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**Working group 24. Social security and pensions**

How to secure pensions in a degrowth society? How to deal with potential intergenerational conflicts?

**‘STIRRING’ PAPER**

**Degrowth with an aging population; increasing leisure for improving the environment  
The key role of pensions and their funding  
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Environmental quality can be improved by three basic mechanisms: 1. Types of products and technologies in production and consumption; 2. Volumes of consumption; 3. Spatial distribution of activities. Spatial planning is left out of account here. The pressure on the environment can hardly be resolved by bending technology alone, as through eco-innovation, though improved eco-efficiency is essential. A reduced volume of consumption, and hence production, is required. That is degrowth, here measured as reduced consumption per head of population, relative to the growth potential due to technological progress. Degrowth can have severe consequences if not embedded properly. To be avoided are: involuntary unemployment; undersaving (US, GR) or oversaving (CA, JP, DE, NL), now a global issue; and distressed public finances. Degrowth for environment and human happiness has to reckon with such consequences. Pension politics now go in a totally wrong direction: forcing people to work more instead of less, to compensate for aging. The pension funding problem will be aggravated by degrowth; working less means producing less, means consuming less. That is the essence of degrowth.

Pension funding systems will have to adapt to degrowth, in the Western world but in developing and emerging countries as well. The typical situation to be considered and strived for is that of increasing labour productivity, reduced by the shift from innovation to eco-innovation, combined with a balanced decrease in life time working hours. We assume that pension funding paid and pensions received balance, though how this balancing comes about may differ, depending on the public or private basis for funding and on the capital based (NL, GB, JP) or current earnings basis for pensions (FR, DE, US). Pensions have a substantial insurance element: some people die early and some live long. Without the insurance, all wise persons would have to save for their chance on longevity, leading to substantial oversaving and overinvestment.

A scenario computation can show the combined consequences of eco-innovation, aging and reduced working hours. In brackets is the one-generation 35 years effect. We have productivity growth of 1.5% per year, down from 2.5 due to shifts towards environmental technologies. We have reduced life time working hours of 1% pa (-30%). There is an aging population, constant before retirement and increasing by reduced mortality after retirement age, with increased life expectancy of 0.5% pa. The receiving group grows by ~0.8% pa (+25%). Consumption per head of population will go down by 0.5% (-16%).

The productivity growth is not enough for leisure and ageing. If workers, or pensioners, get more, or less, is a redistribution issue, not one of growth and pension payment capacity. The harsh conclusion from this analysis is that substantial degrowth in an aging population implies a substantial increase in pension fund payments or tax(-like) payments, or a substantial reduction in the welfare of retired people, and probably a mix of both. Individual choice can

cope with such developments best. It is fully clear that working less means earning less and means having a reduced pension after retirement. The choice for reduced weekly hours or earlier retirement does not make much of a difference: shorter week means lower pension contributions and a earlier retirement means shorter payment and a longer receiving period. There is no free lunch and there are no free pensions. The contribution of more leisure to environmental performance is substantial: an impact reduction of 30%!