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

Czech Republic

January 2018

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9. Links to (national) publications providing further information on the pension schemes.....Chyba! Záložka není definována.
1. Table 29 column A: Defined contribution schemes (funded, non-general government)

<table>
<thead>
<tr>
<th>a. Coverage of the scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined contribution scheme consists of two parts:</td>
</tr>
<tr>
<td>1) First part is run by pension companies, which offer exclusively DC plans. The pension companies are joint stock companies, incorporated in the Czech Republic under the provisions of the Commercial Code. The purpose of pension companies is limited to the provision of supplementary pension insurance. Pension companies must be licensed by the Ministry of Finance, in agreement with the Ministry of Labour and Social Affairs and the Securities Commission. The minimum age at which payments can be received from a pension fund is 60, provided a minimum number of contributory years, which is regulated by each pension fund. If money is withdrawn from the account before this age, the state matching contributions have to be repaid and there is additional taxation. The pension fund invests according to one of offered investment strategies, chosen by the participant (with exception of transform fund, which guarantee return of amount of contributions, investment strategy is reserved for the pension fund with regulatory restriction; contributors could enter only in the last year into it). Participants are entitled to pension payment like annuity or lump sum (this option is used by approximately 65% of participants) according to pension plan, dependent on period of contributions and amount of contributions. The number of participants in the pension scheme is approximately 4.5 million (60 percent of population). In total, they have saved about 400 billion CZK. Person has freedom to joint it. Once a participant enters the system, then receives support from the state. The state matches employees’ contributions depending on their level of contributions, rules are given by law and we can say that for state it is mandatory. Employers can deduct their contributions from their tax base up to 3% of an employees’ assessment base. Employer contributions of up to 5% of their wages are exempt from income tax for the employee. Support from employer is not automatically, depends on his own decision and is considered as benefit obtained by employee.</td>
</tr>
<tr>
<td>2) From 2013 to 2015, there was an additional system, the so-called second pillar of the pension system. This pension system had elements of defined contribution scheme. The second pillar has been funded by diverting 3% of the 28% first pillar social contributions along with 2% from gross wages. 28% of 1st pillar pension contributions is paid 21.5% by employers, 6.5% by employees. According to legislation only part paid by employees (this 3% as part of 6.5% paid by employees) was sent to 2nd pillar. The number of participants reached only 85 thousand with a total saved amount of about 3.2 billion. These participants’ funds were transferred to the third pension pillar. Each pension company offered savings in four types of funds by law. It was possible to change the chosen investment strategy. Pension liabilities of this pension scheme reached a very small amount (0.02% of the total amount of pension liabilities. The second pillar was closed in 2015. It was not automatically merged with column A, during 2016 pension companies had to ask participant what to do with their money. Partly were shifted to third pillar or paid back, but part which was taken from the first pillar had to be taken back to it.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Institutional set-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data sources/ suppliers</td>
</tr>
<tr>
<td>Which institution is running/managing the calculations?</td>
</tr>
</tbody>
</table>

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

This pension scheme is not available in the Czech Republic.

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

This pension scheme is not available in the Czech Republic.

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

This pension scheme is not available in the Czech Republic.

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

This pension scheme is not available in the Czech Republic.

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

This pension scheme is not available in the Czech Republic.

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 first pillar includes the mandatory basic pension insurance, defined by benefits (DB) and funded on a running basis (pay-as-you-go system). The system is universal and involves all economically active individuals. In this system pension schemes managed by the general government, benefits payable in the current period are financed by the social contributions receivable from current employees in the same period. These social contributions are deducted from wages. In the Czech Republic, there are almost 3.6 million pensions paid to the beneficiaries. Most pension payments are realized by the Czech Social Security Administration (98%). The remaining part of pensions is provided by the Ministry of Justice, the Ministry of Interior and the Ministry of Labour and Social Affairs. If we focus on the different types of pensions, the largest share of pensions is paid in form of old-age pensions (67%). Other types of pensions are survivor pensions (22%) and disability pensions (11%).

   There are two basic conditions for receiving a retirement pension. The first is to reach the statutory retirement age and the second condition is to obtain the necessary insurance period.

