SETTING MDC PARAMETERS IN LOW INCOME COUNTRIES (LICS)

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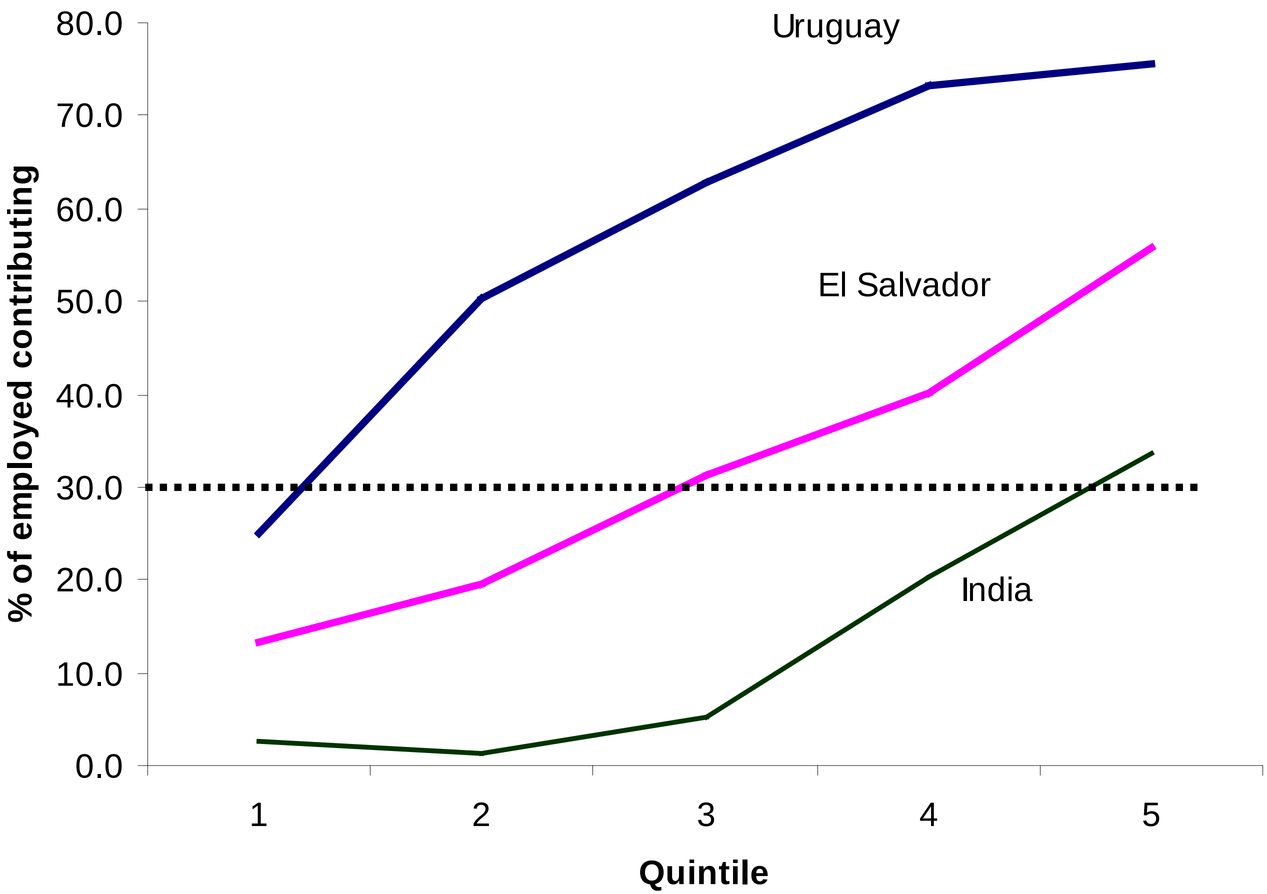
Target population

- Roughly 1/3 of the world's population lives in LICs where coverage is below 20% of workforce
- This includes most of sub-Saharan Africa, South Asia, and parts of Latin America, East Asia, Middle East/North Africa
- Many of these countries have social assistance programs or social pensions in some form
- Within countries, coverage highly correlated with income

