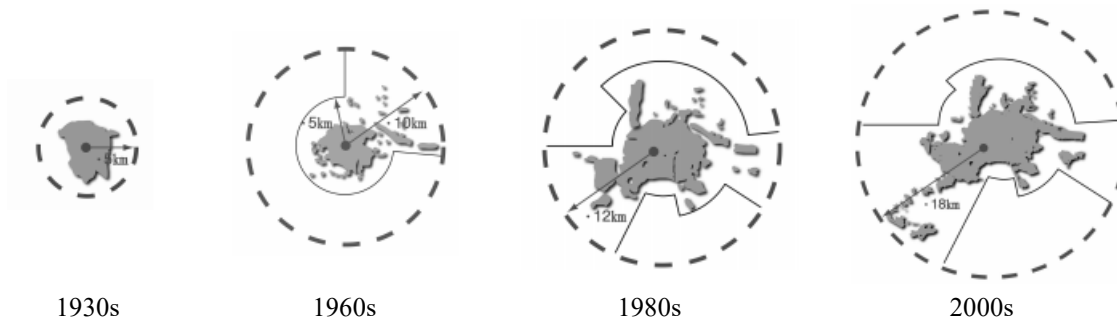


Figure 5. Urbanization of Daegu 1930s-2000s

Source: Long-term Development Plan of Daegu (DMG, 2014a)

Table 2. Total and urbanized areas of Daegu 1987-2014

Year	Total area (sq. km)	Urbanized area (sq.km)	% of urbanized area
1987	740.7	104.5	14
1996	767.8	125.3	16
1999	919.6	146.2	16
2007	884.3	248.2	28
2014	883.5	264.8	30

Source: Cho, 2010; reproduced by authors

Daegu's physical growth has been closely tied to the government plans. The 1984 City Concept Plan envisioned a polycentric urban structure along the East-West expansion axis, aiming for 3.2 million population by the year of 2001 (Cho, 2010). During the national government's 'Two Million Housing Plan (1988–1992)',<sup>10</sup> large-scale residential development projects were built outside the city centers, including a new town development in Suseong-gu. In fact, until the late 1990s, suburbanization had been the core planning concept of Daegu (Cho, 2010). Consequently, Daegu today has four sub-centers and a new center in its outlying areas (DCURC, 2015b), some of its growth reaching beyond the greenbelt surrounding the city (Figure 6) (DMG, 1997).

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<sup>10</sup> The Two Million Housing Plan was an ambitious promise made by President Roh Tae-woo to build 2 million housing units within 5 years, when the total national housing stock was only 6.45 million.

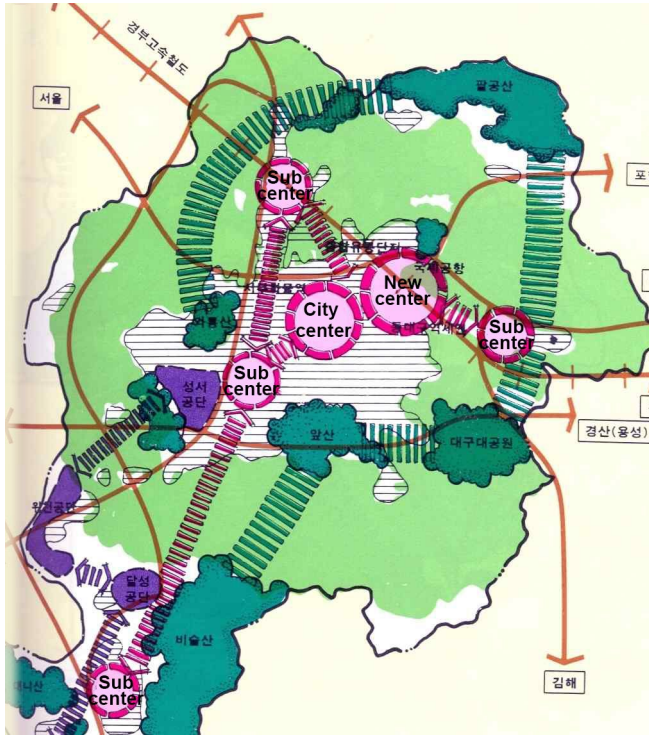


Figure 6. Daegu Concept Plan 2016 (DMG, 1997).

