



Reporting pension obligations of social security schemes in the EU

Webinar

Meeting the challenge of ageing in the EU

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Structure of presentation

- EU reporting frameworks of pension obligations
 - ✓ Ageing Working Group of the Economic Policy Committee (EPC-AWG)
 - ✓ Eurostat ESA 2010¹
- Methodological approach: closed versus open-group
- Eurostat 2017 and AWG 2018 results
- Key methodological considerations and impact on Eurostat results
- The contribution of social security actuaries

EU reporting frameworks – EPC-AWG

- A well-established EU framework: since 2001
- Long-term public pension expenditure projections
 - ✓ Based on EU commonly agreed methodologies and assumptions
 - ✓ Calculations on an open-group basis
- Analysis of the sustainability of public finances with respect to age-related expenditure, including pensions
- Contributory and non-contributory Social Security Pension Schemes (SSPS) are included
- Reporting is undertaken every 3 years
- Results are presented in the Ageing Report² and Fiscal Sustainability Report³

EU reporting frameworks – Eurostat ESA 2010

- A newly-established EU framework: first transmission of pension data by MS in December 2017
- Pension obligations of SSPS are reported in the supplementary Table 29
 - ✓ Calculations on the Accrued-to-Date Liability (ADL) method
 - ✓ Broadly, based on the EPC-AWG assumptions
- ADL method does not allow the assessment of the financial sustainability of SSPS
- Table 29 provides a tool for economic analysis of households' pension wealth across MS
- Non-contributory SSPS are in principle excluded
- Reporting is undertaken every three years

Methodological approach: Closed versus open-group

PV of Assets

PV of Obligations

Future contributions from
future contributors

Future benefits of
future contributors

Future contributions from
current contributors

Future benefits of current
contributors
(from future service)

Reserve

Future benefits of current
contributors
(from past service)

Future benefits of
current pensioners

Closed-group

Open-group

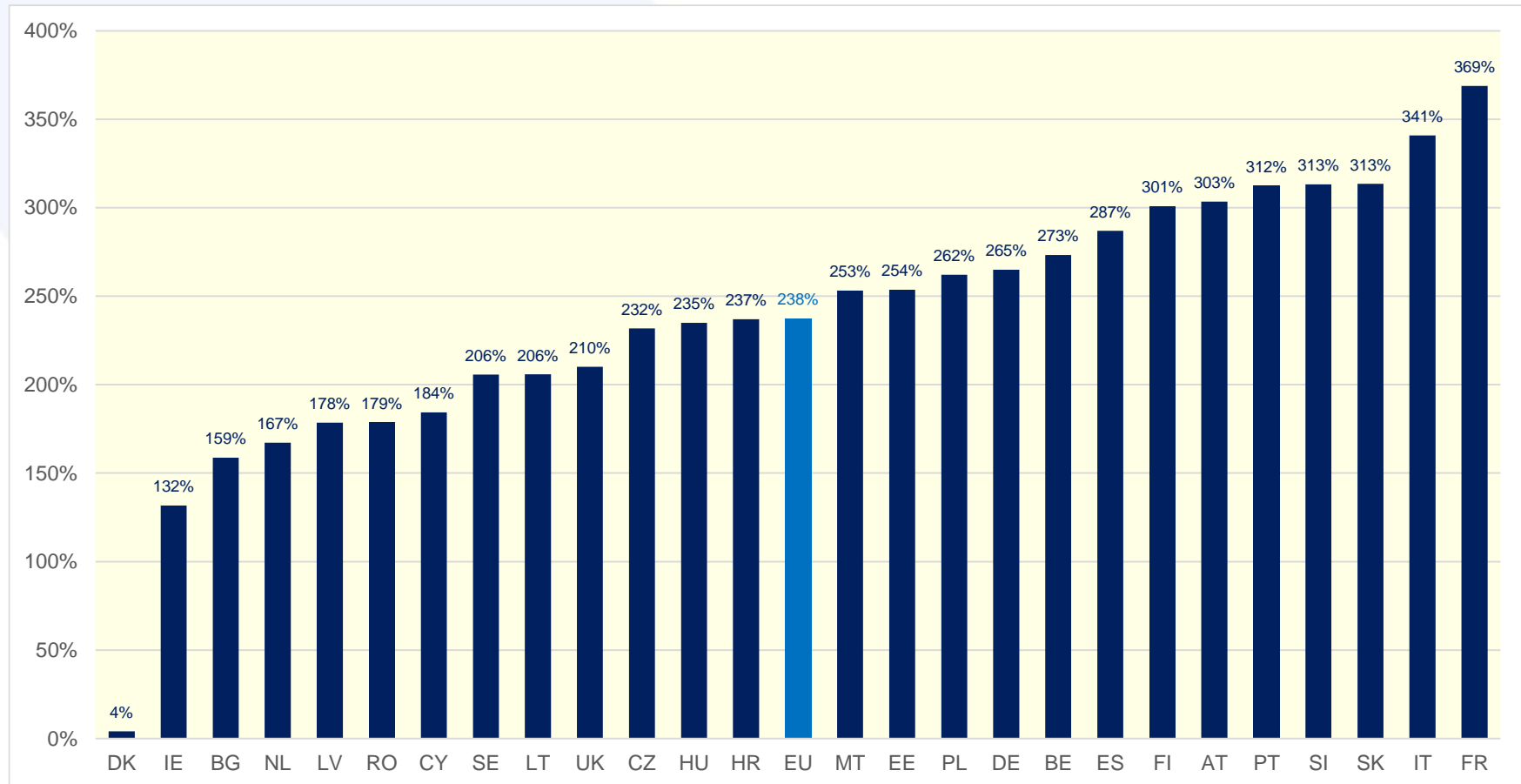
Closed-group

- It only includes current pensioners and contributors
- No future entrants are taken into account
- It ignores future contributions (largest asset)
- No future accrual of new benefits
- It provides incomplete financial picture of a SSPS
- It only reflects the performance of a SSPS in the past

