# ESTIMATING THE PAID CARE SECTOR IN SOUTH KOREA

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JOO YFOUN SUH



An economist by training, Joo Yeoun is leading the ongoing efforts at AARP to measure, depict, and promote the economic and social contributions made by Americans 50 years and older.

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Joo Yeoun Suh's published papers and articles include "Valuing Unpaid Care Work in the US: A Prototype Satellite Account Using the American Time Use Survey" in the Review of Income and Wealth. She has also presented in the U.S. and internationally on various aspects of her research interests, including at a meeting convened by the Royal Society of Statistics (UK) dedicated to examining how housework can be incorporated into nations' Gross Domestic Product.

### TABLE OF CONTENTS

1. INTRODUCTION	
2. CONCEPTUAL FRAMEWORK OF MEASURING PAID CARE SECTOR	2
2.1 DEFINITION OF PAID CARE WORKERS	2
2.2 CHALLENGES IN MEASURING PAID CARE WORK	
2.2 CHALLENGES IN MEASURING PAID CARE WORK	4
3. ESTIMATING THE PAID CARE FORCE IN SOUTH KOREA	5
3.1 LOCAL AREA LABOR FORCE AREA	5
3.2 CHILD CARE STATISTICS	
3.3 LONG-TERM CARE INSURANCE STATISTICAL YEARBOOK	6
4. PROFILE OF THE PAID CARE WORKFORCE	
4.1 PAID GENERAL CAREWORKERS	
4.2 PAID CHILD CARE WORKERS	
4.3 LONG-TERM CARE WORKERS	
4.4 MIGRANT PAID CARE WORKERS	16
5 TOTAL FOUNDATION OF DAID CARE WORKERS	4.0
5. TOTAL ESTIMATES OF PAID CARE WORKERS	
5.1 TOTAL EMPLOYMENT OF PAID CARE WORKERS	
5.2 MEDIAN WAGES OF PAID CARE WORKERS	
5.3 AVERAGE HOURS OF PAID CARE WORKERS	19
6. CONCLUSION	19
REFERENCES	21
REFERENCES	∠⊥
LIST OF FIGURES & TABLES	
	_
FIGURE 1	
FIGURE 2	
FIGURE 3FIGURE 4	
FIGURE 5	
FIGURE 6	
TABLE 1	
TABLE 2	
TABLE 3	
TABLE 4	
TABLE 5	
	18
TABLE 6	

#### 1. INTRODUCTION

Care work, whether unpaid or paid, lies at the heart of humanitarian concern and expression, and our societies and economies are dependent on it to survive and thrive. Across the world, women account for more than three-quarters of the total amount of unpaid care time while two-thirds of paid care workers are women (Folbre et al. 2012; ILO 2018; Yoon et al. 2011). The outsized role that women play in providing care is readily observed in South Korea, with its strong patriarchal and familistic orientation that assigns primary responsibility for the care of children and elderly to women in the household, reinforcing the economic significance of gender. While unpaid care work by family members, especially women, makes up a large part of the care provided within Korean society, the rapid aging of the population and the fact that more than 50% of the female population aged 16 and older participated in the labor force in 2016-18 underscore the importance of paid care workers in meeting care needs (ILO 2018). They tend to the most basic necessities and help sustain the well-being of those in dependent positions, such as children, frail elderly, or people with illness and/or disabilities. Broadly, there is a spectrum of paid workers providing care, ranging from informal workers such as domestic service workers, nannies, and home care aides in private homes to formal workers in child care centers, nurseries and early childhood learning centers, elder care centers, nursing homes, and assisted living facilities, to nurses and teachers.

Accounting for the contribution of paid care workers is crucial to our understanding of the centrality of care in the development of human capabilities and economic progress; it is a crucial part of the effort to make women's work and all forms of care work more visible. As the ILO (2018) points out, "care workers close the circle between unpaid care provision and paid work" (p.166). It is also critical to understand their work conditions since they represent one of the fastest growing segments of the labor force. For that reason, it is of particular concern that the paid care workforce experiences low wages and difficult working conditions across occupations and industries (ILO 2018). For instance, domestic workers are most vulnerable to exploitation and abuse among all workers in the labor market (UNDP 2015), a consequence of their frequent exclusion from laws and regulations affording labor protections. Understanding paid care work is therefore critical to shedding light on the implications of economic, cultural, and policy contexts that shape the larger labor market as well.

The objective of this paper is to provide a comprehensive picture of the paid care workforce in South Korea by measuring its size and extrapolating the median wage earnings and aggregate hours spent on caregiving by the workers using following data sources: the Local Area Labor Force Survey, Child Care Statistics, Social Services Voucher Statistics, and Longterm Care Insurance Statistical Yearbook for 2009 and 2014. The size of the paid care workforce in South Korea in this estimation focuses on the value of the labor provided by

care workers that are directly and indirectly involved in elder care and child care provision. The estimation will be used for making the paid care sector visible in the Korean Social Accounting Matrix (SAM), which serves as the base for developing the GAM Care Computable General Equilibrium (CGE) model for policy analysis.