Target population

Country types	PPP$YCAP	Coverage ratio	Ratio 20-59/60+ population
LIC	>4500	17%	7.6
MIC	4500-15,000	51%	6.3
HIC	15,000+	90%	3.4
TSE	2000-20,000	66%	3.7



Uruguay
El Salvador
India
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
% of employed contributing
Quintile

Characteristics of target population

- Variable income flows
- Low savings capacity
- Low exposure to formal financial sector
- Transient career path (rural-urban migrants)
- High degree of self-insurance (i.e., lack of various types of insurance coverage)
- High discount rate/liquidity preference
- Higher mortality/morbidity (relative to covered)
- Few opportunities for formal jobs (evasion issue minor)

Strategies for system design

- Minimize transaction costs
  - Allow small and variable contribution amounts and flexible timing
  - Harness existing groups where possible
  - Use IT to lower transaction costs on front end (banking correspondents, mobile payments)
  - Use formal pension system infrastructure where feasible
  - Simple investment types, reliance on defaults
- Effective outreach
  - Credible institutions must participate on provider side
  - Pull factor may require paying providers' incentives for enrolment (especially at outset)

Strategies for system design

- Affordability and incentives
  - Affordable contribution levels
  - Link with health/disability insurance where feasible
  - Voluntary pensions in rich countries exist due to tax treatment, but irrelevant for informal sector workers – a substantial matching contribution is needed to overcome high discount rate and liquidity preference
- Age of withdrawal must be in line with realistic biological deterioration

Matching contributions

- MCs can be targeted and capped (e.g., India matches up to 1000 rupees per year for informal sector workers)
- 1:1 match provides an immediate 100% return
- Can be bundled with insurance (eg. Health) reducing the need for liquid precautionary savings
- In practice, there are a number of countries planning or starting MDCs, but not enough experience to have empirical results
  - China, India, Indonesia, Vietnam, Dominican Republic