With Daegu’s physical expansion not being met with a population increase since the mid-1990s, the city’s suburbanization shows a strikingly similar pattern to that of many post-industrializing cities in the US, where the city center has been hollowed out (Kim & Kwon, 2009). The population of Daegu’s three old central districts (Jung-gu, Nam-gu, and Seo-gu)<sup>11</sup> has decreased since 1995, while that of the surrounding outer districts (Suseong-gu, Dalseo-gu, Buk-gu, Dong-gu, and Dalseong County) – where most of the new housing projects are located – has slightly increased, or remained stable (DSI, 2016b). (See figures 7 and 8). Since 1995, the three central districts together have lost almost 40% of their population (DSI, 2016b). The decline has been especially pronounced in Seo-gu, where most of the textile manufacturing factories were located, and which has experienced the most significant population loss (Lee *et al.*, 2012).

<sup>11</sup> Literally they each mean ‘Central District’, ‘South District’, and ‘West District’.

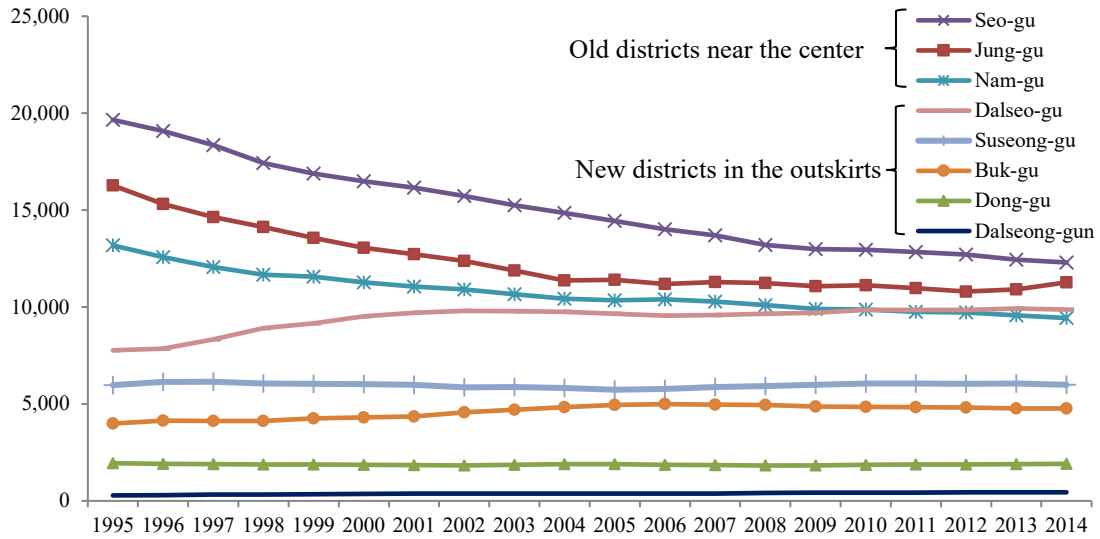


Figure 7. Population density changes by district 1995–2014 (persons per sq. km)  
 Source: DSI (2016b); reproduced by authors.

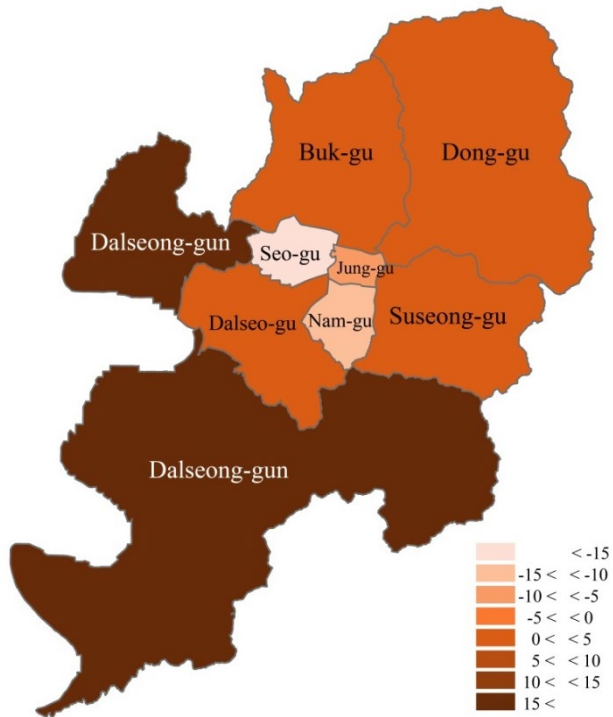


Figure 8. Population change rates by district 2003-2014 (%)  
 Source: Authors based on DSI (2016b)

