

Pension Systems and Income Inequality among the Elderly around the World



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Consistency amid Complexity: Navigating the Future of Pensions and Retirement
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Outline of the presentation

1) Research perspective ➡ 2) Data analyst perspective ➡ 3) Policy advice

Theoretical framework &
main findings own work

Comparable indicators &
awareness of cross-national
differences

Bring together expertise in
research/data/policy fields
(mechanisms pensions/family
policy & labour markets)

1) Research perspective

Theoretical framework &
main findings own work

- Theoretical framework for an ‘ideal’ pension system design.
(Myles 1989, OECD (PAAG) 05-15, OECD 2008 , World Bank 1994)
 - Differences in (welfare) state ideology: liberal vs. conservative vs. social-democratic (Esping-Andersen 1990) / liberal vs. coordinated (Hall & Soskice 2001).
 - Cross-national variation in pension systems and pension income mix.
(Korpi & Palme 1998, Behrendt 2000, Yamada & Casey 2002, OECD 2001)
 - *New social risk* groups require modified pension system design.
(Armingeon and Bonoli 2006; Taylor-Gooby 2004)
- Evaluate and explain inequalities in pension income of the elderly.

1) Research perspective

Theoretical framework &
main findings own work

RQ 1: Why is there cross-national variation of income received by the elderly?

RQ 2: What implications do different institutional pathways of pension systems have for the income situation?

RQ 3: What role do non-public pension systems play in the income-mix and for the development of inequalities?

RQ 4: Which developments can be observed in the public-private income mix and generosity of the pension system?

 Approach: **Comparative** cross-national study of **pension outcomes** from a **historical welfare state tradition** perspective.

‘Small-N’ analysis: Most Similar System Design

1) Research perspective

Theoretical framework &
main findings own work

- What is new? - Comprehensive analytical framework for analysing pension system design and pension outcomes. (Part I: Theoretical framework - Chapters 1,2,3)

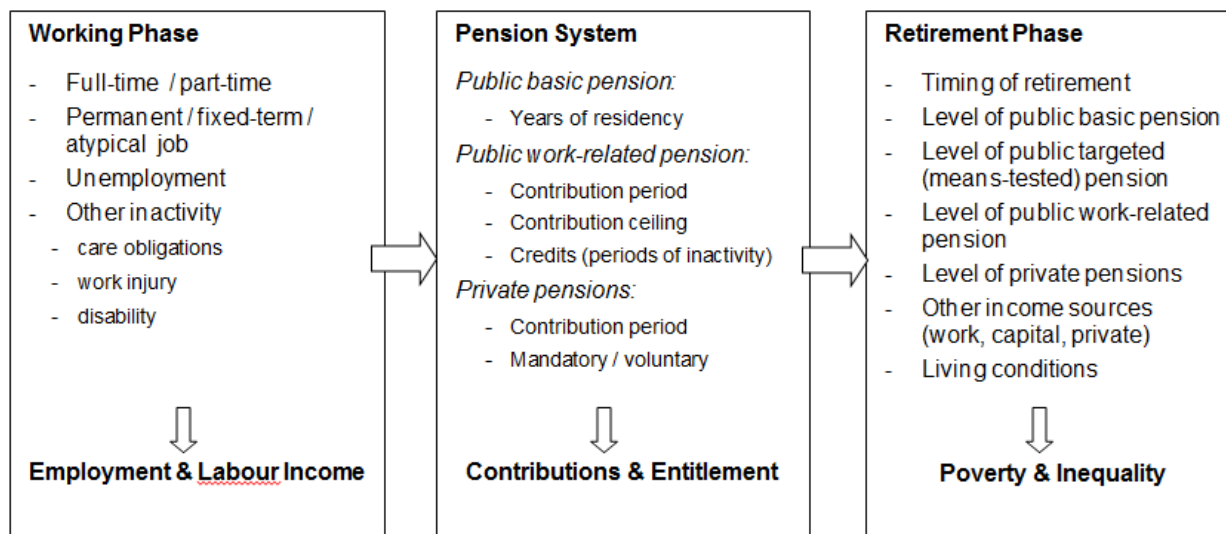
3 dimensions:

Pension system characteristics

Individual labour market attachment

Living arrangements

➔ Stylised model of retirement income



Source: Neugschwender (2016: p29); Ebbinghaus and Neugschwender (2011: p392), adjusted.

1) Research perspective

Theoretical framework &
main findings own work

Finding 1: In Western European societies pension systems are the major explanatory factor for pension income inequality and reproduction of pre-retirement inequality.

But **pension system characteristics** vary in a comparative cross-national perspective.

Various actors are involved in pension system design (state, employers, financial institutes).

The degree of involvement of these actors follows different state traditions.

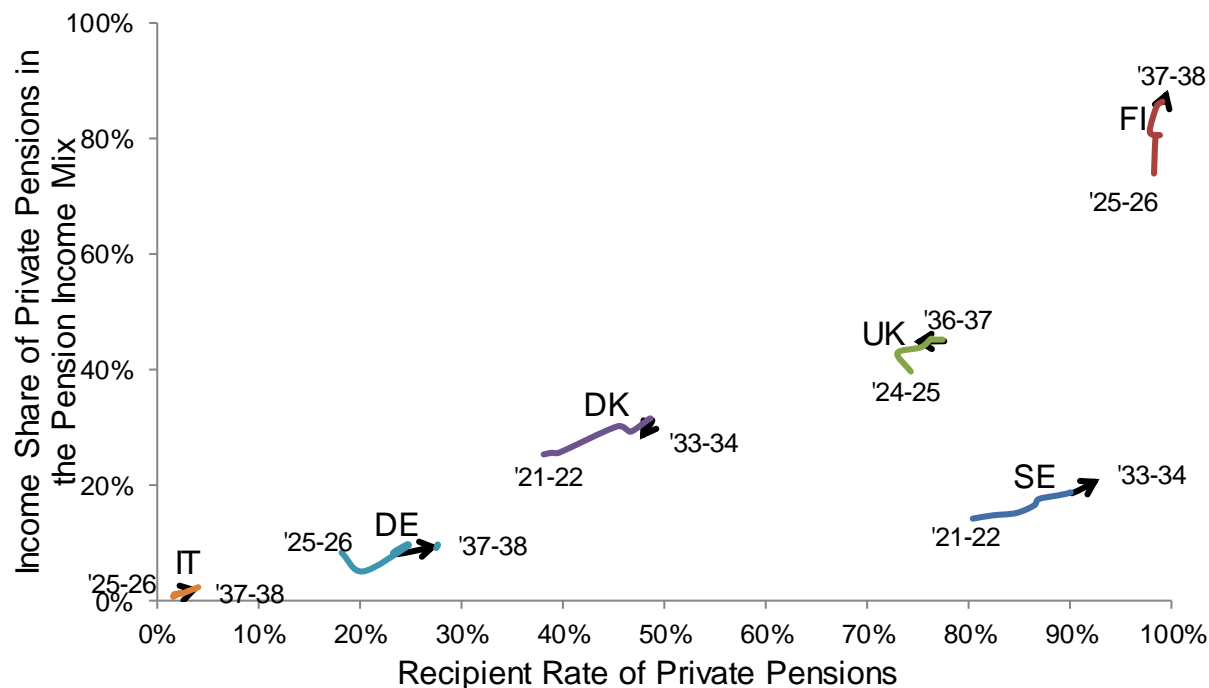
➡ As a result, pension systems create cross-national differences with respect to poverty prevention (pension adequacy) and income maintenance (income replacement).

