MINISTRY OF FINANCE
OF THE SLOVAK REPUBLIC

institute for financial policy

Pension projections of Slovakia
2020 update

February 2020

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OF THE SLOVAK REPUBLIC

Outline

- Overview of the Slovak pension system
- Changes in the pension system in 2019
- Projection results: 2020 Update
- Projection comparison: 2018 AR vs. 2020 Update

Overview of the Slovak pension system (Prior the 2019 reform)

Structure of the Slovak pension system

Universal pension system	Pension system of armed forces
I. pillar – PAYG, mandatory, defined-benefit (point system – earning related), **public**	**Armed forces scheme -** PAYG, mandatory, defined-benefit, **public**
II. pillar – fully-funded, quasi-manadatory (opt-in), defined-contribution, **private**	
Voluntary fully-funded "third pillar"	
III. pillar - voluntary, DC, **private**	
Social assistance	
Minimum pensions and Christmas bonus **0.pillar –** universal benefit, means-tested, **public**	

Universal system

- **Old-age benefit (Defined-benefit point system)**
  - *average personal pension point * contributory period * current pension point value*
  - Statutory retirement age **linked to life expectancy**

- **Disability benefit –** modified by work capacity loss

- **Survival benefit –** widow/ widower/ orphan

- **Financed through social insurance contributions**
  - Old-age insurance – 18 % of gross wage (split if one participates in the second pillar)
  - Reserve fund of solidarity – 4.75 % of gross wage
  - Disability insurance – 6 % of gross wage

Universal system – Additional schemes

- **Minimum pensions (MP)**
  - Minimum pension is a **top-up** to old age pension
  - **MP = subsistence minimum * coefficient (1.36 for 30 years of insurance)**
  - Increases with the number of qualified years
  - Almost 5 % of pensioners eligible in 2016, with total costs 20 mil. euros

- **Christmas bonus**
  - Amounts to 100 euro (circa 10% of the average gross monthly wage)
  - All pensioners with benefit below 60 % of average wage were eligible
  - The value decreases with higher pensions
  - **No legislated indexation**

Changes in the pension system in 2019

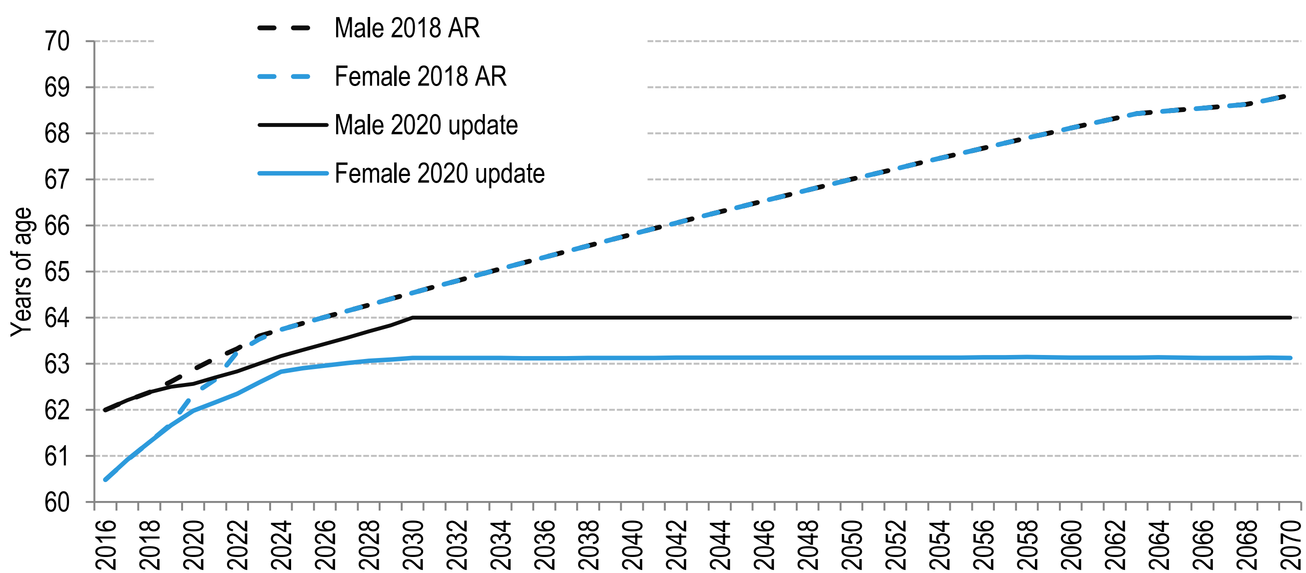
2019 Reform

- The reform consists of **4 individual changes:**

1. **Retirement age cap** – Retirement age can not exceed age 64 years
2. **Change in minimum pensions** – Increased value and indexation change
3. **Increase of Christmas bonus**
4. **Change in the first pillar benefits for the second pillar participants**