The uneven population changes among the districts have resulted in socio-spatial inequalities. As the population declined, and the government focused on suburban developments, the old central districts began to have difficulty attracting new real estate investments and

revenue. Accordingly, they have lower fiscal capacity than the new districts (Table 3), which hinders the timely maintenance and improvement of urban amenities in their deteriorating neighborhoods. A vicious cycle is created when further out-migration and depreciating property values follow (Jeong, 2015). Due to the notable decline in terms of demography, economy, and physical environment, the national government designated Jung-gu, Nam-gu, and Seo-gu as districts of substantial urban deterioration that require special policy actions (MoLIT, 2015).

Table 3. Fiscal capacity index of eight districts in Daegu (as of 2013)

District		Fiscal capacity index <sup>1</sup>
<b>Old districts near the center</b>	Jung-gu <sup>2</sup>	0.429
	Seo-gu	0.292
	Nam-gu	0.211
<b>New districts in the outskirts</b>	Buk-gu	0.462
	Dong-gu	0.384
	Suseong-gu	0.541
	Dalseo-gu	0.611
	Dalseong-gun	0.425

Source: DSI (2014).

Note: 1. Ratio of revenue capacity to expenditure needs of local governments

2. The relatively higher fiscal capacity of Jung-gu is due to the revenue from high-value property taxes in CBD.

A local news media outlet coined the term ‘Dual City Daegu’ to reflect the city’s socio-spatial inequality amid suburbanization and administrative decentralization (Lee & Shin, 2015). Daegu’s negative image also extended to the national media, which described it as ‘a hopeless city that has stopped growing’ (Kim, 2006). Since the 2000s, Daegu has struggled to overcome its negative internal and external images in various ways, tackling its challenges of slow growth, population decline, and socio-spatial inequality.

#### **4. Multi-level policy responses**

An examination of Daegu must consider multi-level actors. Despite the political and administrative decentralization reforms since the 1990s, fiscal decentralization lagged significantly, and much of the country's financial resources remain in the hands of the national ministries (Bae & Joo, 2016). Since 1995, Daegu has had an average financial independence rate of about 50%,<sup>12</sup> indicating heavy reliance on the national government funding for local affairs. Also reflecting the legacy of the developmental state, national government continues to actively devise policies for the city. At the same time though, recent literatures on South Korean urban development began to underscore local actors and civil society in urban development (see Bae, 2013; Shin & Stevens, 2013; Bae & Sellers 2007). To help tackle some of Daegu's challenges, new local actors such as NGOs, sub-local district governments, and residents have emerged, bringing in new perspectives and approaches. This section discusses the dual policy trend experienced by Daegu.

##### **1) Pro-growth strategies: industrial restructuring, mega-projects, and mega-events**

As expected from the country with strong growth-centered development experience, a solution to Daegu's challenges was first sought in pro-growth strategies, particularly because the problem was also seen from the lens of uneven regional development. In South Korea, the capital region lopsidedly comprises 50% of the population, and Daegu is not alone in facing decline. Urban shrinkage is both framed as, and worsened by, the country's pronounced uneven regional development. Since the 2000s, alarmed with the unequal growth between the capital region and 'the rest', the national government has been pursuing more balanced regional development.

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<sup>12</sup>The financial independence rate is the ratio of local government's own revenue over its total budget. In 2016, it was 57% for Daegu.



Leveraging on this trend, DMG and the national government implemented a number of strategies in an effort to stir new growth in Daegu.

First, the national government attempted industrial restructuring towards more knowledge-based industries and innovation. Two key strategies here were a regional approach and inter-city collaboration. In 2008, the Daegu-Gyeongbuk Free Economic Zone (DGFEZ) was established, bringing together Daegu, Pohang (the steel city), Gumi (the electronics city), and other nearby industrial cities in Gyeongbuk province. According to the national government's balanced regional development plan (PCRD, 2015), Daegu is to become a 'regional hub' for research and development of high technologies within the regional cluster. Working towards this goal, in 2011, the national government established a research institute and science and engineering university, Daegu Gyeongbuk Institute of Science and Technology (DGIST) (DGIST, 2014).

