Assisting the Elderly Poor: social pensions, social assistance and related issues

World Bank-Hitotsubashi Workshop:
Closing the Coverage Gap: The Role of Social Pensions
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Outline

I. Poverty among the elderly

II. Policy options

III. Targeting eldery vs the general population

Part I: Poverty among the Elderly

Poverty Among the Elderly: bottom lines

- Most elderly live in larger households, which raises philosophical and data issues about whether poverty is individual or household;

- Most empirical work shows mixed results: elderly (or households with elderly) may be poorer on average, but not always, and degree varies.

Moreover, even where the old are poorer than average, there are many poor who are not old, and old who are not poor.
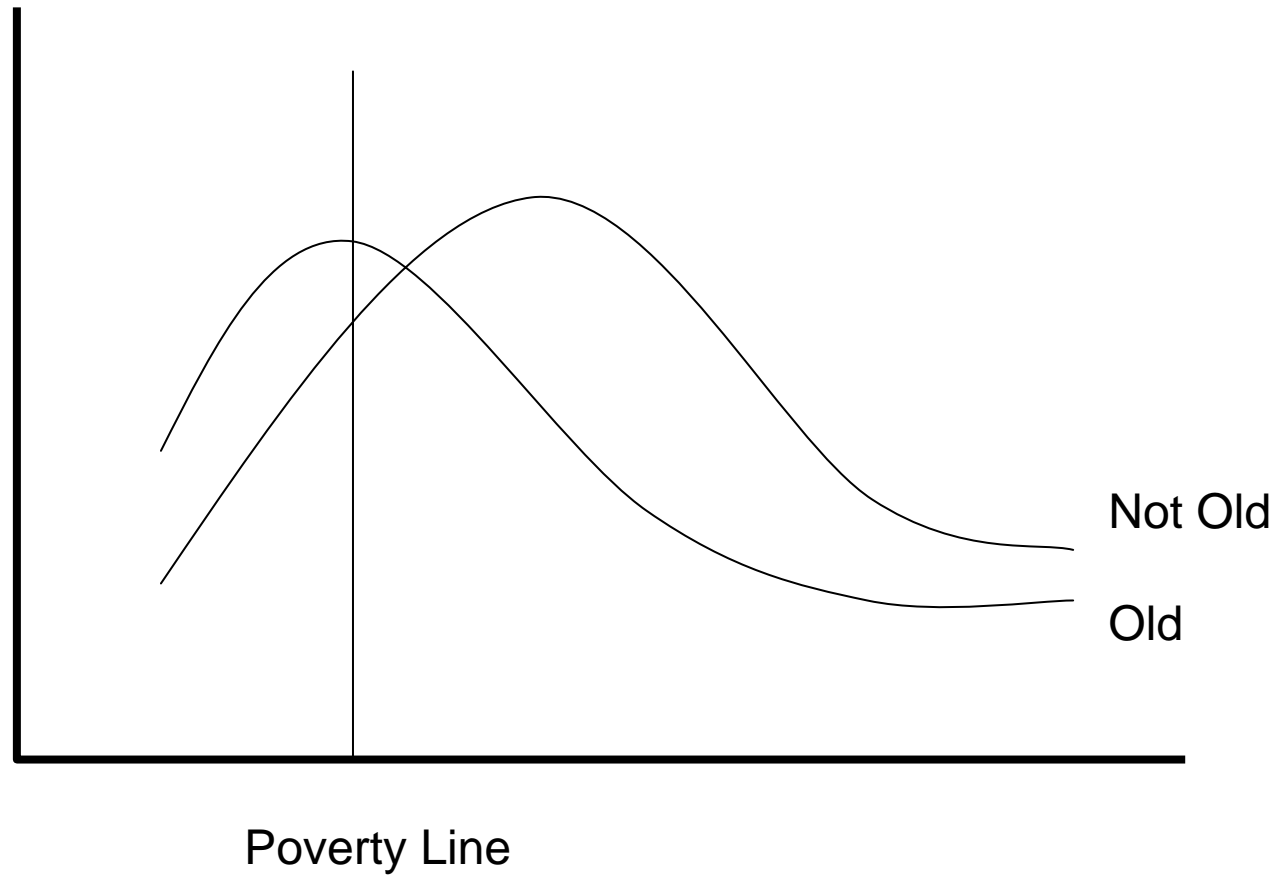