Retirement age cap

- Retirement age formerly **linked to life expectancy**
- Women's retirement age was supposed to converge to men's by 2024
- **Under new provisions, retirement age can not exceed 64 years**
  - Further decreased for mothers by 6 months for every child up to 3 children



Change in minimum pensions

- Minimum pension is a **top-up** to old age pension
- **Formerly based on subsistence level (SL)**
  - Indexed roughly to CPI
- The reform increased the basic level by **17 %** from **136 % of SL to 33 % of average wage (AW)**
- Basic level now **indexed to average wage**
- The bonus for additional years of paid insurance remains unchanged

Career length in years	Former legislation	New legislation
30	136 % SL	33 % AW
31	138 % SL	33 % AW + 2 % SL
32	140 % SL	33 % AW + 4 % SL
33	142 % SL	33 % AW + 6 % SL
34	144 % SL	33 % AW + 8 % SL
35	146 % SL	33 % AW + 10 % SL
36	148 % SL	33 % AW + 12 % SL
37	150 % SL	33 % AW + 14 % SL
38	152 % SL	33 % AW + 16 % SL
39	154 % SL	33 % AW + 18 % SL
40	157 % SL	33 % AW + 21 % SL
41	160 % SL	33 % AW + 24 % SL
42	163 % SL	33 % AW + 27 % SL
43	166 % SL	33 % AW + 30 % SL
44	169 % SL	33 % AW + 33 % SL
45*	172 % SL	33 % AW + 36 % SL

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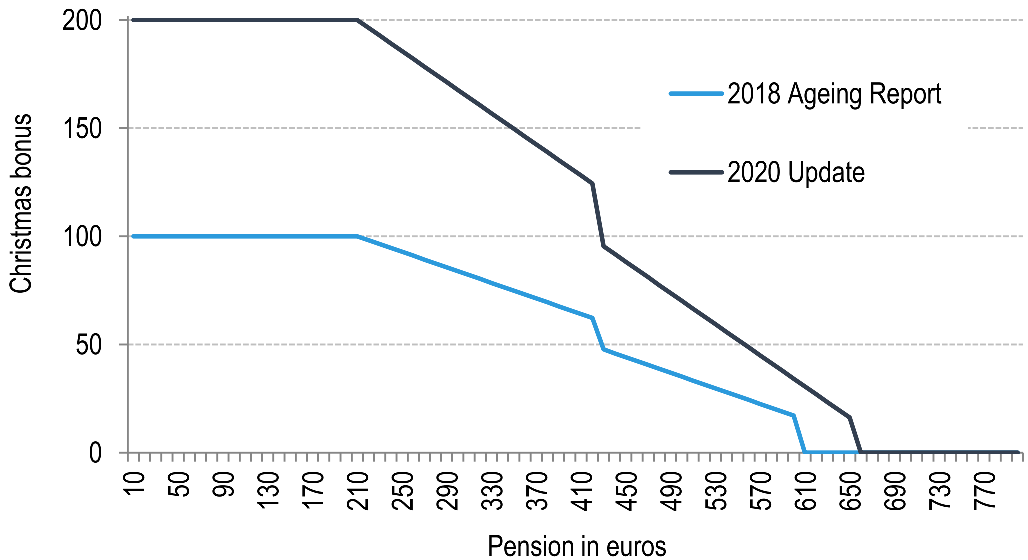
Increasing Christmas bonus

- Christmas bonus was **doubled** in 2019, maximum value now 200 euros
- Pensioners with benefit lower than 65 % of the average national wage entitled to Christmas bonus
    - Formerly 60 % of the average national wage
- **Remains formally unindexed**



Change in benefit for the second pillar participants

- First pillar benefit is reduced for second pillar participants

- **Social insurance also includes contributions to Reserve fund of solidarity (4.75 %)**
  - The fund is used to pay out first pillar pensions

$$\frac{Second\ pillar\ contribution\ rate_t}{Old\ age\ insurance\ rate_t}$$

$$\Downarrow$$

$$\frac{Second\ pillar\ contribution\ rate_t}{Old\ age\ insurance\ rate_t + Reserve\ fund\ of\ solidarity\ rate_t}$$

- In 2018, contribution rate to first pillar was 13.5 % and to second pillar 4.5 %

Former reduction: $\frac{4.5\ \%}{18\%} = 25\ \%$ **New reduction**: $\frac{4.5\ \%}{18\%+4.75\%} = 20\ \%$

