

# TF Adequacy: Information on European social security pensions systems and measures of adequacy

MEETING OF THE SOCIAL SECURITY SUB-COMMITTEE  
VIENNA, AUSTRIA  
THURSDAY 10 OCTOBRE 2019



# Information on European social security pensions systems

An inventory:

What we do/don't have and what we do/don't know  
about our pension systems  
to properly assess (compare, etc., ...)  
its financial status  
for the most purposes

# Agenda

## Looking at present experience from data and modelling perspective

- Defining the purpose(s)

- Coverage

- Methods

## Data availability

- Data used by the Reports

## Data assessment

- Checking the adequacy of data

- What is/isn't in the databases

## Observations, opinions



# Information on European social security pensions systems

Present experience:

Summary of the data and models of the European Reports on pensions

# Reporting on Adequacy and Sustainability: Aims

## **Adequacy and Sustainability:**

- Cross country comparisons – good practices? – and
- Policy recommendations on
- Methodology should consider the complementing (or even competing) objectives of Adequacy and Sustainability

The two sides of the same coin – social and financial

# Indicators

## The Ageing Report

**Main indicators:** expenditure item/GDP

### Pension expenditure projection (% of GDP)

Public pensions, gross

Of which: Old-age and early pensions

Disability pensions

Survivors pensions

Earnings-related old age and early pensions

Public pensions, contributions

### Indicators

Benefit ratio % (Public pensions/Average wages)

Gross replacement rate at retirement %

Average accrual rates % (new pensions)

Average contributory period, years (new)

Economic old-age dependency ratio (15-64)

Support ratio (contributors/100 pensioners)

### Projections

2016 (base year ), 2020, 2030, ..., 2070 and

Change 2016-2070

## The Pension Adequacy Report

**Adequacy is defined** along three dimensions as the ability of pension income

- to protect pensioners against poverty, and
- to replace or help maintain the former earnings of men and women to a reasonable degree
- for the duration of their retirement

**Risk of poverty:** Poverty and severe material deprivation measured by „at-risk-of-poverty” (AROP) using total equalized household net disposable income

### Income replacement

- Prospective theoretical replacement rates (TRR 2056)  
Standard and Early/Deferred variants of the TRR cases
- Groups of particular attention
- Measures of redistribution

### By microsimulation

- [expenditures/GDP]
- AROP, the Gini index, income quintile share ratio (S80/S20), and average duration of retirement

# Reporting on Adequacy and Sustainability: Covered Benefits

## Benefits:

“The Reports” seek to cover the entire national packages of income from pension schemes

**Qualifying conditions:** Old-age pension entitlement is primarily based on some form of prior record of ‘performance’ establishing the right to claim. Pension entitlement can be based on

- years of contributions
- paid or credited, or
- years of residency

## Elements of **minimum pension benefits**

- included in the basic scheme, or
- replace or complement it, and then usually non-contributory, income or means tested

Entitlements on derived rights: allowances for **spouses and a survivor’s pensions**

PAR doesn’t cover **disability pensions** as not “old-age”,

But discuss **supplementary (occupational and personal) pensions**

- Note: Disability benefit might be financed from different funds but might be replaced by old age pension @NRA



# Reporting on Adequacy and Sustainability: Covered schemes

Public schemes and other public pensions: **statutory schemes** and general government sector administered schemes

Statutory: established by legislation

- universal for all citizens,
- mandatory for all employed people with a standard employment contract,\*
- limited to certain occupational groups (e.g. public-sector employees, farmers, workers in arduous or hazardous jobs, etc.)
- By funding:
  - pay-as-you-go or
  - pre-funded
- By funding\*\* source based on
  - contributions (earnings-related or contributory) or
  - taxes or other sources (non- earnings-related or non-contributory)
- By the risks\*\* covered
  - old-age and early pension,
  - disability,
  - survivor,
  - minimum/basic\*\*\* or
  - other schemes such as special pensions

Supplementary: Occupational and personal pensions.



