

EMPLOYMENT, DEMOGRAPHIC CHANGE AND WELL-BEING

AVOIDING POVERTY AMONG THE ELDERLY IN AGING POPULATIONS

John Giles
Development Research Group
The World Bank
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Population Aging and the Policy

Middle and Low Income Countries

Reduce Vulnerability to Poverty and Promote Shared Prosperity

- Two retirement systems:

- Formal - Civil servants and formal sector workers: Pension

- Informal - Informal sector, small scale enterprises, agriculture: Savings and family support

Addresses Stresses Created by Populations Aging

- Aging of populations implies that burdens could rise (both fiscal burdens for formal, and strain on families for informal).

- Migration of young adults may lead to lack of support for rural elderly.

Solutions?

- Encourage migration to urban areas for better support.

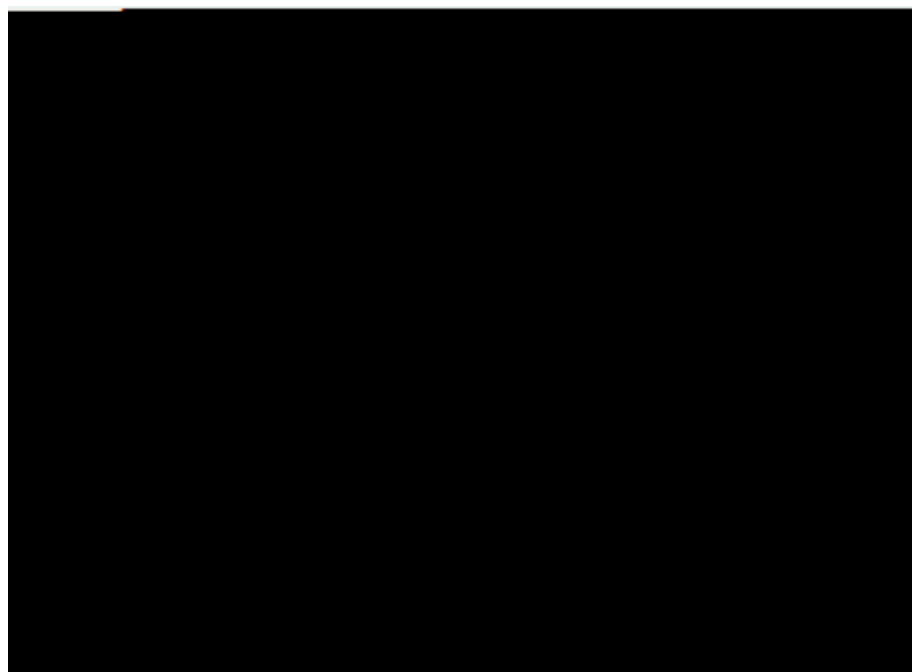
- Encourage migration to urban areas for better support. Encourage migration to urban areas for better support. Encourage migration to urban areas for better support.

Motivations

“ Income Poverty Among Elderly is Still Common in EAP, and is Dominated by Rural Poverty.

Across Many of the Countries in EAP, Considerable Income Poverty Rates Among Rural Elderly

Income Poverty Head Count,
2011 - 2012



Note: Poverty based on EAP Standardized Household, CHNS, SES and VHLSS is defined as per capita daily income (2005 PPP \$) less than \$1.25 /day.

Source: Giles and Huang (2014). Background Paper for the EAP Aging Report (2015).

Motivations

- “ Income Poverty Among Elderly is Still Common in EAP, and is Dominated by Rural Poverty
- “ Y a|Á d[a~ &ã * Á% d[&ã Á ^} • a } • +Á^a~ &^Á [ç^!c^ Á ã@~ cÁ crowding out private support and distorting the labor supply decision?
- “ What is the case for a pension covering the informal sector? (Part 1)
- “ For Some, Well-Being in Old Age May Require Continued Employment
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 - “ With population aging, one may worry about rising support ratios due to demographic change and exacerbated by earlier retirement.
 - “ Understand factors contributing to earlier retirement in order to facilitate longer working lives (skills, policy, vs institutions)