Steps in setting key parameters for MDC

MCT

↓

TBL = x % of MCL

↓

CR/PL = $

↓

AP = % of PL

↓

SR = 1-AP → CT - # workers → BR - $

MCT – minimum consumption target

TBL – target benefit level

CR – contribution rate

PL – premium level

AP – ability to pay

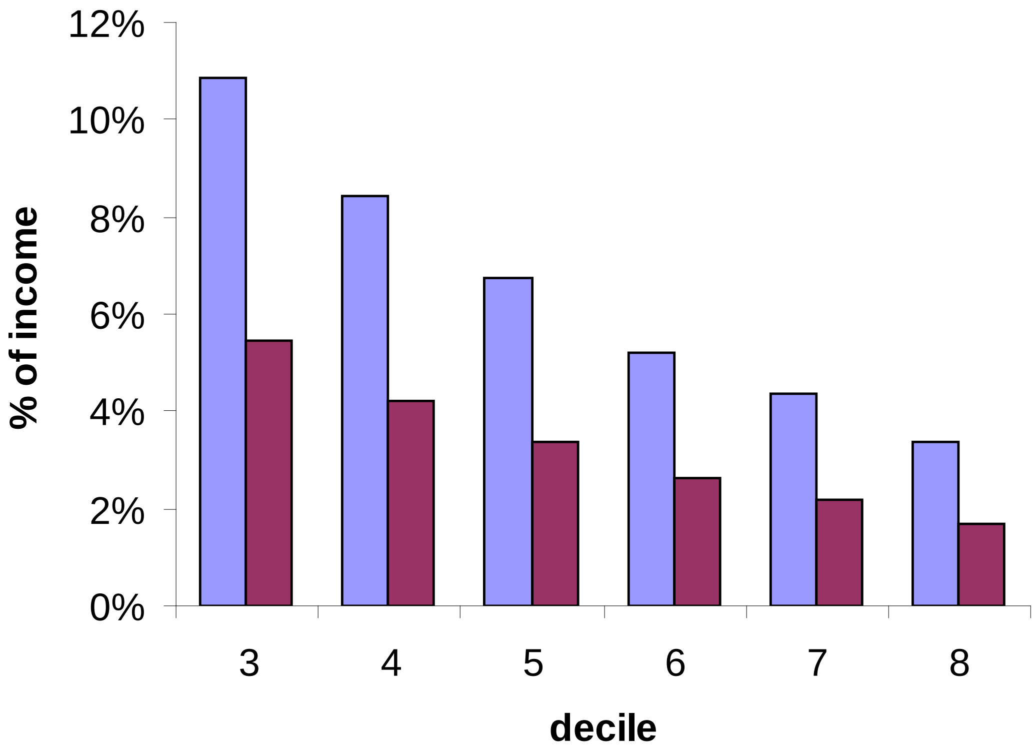
SR – subsidy rate

CT – coverage target

BR – budget requirement

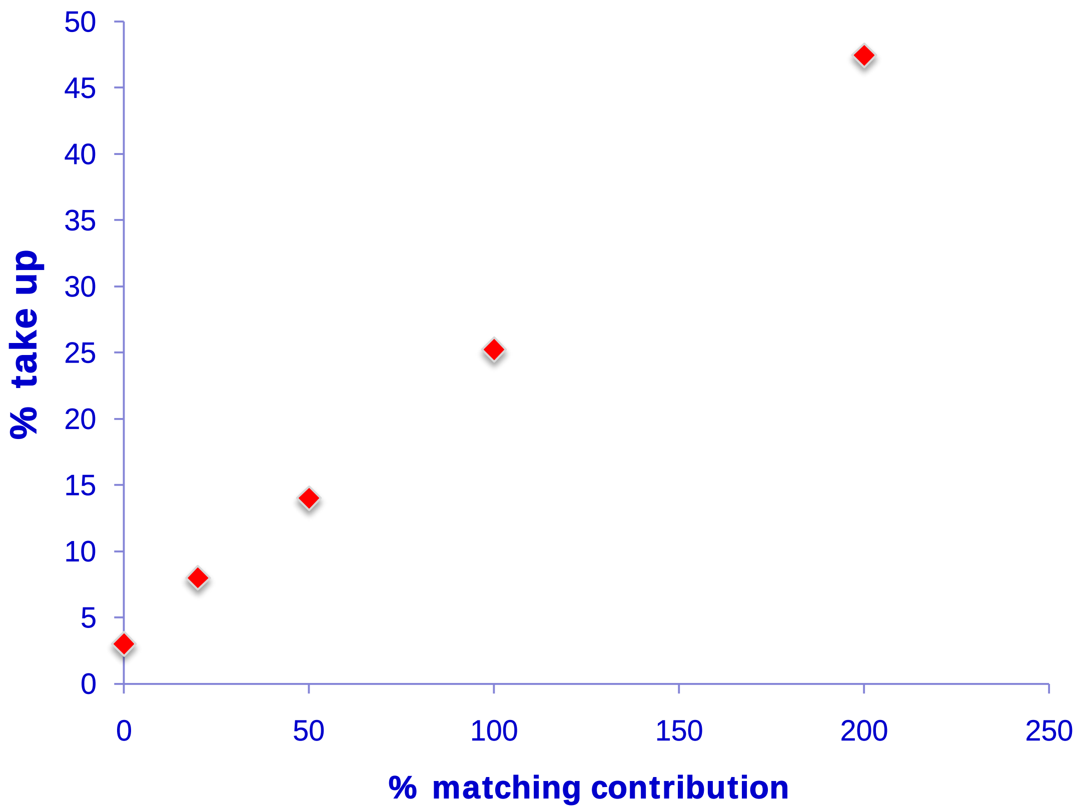
How affordable is the MDC to workers?

