# The Youth Struggle for Jobs in South Korea: Dualism, Inequality, and Youth Labor Market

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This article examines the political economy of South Korea's youth labor market over the past two decades. It argues that the institutional characteristics of the dualistic labor market along the lines of firm size and employment status have exacerbated youth labor market problems in South Korea. The segmentation of the labor market has incentivized the young people to desperately look for good first jobs because of the difficulty in making a transition from the external labor market to the internal labor market at the later stage of employment. It claims that not only the number of jobs, but also the quality of jobs matters to South Korea's youth labor market problem.

#### Keywords: South Korea, youth labor market, dualism, inequality

## 1. INTRODUCTION

Despite its rapid economic recovery from the 1997 Asian financial crisis and the 2008 global financial crisis, South Korea (hereafter, Korea) has not been able to effectively tackle youth labor market problems over the past two decades.<sup>1</sup> The Korean government has advanced a wide range of youth employment policies, encompassing the direct job creation for youth, the promotion of the start-up business, the improvement of the labor market infrastructure, the reinforcement of vocational education and training, and the promotion of youth's overseas job search (Yee et al., 2017: 9–29). It has also striven to encourage the private sector to increase youth hiring by offering various policy supports, financial subsidies, and tax credits. A series of these policy efforts, however, have failed to respond to Korea's youth labor market problem, such as high youth unemployment, low youth employment, and rising precarious youth employment, leaving a majority of the young people exposed to very difficult job market situations.<sup>2</sup> The deterioration of the youth labor market has created far

<sup>&</sup>lt;sup>1</sup> There is no clear definition of youth population in the literature. International organizations, such as the Organisation for Economic Development and Co-operation (OECD, hereafter) and the World Bank, define youth population as those aged 15–24. Meanwhile, the boundary of youth population in Korea is often extended to those aged 25–29 because a majority of the young Korean male population enters the labor market in their mid and late 20s after the mandatory military service and college education. For a cross-national comparison, I will identify youth population as those aged 15–24. However, I will modify the boundary of youth population depending on the government policy measures for youth, the categories of the statistics, and official publications in the context of the Korean labor market. When it is necessary, the specific scope of youth population will be clarified in order to avoid any conceptual confusions.

<sup>&</sup>lt;sup>2</sup> Although both unemployment and employment rates serve as important indicators for macroeconomic conditions and labor market situations, each refers to slightly different dimensions of the labor market. The unemployment rate is calculated by the number of the unemployed divided by the economically active population, whereas the employment rate is calculated by the number of the employed divided by both economically active population and economically inactive population.

more serious consequences for the Korean society. Economic insecurity of youth has resulted in delaying of marriages, decreasing fertility rates, and the growing discontent among youth, undermining the long-term sustainability of the society. Then, why has Korea not been able to solve the youth labor market problem over the past two decades?

This article argues that the institutional characteristics of Korea's dualistic labor market have exacerbated the youth labor market problem over the past two decades, especially after the 1997 Asian financial crisis. Dualism is identified as the segmentation of the labor market along the lines of firm size, employment status, gender, or race, which divides the labor market into the internal and external ones (or the primary and secondary ones). Under the dualistic labor market, the employment contracts, working conditions, wages, and social welfare benefits of the workforce do not precisely correlate with the capabilities of individual workers. Rather, it is whether workers belong to the internal labor market, represented by strong employment protection with decent working conditions, high wages, and generous social welfare benefits, or the external labor market, illustrated as weak employment protection with poor working conditions, low wages, and meager social welfare benefits, that determines the key dimensions of job quality (Doeringer and Piore, 1971; Emmenegger, Häusermann, Palier and Seeleib-Kaiser, 2012; Palier and Thelen, 2010; Rueda, 2008; Rueda, Wibbels and Altamirano, 2015).

In the Korean labor market, dualism has developed along the lines of firm size, employment status, and gender; however, its consequences have been different over time. Although its large *chaebol*-centered developmental strategy established labor market dualism along the lines of firm size in the early stage of industrialization, Korea's rapid economic growth moderated the labor market inequality between large-sized firms and small and medium-sized enterprises (SMEs, hereafter) through the mechanism of high wage increases, more job creation, and upward social and economic mobility.<sup>3</sup> In addition, as long as Korea's economy continued to rapidly grow, employment status (e.g., regular workers vs. nonregular workers) did not starkly divide the labor market into the internal and external ones, while the level of gender inequality still remained high in the labor market despite its highspeed growth.<sup>4</sup> After the 1997 Asian financial crisis and the 2008 global financial crisis, however, an increasing number of large-sized chaebol firms have shifted their business and human resource management strategies, in conjunction with globalization and technological innovation. Chaebol firms have streamlined their business organizations through corporate restructuring, and transferred the adjustment costs of the business cycle and intensified global market competition to SMEs, most of which have been locked in the multilayered subcontracting system of the chaebol-centered economic structure. The size of the chaebol workforce represented as those in large-sized firms with regular employment contracts has been shrinking, and the segmentation of the labor market along the lines of firm size and employment status has been further intensified, widening the economic disparity within the

Thus, the employment rate encompasses not only job seekers, but also those exiting from the labor market and not participating in the labor market.

<sup>&</sup>lt;sup>3</sup> Chaebols are the family-owned and -managed large business conglomerates in Korea, which have dominated the country's market economy since the early 1960s as the creature fostered by the Park Chung Hee regime's state-led developmental strategy.

<sup>&</sup>lt;sup>4</sup> Korea's gender wage gap has been the highest among OECD countries. As of 2017, Korea's gender wage gap was 34.6%, whereas the OECD average was 13.5% (OECD, "OECD Data, Gender Wage Gap").

labor market. Under these circumstances, Korean youth have desperately searched for good first jobs, which refer to regular employment positions with strong job security, decent (if not high) wages, and generous welfare benefits in large-sized *chaebol* firms and the public sector, even if they decide to postpone their graduation or stay as unemployed or economically inactive after graduation, as opposed to taking any jobs that are readily available. This article analyzes the ways in which the segmentation of the labor market has further intensified the youth labor market problem in Korea over the past two decades. It will elaborate the key determinant of Korea's youth labor market problem, by making a brief comparison to the case of Japan, which shares the very similar institutional arrangements of the market economies and labor market—identified as coordinated market economies (CMEs, hereafter) centered on group-based coordination and the dualistic labor market along the lines of employment status, firm-size, and gender.

This article proceeds as follows. The second section outlines Korea's youth labor market problem in a comparative perspective and points out the limitations of several analytical approaches to account for the case of Korea. The third section illustrates Korea's transformation of the economic structure and production system, represented by globalization and technological innovation, which has affected firms' business and human resource management strategies. Section 4 analyzes the ways in which Korea's labor market dualism that has been further reinforced after the 1997 Asian financial crisis and the 2008 global financial crisis has affected its youth labor market conditions and shaped the young people's preferences and strategies for the job market over the past two decades. The conclusion summarizes the key findings of the research and provides some policy implications for Korea's youth labor market.

## 2. KOREA'S YOUTH LABOR MARKET IN A COMPARATIVE PERSPECTIVE

In most advanced industrial countries, the youth population (the age group of 15–24) is exposed to a much higher risk in the labor market than the prime working age population (the age group of 25–54). Young workers with less experience and skills become the first target of lay-offs, but the last target of hiring in economic downturns. In addition, the employment status of youth is not as stable as that of the prime working age population, since the former tends to switch from one job to another before landing at a permanent secured position and takes precarious employment right after graduation as stepping stones to a more decent and stable one (O'Higgins, 2012; Scarpetta, Sonnet and Manfredi, 2010). Thus, the youth unemployment rate is always higher than the total unemployment rate, and the proportion of the young people hired in precarious employment is larger than that of the prime working age population.

