RIETI-JSTAR Symposium

Japan's Future as a Super Aging Society: International comparison of JSTAR datasets

Handout

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December 12, 2014

Research Institute of Economy, Trade and Industry (RIETI)

http://www.rieti.go.jp/en/index.html

Research Findings Using the China Health and Retirement Longitudinal Study (CHARLS)

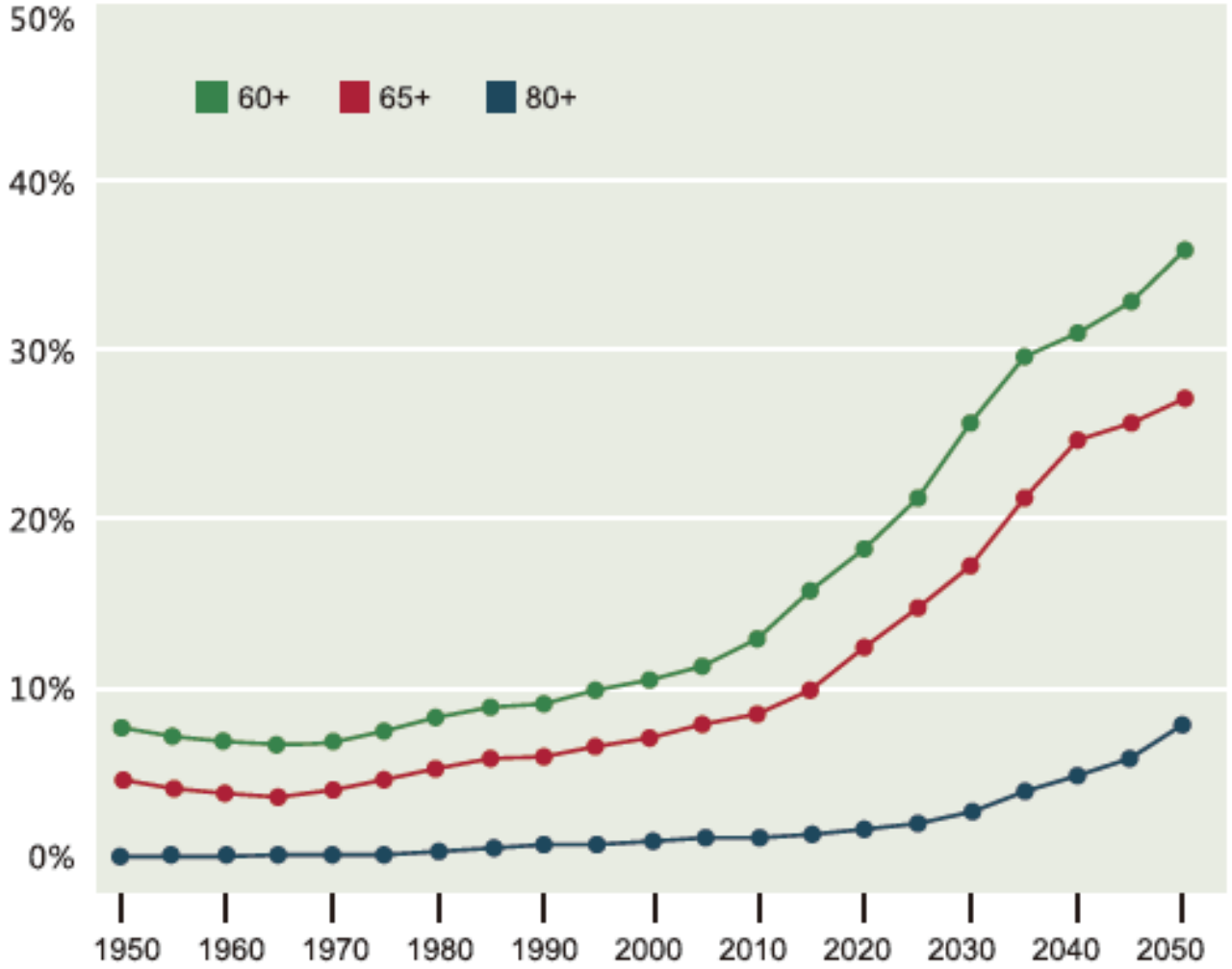
Albert Park
Hong Kong University of Science and Technology

Graying nation.Nearly a quarter of China's elderly live in poverty.

M Hvistendahl Science 2013;341:831-832

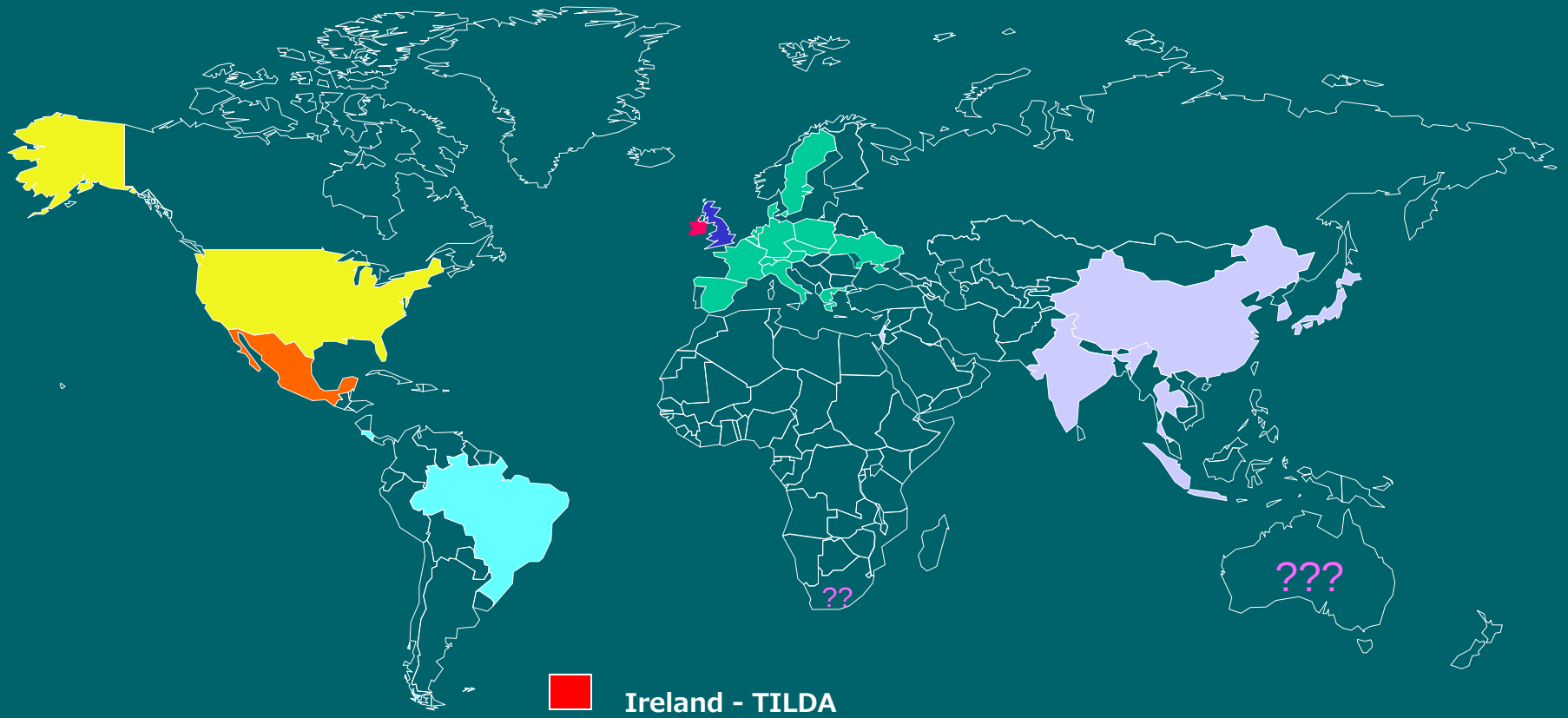
Published by AAAS

Figure 1.1. Elderly Share of Population in China, 1950 to 2050



Source: UN, 2010 Medium variant

HRS Global Coverage--2014



Health and Retirement Study (HRS)

Asian HRS Studies

South American Studies

Ireland - TILDA

Mexican HRS (MHAS)

