World Bank
Core Course on Pensions
Washington, May 2015

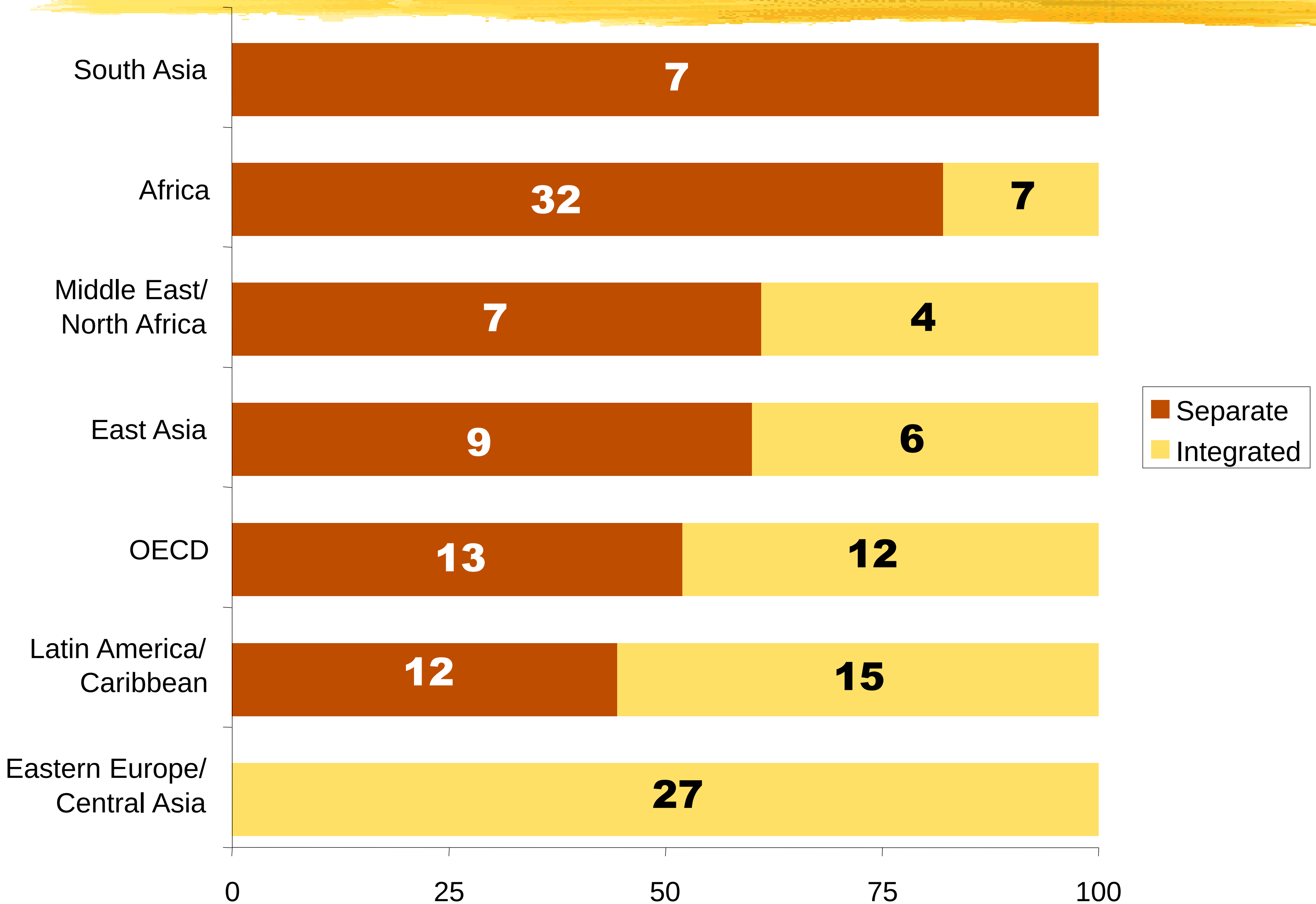
Agenda

- Institutional arrangements for public-sector workers' pensions
- Demographic pressures on finances
- Flexibility and portability of civil-service pensions

Origins

- Civil-service pension schemes usually set up before national programmes
  - independence of civil servants
  - make working for the public sector attractive
  - shift the cost of remunerating civil servants into the future
- Separate schemes then often persisted after national schemes established: ‘dualism’

Institutional arrangements around the world



Institutional arrangements

Fully integrated	Institutionally separate with similar benefits	Fully integrated with top-up arrangements	Partially integrated with top-up scheme	Entirely separate institutions and benefits
Chile	Denmark	Australia	United Kingdom	Austria
Czech Republic	Finland	Canada		Belgium
Estonia	Iceland	Ireland		France
Hungary	Israel	Italy		Germany
Mexico	Netherlands	Japan		Greece
Poland		New Zealand		Korea
Slovak Republic		Norway		Luxembourg
		Slovenia		Portugal
		Spain		Turkey
		Sweden		
		Switzerland		
		United States		

Institutional arrangements

Separate

Angola
Benin
Burundi
Cameroon
Congo, DR
Congo, R
Cote d'Ivoire
Gambia
Guinea
Guinea-Bissau
Kenya
Madagascar
Malawi
Mali
Mauritania
Mozambique
Niger
Senegal
Sudan
Tanzania
Togo
Uganda
Zimbabwe

Partially integrated 1

Botswana
Lesotho
Mauritius
Namibia
South Africa
Swaziland

Partially integrated 2

Liberia

Integrated

Cape Verde
Central African Republic
Chad
Ethiopia
Ghana
Nigeria
Rwanda
Sao Tome e Principe
Seychelles
Sierra Leone
Zambia

