



Care-Focused Empirical Macro for Policy Analysis: Estimating the Care Economy (Part 1)

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Part I: Accounting for Unpaid Care Work

Part I: Outline

- I. Definition of unpaid care work
- II. Valuating and estimating unpaid care work
 - a) Measurement issues: Time use and labor force (wage/occupation) data
 - b) Accounting for the unpaid care sector
- III. Example: Estimating the unpaid care sector of South Korea

I. Defining Unpaid Care Work

A. Defining Work in the Household: Use of 'Third Party' Criterion

Introduced by Margaret Reid (1934):

- [i] if an activity is of such character that it might be delegated to a paid worker, then that activity shall be deemed productive...
- Household production...consists of those unpaid activities which are carried on, by and for the members, which activities might be replaced by market goods, or paid services, if circumstances such as income, market conditions, and personal inclinations permit the service being delegated to someone outside the household group (Reid 1934, 11). (in Beneria et al 2015, Chap 5).

B. Defining Unpaid Care Work

- What is **care work**?
 - activities that meet “the physical, psychological, and emotional needs of adults and children, old and young, frail and able-bodied” (ILO 2018, p. 6)
 - 2 types: Direct *personal* care and indirect care activities (*housework*)
 - *Performed by unpaid and paid* care labor
- What is **unpaid care work**?
 - Unpaid care work is provided without a monetary reward by *unpaid carers*
 - In 2013, the ICLS (International Conference of Labor Statisticians) passed a resolution on international labour statistic convention that *unpaid care is work*

Narrow vs. Broad Definitions of Unpaid Care Work

- **Narrow definition:** direct care activities performed without pay that provide relational/nurturing/personal service to meet the needs of dependent persons.

Ex: Childcare, care for the elderly, sick/disabled care

- **Broader definition:** direct and indirect care activities performed without pay involving not only personal/relational care services but also provision of services and goods which nurture and sustain other household including dependents including
 - Ex: Childcare, eldercare, cooking, doing laundry, cleaning house, shopping, sick care, gathering water, gathering fuel, etc.

C. The Unpaid Care Sector

- Aggregation of the value of goods and services performed to meet the physical, psychological and emotional needs of dependents.
- Heavily relies on **unpaid** labor provided mainly by women
- Comprised of **non-market** goods and services produced in households as well as communities
- Outside the **System of National Accounts (SNA)**
- Needs and issues are neglected in policy discourses, impact evaluations, and policy appraisals

UNPAID CARE WORK

16.4 BILLION

hours/day are spent
on unpaid care work



Equal to:

2 BILLION

people working
8 hours/day
for free

GENDER GAP



3 IN 4

people
performing
unpaid care
work are women

The pace of
change is so
slow that it
will take

**210
YEARS**

to close the
gap between
men and
women

Source: ILO (2018)

Unpaid Work recognized as part of the New Definition of Work

- The 2013 ICLS passed a resolution that significantly redefines the concepts of work and provides a framework for their measurement