# Methodology used for the Reports

## **AR: Macroeconomic and demographic assumptions establish age-related expenditure projections**

- Projections of population and migration, labour force (participation, employment and unemployment rates), GDP, labour productivity and the real interest rate development

## **Pension projections**

- Prepared by the Member States
- Open group basis

## **Projections for health care, long-term care, education and unemployment: DG ECFIN and EPC AWG**

## **PAR: Pensions as income replacement and labour market issues**

Also uses the EPC AWG and EC Services calculations

OECD modelling: Analysis of Pension Entitlements Across Countries (APEC)

## **For household and income distribution indicators**

Microsimulation: Belgium, Sweden and Italy

## ***Dynamic microsimulation models***

- based on a representative sample
- in which the characteristics of the individuals and households the fundamental demographic and labour market trends are simulated [dynamically]

The link between macro and micro models

# Data/information used for the calculations of the Reports

**MS calculations** use MS data and information – in consultation with EUROSTAT

## **EU sources**

- EUROSTAT: Demographic and Economic assumptions and projections
- EU SILC: The European Union Statistics on Income and Living Conditions microdata on income, poverty, social exclusion and living conditions
- PENSREF database: detailed information on pension systems in the EU Member States

## **OECD**

=====

## ***Other EU***

- QUEST: The global macroeconomic model of the Directorate General for Economic and Financial Affairs (DG ECFIN)
- MISSOC Mutual Information System on Social Protection



# Information on European social security pensions systems

Looking at present data availability from data and modelling perspective



# SSP databases

## EU

EU PENSREF <https://webgate.ec.europa.eu/scopax/pensref/index.cfm#/presentation>

MISSOC – Mutual Information System on Social Protection <https://www.missoc.org/>  
[https://europa.eu/youreurope/business/human-resources/social-security-health/index\\_en.htm](https://europa.eu/youreurope/business/human-resources/social-security-health/index_en.htm)

## OECD

[https://data.oecd.org/society.htm#profile-Social protection](https://data.oecd.org/society.htm#profile-Social%20protection)

<http://www.oecd.org/els/public-pensions/indicators.htm>

<http://www.oecd.org/social/soc/recipients.htm>

<http://www.oecd.org/els/public-pensions/>

SSA, ISSA <https://www.ssa.gov/policy/docs/progdesc/ssptw/2018-2019/europe/index.html#fileList>

## ILO, ISSA

<https://www.issa.int/en/social-security-databases>

<http://www.ilo.org/sesame/IFPSES.SSDBMenu>

[http://www.ilo.org/sesame/SESHelp.socialsec\\_desc](http://www.ilo.org/sesame/SESHelp.socialsec_desc)

***The following slides highlight the main scheme information we as a TF Adequacy might be interested in***

***There are lot more information included in the databases***

# Checking the availability/adequacy of data

## PENSREF database - Directorate-General for Economic and Financial Affairs

### Old Age

#### ***Scheme rules***

Description of the scheme  
Pension type  
Coverage  
Earning related?  
Means tested?  
Mandatory?  
Closed to new entrants?

#### ***Qualifying conditions***

#### ***Contribution rates***

#### ***Benefits***

#### ***Taxation***

#### **Standard queries**

**Countries:** Austria ... United Kingdom

**Pension type:** Old-Age Disability Survivor  
Non-Contributory Minimum Individual  
Occupational

**Pension scheme:** DB DC DC with Guarantee  
Plan Flat Mixed NDC Other PS  
Undefined

**Coverage:** Private employees Self-Employed  
Rest of Citizens Civil servants

**Other criteria:** Earning related Means tested  
Mandatory

Same/Similar for

**Disability, Survivor, Non-contributory,  
Minimum, Individual data, Occupational,  
and Special Pensions**

# Checking the availability/adequacy of data

## MISSOC - Directorate-General for Employment, Social Affairs and Inclusion

### Mutual Information System on Social Protection

#### Comparative tables

- For all Countries
- Financing, healthcare, sickness, maternity/paternity, invalidity, old age, survivors, accidents at work and occupational diseases, family, unemployment, guaranteed minimum resources and long-term care.
- Tables divided into categories like legal basis, field of application, conditions and benefit amount

#### Self-employed

Questionnaire on social protection of the self-employed. descriptions include coverage and differences from regular employees. In case the schemes for the self-employed are similar to those for employees, the texts refer to the MISSOC Comparative tables.