UK Studies– ELSA, Thistles, Nicola

Survey of Health, Ageing and Retirement in Europe (SHARE)

The Asian Landscape in Comparable HRS Data Collection

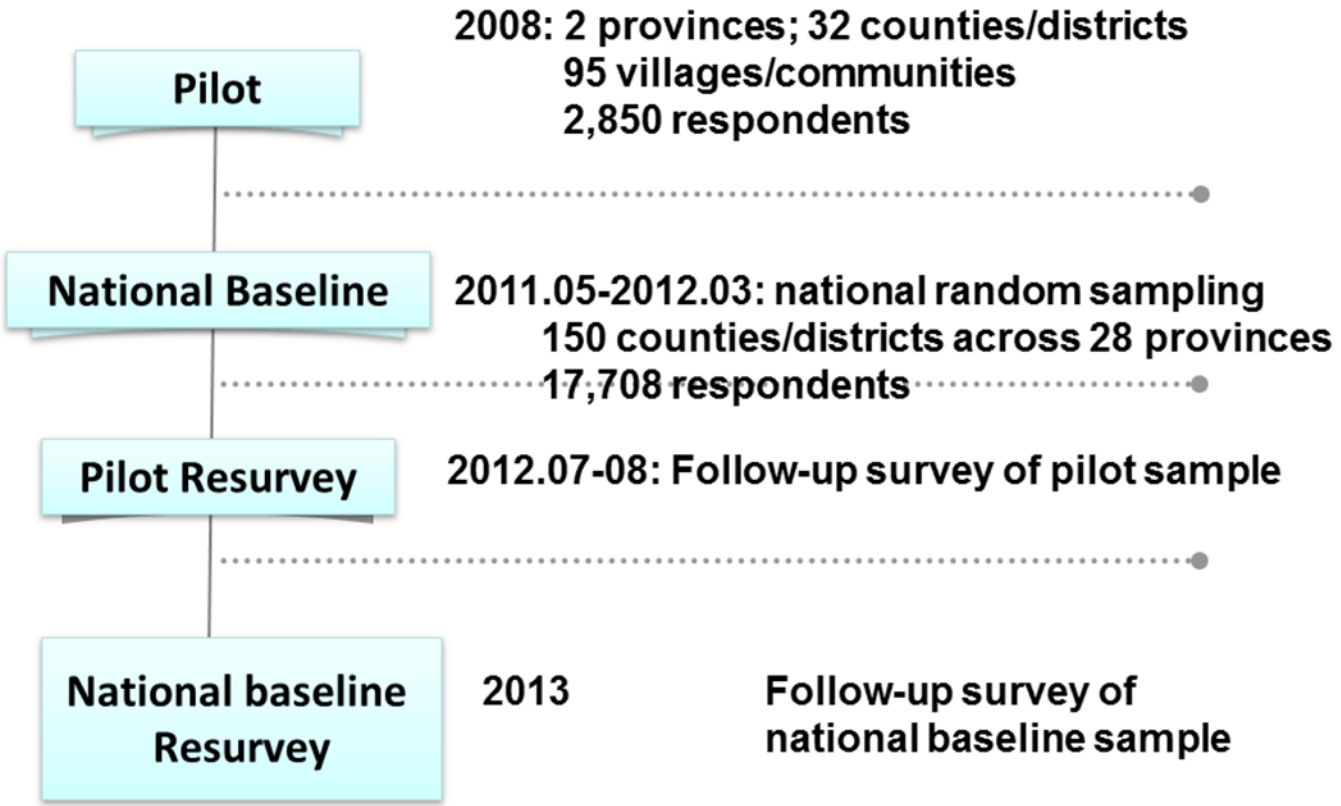
- **Indonesia- started in 1992- finished four waves - IFLS**
- **South Korea- finished first three waves - KLoSA-**
- **Japan- internally funded- first two waves completed - JSTAR**
- **India – baseline later this year- LASI**
- **China- baseline and 2nd wave done- CHARLS-**

China Health and Retirement Longitudinal Study (CHARLS)

- Biennial survey representative of the residents of China aged 45 and older
- Supporting fact-based policy making

