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**Pension Expenditure Projections,
Pension Liabilities
and European Union Fiscal Rules**

Daniele Franco, Maria Rosaria Marino and Stefania Zotteri

Motivation

- **Debate on the European Union fiscal rules:**
 - **consensus on the need to place more focus on government debt and long-term fiscal sustainability in the surveillance of budgetary positions**
 - **pension expenditure should be taken into account in assessing fiscal sustainability**
- **Paper considers how the burden for pensions can be included in the EU fiscal rules framework:**
 - (a) **pension expenditure projections**
 - (b) **pension liabilities**

Outline

- **European Union fiscal rules: current situation and reforms**
- **Pension expenditure projections in the EU**
- **Pension liabilities: definition, economic interpretation, figures**
- **Pension expenditure projections versus pension liabilities: different roles**
- **Improving the quality of pension expenditure projections and pension liabilities: organisational and methodological aspects**

EU fiscal rules

- **EMU: many sovereign countries share a common currency and retain fiscal responsibility \Rightarrow budgetary discipline recognised as necessary condition for EMU's success**
- **have fiscal rules to avoid externalities of deficits, prevent moral hazard in fiscal policy, avoid pressures on ECB for ex-ante & ex-post bail-outs, counter deficit-bias**
- **deficit should not exceed 3% of GDP (unless exceptional events, excess temporary and excess limited).**
- **debt should not exceed 60% of GDP (if higher, must decline at a satisfactory pace)**
- **close-to-balance targets over the cycle \Rightarrow debt asymptotically to zero (more than requested by sustainability theory)**

A pragmatic (but myopic) approach

- choice of rules and indicators guided by need for simplicity, transparency, homogeneity. Focus on monitoring of compliance
 - ⇒ rules refer to yearly data
 - ⇒ monitoring refers to short-to medium- term perspectives
 - ⇒ **no reference to long-term indicators/prospects**
 - ⇒ **only consider gross financial debt, no reference to assets and implicit liabilities**
- implicit assumption: if rules respected over short-medium term, no long-term problem