In line with the national government's efforts, DMG also worked hard to diversify and upgrade its local industries, declaring itself to become a 'global knowledge economic city' that supports creative industries (Jang, 2015). From 1999 to 2014, while the share of the textile industry in the city's manufacturing decreased, the share of machinery, metal, and automobile parts has significantly increased (Figure 9). More recently, DMG designated ICT, bio-medical, and smart green energy industries as new strategic businesses for its 'creative city' vision and the future growth engine of Daegu (DMG, 2016a). One notable example is the development of Daegu's solar energy industry, turning Daegu's disadvantage of notoriously hot and dry summers into an advantage. Under its 'Solar City 50 Year Plan,' developed in 2005, DMG made considerable investments in the green energy industry, and in 2011 succeeded in building South Korea's first solar power tower (Figure 10). DMG also reached out to build inter-city

relationships with a few Chinese cities – including Chongqing, Wuhan, and Jiangsu – seeing them as potential business partners in the water industry (Choi, 2016).

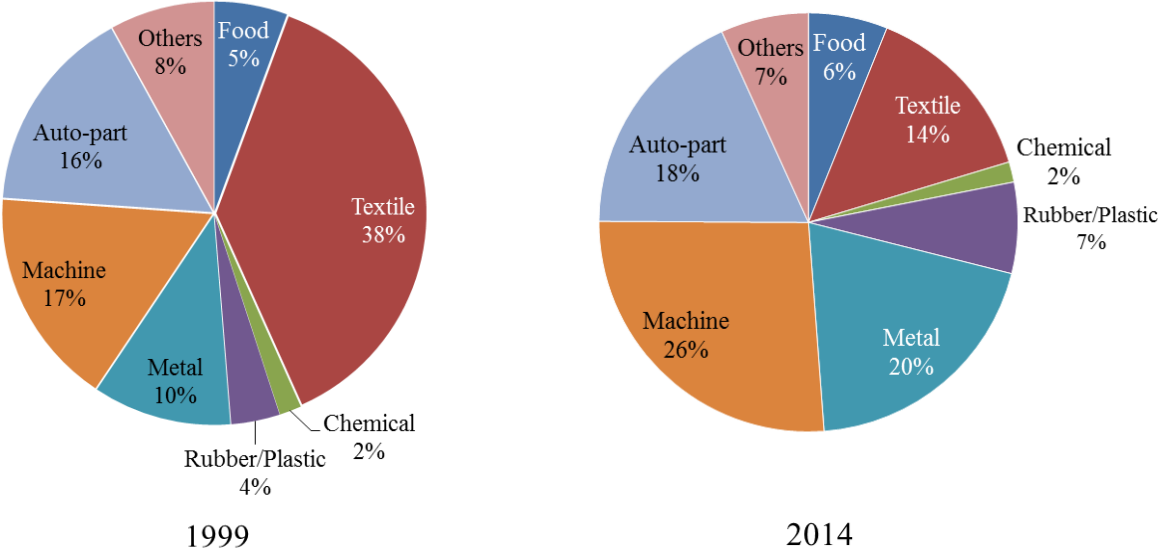


Figure 9. Industrial structure changes in Daegu between 1999 and 2014  
 Note: Calculated based on added value  
 Source: KOSIS (2016c).



Figure 10. Solar power tower in Daegu  
 Source: DMG (2017)

Second, Daegu launched a number of mega-scale property developments in the Daegu metropolitan area, in the form of building ‘new cities’ (or more accurately, new towns) (Table 4). Often, they were closely tied to economic restructuring efforts. For example, the national government, in collaboration with DMG, developed Daegu Technopolis as a regional R&D hub

under DGFEZ; and DMG, under public-private partnership, launched Easiapolis as a new town that would house an upgraded and modernized textile industry. Following the national balanced regional development plan to relocate public corporations out of the capital region, the new Sinseo Innovation City will relocate eleven public corporations out of Seoul, and will house a new medical zone. All of these projects are located outside of the city center, and have thus contributed to Daegu’s physical expansion during the 2000s (Figure 11).