Open-group

- It includes current pensioners and contributors as well as future contributors
- All future contributions are considered
- All future benefits of current pensioners and contributors (past and future service) and future contributors are considered
- It provides a complete and forward-looking financial picture of a SSPS

Eurostat 2017 results: ADL as % of GDP in 2015 (1st pillar¹ of pension system)



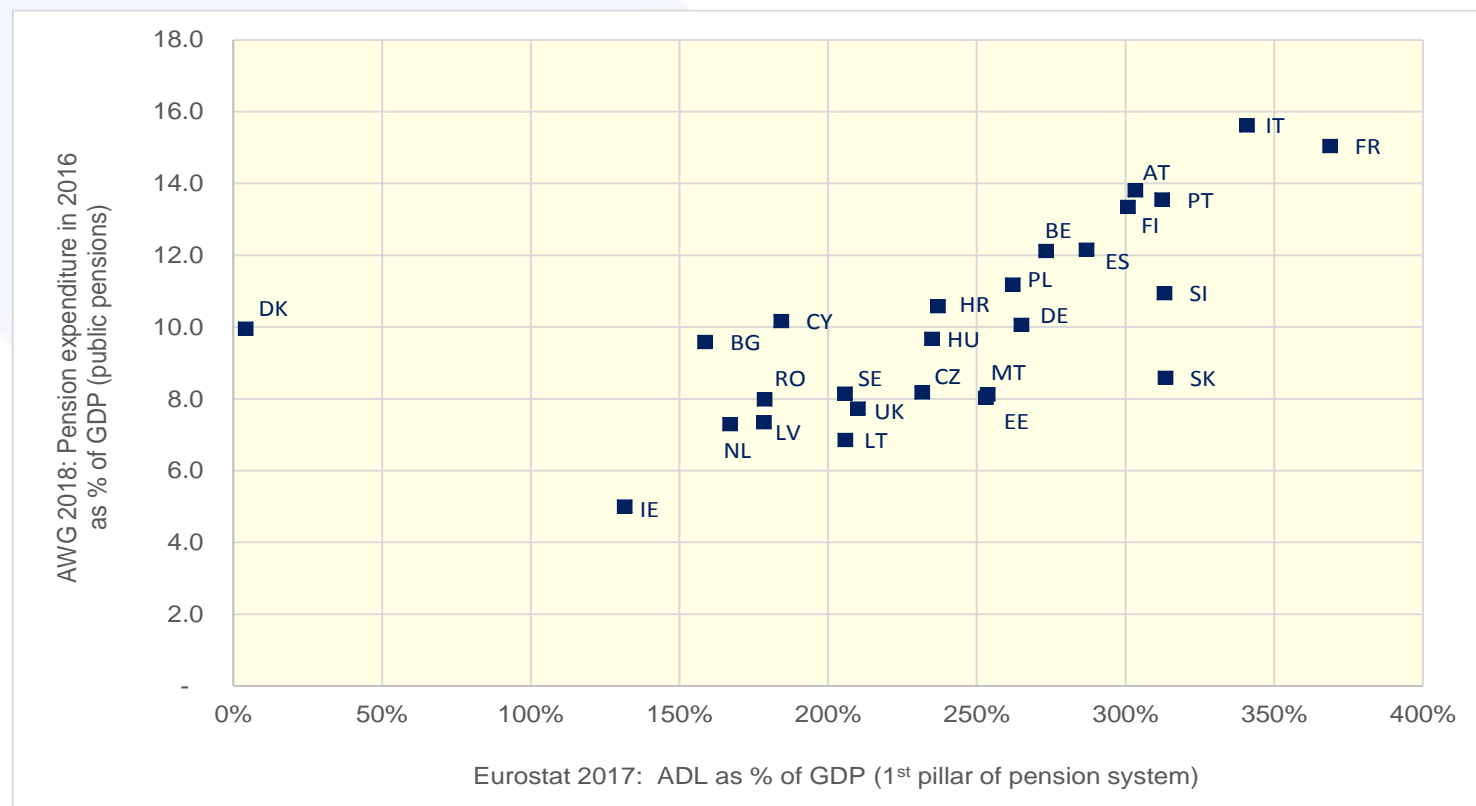
Source: Eurostat

¹ The 1st pillar of the national pension system refers to the contributory social security pension schemes (SSPS) which are recorded under column H of Table 29 ("Social Security Pension Schemes"), as well as under column G of Table 29 ("Classified in general government") in Member States where a separate SSPS exists for government employees