1) Research perspective

Theoretical framework &
main findings own work

Finding 2: Public (mandatory) first-tier schemes left different scope for development of complementary second-tier schemes.

- a) depending on the public pension system tradition complementary second-tier schemes have been *crowded out/in*.



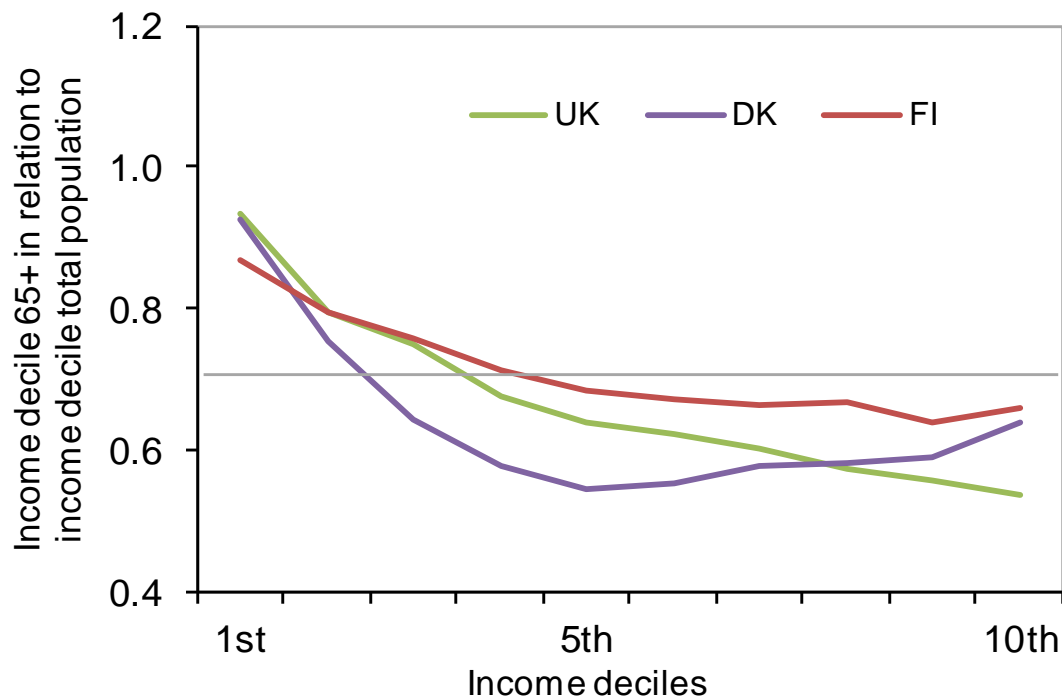
Source: Neugschwender (2016: p122); own calculations based on Luxembourg Income Study (LIS) Database.

1) Research perspective

Theoretical framework &
main findings own work

Finding 2: Public (mandatory) first-tier schemes left different scope for development of complementary second-tier schemes.

- b) voluntary second-tier schemes create selective coverage, as they are not considered equally important, or are a financial burden for low to medium income earners.



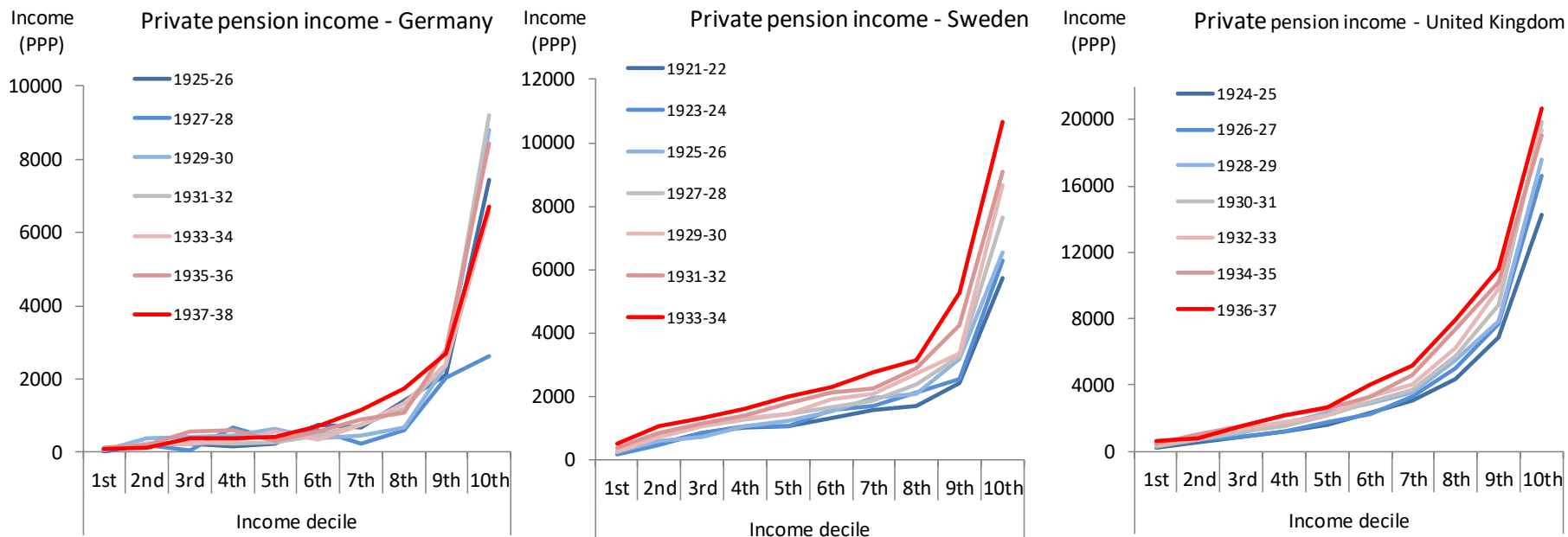
Source: Neugschwender (2016: p90); own calculations based on Luxembourg Income Study (LIS) Database.

