Social protection data: OLD AGE POPULATION

Reliable statistics to improve pensions policy-making

(old-age, disability, and survivors care, and benefits)

The need for reliable and up-to-date data

Poverty reduction and shared prosperity need good pensions for all generations

- ❑ Need for timely information about increasingly diverse retirement-income provision

- ❑ Move away from narrow focus on financial sustainability

- ❑ Greater emphasis on a 'results–based' policy-making

- ❑ Impact of policy changes needs to be identified, measured and assessed

Addressing workshop's objectives:

1. How to assess social protection extension and basic income security for persons in old age (scope, statistical definition, comparability at the global level).

2. What data, statistics and (possibly) indicators are currently available?

3. Who collects what? Who could possibly be considered as 'responsible' organization?

4. What are the gaps in current data collection and indicators production and what could be developed or improved (short and medium term perspective depending of priorities)? What would be the related technical feasibility of data collection and production of such indicators?

1a. HOW TO ASSESS SOCIAL PROTECTION COVERAGE EXPANSION

➢ Data limitations, misconceptions, and selection criteria for measuring and assessing coverage

➢ Various difficulties in providing comparable international statistics

➢ Availability and quality of data:

- Lack of capacity and resources on the national level
- Lack of collection and aggregation mechanisms at the national level
- Missing or wrong information of individual records
- Lack of information on the people that are not covered
- Corruption, evasion, and abuse of the systems

➢ Concepts and definitions:

- Labor force
- Active members
- Beneficiaries

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Some problems with concept definitions (labor force data)

Variations in national definitions of labor force concept:

➢Differences in the exclusion and inclusion of rural areas

➢Different considerations of contributing 'family workers'

➢Different considerations of unemployed not looking for work

➢Differences in age limits used in measuring the economically active population

➢Different treatment of emigrants

➢Different ways of defining "informal labor force"

Some problems with concept definitions (pensions data)

➢ **From the working-age population side:**

- o Contributor vs non-contributor
- o Contributor vs active member
- o Active contributor vs pasive contributor (dormant accounts, affiliates...etc)

➢ **From the beneficiaries side:**

- o Beneficiary type: old-age, disability, survivors, and others
- o Number of benefit payments vs number of beneficiaries
- o Possibility of various benefits for one individual from one institution
- o Possibility of various benefits for one individual from various institutions (particularly for civial servants or other special schemes)
- o Non-contributory pensions
- o Regular payments vs lump-sum payments, and/or benefits in kind

Defining coverage:
The active member concept

- Someone who contributed to or accrued rights in a formal pension scheme

- Concept clearest when pensions are contributory, but active members of non-contributory schemes are also 'covered'

- Also, people who receive credits for periods of unemployment, caring for children, full-time education, military service *etc.* can be covered

- Note: active member concept only applies to mandatory income-replacement pensions (first and second pillars) and rarely to zero pillar schemes (universal basic, means-tested)

- Comparators:
    - working-age population
    - labour force

1b. HOW TO ASSESS SOCIAL PROTECTION BASIC INCOME SECURITY

Three approaches to assessing adequacy:

❑ Empirical information on pension entitlements of recent retirees

❑ Evidence from household survey data on income and poverty of older people

❑ Models of future pension entitlements of today's workers

Other aspects to consider for old-age population:

❑ Access to health

❑ Access to housing

❑ Access to services and infrastructure

❑ Living arrangements and informal care

Modelling pension entitlements

❑ Uses 'Apex' model (Analysis of Pension Entitlements across Countries)

❑ Results published in OECD *Pensions at a Glance* and World Bank *Pensions Panorama*

❑ Baseline assumptions:

> ❑ worker entering the labour market today
>
> ❑ full career from age 20 to national, normal pensionable age
>
> ❑ standard assumptions of inflation, average-earnings growth, investment returns (for DC), discount rate
>
> ❑ country-specific information on mortality rates

❑ Important to note this is an **indicator** not a **forecast**

Environment → **System design** → **Performance**

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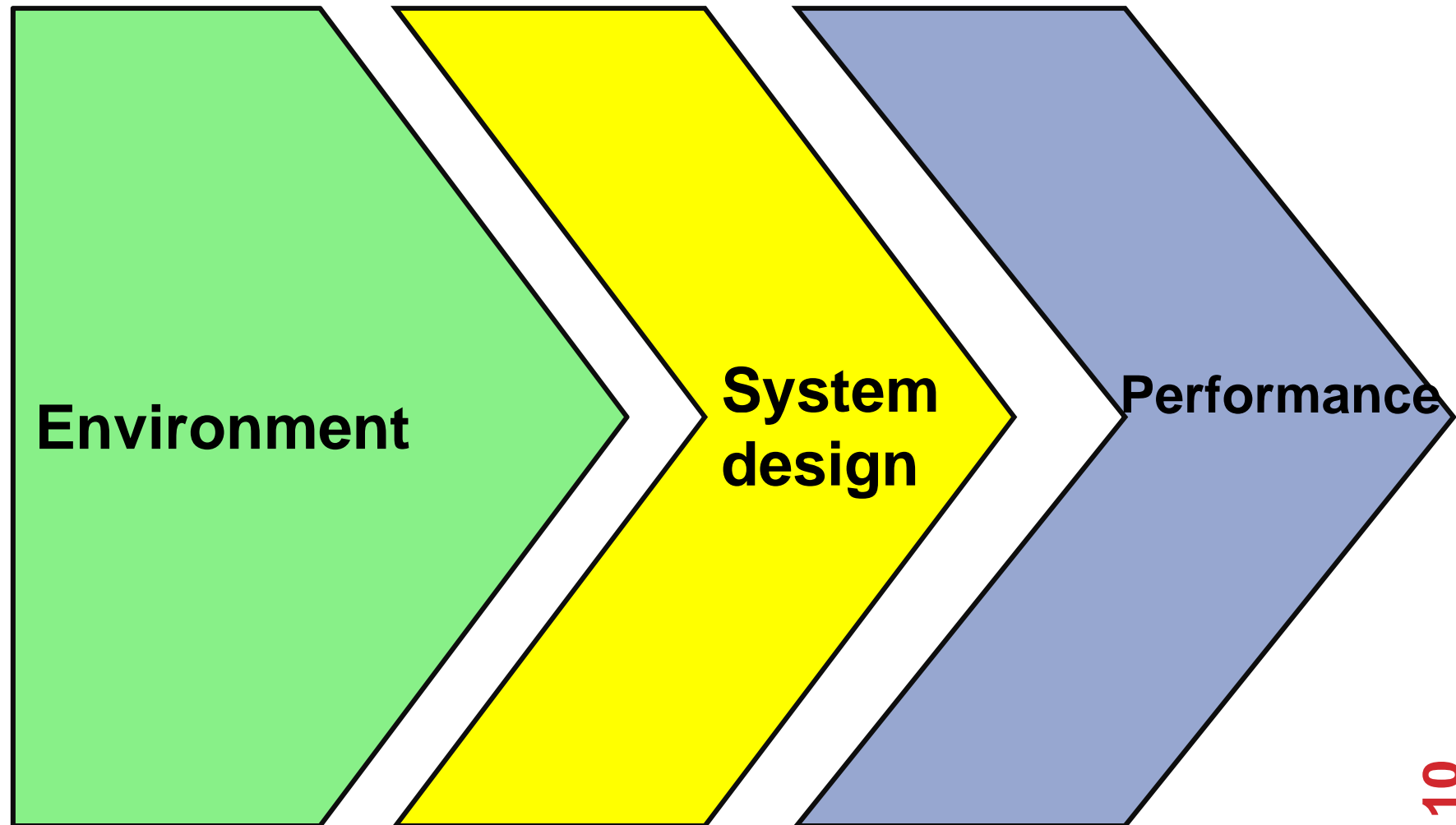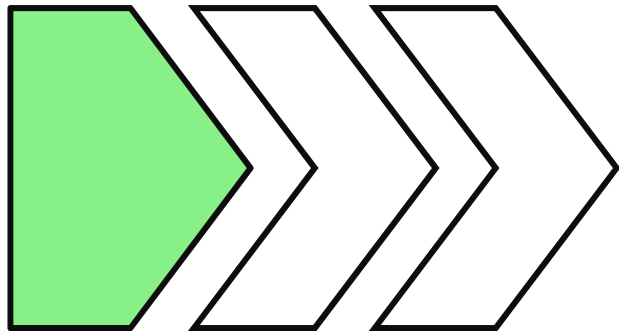
Environment Indicators

