ACCRUED-TO-DATE PENSION ENTITLEMENTS IN SOCIAL INSURANCE: FACT SHEET

CYPRUS

January 2024

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1. Table 29 column A: Defined contribution schemes (funded, non-general government)

1. General description of the scheme and the calculation model

a. Coverage of the scheme

Under this category are included the Provident Funds, which provide retirement benefits paid as lump sum payments. These defined contribution schemes are voluntary schemes.

Provident Funds are occupational pension schemes which are established based on an agreement between the employer and the employees. Both parties (employer and employees) contribute to the provident fund.

The percentage of the workforce covered under these schemes is estimated at 22%.

b. Institutional set-up	
Data sources/ suppliers	Registrar of Occupational Retirement Benefit Schemes.
	Data is obtained from the annual economic accounts of the Funds. All rows of the table can be completed directly.
Which institution is	CYSTAT
running/managing the	
calculations?	

2. Any other comments

Any discrepancies observed between Table 29 and the database of Eurostat for Financial Accounts for Variable F.63 (Pension entitlements) are due to vintage effect (difference of cut-off date).

2. Table 29 column B: Defined benefit schemes and other non-defined contribution schemes (funded, non-general government)

1. General description of the scheme and the calculation model

a. Coverage of the scheme

Under this category are included Pension Funds that provide a given level of pension benefits, paid as periodic payments or partially as periodic payments and partially as lump sum payments. The scheme covers all sorts of exits however we assume that all members retire normally. The scheme is mandatory and the benefits are paid to all members that complete 5 years of continuous service.

More particularly the defined benefit schemes include mainly the pension funds of the public corporations (i.e. Cyprus Telecommunication Authority, Electricity Authority of Cyprus, Port Authority), and of the sewerage boards.

The percentage of the workforce covered under these schemes is estimated at less than 5%.

b. Institutional set-up	
Data sources/ suppliers	Registrar of Occupational Retirement Benefit Schemes (being the Data source for the members of the Retirement Plan) «Aon Solutions Cyprus Ltd» (Rows are completed as a result of the actuarial valuations performed by «Aon Solutions Cyprus Ltd»)

Which institution is	«Aon Solutions Cyprus Ltd»
running/managing the	CYSTAT
calculations?	
c. Major formulas: Benefi	t formula; Indexation of benefits
Benefit formula	Service until 31/12/2012: 12/800 x Annual Final Salary x Years of Service until
	31/12/2012
	Service after 31/12/2012: 12/800 x Annual Career Average Salary x Years of Service between 1/1/2013 and normal retirement date
Indexation of benefits	Based on the Social Securities Basic Insurable Earnings at the age of retirement
d. Type and structure of the calculation model	

The model is based on the Projected Unit methodology and the Current Service Cost (CSC) is calculated based on this particular methodology.

A number of assumptions are used for the projection of salaries and the calculation of benefits at the Normal Retirement Age which are then discounted to the valuation date.

2. Assumptions and methodologies applied

a. Discount rate

4% nominal

b. Wage growth

1.00% + 0.25% + salary scale increases (Inflation rate/2 + General Salary increases + Salary Scale increases)

c. Valuation method: ABO/PBO

РВО

3. Data used to run the model

a. Mortality tables

EVK2000 for Males and for Females

b. Entitlement statistics; other relevant statistics

Data necessary for the calculation of Social Insurance pension that is deductible as per rules and regulations

4. Reforms incorporated in the model

Calculations were based on the up to date rules incorporating all reforms on pension benefit calculations

5. Specific assumptions

a. How are careers modelled?

Based on past service

b. How are survivor pensions calculated?

The survivor pensions are calculated using annuities based on the current age

c. How is the retirement age modelled over time?

Fixed at age 65

d. Other specific features of the model

6. Any other comments

Most of the above schemes invested only in cash during the years 2018-2021. Therefore, there are no investment, consultation or administrations fees for the years under investigation or these fees are very small for many of these organisations. Only large organisations adopted a particular investment policy and thus incurred expenses that should be included in row 2.5.

Any discrepancies observed for variable F.63 (Pension entitlements) between Table 29 and the database of Eurostat for Financial Accounts are due to vintage effect (difference of cut-off date).

3. Table 29 column D: Defined contribution schemes (funded, general government)

Not applicable for the case of Cyprus.

4. Table 29 column E: Defined benefit schemes (funded, for general government employees, classified in financial corporations)

1. General description of the scheme and the calculation model

a. Coverage of the scheme

Under this category are included Pension Funds that provide a given level of pension benefits, paid as periodic payments or partially as periodic payments and partially as lump sum payments. The scheme covers all sorts of exits however we assume that all members retire normally. The scheme is mandatory and the benefits are paid to all members that complete 5 years of continuous service.

