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Layout & Distribution: Pascal Clerc & Valéria Kozakova

# Adequacy and Sustainability of Pensions Systems: Is there a Trade Off?

Elsa Fornero

## European Social Security Systems

### Wide differences in:

- ✓ Structures (PAYG vs. funded component)
- ✓ Payroll tax rates
- ✓ Pension formulae
- ✓ Taxation

### but the same problem:

- ✓ population ageing (due to low fertility and increasing longevity)
- ✓ inefficient pension designs (low correlation between contributions and benefits; "deadweight losses" and implicit taxes, large pension debts)

### with consequences on:

- ✓ labour market
- ✓ competitiveness of firms
- ✓ economic growth

See: Fornero, E. and O. Castellino, *Pension Policy in an Integrating Europe*, Cheltenham: Edward Elgar, 2003

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## Common objectives

### 1. Financial sustainability

(High level of employment, higher retirement ages, balanced relationships between generations, sustainability of fiscal policy and of private pension schemes)

→ *The main driving force of reform*

### 2. Adequacy

(Prevention of poverty and social exclusion; promotion of solidarity between and within generations; helping people to maintain their living standard at and during retirement)

→ *A constraint on reform?*

### 3. Modernization

(Adaptation to labour market flexibility, to workers' mobility and to changes of economic and social circumstances; prevention of gender-differences in treatment; transparency).

→ *Dynamic features*

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## Indicators of sustainability

### Expenditure/GDP

- Main indicator from a macroeconomic point of view
- Measures the amount of resources absorbed by the pension system
- Stabilizing the expenditure on GDP is an important but insufficient goal

### Equilibrium tax rate

- Indicates the burden on labour income of the pension scheme
- It is difficult to calculate in the medium-long run, as it requires evaluations by sector (e.g.: distribution of workers between employees and self-employed)

### Deficit (% of GDP)

- Derives from the other two (given the tax rate)
- Measures how much pension expenditure contributes to public finance imbalances

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### Net Present Value Ratio (NPVR)

- *Ratio* between the real pension value, calculated at the beginning of working life and at a given retirement age, and the actual value of contributions, both calculated at a pre-fixed rate
- NPVR > 1 means that the system gives back to the cohort more than what they contributed (->pension debt)

### Internal rate of return (r)

- Actualization rate that cancels pension wealth (evaluated at the beginning of working life)
- An internal rate of return higher than the implicit equilibrium rate in the PAYG ( $n + g$ ) implies again that the system is overgenerous (based upon 'debt', i.e. upon transferring a growing burden on future generations)

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### A Focus on Adequacy

Objectives	Covered risks	Measures/ Indicators	Policies (aiming at):
<i>Consumption smoothing</i>	(Individual) <ul style="list-style-type: none"> <li>• Longevity</li> <li>• Myopia</li> <li>• Time inconsistency</li> </ul>	(Individual) <u>Replacement Ratios</u> <i>extended comprehensive</i>	<ul style="list-style-type: none"> <li>• <i>preparation</i></li> <li>• <i>diversification</i></li> <li>• <i>assistance</i></li> </ul> <ul style="list-style-type: none"> <li>• Compulsory participation (at less than full RR)</li> <li>• Education</li> <li>• Incentives to savings</li> </ul>
<i>Prevention of poverty in old age</i>	Earning risk Contribution risk	(Individual/ occupational group/gender) - Poverty and inequality indexes	<ul style="list-style-type: none"> <li>• Reduce implicit taxes (which discourage work)</li> <li>• Redistributive measures</li> </ul>
<i>Maintaining a compact between generations</i>	(Aggregate) demographic and economic risks	- ( <i>Net</i> ) present value ratio - Internal rate of return	<ul style="list-style-type: none"> <li>• PAYG</li> <li>• Requisites on benefit indexation (see <i>Brown et al. 2005, Index. Social security</i>)</li> </ul>

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## The new pension architecture: principles

- ◆ Beyond the philosophy of assistance: risk diversification and a better insurance design
- ◆ Enhancement of incentives and reduction of inefficiency through stronger correlation between benefits and contributions (i.e., application of actuarial principles)
- ◆ Pension wealth diversification and mixed systems
- ◆ Flexible and portable pensions to enhance welfare and mobility
- ◆ Genuine solidarity instead of privileges

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## The Notional Defined Contribution system as an example of the new philosophy

The NDC systems: characteristics, main advantages and weaknesses

Implementing the NDC system:

A brief comparisons between the Italy and Sweden

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## The indirect sources of convergence

### a) Macroeconomic:

Convergent measures to tackle the effects of population aging, i.e.:

- ✓ Limitation of pension expenditure
- ✓ Increased participation rate among older workers
- ✓ Promotion of retirement savings through supplementary funded pensions
- ✓ Introduction of demographic variables in the stability pact?

### b) Microeconomic:

Application of the EU basic principles:

- ✓ Market freedom
- ✓ Free circulation of people

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## Will the "open coordination" method be enough?

- ✓ In the social policy area, the subsidiarity principle applies
- ✓ Established in the European Councils of Stockholm and Göteborg, the method consists of agreeing on broad common objectives, translating them into national policy strategies and monitoring them with standard indicators
- ✓ Countries are asked to produce "National Reports"\* and to provide common indicators (such as RR, i.r.r., NPVR, TR and others) in order to establish ground for meaningful comparisons, benchmarking and dissemination of good practices\*

\* The reports issued by each member state are at the base of the EU "Joint report by the Commission and the Council on adequate and sustainable pensions" (March 2003)

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## The European strategy for reaching sustainability is based upon higher employment rates (in particular at old ages and for women)

Final departure from the “lump of labour” fallacy, i.e. the notion that work is available in a “fixed” amount and increase in employment can be obtained largely through reduction of hours worked, and adoption of the view of adjusting economic mechanisms, properly regulated and integrated with solidarity

As a consequence, it is necessary to verify that the system itself does not discourage employment

Therefore, the sustainability indicators should include the implicit tax rate - resulting by the earning-based formulae

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## Conclusions

- Irrespective of the subsidiarity principle, common goals are important for the design of European social security systems
- Working on a set of good indicators is also important for assessing convergence towards common objectives
- Sustainability indicators are related to criteria of financial choice -> they stress the insurance nature of the pension system, in contrast with the more *welfare-oriented* and redistributive view
- However, they cannot capture the various sources of uncertainty (other than life expectancy uncertainty) and market imperfections
- The integration of these indicators with adequacy indicators is a fundamental step
- Adequacy of pension systems is strengthened within sustainable and efficient pension systems.

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