WORLD BANK GROUP
Social Protection & Labor

Pension Diagnostic Assessment
Pensions Core Course
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Organization

I. Pension Diagnostic Assessment –
   A. Evaluation Process & Criteria
   B. Data
   C. Indicators
   D. Tools

II. Conceptual Framework & Design Typology
   a.

III. Questions for discussion

Pension Diagnostic Assessment

Diagnostic Assessment 1. – Evaluation Process & Criteria

Initial Conditions & Inherited System

Demand (Objectives) consumption smoothing & elderly poverty protection

Supply - mandatory & voluntary pension & social security schemes

Family & community support

Enabling environment
(Motivating reform, framing & constraining reform options)

Existing design

Demographic profile

Macro-economic environment

Institutional Capacity

Financial market status

Political economy

Reform objectives

Primary: improving **coverage, adequacy, & sustainability** for the long-term

Secondary: improving labor markets, macro/fiscal position, & contributing to financial market development.

Reform Design & Implementation Options

Design reforms - introduce new schemes, parametric & structural reforms

Governance, Institutional and regulatory reforms

Strengthening institutions & implementation

CLICKER QUESTION

What are two key objectives of social security systems?

A. Smooth consumption in old age

B. Protect the elderly against poverty

C. Develop financial markets

D. Improve labor markets

E. Improve the rate of return on savings

F. A through E

G. A, B, C, D.

H. A and B

I. None of the above

Diagnostic Assessment 2. – Data, Indicators and Tools

Initial conditions	Information/ Data	Indicators	Tools
Elderly incomes, vulnerability & poverty	Country HH survey data ADEPT-SP x/country data	*Environment* Demographic Economic Financial Informal Support	ADEPT-SP Apex PROST ASPIRE & ext. x-country data
Mandatory & voluntary pension systems & social security schemes	*Environment* – UN Population Projections Country admin data Financial market data Macro & fiscal data (country/IMF) *System design* – Admin data/country laws WB database comparators *Performance* – Admin data/country laws WB database comparators HH survey data	*Design* Structure of pension system Qualifying conditions Parameters	
Additional state support	Administrative data from social welfare schemes, housing, health provision. HH survey data.	*Performance* Coverage Adequacy Financial sustainability	

Diagnostic Assessment 3. Indicators

Indicators

Environment

Demographic

- Old-age & system dependency ratios (historical & projected)
- Life expectancy at retirement age (projected)
- Fertility (historical & projected)

Economic

- Labor force participation
- Public & Publicly guaranteed debt (% GDP)

Financial & Institutional

- Financial sector development indicators

Government effectiveness

- Informal support
- Co-residence rates

Design

Structure

- Pillars (benefit design, financing, institutional structure)
- Civil service (integrated vs. separate)

Qualifying conditions

Eligibility ages
Vesting

Parameters

- Pension contribution rates + caps
- Social insurance contribution rates
- Target replacement rates
- Target pension wealth

Performance Indicators

Coverage

- Contributors/labor force or working-age population
- Recipients (% total & % age 65+)

Adequacy

- Replacement rates
- Pension income/elderly expenditures
- Elderly incomes
- Elderly poverty (before & after benefits)

Sustainability

- Pension spending (% GDP)
- PV of financing gap (% GDP)
- PV spending/PV contributions (%)

CLICKER QUESTION

What are key <u>design</u> features of public pension schemes?

A. Structure (defined-benefit, defined-contribution, hybrid)
B. Demographic profile
C. Parameters – contribution rates, accrual rates, indexation.
D. Governance
E. Qualifying conditions
F. A, C, E
G. All of those A-E

CLICKER QUESTION

What are key criteria for measuring performance of public pension schemes?

A. Sustainability from a system and fiscal perspective.
B. Development of financial markets.
C. Improving labor market efficiency
D. Adequacy – replacement rates and elderly poverty protection.
E. Coverage – Elderly and labor force coverage
F. A, D, E
G. A, B, E
H. A-E

Diagnostic Assessment – 4. Tools

Tools

ADEPT-SP

- Elderly welfare
- Elderly poverty
- Co-residence
- Elderly income generation
- Comparisons of welfare, poverty across elderly, non-elderly & household types.

PROST

Baseline. Long-term projections of *financing gap* for existing schemes + *replacement rates* for current and future retirees

Reform scenarios. Long-term projections *financing gap + replacement rates* for parametric and/or structural reforms

Outputs to simulate ***other instruments*** (social pensions, voluntary savings)

APEX

Evaluation of individual level benefits across instruments + for different income groups.