1) Research perspective

Theoretical framework &
main findings own work

Finding 2: Public (mandatory) first-tier schemes left different scope for development of complementary second-tier schemes.

- c) contribution ceilings create both under-protection and over-protection.

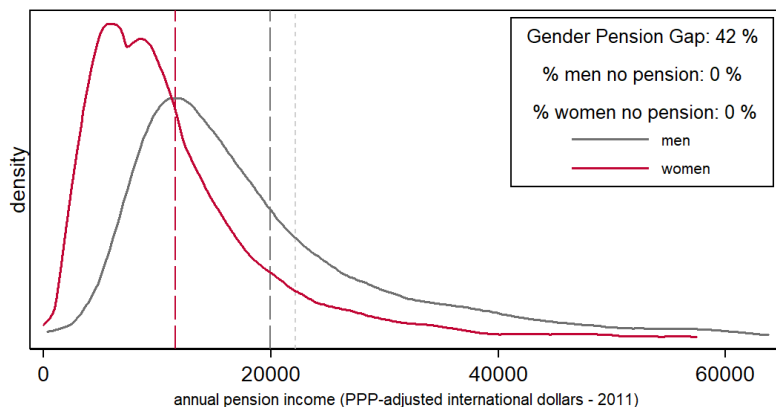


Source: Neugschwender (2016: p127/8); own calculations based on Luxembourg Income Study (LIS) Database.

2) Data analyst perspective

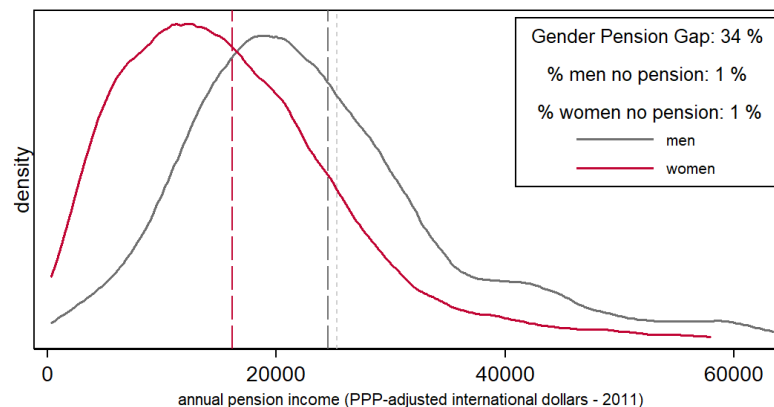
Kernel density estimate for pension income by gender

-- United Kingdom 2013 --



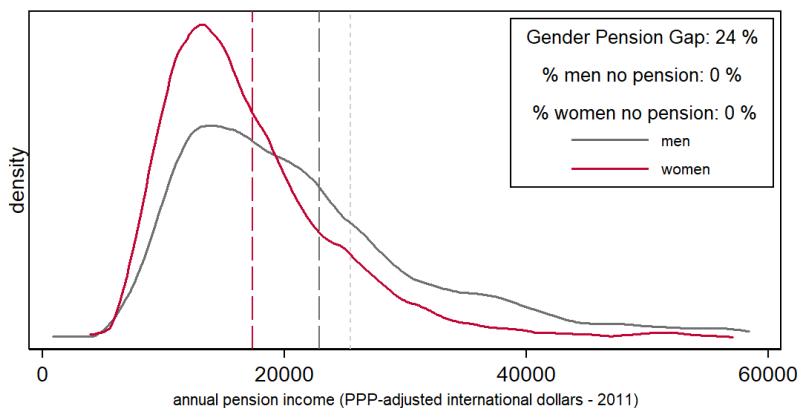
Kernel density estimate for pension income by gender

-- Germany 2015 --



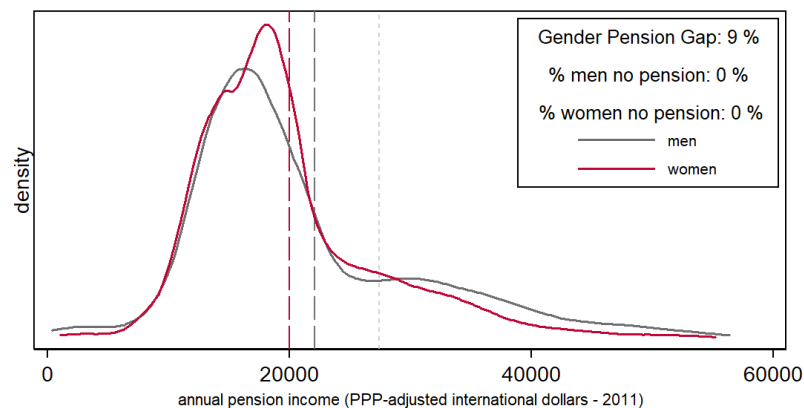
Kernel density estimate for pension income by gender

-- Finland 2013 --



Kernel density estimate for pension income by gender

-- Denmark 2013 --



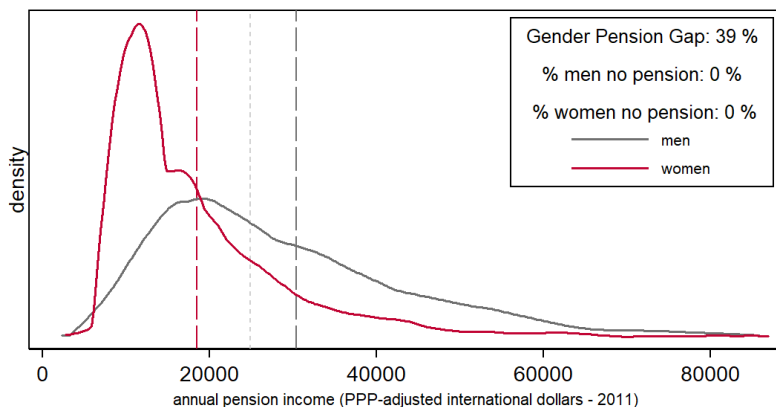
Notes: Epanechnikov kernel function based on 1000 quantiles for men and women separately. 0 pension income & top 1 percent censored for the graph.
 Vertical long-dashed lines show mean values for pensions for men and women, short-dashed line shows median of equivalised DHI for the whole society.
 Source: Luxembourg Income Study (LIS) Database.