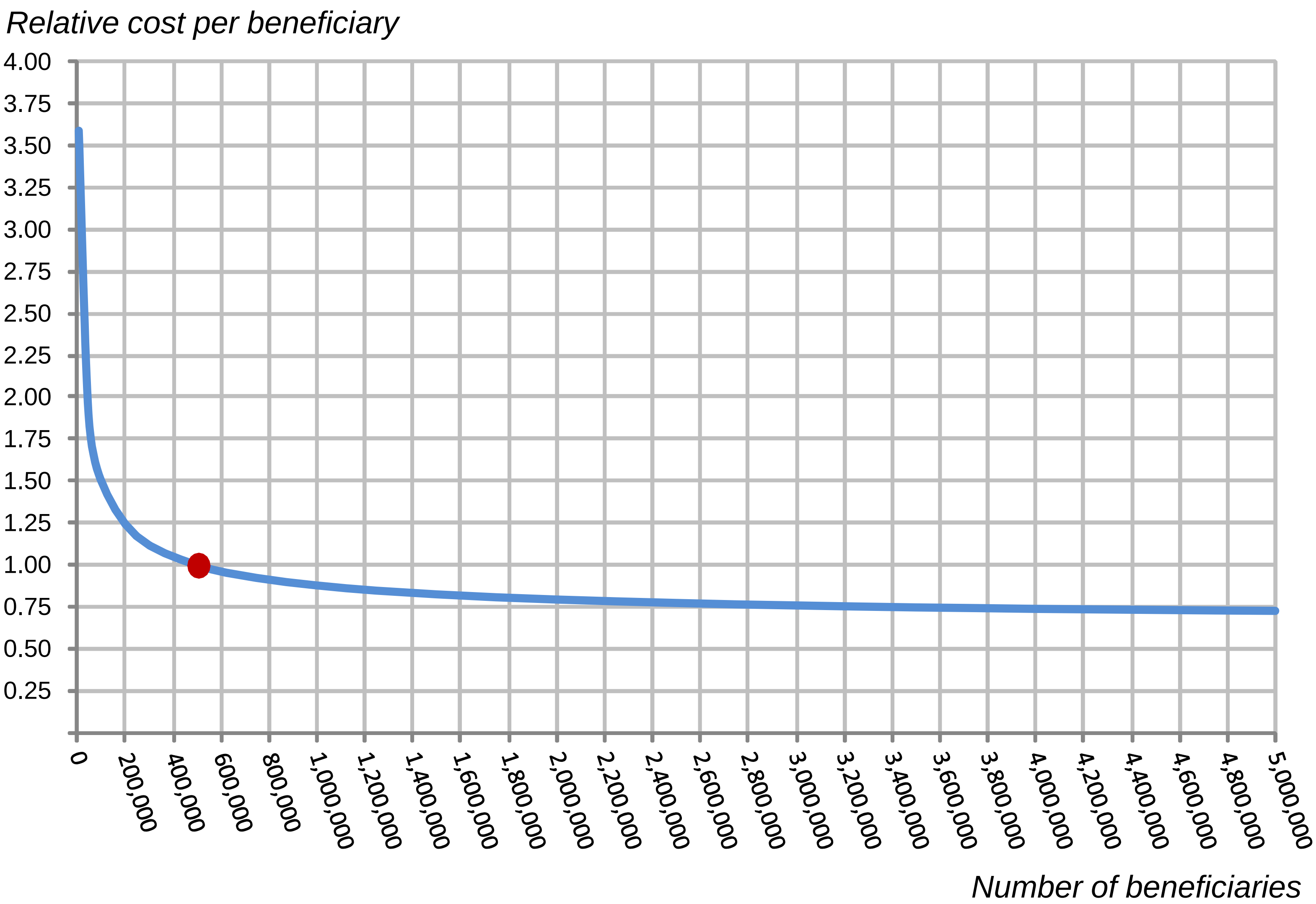
No private-sector scheme

Eritrea
South Sudan

Dualism

- Arguments against
  - Integration gives civil servants direct, personal interest in the plan being well managed
  - Economies of scale
  - Mobility and portability
  - Equity
  - Transparency
- Long-term goal should therefore probably be integration of civil-service and national pension plans