Projection results: 2020 Update

Assumptions: legislation vs. projections

- Two expenditures are modeled with **different assumption than in legislation:**

1. **Minimum pensions** are fully indexed to wages both pre- and post- reform
   - Before reform fully indexed to CPI in legislation
   - After reform, basic level indexed to average wage
   - **The change in indexation of minimum pensions has no effect on expenditures, as indexation of wages assumed in both rounds**

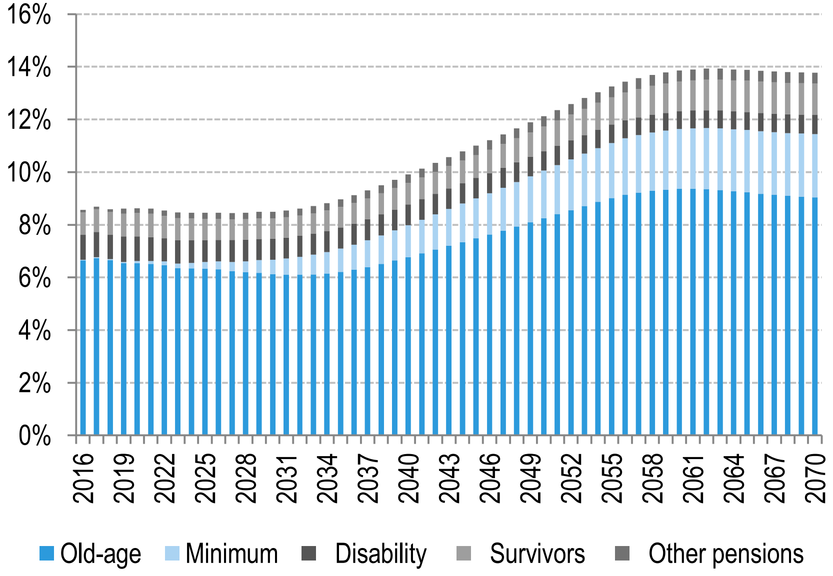
2. **Christmas bonus** is indexed to wages
   - No legislated indexation pre- or post- reform

Overview of results

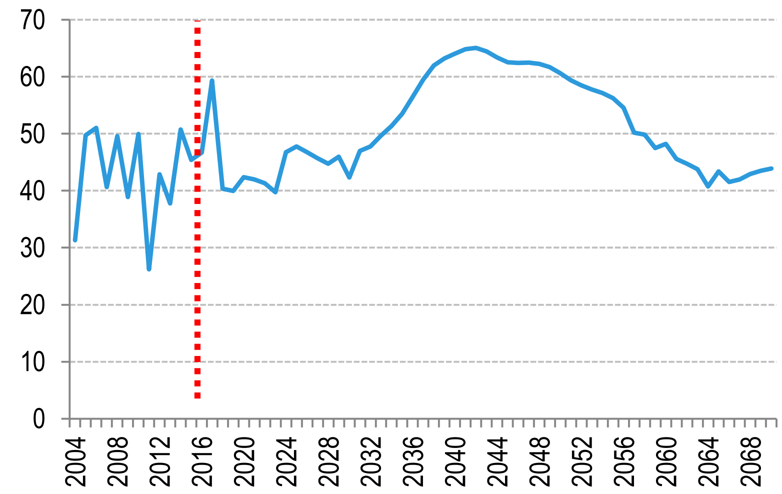
- Pension expenditure will increase by **5.2 p.p. of GDP between 2016 and 2070**
  - Increase from 8.6 % GDP to 13.8 % GDP

- **The increase will begin after 2030 due to**
  - Demographic changes
  - Slower GDP growth

Projected gross public pension expenditure (% GDP)



Number of new old-age pensions (thousands)