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2) Data analyst perspective

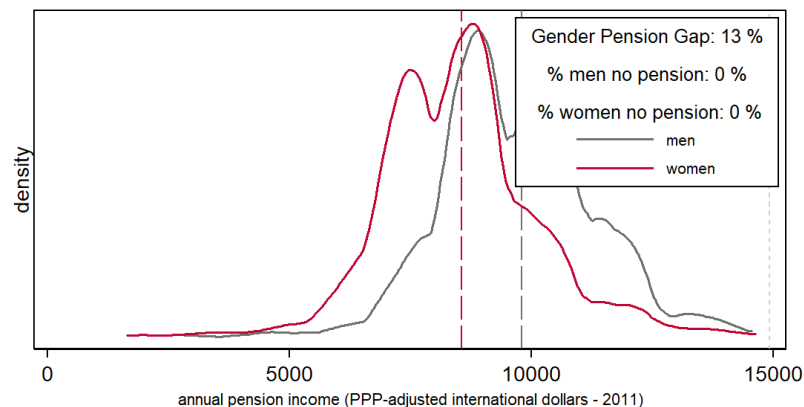
Kernel density estimate for pension income by gender

-- Netherlands 2013 --



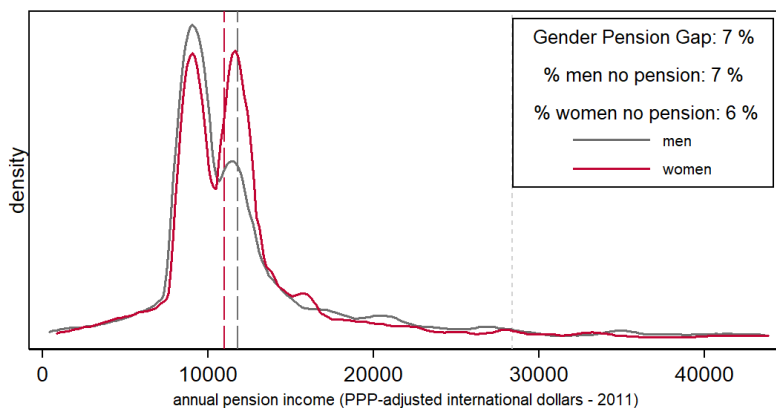
Kernel density estimate for pension income by gender

-- Czech Republic 2013 --



Kernel density estimate for pension income by gender

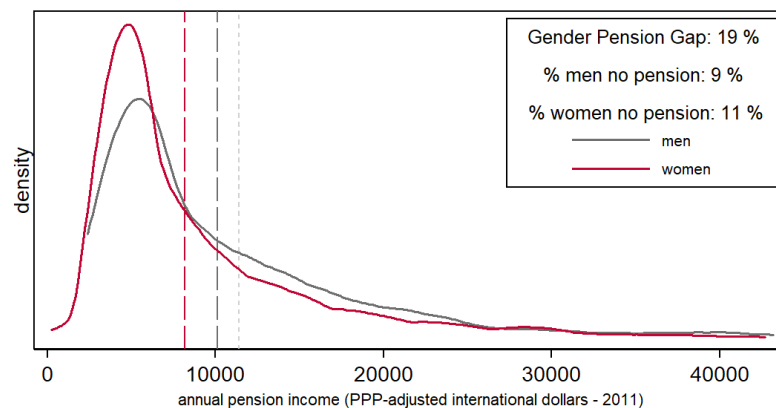
-- Australia 2010 --



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Kernel density estimate for pension income by gender

-- Uruguay 2016 --

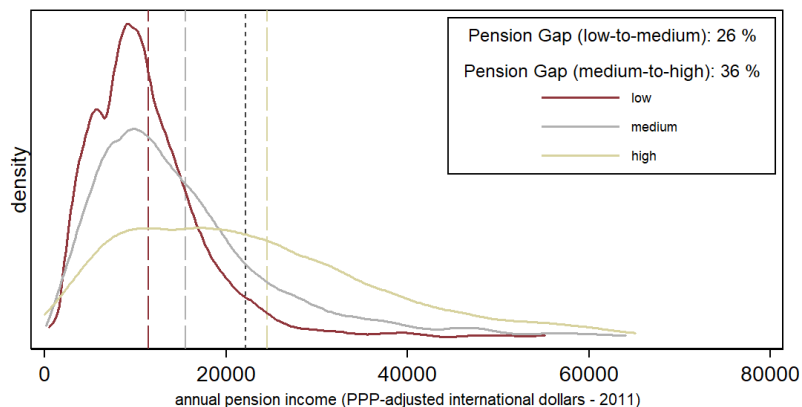


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2) Data analyst perspective

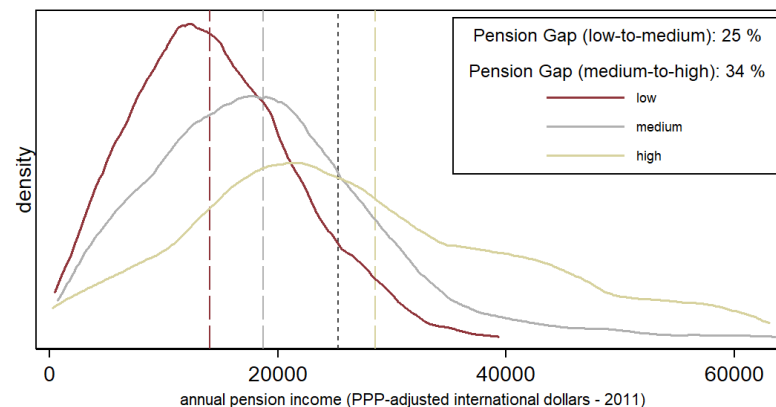
Kernel density estimate for pension income by education