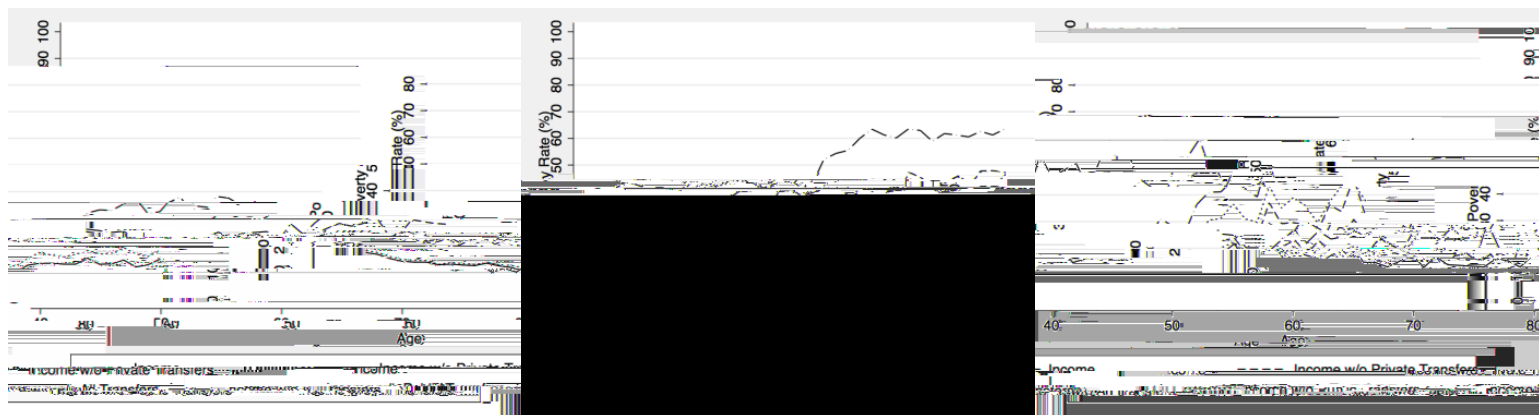
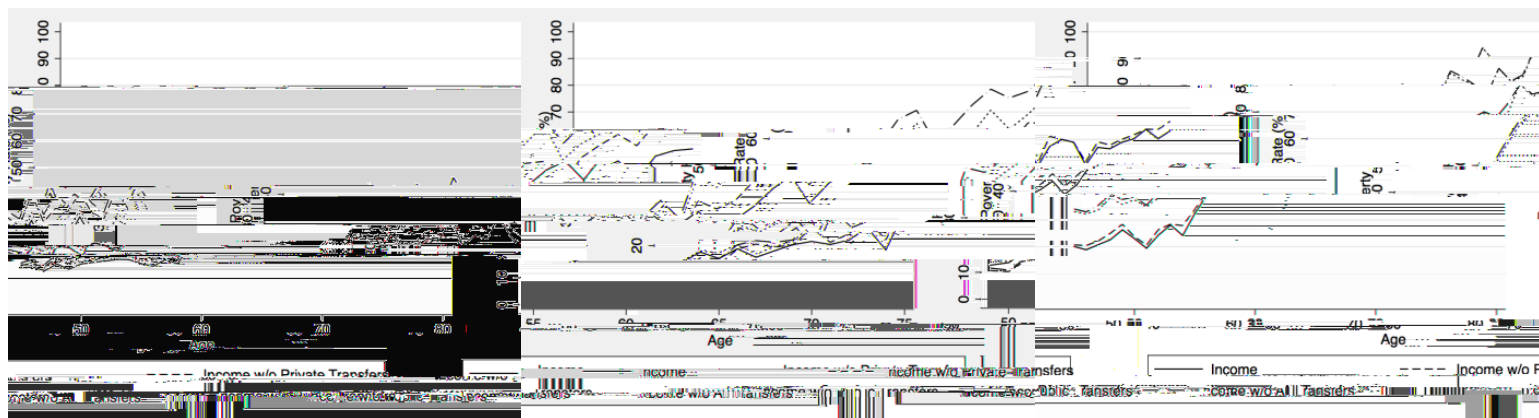
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Private Transfers and Poverty

“ In much of East Asia, private (financial and in-kind) transfers and co-residence with adult children reduce vulnerability to poverty.