Economies of scale

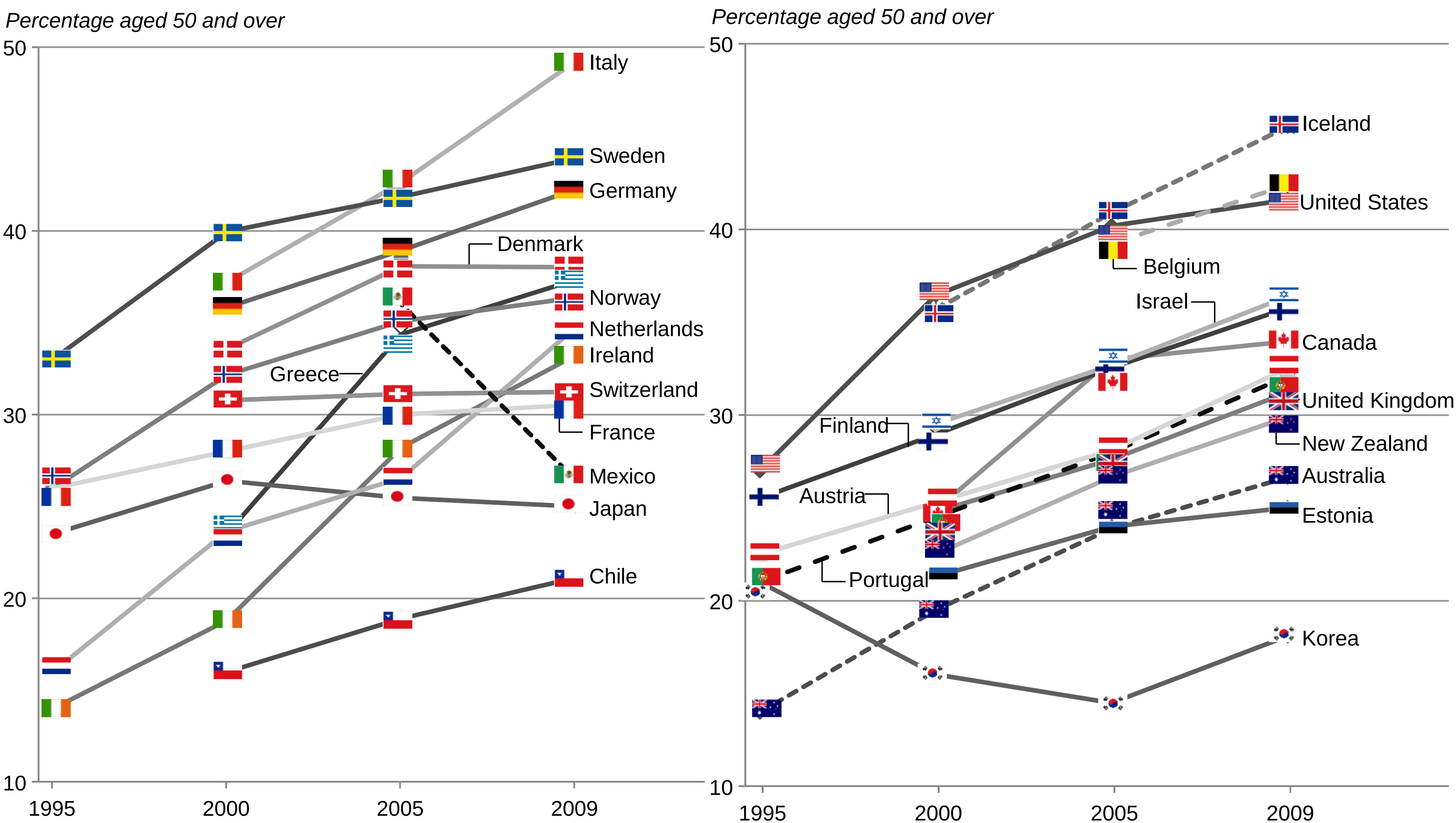


Central-government employment

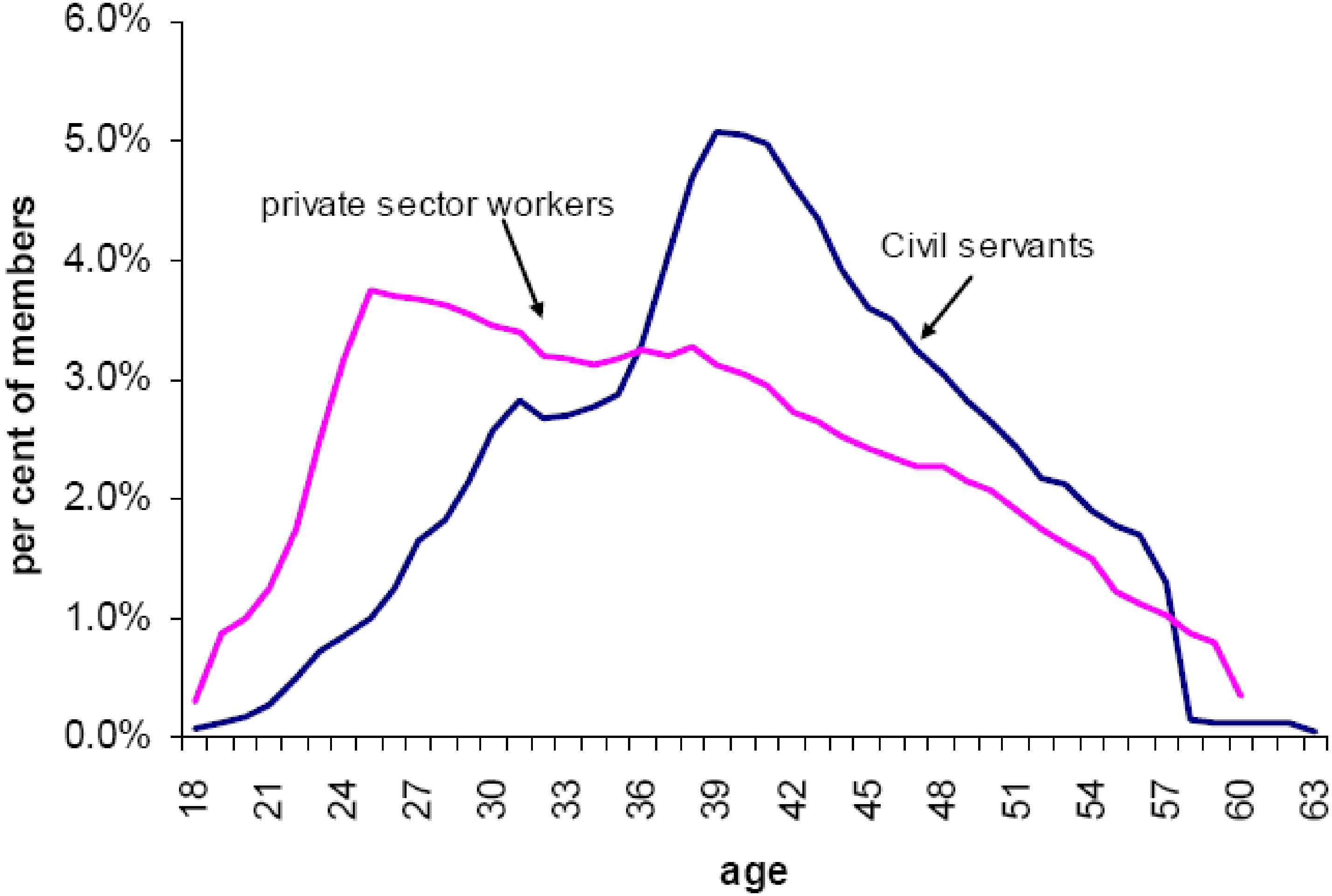
per cent of total population

	early 1980s	early 1990s
Africa	1.8	1.1
Asia	2.6	1.1
Latin America	2.4	1.5
All developing countries	2.2	1.2
OECD	2.9	1.9