Individual replacement rates

Replacement of average wage

Pension wealth

WB Database & External X-Country Data

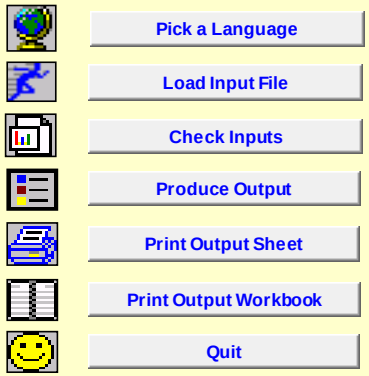
Cross-country comparisons

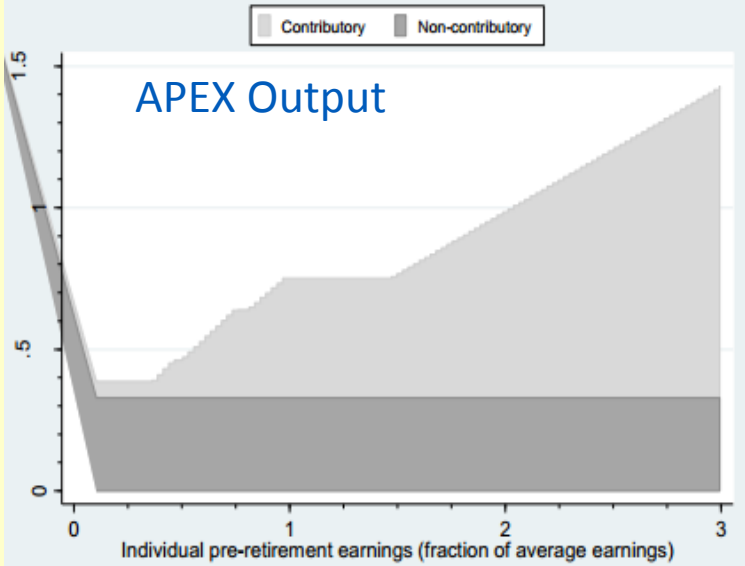
- Demographics
- Coverage
- Adequacy
- Affordability
- Sustainability

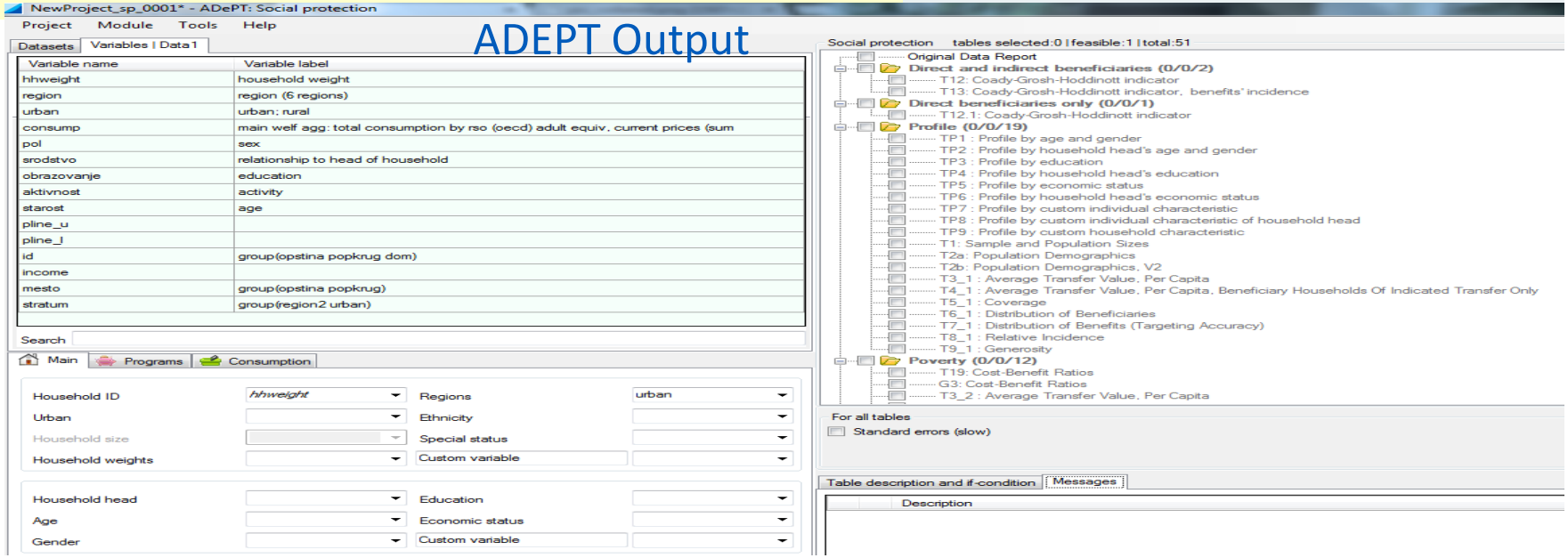
Diagnostic Assessment – 4. Tools

The Pension Tool-Kit

PROST







CLICKER QUESTION

Which modeling tools employ Household Survey Data?