-- United Kingdom 2013 --



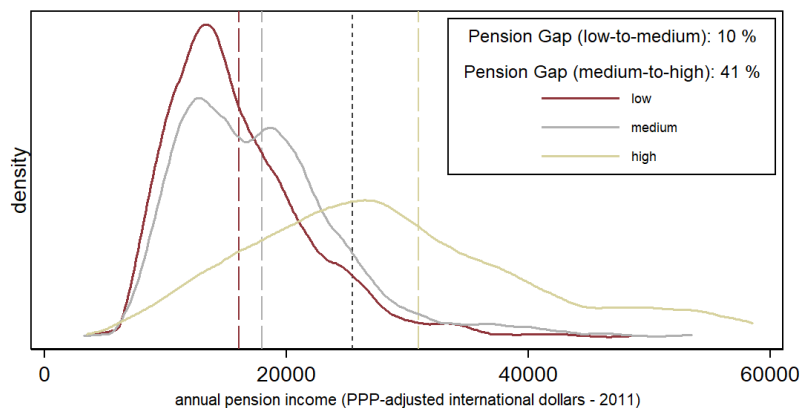
Kernel density estimate for pension income by education

-- Germany 2015 --



Kernel density estimate for pension income by education

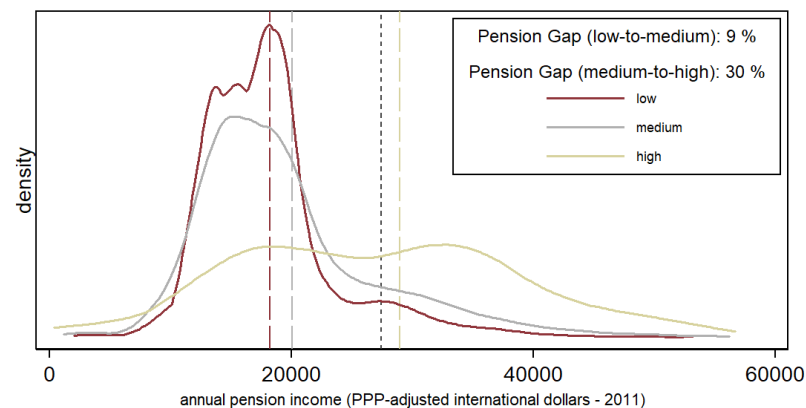
-- Finland 2013 --



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Kernel density estimate for pension income by education

-- Denmark 2013 --

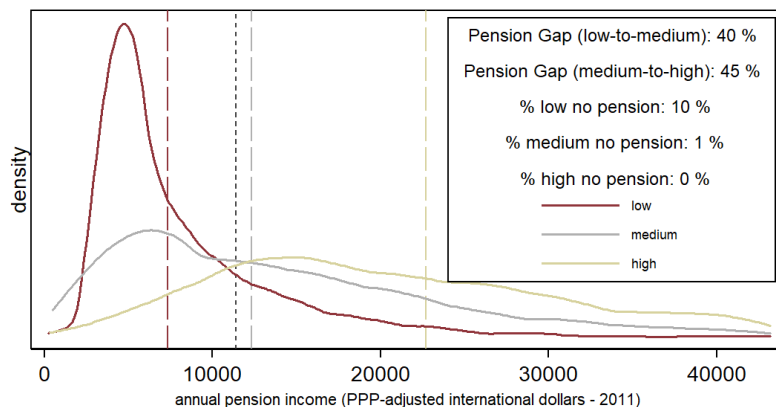


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2) Data analyst perspective

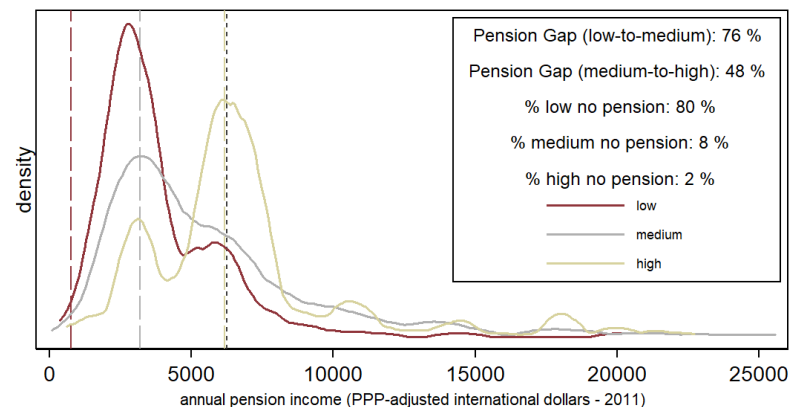
Kernel density estimate for pension income by education

-- Uruguay 2016 --



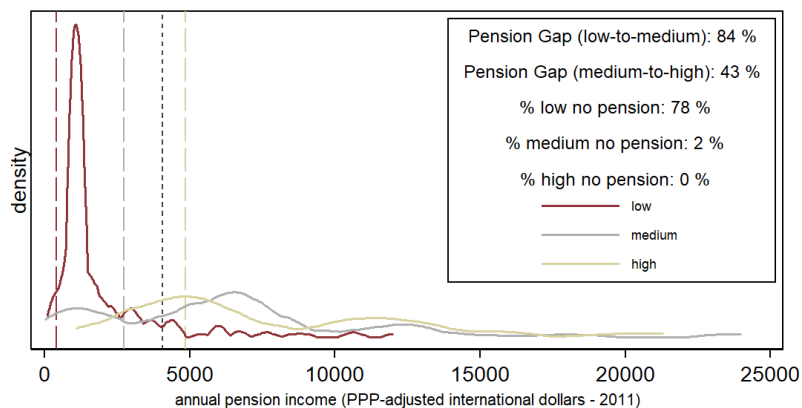
Kernel density estimate for pension income by education

-- Peru 2013 --



Kernel density estimate for pension income by education

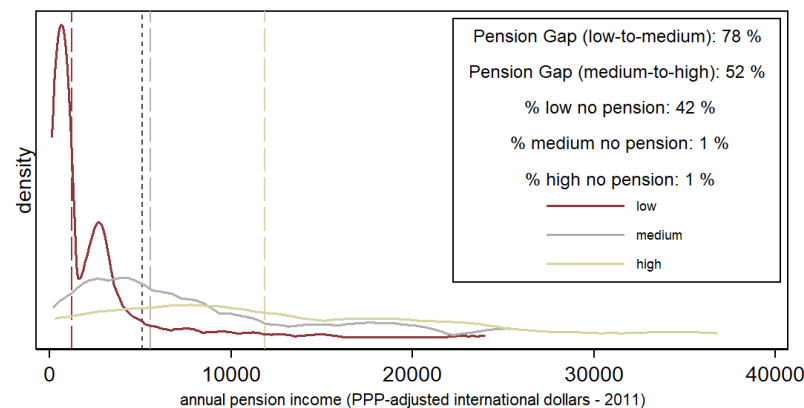
-- Guatemala 2014 --



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Source: Luxembourg Income Study (LIS) Database.