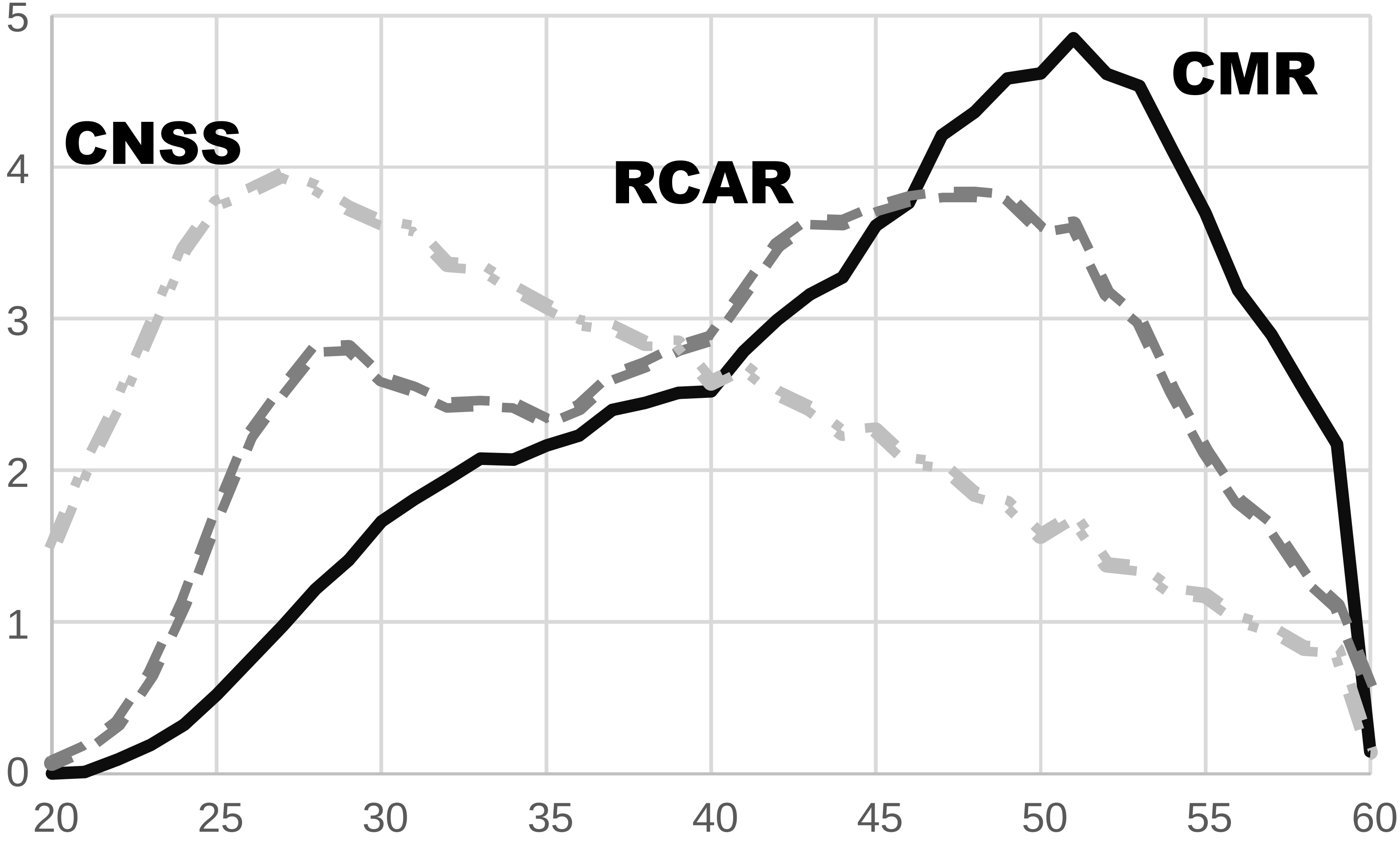
Ageing central-government workforce



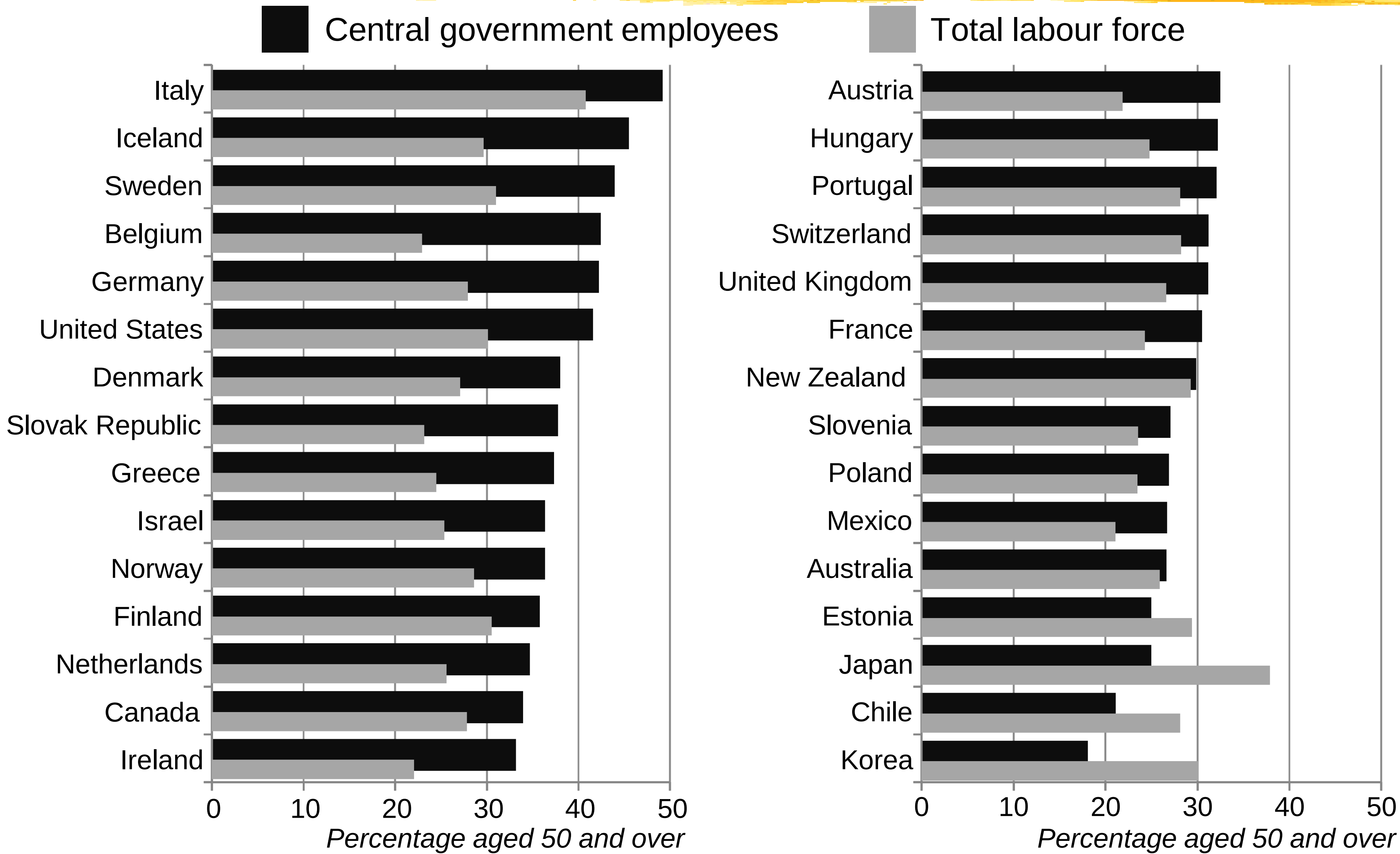
Example: Egypt



Example: Morocco



Labour-force demographics: central government vs population



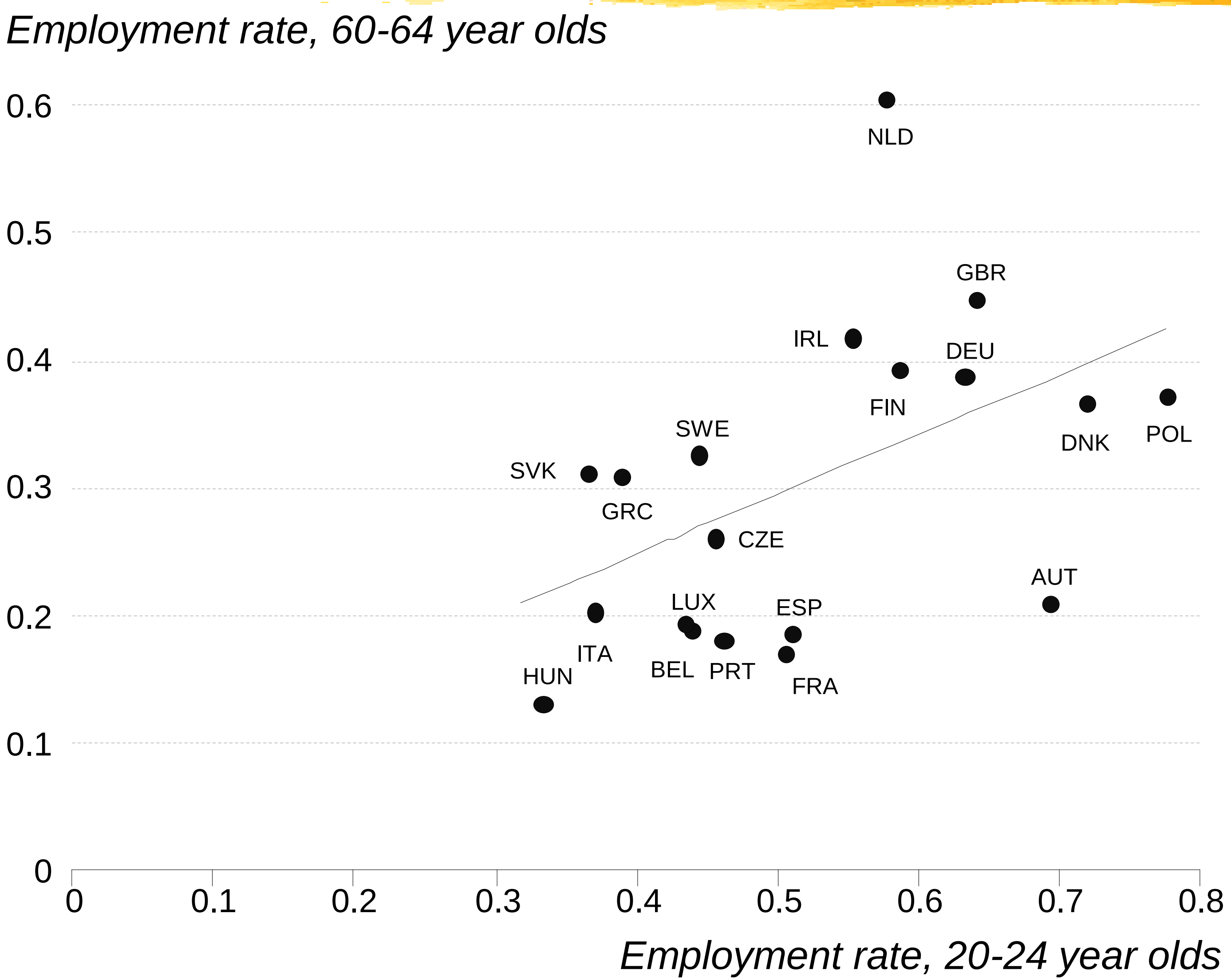
Reform options 1

- ‘Parametric’ reforms to defined benefit plans
  - reduce replacement rate
  - index pensions in payment to prices rather than civil-service earnings
  - introduce/increase member contributions
  - raise pensionable age
  - extend averaging periods for ‘final’ salary
- ‘Systemic’ reforms
  - introduce new system for new civil servants with some element of pre-funding of obligations
- Any reform must take account of all aspects of civil-service terms and conditions

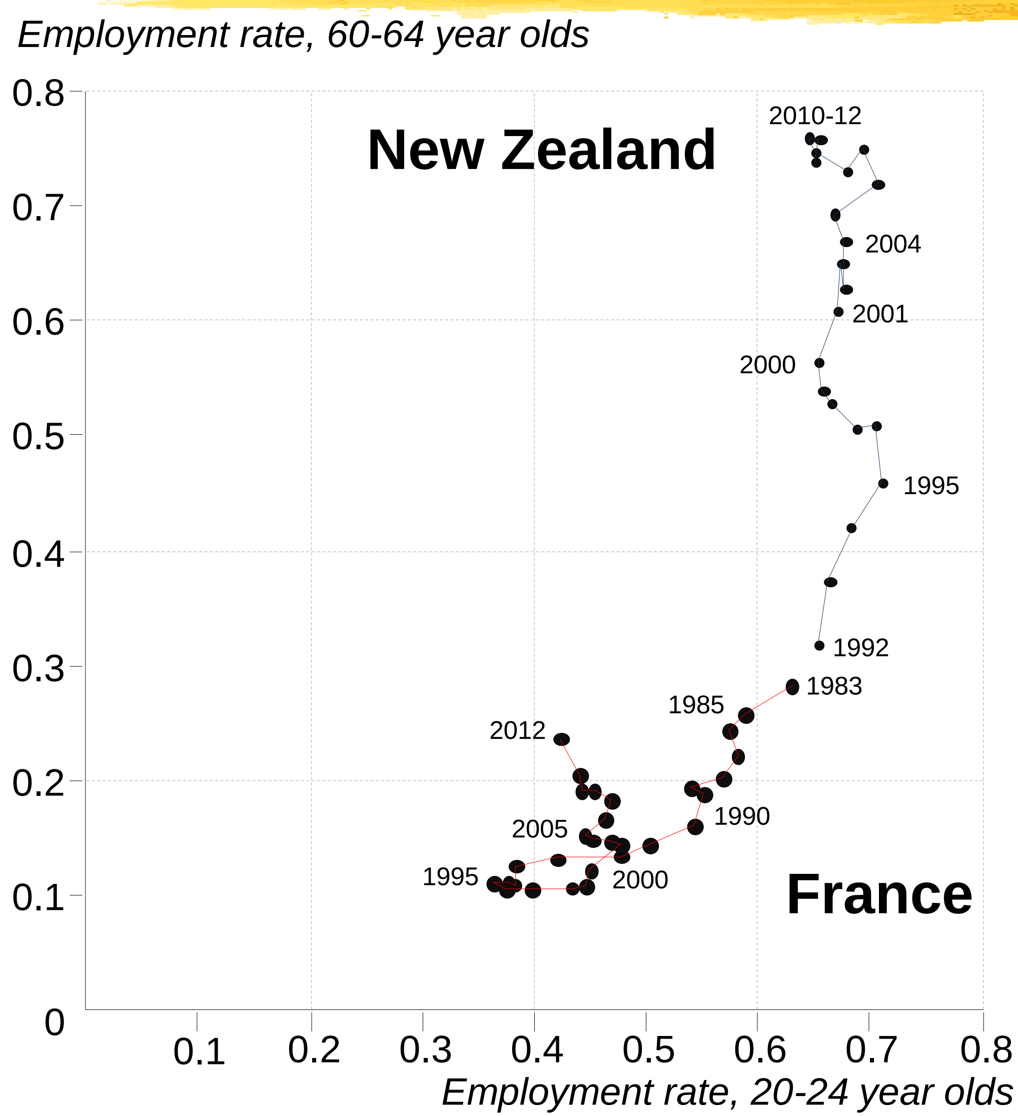
Reform options 2

- Increasing contributions:
  - employer contributions are just re-labelling, unlike national systems
  - employee contributions may have an effect on wages or productivity
- Increasing pension age:
  - Civil service schemes are ‘closed’ systems
  - so increasing retirement age has different effects than it does in national schemes: labour supply effect in national schemes
  - Increase in retirement age cuts duration of benefit payments, but
  - without downward adjustment of accrual rates to compensate, benefit values increase
  - people might retire on higher pay if earnings continue to grow with age
  - affects both pay and pension bills

