#### Valuing the Invaluables in South Korea

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**AARP** 

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If the birthrate remains at **1.19** children per woman, South Korea could face natural extinction by **2750**.



Source: http://blogs.wsj.com/korearealtime/2014/08/26/ south-korea-birthrate-hits-lowest-on-record/

BROOKINGS

#### Korean population aging fast Seniors aged 65 or older made up more than 12 percent of all Koreans this year, raising concerns the fast-aging population could weigh on the nation's future economy. 37.4 32.3 32.3 32.3 (Ratio of people aged 65 or older) 30 24.3 20 15.7 11.0 12.2 10 1990 2000 2010 2013 2020 2030 2040 Source: Statistics Korea Graphic by Han Chang-duk

## Median Age

$$19.6 (1975) \Longrightarrow 41.3 (2018)$$

#### Goal: the Visibility of Care

- To demonstrate the quantitative significance of unpaid care to the Korean economy and help develop better care policy.
- ▶ How to best measure unpaid care work?
- How to best value unpaid care work?
- What are the policy implications of these estimates?

### Why Important to Value Unpaid Care Work?

- ► Failure to assign a value to this work results in profound mismeasurement of living standards and economic output.
  - Family A vs. Family B, same income but...
- Public policies continue to define economic welfare as well as eligibility for public assistance entirely in terms of family income.
- Unpaid work not adequately measured in the current national accounting system.

What's included in current GDP?

Lots of things

#### What's included in current GDP?

- Lots of things
- ► Illicit activities Drugs, prostitution, alcohol and tobacco smuggling, and tax evasion

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#### National accounts

### Sex, drugs and GDP

Italy's inclusion of illicit activities in its figures excites much interest

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# Why Gross Domestic Product (or **GDP**) is Grossly Inaccurate

by Samuel Rines



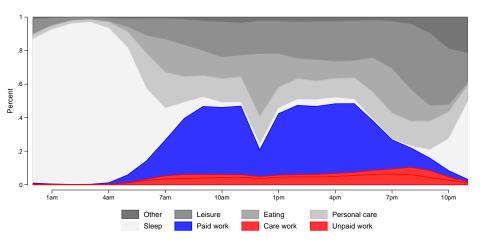




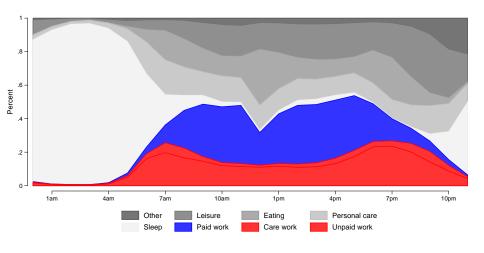
#### Data and Sample

- ▶ 2014 Korea Time Use Survey data
  - Cross-sectional since 1999 (every 5 years)
  - All household members aged 10 and older
  - Two consecutive days
- Survey Report on Labor Conditions by Employment Type
  - Cross-sectional annually
  - Sample 33,000 establishments
  - Information on wage, working hours, working days, (fairly) detailed occupation code
- Census Population Estimates

#### Men vs. Women



#### Men vs. Women



## Time Diary Survey - Korea

#### ≪예시≫ 나리 엄마의 시간일지(저녁8시~밤11시)

		1. 주로 한 행동	2. 행위장소/이동수단	3. 함께 한 사람	4. 동시에 한 행동	
		주된 행동을 10분 간격으로 기입합니다.	0.본인 집     5.걸어서       1.직장·학교     6.자전거       2남의 집     7.개인교통       (부모남맥동)     8.공공교통       3.식당,주점     9.기타교통       4.기타 장소	1. 혼자 2.배우자 3.만10세미만 (손)자녀 4.만10세이상 (손)자녀 5.부모 9.기타 아는 사람	주로 한 행동과 동시에 다른 행동을 한 경우 기입합니다.	
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127	9시	라일 먹기	0	2, 3		127
128	10	전화 통화(친구)		/		128
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### Definition of Unpaid Care Work

- Interactive vs. Supervisory vs. Support
- ▶ Interactive (direct) care work: *face-to-face* or *hands-on* interaction between care providers and care recipients.
- ► Supervisory care: responsible for supervising or being available to someone who needs assistance.
- Support care: housework, cooking and cleaning, may benefit other family members.

#### Valuation Method

- Within input methods, the National Academy of Science (NAS) recommends replacement cost, rather than opportunity cost.
- ▶ If the household produced its own goods and services, what would it cost to purchase comparable goods and services?
- Multiplying hours of unpaid care work by a generalist wage or a vector of specialist wages provides a reasonable lower bound estimate.

#### Wages to Consider

Health, social welfare, religion related occupations

Domestic chores and infant rearing help

Transport and leisure service occupations

Cooking and food service occupations

Textile, clothing and leather related trade occupations

Cleaners and sanitation workers

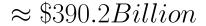
Manual workers

Household chores and cooking attendants

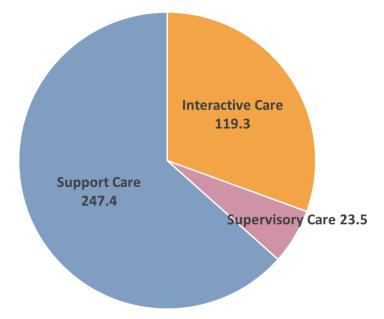
Administrative and business support management occupations

### Value of Unpaid Labor in 2014

Child care (physical, developmental, travel, secondary, with whom) Adult care Cooking and cleaning Doing laundry Home repairs and maintenance Shopping Organizing and managing Other household chores Travel



### 2014 Value of Unpaid Labor (\$ Billion)



### How Unpaid Care Work Compares

- 11 million workers would be needed on a given day (working 8 hour shifts) to provide paid replacement for unpaid care work.
- But only little over 1 million workers in paid care industries.
- ▶ 28% of GDP.

#### Limitations/Extensions

- Adequate supervisory care?
- Quality-adjusted wages?
- ▶ Population 20 and older, what about contribution by younger population?

# Thank you!

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