CHARLS

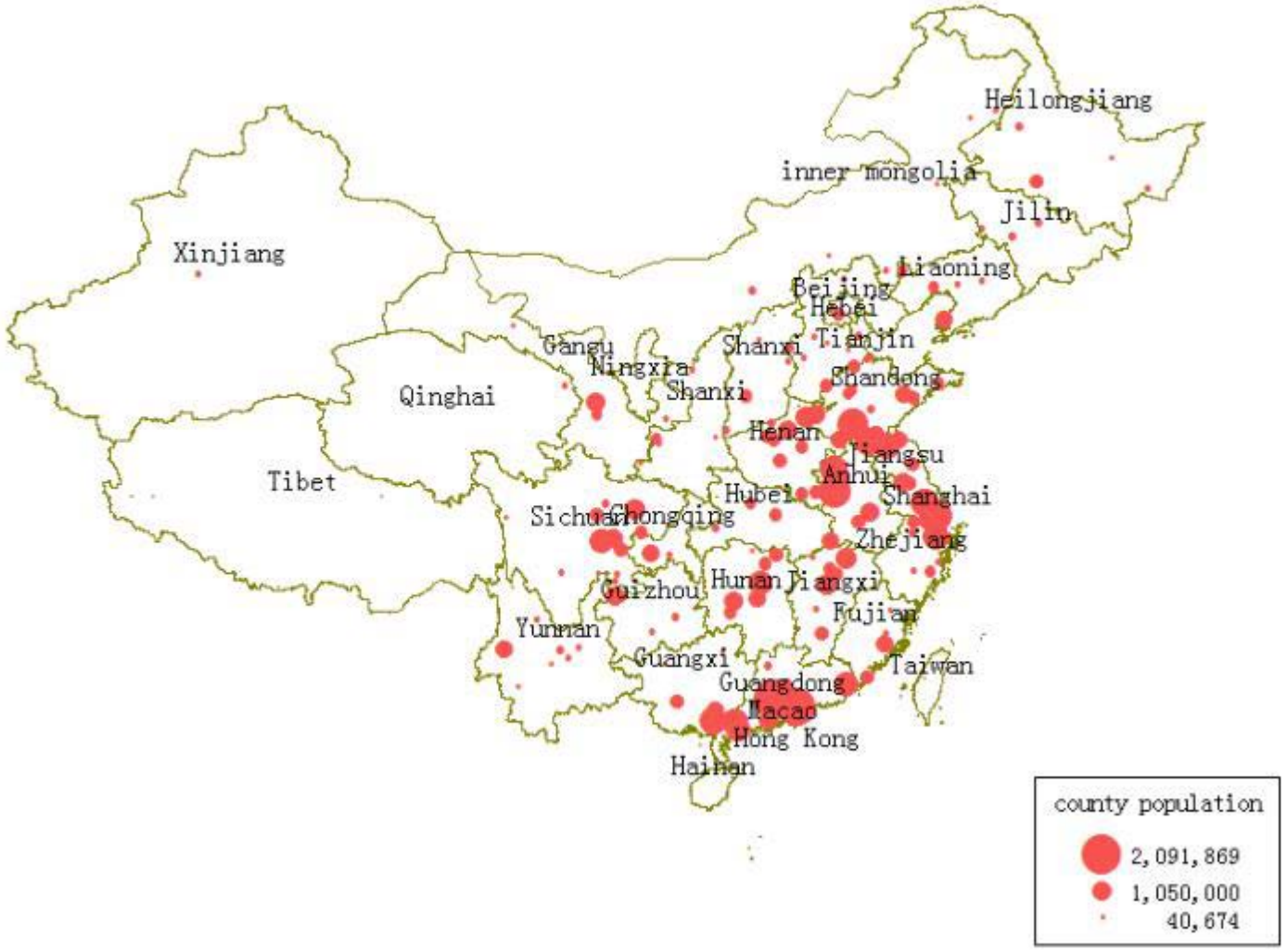
Timeline for CHARLS



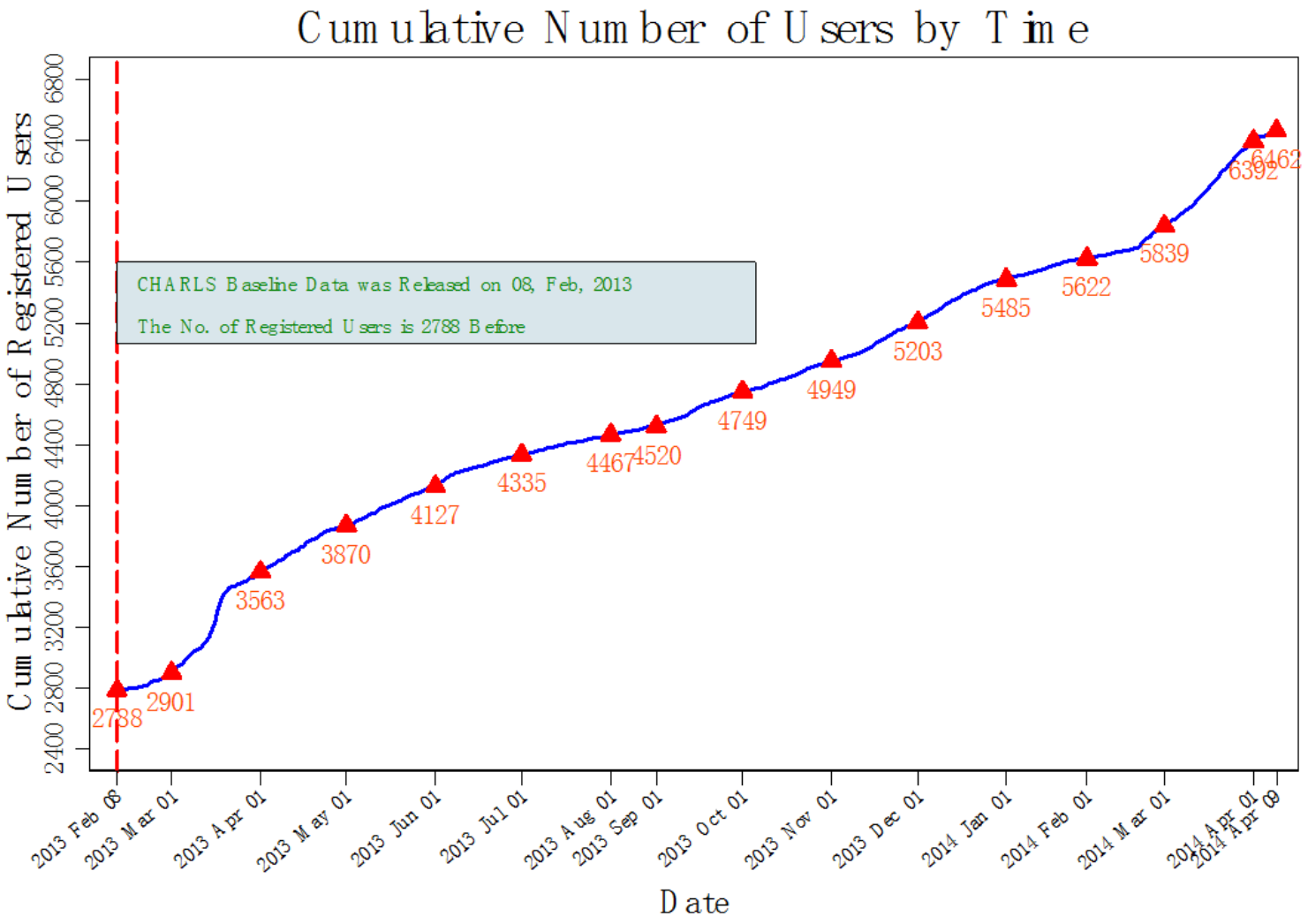
CHARLS National Baseline

- Multi-stage PPS random sampling
  - Counties (stratification: by regions, urban/rural, pc GDP): 150
  - Villages/communities: 450
  - Household sampling frame created out of the mapping/listing operation
  - One household member 45 and older randomly chosen, plus the spouse
- Sample size:
  - Households: 10,257; Persons: 17,708
- Field work: May 2011-March 2012

County distribution



Cumulative Number of CHARLS Users



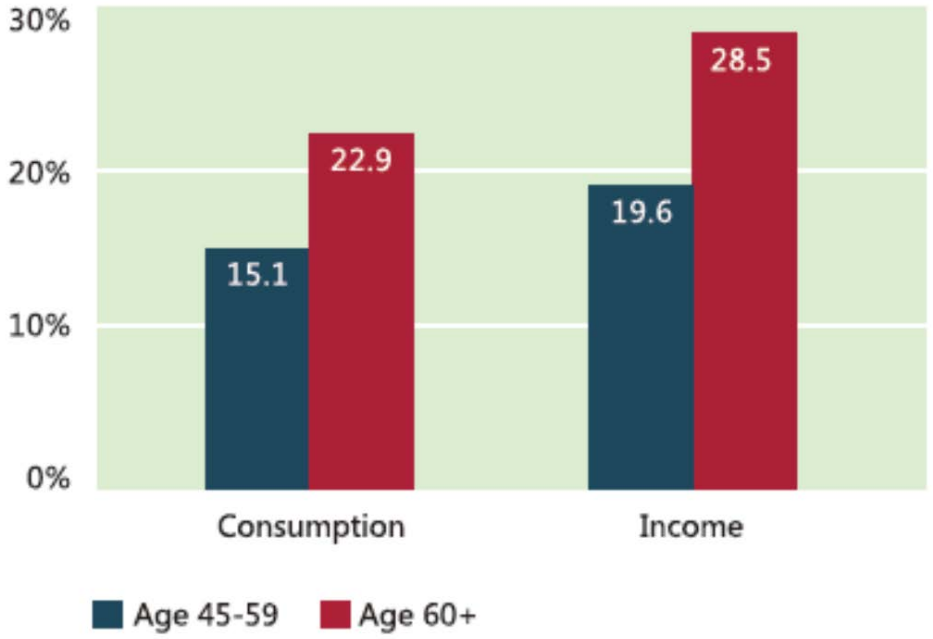
北京大学国家发展研究院
National School of Development

Challenges of Population Aging in China

Evidence from the National Baseline Survey of the China Health and Retirement Longitudinal Study (CHARLS)

CHARLS Research Team
May 2013

Figure 5.1. Consumption and Income Poverty Rates by Age Group



THE WALL STREET JOURNAL.
WSJ.com

CHINA NEWS | May 31, 2013, 12:02 a.m. ET

Aging Chinese Face a Bleak Picture

High Rates of Poverty, Disability and Mental Illness Haunt Elderly, Pose Growing Economic Challenge

South China Morning Post 南華早報

Vast study seeks to tackle China's age challenge

Friday, 31 May, 2013, 12:00am

Global Forum

New portrait of China's 185 million seniors

By Charles Riley @CRileyCNN May 31, 2013: 9:24 AM ET

DEMOGRAPHY

Can China Age Gracefully? A Massive Survey Aims to Find Out

www.sciencemag.org SCIENCE VOL 341 23 AUGUST 2013

Published by AAAS

Table 6.1. Transfers Between Elderly and Non-coresident Children

Percent receiving transfers from non-coresident children	46.9
Percent giving transfers to non-coresident children	19.0
Percent receiving transfers from children if not living with children and have children	53.3
Median positive net transfers received by those who receive positive net transfers from non-coresident children (yuan)	1,700
Median net transfers received as share of elderly household expenditures (for those receiving positive net transfers) (%)	37.3