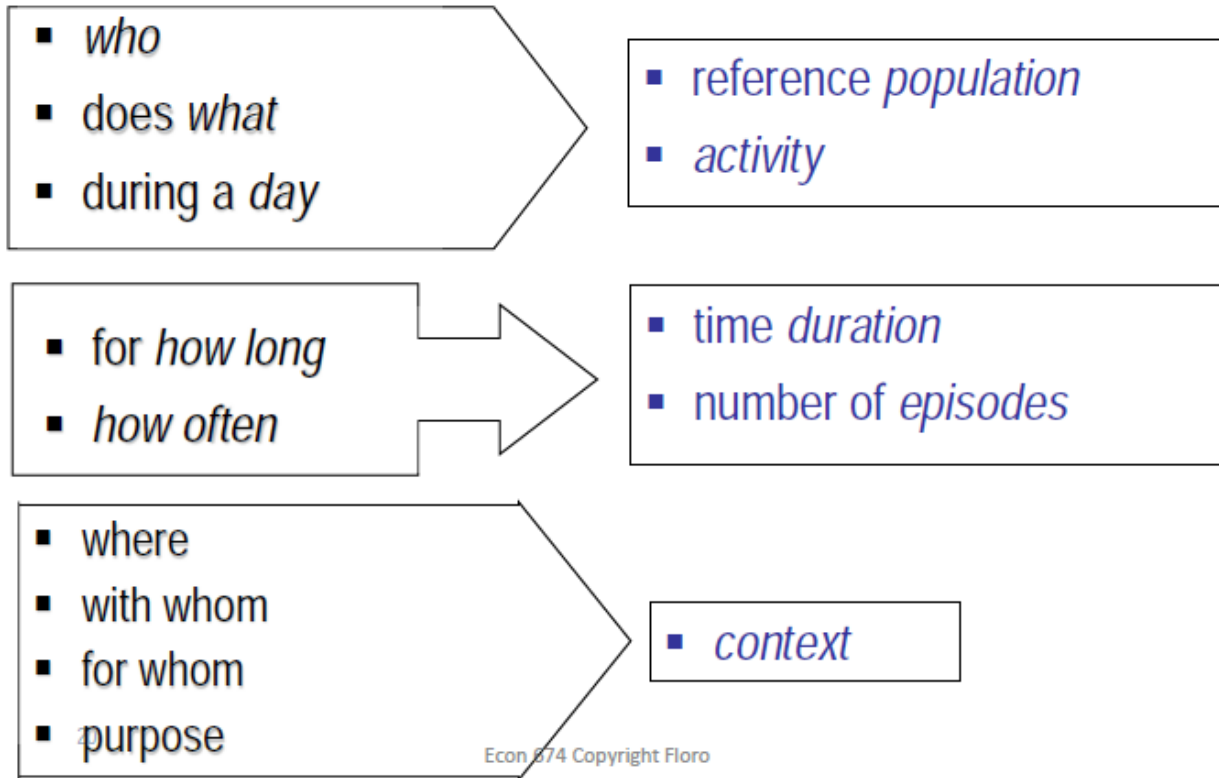
See: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_230304.pdf

- The 19th ICLS Resolution 1 identifies 5 types of work that are done by persons over 15 years of age:
 1. **Unpaid own-production work:** provides goods or services for use by own self/household;
 2. **Unpaid trainee work:** acquires skills or workplace experience;
 3. **Employment work:** done for pay/profit
 4. **Unpaid volunteer work:** helps others;
 5. **Other unpaid work:** includes state-mandated work like community service and unpaid work of prisoners and military or compulsory work required to receive social benefit (ILO 2018; Beneria et al Chap 5).

II. Valuating and Estimating Unpaid Care Work

- **Unpaid work** does not receive any direct remuneration, so it's not recognized as "important" in economic discourses
- Not considered as "work" in standard input-output (IO) tables and macroeconomic models
- Generally not counted in System of National Accounts (outside GDP)
 - *Except subsistence production and gathering of water and fuel.
- In labor market activity classification, many care services (e.g. domestic work) still considered as "low" skilled
- *Unpaid care work remains invisible in macroeconomic discourses and macropolicy debates*
- **NEED TO MAKE THE UNPAID CARE SECTOR VISIBLE.**

A. Main Data Source: Time Use Surveys (Time Accounts)



- Now collected in more than 100 countries
- Primarily provide data on:
 - Unpaid informal work
 - Subsistence production
 - Volunteer work
 - Household and care work

REVIEW: What Time Use Statistics (TUS) Tell Us?

- Information on how people spend their time on different activities: SNA, Non-SNA, non-economic activities (“individual disposable time”)
- **Quantitative summaries of how individuals spend or allocate their time over a specified time period** – typically over the 24 hours of a day or over 7 days of a week on different activities
- Three main components:
 1. Background information on households & individuals,
 2. Type of activity etc. and time spent per activity
 3. Context of activities: location, with whom, etc.