Despite these common challenges for youth, labor market outcomes have varied across advanced industrial countries. First Korea's youth unemployment rate for those aged 15–24 (as of 2019, 10.3%) was still much higher than those of Germany (5.7%) and Japan (4.1%), although it was not as high as the Organization for Economic Co-operation and Development (hereafter, OECD) average (11.9%) (World Bank, "Unemployment, Youth Total (%total labor force ages 15–24) (modeled ILO estimate)") (see also figure 1). In addition, its gap between the youth unemployment rate and the total unemployment rate was much larger than those of other OECD countries. As of 2019, the ratio of Korea's youth unemployment rate (10.3%) to its total unemployment rate (3.7%) was 2.78:1, whereas its Japanese counterpart and



Figure 1. Youth Unemployment Rates in Japan, Korea, and OECD Countries

Source: World Bank, "Unemployment, Youth Total (% of total labor force ages 15–24) (modeled ILO estimate)" (https://data.worldbank.org/indicator/SL.UEM.1524.ZS, accessed January 14, 2020).

the OECD average were 1.7:1 (4.1% to 2.4%) and 2.29:1 (11.9% to 5.2%), respectively. It demonstrates that Korean youth have confronted far more difficult job market situations than its prime working age population as well as the youth population in other advanced industrial countries have experienced (World Bank, "Unemployment, Youth Total (% of total labor force ages 15–24) (modeled ILO estimate)"; World Bank, "Unemployment, Total (% of total labor force) (modeled ILO estimate)"). When we closely analyze the Korean labor market, as illustrated in figure 2, its youth with tertiary education has suffered higher unemployment rates than those of high school graduates since the early 2010s, implying more difficult job market situations for college graduates than those for high school graduates. Meanwhile, in terms of the gender dimension, there have not been huge differences between male and female youth, although young male aged 15–24 had slightly higher unemployment rates than those of young female aged 15–24 (as of 2018, 11.1% for young male and 10.2% for young female) (Korean National Office of Statistics, "Gyŏngje Hwaldong Ingu Josa [Economically Active Population Survey]").

Second, Korea's low employment has raised another serious concern for the policymakers. Most Korean teenagers advance to upper secondary education as opposed to entering the labor market, and a large majority of the young Korean male population in their early 20s have to serve for the military service, which might affect its low youth employment. Nevertheless, its youth employment rate for those aged 15–24 was much lower than those of other OECD countries (26.2% in Korea compared with 46% in Japan and 41.9% as the OECD average in 2018) (OECD, "OECD Data, Employment Rate by Age Group"). Even among Korean youth participating in the labor market, a large fraction of them have been hired in precarious employment, which rarely provides job security, decent wages, and social welfare benefits (Nam, 2011: 24–28). In addition, Korea had a relatively large size of youth not in education, employment, or training (hereafter, NEETs) (18.01% in 2013 compared with 10.12% in Japan and 14.56% as the OECD average as of 2015), which would impose critical policy tasks on the government to activate youth in the labor market (OECD, 2016:

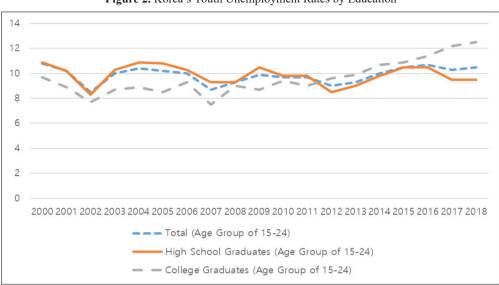


Figure 2. Korea's Youth Unemployment Rates by Education

Source: Korean National Office of Statistics, "Gyŏngje Hwaldong Ingu Josa [Economically Active Population Survey]" (various years) (http://kosis.kr, accessed January 7, 2020).

20).5

Then, why do countries experience different degrees of youth labor market problems, especially in the cases of Japan and Korea? First, some scholars have pointed out that good economic conditions account for the improvement of youth labor market situations, such as more employment opportunities. Kambayashi and Kato (2016) and Miyamoto (2015) have argued that economic growth, known as "Abenomics," contributes to the decline in youth unemployment and the enhancement of employment and working conditions for the young people by creating more decent and stable jobs in the Japanese labor market. Second, others have claimed the supply and demand of the workforce in the labor market as the key determinants. Jang (2017), Lee and Lee (2017), and Vogel (2018) have argued that Japan's demographic shift, driven by an aging population and declining fertility rates, has accelerated labor shortages, coupled with the retirement of the "*dankai* generation" (i.e., Japan's baby boom generation born in between 1947 and 1949), which has resulted in the enhancement of employment and working conditions for workers, especially for the young people looking for their first jobs.

While the macroeconomic conditions and demographic shift affect the youth labor market in Japan, these variables do not seem to provide comprehensive answers to the case of Korea. As illustrated in figure 3, Korea's economic growth rate (measured by annual GDP growth rate) has been higher than that of Japan, except for the year of 1998. Yet, Korea has more serious youth labor market problems than Japan, such as high youth unemployment and the large size of the NEETs, especially for the past decade. In addition, Japan's Abenomics has not specifically focused on the youth labor market, although it has attempted to resuscitate

<sup>&</sup>lt;sup>5</sup> According to the OECD definition, NEETs are referred to those aged 15–29 not in employment, education or training (OECD, 2016: 14).



Figure 3. GDP Growth Rates in Japan, Korea, and OECD Countries

Source: World Bank, "GDP Growth (annual %)" (https://data.worldbank.org/indicator/NY.GDP.MKTP. KD.ZG, accessed October 16, 2019).

its sluggish economy. Looking at the effects of Japan's demographic shift on the youth labor market, it has been expected that Korea would also be able to alleviate the youth labor market problem, if not completely solve it, once the number of the young people entering the labor market begins to decline and leads to labor shortages. If the demographic structure had determined the youth labor market conditions, Korea's youth population (especially those aged 25–29) entering the labor market should have had good job market conditions, at least during the period of 2008–2014 when the number of population aged 25–29 declined from 4,056,267 to 3,259,130 (Korean National Office of Statistics, "Population Projection"). However, it was not the case.

Baak, Kim and Jang (2018), who have examined the cohort effects of youth population on unemployment with a panel data of 30 OECD countries, have confirmed no conclusive findings as to whether the youth population size (as the supply of the workforce in the labor market) determines youth unemployment rates. As Japan has already experienced over the past few decades, the continuous shrinkage of Korea's working age population might lead to an increasing number of available jobs for youth in the long-term. Nevertheless, such demographic change is less likely to solve Korea's youth labor market problems in the short or medium-term at least, as already demonstrated in the case of the period of 2008–2014. Even if Korea's demographic challenges (e.g., an aging population, low fertility rates, and declining population) would exacerbate labor shortages, youth competition for good first jobs will not disappear automatically unless the institutional characteristics of the dualistic labor market are weakened.

Then, what explains Korea's youth labor market problems? Its high exposure to economic openness and technological innovation as well as the intensification of the dualistic labor market are critical variables accounting for more serious youth labor market problems in Korea than its other counterparts (e.g., Japan and OECD countries). First, from the perspective of the economic structure, Korea has been exposed to a much higher risk of economic openness and has undergone a much more extensive scope of technological innovation to replace the workforce. Second, under the dualistic labor market that strictly divides the workforce into

insiders and outsiders, such structural transformation of the Korean economy and production system, represented by globalization and technological innovation, has further intensified the job market competition among youth for the declining number of good jobs in the labor market. All else equal, Korea's dualistic labor market structure has imposed far more difficult job market conditions on youth than its counterparts. The following section analyzes the ways in which the structural transformation of Korea's economy and production system has shifted firms' business and human resource management strategies, leading to the further consolidation of the dualistic labor market and the exacerbation of the youth labor market problem over the past two decades.

# 3. THE STRUCTURAL TRANSFORMATION OF THE KOREAN ECONOMY IN THE ERA OF GLOBALIZATION AND TECHNOLOGICAL INNOVATION

Over the past few decades, Korea's economy has become more exposed to the fluctuating international market compared with those of Japan and OECD countries, as shown in its rapidly rising economic openness (measured by the trade volume as % of GDP) (see figure 4). Thus, Korea's policymakers and business communities have always been very much concerned about the effects of the world economy on the domestic market economy. Traditionally, large-sized *chaebol* firms have dominated the export-oriented sector, whereas SMEs have occupied the sheltered domestic industry (Song, 2015: 34). The growing volume of trade indicates that large-sized *chaebol* firms have relied more on the international market, as opposed to the domestic market, and become more vulnerable to the volatile global business environments. In addition, as the country's economic growth has gradually slowed down since the early 2000s, an increasing number of large-sized *chaebol* firms have made efforts to adjust to the changing economic structure and business environments

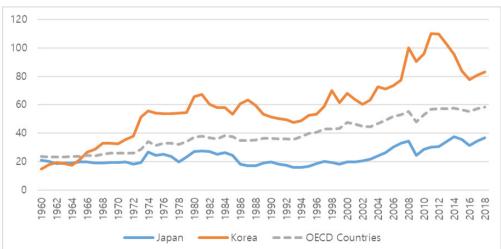


Figure 4. Trade in Japan, Korea, and OECD Countries (% of GDP)

Source: World Bank, "Trade (% of GDP)" (https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS, accessed December 7, 2018).

