

Pensions and the Green Transition: policy and political issues at stake

David Natali,
Sant'Anna School of Advanced Studies, Pisa

Michele Raitano,
University La Sapienza, Rome

Giulia Valenti,
University Ca' Foscari of Venice



Outline

- Research questions
- Pension systems in Europe
- The Green Transition and its effects on economic growth and productivity; labour market; financial markets
- Policy and Political issues at stake
- Preliminary conclusions



Research questions

- What is the (possible) impact of the Green Transition on different pension systems ?
- What are the policy and political issues (role of trade unions) at stake in different pension systems?



Two words of pensions in Europe

Social insurance systems		Multipillar systems	
1 st generation	2 nd generation	1 st generation	2 nd generation
First pillar PAYGO systems (contribution based)	First pillar PAYGO systems	First pillar PAYGO systems (flat rate and/or means tested)	First pillar PAYGO systems (contribution based)
Supplementary schemes Uneven spread and limited of schemes)	Supplementary schemes Widespread (DB/DC schemes)	Supplementary schemes Widespread (DB/DC schemes)	Supplementary schemes Widespread (DC schemes)
Continental and Southern Europe	Nordic countries	UK, NL, DK, IR	RO; BG; EE; LT; LV

Recent reform trends, individualisation of risks



Green Transition and its potential impact on pensions



GT challenges

- Economic Growth and Productivity

- Impact on GDP depends on technology, timing of reforms, policy mix, co-benefits
- An annual GDP growth reduction between -0.03% and -0.13% by 2050 (but co-benefits and avoided damages) (IPCC AR5 WGIII)

- Labour markets

Short-, mid-, long-term effects (Fankhaeser, 2008)

- shift from carbon-intensive activities to low-carbon ones, more labour-intensive, should determine a rise in employment in the short term
- Mid-term effects might partially offset the increase in employment if climate actions are adopted unilaterally
- Long-term effects depend on investment strategies in brown and green sectors



GT challenges

- Labour markets (Pollitt, 2015; Fragkos, 2018)
 - Positive net effects when multiple objective strategies, EU net-employment
 - Renewable energy sector: higher labour intensity (+1% in the labour force by the half of century)
 - Overall effect depends on:
 - i. The scale of policy implementation (EU or global) and its effects on competitiveness
 - ii. The financial scheme adopted (competition between investments in green sectors and the others)
 - iii. Policy mix
 - iv. Revenue recycling scheme implementation



GT challenges

- Labour markets: whatever the net effect on employment, GT determines winners and losers
- Sectors
 - higher employment increase by 2050 is in electricity, agriculture (biofuels production), and construction (buildings' renovation)
 - the sectors hardest damaged by the transition will be all the traditional energy supply and carbon-intensive industries as coal mining, refineries, and refuelling stations



GT challenges

- Labour markets: whatever the net effect on employment, GT determines winners and losers
- Occupational groups (O*NET)
 - *Green increased demand* group (e.g., Chemical Technicians, Forest and Conservation Technicians, Hydrologist).
 - *Green enhanced skills* group (e.g., Environmental Engineers, Construction and Building Inspector, Plumber)
 - *Green emerging* group (e.g., Wind Turbine Service Technicians, Biomass Plant Engineers, Solar Power Plant Technicians)

A narrow skills distance between green and brown jobs (Vona, 2018) → targeted technical programs and training



GT challenges

- Labour markets: GT effects on wage dynamics
 - *Green-wage-premium* addressed to workers belonging to green industries (+7%) (Antoni 2015; Jackman 2021)
 - Redistribution in favour of labour input in fossil fuels intensive countries (Chateau 2018)
 - Low skilled workers, lowest wage benefits (Popp 2020)



GT challenges

- Financial markets
 - In the EU, pension funds' assets are exposed to climate-policy-relevant-sector both directly (8%) and indirectly (8%)- through shares of investment funds and banks in turn vulnerable to these sectors – for about 16% of their assets (Battiston, 2017)
 - Pension funds may play a role to support GT directing their investments in the Green economy



Policy and Political issues at stake



Policy Issues in the pension domain

— *Financial sustainability*

- no scenarios forecast a drop in GDP – rather they usually expect a rise in GDP growth because of the higher productivity allowed by the GT.
- no dramatic drops in the wage mass and the wage share

— *Social adequacy*

- winners (i.e. the most skilled) and the losers (most disadvantaged groups of workers in terms of skills, contracts, wages and tasks)
- Temporary losers (no need to change pension rules)
- Permanent losers (need for pension changes), early retirement, increased minimum pensions; top up
- No major challenges on supplementary schemes



Political Issues in the pension domain

— *Trade unions' dilemma*

- Need to protect the potential losers in carbon-intensive sectors (risk to increase costs of climate change)
- Support the potential winners in the Green sectors (but losing jobs in brown sectors)

— *Different (complementary) strategies*

- Defensive strategy, compensate the losers (protect brown jobs, special pension rules) but with risks of internal divisions
- Encompassing strategy, more old age protection (minimum pensions; top up)
- Pro-active strategy, using pension funds' investments to steer GT



Preliminary conclusions

- Green Transition is a challenge but not a massive one for both financial sustainability and social adequacy
- Pension system can be ‘recalibrated’, parametric reforms could be enough (even if the reform trends of the past decades do not help) (individualisation of risks)
- The major policy and political issue is inequality between carbon-intensive and green sectors
- Trade unions’ dilemma: protect the losers while supporting GT and the winners; three complementary strategies