A. PROST
B. ADEPT
C. APEX
D. Cross-country comparisons
E. B, D
F. B, C, D
G. All of those A-D

CONCEPTUAL FRAMEWORK – DESIGN TYPOLOGY

Design typology

Objective

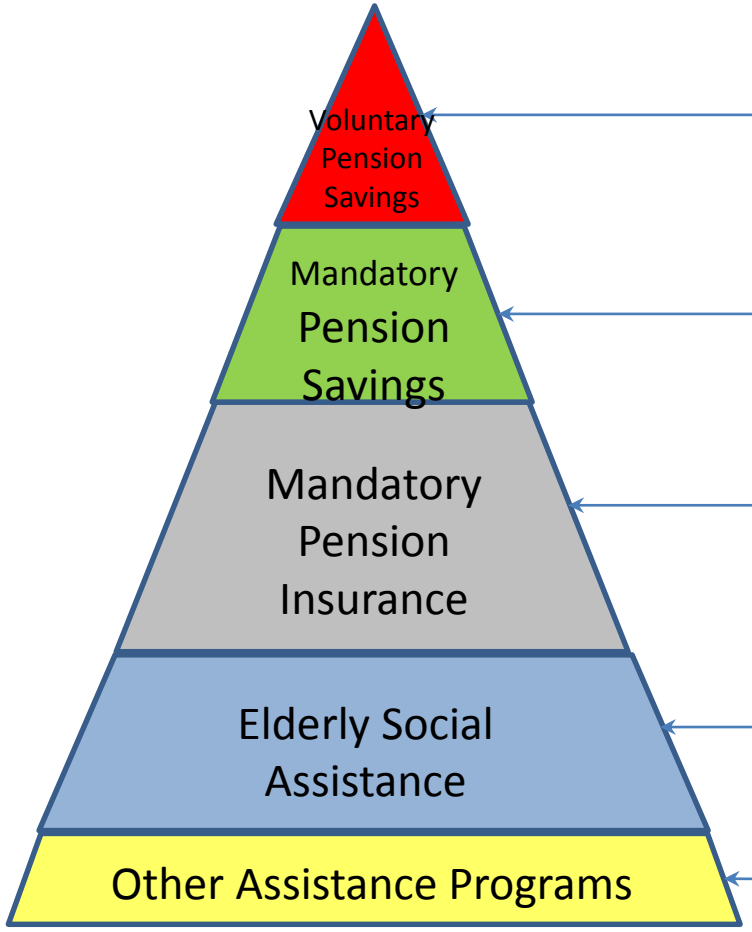
Voluntary savings to smooth consumption

Mandatory savings to smooth consumption

Mandatory co-insurance against consumption shocks

Elderly poverty protection

Protection against poverty & consumption shocks



Instrument

Third pillar - Voluntary occupational & individual pension arrangements

Second pillar – Mandatory contributory earnings-related pension savings

First pillar – Mandatory contributory earnings related pension insurance

Zero pillar – Non-contributory elderly social assistance

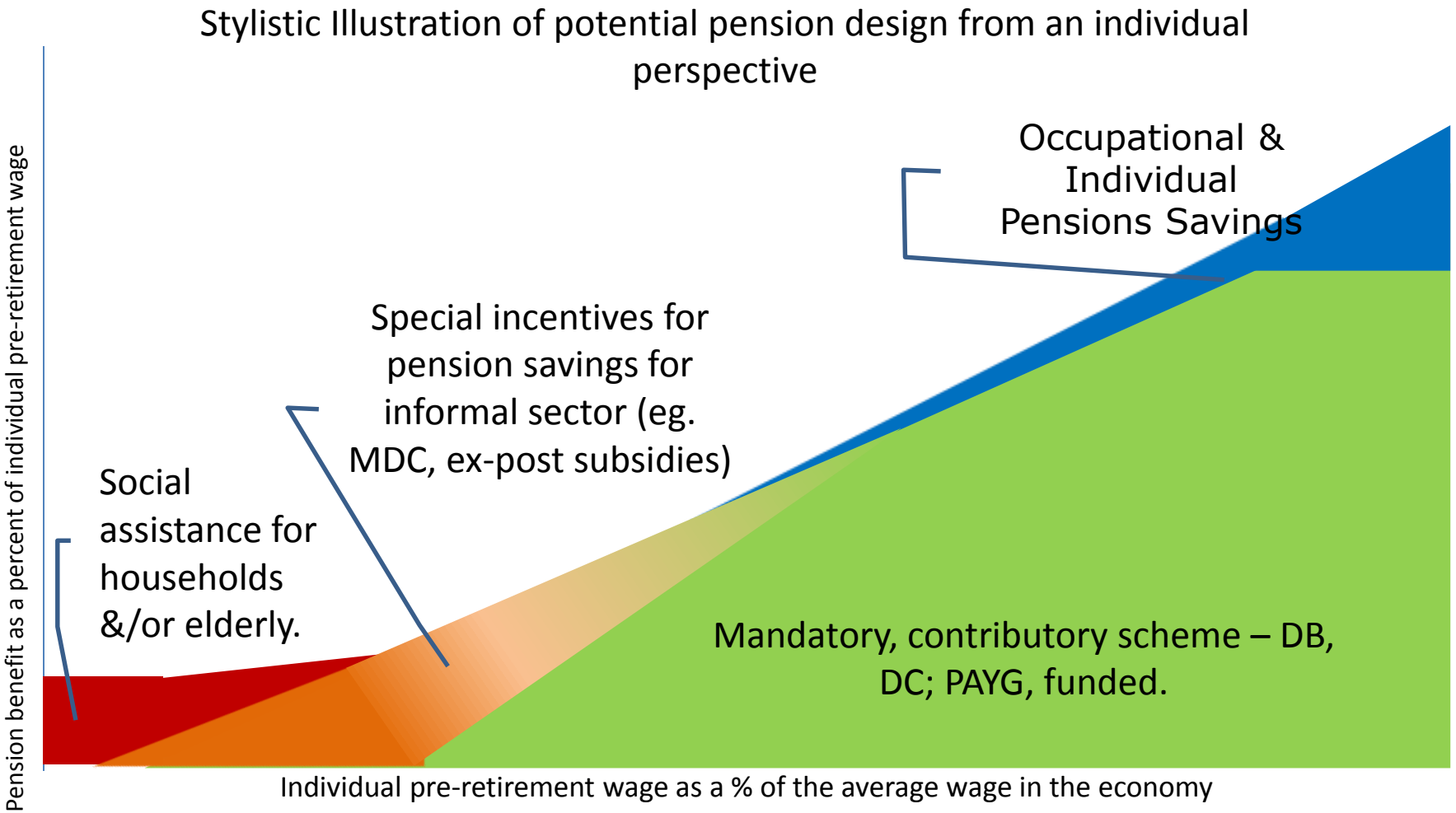
Fourth pillar - other assistance programs (eg. health or housing) assisting elderly income protection

CLICKER QUESTION

How would you characterize the pillar design in your country?