Eurostat 2017 results: ADL as % of GDP in 2015 (1st pillar of pension system)

- The single figure of ADL alone is a crude indicator
- Large ADL figures are easily misunderstood and misinterpreted
- To a large extent, the size of ADL reflects the performance of the social security pension system in the *past*, in terms of:
 - ✓ Generosity and maturity of benefits offered
 - ✓ Pensioner coverage
 - ✓ Population ageing effect

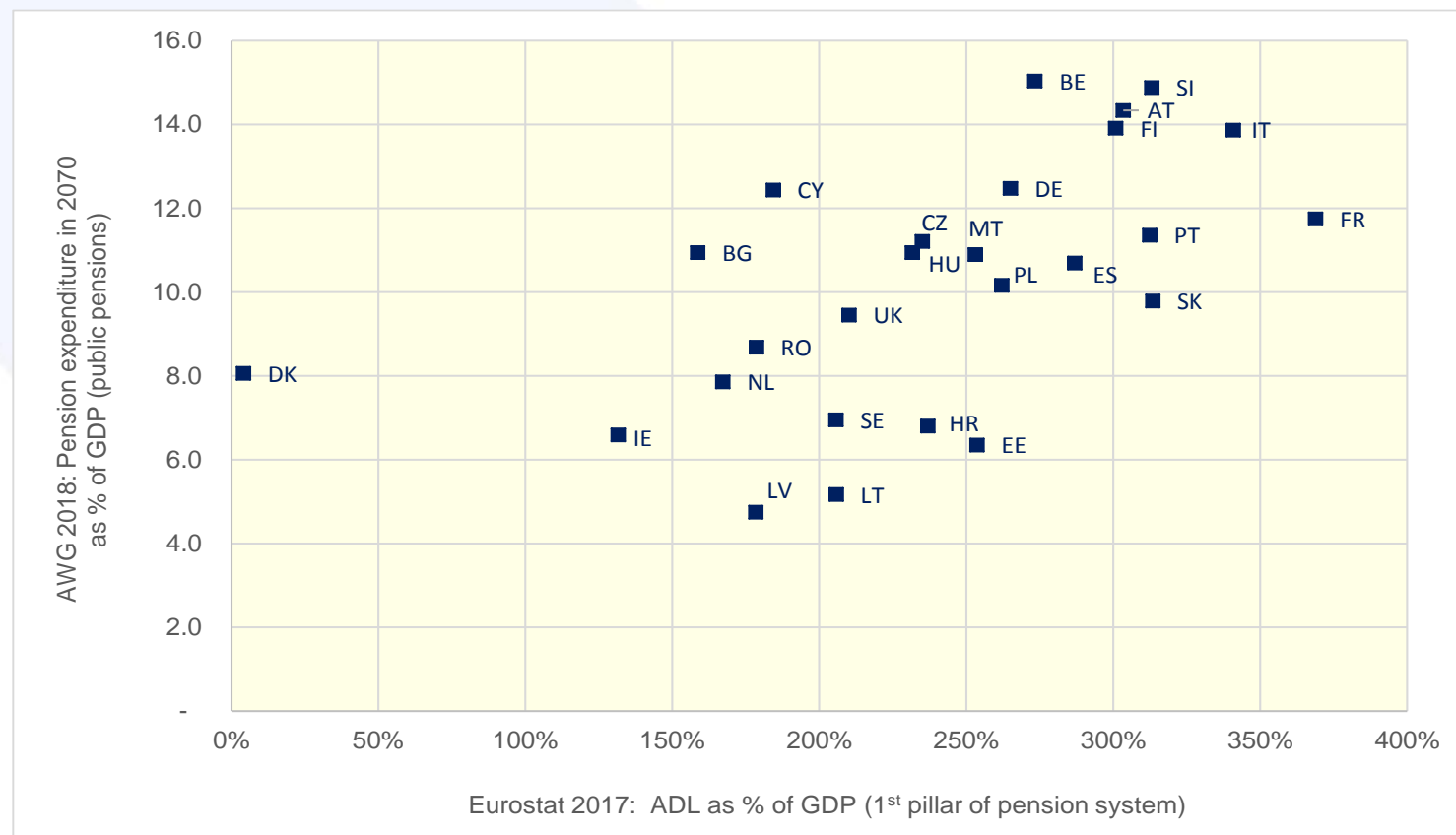
Eurostat 2017 and AWG 2018 results



Sources: Ageing Report 2018 and Eurostat

- Rather strong correlation between ADL/GDP figures (Eurostat 2017) and Pen.Exp./GDP figures of 2016 (AWG 2018)
- They both reflect the performance of SSPS in the past
- DK: virtually no disclosure of social security pension obligations in Table 29