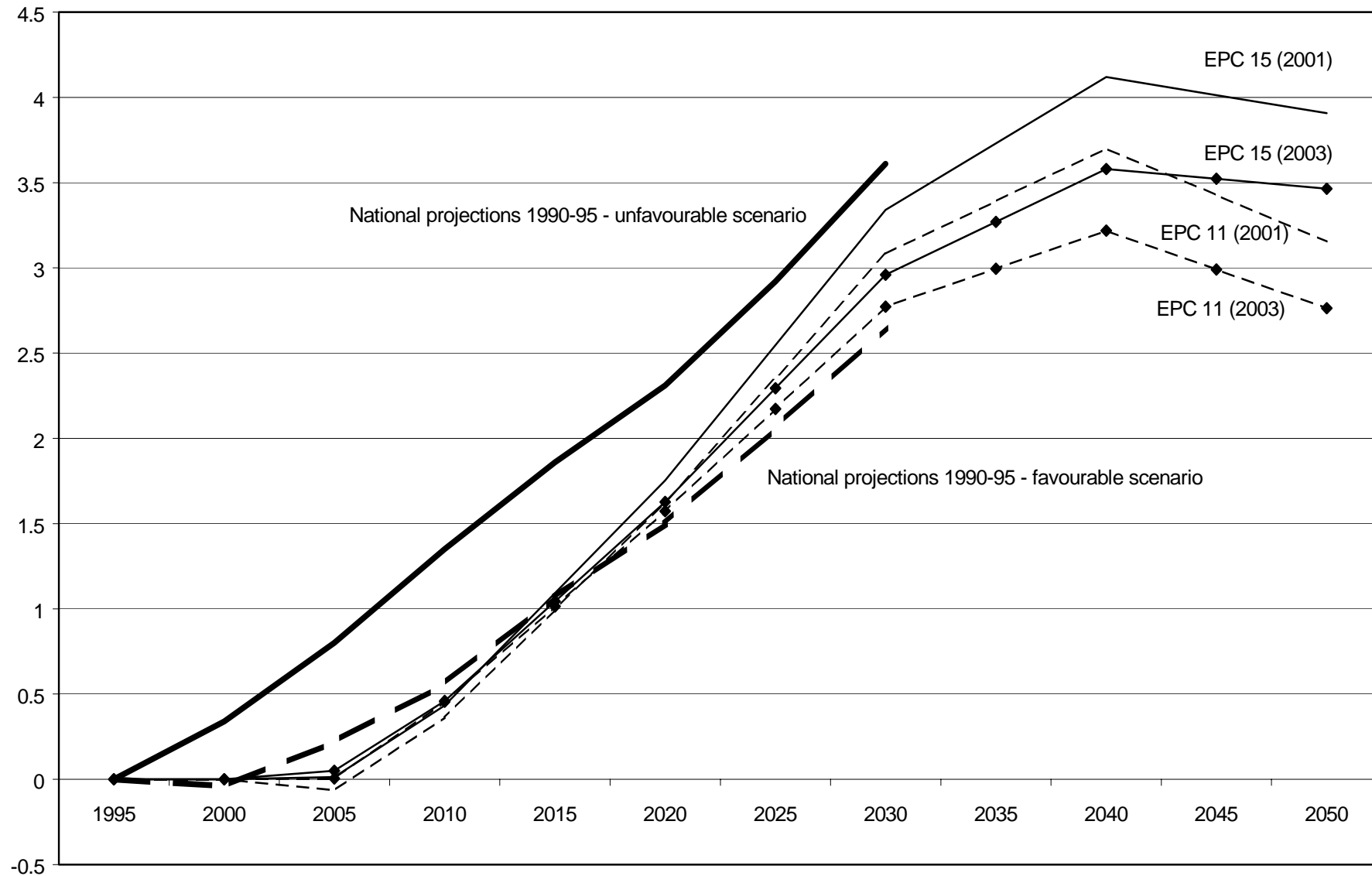
A greater focus on long-term issues

- in recent years, issue of long-term sustainability has gradually gained importance in assessment and design of EU fiscal policy
- European Council indicated a three-pronged strategy to tackle the budgetary implications of ageing population:
 - (i) raising employment rates, (ii) reducing public debt, (iii) reforming pensions and health-care systems
- European Council agreed that long-term fiscal sustainability should be regularly reviewed
- **now have debate about including long-term budgetary trends in budgetary surveillance and targets** (e.g. if introduce reforms with long-term benefits, can have higher deficits)

Joint projections exercises

- **all EU countries have developed models for projecting pension spending**
- **in 1999 a technical working group was set up to examine the budgetary implications of ageing populations and provide expenditure projections**
- **projections rely on models of national authorities, which have the best institutional and statistical knowledge, but are based on common demographic forecasts and assumptions (demography, labour market, productivity growth, etc)**
- **projection exercises increase the comparability of national forecasts. Now have projections of pensions, health and long-term care**

National projections 1990-95 and EU exercises 2001-2003



From expenditure projections to tax gaps

- expenditure projections are already used for deriving sustainability indicators of the budgetary adjustments required to ensure sustainable public finances and compliance with rules
- the initial non-age-related primary expenditure and revenue ratios are kept constant over time: **projected change in age-related expenditure \Rightarrow change primary balance + interest spending \Rightarrow overall balance \Rightarrow debt dynamics**
- can compute tax gaps (difference between current tax ratio and constant ratio needed over projection period to achieve a pre-determined budgetary target at a specified future date)

Pension liabilities: definitions

- any PAYG pension scheme gives rise to unfunded liabilities: each generation pays pensions to previous generations and later receives pensions from younger generations
- debt arises with creation of scheme, first generation receives a pension without having paid any previous contribution
- *Accrued-to-date liabilities*: present value of pensions to be paid in the future on the basis of accrued rights

Current workers and pensioners' net liabilities: also include present value of future contributions of existing members and their new rights under current rules

Open-system net liabilities: also include present value of contributions and pensions of new workers under current rules

Accrued liabilities and sustainability - 1

- **in steady state, the ratio of accrued liabilities to GDP is given by the discounted value of the ratios of future pension spending to GDP: it is proportional to the pension to GDP ratio**
- **suppose (i) country A and country B devote on a permanent basis revenues amounting respectively to X and aX of GDP to their PAYG schemes; (ii) revenues fully cover expenditure**
 \Rightarrow notwithstanding the same underlying sustainability circumstances, country B pension liabilities are a times those of country A
- **the size of accrued liabilities depends on the decision concerning the benefits and eligibility criteria of PAYG schemes**

Accrued liabilities and sustainability - 2

- **the size of accrued liabilities does not provide any information on whether the PAYG system is unbalanced or will be unbalanced in the future**
- **any judgement about the sustainability of pension schemes requires estimates about the resources available to pay for the accrued pensions (e.g. evolution of employment and income). Accrued liabilities do not include such estimates**
- **but the larger the ratio of pension rights to GDP, the higher the share of future public resources committed to pension expenditure and the higher the risk that, if GDP growth is not adequate, some adjustment will become necessary (in terms of higher tax rates, of repudiation of pension rights, etc.).**