The defined benefit schemes under column E include the pension funds of the semi-government organisations (i.e. Cyprus Broadcasting Corporation, University of Cyprus, Human Resource Development Authority etc.), as well as those of the local authorities.

Semi-government organisations and local authorities are not part of the general government retirement scheme, since their benefit schemes are independent units classified outside the government sector. However, they offer the same retirement plan as the central government.

The percentage of the workforce covered under these schemes is estimated at less than 5%.

b. Institutional set-up		
Data sources/ suppliers	Registrar of Occupational Retirement Benefit Schemes (being the Data source for the members of the Retirement Plan) «Aon Solutions Cyprus Ltd» (Rows are completed as a result of the actuarial valuations performed by «Aon Solutions Cyprus Ltd»)	
Which institution is running/managing the calculations?	«Aon Solutions Cyprus Ltd» CYSTAT	
c. Major formulas: Benefit formula; Indexation of benefits		
Benefit formula	Service until 31/12/2012: 12/800 x Annual Final Salary x Years of Service until 31/12/2012 Service after 31/12/2012: 12/800 x Annual Career Average Salary x Years of Service between 1/1/2013 and normal retirement date	
Indexation of benefits	Based on the Social Securities Basic Insurable Earnings at the age of retirement	
d. Type and structure of the calculation model		

The model is based on the Projected Unit methodology and the Current Service Cost (CSC) is calculated based on this particular methodology.

A number of assumptions are used for the projection of salaries and the calculation of benefits at the Normal Retirement Age which are then discounted to the valuation date.

2. Assumptions and methodologies applied

a. Discount rate

4% nominal

b. Wage growth

1.00% + 0.25% + salary scale increases (Inflation rate/2 + General Salary increases + Salary Scale increases)

c. Valuation method: ABO/PBO

PBO

3. Data used to run the model

a. Mortality tables

EVK2000 for Males and Females

b. Entitlement statistics; other relevant statistics

Data necessary for the calculation of Social Insurance pension that is deductible as per rules and regulations

4. Reforms incorporated in the model

Calculations were based on the up-to-date rules incorporating all reforms on pension benefit calculations

5. Specific assumptions

a. How are careers modelled?

Based on past service

b. How are survivor pensions calculated?

The survivor pensions are calculated using annuities based on the current age

c. How is the retirement age modelled over time?

Fixed at age 65

d. Other specific features of the model

6. Any other comments

Most of the above schemes invested only in cash during the years 2018-2021. Therefore, there are no investment, consultation or administrations fees for the years under investigation or these fees are very small for many of these organisations. Only large organisations adopted a particular investment policy and thus incurred expenses that should be included in row 2.5.

Any discrepancies observed for variable F.63 (Pension entitlements) between Table 29 and the database of Eurostat for Financial Accounts are due to vintage effect (difference of cut-off date).

5. Table 29 column F: Defined benefit schemes (funded, for general government employees, classified in general government)

Not applicable for the case of Cyprus.

6. Table 29 column G: Defined benefit schemes (unfunded, for general government employees, classified in general government)

1. General description of the scheme and the calculation model

a. Coverage of the scheme

Defined benefit scheme of Central Government. Pension scheme is mandatory. The scheme covers all permanent workers that have been employed on or before 01/10/2011. Also, the Scheme covers all types of retirement including old age, disability and survivors' pensions. It is supplementary to the Social Security Scheme.

The minimum number of years of continuous service required for pension eligibility is 5 years.

The percentage of the workforce covered under this scheme is estimated at less than 10%.

b. Institutional set-up		
Data sources/ suppliers	Treasury of the Republic of Cyprus	
Which institution is	Aon Solutions Cyprus Ltd	
running/managing the		
calculations?		
c. Major formulas: Benefit formula; Indexation of benefits		
Benefit formula	Service until 31/12/2012: 12/800 x Annual Final Salary x Years of Service until	
	31/12/2012	
	Service after 31/12/2012: 12/800 x Annual Career Average Salary x Years of Service	
	between 1/1/2013 and normal retirement date	
Indexation of benefits	Based on the Social Securities Basic Insurable Earnings at the age of retirement	
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d. Type and structure of the calculation model

The model is based on the Projected Unit methodology and the Current Service Cost (CSC) is calculated based on this particular methodology.

A number of assumptions are used for the projection of salaries and the calculation of benefits at the Normal Retirement Age which are then discounted to the valuation date.