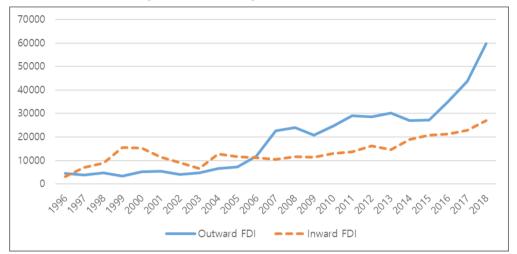


Figure 5. Korea's Foreign Direct Investment Trend

Source: Korea's e-country index, "Foreign Direct Investment" (for the data of the outward FDI, http:// www.index.go.kr/potal/main/EachDtlPageDetail.do?idx\_cd=1065, accessed January 8, 2020; for the data of the inward FDI, http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx\_ cd=1140, accessed January 8, 2020).

Note: Y axis refers to the amount of FDI and the unit of the y axis is one million USD.

by restructuring the corporate organization, increasing overseas production, and adopting automation with the ICT technology.

Korean firms have expanded overseas production across all industrial sectors in order to save labor and production costs as well as to access to the local market since the 2000s (Hwang, 2017; Lee, Lee, Park and Kim, 2012: 3–7). As illustrated in figure 5, Korea's foreign direct investment (hereafter, FDI), especially outward FDI, has drastically expanded, indicating the rapid increase in firms' overseas production. In the case of the cellular phone, one of Korea's top export items, the proportion of overseas production increased from 45.3% to 91.3% between 2008 and 2017 (Lee, Lee, Park, and Kim, 2012: 6; Maeil Business *Newspaper*, 2018b). The automobile industry, another primary source of Korea's exports, has also expanded its overseas production. Hyundai Motor Company and Kia Motor Company, occupying more than 80% of the domestic automobile market together (82.7% as of February 2018), have produced more cars overseas, whose overseas production share has risen from 26.7% to 56% between 2006 and 2017 (Chosun Ilbo, 2018a; Maeil Business Newspaper, 2018a; Yonhap News, 2018). The rapid inflow of the foreign portfolio investment to the Korean stock market since the 1997 Asian financial crisis has also shifted firms' business strategies, pushing them to focus more on high stock prices, short-term earnings, and efficiency than before (see figure 6). Such increasing exposure to the international market and foreign investment has pressed a large number of Korean firms to adopt a series of corporate restructuring by streamlining the business organization and shedding the redundant workforce.6

<sup>&</sup>lt;sup>6</sup> Regarding the relationship between foreign portfolio investment and corporate governance, see Gourevitch and Shinn (2005) and Tiberghien (2007).

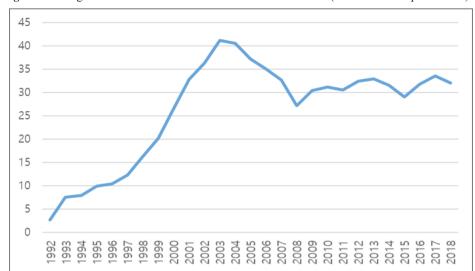


Figure 6. Foreign Portfolio Investment in the Korean Stock Market (% of Market Capitalization)

Source: For the data of 1992–2000, Korea's Financial Supervisory Service (recited from Suh (2007: 127, figure 1); for the data of 2001–2018, Korea's e-country index, "Foreign Portfolio Investment" (http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx\_cd=1086, accessed January 7, 2020).

Overseas production has enabled firms to keep market competitiveness and productivity in the rapidly changing global business environments; however, it has not facilitated the establishment of the virtuous cycle of productivity growth and good job creation in the Korean labor market, if not eliminating a number of jobs due to an increasing share of overseas production. As Korea has increased overseas production since the early 2000s, the number of jobs in the manufacturing sector has continued to drop, despite the increase in the domestic manufacturing production (measured by value-added production) (Hwang, 2017: 12–14). More seriously, as of 2014, productivity in Korea's service industry, whose sector has recently created a majority of jobs in the labor market, was only 45.1% of Korea's manufacturing industry productivity and 90.4% of the OECD average service industry productivity, respectively (Committee on the Job Creation & Government of Republic of Korea, 2017: 2).

In addition, Korean firms have extensively adopted technological innovation, illustrated as the increasing use of the industrial robot in the production site. According to the International Federation of Robotics, Korea had the highest robot density (710 robots per 10,000 employees as of 2018) in the manufacturing industry (especially the electrical/ electronics industry and the automobile industry), far surpassing Germany (322 robots) and Japan (308 robots) by a large margin, whose densities have been accelerated since the year of 2010 (International Federation of Robotics, 2018). In terms of the degree of robot intensity (measured by the industrial robot stock over manufacturing value added), Korea's robot intensity climbed up from 0.14 USD million to 0.32 USD million between 2005 and 2015, ranking top among OECD countries, whereas Japan's robot intensity rose from 0.21 USD million to 0.24 USD million and the OECD average increased from 0.07 USD million to 0.10 million during the same period (OECD, 2017: 36). There is still no consensus whether

technological innovation will substitute or complement the workforce in the labor market, yet some empirical evidence has supported that the middle income groups or workers in routine task-intensive jobs are more likely to be replaced by the technological change (Kattan, Macdonald, and Patrinos, 2018; McKinsey Global Institute, 2017; Thewissen and Rueda, 2019). In the Korean labor market, technological innovation seems to further accelerate the replacement of the workforce as a way of saving labor and production costs as well as avoiding any potential conflicts with workers and labor unions in contentious industrial relations (Cho, 2017; 5).

These structural changes of the economic structure and production system have affected the ways in which Korean firms have employed business and human resource management strategies, especially for the hiring of youth at the entry level position. Korea's economic growth does not automatically produce as many jobs as it did in the past, resulting in the era of "growth without job creation." Also, given the relatively high level of employment protection for regular workers, especially in large-sized *chaebol* firms and the public sector, it turns out to be an easier option for the business to freeze youth hiring or to hire them on precarious employment in economic downturns rather than to lay off prime working age workers already in the labor market. Under these structural constraints, Korean firms are less willing to increase employment, especially youth hiring, even in good economic times, because of their concerns over economic uncertainty in the competitive international market as well as the rigidity in employment, wages, and working conditions for the core workforce. In a comparative perspective, Japan has been less exposed to economic openness and the pressure of technological innovation to replace the workforce than Korea, which might affect Japanese firms' hiring strategies for youth, in conjunction with demographic challenges and labor shortages. In the same vein, its cooperative industrial relations have rarely imposed on the business community a high risk of contentious industrial disputes over employment, wages, and working conditions even in economic hardships. The following section elaborates the ways in which Korea's dualistic labor market, which divides between the internal labor market and the external labor market, has pushed youth to more difficult job market situations over the past two decades.

## 4. DUALISM, INEQUALITY, AND YOUTH LABOR MARKET IN KOREA

Korea has experienced the reinforcement of the dualistic labor market in job security, wages, and the coverage of social welfare benefits along the lines of firm size (e.g., largesized firms vs. SMEs) and employment status (e.g., regular workers vs. non-regular workers), especially after the two financial crises. The institutional arrangements of the *chaebol*centered economic structure—the origins of the segmentation in the labor market—have further strictly divided the labor market into the internal labor market and the external labor market, which results in intense job market competition among youth for the declining number of jobs in the former over the past two decades.