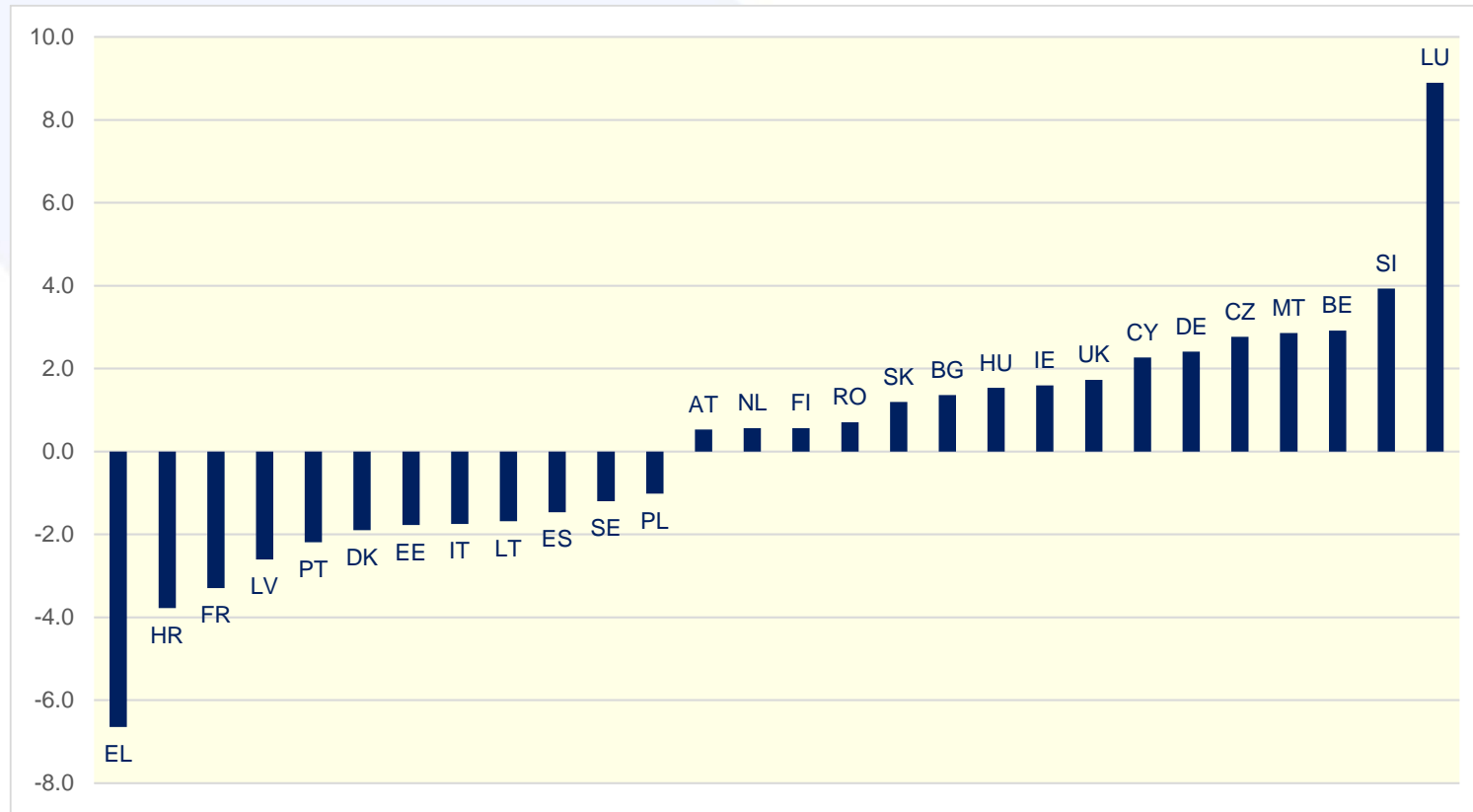
Eurostat 2017 and AWG 2018 results



Sources: Ageing Report 2018 and Eurostat

- Weaker correlation between ADL/GDP figures (Eurostat 2017) and Pen.Exp./GDP figures of 2070 (AWG 2018)
- ADL does not capture the performance of SSPS in the future
- For some MS, the future demographic/ economic developments as well as the impact of pension reform is significant (see next slide)

AWG 2018 results: change in public pension expenditure, 2016-2070 (in p.p. of GDP)



Source: Ageing Report 2018

- *LU and SI*: more than 3 p.p. increase
- *EL, HR and FR*: more than 3 p.p. decrease