Demographic, economic and social context

Demographic, economic and social context

❑ Well known phenomenon of population ageing

    ❑ Lower fertility

    ❑ Longer life expectancy

❑ Patterns of labour-force participation by age

❑ Public finances: a constraint on pension-reform options

❑ Financial-sector development: a constraint on the direction of pension reform?

Other environment indicators

❑ Fiscal situation: a constraint on reform choices?

    ❑ budget deficit

    ❑ government debt

❑ Financial-market development

    ❑ to de developed using World Bank indicators

❑ Institutions

    ❑ to be developed using World Bank governance indicators

Kaufmann, D., A. Kraay, M. Mastruzzi (2009), 'Governance Matters VIII: Aggregate and Individual Governance Indicators, 1996-2008', Policy Research Working Paper no. 4978, World Bank, Washington, D.C.

Beck, T. and A. Demirgüç-Kunt (2009), 'Financial Institutions and Markets across Countries and over Time: Data and Analysis', World Bank, Washington, D.C.

Summary of Environment Indicators (I)

Environment

Old Age Dependency Ratio & Population +65

Life Expectancy

Labor Force Participation Rate

Population Projections

Net Migration

Summary of Environment Indicators (II)

Demography

Household characteristics **(coming soon)**

- Co-residence rates (% elderly households with non-elderly)
- Demographic characteristics by household type (average age, % male, household size, % urban)

- Dependency and support ratios - household
    - Average household dependency ratio (elderly and youth)
    - Average household elderly dependency ratio
    - Average household youth dependency ratio

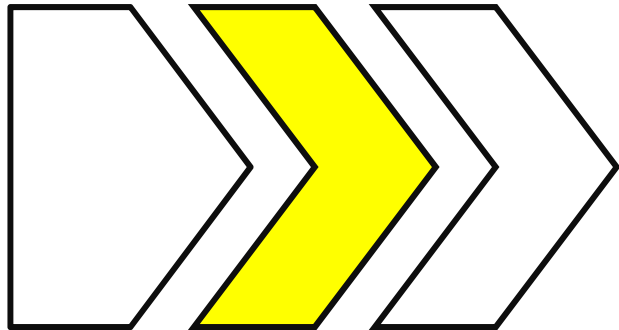**Welfare (coming soon)**

- By household type
    - Poverty and inequality
- By individuals
    - Poverty and inequality
    - Graph – Lorenz curve (graph) – welfare distribution Working Age, Elderly, Youth
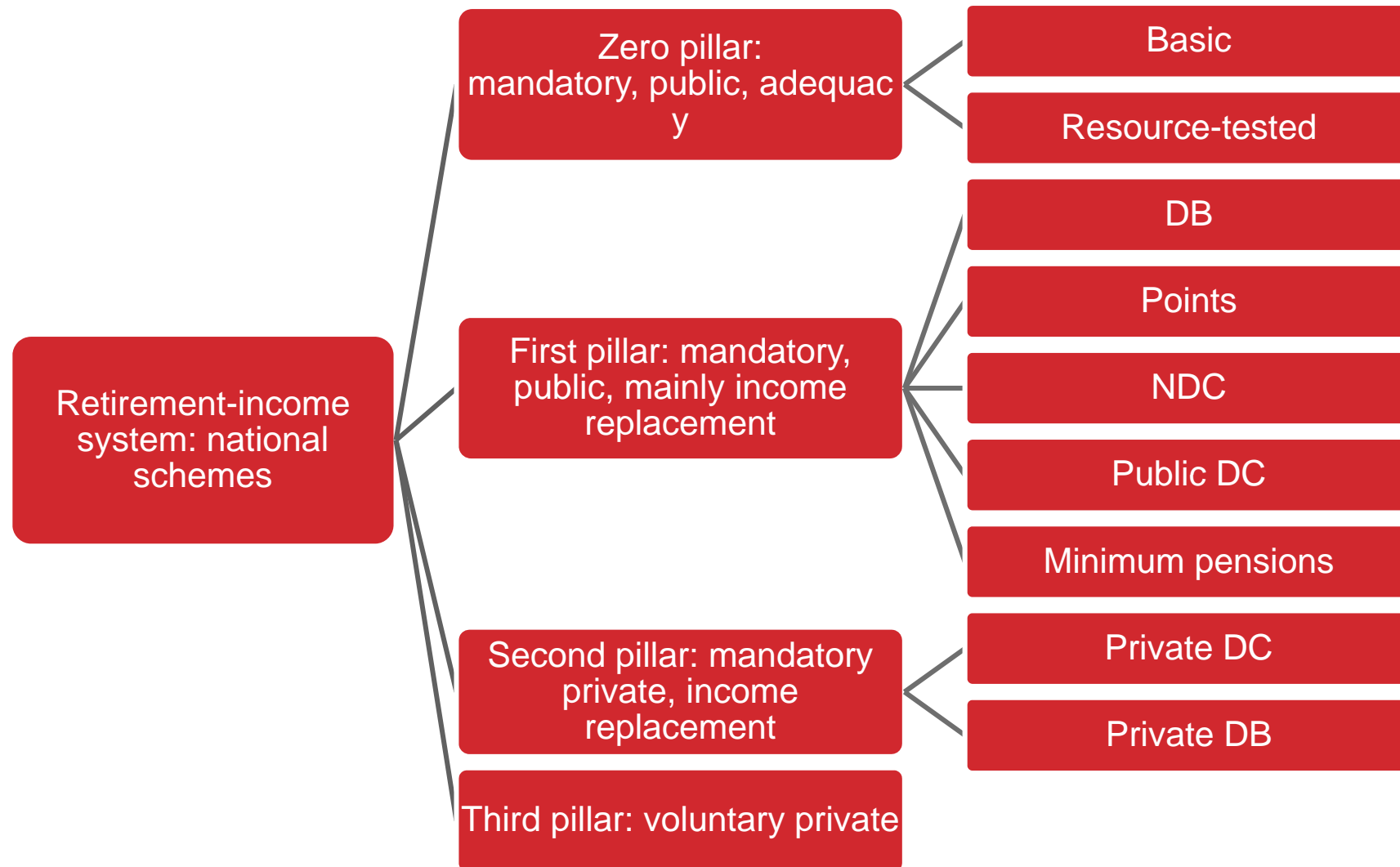
Design Indicators