Table 4. New town development projects in Daegu in the 2000s

	Technopolis	Easiapolis	Sinseo Innovation City
Area	726 ha	118 ha	421 ha
Cost	USD 16 billion (KRW 1,900 billion)	USD 12 billion (KRW 1,400 billion)	USD 13.6 billion (KRW 1,600 billion)
Project duration	2006-2016	2001-2016	2007-2016 (Medical zone to be completed in 2038)
Implementer	Korea Land and Housing Corporation	DMG & Consortium of 9 private companies	Korea Land and Housing Corporation
Development type	Special zone for R&D Commercial & residential development	Industrial complex Commercial & residential development	Public institutions complex Commercial & residential development
Goal	Regional R&D hub for science and technology	Center for modernized textile industry	Home for 11 relocated public corporations under the nation’s balanced regional development plan

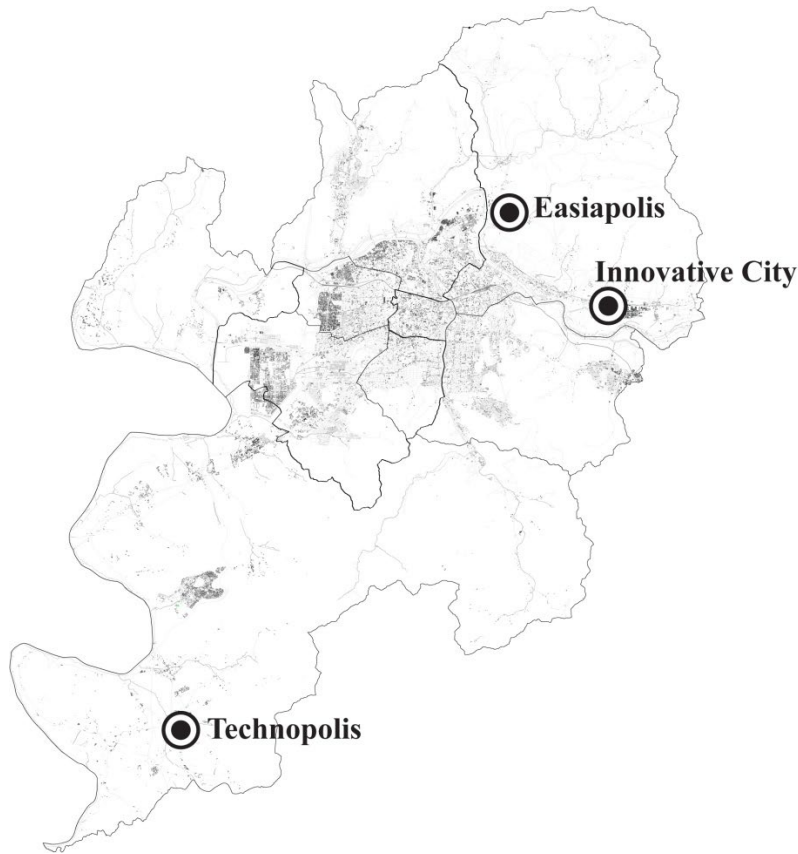


Figure 11. Locations of three mega-projects in Daegu

South Korea in the past had long accompanied its industrialization with new town developments, which were necessary to provide urban and industrial infrastructures against the backdrop of rural country at the time. Yet, in today's highly urbanized South Korea amid slow economic and population growth, developing new towns to stimulate the local economy and attract new residents does not seem relevant or very promising. As if to confirm, these mega-projects have taken more than ten years to complete, going through great financial difficulties at times. The Easiapolis project, for example, had to delay its development plans several times due to a lack of investment (Edaily, 2008), and Daegu Technopolis has been criticized for its considerable amount of unsold apartment units (Kim, 2016). Despite the difficulties and the questionable outcomes, similar mega-scale property development ventures continue. The latest

new town development, Suseong Alpha City, began in 2014 as part of DGFEZ, seeking to promote knowledge-based industries, particularly in the medical sector.

Third, Daegu has hosted a number of international (mega-)events. It was one of ten host cities for the 2002 FIFA World Cup, but more notably, it hosted the 2003 Daegu Summer Universiade and the 2011 Daegu IAAF World Championships in Athletics. In line with the city's vision of 'green energy', DMG organized the World Energy Congress in 2013 and plans to organize the World Gas Conference in 2021. Leveraging on these experiences, Daegu has been gearing up to bid for the 2030 World Expo (DMG, 2014a). These efforts stem from the fact that, starting with the 1988 Seoul Olympics, the South Korean government has strategically used mega-events for developmental purposes, leaving impactful legacies at both national and local levels (Joo *et al.*, 2017). After decentralization, local governments, including DMG, too have competitively joined in the race to host international events as a panacea for their lackluster development. However, unlike some of the nationally pursued key mega-events that benefited from the country's undivided attention and planning, what developmental impact the locally and competitively hosted international events bring remains rather contentious.



Figure 12. Daegu World Cup Stadium  
Source: DMG (2017).



Figure 13. Daegu Exhibition and Convention Center  
Source: DMG (2017).