Selection of Activities considered Unpaid Care

- Activities in Time Use Surveys are generally categorized using the detailed, comprehensive, systematic list called International Classification of Time Use Statistics (ICATUS):
 - Guides the design of survey instruments and selection of methods
 - Guides the interviewer in eliciting responses (level of detail required for the survey objectives)
 - Basis for developing coding and entering data

<https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h-ICATUS-2016-13-February-2017-E.pdf>

ICATUS (2016)

Intended destination of production	for own final use			for use by others							
Forms of work	Own-use production work			Employment (work for pay or profit)			Unpaid trainee work	Other work activities	Volunteer work		
	of services	of goods	in market and non-market units						in households producing		
			goods						services	goods	services
ICATUS 2016	4. Unpaid caregiving services for household and family members	3. Unpaid domestic services for household and family members	2. Production of goods for own final use	1. Employment and related activities			5. Unpaid volunteer, trainee and other unpaid work				
				11. Employment in corporations, government and non-profit institutions	12. Employment in household enterprises to produce goods	13. Employment in households and household enterprises to provide services	53. Unpaid trainee work and related activities	59. Other unpaid work activities	51. Unpaid direct volunteering for other households**	52. Unpaid community - and organization-based volunteering**	
Type of work	Unpaid work (unpaid care work, domestic work and production of goods for own final use*)						Unpaid work (community, volunteer, trainee work)				
Relation to 2008 SNA				Activities within the SNA production boundary							
				Activities inside the SNA General production boundary							

ICATUS Main Activity Categories

Major division Activity

- 1 Employment and related activities
- 2 Production of goods for own final use
- 3 Unpaid domestic services for household and family members
- 4 Unpaid caregiving services for household and family members
- 5 Unpaid volunteer, trainee and other unpaid work
- 6 Learning
- 7 Socializing& communication, community participation &religious practice
- 8 Culture, leisure, mass-media and sports practices
- 9 Self-care and maintenance

2	Production of goods for own final use
21	Agriculture, forestry, fishing and mining for own final use
22	Making and processing goods for own final use
23	Construction activities for own final use
24	Supplying water and fuel for own household or for own final use
25	Travelling, moving, transporting or accompanying goods or persons related to own-use production of goods

3	Unpaid domestic services for household and family members
31	Food and meals management and preparation
32	Cleaning and maintaining of own dwelling and surroundings
33	Do-it-yourself decoration, maintenance and repair
34	Care and maintenance of textiles and footwear
35	Household management for own final use
36	Pet care
37	Shopping for own household and family members
38	Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and family members
39	Other unpaid domestic services for household and family members

4	Unpaid caregiving services for household and family members
41	Childcare and instruction
42	Care for dependent adults
43	Help to non-dependent adult household and family members
44	Travelling and accompanying goods or persons related to unpaid caregiving services for household and family members
49	Other activities related to unpaid caregiving services for household and family members