Figure 3.1.1. Physical Health Status of the Elderly, Full Sample

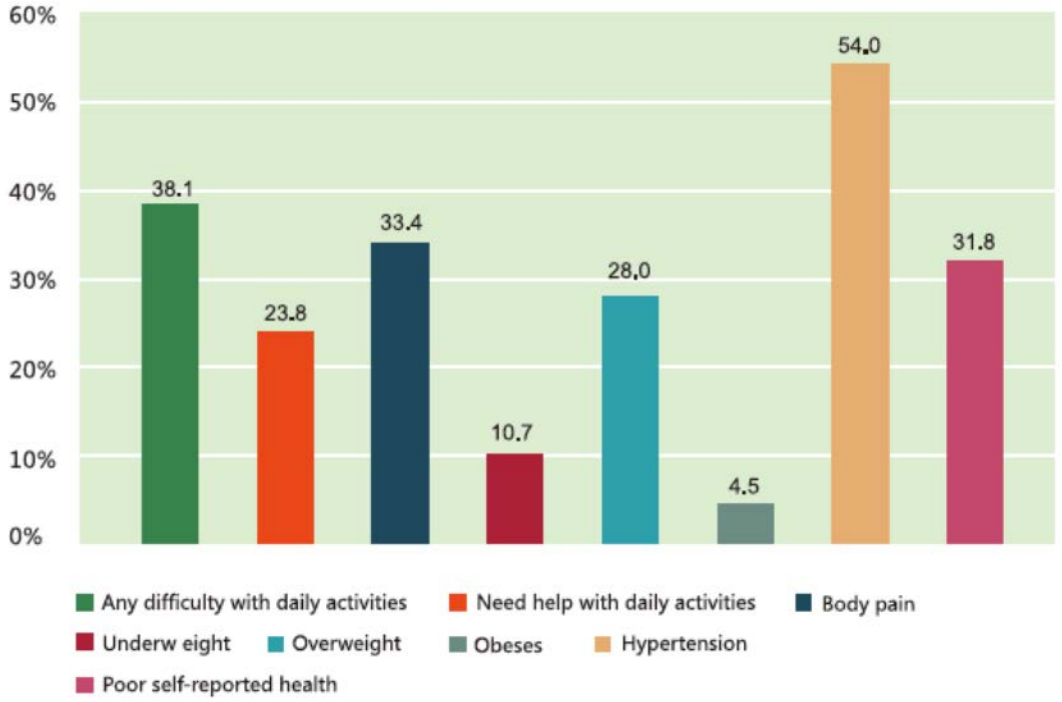


Figure 4.2. Underdiagnosis of Hypertension and Share of Taking Medication if Diagnosed by Hukou Type (Age 60+)

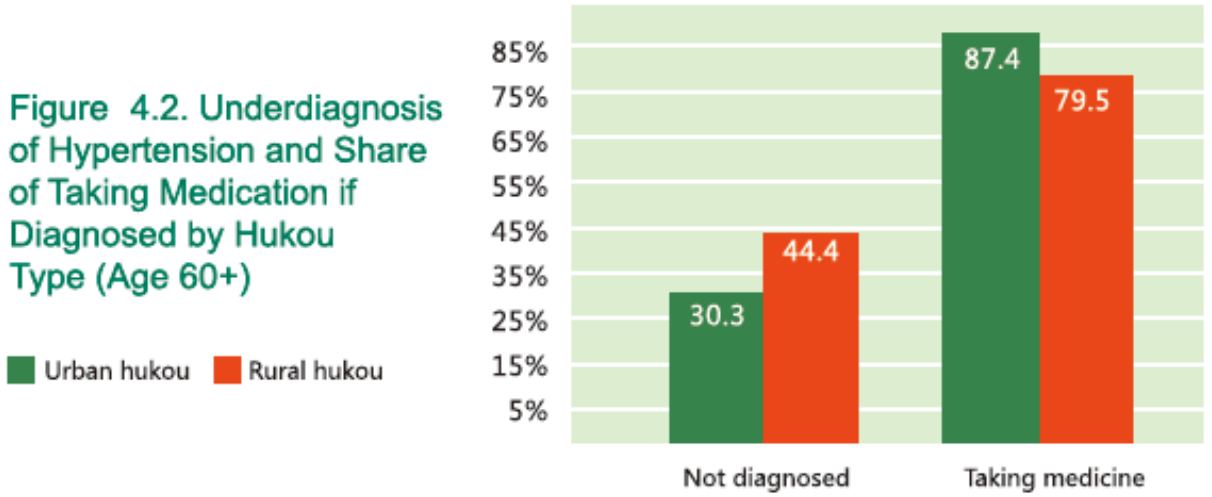


Figure 4.3. Health Insurance Coverage Rates by Age Group and Hukou Type

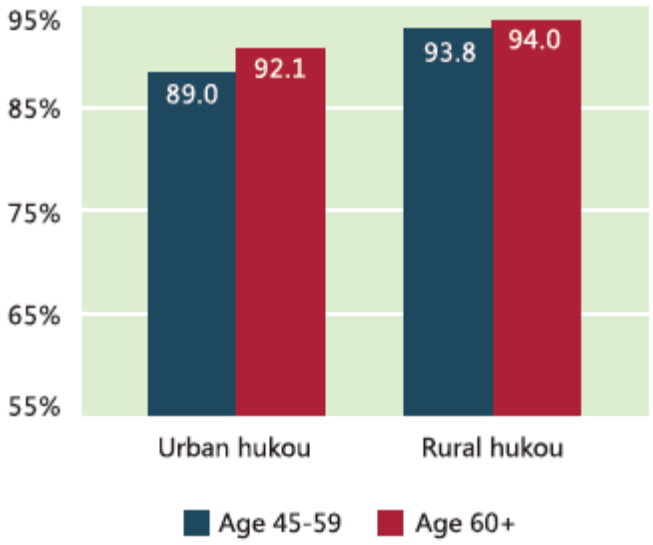
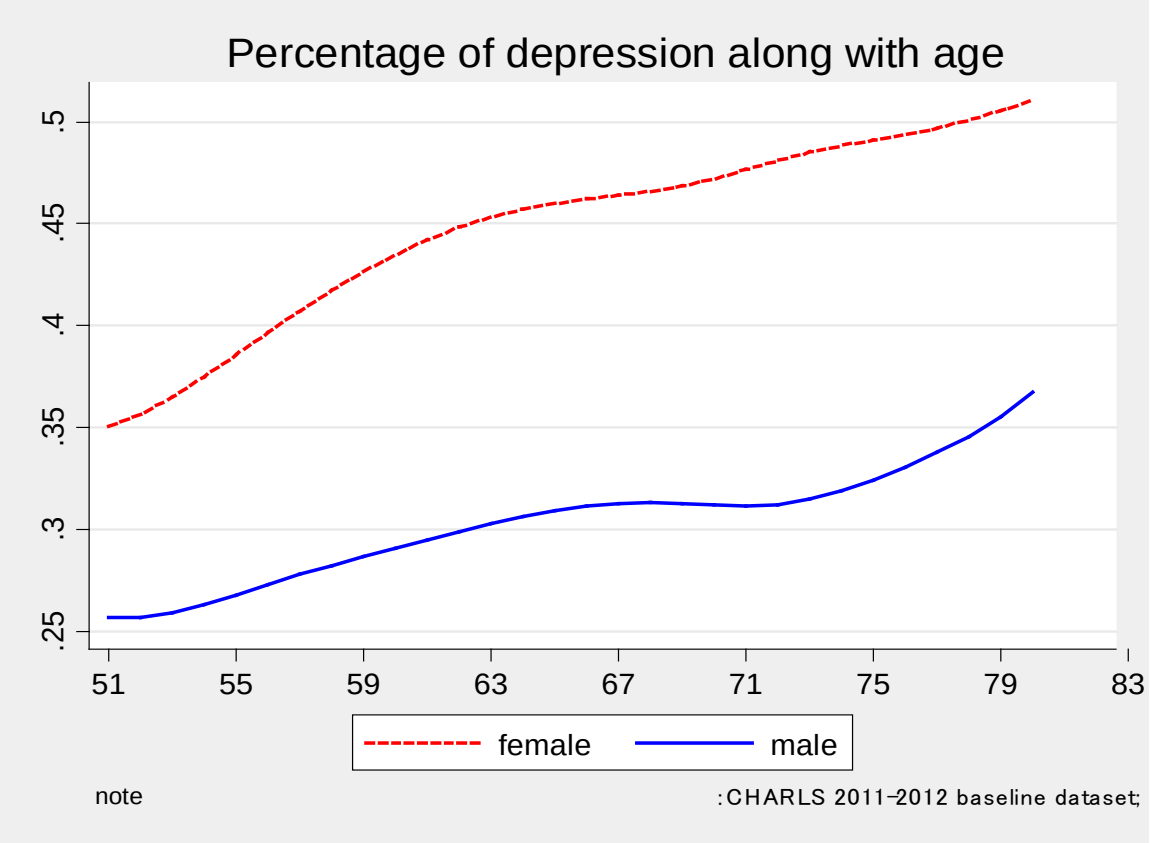