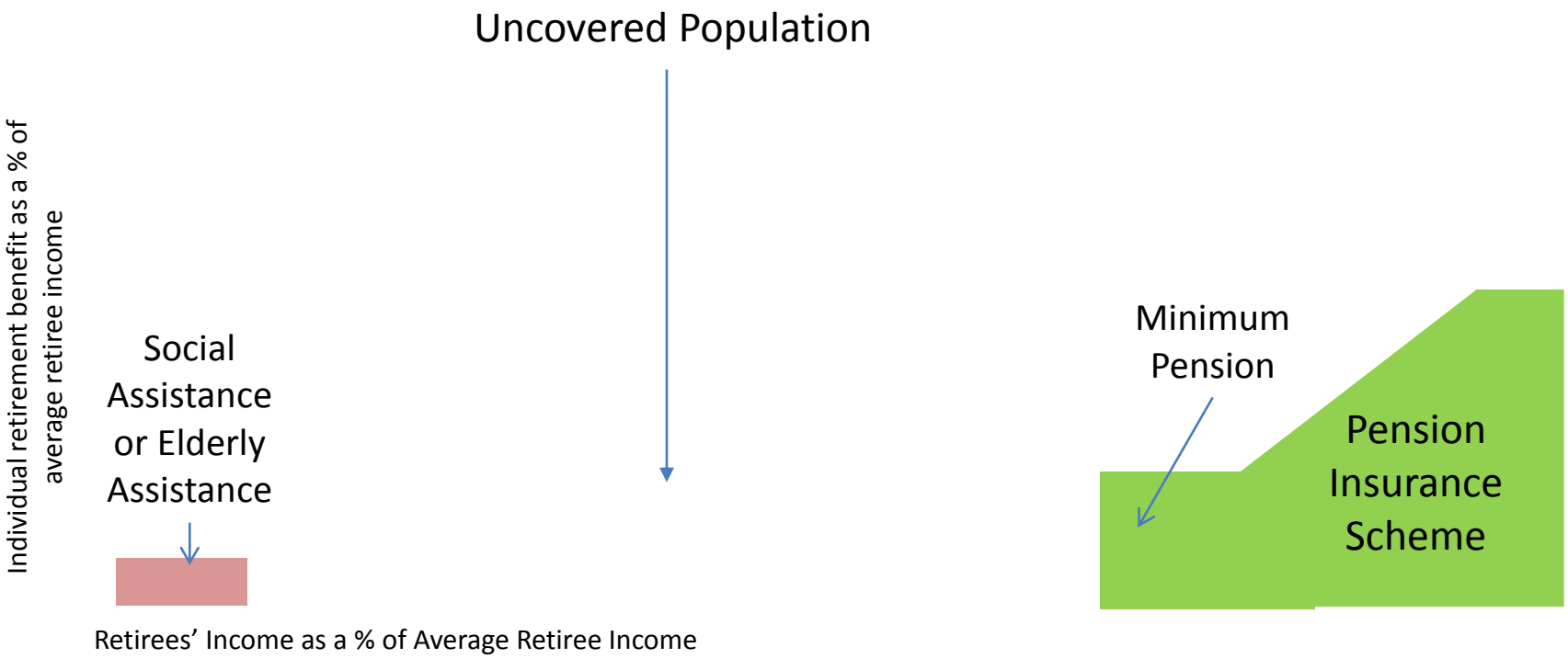
A. Mandatory contributory pension insurance + non-contributory elderly assistance (pillars 1 & 0)
B. Mandatory contributory pension insurance only (pillar 1)
C. Mandatory pension savings only (pillar 2)
D. Mandatory contributory pension insurance + mandatory pension savings + non-contributory elderly assistance (pillars 1, 2 & 0)
E. Voluntary civil service and occupational schemes and non-contributory elderly assistance (pillars 3 and 0)
F. Other