Structure of the pension system, key parameters and rules

World-Bank multi-pillar framework: simplified version

Retirement-income system: national schemes

- Zero pillar: mandatory, public, adequacy
  - Basic
  - Resource-tested
- First pillar: mandatory, public, mainly income replacement
  - DB
  - Points
  - NDC
  - Public DC
- Second pillar: mandatory private, income replacement
  - Minimum pensions
  - Private DC
  - Private DB
- Third pillar: voluntary private
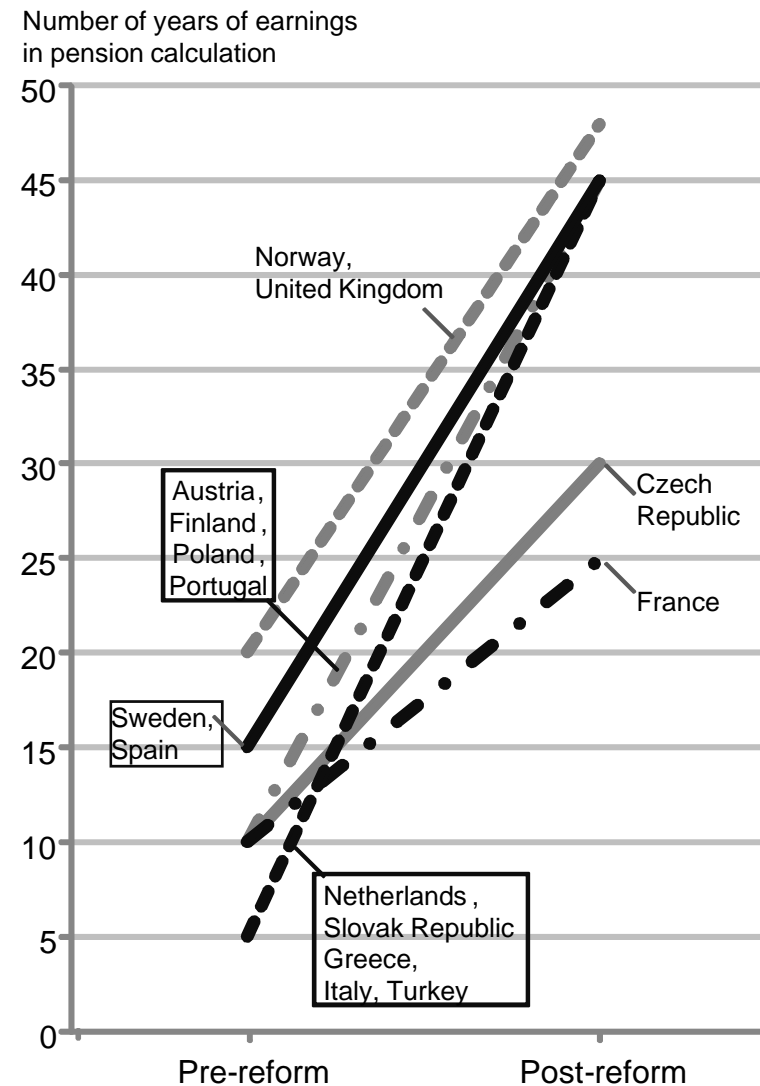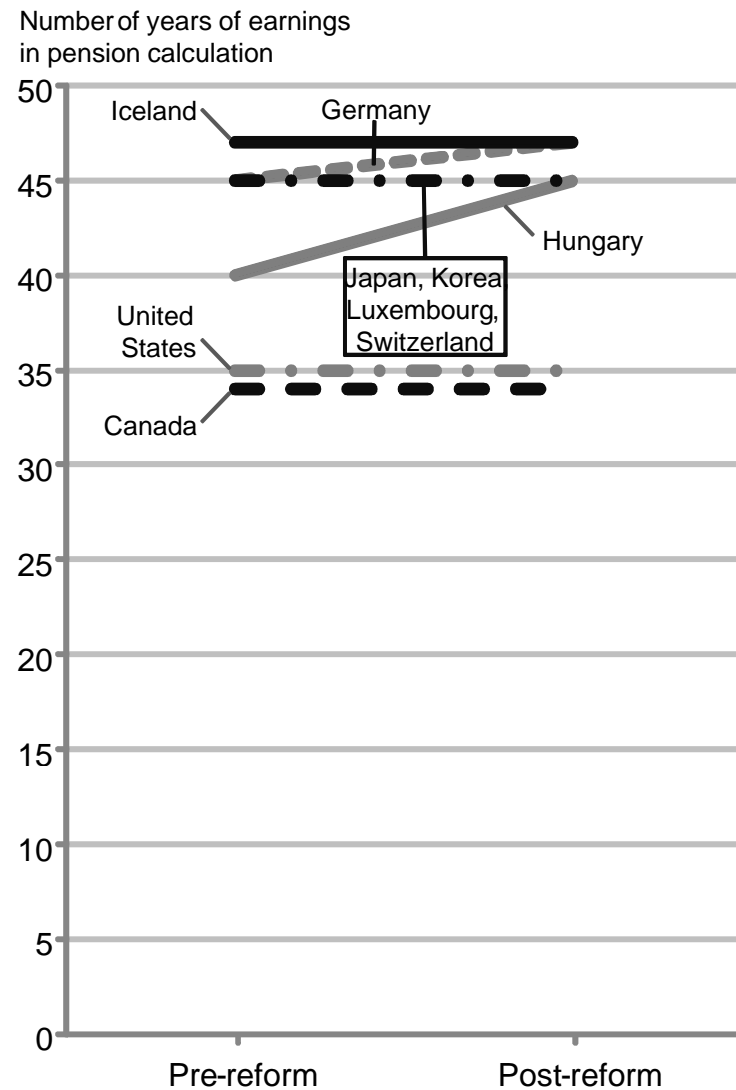
Overall structure:
First and second pillars

- ❑ Zero pillar only: 5 countries (e.g., Botswana, Ireland, Namibia, New Zealand, South Africa)

- ❑ NDC: 10 countries (Azerbaijan, Egypt, Italy, Kyrgyz R., Latvia, Mongolia, Norway, Poland, Russia, Sweden)

- ❑ Private DC: 32 countries (Latin America, Eastern Europe/Central Asia, Australia, Denmark, Egypt, Ghana, Nigeria, Norway, Sweden)

- ❑ Public DC/provident funds: 25 countries (South Asia, Pacific, East Africa)

- ❑ DB schemes: 123 countries

- ❑ Points schemes: 10 countries (e.g., France, Germany, Senegal, Slovak R.)