Not Old

Old

Poverty Line

Table 5: Poverty gap by household type (Kakwani and Subbarao, 2005)

Country	No elderly persons	Elderly persons	Elderly & children	Mixed households	Not headed by elderly	Headed by elderly
Brundi 98	26.2	27.0	33.6	23.1	26.2	24.3
Burkina Faso 98	**14.6**	**12.2**	18.8	18.3	15.4	18.6
Cote d'voire98	10.0	16.0	25.1	14.3	10.5	13.9
Camroon 96	22.6	23.8	21.1	25.3	22.5	27.3
Ethiopia00	9.9	12.1	10.7	11.0	**9.9**	**11.4**
Ghana 98	14.4	12.0	22.3	19.8	14.9	18.9
Guinea94	10.2	13.0	21.7	14.0	10.9	14.3
Gambia 98	20.9	24.7	11.8	31.0	23.7	30.6
Kenya97	17.1	15.9	21.6	21.0	17.1	21.2
Madagascar 01	27.1	17.6	25.1	26.1	27.1	25.1
Mozambique96	**29.4**	**19.2**	31.9	29.8	29.2	31.3
Malawi 97	26.5	25.6	33.7	29.6	26.5	30.5
Nigeria 96	28.3	12.1	26.8	38.1	29.0	34.1
Uganda99	16.7	20.1	22.9	15.9	16.6	17.2
Zambia98	32.8	41.6	59.3	44.1	**33.0**	**46.5**

Eastern Europe and Central Asia

Headcount Rates of Poverty and Age

Age Bracket	Bulgaria	Hungary	Poland	Estonia	Kyrgyz Rep.	Russia
0-4	29.0	30.0	35.3	33.3	46.4	47.9
5-9	28.2	26.0	31.6	32.0	46.0	42.9
10-14	24.2	20.9	27.6	34.1	41.1	40.5
15-24	24.1	19.7	23.6	26.4	41.8	36.6
25-34	23.5	21.7	26.2	27.6	43.3	41.6
35-44	18.8	17.1	21.3	28.6	38.2	34.7
45-54	20.2	13.7	16.0	24.1	35.2	29.7
55-64	27.6	15.6	14.5	31.6	42.6	41.7
65-74	35.0	23.6	18.3	37.0	47.6	45.0
75 +	47.5	37.7	22.1	47.9	41.4	45.9
All	26.1	20.6	23.0	30.5	42.5	39.4

Source: Braithwaite, Grootaert, and Milanovic 1999). The authors use OECD scales of equivalence where the first adult is
1, a second adult is weighted as .7 and a child is weighted .5.

Part II: Policy Options

Public Policy Options

A. Contributory pensions

B. Universal social pension

C. Targeted social pension

D. Inclusion in general social assistance

A. Expanding Contributory Systems

- Contributory system cannot cover everyone
  - Lifetime poor
  - Incomplete employment history
  - Informal sector workers who prefer to stay outside
- Difficulties with collection and record-keeping
  - Particularly in rural areas and among self-employed
- Mandating increased coverage does not work

B. Universal Social Pensions

Selling points:

- Apparent simplicity – no affiliation, contributions or targeting issues
- Little issue of labor disincentives for direct beneficiaries
- Political economy usually good

Problems

- Fiscal cost can be high
  - Schwarz 2004: $1/day to those above 65 in 40 African countries – ranges from .1% of GDP in Seychelles to 10.6% in Ethiopia
  - Kakwani and Subbarao 2004: 70% of poverty specific threshold to those above 65 in 15 African countries – ranges from 0.7% of GDP in Madagascar to 2.4% in Ethiopia
  - As point of comparison, most countries in world spend 1-2% of GDP on ALL targeted transfers
  - Thus implicit issue of whether elderly more or only deserving in the society?
- Most money goes to non-poor
  - Theory, results from Coady-Grosh-Hoddinott 2004
- Not all administrative problems eliminated (see later presentation)