”

In Some Countries, Private Transfers are Important for Staying Out of Poverty



Source: Giles and Huang (2014). (Background paper for EAP Aging Report)

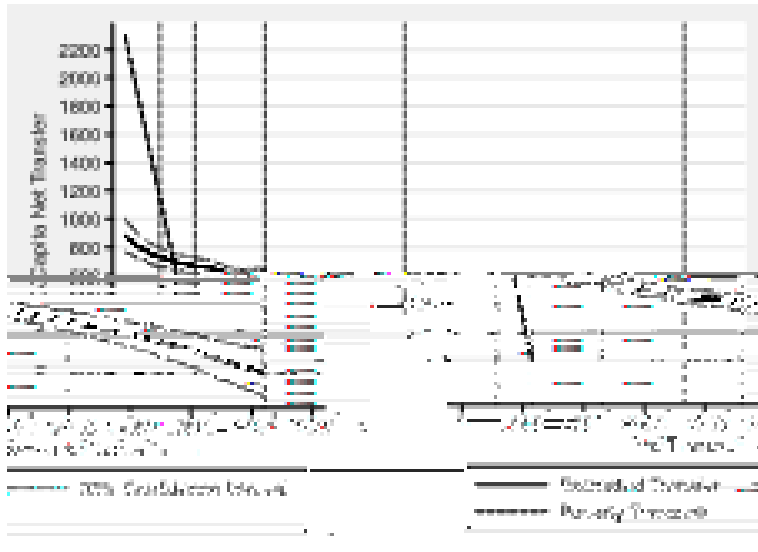
Are Private Transfers Responsive to Low Income? How Well do They Keep Elderly Out of Poverty?

- “ Approach developed in Cai, Giles and Meng (JPubE 2006) and used in Giles, Wang and Zhao (2010)
- “ Examine the extent to which private transfers respond to low income for households with elderly residents.
 - “ Household survey data
 - “ Partial linear model, allowing different motives for transfers at different points of the income distribution
 - “ Address both responsiveness and descriptive evidence on the possibility that a new public transfer might crowd out private transfers.
 - “ Descriptive evidence of differences for households with migrant versus non-migrant children.

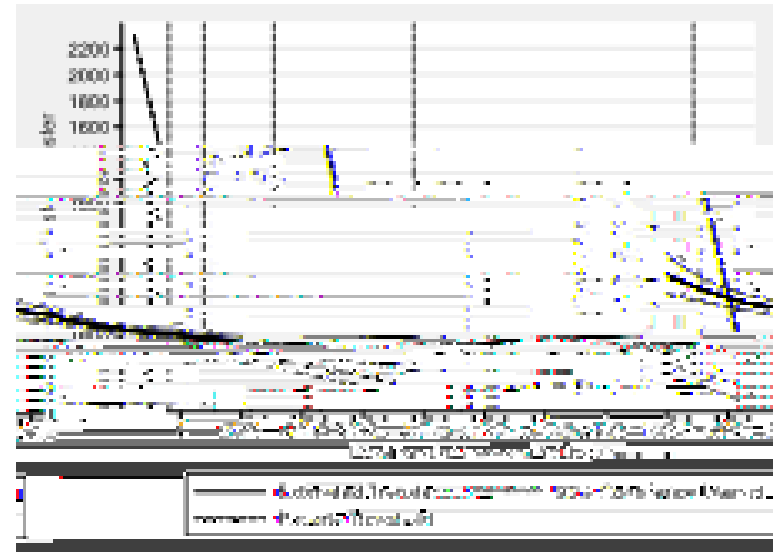
Evidence on Transfer Responsiveness

China

with Migrants



no Migrants

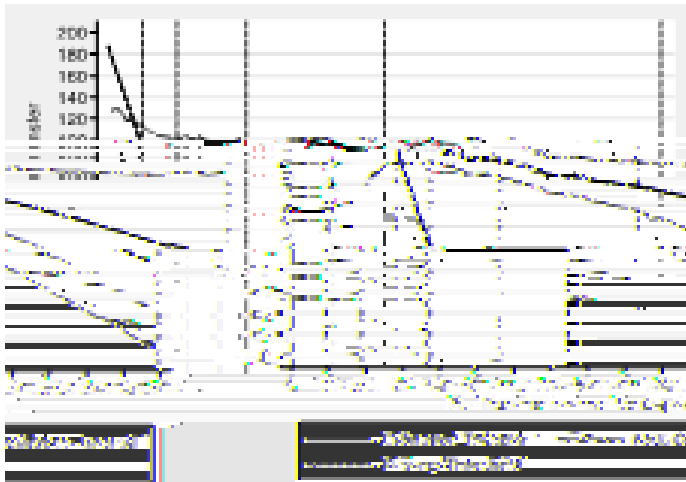


Source: Giles and Huang (2014). Data from China Health and Retirement Longitudinal Study (2011)