Kernel density estimate for pension income by education

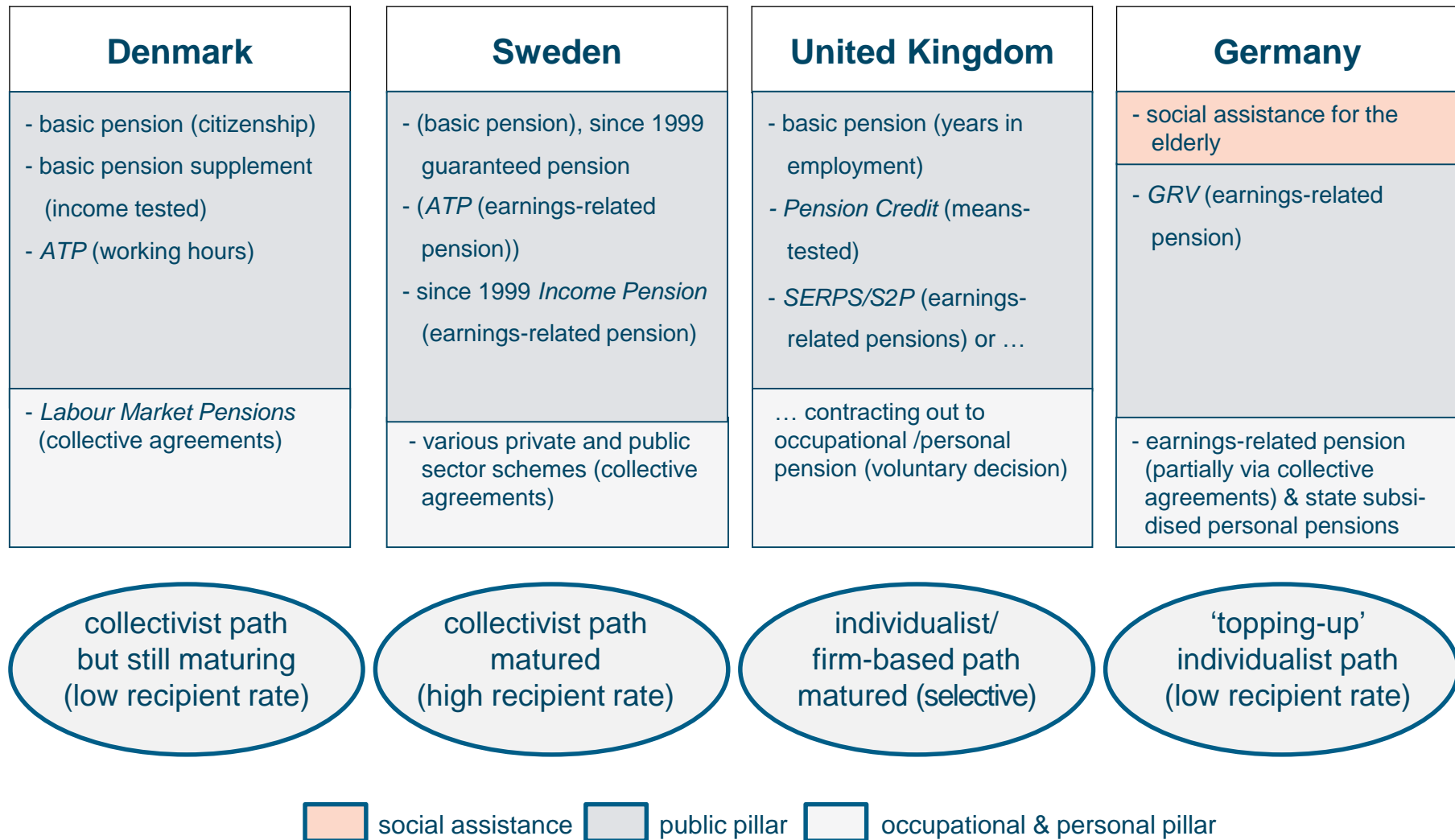
-- Mexico 2012 --



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Source: Luxembourg Income Study (LIS) Database.