Stylistic Illustration of Possible Multi-pillar design

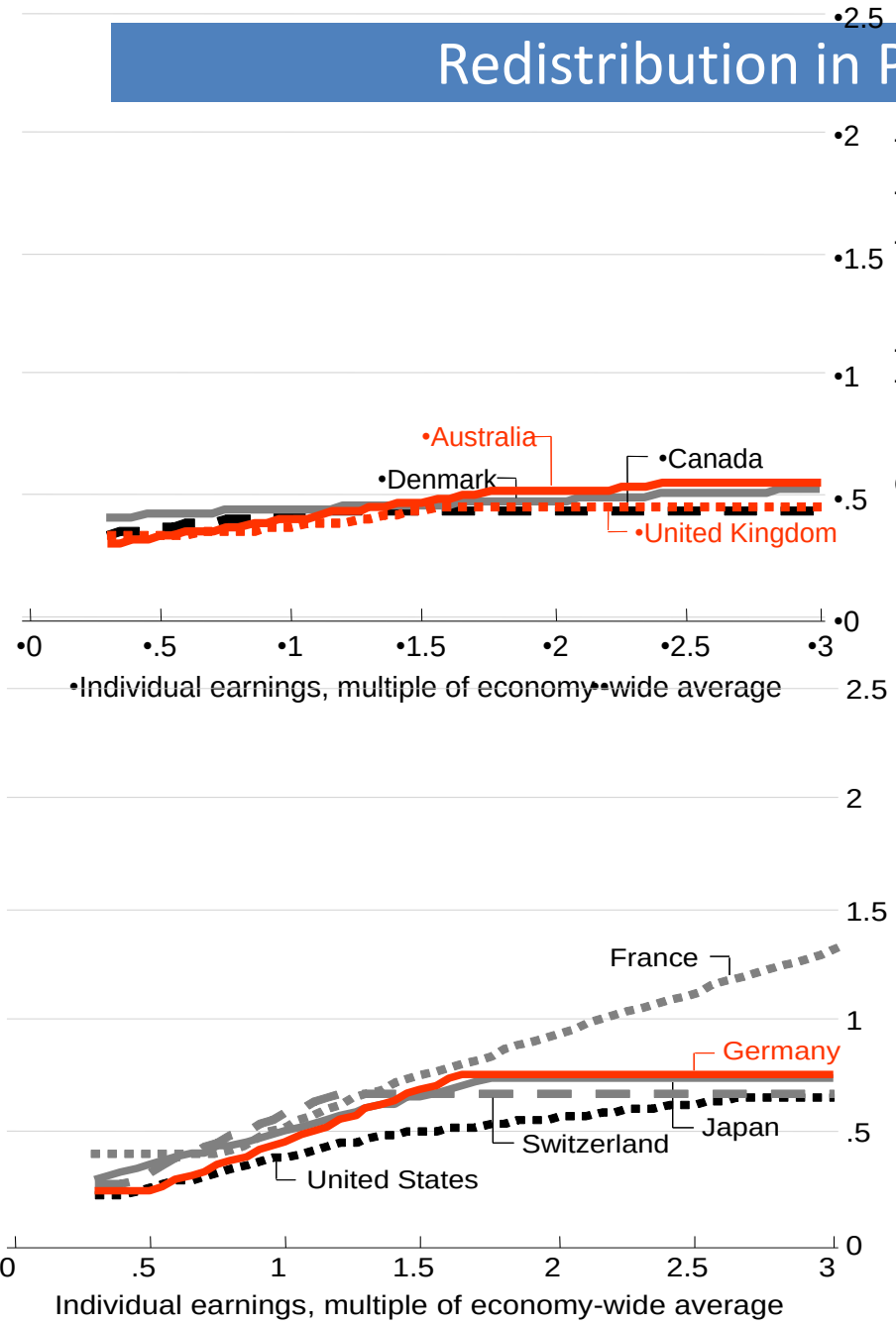


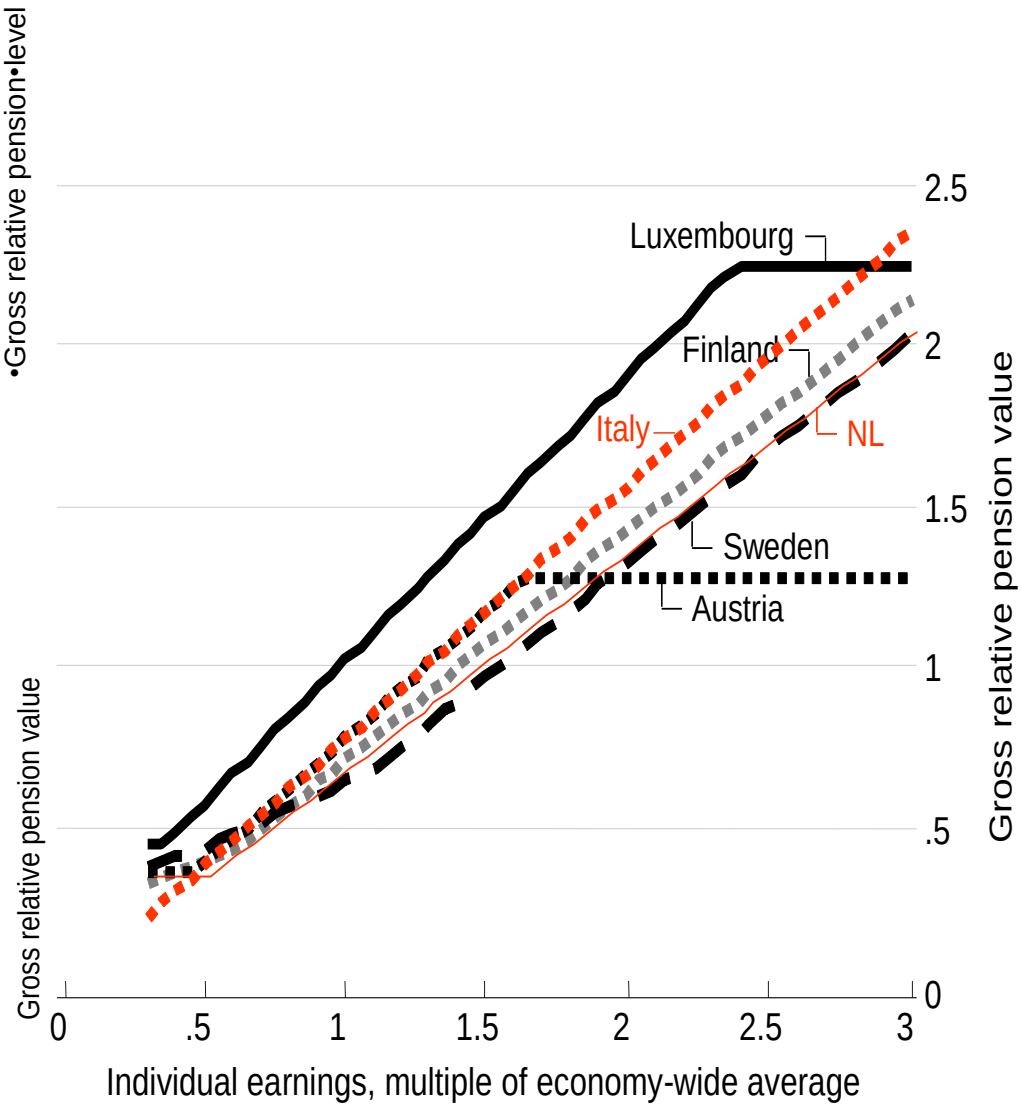
The coverage challenge

Stylistic Illustration of current benefits from an individual perspective



Redistribution in Pensions – OECD





CLICKER QUESTION

What are the factors to consider in determining the redistribution through the pension system?

A. The combined redistributive effect of all the pillars on retiree incomes