Evidence on Transfer Responsiveness

Indonesia

with Migrants



no Migrants

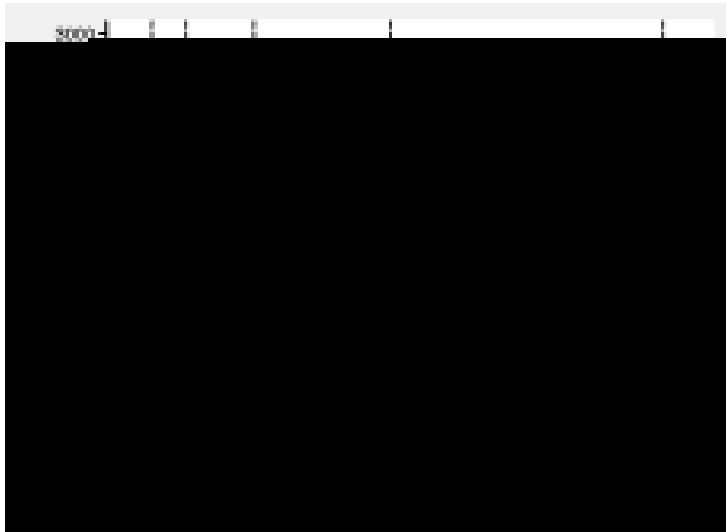


Source: Giles and Huang (2014). Data from Indonesian Family Life Survey (2007)

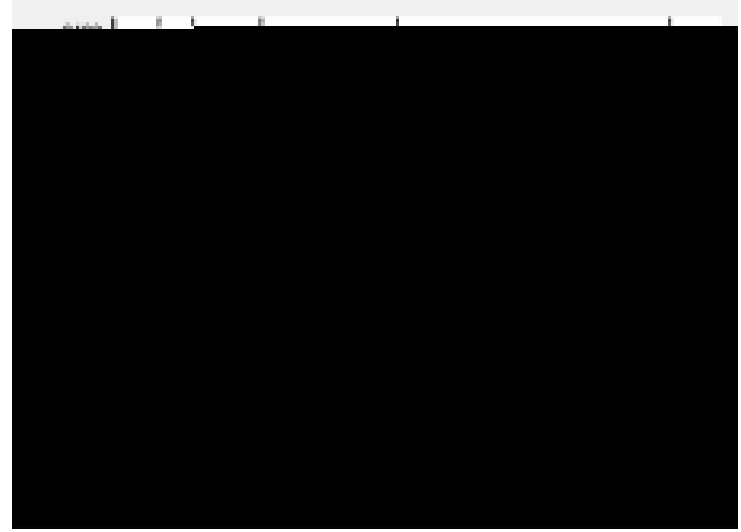
Evidence on Transfer Responsiveness

Thailand

with Migrants



no Migrants



Source: Giles and Huang (2014). Data from Thai Social and Economic Survey (2011)

Transfer Derivatives Suggest Little Potential for Crowding Out a Public Transfer

Estimated Transfer Derivatives for Elderly Households in Poverty

		$\frac{1}{2}$ Poverty Line	Poverty Line
China	w/ Migrants	-0.07	-0.02
	w/o Migrants	-0.11	-0.09
Indonesia	w/ Migrants	-0.06	-0.03
	w/o Migrants	-0.04	-0.01
Thailand	w/ Migrants	-0.73	-0.34
	w/o Migrants	-0.29	-0.32

Conclusion: Introducing a pension for informal sector can improve well-being without overly distorting private support decisions.

Source: Giles and Huang (2014). Data from CHARLS (2011), IFLS (2007) and Thai SES (2011)

Demographic Transition to Smaller Families Does Not Necessarily Lead to Less Financial Support