Lump-of-labour fallacy across countries



Lump-of-labour fallacy over time



Individual-level model: Morocco

	Baseline
Contribution rate	20%
Contribution years	33
Lifetime contributions (x annual salary)	6.6
Accrual rate	2.5%
Gross replacement rate	82.5%
Net replacement rate (average earner)	106.7%
Pension age	60
Indexation	half prices
Lifetime benefits (x annual salary)	13.2

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Indexation	half prices
Lifetime benefits (x annual salary)	13.2
Benefit/cost ratio	2.0
Equilibrium contribution rate	40%
Sustainable replacement rate	41%

Individual-level model

	Baseline		Age 65: same accrual
Contribution rate	20%		20%
Contribution years	33		38
Lifetime contributions (x annual salary)	6.6		7.6
Accrual rate	2.5%		2.5%
Gross replacement rate	82.5%		95.0%
Net replacement rate (average earner)	106.7%		122.3%
Pension age	60		65
Indexation	half prices		prices
Lifetime benefits (x annual salary)	13.2		11.2
Benefit/cost ratio	2.0		1.5
Equilibrium contribution rate	40%		38%
Sustainable replacement rate	41%		50%

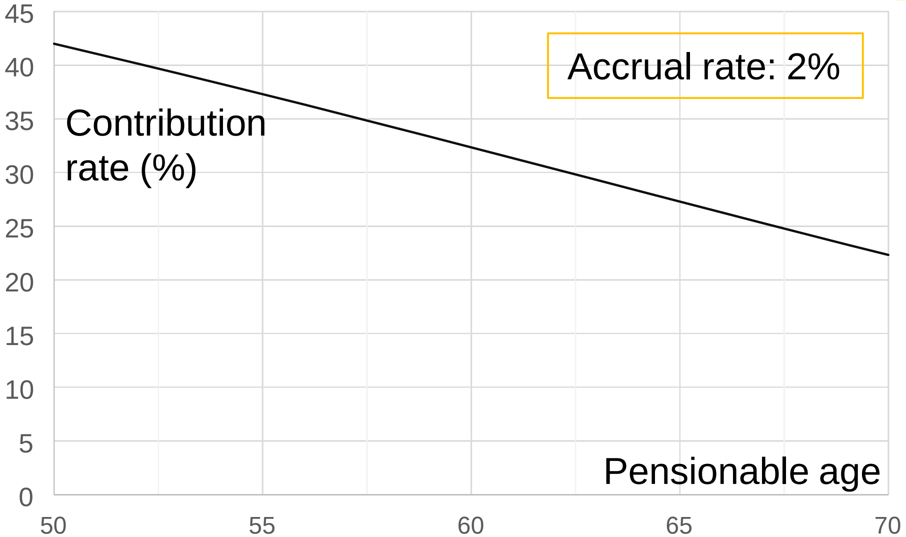
Individual-level model

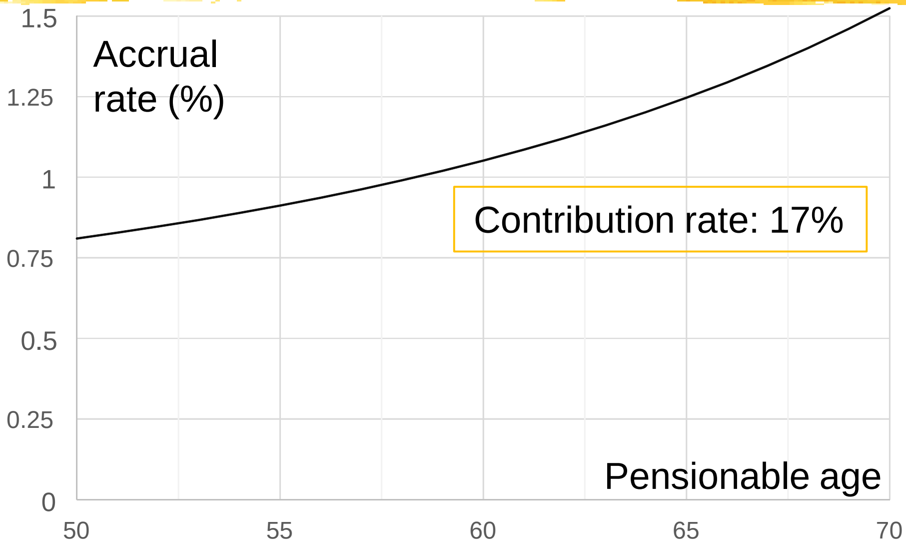
	Baseline		Age 65: same accrual	Age 65: lower accrual
Contribution rate	20%		20%	20%
Contribution years	33		38	38
Lifetime contributions (x annual salary)	6.6		7.6	7.6
Accrual rate	2.5%		2.5%	2.2%
Gross replacement rate	82.5%		95.0%	82.5%
Net replacement rate (average earner)	106.7%		122.3%	106.7%
Pension age	60		65	65
Indexation	half prices		prices	prices
Lifetime benefits (x annual salary)	13.2		11.2	9.7
Benefit/cost ratio	2.0		1.5	1.3
Equilibrium contribution rate	40%		38%	26%
Sustainable replacement rate	41%		50%	64%

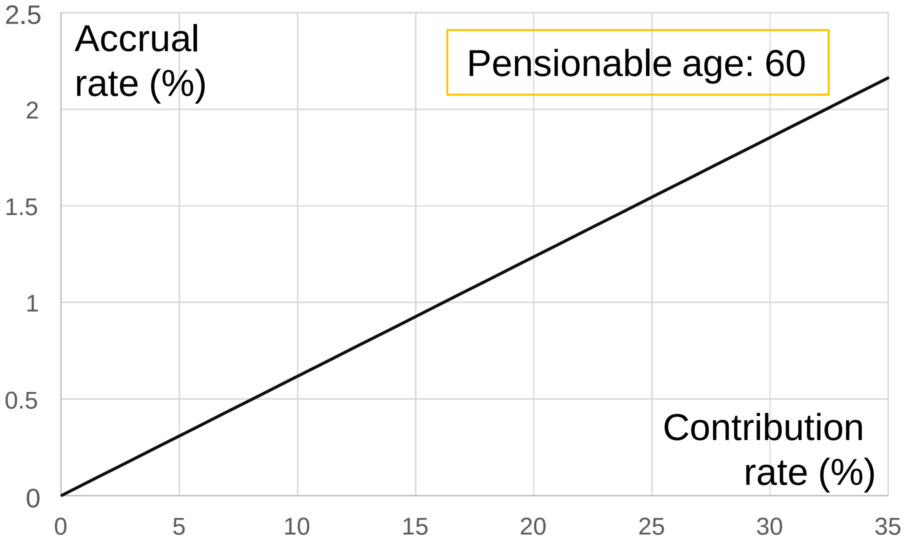
Pension possibilities

- Three key variables:
  - accrual rate
  - pension eligibility age
  - contribution rate
- Look at the sustainable combinations