3) Policy advice

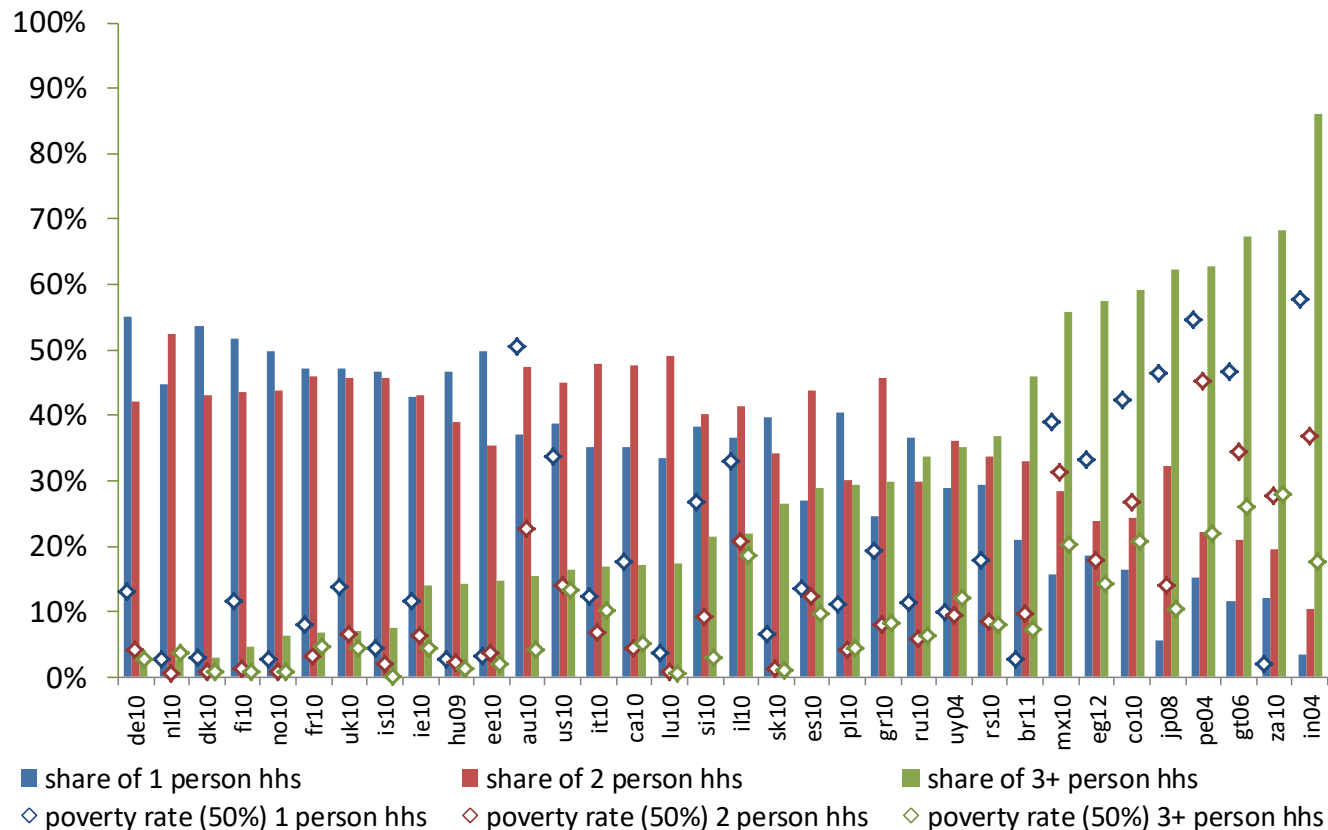
a) strong variation in historical paths of pension systems



3) Policy advice

b) strong variation in living arrangements & risk of poverty

Living arrangements by household size & poverty rates (65+)



Source: Neugschwender (2016: p41); own calculations based on Luxembourg Income Study (LIS) Database.

3) Policy advice

- Pension reform measures of earnings-related pensions change very slowly future pension outcomes (→ '*forward looking*' pension system design).
- But in the meanwhile social contexts are changing (post-industrialism, labour market participation of women, reconciliation of work/family, divorce & single parenthood, ageing societies).
- Employment career interruptions (unemployment, disability, child raising) can lead to substantial interruptions of contribution periods, if no credits are foreseen.
- Labour market stratification/occupational segregation are major challenges for individualised old-age provision (means-tested vs. earnings-related pension).
- Contribution years vary by gender (4.9 years – EC: Pension Adequacy Report 2018), occupation, education level.
- Contributions should pay off, guaranteeing pension adequacy and income replacement (but, avoid wrong incentives).

3) Policy advice

The 'ideal' pension system:

- Bridge between labour market attachment, living arrangements, and stable (individualised) saving for old age and risk protection.
 - Protection of 'insiders' and 'outsiders'.
 - Redistribution to those in need.
 - Close interaction between public, occupational, personal pension schemes (subsidise redistribution mechanisms in occupational/personal schemes?).
- Two goals: **poverty prevention** and (mandatory) **income maintenance**.

There is a lot to be learned from jointly discussing & assessing policy scenarios across policy fields (→re-think social protection from a wider perspective).

Social protection among the elderly not only mirrors individual employment careers and savings choices, but also interacts strongly with outcomes of other policy fields.

Priority: reduce gender pay gap

New challenge: education pay gap?

Pension Systems and Income Inequality among the Elderly around the World

Thank you!

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<https://inequalityoldage.wordpress.com>



Pension pillars and pension income tiers

	<i>First pillar</i>		<i>Second pillar</i>		<i>Third pillar</i>
	Public pension		Occupational Pension		Personal Pension
	Bismarck Social insurance	Beveridge Minimum pension	Voluntary pension plans	Collective agreements	
<i>Third tier</i>					mostly voluntary inclusion based on personal decision complementary status maintenance for (MIE), HIE, or 'topping up' for HIE in addition to compulsory schemes
<i>Second tier</i>	earnings-related public pension		complementary status maintenance for (MIE), HIE mostly in combination with Bismarckian social insurance	compulsory inclusion for covered employees status maintenance for MIE, HIE	
	poverty prevention and status maintenance for LIE, MIE, (HIE)	means-tested minimum pension or supplement to the basic pension poverty prevention for LIE, MIE		mostly in combination with Beveridge type minimum pension	
<i>First tier</i>	insurance based minimum pension for LIE	basic pension poverty prevention for LIE, MIE, HIE			

Notes: LIE=low-income earner; MIE=medium-income earner; HIE=high-income earner.

Light grey schemes refer to selective coverage; dark grey schemes refer to comprehensive coverage.

Source: Neugschwender (2016: p15).

Main characteristics of the pension system and public-private income mix

Denmark



by pillars

tradition of public pension: *Beveridge*
structure of occup. pension: *labour contracting*

by tiers

poverty prevention: *basic minimum pension*
status maintenance: *(public)+occupational*

by income source

share of public pension: *medium-high*
share of private pension: *low-medium*
recipient rate of private pension: *low-medium*

Germany



by pillars

tradition of public pension: *Bismarck*
structure of occup. pension: *voluntary+(labour contracting)*

by tiers

poverty prevention: *none; social assistance*
status maintenance: *public+(occupational)*

by income source

share of public pension: *high*
share of private pension: *low*
recipient rate of private pension: *low*

United Kingdom



by pillars

tradition of public pension: *Beveridge*
structure of occup. pension: *contracting out*

by tiers

poverty prevention: *targeted minimum pension*
status maintenance: *public+occupational+personal*

by income source

share of public pension: *medium*
share of private pension: *medium*
recipient rate of private pension: *high*

Sweden



by pillars

tradition of public pension: *Beveridge+Bismarck*
structure of occup. pension: *labour contracting*

by tiers

poverty prevention: *guaranteed minimum pension*
status maintenance: *public+occupational+(personal)*

by income source

share of public pension: *high*
share of private pension: *low*
recipient rate of private pension: *high*