Example: Based on a target benefit just above the Indian poverty line, the contribution required with a 1:1 match is 5% of income for decile 3

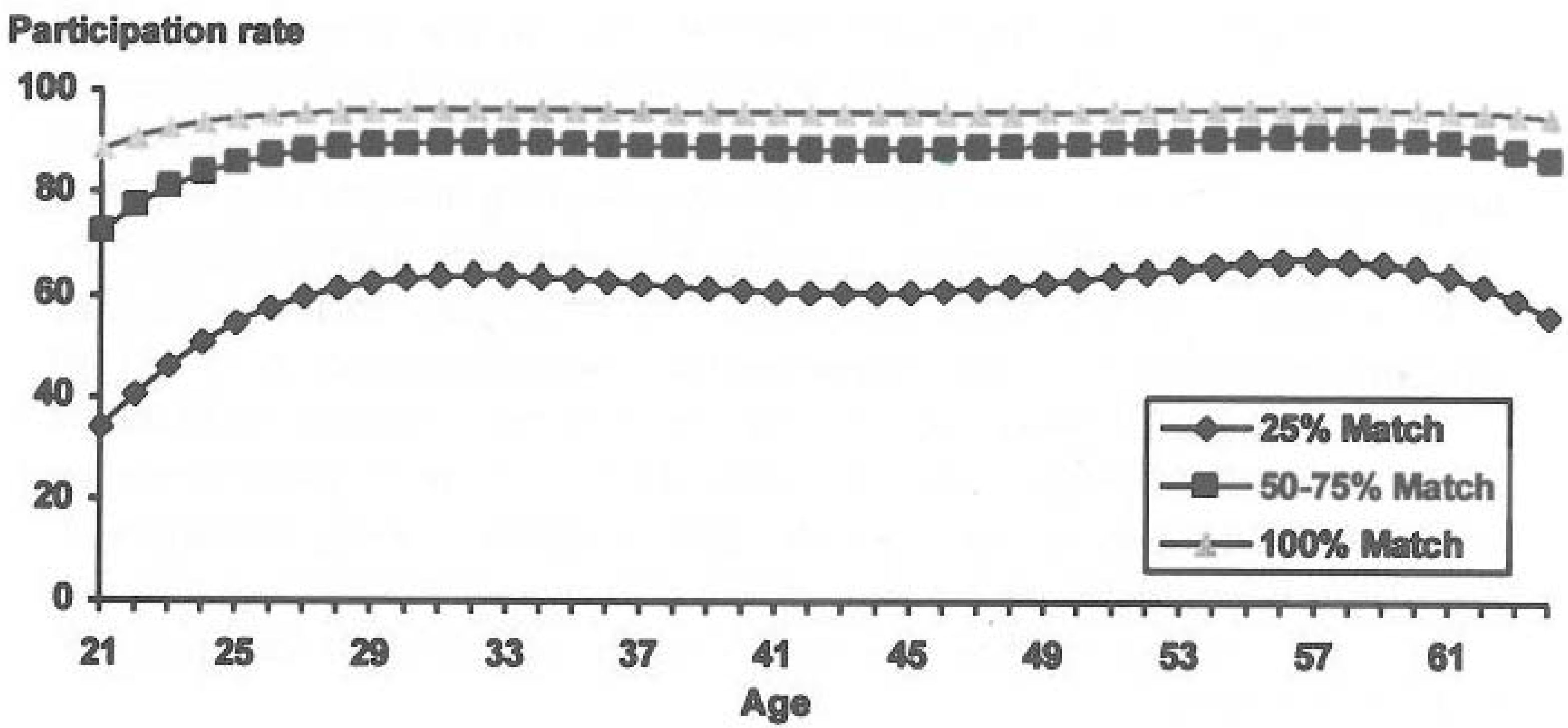


How much take up can you buy?

Duflo et. al. (2005) tested the take up elasticity for US low income workers, but similar studies have not been done for developing countries