Table 4.1. Elderly Health Insurance Coverage Rates and Premiums by Insurance Scheme

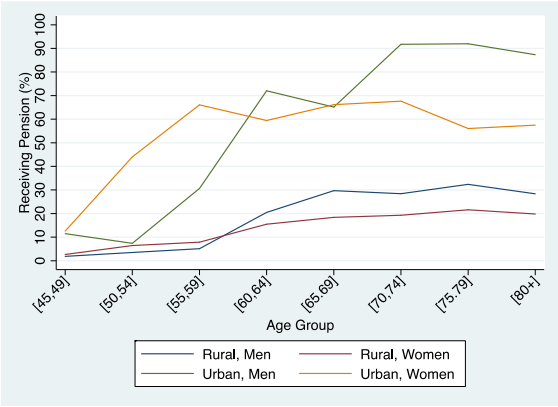
Health Insurance Scheme	Population Covered (%)	Median premium (yuan)
Government medical insurance	3.9	0
Urban employee medical insurance	16.3	0
Urban resident medical insurance	6.3	120
New cooperative medical insurance	65.9	30
Private medical insurance	1.3	138
Other medical insurance	0.9	120

Elevated Depressive Symptoms

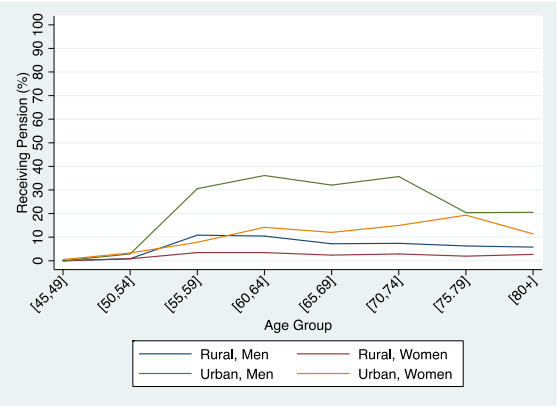


Across East Asia, Significant Differences in Shares of Urban and Rural Workers Receiving a Pension

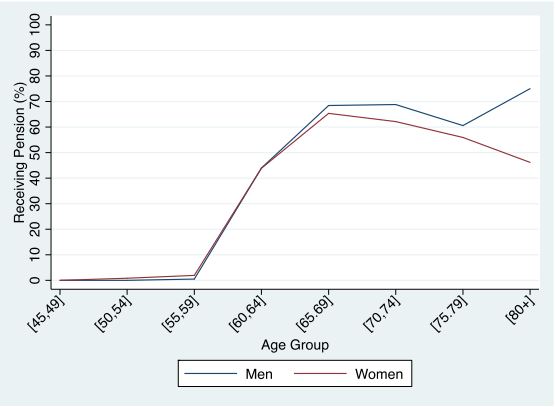
China



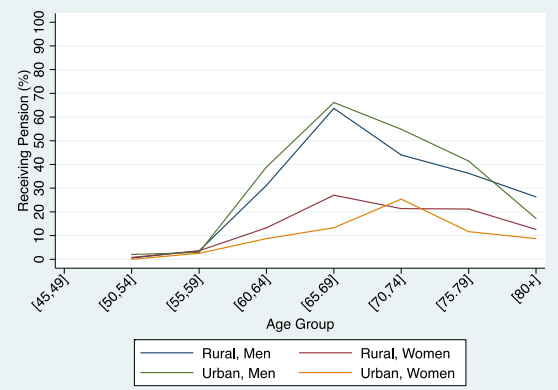
Indonesia



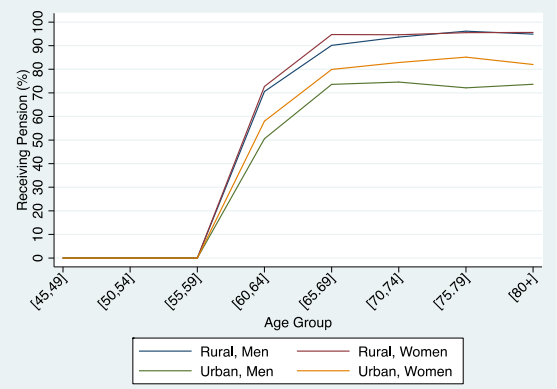
Japan



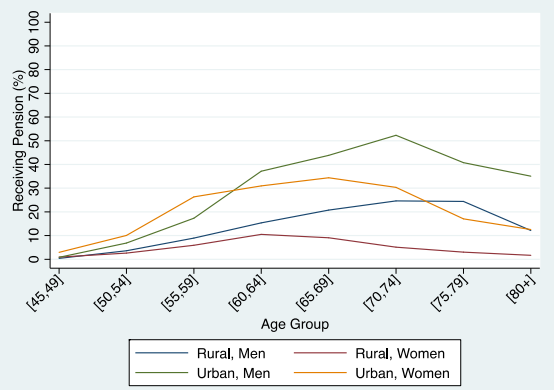
Korea



Thailand



Vietnam

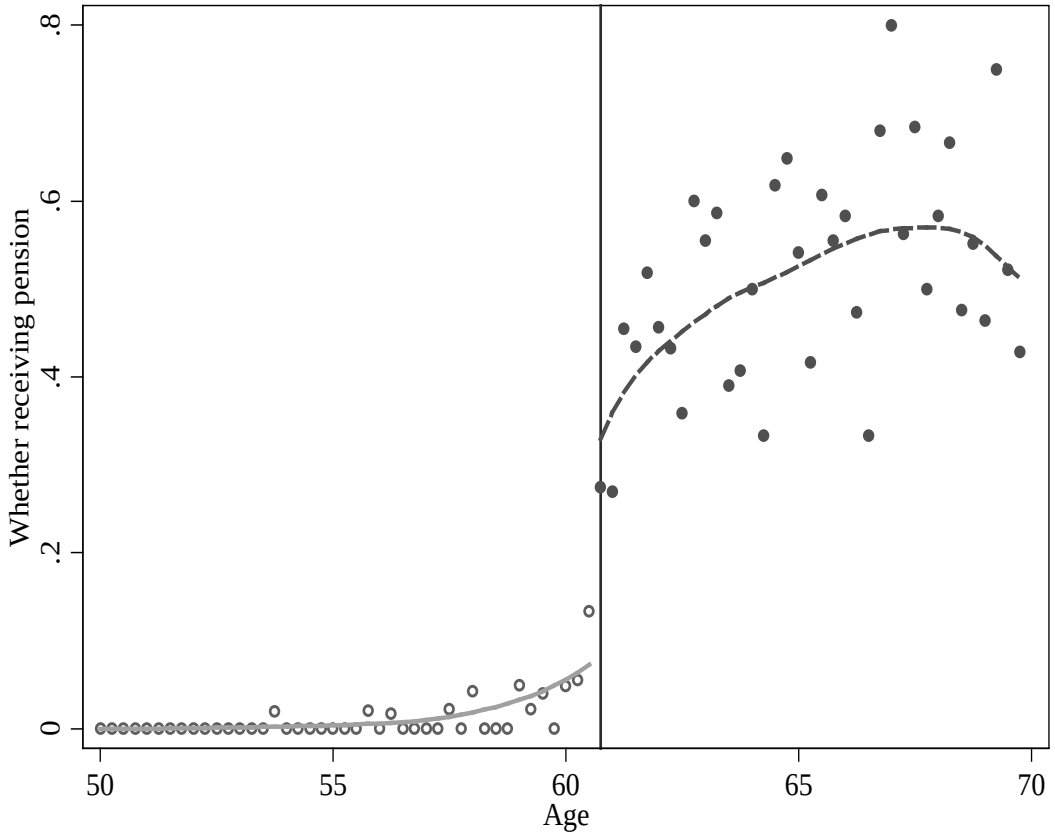


Sources: China Health and Retirement Longitudinal Study 2011 (CHARLS 2011), Indonesia Family Life Survey 2007 (IFLS 2007), Japanese Study of Aging and Retirement 2011 (JSTAR 2011), Korean Longitudinal Study of Aging 2010 (KLoSA 2010), Thailand Household Socio-Economic Survey 2011 (SES 2011), Vietnam Household Living Standards Survey 2012 (VHLSS 2012), and Philippines Family Income and Expenditure Survey 2009 (FIES 2009).