Key methodological considerations and impact on Eurostat results

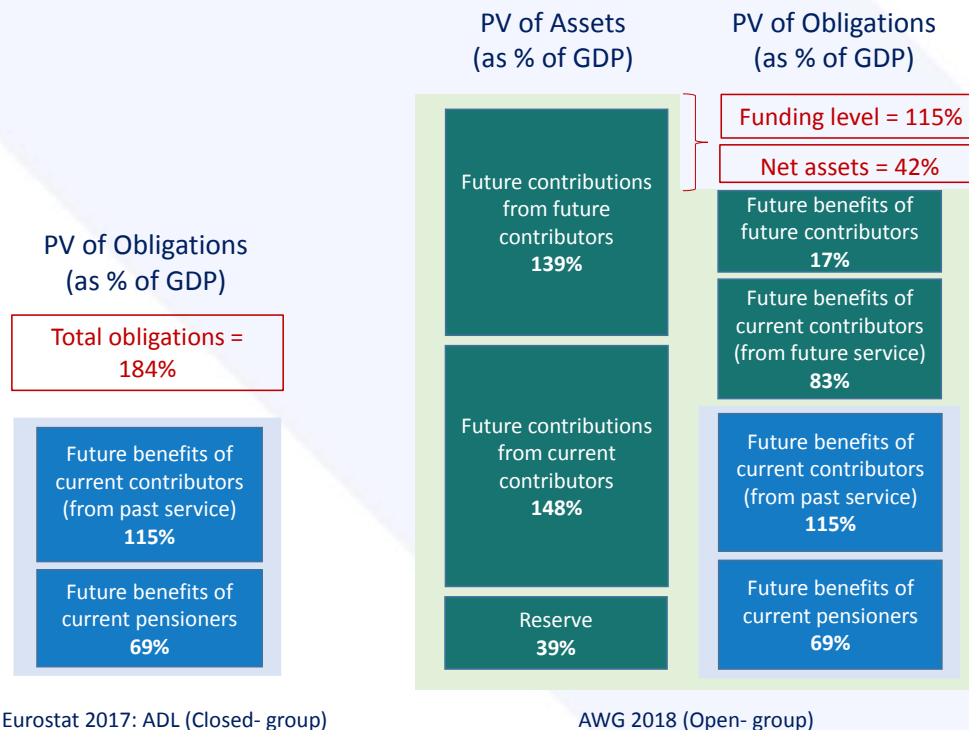
1. Closed versus open-group approach
2. Treatment of minimum income provision
3. Assumptions
4. Treatment of non-employment credits

Key methodological considerations and impact on Eurostat results –

1. Closed versus open-group approach

- SSPS typically operate on a PAYG basis
 - ✓ Implicit social contracts: current pensioners' benefits are covered by contributions of current contributors
- Open-group approach
 - ✓ Explicitly accounts for the intergenerational societal commitments

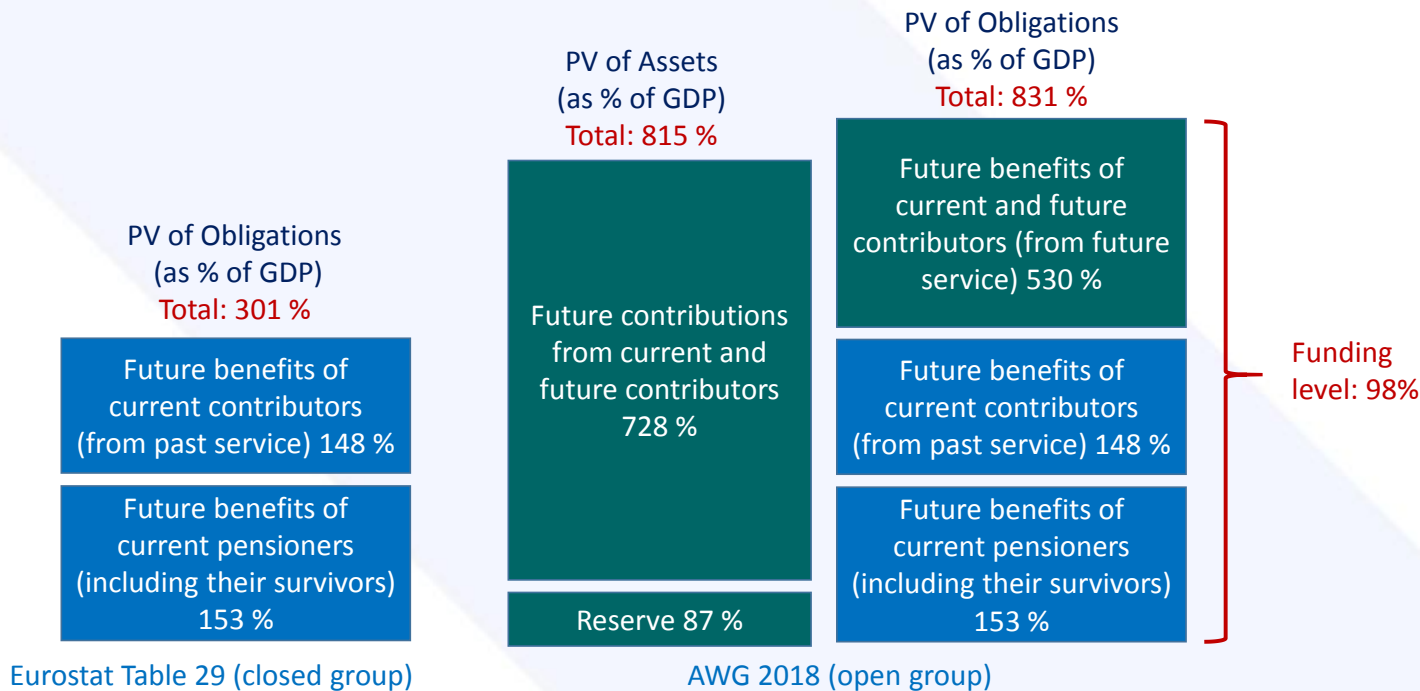
Illustration: Cyprus Social Insurance Scheme (SIS) – Eurostat 2017: ADL versus EPC-AWG 2018 (open-group)



- ADL figure does not allow for assessing long-term financial sustainability of Cyprus SIS
- Cyprus SIS is financially sustainable with a funding level of 115% under open-group approach

Source: Actuarial Unit, Ministry of Labour, Welfare and Social Insurance

Illustration: Earnings-related pension scheme in Finland - Eurostat 2017: ADL versus EPC-AWG 2018 (open-group)

