

# Preliminary findings. Work in progress

**IOPS** Secretariat

IOPS Technical Committee Meeting, 5 June 2018 Paris, France

www.iopsweb.org

## 1. Project Background

- Part of solvency and adequacy project accepted by the IOPS Members for the Programme of Work 2017-2018
- Pension projections important for managing members' expectations and influencing their behaviour. However, also an potential area for misinformation.
- The goal of the paper is to understand:
  - how projections are done in various IOPS jurisdictions (types, inputs and assumptions, revision of inputs and assumptions)
  - how projection results are communicated to users of pension calculators or pension scheme/fund members (particularly how to communicate uncertainty)
  - how projections are supervised (inputs and assumptions & communication)
  - common problems & good practices in surveyed IOPS jurisdictions
- The next step will be to develop IOPS Good Practices on supervision of pension benefits projections in private pensions

## 2. Method, scope, data

- A survey sent to the IOPS members in January 2018 + literature review
- Focus on DC and hybrid plans
  - 23 responses (Albania, Armenia, Australia, Bulgaria, Chile, Colombia, the Czech republic, Egypt, Hong Kong – China, Iceland, Ireland, Jamaica, Lithuania, FYR Macedonia, Mauritius, Mexico, the Netherlands, Poland, Romania, Serbia, Slovakia, Suriname, Turkey – Pension Monitoring Center)
  - CAPSA (desk research)
  - short info from India and the UK

## **3. Main features**

- Legislation
  - In 18 out of 23 surveyed jurisdictions the legislation framework directly addresses, at least partially, the issue of pension projections
    - In Romania making pension projections is currently forbidden to avoid misinformation
  - In 5 jurisdictions the law does not address pension projections, however in trust-based systems a supervisor has the legislative to monitor trustees' activities, including projections
- Who makes projections?
  - pension fund managing companies, administrators, trustees
  - (especially on-line simulators/calculators): pension supervisors and non-commercial or public institutions
  - other entities (financial advisers, insurance companies, actuaries)

## 3. Main features – cont.

- What projections are made?
  - pension calculators (14 jurisdictions), mostly by pension schemes/funds (9) and pension supervisors (4), non-commercial sites (4)
  - regular pension projections via pension benefits statements (9 jurisdictions)
  - various unspecified (Czech Republic and Suriname), on the difference between the benefits from PAYG vs fully funded systems (Colombia), internal projections by supervisor (Romania)
- Mostly deterministic, individualised and based on a single scenario. Show both future accumulated pension assets and pension benefit, expressed in today's terms.
  - stochastic approach used only in Chile (pension supervisor's simulator), by some funds in Lithuania and by Romanian pension supervisor (only for internal purposes). The Netherlands to introduce stochastic approach this year
  - scenario approach used in 4 jurisdictions (Albania, Colombia, Iceland, FY Macedonia); by returns, asset allocation or density of contributions

## 3. Main features – cont.

- Projections are free of charge almost in all responding jurisdictions
- Depending on the type of pension scheme (mandatory vs voluntary) and the situation of an individual (e.g. whether they enter, change or leave a scheme) projections are mandatory in 13 jurisdictions and voluntary in 10 jurisdictions
  - mandatory character mostly in case of pension benefit statements
- In most (18) jurisdictions projections show likely benefits only from a single pillar
  - combined projections available in some schemes Australia (+state pension), Chile (mandatory and voluntary funded pillars), Columbia (PAYG and funded pillars), some schemes and calculators in Hong Kong – China (+voluntary savings), some schemes in Ireland (+voluntary savings)
  - most comprehensive projections in the Netherlands: My Pension Overview (MPO) including first state pension and occupational pension
    - NB. In the Netherlands, projections made by occupational pension schemes show benefits only from this pillar 6

## 4. Inputs and assumptions used (Table 1)

- All variables and assumptions is determined by pension fund managing companies in Albania and Mauritius.
  - all variables and assumptions except for member-specific and schemespecific data in Australia is set by the Australian Securities & Investments Commission on the advice of the Australian Government Actuary.
  - For Chilean pension simulator the data comes from admin record and pension supervisor assumptions.
  - In the Netherlands, assumptions are determined by the Ministry of Social Affairs and Employment on the advice from the central bank.
  - In Slovakia all data for pension calculators is inputted by users.
  - In Poland all assumptions and data are determined by the Social Insurance Institution.
- Specific variables and exemplary values are presented in Table 1 (some other variables will be added in the second draft)