Will a new Pension Alter Incentives? Evidence from China's New Rural Pension Program (Giles, Zhang and Zhao, 2014).

- Roll out of China's NRPP offers an "experiment"
- Will extending social pensions to populations that have not been covered lead to a decline in labor force participation or activity?
- Policy Motivations
  - Close gap between urban and rural, formal and informal "retirement systems"
  - Provide protection against poverty in old age.

Age Eligibility and Receipt of NRPP Benefit



Notes: Lowess smoothed with the default bandwidth (0.8). Sample is restricted to people with rural hukou and in communities that already have the new rural pension program, and excludes the few residents enrolled in other pension programs. The vertical line denotes age 60.75, which is used as the cutoff point.

Effects of Receiving Pension Benefits on Various Outcomes

	Age Bandwidth	
	+/-5	+/-10
Poverty Status (HH PC Income < 1196)	-0.25**	-0.20
"Retired" (not working = 1)	0.26**	0.25**
Weekly Hours Worked	-5.87	-11.1
Net Private Transfer Received>0	-0.28*	-0.28
Net Private Transfer Received ('000s)	-1.05	-0.76
Standardized CES-D (Depression)	-0.45	-0.56*
Piecewise linear function of age	Yes	-
Polynomial function of age	-	4^{th} Order

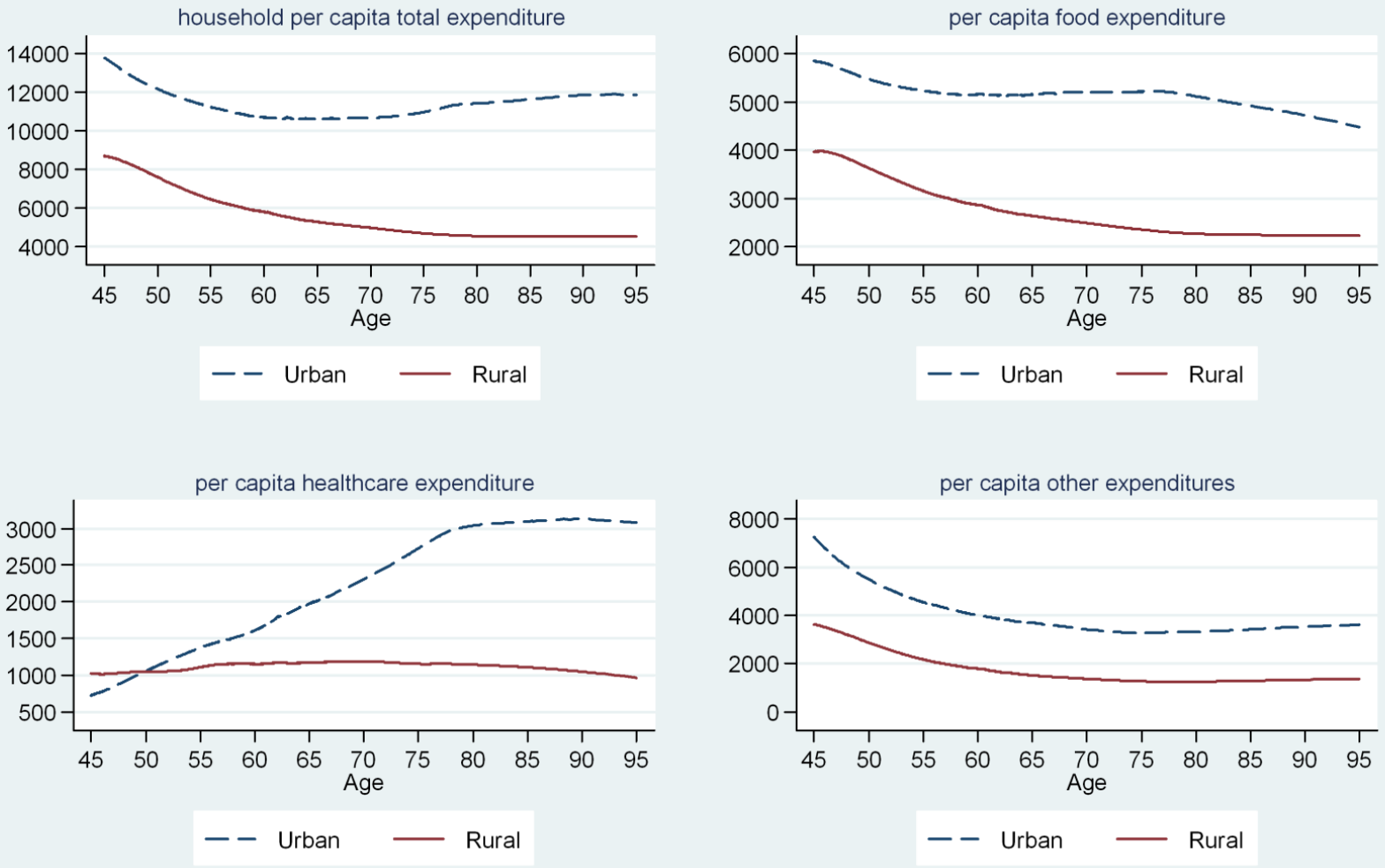
Source: Giles, Zhang and Zhao (2014) using data from CHARLS (2011). *** p<0.01, **<0.05, * <0.1. Sample is restricted to respondents with rural residence and living in communities with the NRPP. All models control for completion of middle school, whether married and living with spouse, and existence of any ADL or IADL difficulties

Age-Expenditure Patterns for Healthcare in China: Are the Rural Elderly Vulnerable?