It might be too early to conclude whether the growth-oriented projects of R&D hubs, new towns, and international events led by DMG and the national government will bring intended outcomes of attracting new capital and residents. DMG has achieved some success in diversifying outside of the textile industry, especially into more green industries. However, considering the predominance of the capital region amid South Korea's overall slowdown of economic and population growth, the massive new development projects on the outskirts of Daegu, with their expectation of a significant (and unrealistic) population increase, seem questionable at best. What is certain is that these policies do very little for Daegu's socio-spatial inequality, and may in fact worsen it. A completely different development logic and outlook is therefore needed for Daegu's shrinking inner-city center, and a different set of strategies has now begun to confront the issues of city-center revitalization and neighborhood regeneration.

## **2) City center revitalization and participatory urban regeneration to tackle shrinkage**

As Daegu pursues mega-scale growth-oriented policies towards urban expansion, it is simultaneously engaged in the contradictory effort to become a 'compact city' (DMG, 2014a).

DMG revised its Long-term Development Plan in 2014, announcing its aim to promote the revitalization of inner city areas instead of encouraging new developments in the outskirts (DMG, 2014a). It also set up a plan in 2013 to demolish deteriorated vacant houses throughout the city and to utilize the cleared sites for urban farming or neighborhood parking lots (Paek, 2016). While these strategies resemble those taken by shrinking cities in response to urban challenges, DMG's plans avoid official mentions of depopulation and the ensuing challenges of urban shrinkage. This is despite the fact that the local news media and scholars consistently raise the issue (see Kim, 2014; Lee, 2016; Park, 2015).<sup>13</sup> Some of the district governments that are hit hardest by depopulation, however, began to proactively seek solutions to counter further population loss, assisted by local grassroots organizations. In fact, one of Daegu's key inner-city revitalization efforts, the revival of the historic center of Jung-gu, was initiated by a grassroots NGO, and later taken over by the district government.

The old Jung-gu (central district) suffered from continuous out-migration, but it had a number of historic sites and buildings that represented the architectural and cultural characteristics of the early 1900s. A local grassroots NGO led a small project to rediscover the historic values embedded in the old buildings and streets of Jung-gu. In 2001, the NGO began to investigate the old uses of the historic buildings and the past street landscape, based on historical documents and interviews with senior residents and local historians. From 2002, it also began a voluntary guided tour program. Many years of work resulted in the 2007 publication of 'Shin Taengniji' (literally meaning a new geography book), which has become an important guidebook

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<sup>13</sup> One of the reasons for officially avoiding shrinkage is because once DMG rescales its annual budget according to the city's actual population size and plans for its decreasing trend, it becomes very difficult to request and secure an increased funding from the national government (interview with a DMG official).

on the history of Daegu (Ryu, 2014).<sup>14</sup> Based on the cultural contents re-identified by the NGO, in 2008, the Jung-gu District Office (JDO) took over and developed the guided tour program into the ‘Alley Tour’, introducing 5 trails of historic streets. According to surveys conducted by the local governments, approximately 68% of the residents of Jung-gu were aware of the guided tour program in their district (DMG, 2014b), and 85% approved of JDO’s efforts to improve the cultural and tourism infrastructure (JDO, 2016). Recognizing the concerted efforts between the JDO and the grassroots NGO to revitalize the declining city center, the national government gave it a tourism award in 2012 (JDO, 2016).

JDO also applied to various national government grants, and with the funding it received, continued to strengthen the historic identity of the city center. Throughout the 2000s, it upgraded the sidewalks and street furniture along the historic sites, and enhanced the streetscape of some of the important alleys (MoCST, 2009). In addition, JDO collaborated with DMG to restore the symbolic traces of the former fortifications sites using specially designed building materials, street furniture, and public spaces.<sup>15</sup> At present, four roads, each with distinctive historic and cultural characteristics, have been built along the former fortifications site: *Bukseong-ro* (on the northern wall), *Dongseong-ro* (on the eastern wall), *Namseong-ro* (on the southern wall) and *Seoseong-ro* (on the western wall) (Figure 14).

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<sup>14</sup> Taengnji is a geography book published in 175, during the Chosun dynasty, which contains a vast amount of geographical information on Korea, along with a depiction of the politics and characteristics of the local people.

<sup>15</sup> The fortifications were constructed in 1591 for defense purposes and reconstructed in 1736. The walls were eventually demolished in 1907 during the Japanese occupation and were transformed into modern arterial roads for the sake of convenient transportation of trading goods for Japanese merchants (Seo, 2009).