## 4.1. Consolidation of the Dualistic Labor Market

Korea's *chaebol*-centered economic structure has established labor market dualism, dividing between large-sized *chaebol* firms and SMEs, even during the period of high-speed development. Yet the authoritarian regime suppressed high wage increases in large-sized *chaebol* firms, whose competitiveness and productivity still heavily relied on cheap labor and production costs, and its double-digit economic growth provided rapid wage increases to all the workers in the labor market, which made the economic disparity between largesized *chaebol* firms and SMEs less salient (Song, 2014: 73–80). Korea's democratization in 1987 was the first critical turning point for the labor market and industrial relations. Labor unions in large-sized *chaebol* firms began to exert political and organizational power over the business, demanding drastic wage increases and generous social welfare benefits. Despite the widening earning gaps since the late 1980s, Korea's sustainable economic growth delivered job security, decent wages, and social welfare benefits to the majority of the workforce until the mid-1990s, regardless of the firm size (Song, 2014: 129–144).

The 1997 Asian financial crisis marked another turning point in the consolidation of the dualistic labor market along the lines of firm size as well as employment status. A series of corporate bankruptcy triggered massive layoffs, and even surviving firms adopted the comprehensive corporate restructuring program to streamline the business organization and workforce (Haggard, Lim and Kim, 2003; Kim, Kim and Oi, 2012). Only a very small segment of large-sized *chaebol* firms with the financial capacities and high productivity growth were able to offer job security, high wages, and generous social welfare benefits to the core group of the workforce, namely labor market insiders. In addition, firms have rapidly expanded the hiring of non-regular employment, such as temporary and part-time workers, in order to enhance labor market flexibility as an economic buffer zone of the business cycle, whose labor market regulations were further relaxed after a series of labor market reforms during the 1997 Asian financial crisis, in particular. The Roh Moo-hyun government (2003-2007) aimed to enhance employment protection for non-regular workers by stipulating the condition that employers should change the employment status of non-regular workers to indefinite employment contract after the first two-year-long employment contract term. Yet the policy outcome has been somewhat mixed since non-regular workers have confronted the termination of employment contract even before reaching the first two-year-long contract term.

The 2008 global financial crisis has further enlarged the economic disparity between the shrinking core group of the *chaebol* workforce and the rest. A few leading *chaebol* firms have been able to keep market competitiveness and productivity growth by taking advantage of overseas production, automation, outsourcing, and subcontracting, whereas SMEs, most of which have been subordinated to the *chaebol*-centered multilayered subcontracting system, have born the adjustment costs in times of structural transformation of the national political economy. The two financial crises have fortified the dualistic labor market between the internal labor market (e.g., regular employment in large-sized *chaebol* firms and the public sector) and the external labor market (e.g., non-regular employment and SME employment).

These institutional characteristics of the dualistic labor market have directly affected Korea's youth labor market. The development of the strong internal labor market, centered on prime working age male workers in large-sized *chaebol* firms and the public sector, makes it extremely difficult for other groups of the workforce, such as those in the external labor market (e.g., SME workers and non-regular workers in large-sized *chaebol* firms), to make a career transition into the internal labor market.<sup>7</sup> As most advanced industrial countries

<sup>&</sup>lt;sup>7</sup> The transitions from temporary to permanent employment are very difficult in the Korean labor market. Only 11.1% of the temporary workforce made a transition to permanent employment after one-year-long temporary employment, and 22.4% of the temporary workforce were likely to move

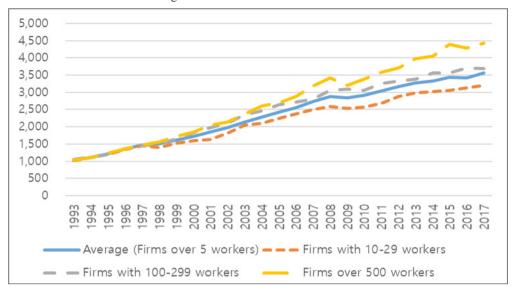


Figure 7. Monthly Base Salary of the College-Educated Workforce Aged 25–29 across Firms Size in Korea

Source: Korean Ministry of Employment and Labor, "Goyong Hyŏngt'aebyŏl Gŭllosilt'ae Josa [Survey on Employment Status and Working Conditions]" (various years) (Korean National Office of Statistics, http://kosis.kr/statisticsList/statisticsListIndex.do?menuId=M\_01\_01&vwcd=MT\_ ZTITLE&parmTabId=M\_01\_01&statId=2001016&themaId=B#101\_ATITLE\_10.3, accessed January 13, 2019).

Note: The unit of the y axis is 1,000 KRW.

have experienced a rising share of labor market outsiders such as temporary or part-time workers over the past few decades, there have been controversial debates on whether non-regular employment serves as stepping stones to regular employment or results in dead ends (Diamond, 2018: 68–70; Han, 2018: 84–85; Imdorf, Helbling and Inui, 2017: 488; Park and Park, 2016: 62–66). Korea's non-regular employment seems to be much closer to dead ends, as illustrated in the high barrier between the internal labor market and the external labor market (Park and Park, 2016: 46). Han (2018) and Kim (2018) have also strongly confirmed that prior employment is very critical for determining later employment, especially for youth in the Korean labor market. Given the very low upward career mobility in the Korean labor market, it becomes crucial for the young people to find "good first jobs." Otherwise, they have a very slim chance to move to the internal labor market at the later stage of their employment.

As shown in figure 7, the wage disparity among youth along the lines of firm size has become much starker in Korea than that in Japan. Monthly base salary of the workforce aged

to permanent employment after three-year-long temporary employment. In other advanced industrial countries, the mobility from temporary to permanent employment was much higher than in Korea. Approximately 50% of the temporary workforce and 70% of the temporary workforce were likely to move permanent employment after one-year-long temporary employment and three-year-long temporary employment, respectively (OECD, 2013: 125).

25–29 with four-year college education—roughly equivalent to the salary of the entry level position in Japan<sup>8</sup>—has continued to rise across all firms, yet the magnitude of the salary increase in large-sized firms has been much greater than that of SMEs.<sup>9</sup> Despite monthly base salary increases for the young workforce aged 25-29 over the past three decades, these workers' salary gaps along the lines of firm size have more drastically enlarged, especially after the 1997 Asian financial crisis. In 1993, workers in large-sized firms with over 500 employees received 1.02 times higher monthly base salary than those in small firms with 10-29 employees, indicating no or very small salary disparity along the lines of firm size. Meanwhile, the former received 1.38 times higher monthly base salary than the latter in 2017, confirming the rapidly growing economic disparity of the young workforce at the entry level position along the lines of firm size (for details, check the data source of figure 7). In contrast, there have been only marginal differences in the annual base salary of the college-educated workforce at the entry level position across firm size in the Japanese labor market over the past few decades. The annual base salary has rarely increased after the collapse of the asset bubble in the early 1990s, even if a large number of Japanese firms have been suffering from labor shortages over the past decade, in particular (see figure 8).<sup>10</sup> Furthermore, Korea's seniority-based wage curve has been far steeper than that of Japan, indicating the acceleration of the wage disparity over the life-course cycle of workers (Song, 2014: 39; Cho, 2017: 4). Korea's substantial gaps in economic compensation between workers in large-sized firms and SMEs have strongly affected young people's job search.

All these institutional constraints of the dualistic labor market have shaped Korean youth's strong incentives and preferences for good first jobs in the internal labor market. Considering the different levels of job security and disparity in economic compensation between the internal labor market and external labor market, its youth population has endeavored to search for regular employment positions with job security, high wages, and generous social welfare benefits in large-sized *chaebol* firms and the public sector. As demonstrated in figure 9, job competition rates of college graduates for the entry level position have been further intensified over the past decade. Despite very difficult job market situations for youth, job competition rates for SMEs (with less than 300 workers) have declined, whereas those for large-sized firms (with more than 300 workers) have continued to increase.

However, as illustrated above, "good first jobs" have continued to decline, in conjunction with globalization and technological innovation. In the top 30 business groups, the number of the newly hired workers at the entry level position continued to decline from 144,501 to

<sup>&</sup>lt;sup>8</sup> Because of the lack of data for the entry level position base salary over time, I have alternatively used this data set that would show the monthly base salary of the young workforce in the Korean labor market.

<sup>&</sup>lt;sup>9</sup> According to the survey conducted by the Korean Employers' Federation in 2015, monthly salary of college-educated workers at the entry level position, whose annual cash bonus was incorporated into the salary divided by 12 months, was estimated to 2,561 thousand KRW for firms with 100–299 workers, 2,775 thousand KRW for firms with 300–499 workers, 2,941 thousand for firms with 500–999, and 3,186 thousand for firms over 1,000 workers, respectively, which also clearly indicates the large wage disparity among college-educated workers at the entry level position across firm size (Korean Employer's Federation, 2015, recited from Lee, 2017: 27–28).