C. Targeted Social Pensions

- **Selling points:**
  - Radically reduces fiscal cost, so more feasible
  - Also opens door to reduce horizontal inequity with other groups
- **BUT** targeting requires a whole new system, and is never perfect, is especially challenging in low income countries

D. Integration with General Social Assistance

Selling points:

– Minimizes administrative costs, avoids duplication of functions

– Avoids issues of one group being more worthy of support than another

– Allows SS administration to stay service-oriented rather than become gatekeepers

But some disadvantages:

– Stigma may be greater if support called social assistance rather than a pension;

– Receipt of family-based social assistance won't empower the elderly within the household the way receipt of an individual-specific pension might;

– Political support for social assistance is often less than political support for pensions.

D. Integration with General Social Assistance

Examples:

– Elderly included in any general program

– Elderly even included in 4 CCT programs – Mexico, Brazil, Ecuador, Jamaica

Some adjustments may be sensible:

– Adjustments to means or proxy means tests formulae (e.g Bulgarian guaranteed minimum income program guarantees high level for elderly, especially lonely elderly)

– Less frequent re-certification (every two years rather than every six months in US food stamps)

– Relaxation of work/job search rules (elderly exempted in Romanian guaranteed minimum income)

Conclusion on policy choice

- Different ways of providing old age protection;

- My general preference is for fewer integrated programs rather than more separate ones;

Part III: Targeting the elderly vs the general population

Option 1: Targeting by household structure (elderly only, or elderly plus child households)

Advantages:
- HH structure easier to observe than income;
- Limits costs still further because few elderly live in such households (1-2% in Kakwani-Subbarao, 2005);
- No labor disincentive issues for prime aged;

Disadvantages:
- Questionable accuracy – elderly only households may be independent not because they have no family ties, but because they prefer/can afford it
- Concern that it may cause families to 'reject' their elderly;

Option 2: Community Based Targeting

- The elderly, or at least the lonely elderly of missing generation families, seem often to be included in community criteria (eg. Zambia, Kenya);

- The usual issues of CBT which are not well studied

  - Possibly accurate, but

  - Depends on well-defined communities, effects on social fabric unclear

Option 3: Means or Proxy Means Tests

Usual issues: often good incidence, sometimes issues of errors of exclusion, administrative system required, etc.