#### Organisation

- Organisation chart and
- Brief description,
- Useful links, Internet addresses of the involved ministries, administrators and other important institutions



# Checking the availability/adequacy of data

## SSA, ISSA - Social Security Programs Throughout the World: Europe, 2018

### *Old-age pension schemes*

Type of program: Social insurance and social assistance system

Coverage

**Qualifying Conditions**

Old-age pension

Disability

Survivor pension

**Old-Age Benefits**

Old-age pension

Disability

Survivor pension

**Source of Funds**

Insured person

Self-employed person

Employer

Government

**Regulatory Framework**

**Administrative Organization**

**Also available for: *Sickness and Maternity, Work Injury, Unemployment, Family Allowances***



# Assessment

# Defining the coverage for a Pension Database

*„Financial analysis supporting comparison and individual assessment, sustainability and adequacy”*

Define all data modules for all schemes,

- But in a **layered approach** by benefits, and in consistent and comparable structure

The cornerstone (the model structure for other benefits): **Pension benefits**

- Basic pension (social assistance) and special allowances
- Old age (social insurance)

Qualifying conditions: age/service period/residence

**+ Survivor, Spouses, Orphans death benefits; links, and sub-schemes like old age**

- Social assistance
- Social insurance

Qualifying conditions: ancillary or own-right, age/service period/residence

**+ Disability, LTC benefits ; links and schemes like old age**

- Social assistance
- Social insurance

Qualifying conditions: ancillary or own-right, age/service period/residence



# What is/isn't in the databases

## Benefit and Scheme Categories – Country XX

### Benefit Category

- Pensions
- Survivors', Spouses', Orphans', Death/Funeral benefits
- Disability, LTC

=====

- Integration\*

### Scheme categories

- Social assistance
- Social insurance

# What is/isn't in the databases

Example: Country XX - Pension benefit

## Type of programs - List and structure of schemes

- **Target groups - Definitions of persons involved: Who belongs to which scheme**
- **Qualifying Conditions - Detailed rules and measures, parameters**
- **Benefit calculation - Calculation algorithms, formulas, parameters**
- **Source of Funds – contributions, taxes, etc.**

# What is/isn't in the databases

Example: Country XX - Pension benefit

## Type of programs - List and structure of schemes

- Basic pension (social assistance)
- Old age pension (social insurance)
  - Flat-rate
  - Earnings related
    - Standard social security
    - **Special schemes of**
      - **Early, deferred, partial pensions and Credit periods**
      - **Special groups (hazardous work, armed forces, civil servants, judiciary, farmers, and self employed)**
      - **Old, Closed/Frozen schemes**
- Mandatory occupational
- **Integration\* Cross-scheme relations of pensions benefits**

Target groups - Definitions of persons involved: Who belongs to which scheme

Qualifying Conditions - Detailed rules and measures

Benefit calculation - Calculation algorithms, formulas, parameters

=====

Source of Funds – contributions, taxes, etc.

# What is/isn't in the databases

Example: Country XX - Pension benefit

**Type of programs** - List and structure of schemes (see before)

**Target groups** - Definitions of persons involved: Who belongs to which scheme

**Qualifying Conditions** - Detailed rules and measures, with special interest in

- Retirement age
- Service period or
- Residence conditions

**Benefit calculation** - Calculation algorithms, formulas, parameters

- Benefit rules
- Min/Max provisions
- Indexation, benefit adjustment
- Payment schedule

=====

**Source of Funds** – contributions, taxes, etc. (see next)



# What is/isn't in the databases

Example: Country XX - Pension benefit

Type of programs - List and structure of schemes

Target groups - Definitions of persons involved: Who belongs to which scheme

Qualifying Conditions - Detailed rules and measures

Benefit calculation - Calculation algorithms, formulas, parameters

=====

## Source of Funds – contributions, taxes, etc.

- Covered wages, Min/Max provisions
- Credit periods
- Special groups

and

- Reserve funds
- ***As paid by***
  - Individual
  - Employer
  - Self-employed
  - Government
- ***By all scheme and special schemes***

# Observations

The good news:

Starting point: AWG Assumptions and methods work well

We have (almost) everything 😊

But:

- Cash flows
  - stronger link would be necessary between benefits and contributions;
  - even in case of Government contributions (tax)
- Special schemes could be better dealt with, elevated, and including e.g. closed schemes
- Minimum guarantees schemes and provisions, both flat-rate and earnings related could be more exposed
- All other schemes could be more details
- All benefits and schemes should be similarly detailed as pensions (of course taking into account the differences)
- Non-contributory social assistance and Contributory social insurance is a major divide