Albert Park and Qing Xia
Hong Kong University of Science and Technology

Household per capita expenditure: total and its decomposition

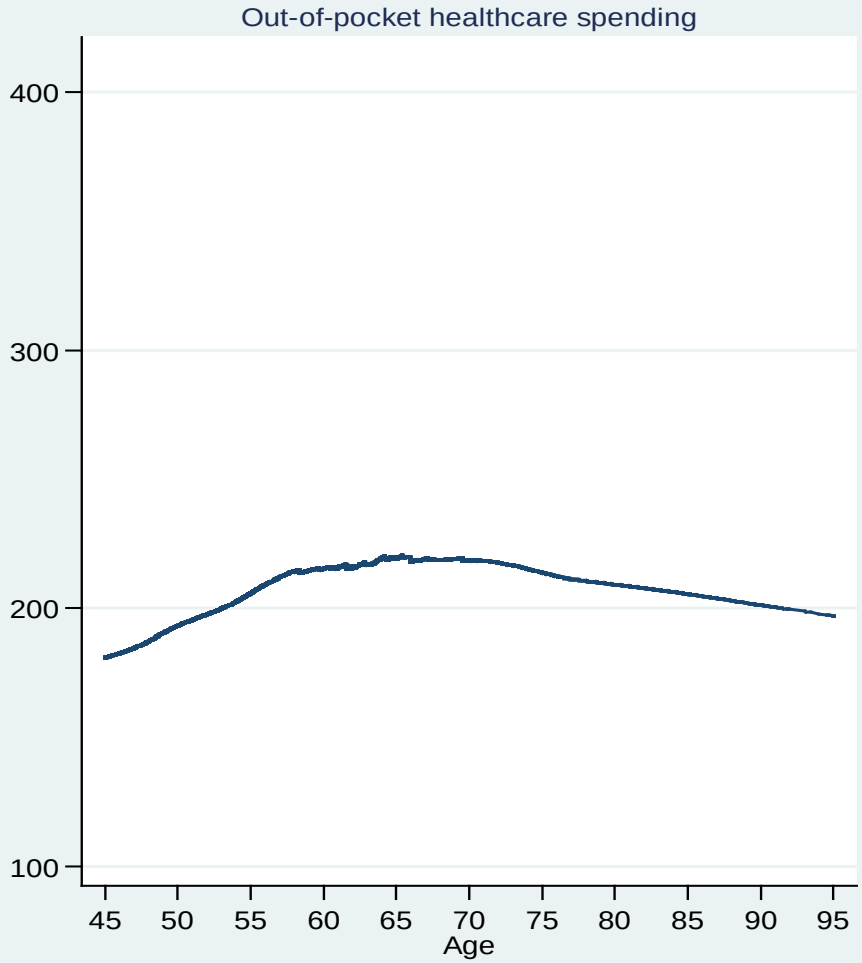
CHARLS,2011-12

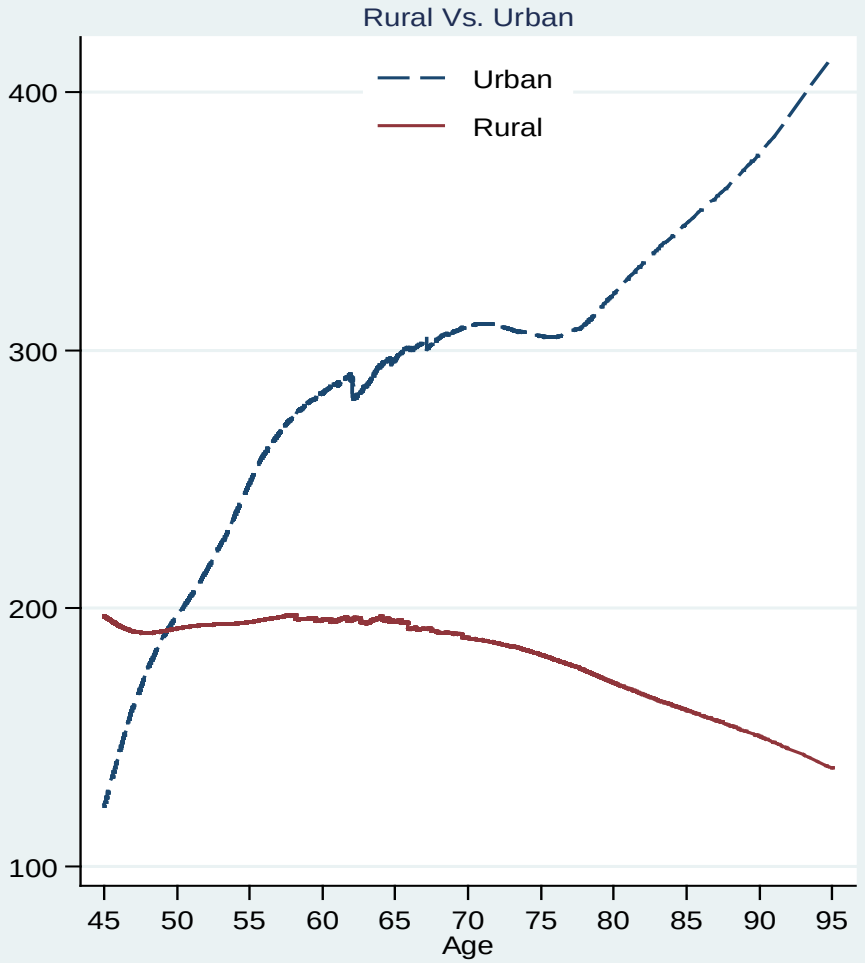


Notes: lowess figures with default bindwidth.

Individual out-of-pocket healthcare spending

CHARLS,2011-12





Notes: lowess figures with defalut bandwidth.

Research question: What explains declining medical expenditures with age among the older rural population?

Findings

- We document for first time sharply declining medical expenditures with age in a rural population of a developing country
- Factors that affect age-expenditure gradients include being economically active, living with non-adults, and having good insurance.
- Differences in good insurance coverage can explain some of the urban-rural gap in age-expenditure gradients
- However, even after controlling for multiple factors, the urban-rural gap in age-expenditure gradients remains
- Policy implication: rural elderly appear vulnerable, but choices can be viewed as welfare-maximizing

Wellbeing of the Elderly in East Asia: China, Korea, and Japan

Albert Park, HKUST, Xiaoyan Lei, Peking U.
Jinkook Lee, RAND, Chulhee Kim, Seoul National U.
Hidehiko Ichimura and Yasuyuki Sawada, U. of Tokyo

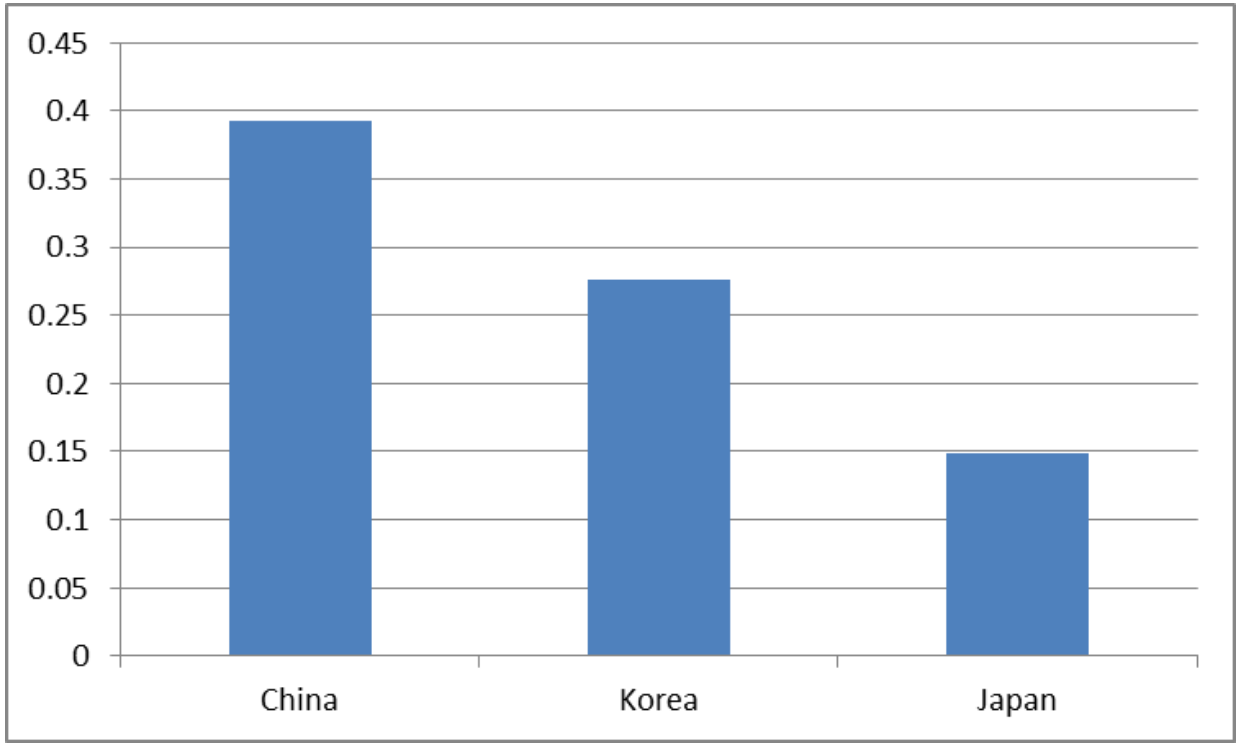
Goals of Comparative Analysis

- Compare the patterns of elderly wellbeing with respect to depression, physical health, and poverty
- Exploit unique ability to harmonize measurements across multiple domains to do truly comparative analysis
- Examine the determinants of having elevated depressive symptoms
  - Demographic determinants
  - Economic determinants
  - Family and social determinants
  - Health determinants
- Treat regression coefficients as partial correlations, recognizing endogeity concerns
  - Focus on differences across countries

Building a Comparative Dataset

- Time:
  - CHARLS 2011-12
  - KLOSA 2012
  - JSTAR 2011-12
- Age groups:
  - 54-59, 60-64, 65-71, and 72-78
- Harmonized measurements
- Regional controls: county in China, province in Korea, city in Japan

Elevated Depressive Symptoms in China, Korea, and Japan



Age Gradients in Depression
Base Model (Education and Region)