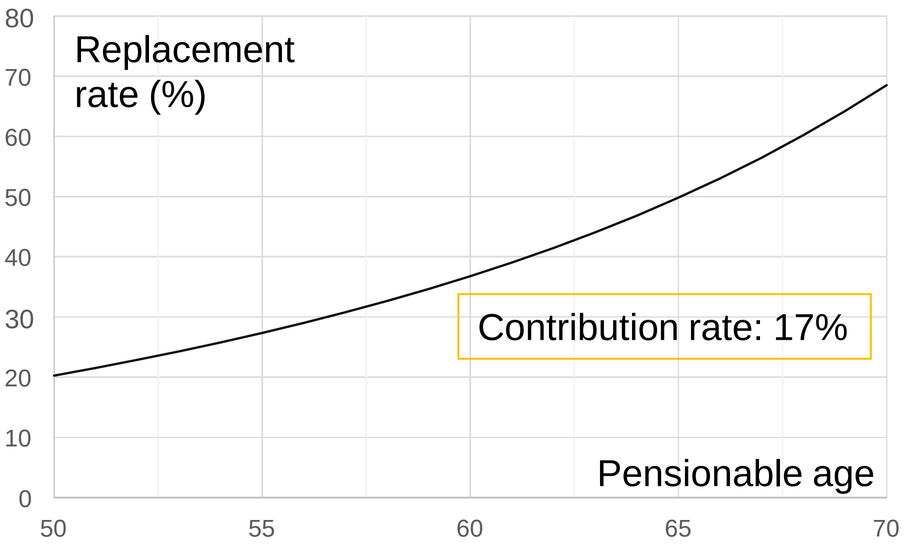
Pension possibilities

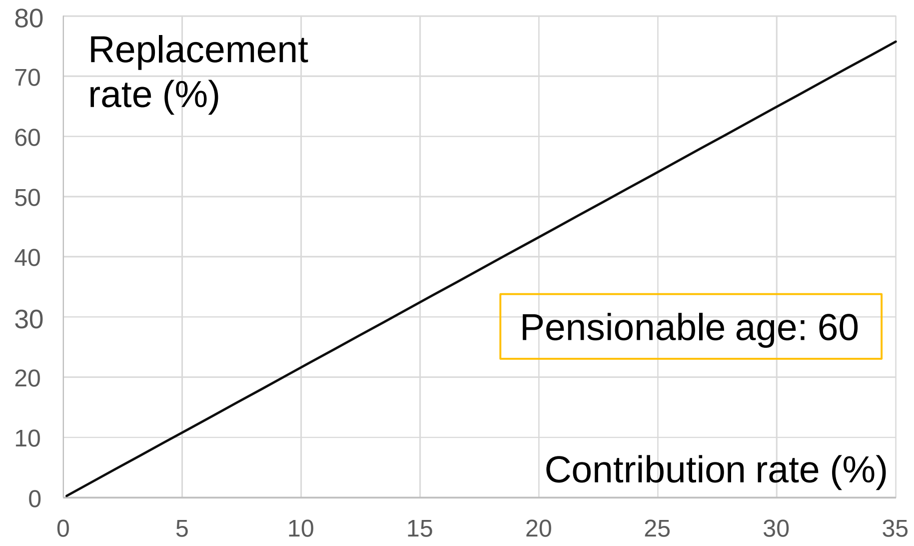






Pension possibilities: replacement rates





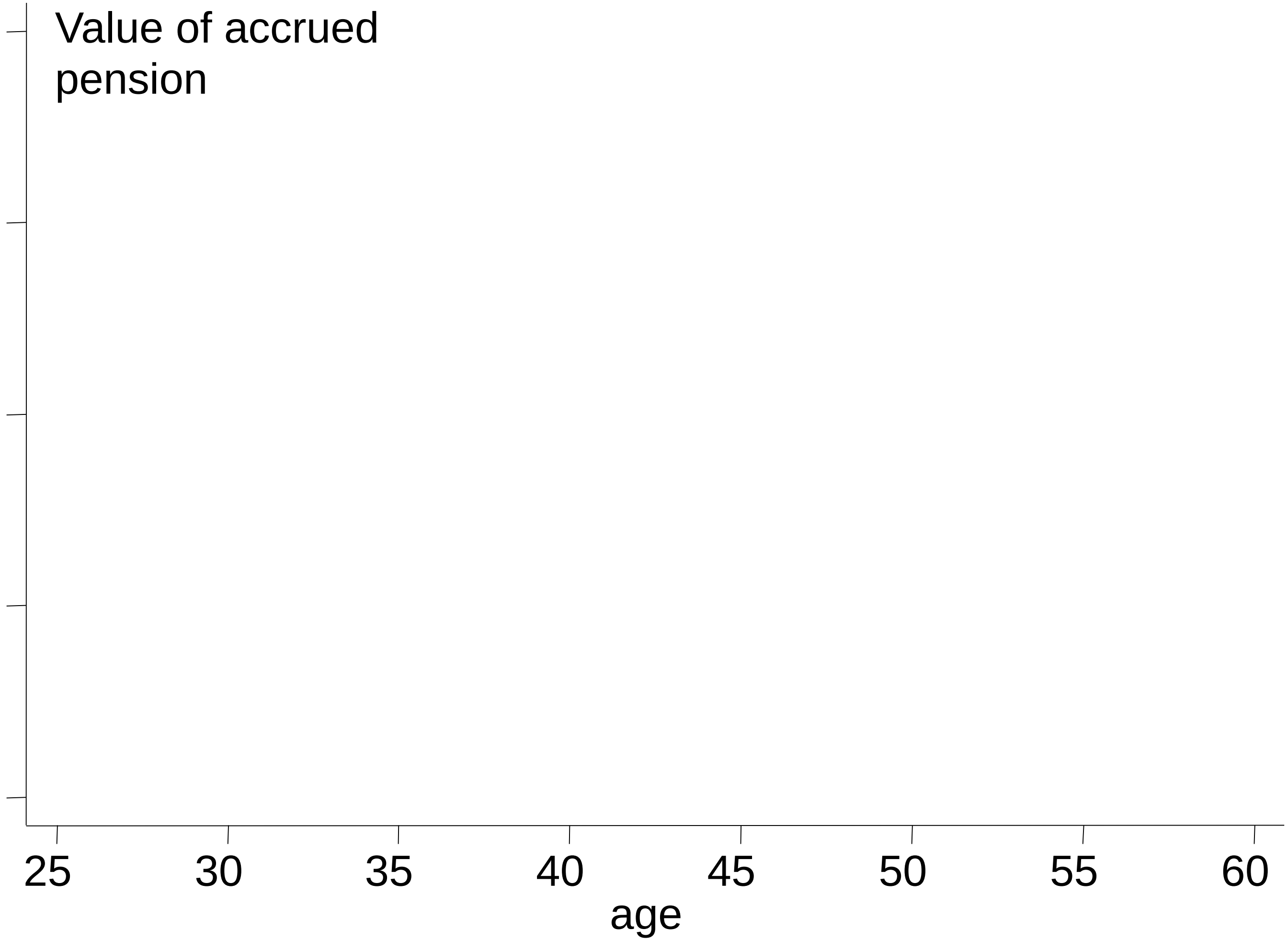
Flexibility and portability

- Civil service schemes are inflexible: ill designed to deal with people without full careers
- But flexible schemes are increasingly important
  - ‘revolving doors’: cross-fertilisation between public and private sectors
  - transfer of employees due to privatisation or contracting out

Penalties to moving jobs

- Vesting periods: when individual qualifies for a pension
  - <1 year in Finland, Netherlands, Sweden, Switzerland, UK
  - 5 years in Belgium, Germany, Ireland, Italy
  - 15yrs in Austria, France, Spain, Mauritius, Senegal
  - people can leave with nothing
- Treatment of 'early leavers': what happens to the benefit between leaving the job and claiming the pension?
  - full transferability (Finland, Netherlands, Sweden)
    moves to occupational plan with same benefits in private sector
  - full preservation (France)
    accrued rights uprated in line with civil-service earnings
- In other countries, a pension cost to moving jobs