Accrued liabilities and public debt

- the timing and amount of the repayment of public bonds are fixed in advance, those of pension liabilities are **uncertain**
- pension rights are **not embodied in formal contracts**: debtors can modify timing and amount of payment. While failure to repay financial liabilities can give rise to legal claims, repudiation of pension liabilities may raise only political reactions
- the acquisition of pension rights is usually **compulsory**. The debt is automatically renewed
- pension rights are **not tradable**. Changes in relative yield and relative risk comparatively to other assets have no effect on financial markets. A large pension-debt does not determine any direct pressure on financial markets

Accrued liabilities and EU public debt

- while conventional debt can be measured timely and precisely, pension liabilities are uncertain and very sensitive to changes in assumptions. This is problematic in a 25 countries context
 - would imply a change in the deficit definition: contributions to be classified as loans to the public sector, pensions as loan repayment. This would blur the indications concerning the impact of national fiscal policies on the area fiscal stance
 - the inclusion of pension liabilities in public debt, by making citizens' entitlements more explicit, **may hamper the pension reforms needed in Europe**
- ⇒ **better not add pension liabilities to public debt definition**

Current workers and pensioners' net liabilities and open system liabilities

- a “pure” PAYG pension policy is sustainable (no need to change rules) if $rc = n + w$
 - rc = implicit return on contribution
 - n = rate of growth of employment
 - w = rate of growth of per capita real wages
- net pension rights are positive if rc is greater than the discount rate (r) assumed as a benchmark (i.e. if $r > rc$) but **the sign of net pension rights does not convey any information on whether or not the PAYG scheme is unbalanced** (whether $rc > n + w$)
- if r is very high, even a scheme where $rc < n + w$ would show negative net rights. If r is very low, even a scheme where $rc > n + w$ would show positive net rights

International comparisons of pension liabilities - 1

- **International comparisons of pension liabilities:**
 - Hagemann and Nicoletti 1989
 - Van den Noord and Herd 1993
 - Kuné *et al.* 1993
 - Chand and Jaeger (1996)
 - Frederiksen (2001)
- Some studies are based on a **highly simplified methodology**: the present value of current benefits is estimated on the basis of the current average pension, mortality rates and a discount rate, do not consider disability and survivors' benefits
- **Problems**: schemes may not be mature, different schemes with different rules and employment structure (e.g. private & public sector), etc.

International comparisons of pension liabilities - 2

- **results are very different: case of France (% of GDP)**

	accrued	open
Van den Noord	216%	216%
Kune	69%	106%
Chand and Jaeger		114%
Frederiksen		237%

- **some results contrasts with need for reforms: case of Italy**

Chand and Jaeger	114%
Frederiksen	237%

rc very low because of reforms, but $n + w$ also low (because of fast ageing) \Rightarrow present value of pension rights is negative

but Italy needs further reforms (for the strong ageing), in fact spending expected to increase from 16% to 18% of GDP

International comparisons of pension liabilities - 3

- Frederiksen (2001) reports change in pension/GDP ratios and amount of pension liabilities (**open system methodology**)
- the relative position of most countries remains the same when ranked on the basis of changes in pension/GDP or of liabilities: **countries with highest expenditure growth are those with the greatest liabilities**. But there are several exceptions
- **ranking of countries in terms of current spending levels does not correspond to ranking in terms of open system liabilities**. Countries with highest pension/GDP ratios have the greatest accrued liabilities, but they do not necessarily have the greatest open system liabilities

Expenditure projections vs pension liabilities

- pension expenditure projections in percentage of GDP provide better indication about need for reforms and timing of problems
- pension expenditure projections can be better integrated with projections for other items (health, long-term care, etc.)
- expenditure projections can provide more intuitive indications and are less sensitive to underlying assumptions

but

- accrued rights measure the cost of closing down a PAYG scheme when fully complying with present rules
- pension liabilities more effective to evaluate the impact on consumption and saving ratios

Improving projections and liabilities

- the improvement in quality of pension projections offers an opportunity to improve estimates of liabilities. Basically need same data
- **should combine the production of the two indicators** (pension expenditure projections and liabilities)
- there is a need improve (i) organisational aspects and (ii) technical aspects
- **organisational aspects: responsibility for projections, frequency and revision of projections, data availability, transparency of assumptions, publication of detailed results**
- **methodological aspects: coverage, methodology, data**

Conclusions

- pension/GDP ratios and pension liabilities provide different, complementary indications: **should estimate both of them**
- assessment of sustainability of pension systems & fiscal policy should primarily refer to expenditure to GDP ratios. **Should not add pension debt to EU conventional debt**
- liabilities necessary to evaluate impact on saving decisions and cost of terminating PAYG pension schemes
- organisation, comparability and quality of projections still have some limitations. **Estimates of liabilities still very unsatisfactory**
- need further efforts in organisation and technical aspects: **need independent, transparent, detailed estimates**. Synergies: estimates of two indicators require the same information