Finland



by pillars

tradition of public pension: *Beveridge*
structure of occup. pension: *mandatory by law*

by tiers

poverty prevention: *targeted minimum pension*
status maintenance: *occupational*

by income source

share of public pension: *low*
share of private pension: *high*
recipient rate of private pension: *high*

Italy



by pillars

tradition of public pension: *Bismarck*
structure of occup. pension: *voluntary*

by tiers

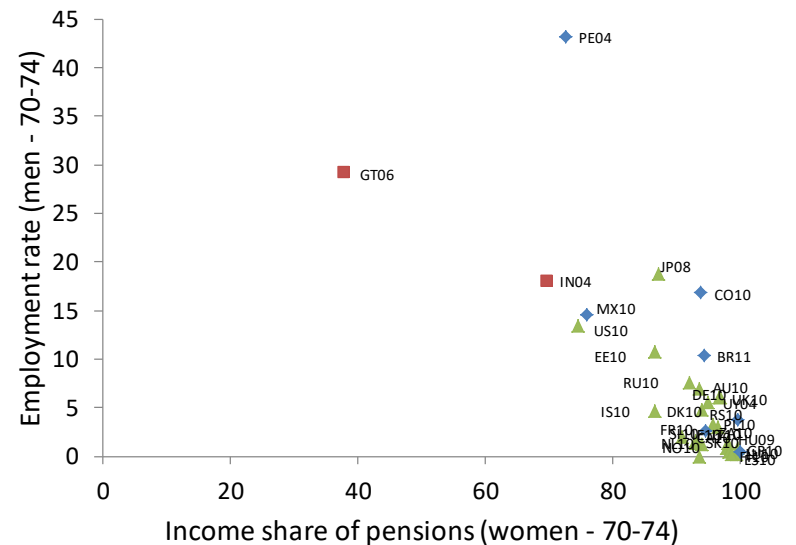
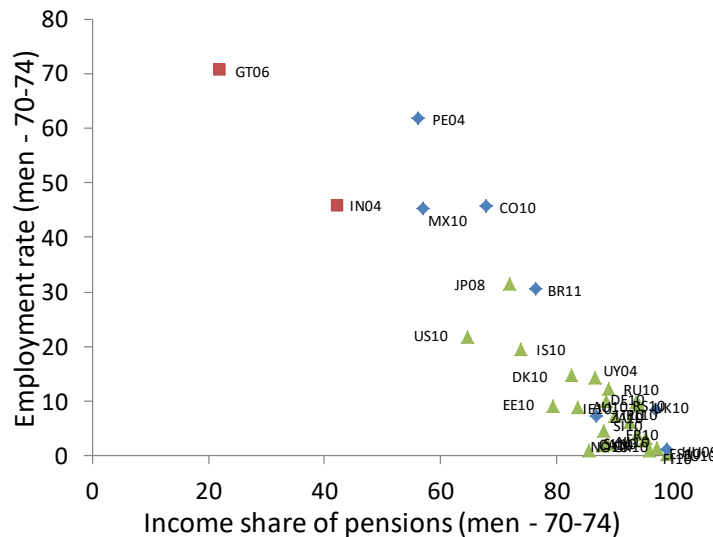
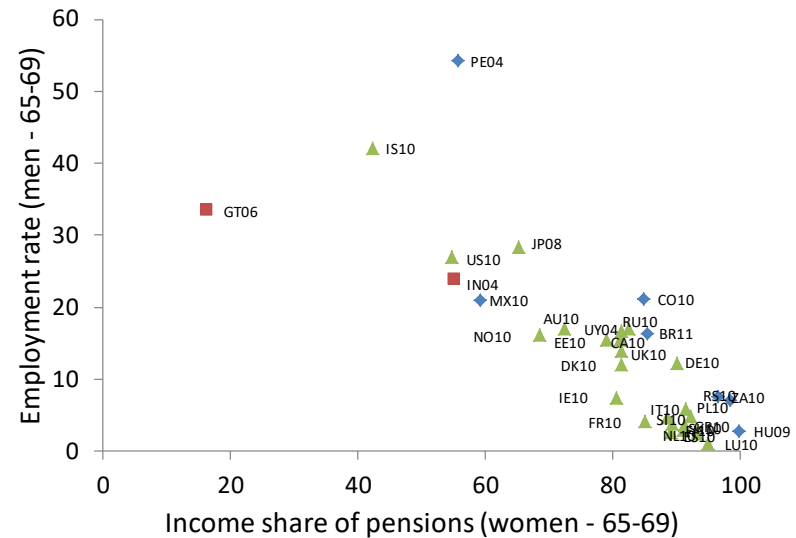
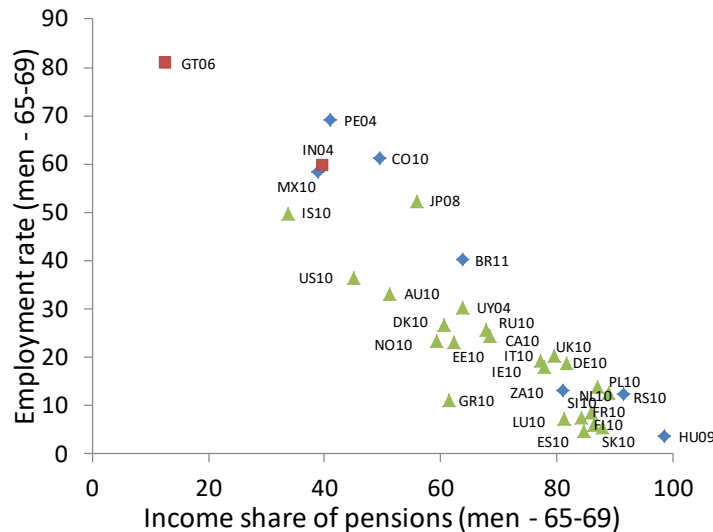
poverty prevention: *income-tested minimum pension*
status maintenance: *public*

by income source

share of public pension: *high*
share of private pension: *marginal*
recipient rate of private pension: *marginal*

Sources: Neugschwender (2016: p71); Behrendt (2000); Ebbinghaus and Gronwald (2011); Rein and Turner (2004); OECD (2007).

Labour market attachment and pension income (65+)



Sources: Neugschwender (2016: p49); own calculations based on Luxembourg Income Study (LIS) Database.