# Observations – Integration of pension schemes into pension system

Integration should be a concept more in the focus

- EU pension systems are different, but some have similar integration features
- Examples:
  - Harmonisation of benefit levels
  - Mirroring benefit structures
  - Disability change into Old-age pension @NRA in most systems
  - Survivor benefits cover Disability beneficiaries' Spouses
  - etc.
- **ETS (European Tracking Services): could be tool for promoting integration**
  - *The primary aim is consumer protection: to provide a consolidated overview of individual pension rights and support managing their retirement benefit adequacy*
  - *It is an information provision system to European citizens on their pension insurance rights throughout Europe and throughout all schemes where they have accrued pension rights*
  - *Insured persons see all of their rights in different schemes in a well-arranged/layered system*
  - *It may lead to demand by the citizens towards more transparent and integrated – not only supplementary, but more complementing – pension schemes and pension pillars in Europe*

# Observations – Pension database supporting the methods of financial analysis

## Defining the purpose(s) of the database

- The objective is to serve a tool for  
Financial analysis supporting
  - comparison and individual assessment of pension schemes
  - by producing indicators of sustainability and adequacy for further analysis
  - from cash flows of different but interrelated benefit schemes
  - covering different social and demographic groups of people

## Distinction between the input data and the algorithm

- Input data: raw past data and information processed
- Primarily supporting aggregate cohort projections (without transition matrices)
- Dynamic models: future data may depend on future states
- But should it be derived from household data?
- More focus could be on changes of the stock: new entrants (where from), leavers (where to)
- Adequate transition matrices could be derived from scheme level administrative data





# Appendix

# Applicable Actuarial Standards: ISAP 2 terms

## Financial Analysis

Any formal actuarial analysis. What constitutes a formal actuarial analysis is a matter for the [actuary](#)'s judgment but might include work required by law and work requested by the principal to inform decisions.

A financial analysis might include but is not limited to:

- Determination of discounted point in time values,
- **Projection of cash flows and associated fund values**, and
- Determination of future contribution rate(s).

## Social Security Program

A program with all the following attributes regardless of how it is financed and administered:

- Coverage is of a broad segment, or all, of the population, often on a compulsory or automatic basis;
- Benefits are provided to, or on behalf of, individuals;
- The program, including benefits and financing method, is prescribed by [law](#);
- The program is not financed through private insurance;
- **Program benefits are principally payable or delivered upon**
  - **old age, retirement,**
  - **death and survivorship,**
  - **disability**

# Applicable Actuarial Standards

## ISAP 2 on appropriate actuarial practice of carrying out financial analyses of

### SSPs Consider all Relevant Features of the SSP and Law:

- Coverage; Nature of the SSP (DB/DC); Financing/Funding approach; Source of funding; Benefit provisions.
- **Collect/rely on relevant data:**
  - Demographic statistics; Economic experience; Demographic status and experience of the SSP; Number and experience of classes of contributors and beneficiaries of the SSP; Benefits of, or claims on, the SSP; Financial attributes of the SSP.
- **Assumptions and time horizon(s)**
- **Consistency with the Financing Method**
  - Projection model and Valuation methodology, Data and Assumptions
- **Results and findings:**
  - Projected demographic values at selected future points in time
  - Financial projections showing cash flows and balance sheet values for the recent past and for the future such as: Contributions; Other income; Benefits or claims; Administrative expenses; Actuarial deficit and funded ratio (for fully-funded pension schemes); Cost measures; Nature of assets and/or individual accounts;
  - A presentation designed to provide an indication of the financial sustainability of the SSP, if appropriate.

# Methodology and data requirements

Relevant Actuarial Guidelines: ISSA Guideline 4. Valuation methodology

## Principles

Valuation methodologies should be assessed according to their

- Sustainability and actuarial measures,
- Analysis of adequacy and affordability of benefits
- Consistency with the scheme's financing approach and funding policy
- Ability to assess whether the scheme's funding objectives
- The projection methodology should be flexible in order to be able to respond to potential changes in the system's design

