Universal Old Age Pensions for China
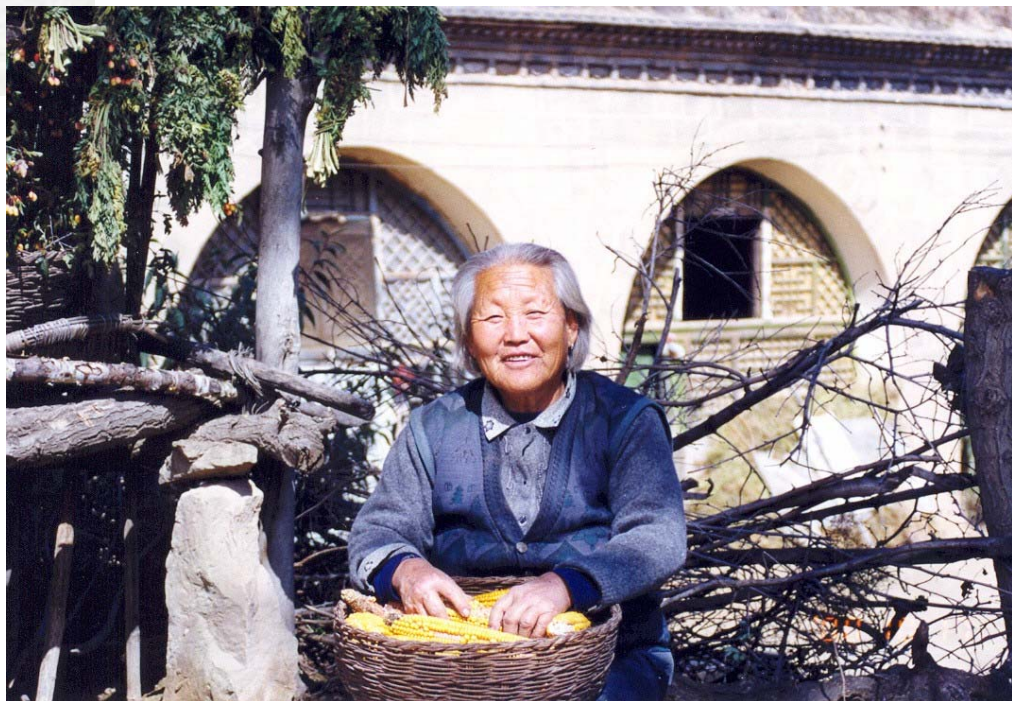
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Population Trends and Human Capital Formation in China: Challenges and Policy Responses

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"People respond to incentives."

Often forgotten in pension design –

Examples:

1. Force (or bribe) people to save for their retirement
2. Force employers to pay pension contributions (as a payroll tax)

World Bank's three pillars (1994)

1. Basic pension
2. Mandatory earnings-related pension
3. Voluntary saving

Types of Pillar 1 pensions

- Contribution-tested pension «
- Universal pension «
- Residence-based pension
- Recovery-conditioned pension (*ex post* means test)
- Social assistance pension (*ex ante* means test)

China's mandatory urban pillar 1

- Contributions (20% of wage) paid by employer on behalf of employee
- Flat pension (20% of average local wage) payable at age 60 (55 women) with 15 years of contributions
- Additional 0.5% points of pension for each additional year of contribution, up to maximum of 30%.
- Problem is low coverage (40%) and treatment of rural migrants

China's voluntary rural pillar 1

- Coverage is 9% and varies (>90% in rural Shanghai)
- A 2000 survey reveals that <5% of rural elderly were receiving a pension
- Average pension was less than 100 yuan a month
- Rural workers are 61% of total, so national coverage is 28%

Advantages of universal pensions

- Simple and easy to administer
- Automatic, 100% coverage
- Reach women and rural areas
- Do not stigmatize recipients
- Broad political support
- Avoid disincentive to save for old age
- Avoid disincentive to work in old age

The cost
of universal pensions

r = ratio of eligible to total population

p = ratio of pension to per capita GDP

y = per capita GDP

t = ratio of pension taxes to GDP

 ty = tax revenue per capita

rpy = pension expenditure per capita
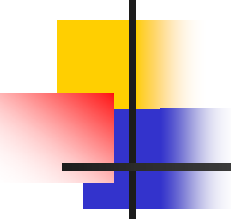
The cost of universal pensions

Taxes=Expenditures

$$ty = rpy \qquad (1)$$

Solve for rate of tax:

$$t = rp \qquad (2)$$

Example: $t = (0.1)(0.3) = 0.03$ (3% of GDP)

Projected values of r (%) for China

Year	Age 60	Age 65	Age 70	Age 75
2000	10.3	7.0	4.2	2.2
2010	12.6	8.3	5.4	2.9
2020	17.1	12.0	7.0	3.7
2030	24.7	16.7	10.3	6.2

r = ratio of eligible to total population (in per cent).

Medium fertility and medium rural to urban migration scenario.