Special issues

- – Include only elderly's income or assets? Or of all household members?
- – The elderly may plausibly have a different asset to income mix than the non-elderly, so formulae would need adjusting
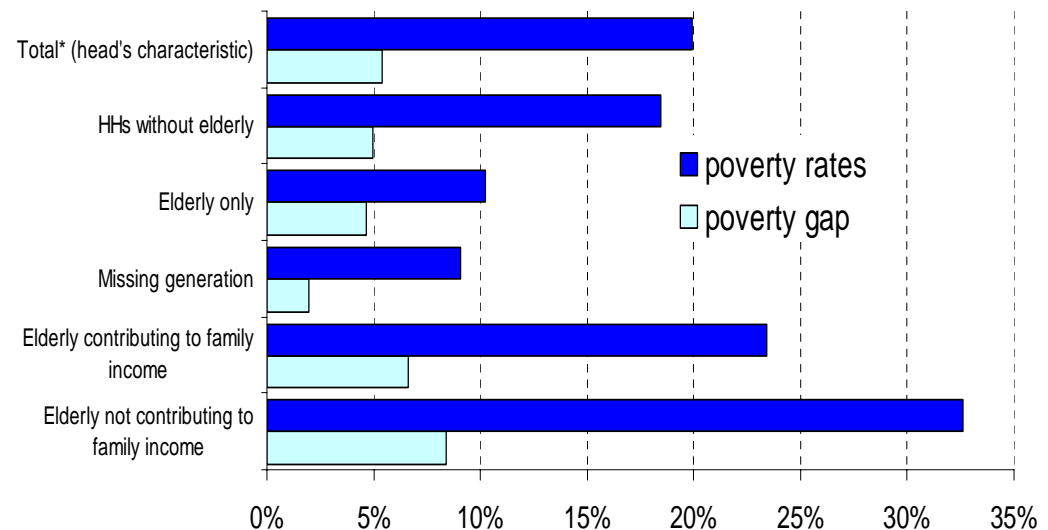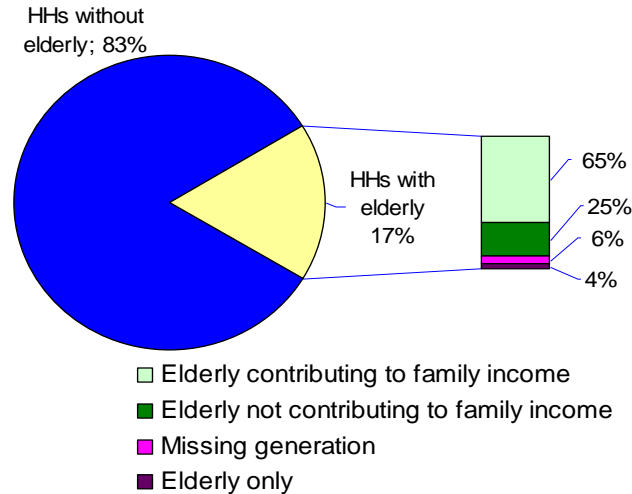
Background		Niger	Panama
Population, total (millions)[1]		14.4	3.3
Rural population (%)[2]		83.24	39.46
GDP (current US$) (billions)[1]		3.5	17.1
GNI per capita (current US$)[1]		260	4,890
Life expectancy at birth[3]		45	75
School enrollment, primary (% net)[3]		39.9	99
Poverty Level (%)[2]			
	FGT(0)	62.1	37.06
	FGT(1)	24.13	15.33
	FGT(2)	12.28	8.7
Inequality[2]			
	Gini Index	0.43881	0.466
	P90/P10	5.714	10.404

Niger: poverty and the elderly

Policy messages:

- Most hh do not include elderly, so if goal is general poverty reduction, social pension serves poorly;

- 90% of elderly living in households with earners, so not necessarily poorer;

- Targeting by household structure not helpful as 'lonely elderly and missing generation hh have lower poverty rates than average;

- Look into age or health status of elderly;

HHs without elderly; 83%

HHs with elderly 17%

65%
25%
6%
4%

- ☐ Elderly contributing to family income
- ☐ Elderly not contributing to family income
- ☐ Missing generation
- ☐ Elderly only

Total* (head's characteristic)

HHs without elderly

Elderly only

Missing generation

Elderly contributing to family income

Elderly not contributing to family income

■ poverty rates
☐ poverty gap

0%   5%   10%   15%   20%   25%   30%   35%

Results largely insensitive to specification of economies of scale (over plausible range of θ from 1 to 0.7); to FGT(0); FGT (1), etc.

Panama: poverty and the elderly

Policy messages:

- Most hh do not include elderly, so if goal is general poverty reduction, social pension serves poorly;

- 73% elderly living in households with earners, so not necessarily poorer;

- Targeting by household structure not helpful as 'lonely elderly and missing generation hh have lower poverty rates than average;