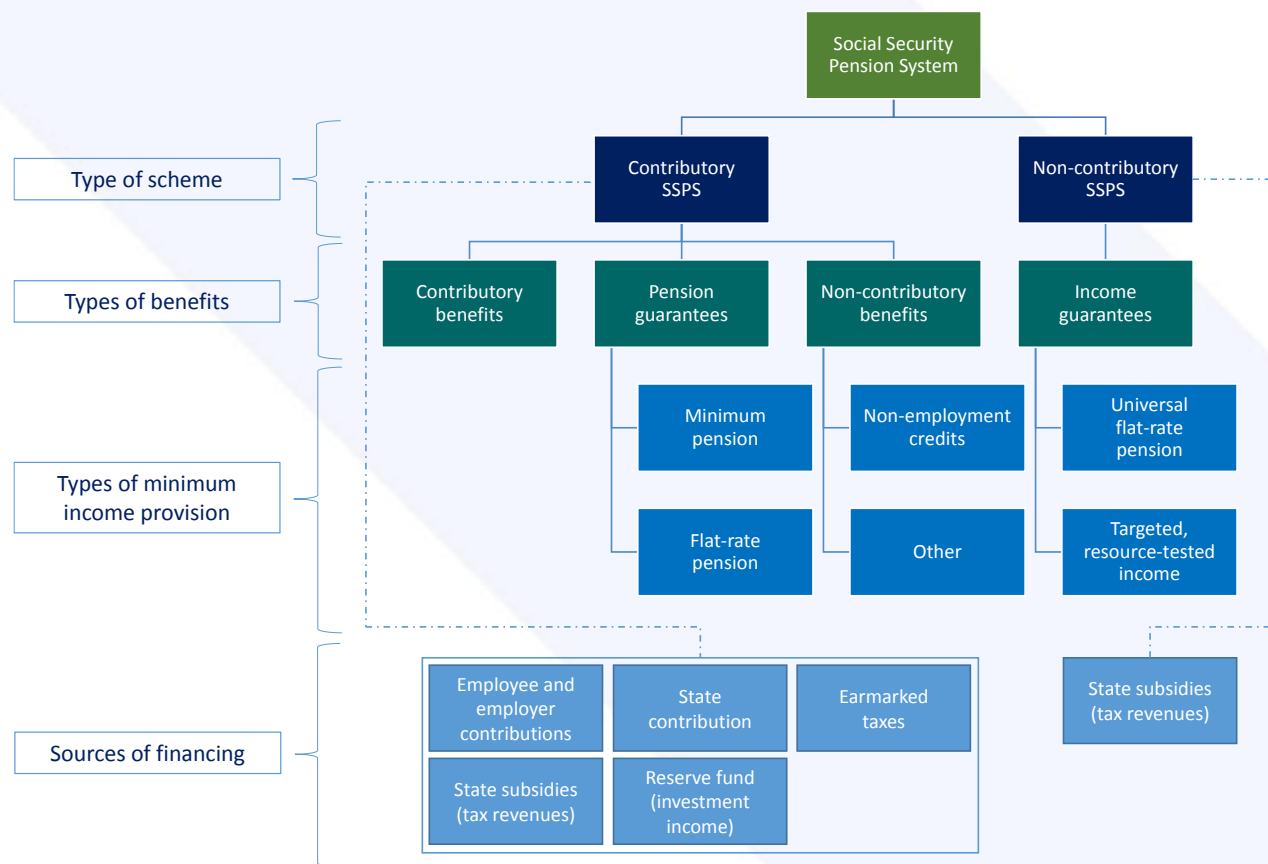


Source: Finish Centre for Pensions

- Finish Earnings-related pension is financially sustainable with a funding level close to 100% under open-group approach

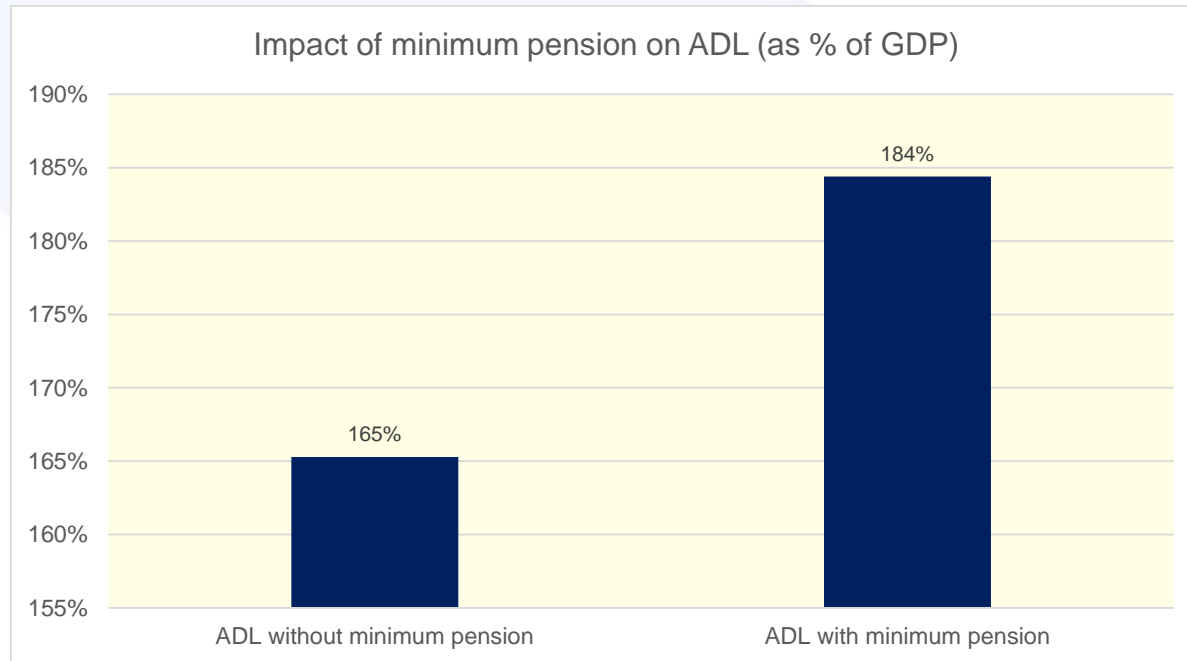
Key methodological considerations and impact on Eurostat results –