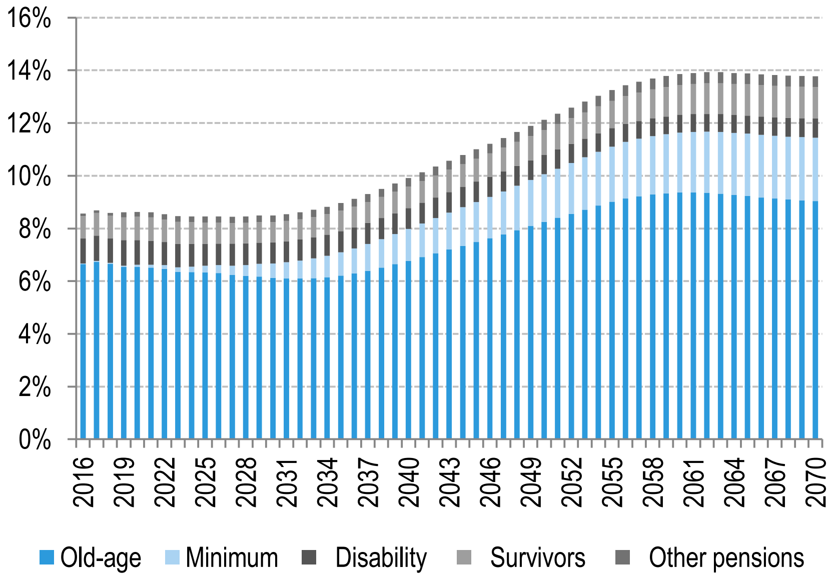


Main drivers of expenditure increase

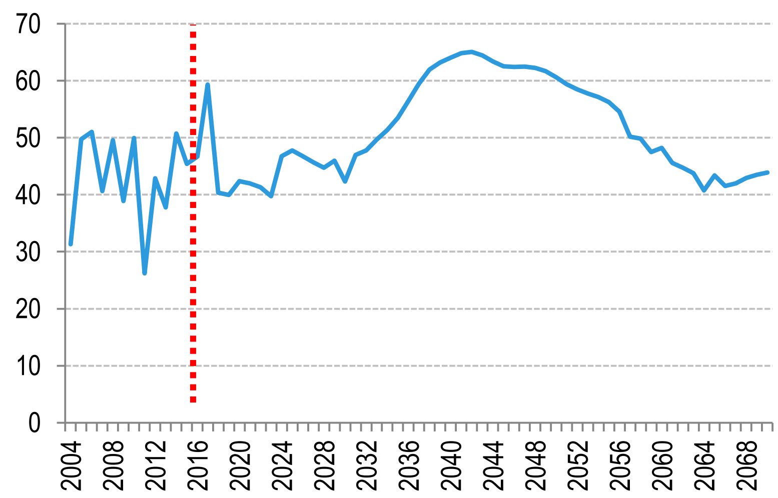
- **Old-age pension expenditures will increase** due to:
  - Strong cohorts retiring after 2035
  - Retirement age cap

- **Minimum pension expenditures will increase** as:
  - People spend more time in retirement – old-age pensions indexed to inflation
  - Minimum pensions indexed to wages, hence more people become eligible

Projected gross public pension expenditure (% GDP)

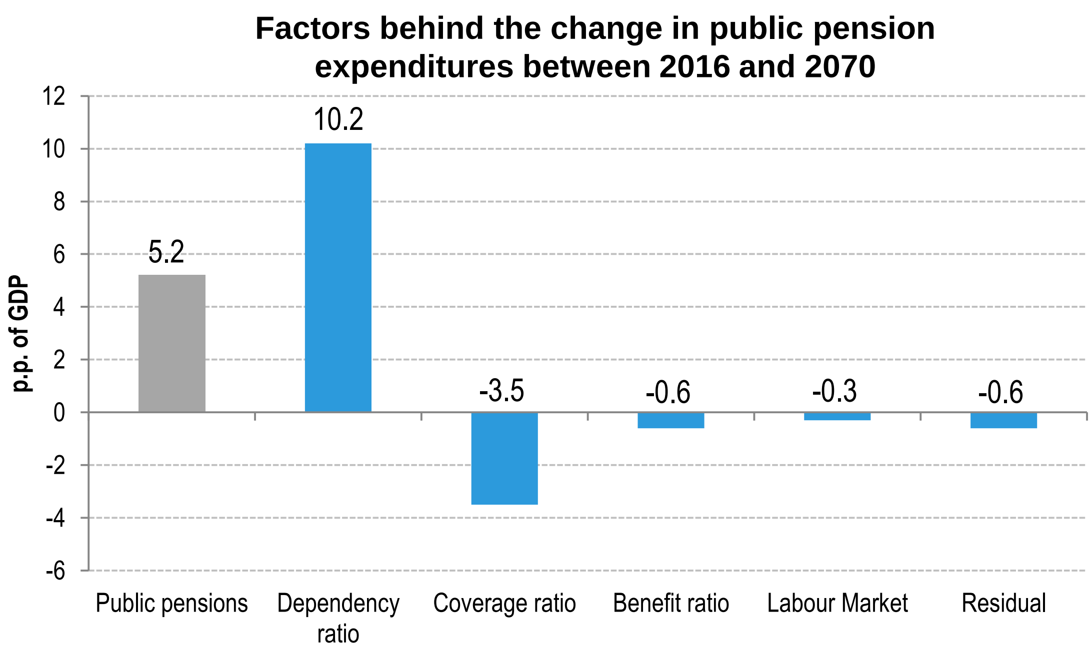


Number of new old-age pensions (thousands)