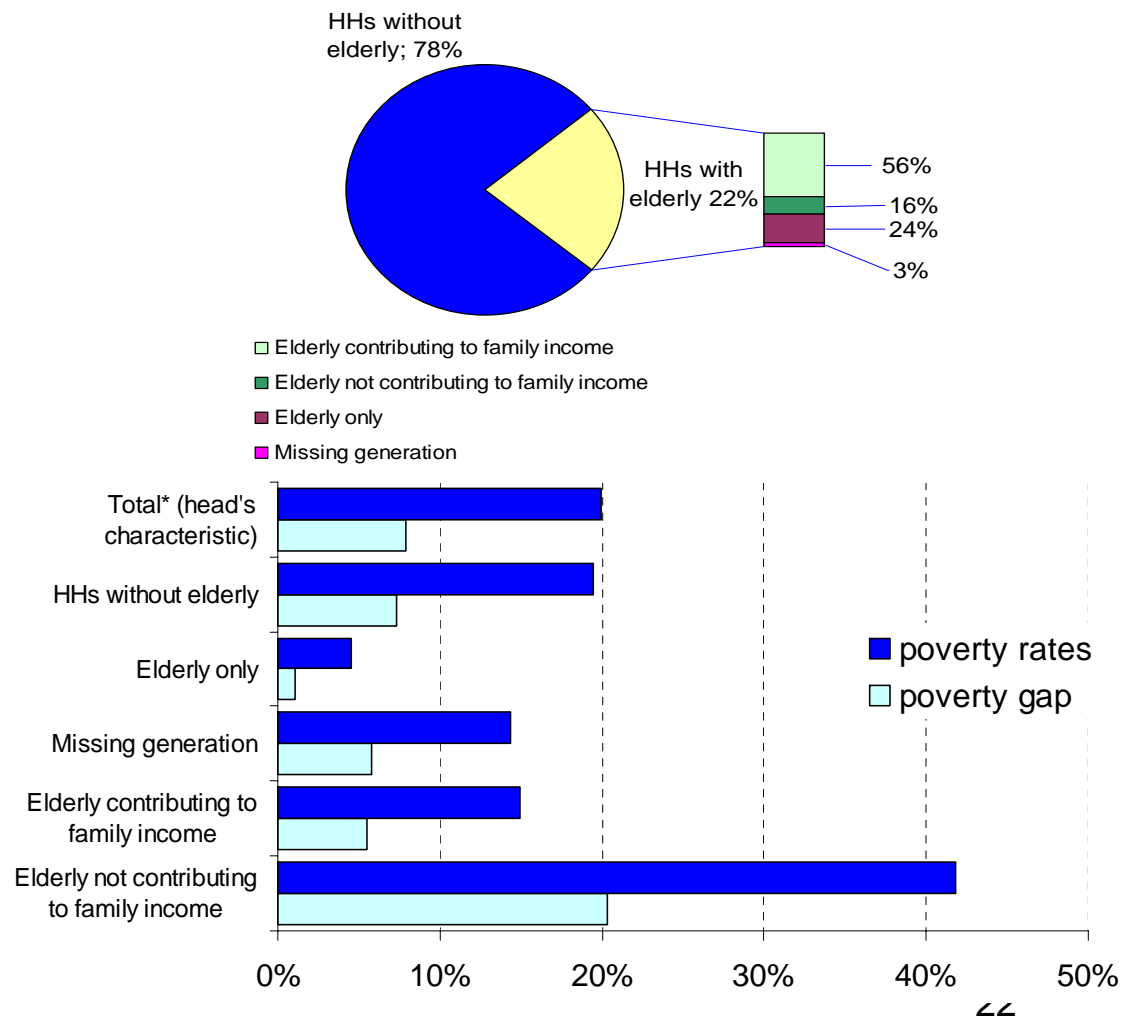- Look into age or health status of elderly;

Results largely insensitive to specification of economies of scale (over plausible range of θ from 1 to 0.7); to FGT(0); FGT (1), etc.

HHs without elderly; 78%

HHs with elderly 22%

56%
16%
24%
3%

- ☐ Elderly contributing to family income
- ■ Elderly not contributing to family income
- ■ Elderly only
- ■ Missing generation

Total* (head's characteristic)

HHs without elderly

Elderly only

Missing generation

Elderly contributing to family income

Elderly not contributing to family income

■ poverty rates
☐ poverty gap

0%   10%   20%   30%   40%   50%

Customizing proxy means tests (PMT)* for the elderly

- Here we develop a series of PMT and compare errors of inclusion and exclusion among them.
- One set of comparisons is calibrated over the population as a whole, but with and without an emphasis in capturing information about elderly within the household.
- Another set is calibrated separately for households with and without elderly.

