

## Methodology for elaboration of “Pension entitlements in social insurance” table (Table 29 of ESA 2010) for Bulgaria

### 1. Elaboration of data for column 1 “Defined contribution schemes”

The main source of information for the filling in of **column 1 “Defined contribution schemes”** of Table 29 is data from the Financial Supervision Commission. Additional data from the Ministry of Finance is used to calculate the split between employer and employee actual social contributions for civil servants. The elaboration of **column 1** follows closely the steps and recommendations of the “Technical Compilation Guide for Pension Data in National Accounts” of Eurostat and European Central Bank.

**Row 1 Pension entitlements (incl. contingent pension entitlements)** - this position is calculated as the total sum of individual accounts for Second and Third Pillar from the Financial Supervision Commission annual questionnaire on pension entitlements for defined contributions schemes in Bulgaria by type of pension fund.

**Row 2.1 Employer actual social contributions** - according to the Social Security Codex in Bulgaria the employer actual social contributions are differ by type of employee category. For civil servants the whole amount of the contribution is paid by the employer (i.e. the government). For self-employed/self-insured persons the whole amount of the contribution is paid by the households. For all other persons the contributions are divided between employer and employee. Since 2008 the division is 60% employer and 40% employee. Data for civil servants comes from the Ministry of Finance, for all other data is taken from the Financial Supervision Commission questionnaire. For the elaboration of the UPF part of this position the sum for all civil servants is subtracted from the total sum of contributions. Then the sum of self-insured persons towards 31.12 of current year provided by the National Revenue Agency is subtracted from the result. The final result is divided by 60% to 40% and the 60% part is taken for this position, while the 40% part is used for row **2.3**. The PPF part of this position includes 100% of all PPF contributions and the value is taken from the Financial Supervision Commission questionnaire. The SVPI part of this position is also taken from the questionnaire. The final position value is calculated as the sum of UPF + PPF + SVPI.

**Row 2.3 Household actual social contributions** - the calculation of the UPF part of this position is detailed in the description of row **2.1**. The SVPI part of the position is taken from the Financial Supervision Commission questionnaire. The final position value is calculated as the sum of UPF + SVPI.

**Row 2.4 Household social contribution supplements** - this position is calculated as the total sum of positive investment income on defined contribution schemes' assets for UPF, PPF, and SVPI, as shown in the Financial Supervision Commission questionnaire.

**Row 2.5 Less: Pension scheme service charges** - this position is calculated as the total sum of fees and deductions for pension companies. They include deductions from social security contributions, investment fees, entry fees for SVPI and other not allocated fees from the Financial Supervision Commission questionnaire.

**Row 4 Reduction in pension entitlements due to payment of pension benefits** - this position is calculated as a sum of several entries in the Financial Supervision Commission questionnaire that deal with net asset value reduction. They include: paid pensions for all defined contribution scheme funds; amounts for one time or deferred payments to insured persons in UPF or PPF; amounts for one time or deferred payments to insured persons with pension rights in SVPI; withdrawn funds from SVPI by insured persons; amounts for payment to heirs of insured persons which have not received hereditary pension from the pension funds; amounts for payment to heirs of retirees which have not received hereditary pension from the pension funds; transferred amounts from PPF to the National Social Security Institute.

**Row 6 Transfers of pension entitlements between schemes** data is taken from the Financial Supervision Commission annual questionnaire on pension entitlements for defined contributions schemes in Bulgaria by type of pension fund. Since 15.08.2015 an amendment of the Social Security Codex is in power allowing people under certain conditions to transfer their mandatory Second Pillar pension (UPF / PPF) into the social security pension fund for an increase in their future social security pension. The sum of those transfers is present in the FSC questionnaire for 2015 as a new position. The sum of all transfers from Second to First Pillar is recorded in row **6** of **column 1** with a negative sign as it is an outbound transfer resulting in a decrease of pension liabilities. The same sum but with a positive sign is recorded in row **6** of **column 2**, as will be described below in the detailed elaboration of row **2**.

**Row 9 Changes in entitlements due to other changes in volume** - this position is calculated as the sum of transferred interest from NRA to UPF and PPF, transferred amounts from pension company reserves to cover the minimal guaranteed return of UPF and PPF and other increase in net assets, minus the transferred amounts from PPF to UPF, minus the transferred amounts to pension reserve of UPF and SVPI, minus other decreases in net assets, minus the total sum of minimal return guarantees in UPF and PPF. All data is taken from the Financial Supervision Commission questionnaire.

### 2. Elaboration of data for column 2 “Social security pension schemes”

The main source of information for the filling in of **column 2 “Social security pension schemes”** is the National Social Security Institute which provides primary information for insured persons and pensioners, which is necessary for the evaluation of the pension entitlements of current and future retirees.

In order to fill in rows **1** and **10 Pension entitlements, incl. contingent pension entitlements** of column **2 "Social security pension schemes"** of Table 29 a statistical actuarial model was created to estimate the pension entitlements of the social security pension scheme in Bulgaria on annual basis. It was elaborated by a statistical mathematician from the BNSI and follows closely the steps and recommendations of the "Technical Compilation Guide for Pension Data in National Accounts" of Eurostat and European Central Bank.

Row **2.1 Employer actual social contributions** and row **2.3 Household actual social contributions** data is taken from social contribution receipts in the "Pensions" fund by years provided by the NSSI.

Row **4 Reduction in pension entitlements due to payment of pension benefits** data is taken from the expenditure on pensions paid by the public social security also provided by the NSSI.

Row **2.4 Household social contribution supplements** is calculated in accordance with the "Technical Compilation Guide for Pension Data in National Accounts" of Eurostat and European Central Bank as equivalent to the unwinding of the discount rate, meaning that its value is equal to the discount rate times the pension entitlements at the beginning of the accounting period.

Row **2.5 Less: Pension scheme service charges** - BNSI has chosen a zero value approach for Bulgaria for this position which is acceptable in European practice.

Row **3 Other (actuarial) change of pension entitlements in social security pension schemes** is calculated as a residual value in accordance with the requirements of the "Technical Compilation Guide for Pension Data in National Accounts" of Eurostat and European Central Bank.

Row **6 Transfers of pension entitlements between schemes** data is taken from the Financial Supervision Commission annual questionnaire on pension entitlements for defined contributions schemes in Bulgaria by type of pension fund. It is the same value as in row **6** in column **1**, but with an opposite sign. Since the transfers are from Second to First Pillar, the value here is positive as it represents an increase in pension entitlements. The reasons and legal basis for the transfers are described in detail in the respective row **6** section of column **1** elaboration description above.

### 3. Data sources

The **National Social Security Institute (NSSI)** is the public institution that manages the state social security scheme in Bulgaria. NSSI administrates the compulsory social security for sickness, maternity, unemployment, accident at work and professional diseases, disability, old age and death. It is the competent institution of Bulgaria in coordination with the social security for EU and the implementation of bilateral agreements in the fields of sickness and maternity benefits, death grants, unemployment benefits and pensions for disability, old age and survivors.

The **Financial Supervision Commission (FSC)** is a specialized government body for regulation and control over different segments of the financial system - capital market, insurance market, health insurance market and pension insurance market. The primary mission of the institution is to assist through legal, administrative and informational means for the maintenance of stability and transparency on the non-banking financial sector, and to ensure the protection of the consumers (investors and insured persons) of financial services and products.

The **Ministry of Finance (MF)** of Bulgaria provides the **Consolidated fiscal program** data from which is used to calculate the split between employer and employee (household) actual social contributions for civil servants.