<sup>&</sup>lt;sup>10</sup> Genda (2017) has examined why Japan's wages have not increased despite labor shortages, from several different dimensions of the labor market, such as institutions, the regulatory framework, and firms' business strategies.

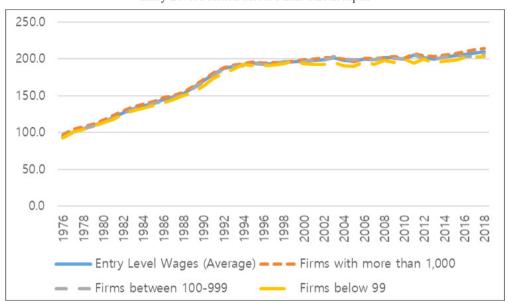


Figure 8. Annual Base Salary of the College-Educated Workforce at the Entry Level Position across Firms Size in Japan

Source: "Chingin Köjö Kihon Chösa [Basic Survey on the Wage Structure]" (2018) (Japanese Ministry of Internal Affairs and Communications, Statistics Bureau, http://www.stat.go.jp, accessed December 20, 2018)

Note: The unit of the y axis is 10,000 JPY.

126,394 between 2013 and 2016, while the number of the workforce increased from 1,155,600 to 1,184,605 during the same period, illustrating that young people have confronted fewer job opportunities in large-sized *chaebol* firms (e.g., top 30 business groups) than the prime working age population (Federation of Korean Industries, 2016; *Money Today*, 2015).<sup>11</sup> According to the Korean Ministry of SMEs and Startups, the proportion of the workforce in large-sized firms (over more than 300 workers) declined from 12.5% to 9.7% between 2013 and 2016, whose number of the workforce also reduced from 1,923,266 to 1,659,209 during the same period.<sup>12</sup> In contrast, SMEs increased the share of the workforce from 87.5% to 90.3%, whose number of the workforce expanded from 13,421,594 to 15,392,246 (Korean Ministry of SMEs and Startups, n.d.). In a comparative perspective, Korea had a much larger share of SMEs with less than 250 workers than other advanced industrial countries,

<sup>&</sup>lt;sup>11</sup> The Korean government uses the official term of the business group (giŏp jipdan) to identify large-sized business conglomerates under the jurisdiction of the government's competition policy regulation, as opposed to the term of *chaebols*. For the definition and list of the business group, see the Korean Fair Trade Commission (www.ftc.go.kr).

<sup>&</sup>lt;sup>12</sup> Not all large-sized firms are *chaebols*. However, I will interchangeably use large-sized firms and *chaebol* firms in order to emphasize the firm size as the key determinant of Korea's labor market dualism. Since the Korean government identifies SMEs with firms with less than 300 workers in terms of the size of the workforce, I will use this number as the cut-off point between large-sized firms and SMEs.

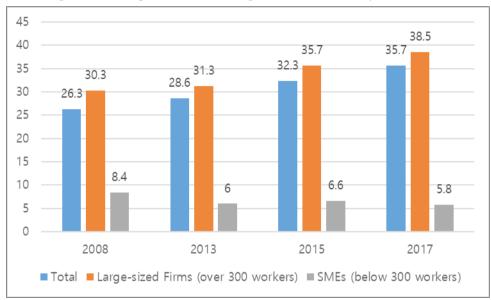


Figure 9. Job Competition Rates of College Graduates for the Entry Level Position

Source: Korean Employers' Federation, "Sin'ipsawon Chaeyong Siltae Josa [Report on the Recruitment of College Graduates]" (various years).

Note: The competition rate is calculated as the number of college graduate job applicants divided by the number of job opening for the entry level position.

which presents the concentration of job creation in SMEs with less financial capacities and productivity growth (as of 2015, 87.2% in Korea compared with 62.9% in Germany, 52.9% in Japan, and 40.7% in the US) (OECD SDBS Database, recited from Jang, 2018: 10). The hiring pattern in the top 30 business groups and the declining share and number of the workforce in large-sized firms with more than 300 workers seem to verify that young workers have been facing far fiercer competition for a smaller number of good jobs in the Korean labor market.

## 4.2. Options for Youth in the Competitive Job Market?

In the face of the intensified job market competition, Korea's young people have been trying to distinguish themselves from other job market candidates by attaining higher education (e.g., tertiary education), applying for an internship, learning foreign languages, or obtaining licenses/qualifications. Over the last two decades, a large majority of the high school graduates have advanced to college (including both two-year and four-year colleges), hoping to improve their employment prospects, and an increasing number of the young people have prepared for the lowest-rank civil service exam. Despite such strenuous efforts of youth for job search, the dualistic labor market has further aggravated the youth labor market problem over the past two decades.

## Investment in Human Capital Development

In Korea, education has been regarded as one of the most critical tools for promoting the

country's economic development through a supply of the highly qualified workforce and providing a great opportunity for upward social mobility.<sup>13</sup> Moving towards a knowledgebased economy, Korea has more rapidly expanded tertiary education since the mid-1990s, a period during which the Kim Young-sam government (1993–1997) extensively liberalized the conditions of the college establishment through the revision of the Law on the College Establishment in 1995 in order to increase the supply of the workforce with more advanced knowledge and skills under the pressure of intensive global market competition (Ahn and Ha, 2015: 237). As illustrated in figure 10, Korea's share of youth with tertiary education was ranked top among advanced industrial countries as its college advancement rate as well as the number of the college increased dramatically since the mid-1990s (Korea's e-country index, "Korea's Higher Education & Korea's Education Advancement Rate").

From the demand side, why would Korean youth like to attain higher education? Given the huge earning gaps and the employment opportunity depending on the worker's education level, the young people prefer to advance to college as one of the strong investment strategies in human capital development for better job prospects in the labor market. In 2017, the workers with four-year college education received 1.67 times higher monthly base salary than those with high school education. This gap of the monthly base salary between these two groups has rarely changed since the early 1990s. In the case of the young workforce aged 25–29, the salary gap depending on the education level was smaller than that of the total workforce; nevertheless, four-year college graduates received higher monthly base salary by 1.28 times than high school graduates in 2017 (Korean Ministry of Employment and Labor, various years). Thus, high educational attainment has served as the critical variable for youth, even for those in the vocational education and training high school track, to distinguish themselves from others in the very competitive job market. "Over education" has been the result of youth's survival strategy under the intense pressure of the dualistic labor market as a way of entering the internal labor market (Kim, 2017: 16). Meanwhile, the number of high school students who enroll in the vocational high school track and enter the labor market right after graduation has declined over the past two decades (Lee, Jeong and Hong, 2014: 48; Oh, 2017: 54 and 56).

Nevertheless, as almost 70% of the high school graduates advance to tertiary education (68.9% in 2017), higher educational attainment does not seem to guarantee the access to good jobs any longer as it had done in the past.<sup>14</sup> Oh (2017: 73–74) has verified the weakening education premium of tertiary education in the labor market, although the graduates from top-tier universities have still received higher wages than the others. Lee, Jeong and Hong (2014: 41–61) have pointed out that a relatively large segment of the graduates from low-tier two-year and four-year colleges (50% of the two-year college graduates and 20% of the four-year college graduates) have been underpaid in the labor market than high school graduates, which makes the effects of high investment in tertiary education on the labor market skeptical. This rapid expansion of tertiary education, one of the most effective strategies for job search in the past, has further exacerbated the degree of job market competition among the young population with higher education, especially over the past two decades, a period

<sup>&</sup>lt;sup>13</sup> Korea's level of public and private spending on education (as % of GDP) has always been ranked as the top group among OECD countries (OECD, "OECD Data, Education Spending").

<sup>&</sup>lt;sup>14</sup> In 1990, 33.2% of the high school graduates advanced to college (including both two-year and fouryear colleges), yet 68.7% of the high school graduates advanced to college in 2017, whose percentage declined from 83.8% in 2008 (Korea's e-country index, "Korea's Education Advancement Rate").