Example: Mauritius



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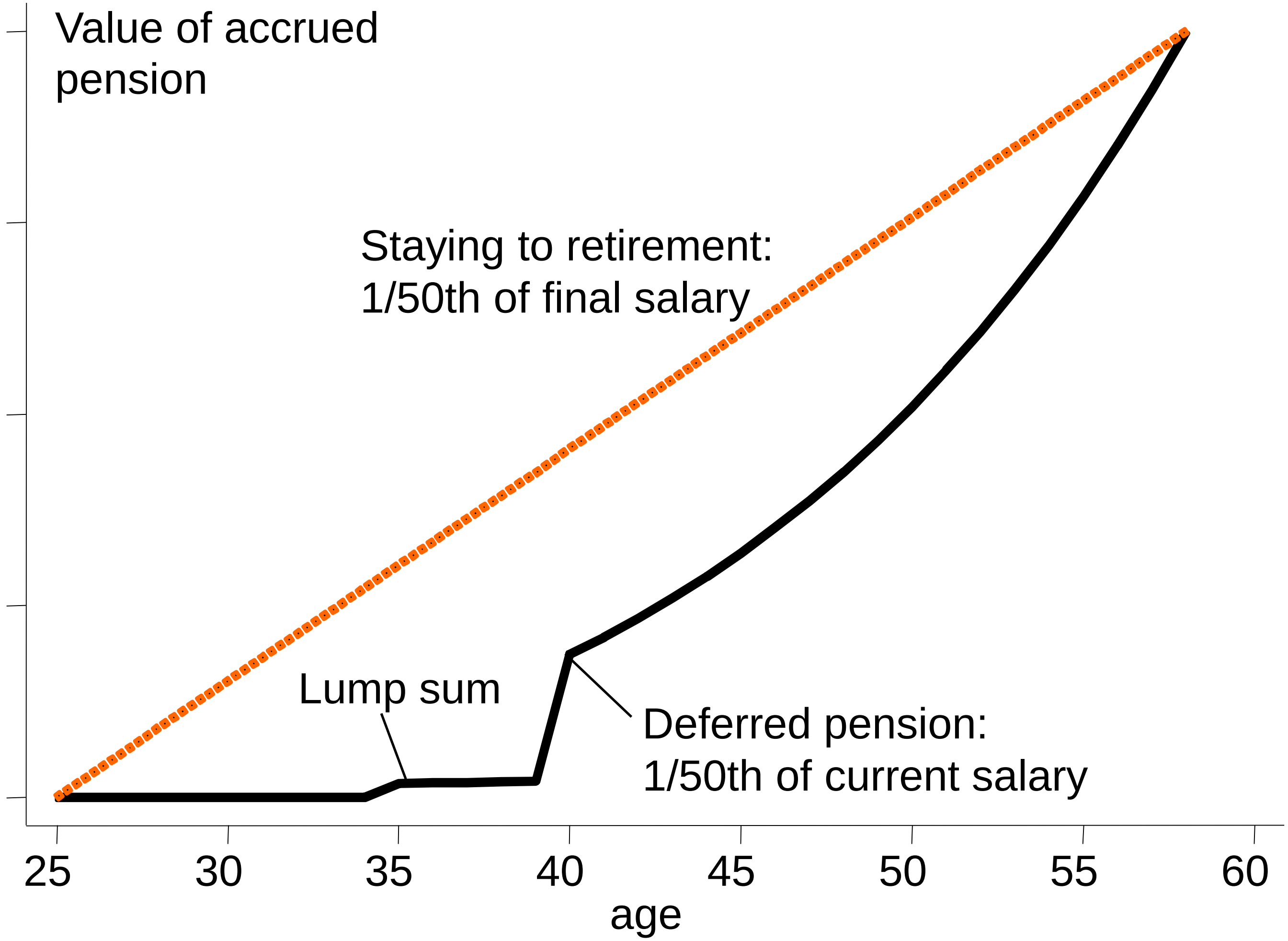