Parameters: earnings measure

	Lifetime average earnings	Best/final earnings
East Asia/Pacific	3	3
Eastern Europe/ Central Asia	5	1
Latin America/Caribbean	-	17
Middle East/North Africa	-	10
South Asia	-	2
Sub-Saharan Africa	-	18
High-income OECD	16	3
World	**24**	**54**

Parameters: earnings measure

Number of years of earnings in pension calculation

(Left chart) Iceland, Germany, Hungary, Japan, Korea, Luxembourg, Switzerland, United States, Canada — Pre-reform to Post-reform

Number of years of earnings in pension calculation

(Right chart) Norway, United Kingdom, Czech Republic, France, Austria, Finland, Poland, Portugal, Sweden, Spain, Netherlands, Slovak Republic, Greece, Italy, Turkey — Pre-reform to Post-reform

Indexation

	Prices	Wages	Mixed	Ad hoc/ discretionary
East Asia Pacific	2	2		1
Eastern Europe Central Asia	10	1	10	3
Latin America Caribbean	6	2	1	15
Middle East North Africa	2	1		9
Sub-Saharan Africa	8	2		7
High-income OECD	11	2	4	2
World	**39**	**10**	**15**	**37**

Contribution rate: Defined-contribution schemes
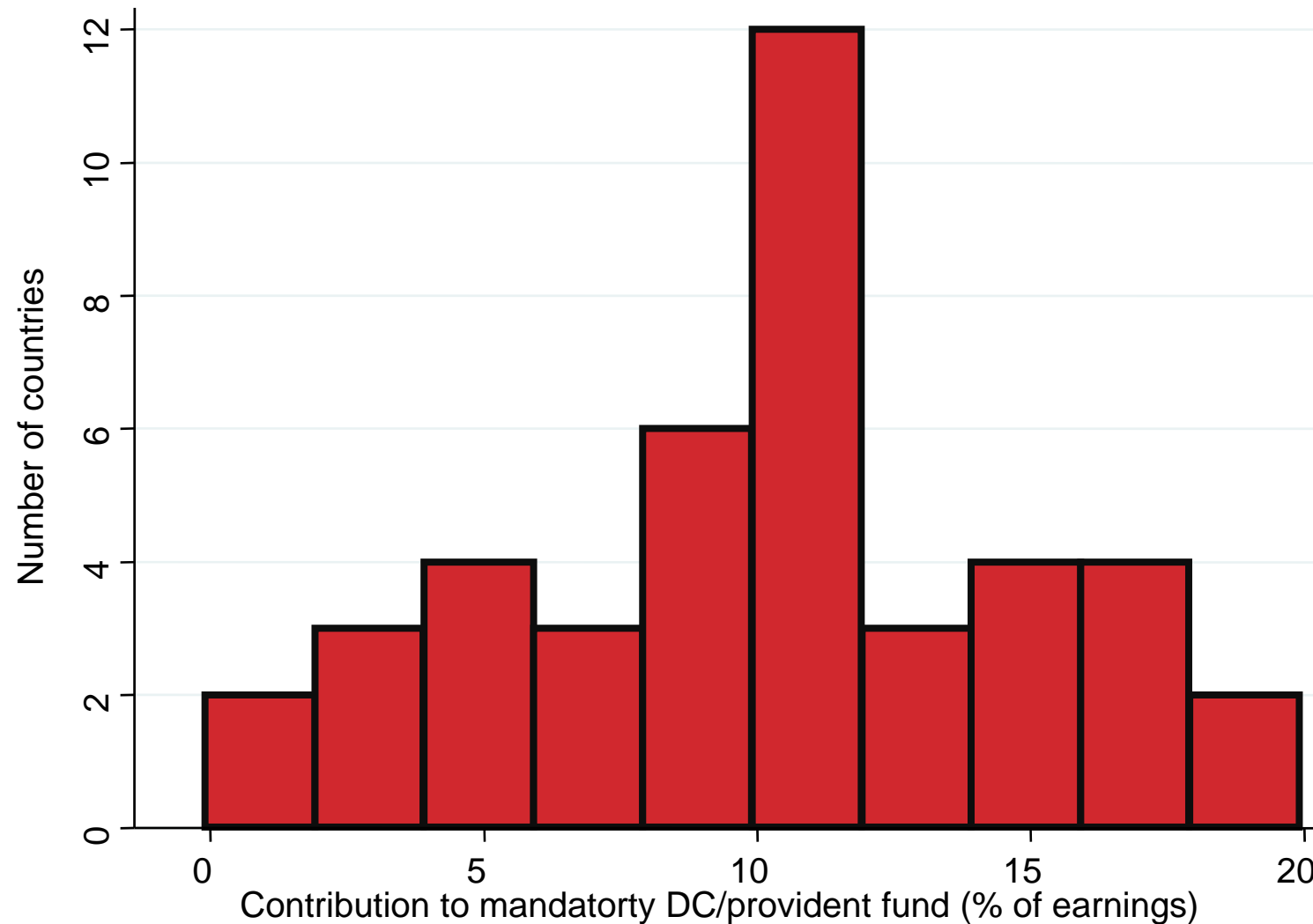
Ceilings: OECD countries

Ceiling on pensionable earnings (% of average earnings)