Overview of projection results

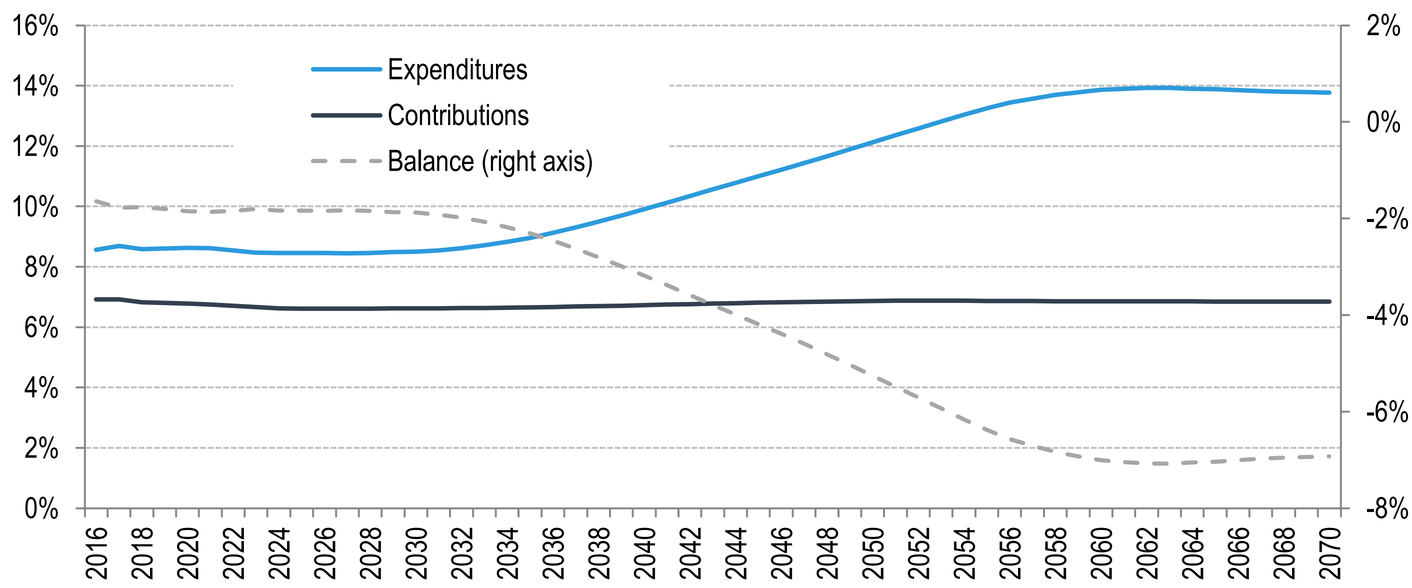
- **Dependency ratio** is the main driver of pension expenditures
- **Coverage ratio** has mitigating effect due to increasing retirement age and decreasing number of pensioners