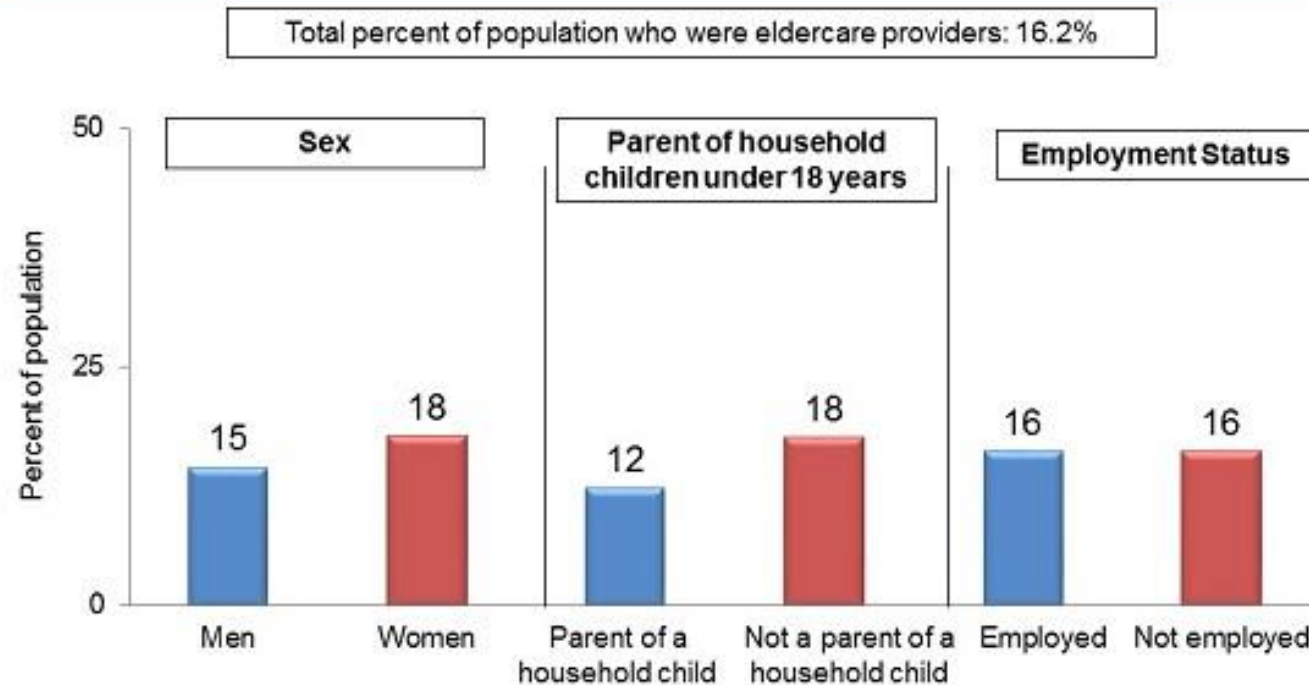
5	Unpaid volunteer, trainee and other unpaid work
51	Unpaid direct volunteering for other households
52	Unpaid community- and organization-based volunteering
53	Unpaid trainee work and related activities
54	Travelling time related to unpaid volunteer, trainee and other unpaid work
59	Other unpaid work activities

Other Data Sources for Measuring Unpaid Care Sector

- Population Census- number of women and men aged 16 and older, by cities and provinces
- Specialized Household surveys or Time Use Survey Modules e.g. eldercare module in American Time Use Survey

Example: 2014-15 ATUS Eldercare Module Summary Data

Percent of population who were eldercare providers



NOTE: Data include all noninstitutionalized persons age 15 and over. Eldercare providers are those who in the previous 3 to 4 months cared for someone with a condition related to aging. Estimates were calculated for persons who cared for at least one person age 65 or over. Data are annual averages for 2014-15.

Sessions 11 & 12: Estimating the Care Economy

<https://www.bls.gov/tus/charts/eldercare.htm>

SOURCE: Bureau of Labor Statistics, American Time Use Survey

B. Methodological Issues

- Objectives, concepts, and methods not yet standardized (i.e. still in the experimental stages) in many countries
- Classification of time use activities not yet harmonized
- Underestimation of emotional/relational work performed as care and 'supervisory care' (passive childminding, etc.) – use of context variables, secondary activity data
- Quality of data not always good
- Consideration of weekdays/weekends
- Accounting for seasonal variation (rural households)
- Having a watch / conceptualization of time
- Underutilization of time use data – little analysis for policy use

Methods for Valuing Unpaid Care Labor: A Review

1. Valuation of labor **input**
 - A. Opportunity cost
 - B. Replacement wage rate
 - Average wage
 - Generalist wage (e.g. skilled, unskilled)
 - Specialist wage (e.g. plumber, cook, babysitter)
2. Valuation of **output** generated by unpaid labor
 - Converting [labor time input + non-labor inputs] into output

1B. Replacement Wage: Generalist Method

- Also known as the “Global Substitute” approach
- An unpaid activity is considered work as long as we can hire someone else in the market to perform it
- The monetary value then is equal to the cost of paying another person to do the work

1B. Replacement Wage: Specialist Method

- The monetary value is equal to the wage of a specialist for a specific task (e.g. a “specialist wage”)
- Ex: How much will a cook **get paid**? This is then how the household cooking is valued.