Number of countries

Mainly
no ceiling
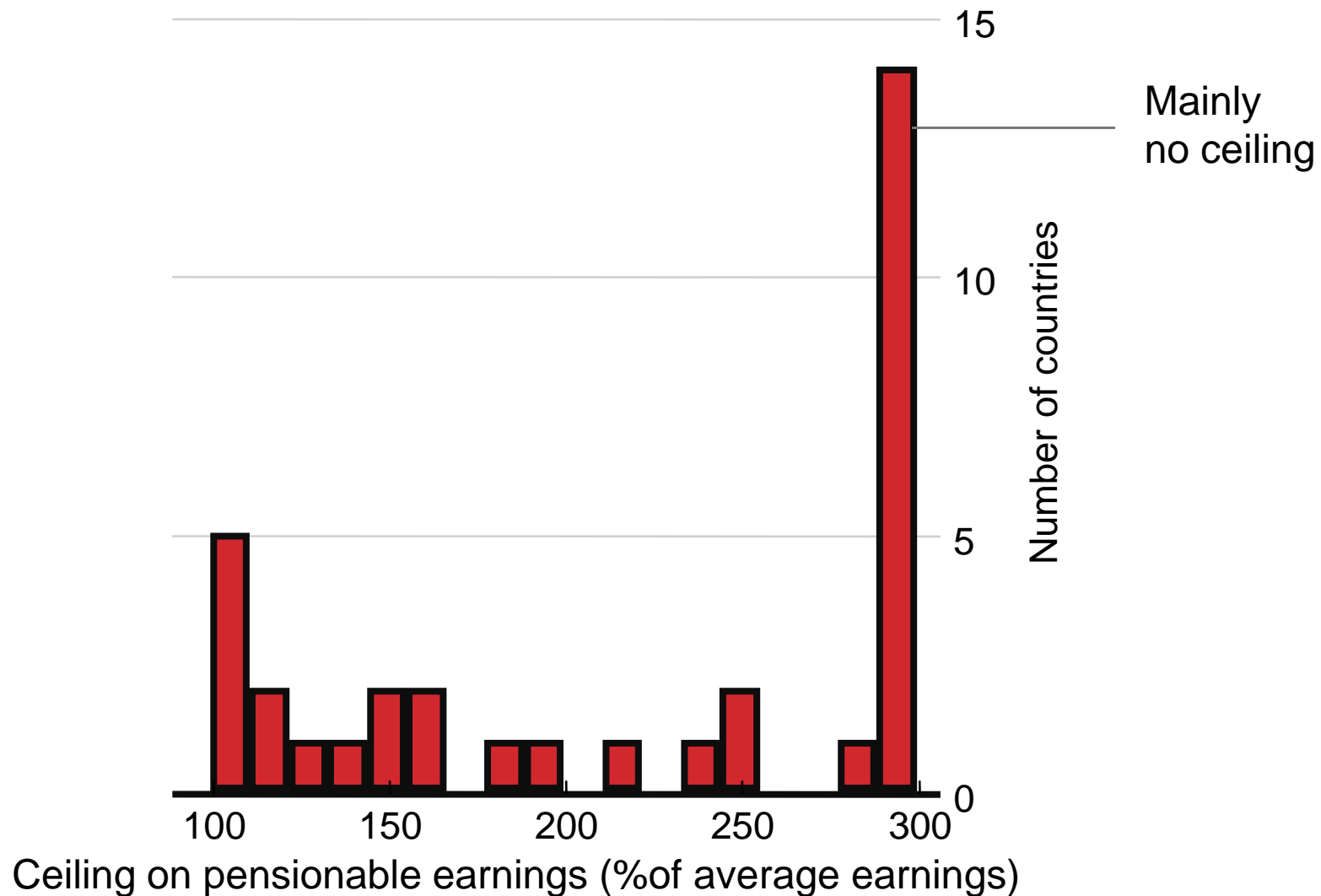
Summary of Design Indicators

Design

Modality of Pillars

Separated vs Integrated (national, civil servants, and other special schemes)

Qualifying conditions
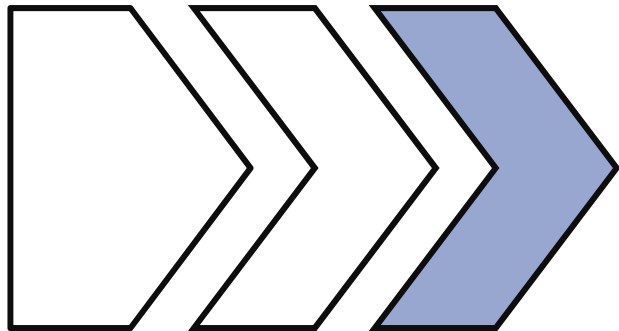
Contribution Rates