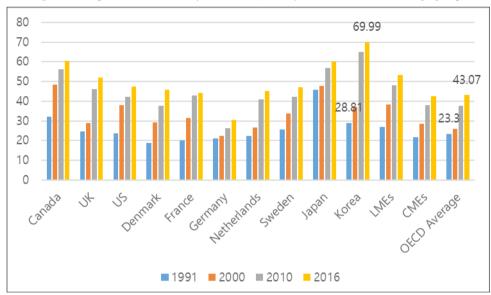


Figure 10. Population with Tertiary Education (25–34 years old, % in the same age group)

Source: OECD, "OECD Data, Population with Tertiary Education" (https://data.oecd.org/eduatt/ population-with-tertiary-education.htm, accessed April 20, 2018).

Note: LMEs and CMEs refer to liberal market economies and coordinated market economies, respectively.

during which the number of good jobs has declined in the labor market. Such phenomena have raised another concern not only for the youth labor market, but also for the education system in general.

## Alternative Career Path in the Public Sector

Although large-sized *chaebol* firms have been able to offer tighter job security, higher wages, and more generous social welfare benefits than SMEs, the number of jobs in large-sized *chaebol* firms has been shrinking (as illustrated above). In addition, even large-sized *chaebol* firms have opted for the corporate restructuring in response to the fluctuations of the business cycle and the intensified global market competition, forcing workers to leave the workplace before reaching the mandatory retirement age of 60. Thus, an increasing number of the young people, especially those who do not enroll in prestigious universities with much lower possibility of getting jobs in large-sized *chaebol* firms, have looked for an alternative career path of becoming lowest-rank civil servants (the 9th level position out of the nine-rank system). For those who place high value in tight job security and the work and life balance, the lowest-rank civil servant position has been regarded "good jobs," although its salaries might be lower than those of jobs in the private sector.

It is not a new story that a large number of the young people have desired to join the public sector, such as the government agency or the public corporations, over the past few decades. Among several different tracks of the public sector employment, this article focuses on the lowest-rank civil servant position (referring to the 9th level) because of the relatively large number of job openings as well as the applicants. In addition, its composition of the

exam applicants and those who passed the exam has more dramatically changed compared with those of the middle-rank and high-rank civil servant positions (the 7th level for the former and the 5th level for the latter), both of which have been regarded the elite career bureaucrat track. Due to the characteristics of high job security in the public sector, though much lower paying jobs than those in the private sector, the competition rate for the lowestrank civil service exam was quite high even during the 1980s and 1990s. However, there have been several important changes, especially after the 1997 Asian financial crisis. In 1980, the competition rate of the 9th level exam was 28.6:1, and a majority of the applicants passed the exam for the administration track were high school graduates (90.8%, 1,338 out of 1,473). After almost 20 years later, the competition rate skyrocketed to 89.9:1 in 2004, and only a very small percentage of the applicants who passed the exam for the administration track were high school graduates (1%, 9 out of 902), while the rest were two-year and fouryear college graduates (Oh, 2006: 31-32). Traditionally, the 9th level civil servant position had not been considered as an appropriate job for college graduates because of relatively low salaries compared with those of the private sector and the stereotypical image of the routine task-intensive jobs at the entry level civil service. After the two financial crises, a growing concern over job insecurity as well as the declining number of good jobs for youth in the labor market has shifted prioritizing job security most, especially for those graduating from lower-tier colleges.

Despite the fluctuations of the applicant number, the competition rate of the 9th level civil

YEAR	Entry Level Post (9th Level, National)	Applicants	Competition Rate
2008	3,223	164,690	49.1:1
2009	2,374	140,879	59.3:1
2010	1,719	141,343	82.2:1
2011	1,529	142,732	93.3:1
2012	2,180	157,159	72.1:1
2013	2,738	204,698	74.8:1
2014	3,000	193,840	64.6:1
2015	3,700	190,987	51.6:1
2016	4,120	221,853	53.8:1
2017	4,910	228,368	46.5:1
2018	4,953	202,978	41.0:1
2019	4,987	195,322	39.2:1

Table 1. Korea's Lowest-Rank Civil Service Exam Competition Rates (National Level Post Only)

Source: Author's collection based on the data from the Korean Ministry of Personnel Management (www.mpm.go.kr, accessed April 23, 2020) as well as the journalistic coverage

Note: The competition rate is calculated as the number of job applicants divided by the number of the entry level post (9th level).

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service exam has increased after the two financial crises. After the 1997 Asian financial crisis, the competition rate skyrocketed from 48:1 to 80:1 between 1997 and 1998 (*Maeil Business Newspaper*, 2002). After the 2008 global financial crisis, the competition rate increased again from 59.3:1 to 82.2:1 between 2009 and 2010 (see table 1). Over the past decade, while the competition rates have continued to decline, the number of applicants has increased or at least has been maintained around 200,000. Considering that the number of the applicants for Korea's SAT was 548,734 in 2019 (Korean Ministry of Education, 2019), almost a third of the size of Korea's SAT applicants (195,322) have still prepared for the lowest-rank civil service exam (see table 1). Unless more decent jobs for youth are created, it is less likely for Korea to see a decline in the number of youth preparing for the lowest-rank civil service exam in the public sector in the near future.

## 5. CONCLUSION

The transformation of the economic structure and production system, represented by the rise of the service economy, technological innovation, and global outsourcing, has created new challenges for the labor market in most advanced industrial countries. The number of good jobs has decreased, while the number of bad jobs has rather increased, widening the economic disparity within the labor market. Although all these changes have substantially affected the employment and working conditions of the entire workforce, youth population, who have just entered the labor market or prepared for job search, have faced even more serious situations than other age groups in the workforce because of the lack of experience and skills in the workplace as well as relatively weak job security for them. Similar to those of other advanced industrial countries, Korean youth have been struggling for good jobs in the labor market over the past two decades. However, they have faced far severer pressure for job search, since there is a very slim chance for them to make a transition from non-regular to regular/permanent employment and from SMEs to large-sized firms if they fail to join the internal labor market (e.g., regular/permanent employment in large-sized firms and the public sector) after graduation. Under these institutional arrangements of Korea's dualistic labor market, the very first job of youth tends to determine the possibility of their career development over the life-course.

As illustrated in the case of Japan, Korea's good macroeconomic conditions and demographic shift might create more jobs than job applicants, which would lessen the youth labor market problem. While acknowledging the importance of these structural variables for the youth labor market, this article rather emphasizes that it will be essential for Korea to be more effective in managing the segmentation of the labor market that has been already intensified after the two financial crises as well as to create more good jobs for youth in the labor market. The current Moon Jae-in government (2017–present) has advanced a wide array of youth employment policies, such as the income tax exemption and financial subsidies for young workers in SMEs as well as the tax credit and employment subsidies for SME employers in hiring young workers (*Chosun Ilbo*, 2018b). Yet youth labor market problems have not yet been fully addressed. Korea's youth labor market problem is not just the lack of enough number of jobs for youth, but rather the lack of quality jobs for youth. Thus, it is important for the government to propose various policy supports to lessen the youth labor market problem in the short-term. Simultaneously, these policies should include strategies to make Korea's labor market dualism much weaker, if not disappear right away, to create the

virtuous cycle of transformations in the economic structure and the production system, and to foster good job creation in the national political economy in the long-term. By doing so, Korean youth are more likely to have much better job prospects in the labor market.