B. The distribution of worker incomes and retiree incomes

A. Design options – Non-Contributory Schemes

Instrument Types

1. *Elderly social assistance*
- Universal
- Pensions-tested
- Resource/means tested
- Subsidized minimum social insurance benefit

2. *Household social assistance*

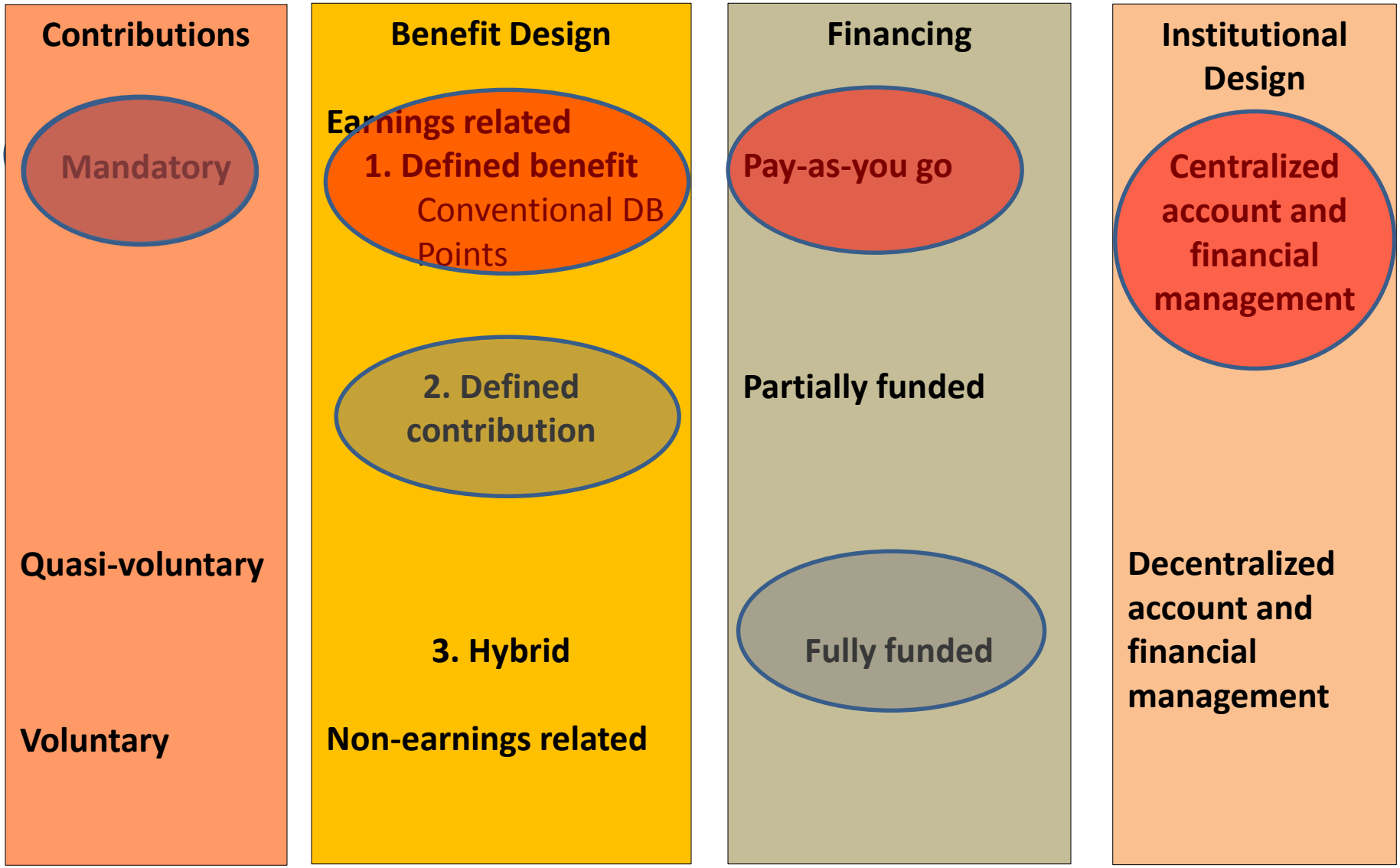
Benefit Parameters

- Qualification criteria - eligibility age, means testing, pension testing
- Targeting method
- Benefit level
- Indexation
- Clawback or other benefit adjustments