2. Assumptions and methodologies applied

a. Discount rate

4% nominal. Additional Sensitivity tests using 3% and 5% discount rate.

b. Wage growth

1.00% + 0.25% + salary scale increases (Inflation rate/2 + General Salary increases + Salary Scale increases)

c. Valuation method: ABO/PBO

PBO

3. Data used to run the model

a. Mortality tables

EVK2000 for Males and Females

b. Entitlement statistics; other relevant statistics

Data necessary for the calculation of Social Insurance pension that is deductible as per rules and regulations

4. Reforms incorporated in the model

Calculations were based on the up-to-date rules incorporating all reforms on pension benefit calculations

5. Specific assumptions

a. How are careers modelled?

Based on past service

b. How are survivor pensions calculated?

The survivor pensions are calculated using annuities based on the current age

c. How is the retirement age modelled over time?

Fixed at age 65

d. Other specific features of the model

6. Any other comments

The Central government has no assets under the DB Pension Scheme. The Scheme, in other words, is not funded by the Government. The benefits and any other expenses are paid out of the year's **Government Budget** therefore in rows 2.1 and 2.5 we have no entries since no contributions are made into a separate fund and as a result, in the absence of a separate fund, the government does not incur investment, consultation or administration expenses.

7. Table 29 column H: Social security pension schemes (unfunded)

1. General description of the scheme and the calculation model

a. Coverage of the scheme

The General Social Insurance Scheme (GSIS) - pensions branch — is a compulsory earnings-related scheme which covers every person gainfully employed in Cyprus, both in public and private sector, including self-employed.

The GSIS covers old age, disability and survivors' pensions.

The threshold for earning pension rights is in accordance with the Social Insurance Law, which defined the maximum insurable earnings, reviewed every year in line with wage index, based on which contributions are paid and the resulting pension amount is calculated.

The split between D6111 and D6131 is estimated, but it is based on the legislated contribution rate, as per Social Insurance Law, which stipulates that it is shared equally between the employer and an employed person.

b. Institutional set-up		
Data sources/ suppliers	Social Insurance Services, Ministry of Labour and Social Insurance	
Which institution is running/managing the calculations?	International Labour Organisation (ILO)	
c. Major formulas: Benefit formula; Indexation of benefits		
Benefit formula	Basic Pension = (60%/ Insurance Period) x Total number of basic insurance points * Basic Insurable Earnings	
	Supplementary Pension = 1.5% x Total number of supplementary insurance points * Basic Insurable Earnings	
Indexation of benefits	Basic Pension: average earnings	

d. Type and structure of the calculation model

Standard deterministic macro simulation cohort-based pension projection model- fully customised version of the ILO generic actuarial pension modelling tool.

Supplementary Pension: Consumer price indexation (CPI)

All frameworks of assumptions used (macroeconomic, demographic and scheme-specific) are in line with those applied in the AWG 2024 exercise.

2. Assumptions and methodologies applied

a. Discount rate

Base scenario: 4% nominal

Sensitivity tests: 3% and 5% nominal

b. Wage growth

In line with AWG 2024 exercise

c. Valuation method: ABO/PBO

PBO

3. Data used to run the model

a. Mortality tables

In line with AWG 2024 exercise

b. Entitlement statistics; other relevant statistics

GSIS database: The insured population by active and inactive status, the distribution of insurable wages among contributors, the distribution of past credited service and pensions in-payment. Data are disaggregated by age and sex.

4. Reforms incorporated in the model

All pension reforms incorporated

5. Specific assumptions

a. How are careers modelled?

Explicitly modelled based on the distribution of past insurance credits in the base year and acquisition of new insurance credits in subsequent years.

b. How are survivor pensions calculated?

Explicitly modelled using scheme-specific assumptions for probability of having a spouse at time of death, average age of spouse, and number and age of children

c. How is the retirement age modelled over time?

The actuarially assumed retirement rates used in the pension model are consistent with the labour force exit rates produced by the DG ECFIN's labour force cohort simulation model under the AWG 2024 exercise. They are in line with the legislated increases in statutory retirement age.

d. Other specific features of the model

The same input data, projection methodologies, actuarial pension model and assumptions used as per AWG 2024 exercise.

6. Any other comments

8. Table 29 column K: Entitlements of non-resident households

No data is available on the share of non-residents in pension entitlements.

9. Links to (national) publications providing further information on the pension schemes

Link to latest Actuarial Review of the social Insurance Scheme

https://www.mlsi.gov.cy/mlsi/sid/sidv2.nsf/All/1A692E8CF3FE4B03C22587430032148E/\$file/Act%20Report%202017.pdf