Financing of the public pension system

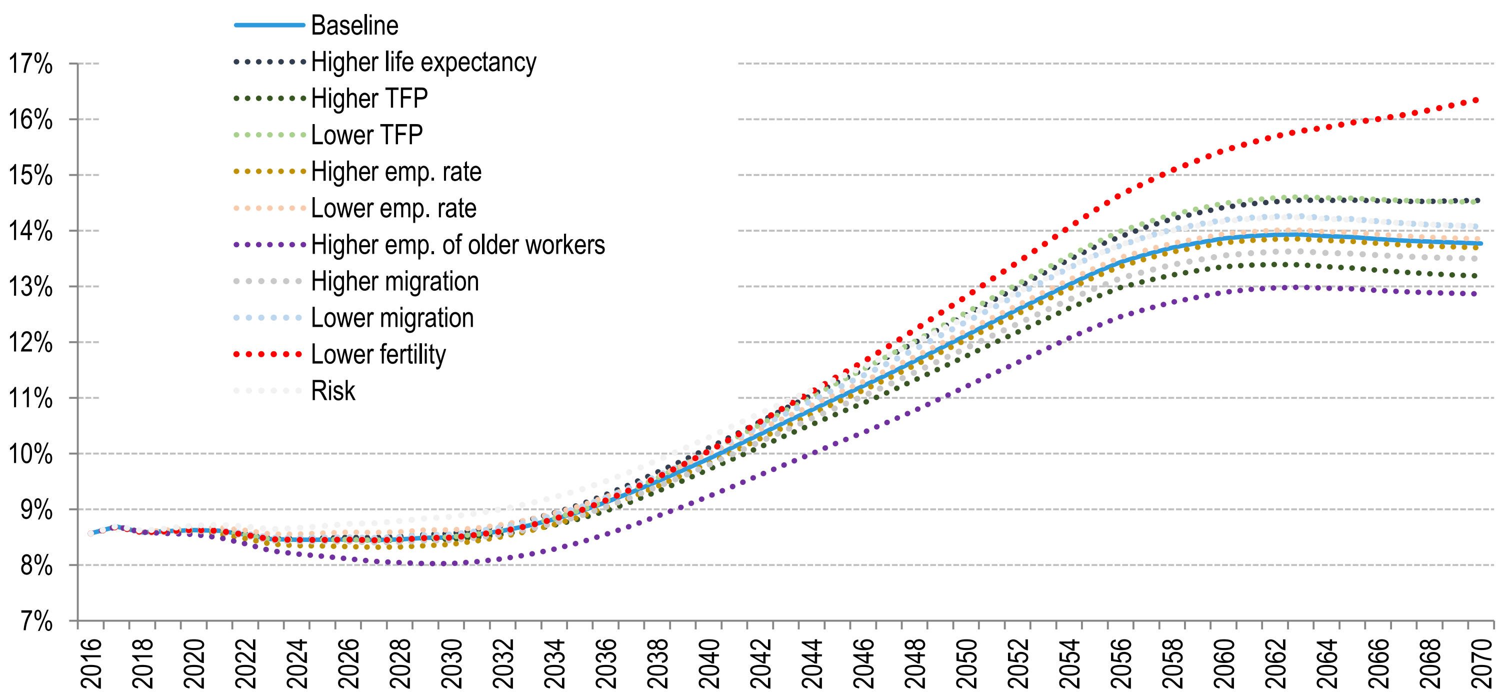
- **Revenue**
  - Remains stable around 7 % of GDP

- **Balance**
  - Deficit increases in line with increasing expenditure
  - Highest deficit 7.1 % of GDP in 2063



Sensitivity scenarios

- **Large effect (in 2070)**
  - Lower fertility (2.6 p.p.)
  - Higher participation of older workers (-0.9 p.p.)
  - Higher life expectancy (0.8 p.p.) – due to retirement age cap



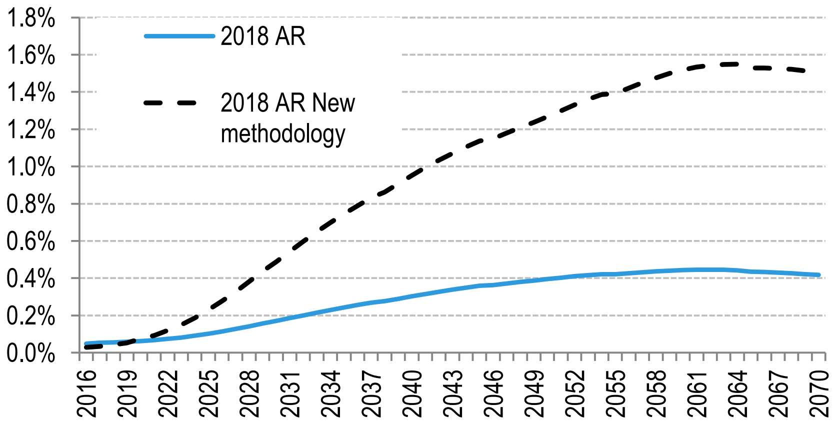
Projection comparison

Methodology change

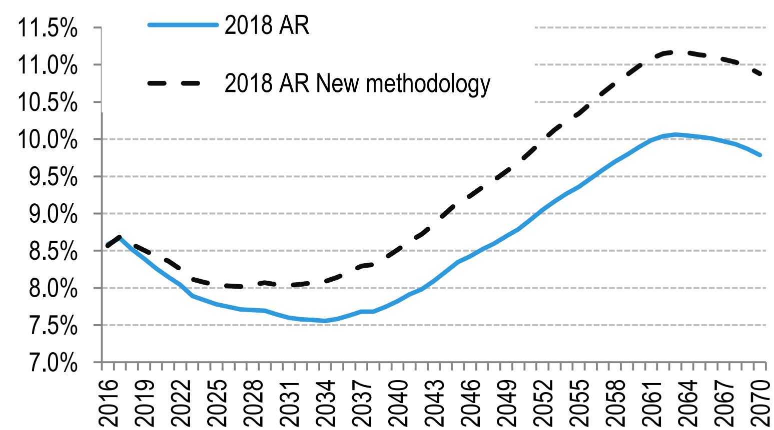
- **Minimum pension projection used in AR 2018 were significantly underestimated**
  - This was due to a simplified approach to modelling of this new policy.
  - Expenditures should increase to 1.5 % of GDP in 2070 instead of 0.4 % of GDP