DB Parameters

DC Schemes

Performance Indicators

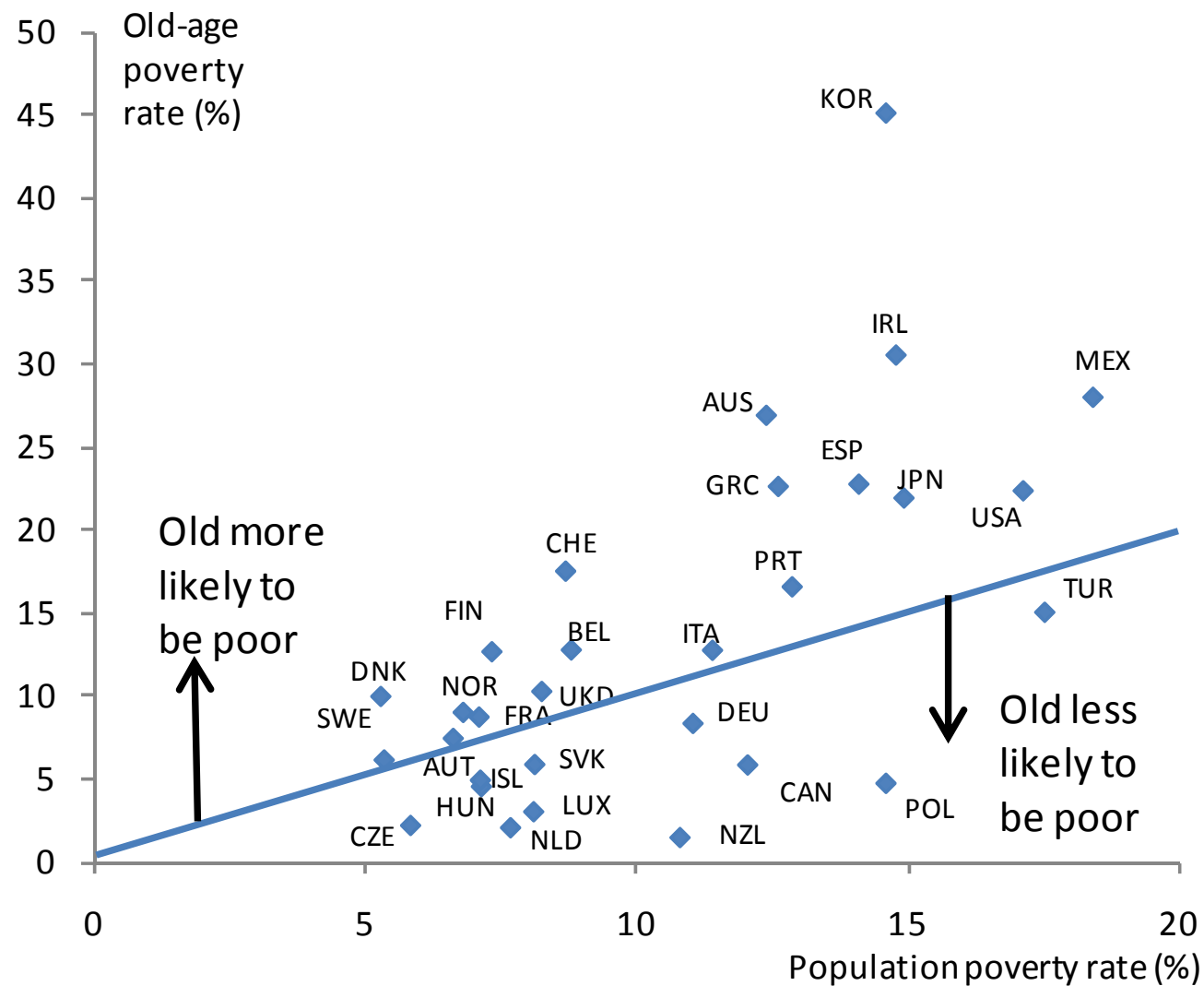## Assessing pension systems against key objectives and principles
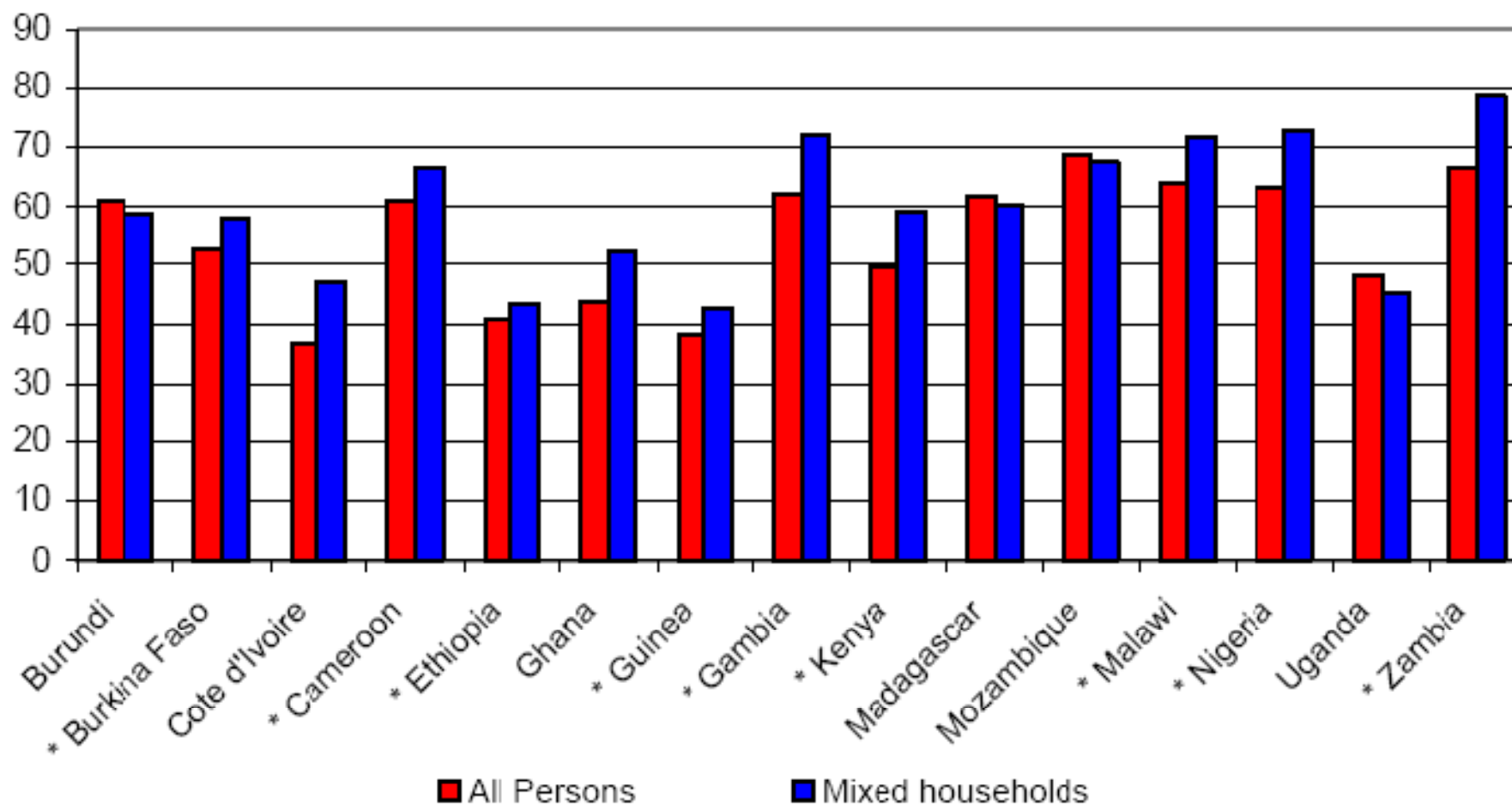
Six principles and objectives

- **Coverage** of the pension system, by both mandatory and voluntary schemes

- **Adequacy** of retirement benefits

- **Financial sustainability** and affordability of pensions to taxpayers and contributors

- **Economic efficiency**: minimising distortions on economic behaviour, such as labour supply and saving

- **Administrative efficiency**: keeping costs low (collecting contributions, paying benefits, managing investments)

- **Security** of benefits in the face of different risks and uncertainties

Old-age poverty: OECD countries

Old-age poverty: Africa

Chart: Old-age poverty rates by country, comparing All Persons (red) and Mixed households (blue).

Y-axis: 0 to 90

Countries (X-axis): Burundi, * Burkina Faso, Cote d'Ivoire, * Cameroon, * Ethiopia, Ghana, * Guinea, * Gambia, * Kenya, Madagascar, Mozambique, * Malawi, * Nigeria, Uganda, * Zambia

Legend:
■ All Persons   ■ Mixed households

* Differences statistically significant at 5% or 10% level.