## 4. Inputs and assumptions used (Table 1)

- Current age: can be provided by admin records, calculator user/scheme member, pension supervisor, actuary
- Retirement age: can be the legal limit or the value determined up by a pension scheme

Variable	Source	Value/range
current age	<u>Admin records</u> (Egypt, Chile supervisor calculator, Iceland – from ID number, Ireland, Jamaica, Macedonia, Mexico in case of PBS, Poland – Social Insurance Institution, Suriname) <u>User/member</u> (Colombia, HK supervisor calculator, Lithuania, Mexico supervisors' calculator, Serbia supervisor's calculator, Slovakia calculators, Turkey Pension Monitoring Center) <u>Pension supervisor</u> (Egypt) <u>Actuary</u> (Egypt)	<ul> <li>16-65 (Lithuania),</li> <li>18-64 (Hong Kong China, MPFA supervisor calculator),</li> <li>20-65 (Ireland),</li> <li>22-60 (Egypt),</li> <li>26 (default, Turkey Pension Monitoring Center)</li> </ul>
retirement age	Admin records (Albania, Jamaica, Lithuania – usually legal age, Macedonia, Mauritius, the Netherlands, Suriname Legal age (Australia, Chile supervisor calculator, Colombia, Iceland plus current years of contributing, Poland, Turkey), User/member (Bulgaria, Mexico – supervisor calculators and pension benefit statements, Serbia – supervisor calculator, Slovakia calculators) Supervisor (Australia) Pension supervisor (Egypt)	<ul> <li>56 (Turkey plus min. 10 years of contributing),</li> <li>57/62 (Colombia plus min. 1300 weeks of contributing in DC scheme),</li> <li>60 (Egypt, Romania voluntary system),</li> <li>60/65 (Mauritius, Poland),</li> <li>61.2/64.2 (Bulgaria),</li> <li>62/65 (Lithuania),</li> <li>63/65 (Romania mandatory system, to increase gradually to 65),</li> <li>65 (Hong Kong - China supervisor calculator, default and fixed),</li> <li>65-67 (Mexico),</li> <li>67 (Australia),</li> <li>max. 70 (Serbia)</li> </ul>

- Gender: information can come from admin records or be inputted by a user/member
- Contribution rate: can be scheme-specific or determined by law, a user/member, actuary or other institution (e.g. Turkish Pension Monitoring Center)

Variable	Source	Value/range
gender	<u>Admin records</u> (Australia, Chile supervisor calculator, Iceland – from ID number, Ireland, Jamaica, Macedonia, Mauritius, Mexico in case of PBS, Poland – Social Insurance Institution, Suriname, Turkey – Pension Monitoring Center) <u>User/member</u> (Colombia, Mexico supervisor calculator, Slovakia calculators) Pension supervisor (Romania)	
contribution rate	Admin records (Albania, Australia, Egypt, Iceland, Ireland, Jamaica, Macedonia, Mauritius, the Netherlands, Serbia) Legal (Chile, Colombia, Lithuania, Mexico, Poland, Romania, Turkey – Pension Monitoring Center) User/member (Bulgaria, Lithuania – voluntary system) Actuary (Suriname) Pension Monitoring Center (Turkey)	<ul> <li>average value from previous 12 months (Australia),</li> <li>actual amount paid during the previous year (Turkey),</li> <li>o-30% (Mauritius employer and employee),</li> <li>3.75% (Romania mandatory with the actual individual contribution density),</li> <li>5% (Bulgaria, universal mandatory pension funds),</li> <li>5% or 10% (the Hong Kong China supervisor calculator),</li> <li>6.5% (Mexico private sector),</li> <li>7% or 12% (Bulgaria, professional mandatory pension funds),</li> <li>10% (Chile),</li> <li>11.3% (Mexico public sector),</li> <li>16% (Colombia),</li> <li>19.52% (Poland, unfunded pillar)</li> </ul>