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" Transfers Increasing in

" Years of education of adult children

" Number of adult children

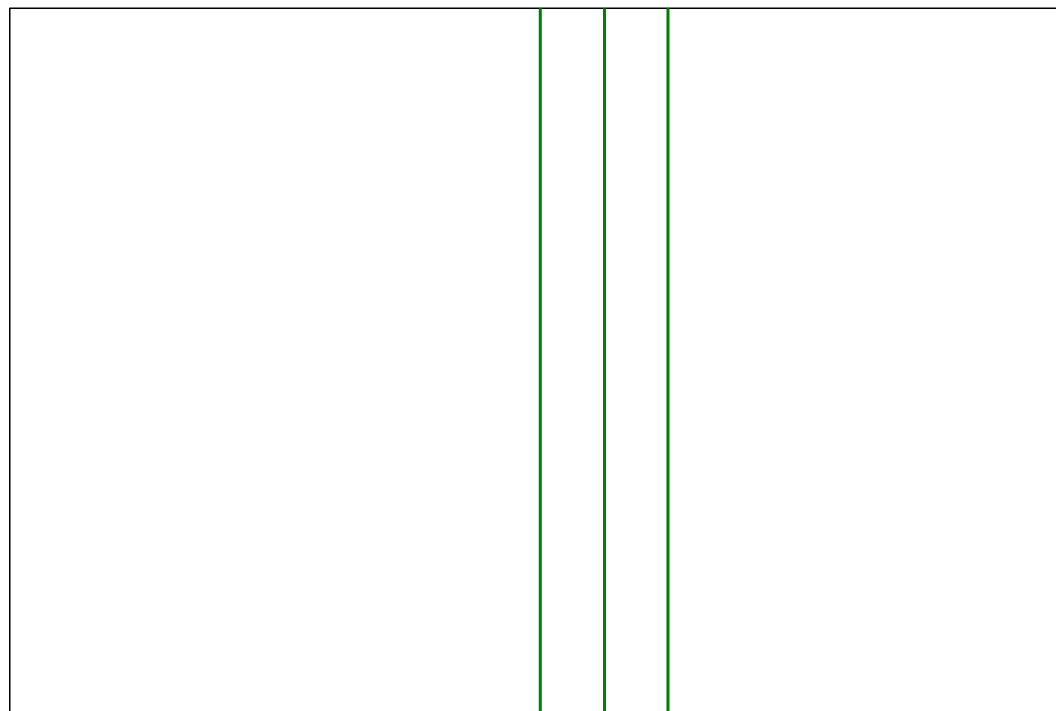
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new Pensions Create Disincentives for Work?

“ Administrative versus Economic Retirement?

- “ Exit from work is strongly associated with formal retirement and pension receipt for workers in formal sector.
- “ Mandatory retirement of employees in civil service and formal sector work creates an additional bias against work (e.g. China, Vietnam, civil service elsewhere)

Discontinuities in Timing of Retirement at China's Mandatory Retirement Ages



“ Retirement jumps at mandatory retirement ages

Source: Giles, Lei, Wang and Zhao

“ Spikes of exit from work at mandatory retirement ages for

new Pensions Create Disincentives for Work?

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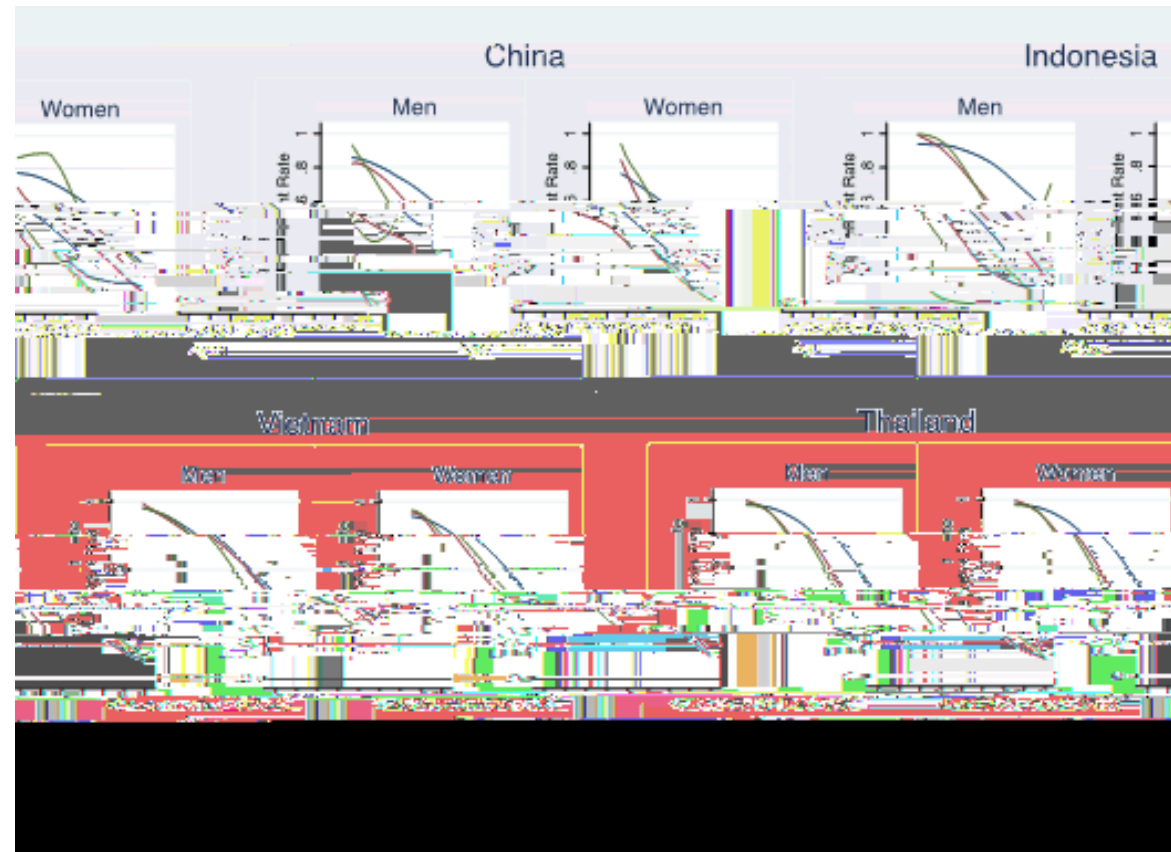
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Across East Asia, Significant Differences in Shares of Urban and Rural Workers Receiving a Pension