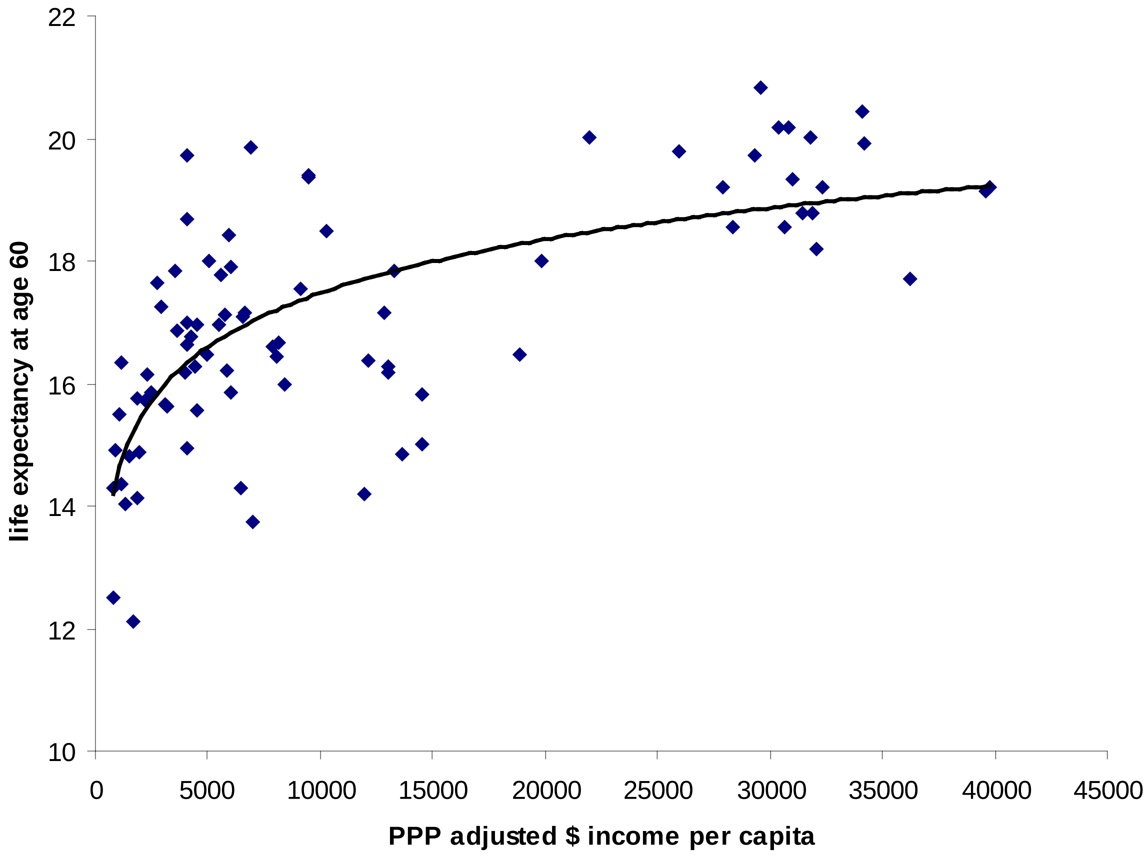
How much take up can you buy?



Age should be linked to target group

- Some limited empirical evidence supports the intuition that the life expectancy differential by income level is greater in LICs (eg., Bannerjee and Duflo (2005) and Pal and Palacios (2010))
- Age of withdrawal should take shorter life expectancy of target population into account
- Age can also be coordinated with social pension eligibility age

Age parameters



Parameters must be consistent with fisc

- Rough estimate of MDC cost
  - Set target pension at 40% YCAP
  - Calculate required total contribution for full career 10% of YCAP
  - Set match at 1:1 (5% of YCAP from government)
  - With labor force/population (40%)* share in informal sector (80%) * take up (50%) = 0.8% of GDP
- This can be reduced to 0.4% of GDP if targeted to the bottom half of the informal sector; (this yields a 40% increase in coverage or 8 percentage points)
- Match can be reduced subject to fiscal constraints