The paper is structured as follows. Section 2 provides the operational definition of paid care work data on paid care workers and discusses the challenges in measuring paid care work. Section 3 then describes the various datasets used in estimating the size of the paid care sector of South Korea for 2009 and 2014 as well as estimating the median monthly wage earnings and aggregate hours spent by paid care workers. This paper also acknowledges that migrant care workers have a growing presence in Korea and that their contribution to the care sector has been substantial even though their numbers are likely to be underestimated. Accordingly, I include some statistics on migrant care workers drawn from other studies.

## 2. CONCEPTUAL FRAMEWORK OF MEASURING PAID CARE SECTOR

#### 2.1 DEFINITION OF PAID CARE WORKERS

People who provide care – whether young or old, healthy or frail, paid or unpaid – build human capabilities and help lay the foundation for vibrant economies and inclusive societies. Caregivers typically convey a sense of emotional engagement and personal connection that has direct consequences for the quality of the services provided for care recipients. Paid care workers are those who perform care work for pay within a range of settings such as private households, public or private hospitals, nursing homes, schools, and other care establishments. They vary in terms of education, skills, pay, and sectors such as human health activities, residential care activities, education, and social work activities without accommodation (ILO 2018, p. 169). The ILO report also notes that there are also care workers in other sectors (ILO 2018). They include doctors and nurses, early education, primary and secondary school teachers and assistants, social workers, therapists, home care aides, and personal care assistants.

Paid care workers also include domestic workers whose activities involve cooking, cleaning, and performing household chores. According to the definition by the International Labor Organization (ILO) (2016), "domestic worker" is defined as "any person engaged in domestic work within an employment relationship." While this definition does not define domestic work based on tasks, it includes a broad range of activities including childminding, caring for older adults or people with disabilities, and cooking, cleaning, or ironing. The inclusion of domestic workers in the care workforce underscores the fact that care provision

includes not only interactive and direct caregiving activities but also non-relational and indirect activities such as cooking and cleaning.

Previous research has used different definitions of paid care work to include a selected range of sectors and occupations, depending on the focus or objective of the study (Applebaum et al. 2013; Budig and Misra 2012; Duffy et al. 2015; England et al. 2002; Folbre 2006; Ilkkaracan and Kim 2018; Lund 2010; Razavi and Staab 2010). One prior study has defined paid care occupations as those in which "workers are supposed to provide a face-to-face service that develops the human capabilities of the recipient (England et al. 2002, p. 455). In terms of occupations, care workers range across home-based care jobs such as nannies, house cleaners, and home care aides, to health and education service sector jobs such as doctors, teachers, and social workers.

The definition of paid care workforce adopted in this paper focuses on elder care and child care workers and encompasses those in the following industry sectors: residential and nonresidential long-term care services in human health care and residential care service activities sectors; early childhood education and child care, comprising preschools as well as family day care centers and other structures for caring for young children aged 0 – 5 in the education sector; social services; and domestic workers hired by individual households to clean, cook, and care for family members.<sup>1</sup>

In terms of occupations, child care and elder care (long-term care) are organized into the four occupational groupings listed in Figure 1. Workers in long-term care services occupations include care workers, nurse aides, social workers, and physical occupational therapists. Since my estimation is part of the valuation process of the total care economy that includes unpaid caregivers (household members), I maintain consistency with the definition of unpaid care work used in the Suh (2019) methodology paper by excluding certain healthcare and education workers such as medical doctors, registered nurses, and teachers in our definition.

Many paid care workers share common characteristics such as personal and motivational commitments. They also tend to work in industries in which it is hard to measure the value of services produced, where beneficiaries, clients, or customers are vulnerable, and the funding is only partially provided by the government; in many developing countries, there is heavy reliance on the private sector. On the other hand, paid care workers are a heterogeneous group in terms of educational levels and pay, ranging from one of the highest-paid and highly-educated major occupational categories (professional and related occupations, which includes doctors, nurses, teachers, and college professors) to one of the lowest-paid and the low-educated (health care support occupations (nursing, psychiatric, and home health aides, personal and home care aides, and child care workers). The biggest division among paid care workers lies between those who are working in well-organized

<sup>&</sup>lt;sup>1</sup> ILO report (2018, p.169) showed that domestic workers working for households that employ domestic personnel are identified by the ISIC code 97.

and monitored facilities or organizations and those who have lower levels of education and are not unionized. (Jones et al. 2014).

#### 2.2 CHALLENGES IN MEASURING PAID CARE WORK

Most paid care workers are women, frequently migrant workers, and work in the informal economy under poor conditions and for low pay. Paid care work, in particular home-based paid care work, is a rapidly growing field in South Korea and across the globe and will remain an important source of employment, especially for women, in decades to come. Yet this burgeoning workforce is nearly invisible, many of whose members are laboring out of sight in private homes.

One of the biggest challenges in estimating the size of the paid care sector stems from lack of data. Measuring the number of paid care workers is complicated by the fact that no single data set captures the full range of occupational and demographic detail needed to accurately measure the paid care workforce. Employment survey data do not capture people working in private households or those who are self-employed, nor do they report demographic information. On the other hand, household and individual surveys capture demographic information in detail, but often lack detailed information on industry and occupation in all or part of the paid care sector. When it comes to migrant care workers, who have become significant in the workforce in general, no official data for them is collected in South Korea. Migrant care workers taking on roles as domestic workers, childminders, home care aides, and nursing assistances are mostly women migrating from low- and even middle-income neighboring countries (ILO 2018). More detailed discussion is found in section 4 in this paper.