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## REFERENCES

- Ahn, Byung-Young and Yeon-Seob Ha. 2015. 5.31 Gyoyukgaehyök kürigo 20nyön [5.31 Education Reform and After 20 Years]. Seoul: Dasan Publisher.
- Baak, Saang Joon, Namju Kim, and Keunho Jang. 2018. Han'guk kwa Ilbonŭi Ch'ŏngnyŏnshirŏm Pigyobunsŏng mit Shisajŏm [Comparative Analysis of the Youth Unemployment in South Korea and Japan]. BOK Kyŏngjeyŏn'gu [BOK Economic Study] 2018–39. Seoul: Bank of Korea.
- Cho, Seong-Jae. 2017. "Nosagwan'gye Sisŭt'emŭi Jŏnhwan'gwa Nodongjŏngch'aek Gwaje [The Transformation of the Industrial Relations and the Task for the Labor Policy]." *Koyong Nodong Brief [KLI Employment & Labor Brief]*, no. 71, April 10. Sejong: Korea Labor Institute.
- Chosun Ilbo. 2018a. "Hyundai and Kia Occupying 83%." March 15, 2018.
- *Chosun Ilbo.* 2018b. "Four-year Long Carrot for the Echo-boom Generation, High Possibility of Youth Unemployment for the Echo-boom Generation." March 16, 2018.
- Committee on the Job Creation & Government of the Republic of Korea. 2017. Iljarijŏngch'aek 5nyŏn Rodŭmaep [The Five-Year Roadmap of the Employment Policy]. Seoul: Government of the Republic of Korea.
- Diamond, Jess. 2018. "Employment Status Persistence in the Japanese Labor Market." *The Japanese Economic Review* 69(1): 69–100.
- Doeringer, Peter. B. and Michael. J. Piore. 1971. Internal Labor Markets and Manpower Analysis. Lexington, MA: Heath.
- Emmenegger, Patrick, Silja Häusermann, Bruno Palier, and Martin Seeleib-Kaiser. 2012. *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Federation of Korean Industries. 2016. "30dae Group, 2016nyŏn Goyong'gyehoik Josa [Top 30 Groups, Survey on the Hiring Plan]." Press Release. April 21, 2016.
- Genda, Yuji, Ed. 2017. Hitotebusokunanoni Najechinginga Sagaranainoka? [Why doesn't Japan's Wages Increase Despite its Labor Shortages?]. Tokyo: Keio University Press.
- Gourevitch, Peter A. and James Shinn. 2005. *Political Power and Corporate Control: The New Global Politics of Corporate Governance*. Princeton and Oxford: Princeton University Press.
- Haggard, Stephan, Wonhyuk Lim, and Euysung Kim, Eds. 2003. *Economic Crisis and Corporate Restructuring in Korea: Reforming the Chaebol*. Cambridge; New York: Cambridge University Press.
- Han, Joseph. 2018. Ch'ŏngnyŏniljarit'ŭksŏngŭi Janggihyogwawa Ch'ŏngnyŏn'goyongdaechaeke kwanhan Sisajŏm [The Long-term Effects of the Youth Labor Market and Policy Implications for the Youth Employment Policy]. Sejong: Korea Development Institute.
- Hwang, Sunoong. 2017. "Jejoŏp Haeoejikjŏpt'ujawa Guknaeiljari [The Korean Manufacturing Industry's FDI and the Domestic Job Market]." *Wŏlgan Nodong*

Review [Monthly Labor Review] (June): 9-17. Sejong: Korea Labor Institute.

- Imdorf, Christian, Laura A. Helbling, and Akio Inui. 2017. "Transition Systems and Nonstandard Employment in Early Career: Comparing Japan and Switzerland." *Journal of Education and Work* 30(5): 486–500.
- International Federation of Robotics. 2018. "World Robotics 2018 Edition." Accessed December 24, 2018. https://ifr.org.
- Jang, Keunho. 2018. Urinara Goyonggujoŭi T'ŭkjinggwa Gwaje [The Characteristics and Problems of the Korea's Employment Structure]. BOK Kyŏngjeyŏn'gu [BOK Economic Study] 2018–34. Seoul: Bank of Korea.
- Jang, Woo Ae. 2017. Ilbonŭi Guinnan Wŏnin mit Silt'aebunsŏk [Japan's Labor Shortage]. Seoul: IBK Economic Research Institute.
- Japanese Ministry of Internal Affairs and Communications, Statistics Bureau. 2018. "Chingin Kōjō Kihon Chōsa [Basic Survey on the Wage Structure]." Accessed December 20, 2018. http://www.stat.go.jp.
- Kambayashi, Ryo and Takao Kato. 2016. "Good Jobs and Bad Jobs in Japan: 1982–2007." Center on Japanese Business and Economy, Columbia Business School Working Paper Series, no. 348.
- Kattan, Raja B., Kevin Macdonald, and Harry A. Patrinos. 2018. "Automation and Labor Market Outcomes: The Pivotal Role of High-Quality Education." *Policy Research Working Paper*, no. 8474. World Bank Group Education Global Practice.
- Kim, Byung-Kook, Eun Mee Kim, and Jean C. Oi, Eds. 2012. Adapt, Fragment, Transform: Corporate Restructuring and System Reform in Korea. Washington, D.C.: Brookings Institution.
- Kim, Namju. 2018. Ch'ŏngnyŏnsilŏpŭi Iryŏk'hyŏnsang Bunsŏk [The Analysis of Hysteresis in Youth Unemployment]. BOK Kyŏngjeyŏn'gu [BOK Economic Study] 2018–37. Seoul: Bank of Korea.
- Kim, Yoo Bin. 2017. "Urinara Ch'ŏngnyŏnch'ŭng Nodongsijang Silt'ae [Reality of the Korea's Youth Labor Market]." In Ch'ŏngnyŏn'goyong Nodongsijang Hyŏnhwang Munjejŏm mit Jŏngch'aekkwaje [The Reality of the Youth Labor Market and Policy Solutions] edited by Yoon-Gyu Yoon, Yoo Bin Kim, Sun Jung Oh, Dongwoo Kang, and Se-Um Kim, 4–22. Sejong: Korea Labor Institute.
- Korea's e-country index. n.d. "Foreign Portfolio Investment." Accessed January 7, 2020. http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx cd=1086.
- Korea's e-country index. n.d. "Korea's Education Advancement Rate." Accessed September 4, 2018. http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx cd=1520.
- Korea's e-country index. n.d. "Korea's Higher Education." Accessed September 6, 2018. http://www.index.go.kr/potal/stts/idxMain/selectPoSttsIdxSearch.do?idx cd=1548.
- Korea's e-country index. n.d. "Inward FDI." Accessed January 8, 2020. http://www.index. go.kr/potal/main/EachDtlPageDetail.do?idx\_cd=1140.
- Korea's e-country index. n.d. "Outward FDI." Accessed January 8, 2020. http://www.index. go.kr/potal/main/EachDtlPageDetail.do?idx\_cd=1065.
- Korean Employers' Federation (KEF). Various years. "Sin'ipsawon Chaeyong Siltae Josa [Report on the Recruitment of College Graduates]." Seoul: KEF.
- Korean Ministry of Education. 2019. "Korea's SAT Applicants for the Academic Year of 2020." Press Release. September 9, 2019.
- Korean Ministry of Employment and Labor. Various years. "Goyong Hyŏngt'aebyŏl Gŭllosilt'ae Josa [Survey on Employment Status and Working Conditions]."

Accessed January 13, 2019. http://kosis.kr/statisticsList/statisticsListIndex. do?menuId=M\_01\_01&vwcd=MT\_ZTITLE&parmTabId=M\_01\_01&statId=2001016 &themaId=B#101\_ATITLE\_10.3.