III. Case Study: South Korea

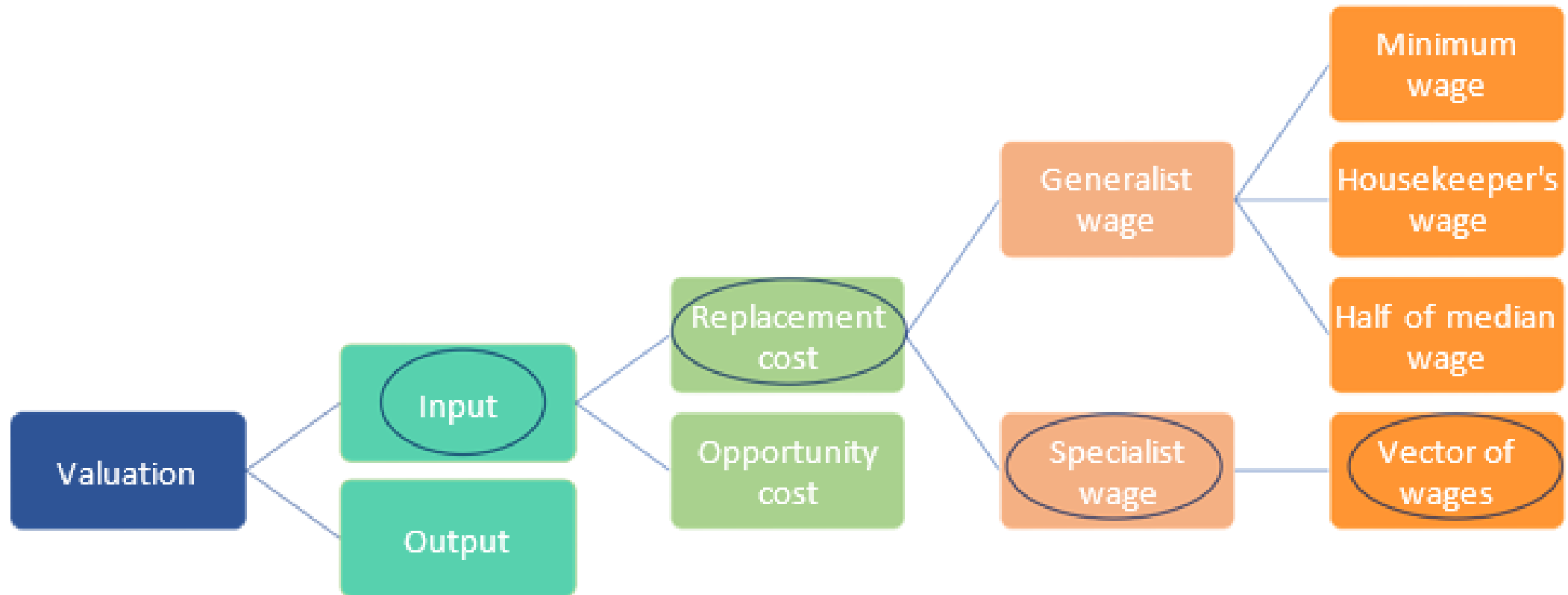
Drawn from Jooyeoun Suh 2019, “Methodology for Estimating the Paid Care Sector in South Korea,” Care Work and the Economy Project, American University, forthcoming

- DATA SOURCE: Korean Time Use Survey (KTUS):
 - 2009: 8,400 households (21,000 individuals)
 - 2014: 11,986 households (53,976 individuals)
 - Recall interview method – day before and day of interview
 - Activity diary (ages 10+) – primary and secondary activities, 10-min intervals