Old-age poverty: Latin America/Caribbean
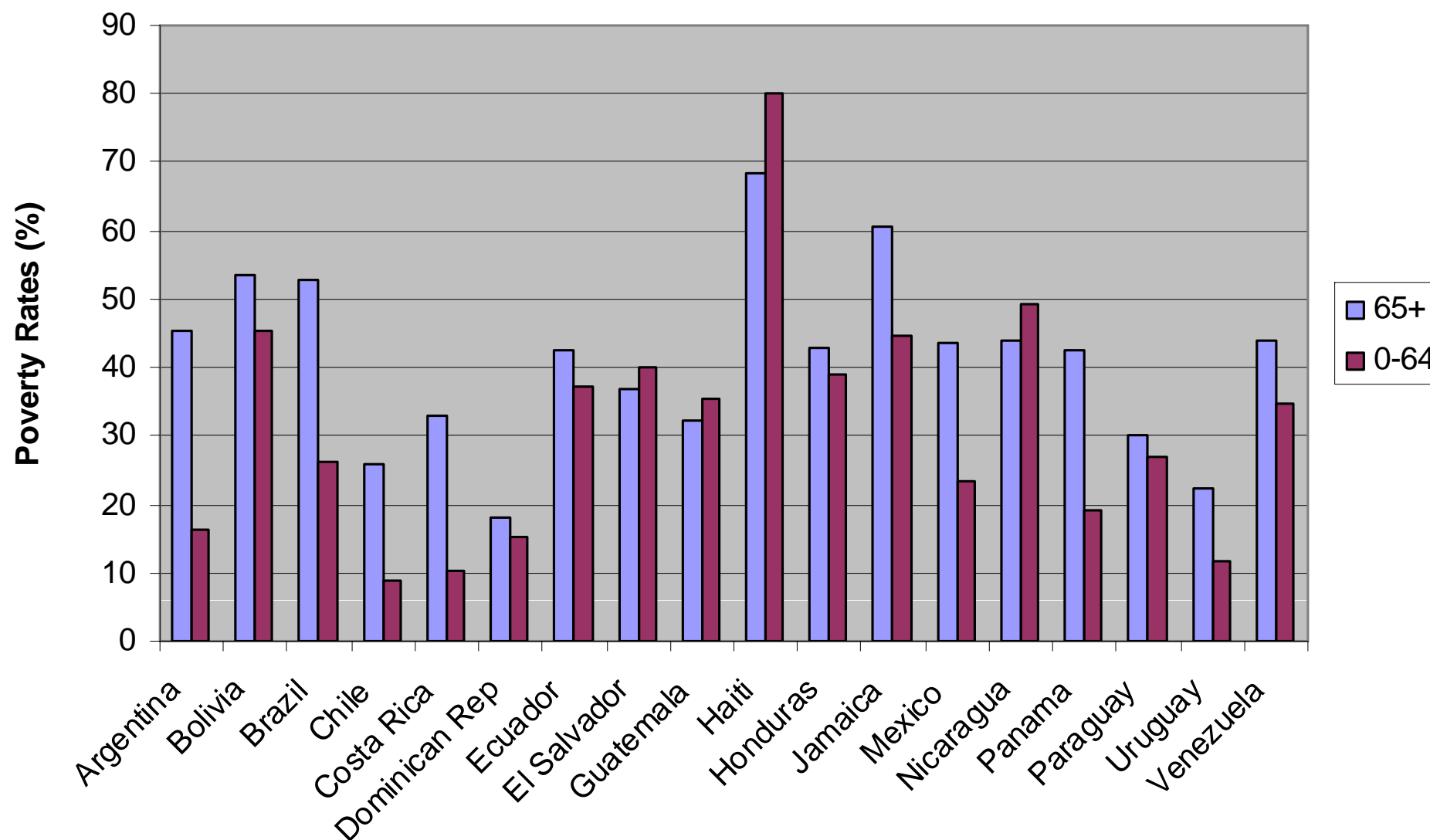
Financial sustainability

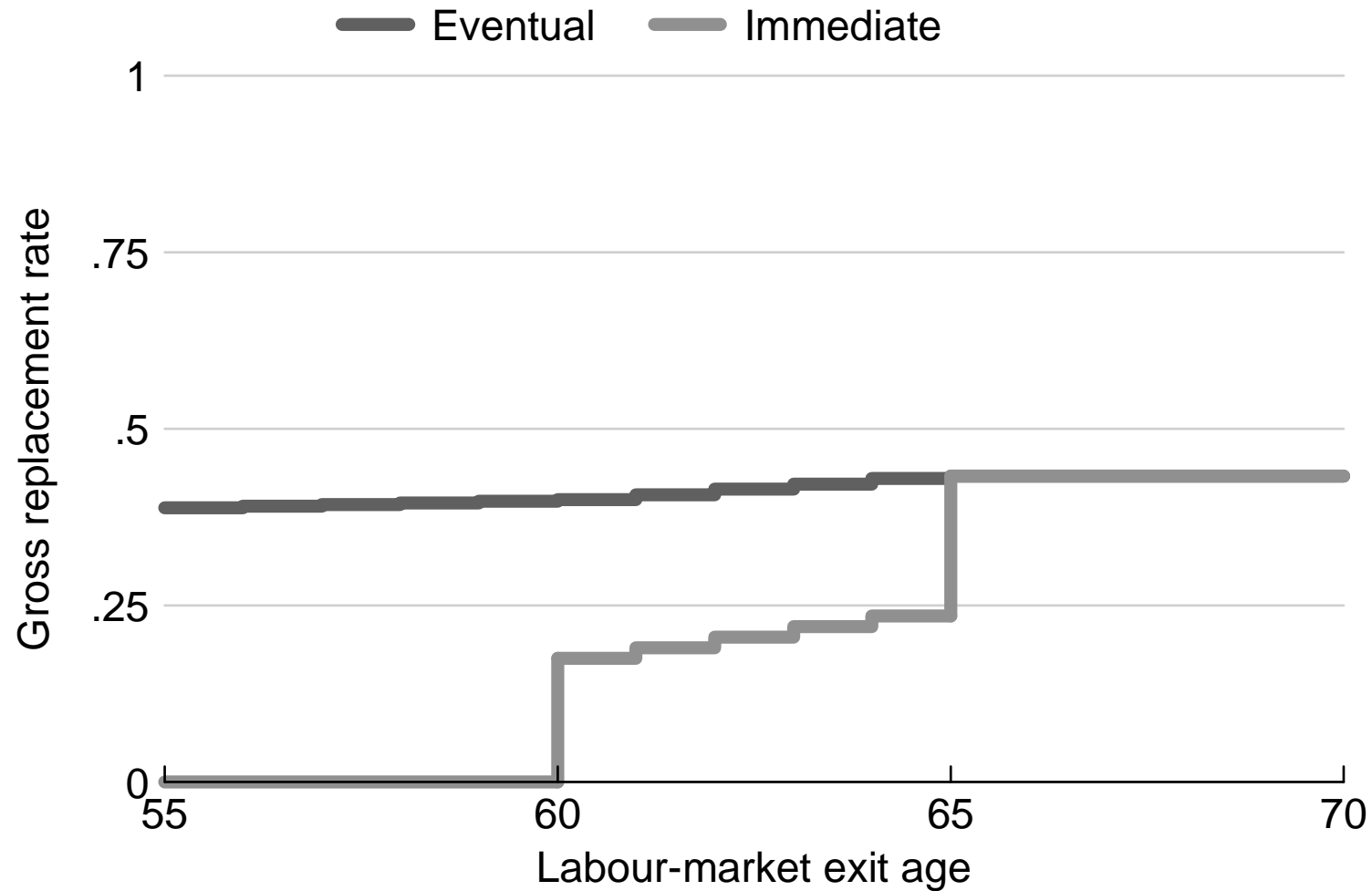**Assessing the finances of pension systems over the long term**

Economic efficiency

Minimising the pension system's distortions of individual choices

Retirement incentives: simple approach

Retirement incentives: measurement

	Defined benefit	Defined contribution	Points	Notional accounts
Longer working period	Extra year's entitlement Extra year towards qualifying conditions	Extra year's contributions —	Extra year's entitlement Extra year towards qualifying conditions	Extra year's entitlement Extra year towards qualifying conditions
	Valorisation of earlier years' earnings	Investment returns on accumulated balance	Uprating of pension-point value	Notional interest on accumulated notional capital
	Higher earnings replace earlier, perhaps lower, earnings in benefit formula	—	Higher earnings replace earlier, perhaps lower, earnings in benefit formula	—
Shorter retirement duration	Forgo a year's benefits "Actuarial" adjustment	Forgo a year's benefits Lower annuity factor	Forgo a year's benefits "Actuarial" adjustment	Forgo a year's benefits Lower annuity factor
Delay in claiming	Probability of dying Discounting	Probability of dying Discounting	Probability of dying Discounting	Probability of dying Discounting