Another challenge to understanding the paid care sector is posed by the lack of quality data on the conditions under which paid care workers – both native and migrant – are employed, specifically, information on wage levels, hours of work, type of employer, and whether their employment benefits and wages are adequate (see section 4 for more detail in the case of South Korea). Nonetheless, some general observations about paid care workers can be made, with the high likelihood that they experience low wages and difficult conditions (Budig and Misra 2009; ILO 2018). Domestic workers, who comprise a significant subset of paid care workers in some national contexts, are particularly vulnerable to exploitation and abuse (UNDP 2015). This vulnerability stems from the failure of labor laws to include them in their purview, which also has the consequence of excluding them from monitoring mechanisms that would yield data on their benefits and wages.

The data also lacks information about the care-relevant infrastructure, such as access to affordable transportation. An economic and social factor that shapes paid care workers' daily lives, access to affordable transportation is especially important for in-home domestic care workers or aides. They often need to scramble to get from one care recipient's home to the another while having little control over those distances. Moreover, long commuting time affects many paid care workers as it further lengthens their workday; it can also serve

as a constraint for those who need to work in more than one job in order to make ends meet.

## 3. ESTIMATING THE PAID CARE WORKFORCE IN SOUTH KOREA

This paper utilizes data from various sources: the Local Area Labor Force Survey, Child Care Statistics, Social Services Voucher Statistics, and Long-term Care Insurance Statistical Yearbook for 2009 and 2014. Section 5 describes the adjustments and assumptions to estimate the total size of the paid care workforce in detail.

#### 3.1 LOCAL AREA LABOR FORCE SURVEY

Since 2008, Statistics Korea has been conducting the Local Area Labor Force Survey to create employment statistics concerning administrative-level employment conditions and structure, including detailed information on industries and the occupations of those who are employed in them. In particular, the survey was designed to produce and disseminate detailed data on employment situations in cities and counties needed for making regional employment-related policies. The survey is conducted biannually, in April and October, with the final sample including 350,000 people aged 15 and older from 176,000 sample households in 2009, and 399,579 people aged 15 and over from 199,000 sample households in 2014.

The Local Labor Force Survey, which includes hourly wages for paid care workers, is the only data set that permits an examination of wage penalties (i.e., wage differentials between care workers and non-care workers) imposed on paid care workers by gender. However, it is important to note that the occupation codes available in the Local Labor Force Survey are limited. For instance, no distinction between home health aides and nursing assistants is available because more detailed groupings are not available to estimate the size of the total paid care workforce. Thus, I supplement this data with information drawn from Child Care Statistics, Social Services Voucher Statistics, and the Long-term Care Insurance Statistical Yearbook to facilitate a more detailed look at the number of paid care workers.

#### 3.2 CHILD CARE STATISTICS

Child Care Statistics, a survey conducted by the Ministry of Health and Welfare, include data on the types of child care facilities, the number of children who are enrolled in those facilities by children's age (0 – 5 years), the number of employees by occupation and gender, and the number 12 of children who are covered by child care subsidies<sup>2</sup> (vouchers) at the

<sup>&</sup>lt;sup>2</sup> The survey provides a nationally representative sample.

regional level.2 Despite lacking information on the characteristics and conditions of workers in the Early Education and Care (ECEC) programs in Korea, the data in Child Care Statistics is useful for understanding the gender distribution of employees and geographic distribution of child care facilities.

#### 3.3 LONG-TERM CARE INSURANCE STATISTICAL YEARBOOK

The Long-Term Care Insurance Statistical Yearbook has been published annually by the National Health Insurance Service since 2008, in connection with Korea's introduction of a social insurance scheme for long-term care (LTC) to address the population's rapid aging from increases in life expectancy and sharp declines in fertility since July 2008. The Long-Term Care Insurance Statistical Yearbook includes information on recipients (those who are 65 and older or under 65 with geriatric diseases who have received LTC) and paid caregivers, including beneficiaries of health insurance and medical aid, by district and province, the total cost of LTC benefits by qualification and types of benefits, the number of LTC institutions by types of benefits, and the number of LTC employees by occupation. The LTC insurance scheme in Korea provides coverage for everyone over the age of 65 as well as for younger people with age-related LTC needs.