Assumed size of p for China

- 100 yuan a month – average rural pension in 2000
- = 15% of per capita income
- Equal to 225 yuan in 2007
- Assume that every resident of China receives a pension this size from age 60, 65, 70 or 75

Cost of universal pensions for China (% of GDP)

Year	Age 60	Age 65	Age 70	Age 75
2000	1.5	1.0	0.6	0.3
2010	1.9	1.2	0.8	0.4
2020	2.6	1.8	1.0	0.6
2030	3.7	2.5	1.5	0.9

$t = rp$

p = 15% of per capita GDP (225 yuan a month in 2007)

Universal pensions

1. New Zealand - 1940
2. Mauritius – 1958
3. Brunei - 1984
4. Namibia – 1990
5. Samoa – 1990
6. Nepal - 1995
7. Botswana – 1996
8. Bolivia - 1996
9. Mexico City – 2001
10. Kosovo - 2002

Universal pensions: actual values for p and t

	p=pension/y	**t=taxes/GDP**
New Zealand (65)	35% – 46%	4.3% (gross) 3.6% (net)
Mauritius (60-100)	16% – 68%	2.0%
Brunei (60)	10%	0.4%
Namibia (60)	16%	0.9%
Samoa (65)	9%	0.4%

Universal pensions: actual values for p and t

	p=pension/y	t=taxes/GDP
Nepal (75)	10%	0.1%
Botswana (65)	10%	0.5%
Bolivia (65)	26%	1.2%
Mexico City (70)	5.5%	0.2%
Kosovo (65)	50%	2.7%

Residence-based pensions
(age, basic pension as % of per capita GDP)

- Denmark (65, 21%) *
- Finland (65, 22%)
- Iceland (65, 9%) *
- Norway (67, 17%) *
- Sweden (65, 30%)
- Canada (65, 14%) *
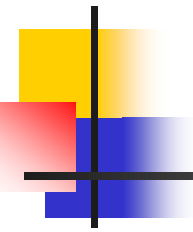- Netherlands (65, 39%)

* plus means-tested supplement

Recovery-conditioned pensions (*ex post* means test)

- Denmark (65)
- Finland (65)
- Iceland (65)
- Norway (67-69)
- Sweden (65)
- Canada (65)
- United Kingdom (80)
- Chile (65)

Recovery-conditioned pensions (*ex post* means test)

	pension/y	recovery rate	base
Denmark	21%	31%	earnings
Finland	22%	50%	pension
Iceland	9%	30%	income
Norway	17%	40%	earnings
Sweden	30%	100%	pension
Canada	14%	15%	income
UK	13%	100%	state pension
Chile (2008)	21%	60%	pension

Examples of social assistance pensions (*ex ante* means test)

	coverage	maximum pension/y	Tax/GDP
South Africa	87% (65, 60)	29%	1.2%
Australia	67% (65, 62.5)	29%	2.3%
USA	6% (65)	17%	0.07%
India	4% (65)	5%	0.01%

Recall the advantages of universal pensions

- Simple and easy to administer
- Automatic, 100% coverage
- Reach women and rural areas
- Do not stigmatize recipients
- Broad political support
- Avoid disincentive to save for old age
- Avoid disincentive to work in old age

So, what are the arguments *against* universal pensions?

1. They are inequitable, since the wealthy live longer lives than the poor

2. The young should have priority over the old in government expenditure

3. Universal pensions "crowd out" private transfers

4. They are a luxury few countries can afford

1. Universal pensions are inequitable, since the wealthy live longer lives

- The wealthy also pay more taxes
- Life expectancies are averages: some of the poor live long lives; some wealthy die young
- Pension income is known to improve health and increase life expectancy of the elderly poor

2. The young should have priority over the old

- False choice, as budgets are not fixed
- For example, much money is spent on subsidies and tax breaks for contributory Pillar 2 and 3 pensions (examples of South Africa, Australia, Bolivia)
- Pensioners in developing countries live with extended family and share income

3. Universal pensions "crowd out" private transfers

- Each dollar of pension reduces transfers from children by as much as 37 cents

- So what is the implication?

- Is it possible for government to force adult children to care for their parents? After all, household income is not distributed equally: children and productive adults have priority over the old and unproductive

4. Universal pensions are a costly luxury

- Governments spend large sums on minimum pillar 2 pensions and tax relief for contributory pillar 2 and 3 pensions
- Costs can be reduced by increasing age of eligibility or decreasing size of benefit
- Or means tests can be applied *ex ante* or *ex post* (abandoning universality)

Ex ante means tests (social assistance pensions)

- Very common
- High administrative costs
- Large errors of inclusion and exclusion
- Crude targeting, so disincentives for working and saving
- Facilitate corruption

Ex post means tests (recovery-conditioned pensions)

- Very rare – this is an anomaly
- Tax collection relies on ex post tests, so why treat cash benefits differently?
- Control of recovery of pension benefits is easier than control of tax collection, because benefits can be halted whereas tax liabilities continue to grow

References consulted

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Shih-Jiunn Shi, "Old-age pensions and the emergence of retirement in rural China: a case study of Shanghai," University of Bielefeld, Germany, November 2006.

Further information

www.PensionReforms.com

L. Willmore, "Universal pensions for developing countries", *World Development* 35:1 (January 2007), pp. 24-51.

Thank you for your attention

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