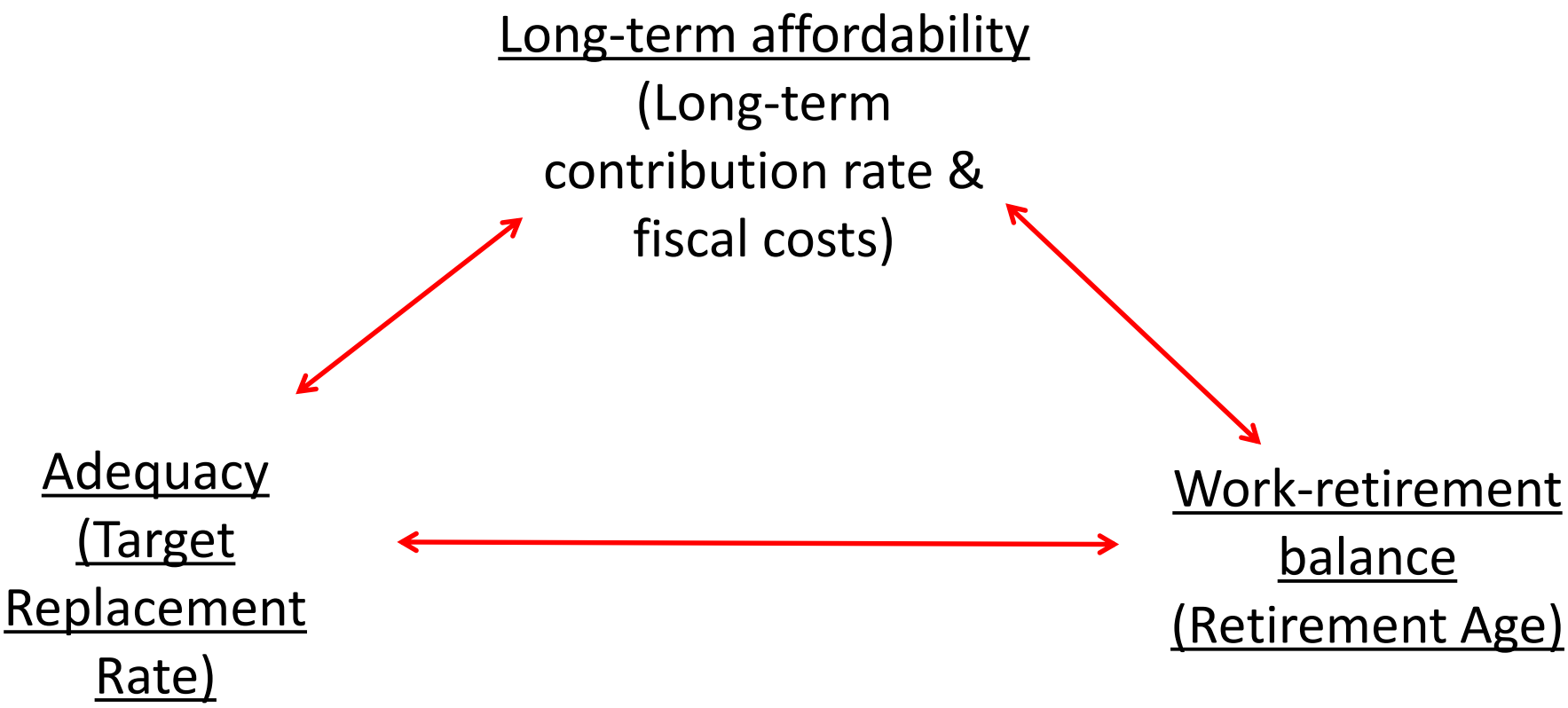
Design Considerations

- Universal vs. targeted
- Integration w/contributory schemes
- Elderly assistance vs. household assistance
- Targeting methods – weighing targeting effectiveness
- Benefit level considerations - Reconciling coverage vs. adequacy & fiscal envelope
- Incentive effects of different designs & benefit levels

B. Design options – Earnings-related Contributory Schemes



Weighing the Tradeoffs in Pension Design Parameters



B. Weighting the Advantages & Disadvantages of PAYG DB & FDC Schemes

PAYG Defined Benefit Schemes

Advantages	Disadvantages
Simplicity	
Limited information/infrastructure requirements	• Parameters need to be adjusted over time • Changes in parameters can result in an effective partial default.
Longevity risks covered by plan sponsor. Indexation risks may be covered	Unsustainable benefits can lead to partial default in pension promises + severe fiscal burdens.
Scaled premium financing enables more generous benefits for initial generations.	Poor designs can have weak incentives for working & regressive benefits for higher income workers
Can compensate for risks of individual myopia, inappropriate planning, & financial market risks.	Central management can contribute to weak disclosure and accountability, poor service standards and weak investment returns.