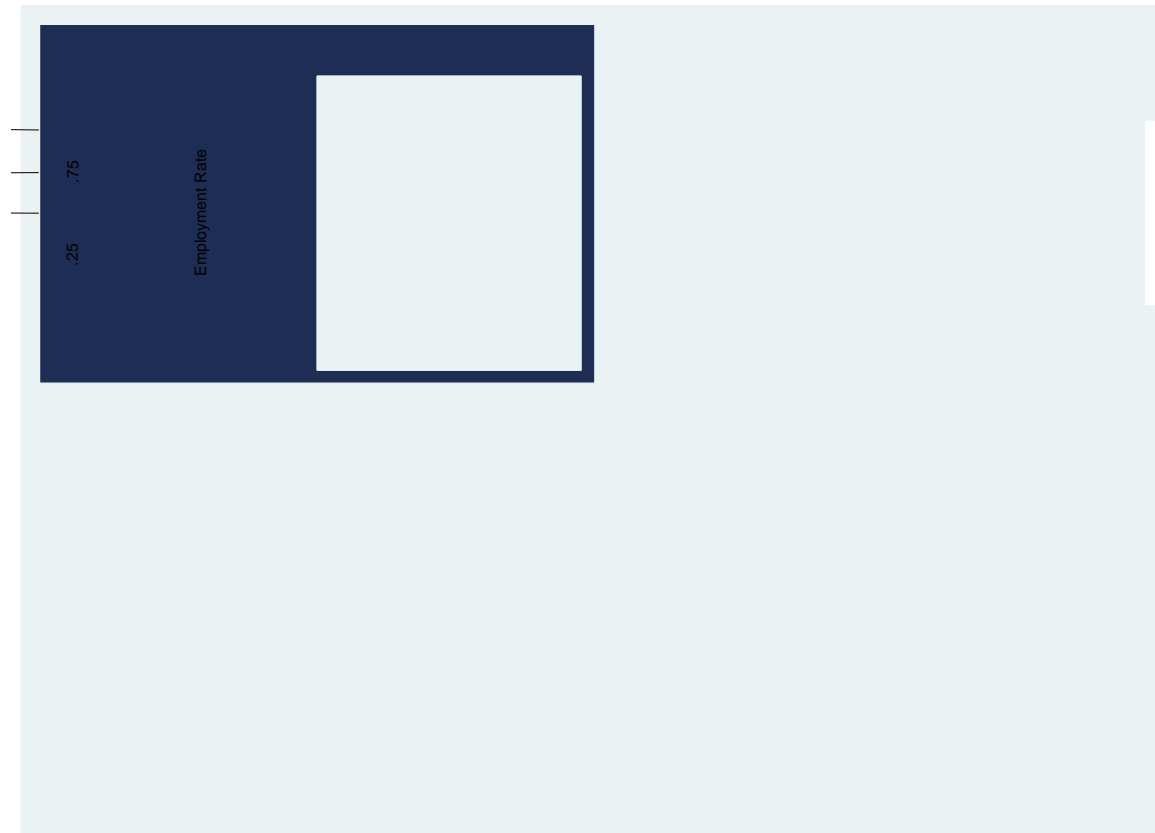
Sources:



In Developing East Asia, Individuals w/ Higher



In ECA, where Pension Systems Offer Broader Coverage, Educated More Likely to Work Longer



Note: EU13: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak





Correlates of Employment - China

	Urban		Rural	
	Men	Women	Men	Women
Pension	-0.23***	-0.16**	-0.01	0.01
ADL Unable (Z-Score)	-0.04***	-0.01	-0.01	-0.03**
IADL Unable (Z-Score)	-0.02***	0.00	-0.02**	0.01**
Elderly Res (>80)				

Correlates of Employment, Indonesia

	Urban		Rural	
	Men	Women	Men	Women
Pension	-0.15***	0.03	-0.14***	-0.04
ADL Unable (Z-Score)	-0.04***	-0.04***	-0.05***	-0.05***
IADL Unable (Z-Score)	-0.05***	-0.03***	-0.08***	-0.03***
Elderly Res (>80)	-0.03	-0.02	-0.05	-0.07*
Young Children (< 6)	0.00	0.00	0.01	-0.02
Spouse Working	0.08***	0.09***	0.08***	0.08***

Source: IFLS (2007). Suppressed covariates include: Age, Age-Squared, Marital Status, Education Level Indicators, Spouse ADLs and IADLs, Spouse Pension Receipt, Ln (1+value of housing wealth), county fixed effects.

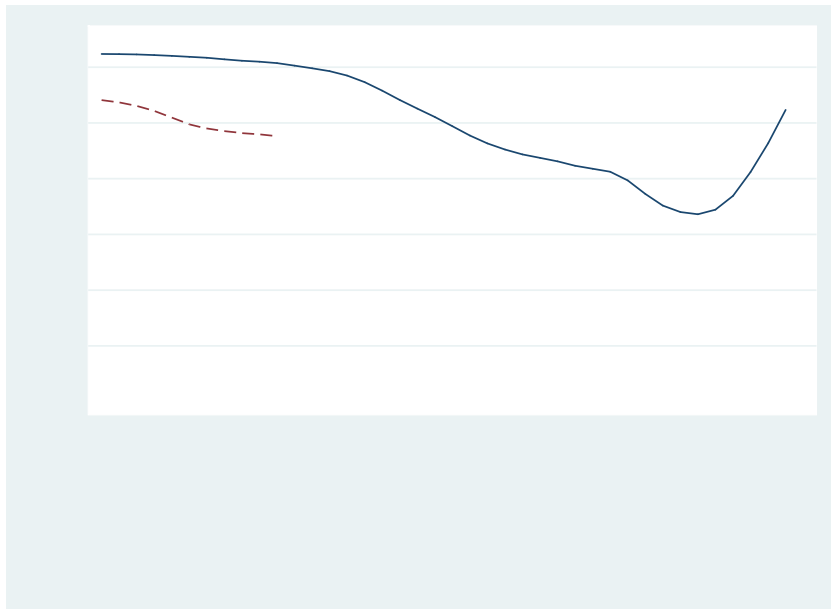
Correlates of Employment, Japan

	Men	Women
Old Age Pension	-0.04	0.01
Other Social Insurance Benefits	-0.17***	-0.10***
ADL Unable (Z-Score)	-0.07***	-0.06***
IADL Unable (Z-Score)	-0.03***	-0.01
Elderly Res (>80)	0.01	-0.01
Young Children (< 6)	-0.01	-0.06
Spouse Working		



Decline of Work More Gradual in Rural Areas, but Still More Hours of Work

Hours of Work Conditional on Working (Rural Residents)



Note:

Sources:

Will a new Pension Alter Incentives?

Òçã^} &^Á[{ ÁÔ@ æ Á New Rural Pension Program
(Giles, Zhang and Zhao, 2014).

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“ Will extending social pensions to populations that have not been covered lead to a decline in labor force participation or activity?

“ Policy Motivations

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“ Provide protection against poverty in old age.