- Pension expenditures **increase from 8.6 % to 10.9 % of GDP in AR 2018 New Methodology**
  - Under former methodology the increase was to 9.8 % of GDP

Change in minimum pension expenditure due to new methodology



Change in overall pension expenditure due to new methodology

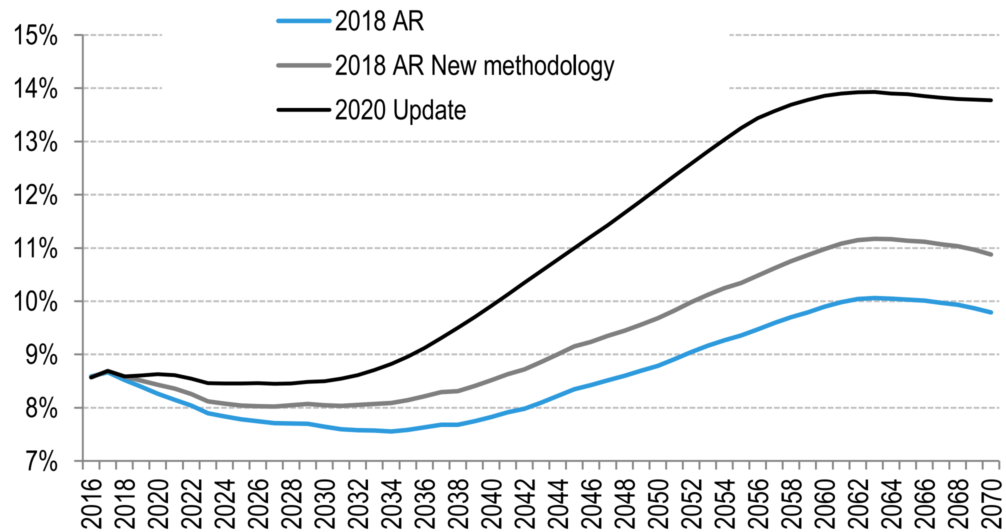


Projection comparison

- **Overall pension expenditure in 2070 increase by 4 p.p. of GDP**
  - 1.1 p.p. is due to **methodological corrections**
  - 2.9 p.p. is due to **adopted changes**

- The increase **against previous round** will start already in 2020
  - Significant increase between 2030 and 2060

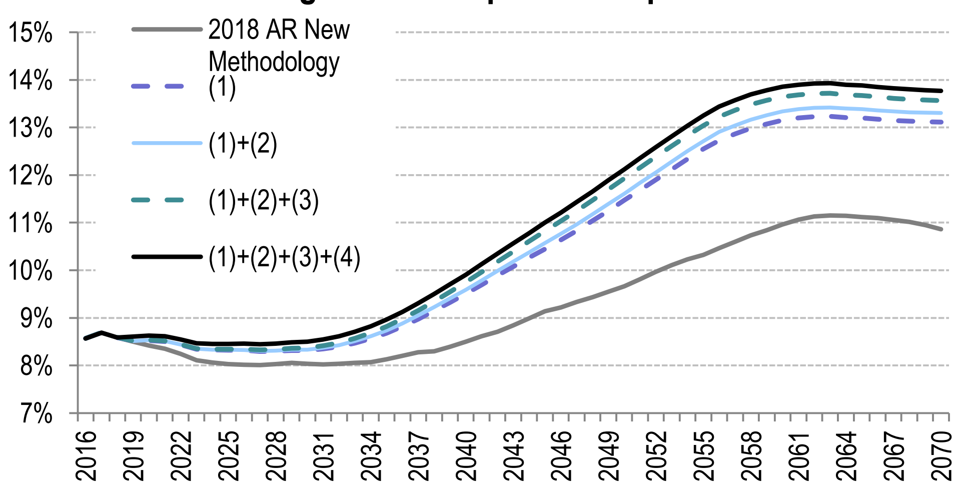
Change in overall pension expenditure due to 2019 reform



Projection comparison

- **Overall pension expenditure will increase by 2.9 p.p. of GDP due to adopted changes**
- The most significant change will be due to **retirement age cap (2.2 p.p.)**
- Change in **minimum pension** only has a **small effect (0.2 p.p.)**
  - Change in indexation not considered between projection rounds