* Widely used, generally give good results. Premise is that easily observable vector of variables on location and quality of dwelling, assets, household demographics predict welfare well, as alternative to income-based means testing.

Details of PMTs

Niger

1. Formulae done separately by regions, R^2 .32-.65. Then predicted welfares merged into single data set again. Policy options simulated.

2. Formulae done separately for hh w/ and w/o elderly, R^2 .45 for both.

3. A single threshold used, to incorporate poorest 20 percent of households.

4. Errors of inclusion and exclusion calculated by comparing predicted welfare based on proxies with welfare (consumption) measured by survey
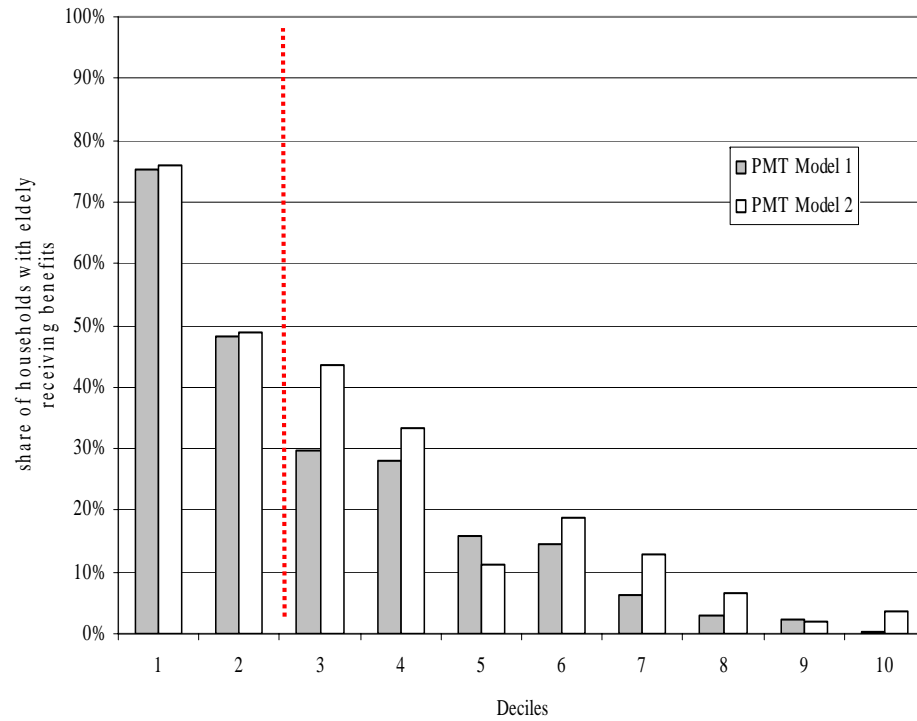
Panama

1. Formulae done separately by urban, rural, indigenous areas, R^2 .50-.66. Then predicted welfares merged into single data set again. Policy options simulated.

2. Formulae done separately for hh w/ and w/o elderly by regions, R^2 .75 -.50.

3. A single threshold used, to incorporate poorest 20 percent of households.

4. Errors of inclusion and exclusion calculated by comparing predicted welfare based on proxies with welfare (consumption) measured by survey

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Variable definition to Proxy means test

Dependent variable	Logarithm of household per capita consumption. No adult equivalence scales and health/travel expenses not included
Head's Characteristics	Age, educational level and gender
Household's demographics	Household size, number of children and number of elderly
Household's infra-structure	Type of household, number of rooms, material of outer walls, material of roof, type of toilet, source of water, combustible to cook, possession of telephone and access to electricity.
Variables used to calibrate model toward elderly population	Type of family: no elderly, elderly alone, missing generation, elderly contributing to income and elderly not contributing to income; number of elderly classified as parent of head; number of elderly who contribute to household income; and share of elderly who not contribute over number of elderly
Durable goods	Possession of Freezer; Washing machine, TV, Car, sofa, wardrobe, ...
Presence of livestock	Possession of Cow, Sheep, Goat, Horse, ...
Source of household income	Auto consumption, agricultural production, wages in private/public sector, Property/equipment rents, Public/private Pensions and remittances, donation and other.
Infra-structure of the region	Distance to hospitals, distance to schools, distance to road, and distance to communication services (post - offices/telephone).
Regional component	Dummies for region