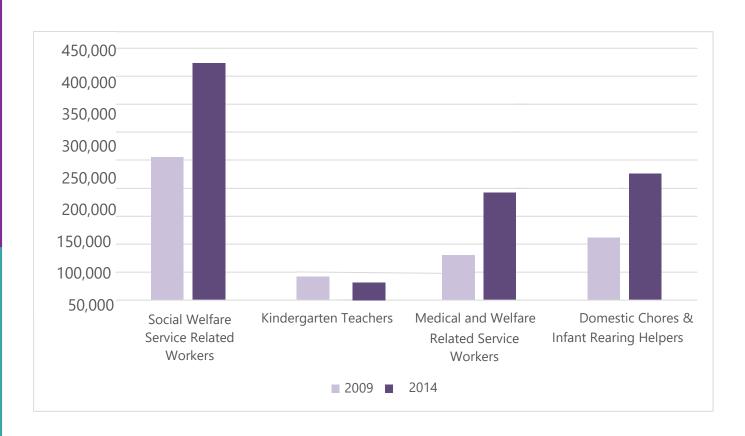
The provision of LTC has significant implications for the labor market. Since the introduction of Long-Term Care Insurance (LTCI) in Korea, the number of private providers in the LTC sector has increased dramatically from 2,600 to 5,000 institutions and 11,900 to 12,900 home-based care agencies between 2009 and 2016 (NHIS, 2016). The population coverage of LTC increased from 2.9 percent to 7.2 percent of older people between 2008 and 2016 (NHIS, 2 The survey provides a nationally representative sample. 13 2016), but it is important to note that the system only covers age-related LTC and not coverage for disability-related LTC.

#### 4. PROFILE OF THE PAID CARE WORKFORCE

#### 4.1 GENERAL PAID CAREGIVERS

Korea's paid care workforce is large and growing. As seen in Figure 1, between 2009 and 2014, the overall number of people engaged in paid care employment (based on this paper's operational definition) increased from a little less than 800,000 to over 1 million, which is equivalent to a 40 percent rise. Yet, not all care occupations saw growth; while social welfare service-related workers and medical and welfare-related service workers almost doubled from 2009 to 2014, employment of kindergarten teachers and domestic-chore and infant-rearing helpers decreased by about 10 percent as a result of constant declines in the total fertility rate (see Figure 1).

Figure 1. Size of Paid Care Workforce in 2009 and 2014, by type of occupation categories (excluding migrant care workers) from the Local Area Labor Force Survey 2009 and 2014



Source: Author's calculations, Local Area Labor Force Survey 2009 and 2014.

The gender gap in care employment is exceptionally large in each of the four occupation groups. Between 2009 and 2014, the total number of men working in care occupations increased but the percent of men compared to women decreased by about 2 percent (9 percent for men in 2009 to 7 percent for men in 2014) (see Figure 2). Without exception, women dominate in all four occupation groups, particularly among kindergarten teachers (2.1 percent in 2009 and 0.6 percent in 2014) and domestic chores and infant rearing helpers (1.5 percent in 2009 and 0.9 percent in 2014).

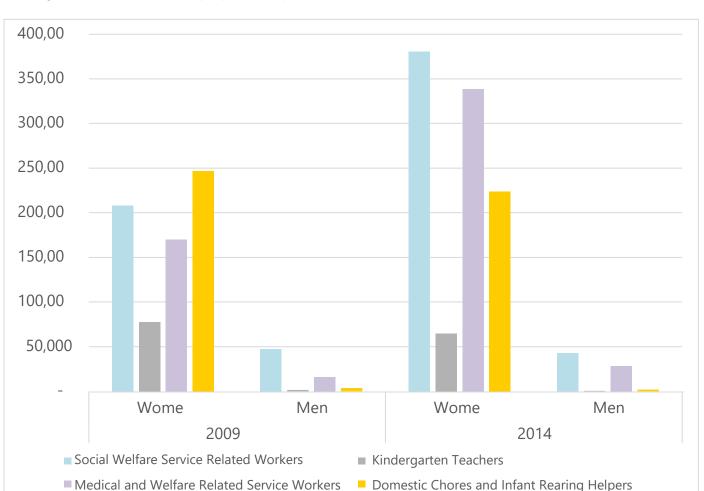


Figure 2. Care Work Employment, by Gender in 2009 and 2014

Source: Author's calculations, Local Area Labor Force Survey 2009 and 2014.

As in other developed countries, where part-time work is largely considered more precarious than full-time positions, South Korea's paid care sector has much higher rates of part time work than the non-care sector (ILO 2018). Table 1 shows the distribution of employment status within each occupation group in care employment in Korea. Overall, the trend from 2009 and 2014 seems to indicate some improvement based on the higher percentage of workers with full-time employment status. Not surprisingly, more than 70 percent of social welfare service-related workers and kindergarten teachers – occupations in which employees enjoy full legal protection, benefit from strong unions, and are considered regular workers in both 2009 and 2014 (Table 1). In particular, the share of regular employees (full-time employees) accounted for by those occupations far exceeds that of others (about 80 percent in 2009 and 90 percent in 2014). Moreover, in the case of kindergarten teachers, none of them appear in the data under the category of daily employee (hired on the spot), likely because of the nature of their work– namely, the consistency of day-to-day interactions with children required of kindergarten teachers, who

must also meet qualifications that are stricter as compared to other occupations (i.e., jobs that do not involve interacting with children). On the other hand, many medical and welfare-related service workers and domestic-chore and infant-rearing helpers have fairly low levels of full-time employment status relative to other occupations. In particular, domestic-chore and infant-rearing helpers fall under the mostly temporary employee and self-employed categories, with less than 10 percent of regular (full-time) employment status.