B. Weighing the Advantages and Disadvantages of PAYG DB vs FDC Schemes (2)

Funded Defined Contribution Schemes

Advantages	Disadvantages
Address population aging (compared to PAYG-DB)	Transitioning requires the payment of both current benefits and contributions on behalf of current workers resulting in a financing challenge for "transition costs"
Can improve benefits for retirees if returns after fees greater than wage growth.	Administrative costs of individual choice materially affect pension benefits.
Can insulate members from political risk - ensure that pension benefits are fully delivered	Requirements for sufficient enabling conditions - fiscal conditions; depth, breadth and contestability of financial markets; regulation and supervision of financial markets & pension providers.
Eliminates a contingent fiscal obligation to make good on pension claims	Significant institutional requirements including information systems, regulation and supervision.
Strong incentives for work and contributions (benefits linked to contributions and life expectancy).	
Incentives for strong investment and account manage-ment through consumer choice & regulation.	Subjects participants to financial market risk yet under a mandatory regime. Regulators need to oversee investment choices of members
Can assist in achieving secondary objectives of labor market efficiency and financial market development	

B. Weighting the Advantages & Disadvantages of PAYG DB & FDC Schemes (3)

Hybrid approach of 1st & 2nd pillars can diversify risks

Well designed PAYG DB schemes & NDC schemes can

- align contributions & benefits (long-term)
- ensure appropriate indexation
- ensure long-term sustainability
- establish automatic adjustment mechanisms.

PAYG schemes still

- Require buffer funds & pre-funding (aging + ensure payment in the face of shocks)
- Still face challenges of adequacy in the face of aging

And FDC components still pose challenges.

CLICKER QUESTION

What are key considerations in considering an FDC schemes to replace PAYB schemes?

A. Ability of pension system or treasury to finance transition costs
B. Enabling conditions including fiscal, financial markets, regulatory and supervisory capacity.
C. Credibility of existing PAYG scheme
D. Inherited system, country needs, objectives.
E. All of the above.
F. Other

C. Voluntary Occupational & Individual Schemes – Policy Considerations

Occupational schemes - important for formal sector employees –

- compensate design rigidities of other schemes
- enables deferred compensation which supports investments in human capital

Individual schemes - important role for middle and upper income self-employed

- Both entail financial and agency risks resulting from private pension management
- Strong regulation essential
- Tax incentives requires income limitations.

C. Occupational Schemes for Civil Servants – Policy Considerations

- ***Harmonization & integration*** w/national schemes for labor mobility - portability losses and labor market effects
- ***Fiscal cost***. Tension between deferred compensation for non-wage benefits & other fiscal priorities. *Consider in context of compensation review*.
- ***Final pay schemes*** - weak incentives & higher effective income replacement for the highest paid workers.
- ***Weak/discretionary indexation*** leaves retirees insufficiently protected.
- ***Technical issues*** – commutation, annuity factors, wage base.

D. Institutional Issues

	Administrative Infrastructure and Institutional Arrangements	Governance and Accountability	Legal and Regulatory	Supervision
Non-contributory pensions or old age assistance	• Unique identification • Means-testing infrastructure • Application and eligibility certification • Record-keeping and data management • Disbursement mechanisms	• Rules, roles and controls. • Transparent disclosure • Complaint redress		• External audit and evaluation • Periodic independent assessment • M&E evaluation processes
1st Pillar Mandatory Defined-benefit scheme	• Unique ID • Record-keeping and data management • Funds management infrastructure and governance • Contribution and disbursement mechanisms + payment systems.	Above + Governing body & policies for managing institutions	Legal framework specifying the rights & resp. of contributors, beneficiaries, employers, agents, managers etc.	• External oversight of managing institution useful. • External audit and accountability processes.
2nd Pillar funded defined benefit scheme	Administrative systems + infrastructure for competitive individual choice of fund managers & custodians	• Governance policies & oversight to address principle-agent issues • Accounting, audit and valuation infrastructure. • Depth, breadth and contestability for pension fund	"	Competent, empowered & independent pension supervisory authority authorizing & supervising all necessary agents, instruments and processes.

E. Combining Multi-Pillar Design Options (1)

Multi-pillared pension systems - ***elements with varying risk characteristics***.

Portfolio approach can accommodate the diversity of societal needs and economic characteristics. Multiple instruments can optimize desired individual and societal benefits while minimizing relative risks.

Mix of instruments (& pillars) depends upon:

- Objectives (income replacement & poverty protection)
- Inherited policies and institutions
- Environmental conditions (demographic, fiscal, admin systems, financial markets)
- Policy choices who bears what risks

E. Combining Multi-Pillar Design Options

- Earnings-related 1st & 2nd pillar schemes most effective for formal sector wage-based workers
- Occupational schemes (3rd pillars) generally cover established firms & often the least poorest workers
- Individual schemes (3rd pillars) for workers of all incomes (formal & informal) though often only cover workers with relatively high and/or stable incomes.
- Non-contributory schemes (Zero pillars) generally aim to assist at least the poorest elderly.

Conclusions

Diagnostic assessment – existing programs, reform needs & reform scenarios based on:

- Coverage
- Adequacy
- Sustainability

Simulation and modeling tools are employed to ensure an evidence base for policy evaluation including ADEPT, PROST and APEX; comparative data is also reviewed.

Menu of mandatory and voluntary instruments - appropriate to needs and enabling conditions.

Elderly social assistance – can address gaps in coverage but needs to be considered against other needy populations.