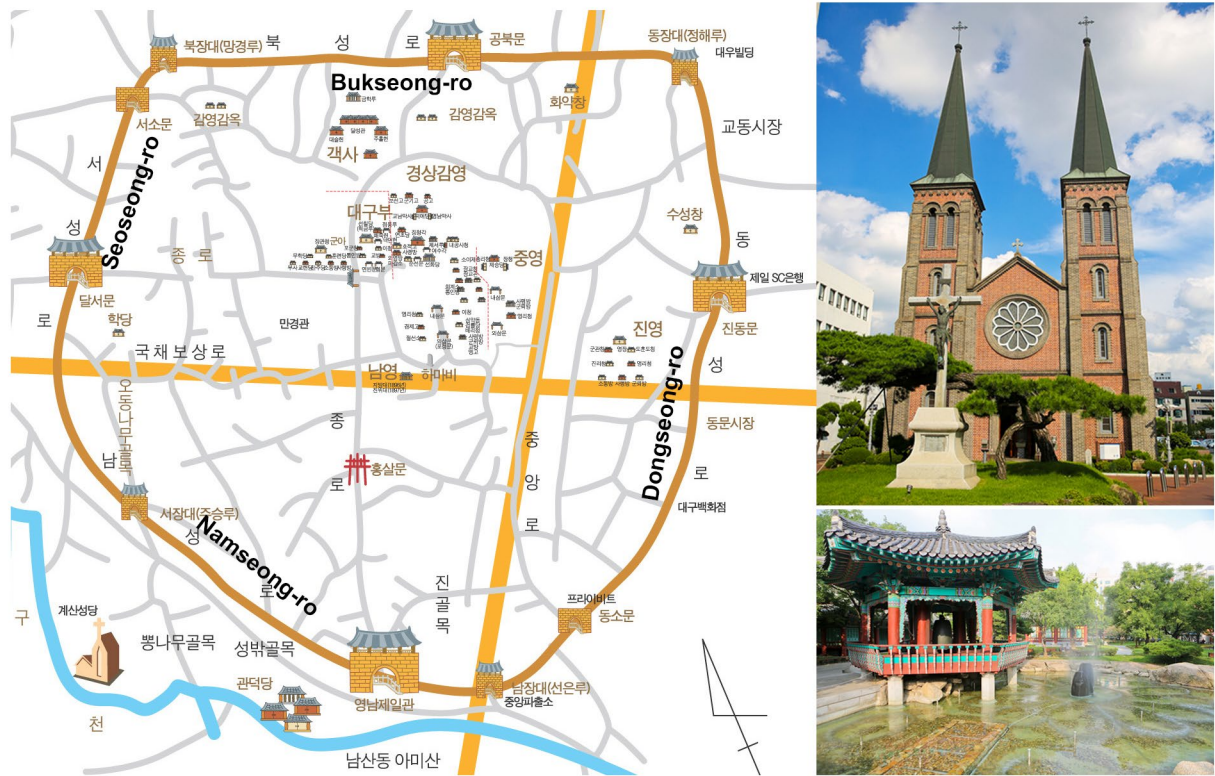


Figure 14. Map of the former fortifications site, its four roads, and the historic buildings located in the city centre  
Source: JDO (2017).

Although the issue of urban shrinkage might not be a welcome topic for DMG, the city is keen to accommodate citizens' aspirations for inclusive urban governance. More recently, there has been an increasing demand for civic engagement in South Korean politics, which both local and national governments have begun to notice and embrace.<sup>16</sup> DMG too is following this trend, and has addressed urban shrinkage 'unofficially' with community-centered projects that underscore public participation.

One example is DMG's annually held 'Community Participatory Planning School' that carefully takes the local context into account and focuses on studio-based workshops to encourage active engagement of residents in revitalizing their own neighborhoods (DCURC,

<sup>16</sup> See Douglass (2000) for the rise of civil society in contemporary Asian cities in globalization and its policy implications.

2015a). It originates from the Ministry of Land, Infrastructure and Transport (MoLIT)'s 'City College' program that brought together experts and ordinary citizens to discuss and explore participatory planning for urban regeneration in five different regions.<sup>17</sup> DMG took over one of the regional programs, and ever since then, the program has been particularly active in the old neighborhoods due to the communities' awareness of their socioeconomic challenges. To date, there have been a total of 630 participants (including experts and students), including 450 community residents. Two proposals developed by the participating residents during the program won national awards, and a total of 18 proposals have been selected and developed into actual projects with funding from MoLIT (DCURC, 2015a).