## Mechanism

- Defined funding objectives and/or sustainability measures
- [T]he valuation methodology properly reflects all sources of financing
- The [...] appropriate length of the projection period: Trade-off between accurate and appropriate results and uncertainty of cash flow projections
- Open or closed group methodology: The open group methodology is considered to be most appropriate for PAYG
- Contingent liability schemes: the valuation methodology should be based on cohort-wide cash flow projections taking into account the evolution of inherent structures of the members and benefit provisions of the scheme



# Methodology and data requirements

Relevant Actuarial Guidelines: ISSA Guideline 5. Projection model

[The projection model] is capable of assessing the material provisions of the social security scheme, projecting its cash flows over the relevant projection period, and evaluating the chosen sustainability and adequacy measures

## Principles

- [T]he actuary should determine whether a deterministic, stochastic or hybrid (...) projection model should be used to conduct the valuation of the social security scheme.
- It should be determined whether the model should be a macro factor-based model, a microsimulation model based on transition probabilities or a hybrid of these two.

## Mechanism

[The] actuary should assess the advantages and disadvantages of both [deterministic or stochastic] methodologies. [...] (e.g. in case it is necessary to measure distributional effects of benefits).

Model requirements include, but are not limited to the following:

- A sufficient number of transitional probabilities that are related to contingencies relevant to the scheme
- Specific requirements with respect to projections of all elements of the social security scheme revenues and expenditures;
- The ability of the model to perform projections that consider new entrants to the social security system (open group projections);
- The ability of the model to perform projections based on large groups such as the country's

# Database example – Old-age pension

| Benefit Category | Type of programs                   |      | Target groups                       |      | Qualifying Conditions                          |      | Benefit calculation                 |      | Source of Funds                     |      |
|------------------|------------------------------------|------|-------------------------------------|------|--|------|-------------------------------------|------|-------------------------------------|------|
|                  | Scheme Category                    | List | Scheme Category                     | List | Scheme Category                                | List | Scheme Category                     | List | Scheme Category                     | List |
| Pension          | Old age pension (social insurance) | ...  | Old age pension (social insurance)  | ...  | Old age pension (social insurance)             | ...  | Old age pension (social insurance)  | ...  | Old age pension (social insurance)  | ...  |
|                  |                                    |      | -Flat-rate pension                  | ...  | -Flat-rate pension                             | ...  | -Flat-rate pension                  | ...  | -Flat-rate pension                  | ...  |
|                  |                                    |      | -Earnings related                   | ...  | -Earnings related                              | ...  | -Earnings related                   | ...  | Earnings related                    | ...  |
|                  |                                    |      |                                     |      | -Retirement age<br>Service period<br>Residence | ...  | -Age/period rules                   |      |                                     | ...  |
|                  |                                    |      |                                     |      |  |      | -Benefit rules                      |      |                                     | ...  |
|                  |                                    |      |                                     |      |  |      | -Min/Max provisions                 |      |                                     | ...  |
|                  |                                    |      |                                     |      |  |      | -Payment schedule                   |      |                                     | ...  |
|                  |                                    |      |                                     |      |  |      | -Indexation, adjustment             |      |                                     | ...  |
|                  |                                    |      | -Special schemes<br>-Credit periods | ...  | -Special schemes<br>-Credit periods            | ...  | -Special schemes<br>-Credit periods | ...  | -Special schemes<br>-Credit periods | ...  |
|                  |                                    |      | -Special groups                     | ...  | -Special groups                                | ...  | -Special groups                     | ...  | -Special groups                     | ...  |
|                  |                                    |      |                                     |      |  | ...  |                                     |      | -Reserve funds                      |      |

# Database example – Old age pensions + all other benefits

|                        | Type of programs                   |      | Target groups                      |      | Qualifying Conditions              |      | Benefit calculation                |      | Source of Funds                    |      |
|------------------------|------------------------------------|------|------------------------------------|------|------------------------------------|------|------------------------------------|------|------------------------------------|------|
| Benefit Category       | Scheme Category                    | List | Scheme Category                    | List | Scheme Category                    | List | Scheme Category                    | List | Scheme Category                    | List |
| Pensions               | Basic pension (social assistance)  | ...  | Basic pension (social assistance)  | ...  | Basic pension (social assistance)  | ...  | Basic pension (social assistance)  | ...  | Basic pension (social assistance)  | ...  |
|                        | Old age pension (social insurance) | ...  | Old age pension (social insurance) | ...  | Old age pension (social insurance) | ...  | Old age pension (social insurance) | ...  | Old age pension (social insurance) | ...  |
|                        | Mandatory occupational             | ...  | Mandatory occupational             | ...  | Mandatory occupational             | ...  | Mandatory occupational             | ...  | Mandatory occupational             | ...  |
| Survivors'             | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  |
|                        | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  |
| Disability             | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  | Social assistance                  | ...  |
|                        | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  | Social insurance                   | ...  |
| Cross-scheme relations | Integration                        | ...  | Integration                        | ...  | Integration                        | ...  | Integration                        | ...  | Integration                        | ...  |
| Past Reforms           | Old, Closed/Frozen                 | ...  | Old, Closed/Frozen                 | ...  | Old, Closed/Frozen                 | ...  | Old, Closed/Frozen                 | ...  | Old, Closed/Frozen                 | ...  |