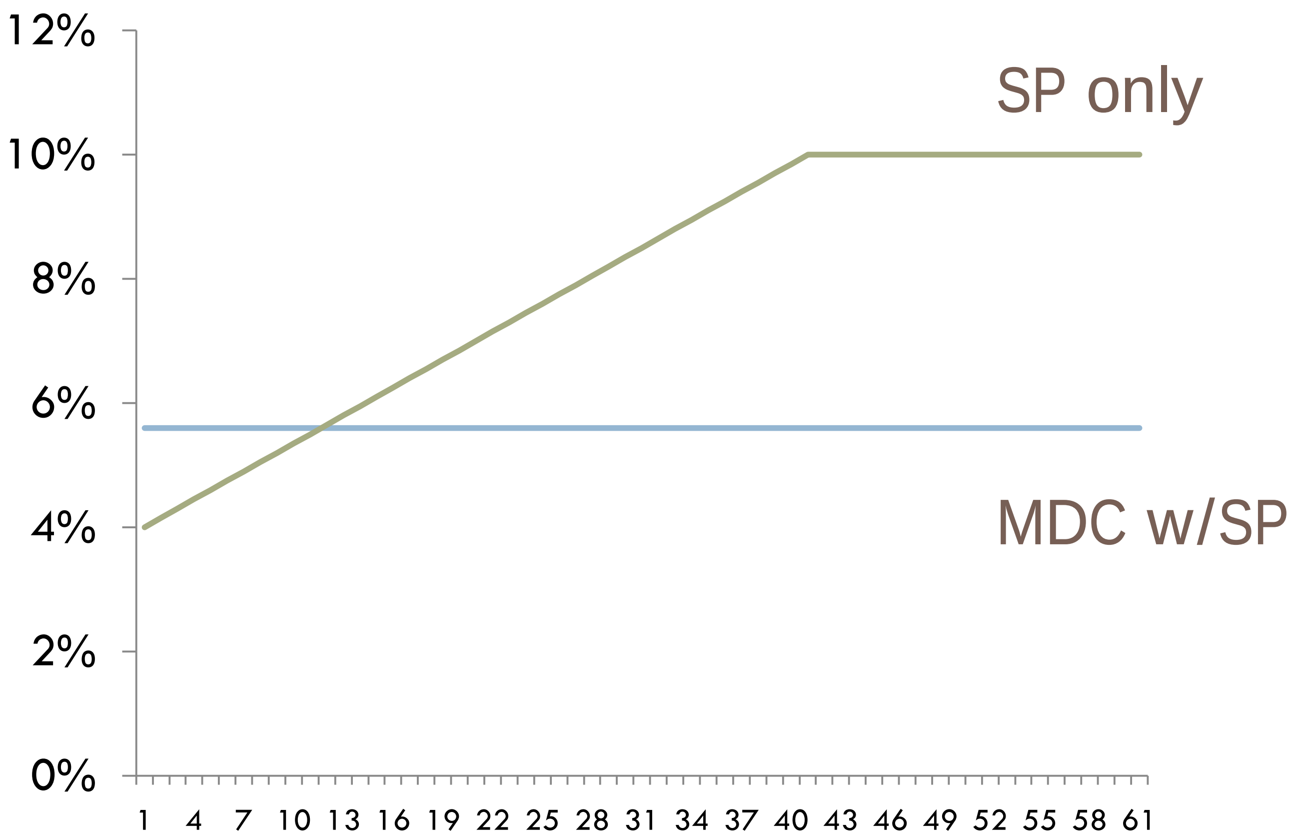
MDCs and social pensions

- MDCs take a long time to mature and have no impact on old age poverty; it does nothing for the current or soon to be old
- MDC policy and social pensions can be linked and harmonized to achieve clear objectives over time
- Social pension dependence will be greater for older workers and gradually be replaced by dependence of younger workers on MDCs
- SP can be set at absolute poverty level and indexed to inflation while MDC parameters linked to YCAP; prefunding as population ages
  - Set target pension at 40% YCAP
  - Calculate required total contribution for full career 10% of YCAP
  - Set match at 1:1 (5% of YCAP from government)
  - With labor force/population (40%)* share in informal sector (80%) * take up (50%) = 0.8% of GDP
- This can be reduced to 0.4% of GDP if targeted to the bottom half of the informal sector; in this case, coverage would be doubled
- Match can be reduced subject to fiscal constraints

Social pension only

Social pension and MDC

Costs


12%
10%
8%
6%
4%
2%
0%
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49 52 55 58 61
SP only
MDC w/SP

Concluding thoughts

- MDCs are being considered or started in a number of countries with low coverage
- MDC policies alone do not address the current coverage gap – social pensions can play that role in the short run until MDC matures
- Careful analysis of fiscal tradeoffs between the two types of program can only be done with long term projections and studies of take up elasticity
- It may be especially attractive in countries with DC schemes for formal sector workers to reduce start up costs and allow for a seamless system