Change in overall pension expenditure due to 2019 reform



(1) Retirement age cap

(2) Minimum pension change

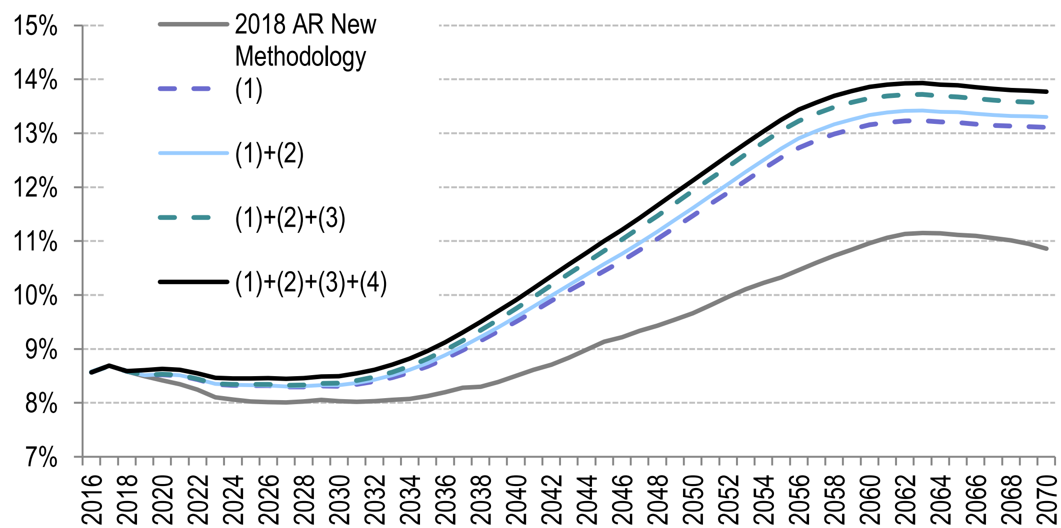
(3) Change in first pillar benefits for second pillar participants

(4) Christmas bonus change

Projection comparison

- **Overall pension expenditure will increase by 2.9 p.p. of GDP due to adopted changes**
- **Change in the first pillar benefits** for the second pillar participants will add an additional **0.3 p.p. of GDP in 2070**
- **Doubling the Christmas bonus will have an additional effect of 0.2 p.p. in 2070**

Change in overall pension expenditure due to 2019 reform



(1) Retirement age cap

(2) Minimum pension change

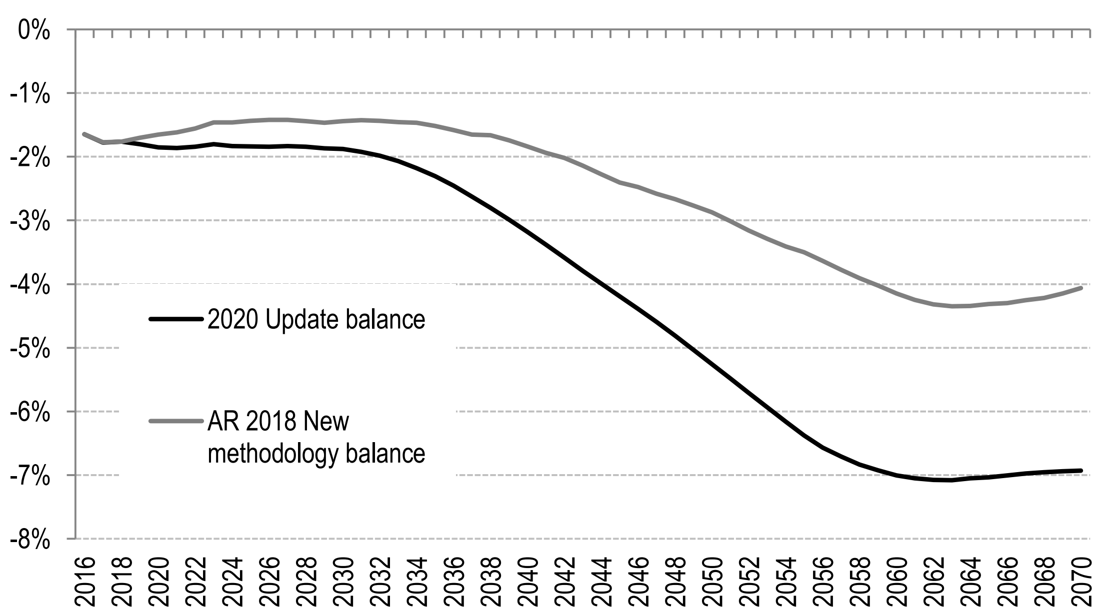
(3) Change in first pillar benefits for second pillar participants

(4) Christmas bonus change

Projection comparison

- The contributions remain relaitvely stable near 7 % of GDP in both projection rounds
- **The deficit increases by 3 p.p. in 2070 from 4 % of GDP to 7 % of GDP**

Change in pension system balance due to 2019 reform



Thank you for your attention