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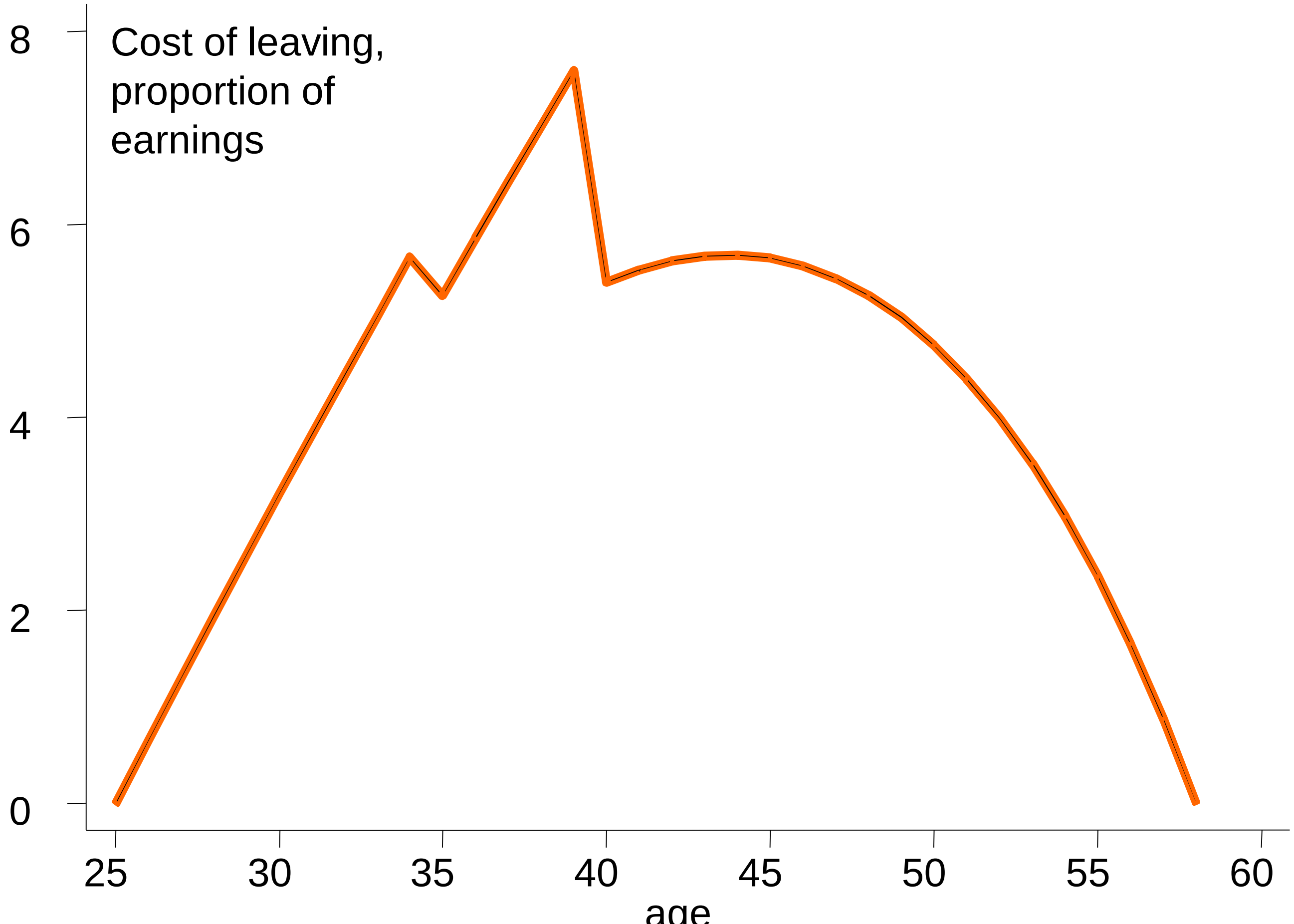
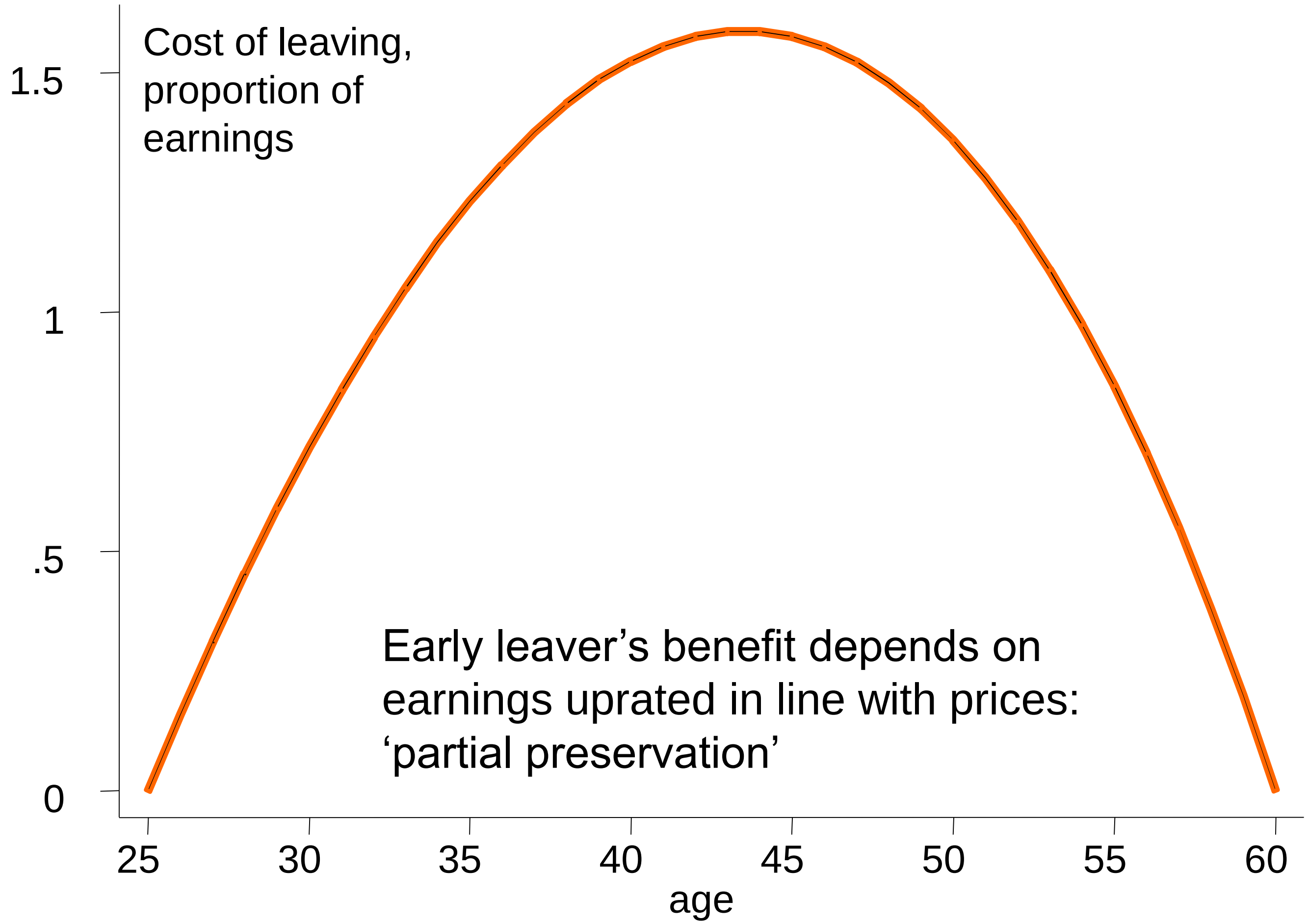
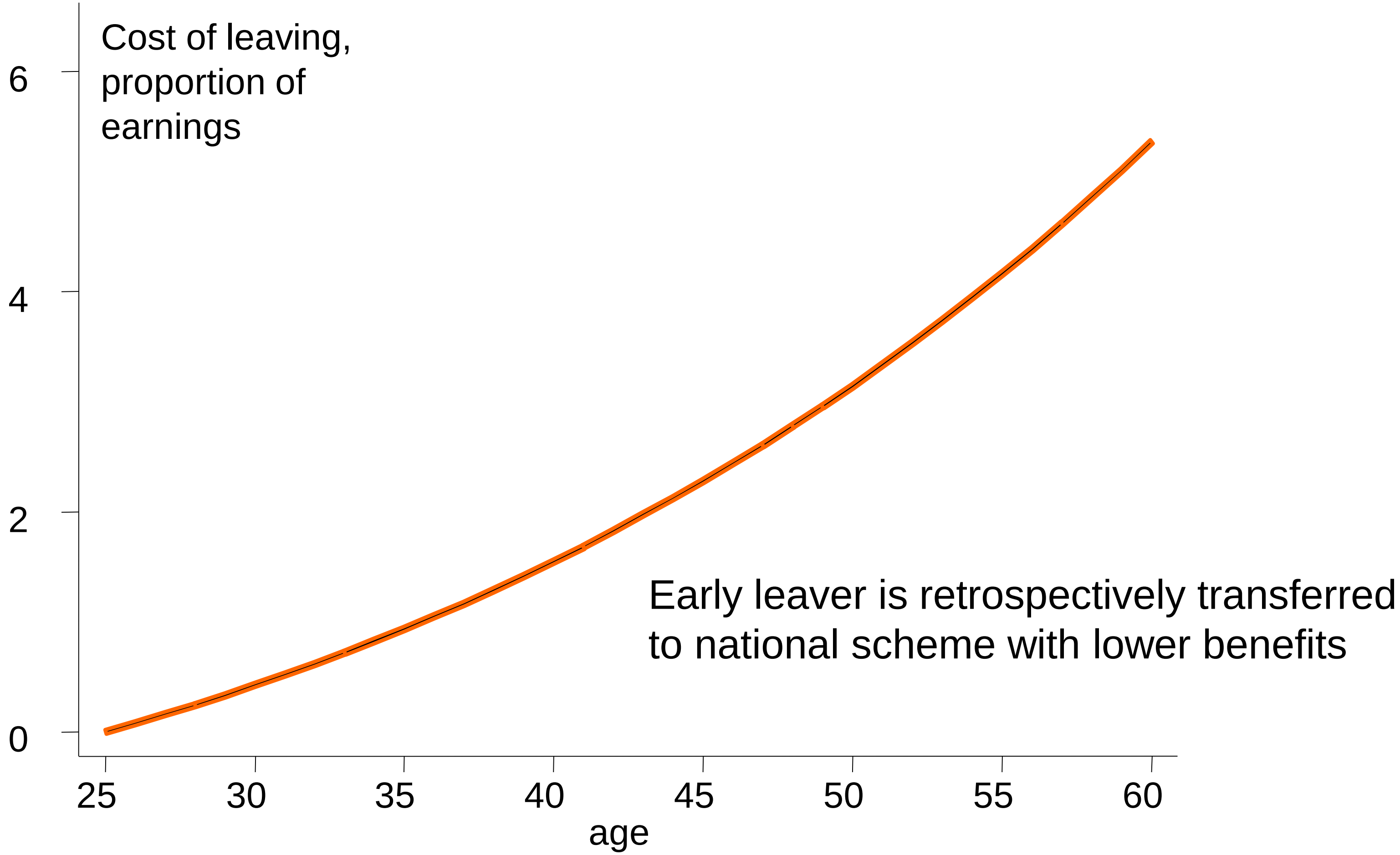


Example: UK



Cost of leaving, proportion of earnings
1.5
1
.5
0
25
30
35
40
45
50
55
60
age
Early leaver's benefit depends on earnings uprated in line with prices: 'partial preservation'

Germany



Cost of leaving,
proportion of
earnings
6
4
2
0
25
30
35
40
45
50
55
60
age
Early leaver is retrospectively transferred
to national scheme with lower benefits

Reforms to improve portability

- Shorten vesting periods
- Preserve pension rights of early leavers
- Extend averaging period for ‘final salary’
  - career average uprating eliminates the mobility problem
  - also deals with problems of incentives for abuse
  - but requires improvements in record-keeping
- Introduce a defined contribution scheme
  - fully portable

Conclusions

- Reform of civil-service pension schemes is important in low- and middle-income countries
  - often, larger expenditure than national schemes
  - crowds out important social programmes
- Many options to put civil-service pension schemes on a sustainable footing
- Structural issues as important as fiscal ones
  - single national scheme would be more administratively efficient, equitable and increase labour-market flexibility
  - equity and efficiency also improved by longer averaging periods for earnings, shorter vesting periods, preservation for early leavers, DC option