Appendix Table 1. Time Devoted to Care Work by Gender (2009 and 2014 KTUS)

			Daily Minutes		Daily Hours		Monthly Minutes		Monthly Hours	
			2009	2014	2009	2014	2009	2014	2009	2014
Women	Child care	Physical care for young children (aged 0-9)	17.27	19.57	0.29	0.33	518.1	587.1	8.64	9.79
		Developmental care for young children (aged 0-9)	9.024	10.58	0.15	0.18	270.7	317.4	4.51	5.29
		Physical care for older children (aged 10-17)	7.383	2.352	0.12	0.04	221.5	70.6	3.69	1.18
		Developmental care for older children (aged 10-17)	5.31	1.223	0.09	0.02	159.3	36.7	2.66	0.61
		<i>Secondary child care</i>	4.341	1.347	0.07	0.02	130.2	40.4	2.17	0.67
		<i>Time with children</i>	4.245	11.69	0.07	0.19	127.4	350.7	2.12	5.85
	Adult care	Care for spouse	3.371	1.705	0.06	0.03	101.1	51.2	1.69	0.85
		Care for parents	1.509	0.365	0.03	0.01	45.3	11.0	0.75	0.18
		Care for other adults	1.645	4.11	0.03	0.07	49.4	123.3	0.82	2.06
	Travel related to care for children and adults		6.549	5.459	0.11	0.09	196.5	163.8	3.27	2.73
	Total care work		60.6	58.4	1.01	0.97	1819.4	1752.0	30.32	29.20

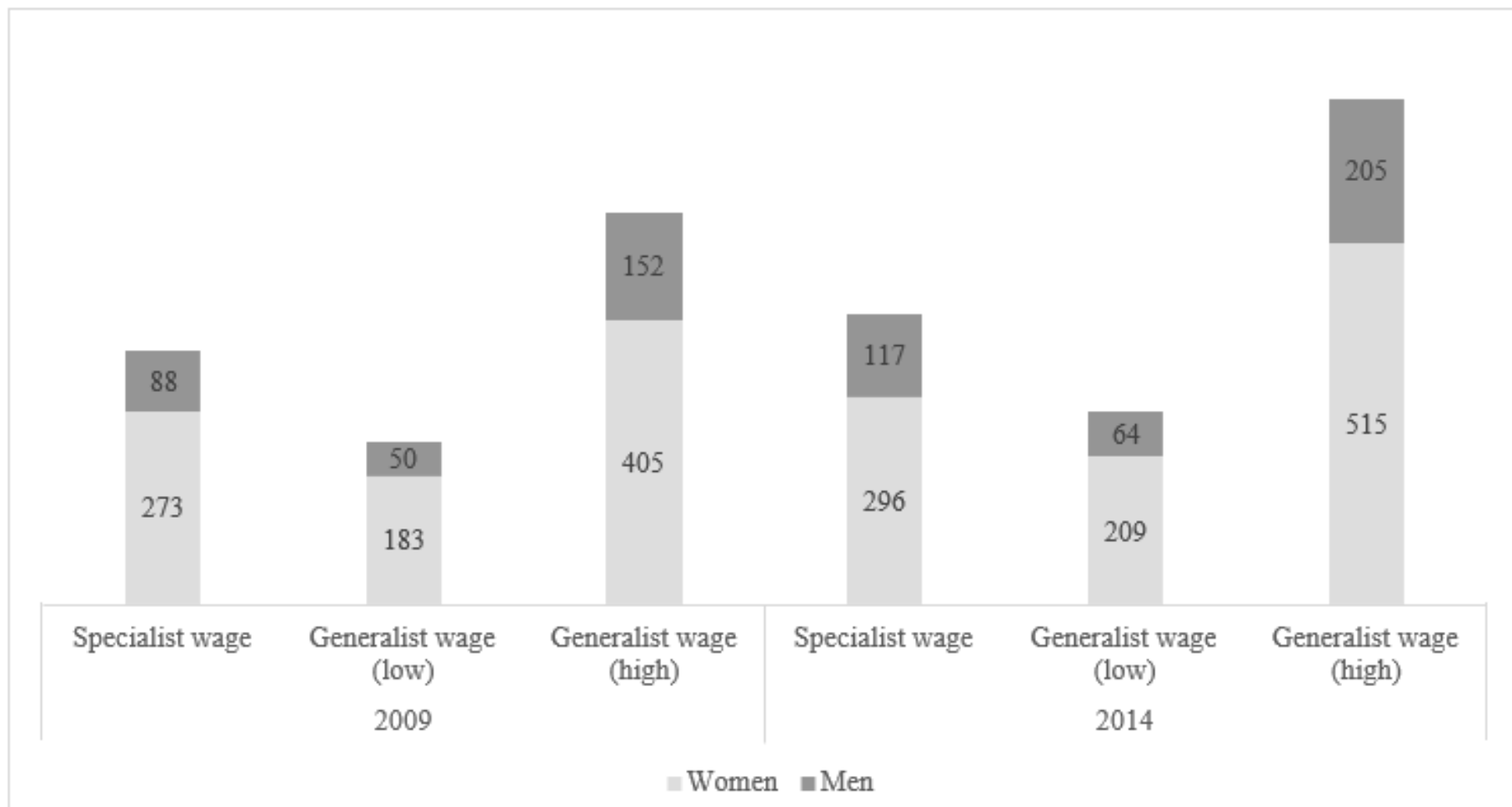
Selecting the Method for Valuing Unpaid Care Work