Additionally, to help raise public awareness, DMG organizes the 'Open Urban Regeneration Academy' – a community education program in which participants learn more about the overall urban regeneration policy through a series of lectures. Daegu, in fact, has been a step ahead of other South Korean cities when it comes to localized, participatory, and community-centered urban regeneration projects (Lee, 2015a; Na, 2013). As a result of its efforts, DMG has been awarded more national funding in urban regeneration than any other local government so far (Interview with a DMG official; Na, 2013). Carrying on the trend, DMG now seeks to bring public participation into its wider-ranging policies and planning. An 'Urban Recreation Bureau' has been established to manage all the participatory planning programs, and it collaborates closely with a local research institute (Daegu Gyeongbuk Development Institute) and NGOs. DMG has also sought to engage citizens in developing its latest comprehensive plan – 'Daegu Future Vision 2030' (Lee, 2015b). These changes, alongside the pursuit of mega-

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<sup>17</sup> Although the program is named 'City College' ('Doshi Daehak' in Korean), it is not a college but an annual short-term program led by the government. It took place in the capital region in 2008, and in other four major regions of South Korea in 2009.

events and mega-projects, indicate DMG's active practice of two seemingly disparate policy stances – one under the growth-first ideology and another inviting more inclusive, localized, and adaptive solutions.

## **5. Concluding remarks**

Cities in Asia, especially those in countries that have been known for their astonishing speed and magnitude of economic achievements throughout the 20<sup>th</sup> century, are typically portrayed as fast growing, powerful economic engines. Daegu's recent struggles, which are not too different from many other cities in South Korea outside the capital region, tell a different story. Daegu's experience highlights how South Korean cities have now 'caught up' with ordinary cities (those outside the club of 'global cities') of the West, and struggle with the same issues of deindustrialization, depopulation, suburbanization, and declining inner city centers and neighborhoods. This city profile began by asking how a city that grew under the developmental state, such as Daegu, might be addressing its seemingly new and opposing challenge of urban shrinkage. Unlike in the U.S. with active local initiatives emerging amid the long tradition of decentralized local democracy, or in the case of Germany with strong national state level interventions for shrinking cities (Mallache *et al.*, 2017), Daegu has pursued notably a dual and multi-level approach in its effort to tackle the difficult challenges of major economic and urban change.

Daegu's growth-oriented strategies were in a way expected, first of all, given its development history under the developmental state. Indeed, its large-scale development projects resemble the past developmental state's planning practices. Secondly, the highly-raised issue of the uneven regional development discourse in South Korea further calls for, and justifies, active

growth-oriented interventions from both national and local governments for the ‘lagging’ regions. Thirdly, while decentralization reforms have been put in place since the 1990s, local governments outside the capital region lack fiscal capacity and heavily depend on the national state funding. This lack of autonomy disincentivizes local government from acknowledging urban shrinkage as a new and imminent challenge. In our interview, a DMG official commented that one of the reasons for officially avoiding shrinkage is because once DMG rescales its annual budget according to the city’s actual population size and plans for its decreasing trend, it becomes very difficult to request and secure an increased funding from the national government. Therefore, DMG has an interest to continue to plan for increasing population and increasing budget, despite the reality that says otherwise.

At the same time though, South Korea’s dramatic transition from authoritarian developmental state to democratization and decentralization has led to the rise of civil society and increasing demand for participatory governance. Amid the changing political environment, local actors (including local governments, NGOs, and residents) are taking on more active roles. Furthermore, the plummeting birth rate has caught the nation-wide attention, which unavoidably leads to questioning the presumption of continued growth. In the circumstances, local and national governments are beginning to show interest in promoting more participatory and localized solutions to urban decline. Reflecting the new changes, DMG has made a remarkable transition by adopting more progressive approaches in its inner-city revitalization and neighborhood regeneration efforts, and even started to bring these approaches into a larger policy and planning framework. This new policy trend – of engaging diverse actors of society and carefully considering local conditions – can sometimes be at odds with the top-down growth-driven strategies. Whether the dual policy we observe in Daegu signals a transitioning phase

from one urban policy paradigm to another, or whether the two will continue to co-exist and with what outcomes, deserves further attention and study in the future. What is clear is that for the paradigm shift to take place, the changes need to take place at both national and local levels in South Korea.

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