Table 1: Distribution of Different Types of Employment, by Occupation, in 2009 and 2014 (Total Number and Percent)

			200	9		2014				
		Social Welfare Service Related Workers	Kindergarten Teachers	Medical and Welfare Related Service Workers	Domestic Chores and Infant Rearing Helpers	Social Welfare Service Related Workers	Kindergarten Teachers	Medical and Welfare Related Service Workers	Domestic Chores & Infant Rearing Helpers	
	Regular	70.26	78.16	38.15	5.87	74.84	87.49	45.77	7.61	
	employee Temporary employee	16.53	15.58	42.84	27.4	11.45	10.61	44.93	44.27	
Percent	Daily worker	0.04	-	16.45	28.64	10.31	-	7.74	26.86	
	Employer	10.48	5.44	0.35	1.02	2.66	1.89	0.7	0.04	
	Self- employed	2.4	0.82	2.06	37.03	-	-	0.76	21.17	
	Unpaid family worker	0.29	-	0.14	0.04	0.74	-	0.1	0.08	
	All	100	100	100	100	100	100	100	100	
	Regular employee	178,151	60,756	50,558	9,214	314,871	54,881	112,644	13,991	
	Temporary employee	41,923	12,107	56,777	43,009	48,178	6,658	110,567	81,420	
Number	Daily worker	89	-	21,804	44,956	43,382	-	19,039	49,360	
	Employer	26,582	4,230	465	1,596	11,184	1,188	1,733		
	Self- employed	6,098	639	2,735	58,125	3,099	-	1,866	38,928	
	Unpaid family worker	724	-	191	55	-	-	239	149	
	All	253,567	77,732	132,530	156,955	420,714	62,727	246,088	183,926	

Since, as previously mentioned, women perform an unequal and large amount of unpaid care work, their availability for paid employment is constrained, as is the quality of employment they can access, thus reinforcing gender gaps in paid work. The undervaluation of women's unpaid care work is mirrored in the pervasive undervaluation of paid care work, leading to lower 18 wages and poor working conditions in the care sectors, in which women are overrepresented. For example, as shown in Figure 2, women in domestic chores and infant rearing helper occupation were 64 times more numerous than men in those occupations in 2009 and 106 times more in 2014.

The care sector's low wages also stem from its role as an entry point for many women who return to paid work after having reared their own children or cared for their own parents or friends. In most contexts, care workers are relatively low paid, and the pay gap varies by occupation within the care sector. Figure 3 shows the average hourly wage by occupation in 2009 and 2014, where the red horizontal lines represent the average hourly wage for all workers in 2009 and 2014. The hourly wages are CPI-adjusted and all numbers are in 2014 dollars. The average hourly wage for care workers ranged from 8 dollars to 13 dollars in 2009 and 10.5 dollars to 17 dollars in 2017, with the lowest earned by domestic-chore and infant-rearing helpers and the highest by kindergarten teachers. Compared to the average hourly wage of all workers, only kindergarten teachers in 2014 received pay higher than that average. In 2009, no group of care workers received pay higher than the average hourly wage of all workers. Again, because of the lack of recognition of unpaid care work, which translates into the undervaluation of paid care work, low wages are observed among care workers (England et al. 2002). This is particularly evident with domestic workers, as shown in Figure 3.

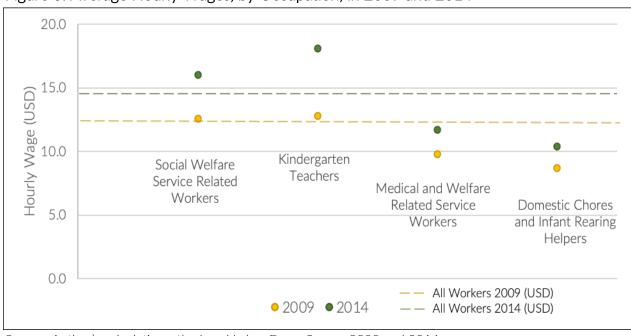


Figure 3: Average Hourly Wages, by Occupation, in 2009 and 2014

Source: Author's calculations, the Local Labor Force Survey 2009 and 2014

Due to low wages, paid care workers face severe financial challenges, including an inability to provide for their own and their families' basic needs (Colombo et al. 2011; Jang et al. 2007; Yoon et al. 2011). Thus, there is a higher percentage of care workers who must work more than one job to make ends meet. Table 2 shows that the average hours worked in second jobs is equal to or more than primary jobs across all selected care occupations in this paper.

Table 2: Average Weekly Hours of Primary Job, by Occupations and Sex, 2009 and 2014

	2009					
	All	Women	Men	All	Women	Men
Social Welfare Service-Related Workers	44.5	44.2	46.2	41.7	41.5	43.7
Kindergarten Teachers	44.9	45.0	40.8	42.2	42.2	44.5
Medical & Welfare Related Service Workers	41.4	41.0	44.6	38.7	38.4	43.3
Domestic Chores and Infant Rearing Helpers	39.5	39.6	26.7	38.0	38.0	36.7

Source: Author's calculations, the Local Labor Force Survey 2009 and 2014

In the following sections, I examine in detail the working conditions of the following types of paid care workers: paid child care workers and long-term care workers.