- Korean Ministry of Personnel Management. n.d. Accessed December 23, 2020 http://www. pmp.go.kr.
- Korean Ministry of SMEs and Startups. n.d. "Jungsogiop Wisang [Status of the SMEs]." Accessed December 21, 2018. https://www.mss.go.kr/site/smba/foffice/ex/statDB/ MainSubStat.do.
- Korean National Office of Statistics. *Various years*. "Gyŏngje Hwaldong Ingu Josa [Economically active population survey]" (various years). Accessed January 7, 2020. http://kosis.kr/statisticsList/statisticsListIndex.do?menuId=M\_01\_01&vwcd=MT\_ZT ITLE&parmTabId=M 01 01&statId=1962002&themaId=B#B1A.3.
- Korean National Office of Statistics. n.d. "Population Projection." Accessed December 20, 2018. http://kosis.kr/statisticsList/statisticsListIndex. do?menuId=M\_01\_01&vwcd=MT\_ZTITLE&parmTabId=M\_01\_01#SelectStatsBox Div.
- Lee, Eun-seok, Jung-wook Lee, Nayeon Park, and You-sin Kim. 2012. Gunknaegiöp Haeoehyönjisaengsan Hwaktaeŭi Younghyang mit Sisajõm [The Korean Firm's Plan for Expanding Overseas Production and Its Implications]. BOK Kyöngjeyön'gu [BOK Economic Study] 2012–4. Seoul: Bank of Korea.
- Lee, Geun-tae, and Ji-sun Lee. 2017. Saengsanganŭngin'gu Gamso Sidaeŭi Gyŏngjesŏngjanggwa Nodongsijang [Economic Growth and Labor Market in the Era of the Working Age Population Decline]. Seoul: LG Economic Institute.
- Lee, Ju-Ho, Hyeok Jeong, and Song Chang Hong. 2014. "Han'gukŭn Injŏkjabon Ildŭng Gukkain'ga? [Is Korea Number One in Human Capital Accumulation?]." In Injŏkjabonjŏngch'aegŭi Saeroun Banghyange taehan Jonghapyŏn'gu [Comprehensive Study on the New Direction of the Human Capital Accumulation] edited by Yongseong Kim and Ju-Ho Lee, 13–71. Sejong: Korea Development Institute.
- Lee, Young-min. 2017. "Ch'ŏngnyŏn Goyongchokjin Bangan [Promotion of the Youth Employment]." In 2017–2021nyŏn Gukka Jaejŏng Unyonggyehoek: Iljari Bogosŭ [National Fiscal Management Plan During the Year of 2017–2021: Report on Job Creation], 17–51. Seoul: Division of the Job Market, National Fiscal Management Plan.
- Maeil Business Newspaper. 2002. "Highest Competition Rate for the 9th Level Civil Service Exam." February 17, 2002.
- Maeil Business Newspaper. 2018a. "Korea Exodus of the Automobile Industry." February 13, 2018.
- Maeil Business Newspaper. 2018b. "Firms Rushing for Overseas." May 1, 2018
- McKinsey Global Institute. 2017. A Future that Works: Automation, Employment, and Productivity. McKinsey Global Institute.
- Miyamoto, Hiroaki. 2015. "Growth and Non-regular Employment." *SDES 2015–20.* School of Economics and Management, Research Center for Social Design Engineering, Kochi University of Technology.
- Money Today. 2015. "Why are Top 30 Business Groups Interested in Increasing Investment, but not in Hiring?" March 16, 2015.
- Nam, Jaeryang. 2011. "Ch'ŏngnyŏnchŭng Nodongsijang ŭi Juyo Tŭkjingdŭl [Key Characteristics of Youth Labor Market]." In Ch'ŏngnyŏnchŭng Nodongsijang Jinip

*mit Jŏngchakbangan Yŏngu [Youth Labor Market Research]* edited by Jaeryang Nam, Chul-In Lee, Young-Jun Chun, and Seok-Jin Woo, 5–38. Seoul: Korea Labor Institute.

- Oh, Ho-Young. 2006. "Gongmuwön Ch'aeyongsihömüi Injökjawön'gaebal Hyogwa [The Effects of the Human Resource Development for the Civil Service Exam]." KLI Nodong Review [KLI Labor Review], no. 11: 29–40.
- Oh, Sun Jung. 2017. "Gyoyukch'egyewa Ch'ŏngnyŏn Goyong Nodongsijang [Education System and Youth Employment and Labor Market]." In Ch'ŏngnyŏn Goyong Nodongsijang Hyŏnhwang Munjejŏm mit Jŏngch'aekkwaje [The Reality of the Youth Labor Market and Policy Solutions] edited by Yoon-Gyu Yoon, Yoo Bin Kim, Sun Jung Oh, Dongwoo Kang, and Se-Um Kim, 4–22. Sejong: Korea Labor Institute.
- O'Higgins, Niall. 2012. "This Time It's Different? Youth Labor Markets During the Great Recession." *Comparative Economic Studies* 54(2): 395–412.
- Organization for Economic Development and Co-operation. 2013. *Strengthening Social Cohesion in Korea*. Paris: OECD.
- Organization for Economic Development and Co-operation. 2016. Society at a Glance 2016. Paris: OECD.
- Organization for Economic Development and Co-operation. 2017. OECD Science, Technology, and Industry Scoreboard 2017: The digital transformation. Paris: OECD.
- Organization for Economic Co-operation and Development. n.d. "OECD Data, Education Spending." Accessed December 15, 2018. https://data.oecd.org/eduresource/ education-spending.htm#indicator-chart.
- Organization for Economic Co-operation and Development. n.d.. "OECD Data, Employment Rate by Age Group." Accessed December 28, 2018. https://data.oecd.org/emp/ employment-rate-by-age-group.htm#indicator-chart.
- Organization for Economic Co-operation and Development. n.d.. "OECD Data, Gender Wage Gap." Accessed January 10, 2020. https://data.oecd.org/earnwage/gender-wage-gap. htm.
- Organization for Economic Co-operation and Development. n.d. "OECD Data, Population with Tertiary Education." Accessed April 20, 2018. https://data.oecd.org/eduatt/ population-with-tertiary-education.htm.
- Palier, Bruno and Kathleen Thelen. 2010. "Institutionalizing Dualism: Complementarities and Change in France and Germany." *Politics & Society*, 38(1): 119–148.
- Park, Wooram, and Yoonsoo Park. 2016. *Giganjekŭlloŭi Goyong'gigan Jehane gwanhan* Siljŭngyŏn'gu [An Empirical Study on the Regulation of the Maximum Duration of Fixed-term Employment]. Sejong: Korea Development Institute.
- Rueda, David. 2008. Social Democracy Inside Out: Partisanship and Labor Market Policy in Advanced Industrialized Democracies. Oxford: Oxford University Press.
- Rueda, David, Erik Wibbels, and Melina Altamirano. 2015. "The Origins of Dualism." In *The Politics of Advanced Capitalism* edited by Pablo Beramendi, Silja Häusermann, Herbert Kitschelt, and Hanspeter Kriesi, 89–111. Cambridge; New York: Cambridge University Press.
- Scarpetta, Stefano, Anne Sonnet, and Thomas Manfredi. 2010. "Rising Youth Unemployment During the Crisis: How to Prevent Negative Longterm Consequences on a Generation?" OECD Social, Employment and Migration Working Papers, no. 106.
- Song, Jiyeoun. 2014. *Inequality in the Workplace: Labor Market Reform in Japan and Korea*. Ithaca, NY: Cornell University Press.
- Song, Yeongkwan. 2015. Gukjemuyŏki Han'guk Jejoŏp Gujowa Saengsansŏnge mich'inŭn

Yŏnghyang [The Impacts of the Trade on the Structure and Productivity of the Korean Manufacturing]. Sejong: Korea Development Institute.

- Suh, Sangwon. 2007. "The Influence of Foreigners' Stock Investment on Korean Stock Prices and Its Implications." *Economic Papers* 9(2): 123–161.
- Tiberghien, Yves. 2007. Entrepreneurial States: Reforming Corporate Governance in France, Japan, and Korea. Ithaca, NY: Cornell University Press.
- Vogel, Steven K. 2018. "Japan's Labor Regime in Transition: Rethinking Work for a Shrinking Nation." *The Journal of Japanese Studies* 44(2): 257–292.
- Thewissen, Stefan and David Rueda. 2019. "Automation and the Welfare State: Technological Change as a Determinant of Redistribution Preferences." *Comparative Political Studies*, 52(2): 171–208.
- World Bank. n.d.. "Unemployment, Youth Total (% of total labor force ages 15–24) (modeled ILO estimate)." Accessed January 14, 2020. https://data.worldbank.org/indicator/ SL.UEM.1524.ZS.
- World Bank. n.d. "Unemployment, Total (% of total labor force) (modeled ILO estimate)." Accessed January 14, 2020. https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS.
- World Bank. n.d. "GDP growth (annual %)." Accessed October 16, 2019. https://data. worldbank.org/indicator/NY.GDP.MKTP.KD.ZG.
- World Bank. n.d. "Trade (% of GDP)." Accessed December 7, 2018. https://data.worldbank. org/indicator/NE.TRD.GNFS.ZS.
- Yee, Seung-Yeol, Se-Um Kim, Jin Yeong Kim, Jaemin Seong, Sun Jung Oh, and Minki Hong. 2017. Ch'ŏngnyŏnch'ŭng Nodongsijangjŏngch'aegŭi Jonghapjŏk Pyŏngga-Munhŏnyŏn'gurŭl Jungsimŭro [Comprehensive Analysis on the Youth Labor Market Policy-Focus on the Literature Review]. Sejong: Korea Labor Institute.
- *Yonhap News.* 2018. "Korea Exodus, Halving the Domestic Automobile Production." February 13, 2018.