2. Treatment of minimum income provision



- Contributory SSPS are in principle covered, while non-contributory SSPS are not
- AAE survey on SSPS covered under ESA 2010 (24 MS)
 - ✓ 55 contributory SSPS covered
 - ✓ 14 non-contributory SSPS are not (only under EPC-AWG)
- Pension guarantees (contributory SSPS) and universal flat-rate pension (non-contributory SSPS) have the same objective but are treated differently
- MS which provide significant levels of minimum income provision through non-contributory SSPS are treated more favourably

Treatment of pension guarantees – An illustration: Cyprus SIS

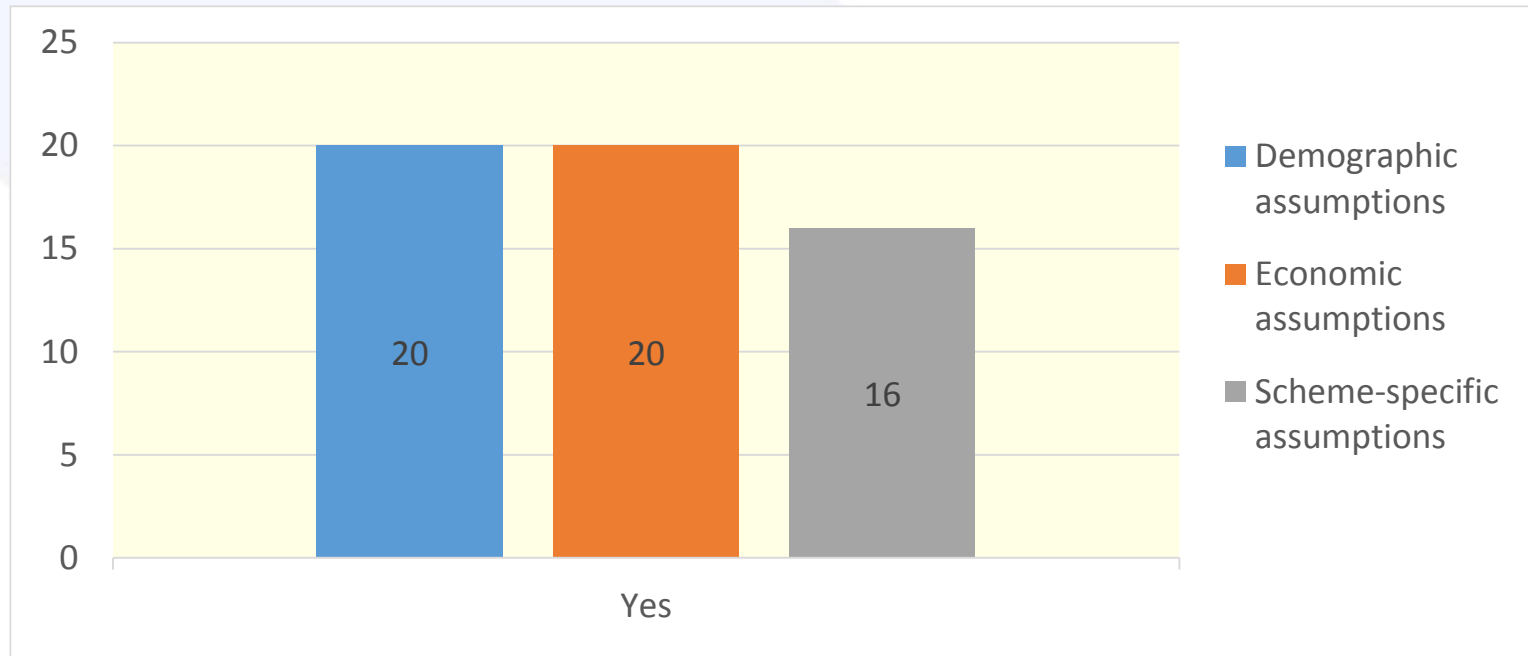


Source: Actuarial Unit, Ministry of Labour, Welfare and Social Insurance

- If Cyprus SIS minimum pension was not included in Table 29 calculations, the ADL figure would have been 10 per cent lower
 - ✓ Reduced 19 percentage points from 184 per cent to 165 per cent of GDP