#### 4.2 PAID CHILD CARE WORKERS

In Korea, child care facilities can be categorized into two types: public and private. Figure shows the distribution of types of child care centers by year. Both types are subject to identical price and quality regulations, since the law sets price ceilings, child-to-teacher ratios, and operating hours. For example, the official price for use of child care facilities for children aged 3 and under is the same and all teachers must have a teaching certificate to be hired at child care centers. Despite these regulations, private facilities find loopholes and try to skirt legal requirements by charging more for special classes or school bus commuting. Another discrepancy between public and private child care centers is that teachers at public facilities receive higher pay, which helps to account for their lower turnover rate (Han et al. 2014). In sum, public child care facilities tend to charge lower effective prices and the quality of child care is guaranteed by rigorous governmental monitoring.

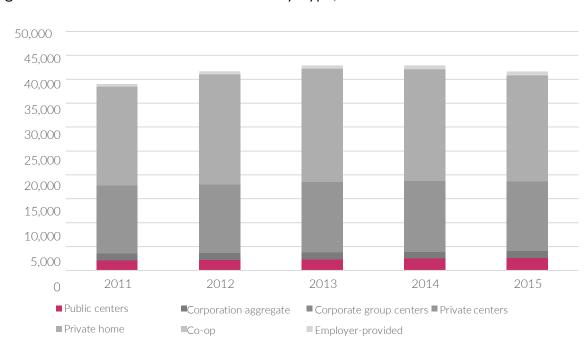


Figure 4: Number of Child Care Facilities by Type, 2011-2015

Source: Author's calculations, Child Care Statistics, 2011 – 2015.

Notes: The type of facilities categorizes by the operating body. Public centers are operated by the federal or local governments; corporation aggregates are operated by the social welfare juridical foundation; corporate group centers are operated by groups and foundation; private home is operated by an individual and the facilities are often their homes; co-ops are operated and set by parents; employer-provided facilities are operated by employers; private centers are the remainder.

The number of children using child care facilities increased from 2010 and 2011, but has decreased since 2013. The number of teachers (employees) at the child care facilities, on the other hand, has been increasing continuously since 2010. This suggests an increase in the child teacher ratio which can affect the quality of care provided.

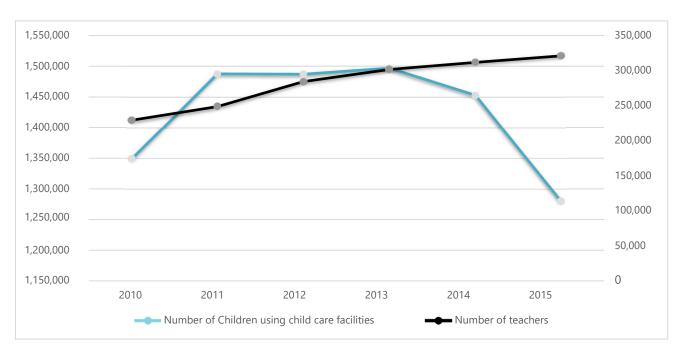


Figure 5: The Number of Children using Child Care Facilities and Teachers 2011-2015

Source: Author's Calculations, Child Care Statistics, 2011-2015

The gender distribution derived from analyzing Child Care Statistics data is similar to that shown in Figure 2 drawn from the Local Labor Force Survey: since 2011, less than 5 percent of workers engaged in child care employment have been men. It is notable that, among all workers employed in child care, the number of workers in child care facilities has been increasing at a faster rate (Figure 6) compared to kindergarten teachers (results from the Local Labor Force Survey) (Figure 2). The magnitude of the results from the two datasets are also notably different: the total size of employment encompassed by Child Care Statistics is five times greater than the total in the Local Labor Force Survey. This variance may have been caused by the different occupational definitions used in the two surveys. For example, Child Care Statistics include after-school teachers caring for older children that are absent in the Local Labor Force Survey. Unfortunately, a detailed definition of child care employment in Child Care Statistics, which would allow a direct comparison between it and the Local Labor Force Survey, is not available

350,000
250,000
200,000
150,000
0
2011
2012
2013
2014
2015
Women
Men

Figure 6: Gender Distribution of Total Child Care Employment 2011-2015

Source: The Child Care Statistics, 2011-2015

#### 4.3 LONG-TERM CARE WORKERS

Adult care, often described as long-term care, is assistance provided to people over the age of 18 who need help performing some activities of daily living (such as bathing, dressing, eating, transferring from bed to chair) owing to physical or mental disability, chronic illness, or the effects of aging. As mentioned previously, targeting the care needs of an aging population, Korea introduced in July 2008 a Long-Term Care Insurance (LTCI) system. Elderly persons (aged 65 and older) applying for long-term care are thoroughly assessed by National Health Insurance staff and physicians, who test their ability to perform 52 activities of daily living. In 2008, 4.2 percent of people aged 65 and older (214,000 people) were eligible for LTCI benefits, with an increase to 8.2 percent in 2017 (585,000 people).

Care workers under LTCI can be found in a variety of settings, from for-profit and nonprofit nursing facilities, assisted living facilities, and continuing care retirement communities to private households to group homes for people with psychological or developmental disabilities. LTCI provides the following services: home-visit care, home-visit bathing, home-visit nursing, day and night care, short-term care, welfare kits, aged care facilities, and senior congregate housing. The following occupations are included under the LTCI workforce: social welfare workers, doctors, nurses, nursing assistants, dental hygiene providers, physical therapists, care helpers (home aides), and dietitians.