Appendix Table 3. Median Specialist Wages for Interactive and Supervisory Care, 2009 and 2014 (in dollars)

	Care Category	Occupation code	2009						2014			
			Monthly Wage (in 2009 dollars)		Hourly Wage (in 2009 dollars)		CPI-adjusted (in 2014 dollars)		Monthly Wage (in 2014 dollars)		Hourly Wage (in 2014 dollars)	
			Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Generalist Wage												
Lower Bound	Unpaid Care Work	Domestic chores and infant rearing help (951)	1,940	1,210	7.81	6.32	8.77	7.09	1,419	1,084	9.5	8.4
Upper Bound	Unpaid Care Work	Professionals in education (25)	4,283	2,421	23.95	13.99	26.89	15.70	4,817	2,858	31.7	19.1
Specialist Wage												
Child care	Physical care for children aged 0 - 9	Health, social welfare and religion related occupations (24)	3,762	2,032	19.84	10.75	22.27	12.07	4,150	2,250	24.0	13.3
	Developmental care for children aged 0 - 9	Professionals in education (25)	4,283	2,421	23.95	13.99	26.89	15.70	4,817	2,858	31.7	19.1
	Physical care for children aged 10 - 17	Health, social welfare and religion related occupations (24)	3,762	2,032	19.84	10.75	22.27	12.07	4,150	2,250	24.0	13.3
	Developmental care for children aged 10 - 17	Professionals in education (25)	4,283	2,421	23.95	13.99	26.89	15.70	4,817	2,858	31.7	19.1
	Secondary child care (not-overlapped with any primary child care activities)	Domestic chores and infant rearing help (951)	1,940	1,210	7.81	6.32	8.77	7.09	1,419	1,084	9.5	8.4

Average Annual Amount and Value of Time Devoted to Unpaid Care Work in Korea



Source:
Suh (2019)

Value of Unpaid Care Work as a Share of GDP in Korea



Source: Suh (2019)

Highlights on the Korean Unpaid Care Sector for 2009 and 2014

- Value of unpaid care work by adults aged 18 and older ranges from 22% to 59% of GDP, depending on the market wage
- Adults provided about 87 million hours of unpaid care per day in 2009 and 92 million hours in 2014 (11 million workers assuming 8-hour shifts)
- Continued aging of the population and decline in fertility rates signal growth in care needs AND an increasing difficulty of households to meet these care demands