- Pension plan costs: information can come from admin records or be inputted by a user/member
  - directly incorporated in 7 jurisdictions (below)
  - indirectly accounted in net investment returns (Hong Kong China, Ireland, Mauritius, usually in Lithuania)
  - legal ceilings present in many jurisdictions (see IOPS paper on fees)

Variable	Source	Value/range
pension plan costs	<u>Admin records</u> (Albania, Australia, Bulgaria, Macedonia, Mexico) <u>Actuary</u> (Suriname - with auditor and pension fund)	<ul> <li>average value from previous 12 months (Australia),</li> <li>actual fees charged (Mexico),</li> <li>up to 2.5% on contributions and up to 0.6%</li> <li>p.a. on assets (Romania, mandatory pension funds),</li> <li>up to 4% of contribution and up to 0.8% p.a. of assets (Bulgaria, universal mandatory and professional mandatory pension funds),</li> <li>up to 5% on contributions and up to 2.4% p.a. on assets (Romania, voluntary pension funds)</li> <li>up to 7% of contribution and up to 10% of returns (Bulgaria voluntary pension funds)</li> </ul>

Rates of return: legally stipulated (3), determined by a user/member (4), pension fund managing company or administrator (8), pension supervisor (2) or other (see below)

Variable	Source	Value/range
rates of	Legal (Colombia, the Netherlands, Turkey)	o.5% real (money market), o.8% (MPF
rates of return	Legal (Colombia, the Netherlands, Turkey) User/member (Hong Kong China MPFA calculator, Mexico CONSAR calculators, Serbia calculators, Slovakia calculators) Pension fund managing company/administrator (Albania, Bulgaria, Iceland, Lithuania, Macedonia, Mauritius, Mexico – regular projections, Suriname) Supervisor (Australia) Pension supervisor (Chile, Romania) Actuary (Egypt, Jamaica, Mauritius) Pension fund advisor (Ireland)	<ul> <li>o.5% real (money market), o.8% (MPF Conservative Fund) 1.1% (guaranteed fund), 2.6% (bond fund), 3.6% (mixed assets fund), 3.9% (equity fund) – reference values (Hong Kong, China)</li> <li>1-2% real (tbc) (Turkey Pension Monitoring Center)</li> <li>2-9% real (Lithuania)</li> <li>3% real, net of tax and investment fees (Australia)</li> <li>4% real before commission (Mexico regular projections)</li> <li>4% or 5% real before commission (Mexico CONSAR calculators)</li> <li>4% real (conservative fund), 6% (moderate fund), 8% (great risk fund) (Colombia)</li> <li>4-10% real (tbc) (Bulgaria)</li> <li>5-10% real (net of investment-related expenses, Mauritius)</li> <li>5.75% real (fund A), 4.89% (fund B), 4.15% (fund</li> </ul>
		C), 3.53% (fund D), 3.00% (fund E), 4.15% (fund C), 3.53% (fund D), 3.00% (fund E) (Chile) up to 6% real (legal ceiling in Ireland) up to 20% nominal (Serbia, calculators)
		CPI plus 3.5% (Iceland)
		the average nominal rate for last three years plus
		CPI (Macedonia)

- Depending on the jurisdictions, rates of return
  - vary with lifecycle portfolio (Chile, Colombia), Hong Kong (China) reference historical performance provided for a user of MPFA calculator
  - are linked to CPI level (Iceland plus 3.5%) or legal ceiling (Ireland 6%)
  - are net of scheme costs (Jamaica mandatory condition) or investment costs (Mauritius DC mandatory condition)
  - are gross of fees (Mexico)
  - are established on the basis of historical performance (Chile, MPFA calculator in Hong Kong, China; Lithuania, Macedonia)

## 5. The next draft will develop

- Other variables used in the surveyed jurisdictions (chapter 2.1.)
- Who and how often reviews inputs and assumptions for pension projections? (chapter 2.2.)
- Presentation of results of pension projections (chapter 3) with a focus on good practices and challenges
- Supervision of pension projections (chapter 4)
- Preliminary conclusions

## Thank you!