   1) Retirement age: In 2015, the standard retirement age was 63 years for men and 61 years six months for woman. The standard retirement age was gradually increasing by two months per birth cohort without any upper limit. The pension age for women was increasing by four months and from 2019 by six months in order to be unified with that of men.
In 2015, the required period of insurance was 31 years, each calendar year extended by one year. An employee contributes 6.5% of his gross wage to pension insurance, another 21.5% of gross wages is paid by his employer. These contributions are used to pay the all existing pensions (disability pensions, survivor pensions, old-age pensions).

### b. Institutional set-up

**Data sources/suppliers**
- Czech Social Security Administration
- Department of Justice
- Ministry of Interior
- Ministry of Labour and Social Affairs

**Which institution is running/managing the calculations?**
- Czech Statistical Office

### c. Major formulas: Benefit formula; Indexation of benefits

#### Benefit formula
The earnings-related pension gives 1.5% of earnings for each service year. The earnings measure currently averages across all years starting from 1986, but it will gradually reach lifetime average. Earlier years earnings are indexed by the growth of economy-wide average earnings.

#### Indexation of benefits
From 2018, the percentage of each pension awarded before to 1 January 2018 will increase by 3.5% of the percentage accrued before the increase.

### d. Type and structure of the calculation model

The Czech model of pension liabilities is inspired by the Freiburg model. The calculation of liabilities is based on several steps:

1) Population projection
2) Projecting the pension of existing retirees
   a) Generating age-specific pension
   b) Rescaling the pension benefits of existing retirees
   c) Projecting the pension benefits of existing retirees
3) Projecting the pensions of future new retirees
   a) Estimation of pension benefits for new retirees in the base year
   b) Estimation of pension benefits for new retirees in a future year
   c) Added value of the pension benefit for a future new retiree
   d) Estimating the cumulated benefits of future new retirees
4) Considering the proportion of full pensions accrued-to-date
5) Aggregating and discounting pension benefits

### 2. Assumptions and methodologies applied

#### a. Discount rate
For the Table 2900 (base scenario) we applied a discount rate of 5% in nominal terms and an inflation rate of 2%.

<table>
<thead>
<tr>
<th>Table</th>
<th>Discount Rate</th>
<th>Inflation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2901</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>2902</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

#### b. Wage growth
inflation (2%) and one third of average wage growth (calculated on average of five years) are taken into account in the growth of pensions.

#### c. Valuation method: ABO/PBO

**PBO**

#### 3. Data used to run the model
### a. Mortality tables

The probability of death in Year X is taken into account in the demographic projection of population by age units.

### b. Entitlement statistics; other relevant statistics

*Population projection for the Czech Republic to the year 2100; Main macroeconomic indicators published by CZSO*

### 4. Reforms incorporated in the model

No reforms

### 5. Specific assumptions

#### a. How are careers modelled?

Estimating by applying homogenous contribution careers

#### b. How are survivor pensions calculated?

Survivor pensions are calculated on the basis of actual pension payments. There are many conditions for entitlement to a survivor’s pension, and in most cases paid only one year after the death of a spouse. The main condition for a permanent widow’s pension is to reach at least a early pension. For these reasons, pension liabilities related to survivors' pensions are calculated as follows. One-year survivors' pensions are taken into account for up to 50 years of age, and over the age of 50 years a permanent survivor's pension (considering the Lambda factor for future retirees)

#### c. How is the retirement age modelled over time?

Retirement age is not considered in our model. Calculations are based on actual data on paid pensions. We expect people to retire (old age, widow, disability, orphan) by age according to the retirement benefits (according to the base year). The highest value of pension liabilities corresponds to the official retirement age without being included in the model.

#### d. Other specific features of the model

We take into account the population projection according to the CZSO, which includes migration and death rates. This projection may take into account the numbers of individuals of the generations up to their 100 years of age, unlike the Eurostat projection that is calculated by 2080.

### 6. Any other comments
# Table 29 column K: Entitlements of non-resident households

## 1. General description and the calculation model

### a. Coverage of the scheme

Non-resident liabilities could be analyzed only in the first pension pillar. There are no data sources about other pension schemes.

### b. Institutional set-up

<table>
<thead>
<tr>
<th>Data sources/methods</th>
<th>Czech social security administration (The number of benefits paid by other institutions is very low)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Which institution is running/managing the calculations?</strong></td>
<td>Czech Statistical Office</td>
</tr>
</tbody>
</table>

## 2. Any other comments

Pension liabilities of non-residents are calculated in a similar way as the calculation of pension liabilities of residents in the first pension pillar.