Other Potential Effects

- “ Reducing income risk may increase efficiency in labor and land use
- “ May facilitate structural shift out of agriculture
 - “ Secure source of income may make elderly more willing to transfer land, perhaps to more productive uses.
 - “ Secure elderly income may facilitate further movement of adult children out of agriculture
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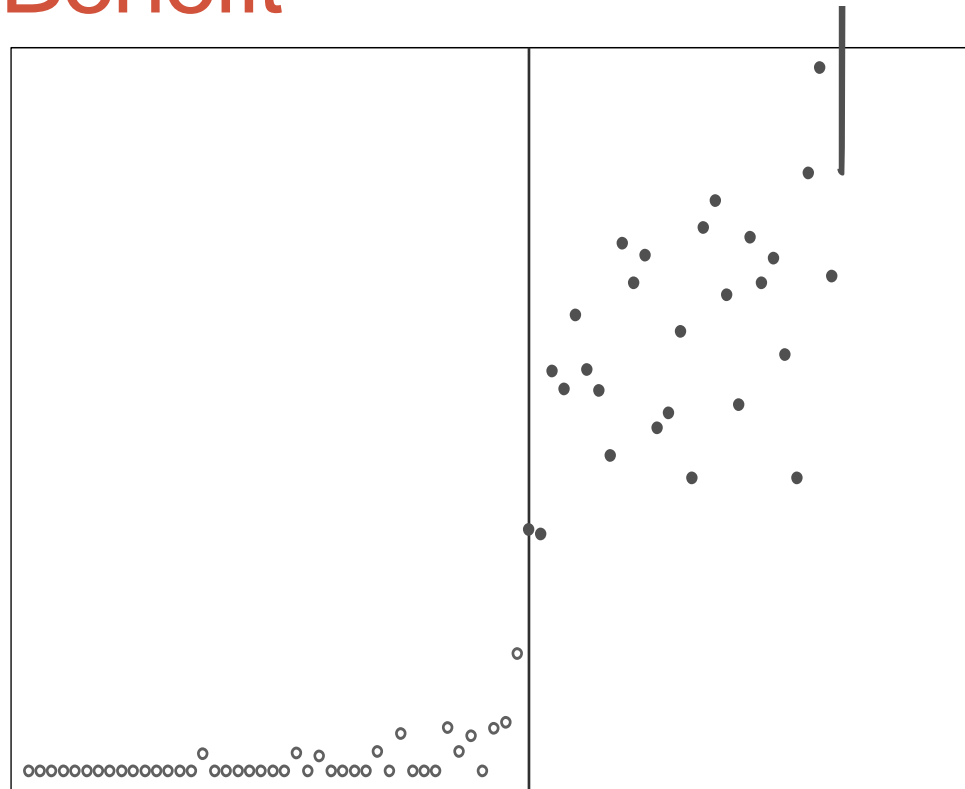
NRP Program Features

- “ Pilot started in September 2009.
- “ Enroll working population over age 16, excluding students and individuals covered by urban employee pensions (voluntary enrollment).
- “ The NRPP is funded by individual and collective contributions and

The CHARLS Data Set

- “ China Health and Retirement Longitudinal Survey (CHARLS), 2011-12 National Baseline survey data.
- “ One of a family of health and retirement surveys (HRS, SHARE, LASI, IFLS, KLoSA, JSTAR)
- “ 2008 Pilot supported by EAP, 2011 and 2013 national waves receive partial support from KCP (and US NIH/NIA, China NSF)
- “ Select different sub-samples depending on identification strategy:
 - “ RD estimates: we restrict the sample to those rural communities where the NRRP was implemented.
 - “ Placebo test in those communities where it was not yet implemented.

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.

Age Eligibility on NRPP Benefit Receipt (LPM)

	Dependent Variable: Receiving Pension Benefits	
	Age Bandwidth	
	+/-5	+/-10
Age \geq 60.75	0.35***	0.32***
	(0.04)	(0.04)
Piecewise linear function of age	Yes	-
Polynomial function of age	-	4 th Order
F-Statistic	83.2	58.5
Observations	1590	2774

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

Effects of Receiving Pension Benefits on Various Outcomes

	Age Bandwidth	
	+/-5	+/-10
Poverty Status (HH PC Income < 1196)	-0.25**	-0.20
% of respondents with ADL or IADL difficulties	0.26**	0.25**
Weekly Hours Worked	-5.87	-11.1
Net Private Transfer Received > 0	-0.28*	-0.28
Percentage of respondents with depression	-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

Summary Findings on NRPP (so far)

“

Work in Progress

- “ CHARLS biannual survey, with special topic surveys.
- “ Identify effects of migration on rural elderly well-being and support (both financial and instrumental)
 - “ Migration and access to instrumental care (input into LTC work with WB China colleagues)
 - “ Giles and Mu (2007) show that return migration influenced by parent
 - “ provide care until parents are highly disabled)
- “ How does adult child migration influence labor supply decisions? (China, Vietnam, Indonesia)

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