Table 3 illustrates employment in Long-Term Care Insurance by occupation and type of care (in-home or institutional) drawn from the Long-Term Care Insurance Statistical Yearbook from 2011 to 2014. To be consistent with the definition of "paid care workers" employed

in other datasets, only three occupations are considered in this paper – social welfare workers, nurse assistants, and care helpers (home aides) – as constituting the core long-term care workers. To provide the full picture of occupational distribution in long-term care insurance, Table 3 also includes non-core occupations such as doctors, nurses, and others. It is notable that care helpers (home aides) have made up an exceptionally large proportion of long-term care workers for both in-home and institutional care across years. Over 91 percent of long-term care workers have been accounted for by care helpers (home aides); for in-home care, about 97 percent of long-term care workers are care helpers while the corresponding figure for institutional care is 77 percent (Table 3).

The difficult physical and emotional labor that paid care work entails is rarely acknowledged in the terms and conditions of workers' employment. Paid care workers suffer from low compensation and uncertain and unpredictable hours. Survey data from 2013, based on 248 selected institutional long-term care facilities, find that care helpers (home aides) work on average 185 hours per month and are paid about 6 dollars per hour (Kwon and Hong 2016). Assuming an 8-hour-a-day work schedule, many care helpers work at least 160 hours per month.

Another study (Seok et al. 2015) shows the intensity of the work undertaken by care helpers in long-term institutional settings. On average, they work 188 hours per month and they are often required to work continuously for 24 hours. The intensity of work not only comes from working long hours, but also from the number of care recipients to whom each worker has to attend. On average, there are 10 patients/customers per care helper.

Table 3: Long-Term Care Insurance Employment by Occupation and Type, 2011-2014

	All				In-home			Facilities				
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
					Care Oc	cupations						
Social welfare workers	6,133	6,751	7,506	11,298	3,224	3,424	3,828	6,623	3,059	3,459	3,809	4,817
Nurse assistants	5,859	6,560	7,552	8,241	1,499	1,546	1,838	2,073	2,776	5,427	6,190	6,752
Care helper (home aides)	232,639	233,459	252,663	266,538	196,784	192,830	206,971	216,358	39,902	45,234	51,449	56,072
All	244,631	246,770	267,721	286,077	201,507	197,800	212,637	225,054	45,737	54,120	61,448	67,641
				Ex	tended Car	re Occupati	ions					
Doctors	1,081	1,142	1,233	1,324	62	71	83	94	1,038	1,104	1,194	1,288
Nurses	2,838	2,735	2,627	2,683	1,331	1,310	1,262	1,213	1,633	1,552	1,498	1,575
Dental hygiene providers	7	7	4	5	5	5	4	5	2	2	-	-
Physical therapists	1,530	1,626	1,740	1,813	200	219	213	225	1,396	1,474	1,593	1,668
Dietitian	776	835	918	987	45	45	48	45	740	796	875	944
All	6,232	6,345	6,522	6,812	1,643	1,650	1,610	1,582	4,809	4,928	5,160	5,475

Source: The Long-Term Care Insurance Statistical Yearbook 2011-2014

#### 4.4 MIGRANT PAID CARE WORKERS

The physical, emotional, and psychological demands of care work means that paid care work is often a "last resort" for many without access to other job opportunities – a profile often matched by migrants. The role of migrant care workers has received greater attention in recent years, in which the concept of "global care chains" has emerged to characterize the linkages between people and families across the globe involved in paid and unpaid care work (Hochschild 2000; Yeats 2012). In more affluent countries, low-wage care work is considered one of the few employment avenues open to immigrants. For care workers, many migrate (for the short- and long-term) to developed countries to seek higher wages, leaving their own families in their home countries. Migrant care workers take on roles as domestic workers, childminders, care helpers, or home care aides in foreign countries.

The growing need in Korea for additional care resources for children, the frail elderly, the sick, and disabled persons as well as for everyday domestic work as a result of aging has posed increasingly difficult policy challenges for the redistribution of care responsibility among the government, market, and family. Since the mid-2000s, the Korean government has tried to address the care crisis by extending labor market access to non-natives such as immigrants and migrants.

In 1990, Korea's immigration policy was so restrictive that the estimated immigrant population including the undocumented was only about 0.1 percent of the total population (about 50,000). However, this population has grown fast since then, rising to almost 1.8 million in less than two decades (KIS 2015). Regarding migrant care workers, Korea has developed an ethnospecific background (so-called "co-ethnic migrants") receive explicit privileges. Over 85 percent of coethnic migrants are Chinese with Korean origins (KIS 2015).

Table 4 compares the characteristics of Korean native paid care workers to migrant care workers using the information from the report by the Korean Alliance of Home and Personal Care Workers (2017). Compared to Korean native care workers, migrant care workers tend to be older, likely because it is easier for a Chinese person with Korean origins to receive a visa to work in Korea if she is aged 60 and older. Precarious migrant status frequently leads to poor working conditions. This is particularly the case among live-in personal care workers who are more likely to work longer hours, as shown in Table 4. Evidence also suggests important wage differentials between migrant and native domestic workers (Tomei and Belser 2011) but no official wage data is available.