# What would be an optimal data basis – Detailed table for Old age pensions

|                  | Type of programs           |      | Target groups                      |      | Qualifying Conditions                       |      | Benefit calculation               |      | Source of Funds                     |      |
|------------------|----------------------------|------|------------------------------------|------|---|------|-----------------------------------|------|-------------------------------------|------|
| Benefit Category | Scheme Category            | List | Scheme Category                    | List | Scheme Category                             | List | Scheme Category                   | List | Scheme Category                     | List |
| Pension          | Basic (social assistance)  | ...  | Basic (social assistance)          | ...  | Basic (social assistance)                   | ...  | Basic (social assistance)         | ...  | Basic (social assistance)           | ...  |
| Pension          | Old age (social insurance) | ...  | Old age (social insurance)         | ...  | Old age (social insurance)                  | ...  | Old age (social insurance)        | ...  | Old age (social insurance)          | ...  |
|                  |                            |      | Flat-rate pension                  | ...  | Flat-rate pension                           | ...  | Flat-rate pension                 | ...  | Flat-rate pension                   | ...  |
|                  |                            |      | Earnings related                   | ...  | Earnings related                            | ...  | Earnings related                  | ...  | Earnings related                    | ...  |
|                  |                            |      |                                    |      | Retirement age, Service period<br>Residence | ...  | Age/period rules                  | ...  |                                     |      |
|                  |                            |      |                                    |      |   |      | Benefit rules                     | ...  |                                     |      |
|                  |                            |      |                                    |      |   |      | Min/Max provisions                | ...  | Covered wages<br>Min/Max provisions | ...  |
|                  |                            |      |                                    |      |   |      | Payment schedule                  | ...  |                                     |      |
|                  |                            |      |                                    |      |   |      | Indexation, adjustment            | ...  |                                     |      |
|                  |                            |      | Special schemes,<br>Credit periods | ...  | Special schemes<br>Credit periods           | ...  | Special schemes<br>Credit periods | ...  | Special schemes<br>Credit periods   | ...  |
|                  |                            |      | Special groups                     | ...  | Special groups                              | ...  | Special groups                    | ...  | Special groups                      | ...  |
|                  |                            |      |                                    |      |   |      |                                   |      | Reserve funds                       | ...  |
| Pension          | Mandatory occupational     | ...  | Mandatory occupational             | ...  | Mandatory occupational                      | ...  | Mandatory occupational            | ...  | Mandatory occupational              | ...  |
| Survivors'       | Social assistance          | ...  | Social assistance                  | ...  | Social assistance                           | ...  | Social assistance                 | ...  | Social assistance                   | ...  |
|                  | Social insurance           | ...  | Social insurance                   | ...  | Social insurance                            | ...  | Social insurance                  | ...  | Social insurance                    | ...  |
| Disability       | Social assistance          | ...  | Social assistance                  | ...  | Social assistance                           | ...  | Social assistance                 | ...  | Social assistance                   | ...  |
|                  | Social insurance           | ...  | Social insurance                   | ...  | Social insurance                            | ...  | Social insurance                  | ...  | Social insurance                    | ...  |
| Integration      | Integration                | ...  | Integration                        | ...  | Integration                                 | ...  | Integration                       | ...  | Integration                         | ...  |
| Past reforms     | Old, Closed/Frozen         | ...  | Old, Closed/Frozen                 | ...  | Old, Closed/Frozen                          | ...  | Old, Closed/Frozen                | ...  | Old, Closed/Frozen                  | ...  |