Retirement incentives matter: Effect on behaviour
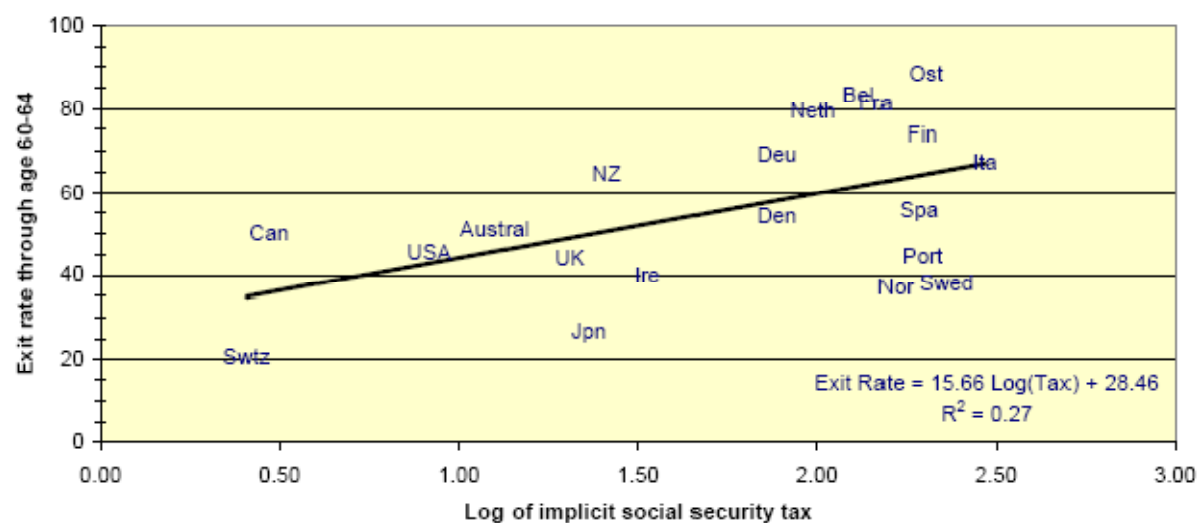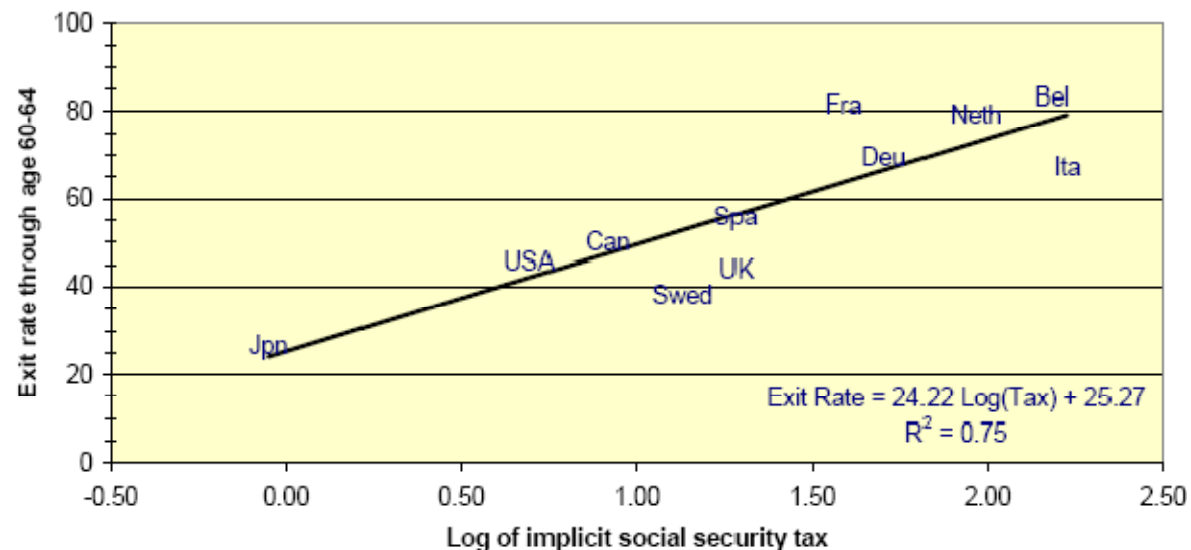
Administrative efficiency

Assessing the cost of running public pension systems

Security

Risk and uncertainty in retirement-income systems

Summary of Performance Indicators (I)

Performance

Active Coverage

Beneficiaries Coverage

Pension Spending

Summary of Performance Indicators (II)

Coverage (sample and with population expansion factor) (under discussion and coming soon)

- Pension receipt by household type and gender
- Pension receipt by age band and gender
- Pension receipt by welfare decile
- Pension receipt by work status
- Pension coverage/overlap (social assistance only, work-related only, survivorship only, disability only, combination but not all, all, none)

Adequacy - by age bands, household type (under discussion and coming soon)

- Value pension transfer/median and mean sample earnings
- Value pension transfer/poverty line (extreme and moderate)
- Value pension transfer/welfare aggregate (by quintile)
- Value pension transfer/total transfers (by quintile)

Summary of Performance Indicators (III)

Poverty and inequality impact (counterfactuals including all transfers, subtracting each pension transfer, and excluding all pension transfers) (under discussion and coming soon)

- Absolute poverty
- Relative poverty
- Gini coefficient
- Lorenz curve (graph) (welfare aggregate for each counterfactual)
- Concentration curve(graph) – pro/regressivity each pension transfer and all transfers

Administrative efficiency (under discussion and coming soon)

- Cost-poverty gap reduction ratio -reduction in poverty gap due to transfer, cost is total amount spent on scheme

3. WHO COLLECTS WHAT? WHO COULD POSSIBLY BE CONSIDERED AS 'RESPONSIBLE' ORGANIZATION?

Four type of sources in the WB pensions team:

❑ **PROST model**

❑ **Adept model / household surveys**

❑ **Apex model**

❑ **Administrative sources (various)**

4. WHAT ARE THE GAPS IN CURRENT DATA COLLECTION AND INDICATORS PRODUCTION

❑ **Fiscal, Financial and other relevant environment indicators**

❑ **Various four pillar indicators**

❑ **Various relevant performance indicators on economic efficiency, administrative efficiency, security, etc.**

❑ **Not all the countries have the pensions data schemes separated by 1) work-related pensions, 2) survivorship pensions, 3) disability pensions, and 4) social pensions**

❑ **Around 50 percent of the countries in the world have fragmented pension system (national schemes + special schemes). There are considerable gaps on information about the special schemes (including design indicators for such schemes).**

❑ **Others (to be discussed)**