Table 4: Characteristics of Korean Native Care Workers vs Migrant Care Workers

	Korean Native Care Workers	Migrant Care Workers
Size	300,000 - 600,000	30,000 - 80,000
Occupations	Domestic helper, childminder, elder care helper, and others	Domestic helper, a carer for children, the frail elderly, and pregnant women, and others
Ages	Late 40s - 60s	50s and 60s
Education	70 percent of them are high school graduates	Varies from primary school to college
Previous jobs	Housewife, work in restaurant, cleaning, manufacturing	Farming, cleaning, restaurant, housewife
Hours	2-4 hours per client/customer	6 days a week, live-in personal care workers, about 16 hours a day

Source: The Korean Alliance of Home and Personal Care Workers, 2017, "Report on migrant workers and policies of their rights.", page 81.

#### 5. TOTAL ESTIMATES OF PAID CARE WORKERS

#### 5.1 TOTAL EMPLOYMENT OF PAID CARE WORKERS

Table 5 shows the total employment of paid care workers from the Local Area Labor Survey. As previously explained, the results from the Local Area Labor Survey are most comprehensive and inclusive but the dataset does not provide detailed information on occupations. In order to calculate the total size of paid care workers in Korea, only four occupations in the Local Area Labor Survey were considered - social welfare service-related workers, medical and welfare related service workers, kindergarten teachers and domestic chores and infant rearing helpers.

Table 5: Total Employment of Paid Care Workers in 2014

			Number of Employees		
			All	Women	Men
		All Care Workers	1,081,500	1,007,400	74,000
	Local Area Labor Survey	Social Welfare Service Related Workers	423,500	380,600	42,900
004.4		Kindergarten Teachers	65,100	64,700	400
2014		Medical and Welfare Related Service Workers	367,000	338,400	28,600
		Domestic Chores and Infant Rearing Helpers	225,900	223,700	2,100

#### 5.2 MEDIAN WAGES OF PAID CARE WORKERS

Monthly average earnings for paid care workers are solely drawn from the Local Area Labor Survey because of lack of relevant information in the other datasets (see Table 6).

Table 6: Median Monthly Earnings of Paid Care Workers in 2014

Monthly Earnings (in 2014 US \$)

2014 Local Area Labor Survey	All	Women	Men
All workers (employees)	2,044.86	1,466.24	2,483.85
Social Welfare Service-Related Workers	1,496.33	1,411.74	2,151.47
Kindergarten Teachers	1,715.78	1,711.28	2,398.81
Medical and Welfare Related Service Workers	921.01	900.37	1,171.83
Domestic Chores and Infant Rearing Helpers	758.53	760.37	511.65

#### 5.3 AVERAGE HOURS OF PAID CARE WORKERS

Likewise, average hours that paid care workers spend on work are not easily accessible from the different datasets. Therefore, the average hours of paid care workers shown in Table 7 are drawn from the 2014 Local Area Labor Survey.

Table 7: Average Weekly Hours of Paid Care Workers In 2014

	Weekly Hours of Work			
2014 Local Area Labor Survey	All	Women	Men	
All workers (employees)	43.2	40.2	45.5	
Social Welfare Service Related Workers	41.3	41.0	43.3	
Kindergarten Teachers	42.0	42.0	44.5	
Medical and Welfare Related Service Workers	36.4	36.3	38.0	
Domestic Chores and Infant Rearing Helpers	34.8	34.8	35.1	

#### 6. CONCLUSION

This paper calls attention to the urgent question of "who will provide for Korea's increasing care needs in the future?" The numbers of paid care workers are growing at much faster

rates than 31 ever but, thus far, greater demand has not been accompanied by sustainable working conditions. Instead, many care occupations are viewed as an extension of women's care roles within their own homes, and as a result, carry with them low status and a lack of social recognition. Some occupations are closely associated with women's presumed inherent abilities and predispositions such that they are assumed to be low-skilled, thus justifying low rates of pay. A disproportionate number of these jobs is taken up by women who may be further marginalized by their race, ethnicity, or migration status.

It is important to make paid care workers visible to societies that, like Korea's, increasingly depend on them, and insist that their value be recognized in the form of fair working conditions. The size, working conditions, and levels of pay of care workers are closely related to the coverage and quality of care services in education, health, and social work, including early childhood care and education and long-term care. Poor job quality for care workers leads to poor quality care work. This is harmful for the well-being of both care recipients and caregivers.

This analysis has depicted the substantial number of paid care workers in Korea who contend with limited benefits and other challenging conditions. A critical inference that may be drawn from this study concerns the difference between public and private provision of care. Public investment in quality care services tends to improve the working conditions of care workers (thereby benefiting care recipients), and unregulated private provision tends to worsen them. For instance, in terms of child care, there was higher demand for public child care centers as compared to private ones, evidencing the effectiveness of quality control measures taken at public institutions. This is just one example among many suggesting that the government and public sector should drive the effort to meet the multifaceted challenges posed by the growing demand for care work.

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