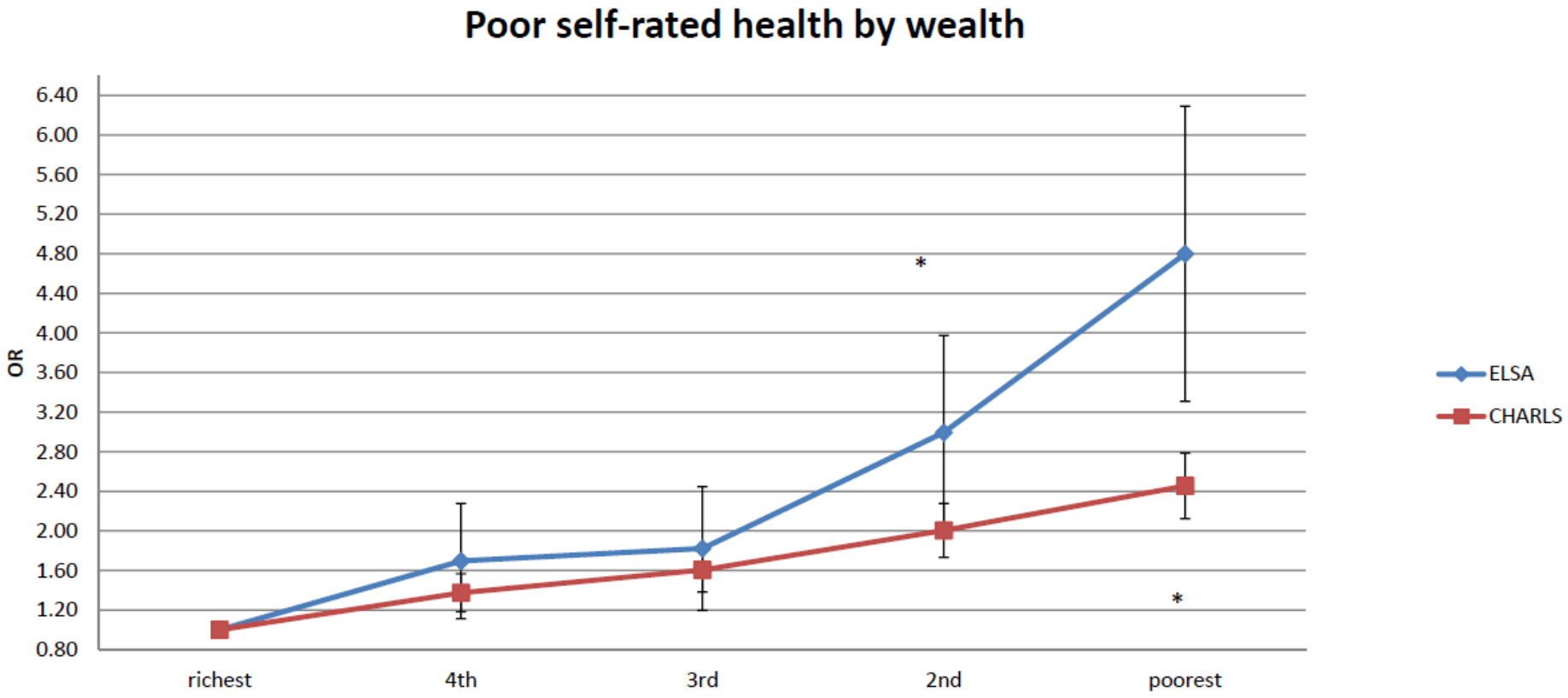
AGE	CHARLS	KLoSA	JSTAR
54–59 (ref)			
60--64	.042***	-.001	-0.077
65--71	.052***	.084**	-0.088
72--78	.011	.148**	-0.155***

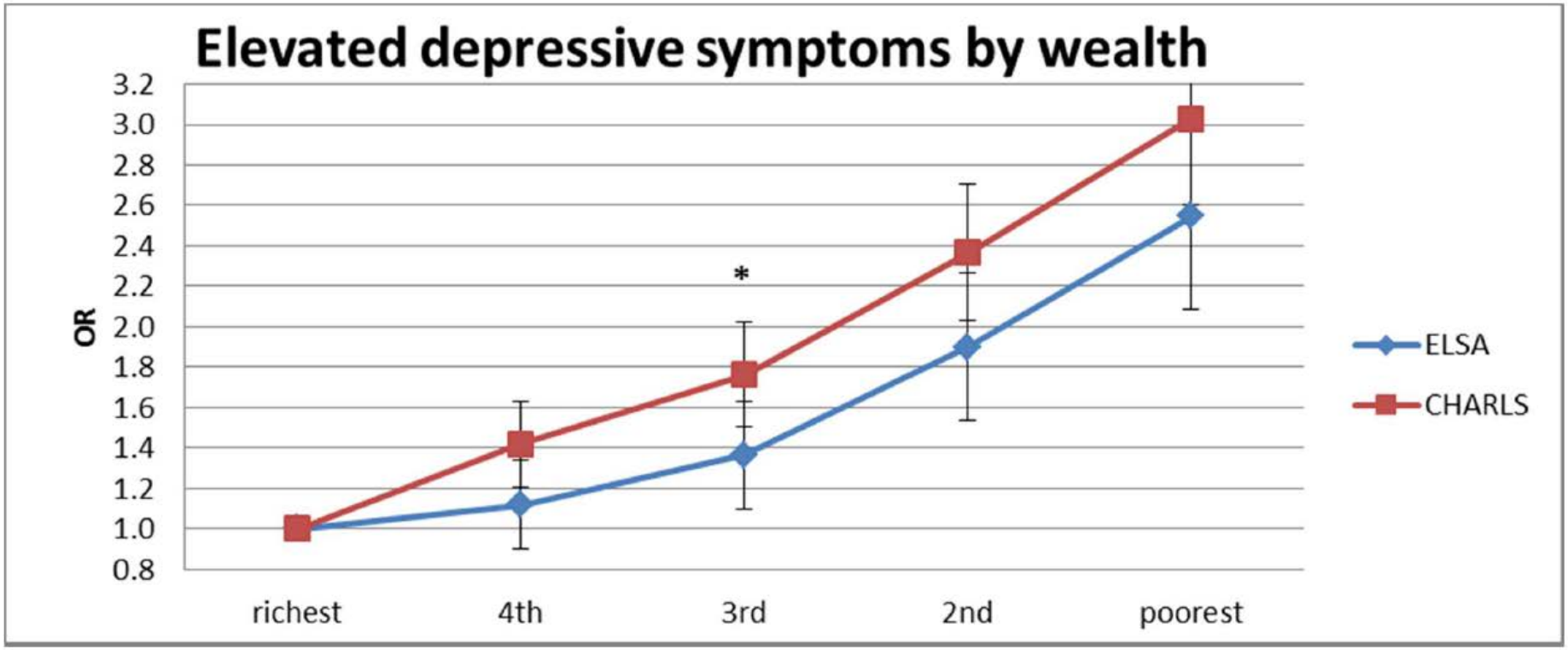
Key Findings

- Physical health has greatest explanatory power for depression in all three countries
- Depression increases sharply with age in Korea, is nonlinear with age in China and decreases with age in Japan
- In China and especially Korea, economic factors strongly predict depression
- Education is strong predictor of depression in China and Korea
- Contact with children is more important than receiving transfers in China and Korea
- Social activity reduces depression in China and Korea

Elderly Well-being and Socioeconomic Status in China and England

James Banks (Manchester)
Xiaoyan Lei (Peking)
Albert Park (HKUST)
Andrew Steptoe (UCL)
Yafeng Wang (Peking)
Winnie Yip (Oxford)
Paola Zaninotto (UCL)
Yaohui Zhao (Peking)


Poor self-rated health by wealth
OR
6.40
6.00
5.60
5.20
4.80
4.40
4.00
3.60
3.20
2.80
2.40
2.00
1.60
1.20
0.80
richest
4th
3rd
2nd
poorest
*
*
ELSA
CHARLS


Elevated depressive symptoms by wealth
OR
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
*
richest
4th
3rd
2nd
poorest
ELSA
CHARLS

Explaining Wealth Findings

- Wealth less correlated with physical health in China than in England
  - Current wealth less correlated with lifetime wealth in China?
  - Equalizing factors (socialism, community factors) in China
  - Wealth quintiles reflect greater inequality in England
- Wealth more correlated with psychological wellbeing in China
  - People in China are more dependent on their current wealth for their livelihood; social security is less important in China
  - Relative wealth more relevant than absolute wealth
  - Subjective well-being more influenced by recent circumstances than physical health