	Exclusion Error		Inclusion Error	
Niger	HH w/ elderly	HH w/o elderly	HH w/ elderly	HH w/o elderly
Standard PMT estimated over all households	39.4	47.0	13.4	10.7
Standard PMT estimated separately	32.8	47.2	13.0	10.3
PMT augmented with 'elderly' variables, estimated over hh	37.5	47.8	13.5	10.7
PMT augmented with 'elderly' variables, estimated separately	34.6	47.1	12.5	10.6
Panama				
Standard PMT estimated over all households	32.2	27.4	5.5	7.6
Standard PMT estimated separately	31.4	27.4	5.3	7.6
PMT augmented with 'elderly' variables, estimated over hh	24.8	25.6	4.8	6.8
PMT augmented with 'elderly' variables, estimated separately	26.3	24.8	4.0	6.9

Coverage when models calibrated jointly (1) and separately (2)

Niger
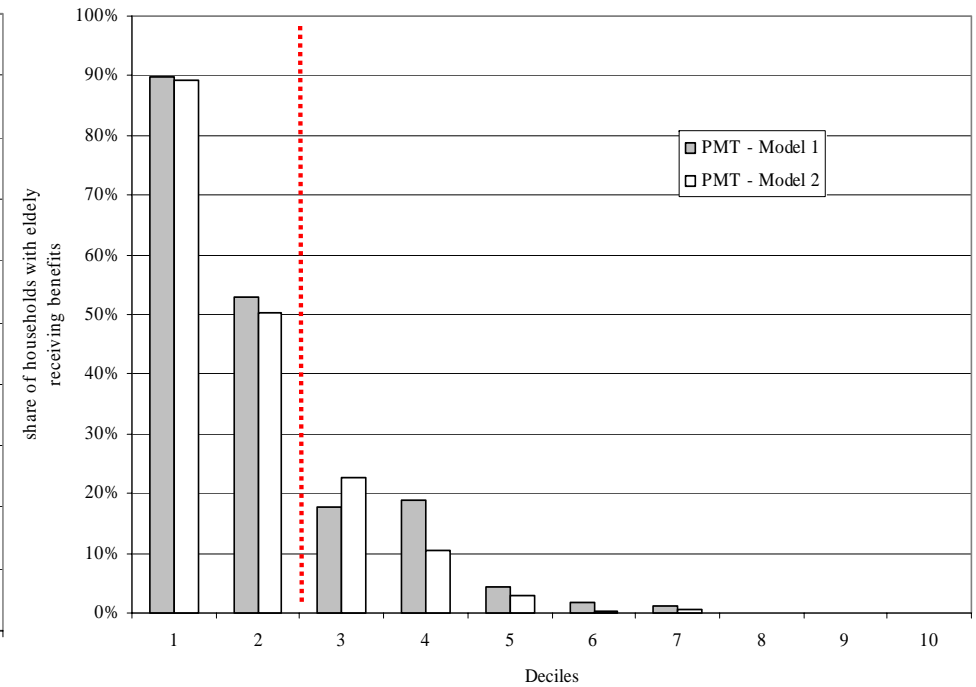
Panama

Policy messages for
Adjusting PMT for the elderly

- Real action is in errors of exclusion, errors of inclusion are less sensitive;
- Addition of 'elderly' variables to PMT formula greatly reduces errors of exclusion among elderly in Panama, less so in Niger;
- Separate calibration of models helps in Niger, not in Panama;
- Results are generally 'pro-elderly' in Niger, more neutral in Panama;
- There is a bit more to explore: errors of exclusion vary by household type (very high for elderly only or missing generation households) and age (higher for older elderly) groups that very small in number but perhaps salient;

Conclusion on targeting

- As for wider social assistance field, targeting choices are situation specific;

- Apparently much of the general know-how will carry through;

- Some attention to elderly in defining PMT is useful.