Key methodological considerations and impact on Eurostat results –

3. Are the Table 29 assumptions the same with those of EPC-AWG?

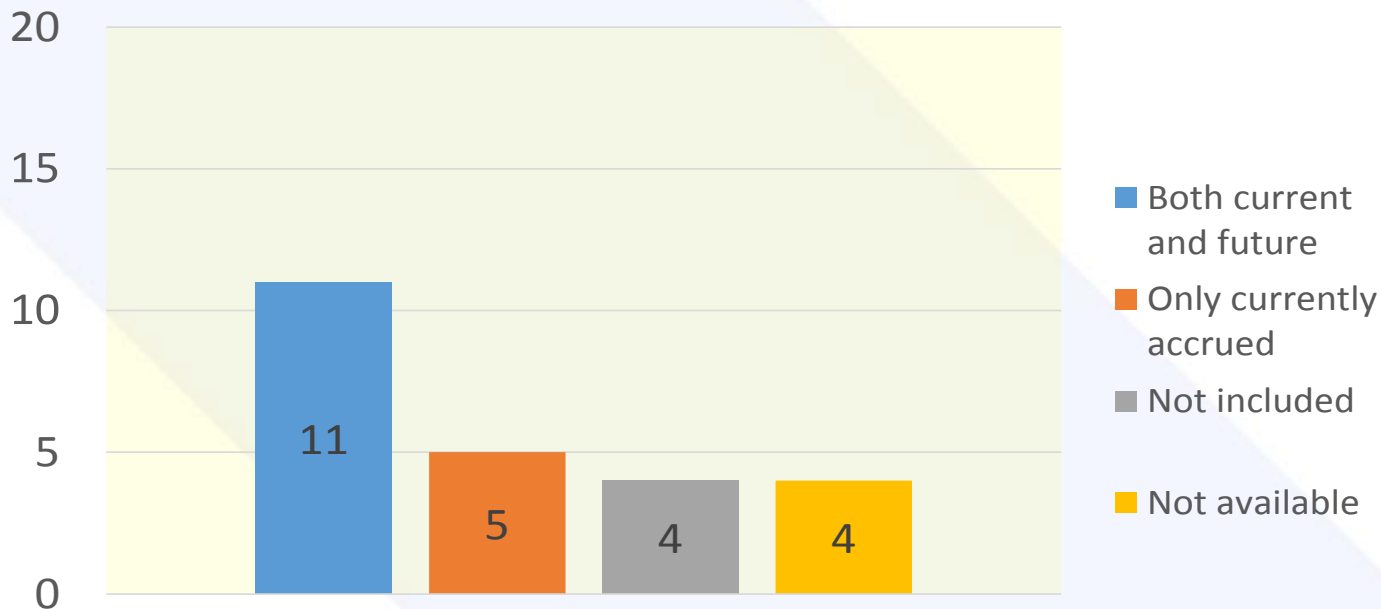


Source: AAE survey on social security pension schemes covered under ESA 2010 – 23 responses

- Broadly the same for economic and demographic assumptions
 - ✓ Some differentiation for scheme-specific assumptions
- Deviation from EPC-AWG assumptions on the key economic assumption of wage increase
 - ✓ Choosing between Projected Benefit Obligations (PBO) and Accumulated Benefit Obligations (ABO)
 - ✓ ADL figure for current contributors under ABO could be 20%-30% lower than that of PBO

Key methodological considerations and impact on Eurostat results –

4. Were the non-employment credits, such as childcare and invalidity, included in ADL calculation?



Source: AAE survey on social security pension schemes covered under ESA 2010 – 24 responses

- Different approaches for accounting credited years were adopted by MS
 - ✓ 11 MS – both current and future: computed and recorded at the year of retirement
 - ✓ 5 MS - only current: recorded as they occur
- Non-employment credits are not considered by a number of MS

The contribution of social security actuaries

1. Improvement of existing methodologies of calculating EU pension obligations
 - ✓ Key methodological issues associated with Table 29 ADL figures need to be addressed, such as treatment of redistributive features of SSPS
 - ✓ Use of appropriate measures based on sound actuarial standards and principles to properly assess the financial sustainability of contributory SSPS, taking into account financing method and types of benefits offered
2. Creation of a robust framework for effective communication and interpretation of EU pension obligation figures
 - ✓ Enabling informed decisions to be made by stakeholders
 - ✓ Minimising the risk of misinterpretation or misuse
 - ✓ Use of multiple disclosure approach in the form of balance sheets
 - ✓ Ensuring that no certain types of SSPS are promoted

References

1. [The ESA 2010 framework as stipulated by the EU regulation 549/2013](#)
2. [The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States \(2016-2070\)](#)
Ageing Working Group of the Economic Policy Committee,
Brussels, May 2018
3. [Fiscal Sustainability Report 2018](#)
European Commission, Directorate-General for Economic and
Financial Affairs, Brussels, January 2019
4. Stavrakis (2018) Reporting the pension obligations of social security schemes: An EU perspective. International Social Security Review 71, 3/2018, 105-123

Thank you very much for your attention!

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