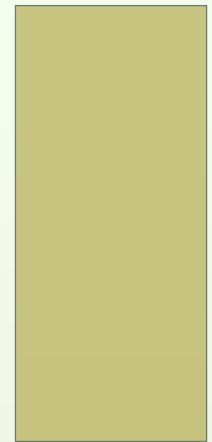


# **PENSIONS CORE COURSE SUMMARY & APPLICATION OF TOOLS**

WORLD BANK CORE COURSE ON PENSION REFORM  
WASHINGTON, D.C., MARCH 2014



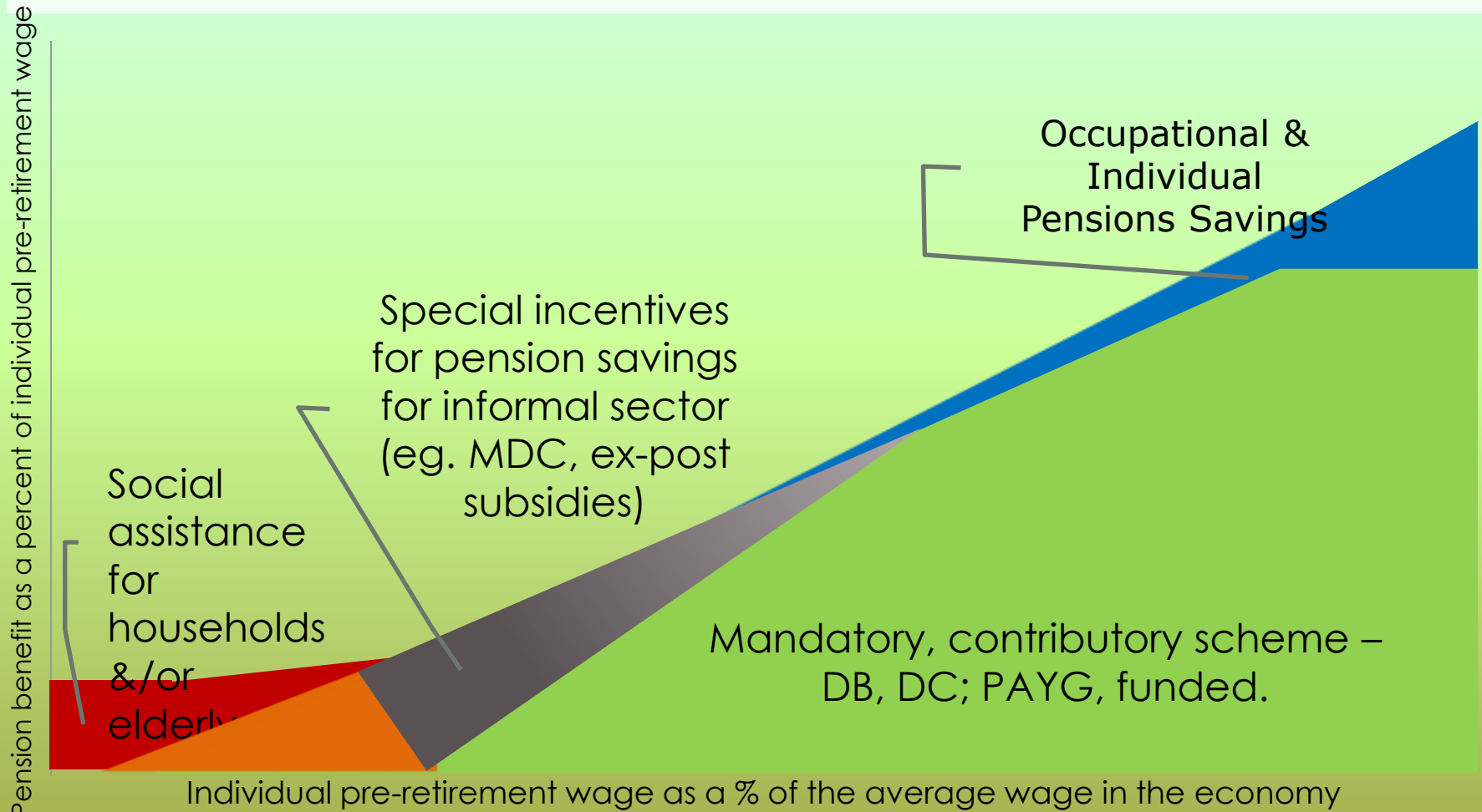
# REVIEW

PENSIONS CORE COURSE

# REVIEW

- Conceptual Framework
  - 5 Pillar typology
  - Social assistance vs. social pensions
  - DB vs. DC 1<sup>st</sup> & 2<sup>nd</sup> Pillars
  - Occupational & Individual schemes
- Unique ID & Administrative Systems
- Regional challenges and trends
  - Inverting Pyramid = Central and Eastern Europe
  - Sub-Saharan Africa – Coverage & design needs
  - Latin America & Caribbean – Coverage & beyond pensions

# STYLISTIC ILLUSTRATION OF POSSIBLE MULTI-PILLAR DESIGN



# REVIEW (CONT.)

- Tools
  - PROST
  - Adept
  - APEX
  - Comparative data
- Investment Management/governance/  
accounting/ financial reporting
- Regulation & supervision
- Civil service pensions
- Alternative perspectives

# USING DIAGNOSTIC TOOLS – THE BULGARIA CASE

PENSIONS CORE COURSE

# ENVIRONMENT AND DESIGN FEATURES

- **Demographic environment**
  - Old-age dependency ratio set to double by 2060; accelerated by steady net emigration
  - Low and protracted fertility rates well below replacement.
- **Economic environment**
  - High labor force participation both men and women
  - Low labor force participation among youth and older workers above age of 55
- **Pillar 0**
  - Objective: **poverty prevention**
  - Eligibility: age 70 (legislated)
  - Benefit level: 110/136 leva (20% of avg. monthly salary)
- **Pillar I**
  - Objective: **income replacement (w/progressivity)**
    - Old age
      - Eligibility: Age 65m/63f, LOS 40m/37f years; Benefit level: 289 leva (42.2% of avg. monthly salary)
    - Disability and Survivor
      - Eligibility and benefit level depends on degree of disability, years of contribution, age
- **Pillars II and III**
  - Objective: **savings for income replacement**
  - Benefit level: based on accumulated savings

# REFORMED PAYG DESIGN

- Contribution Rate
  - Non-switchers: 17.8% to Pillar I
  - Switchers: 12.8% (Pillar I) and 5% (Pillar II)
  - Government: 12% of insured income
- Eligibility conditions
  - Age: 65m/63f
  - Service: 40m/37f years
  - No early retirement
- Eligibility conditions for a minimum contributory pension
  - Age 67 with 15 years of contributions
  - Around 20% of average insured wage
- Old age pension amount dependent on:
  - Accrual rate (1.2% and 4% for deferred pension)
  - Lifetime wages & valorization
- Indexation to inflation

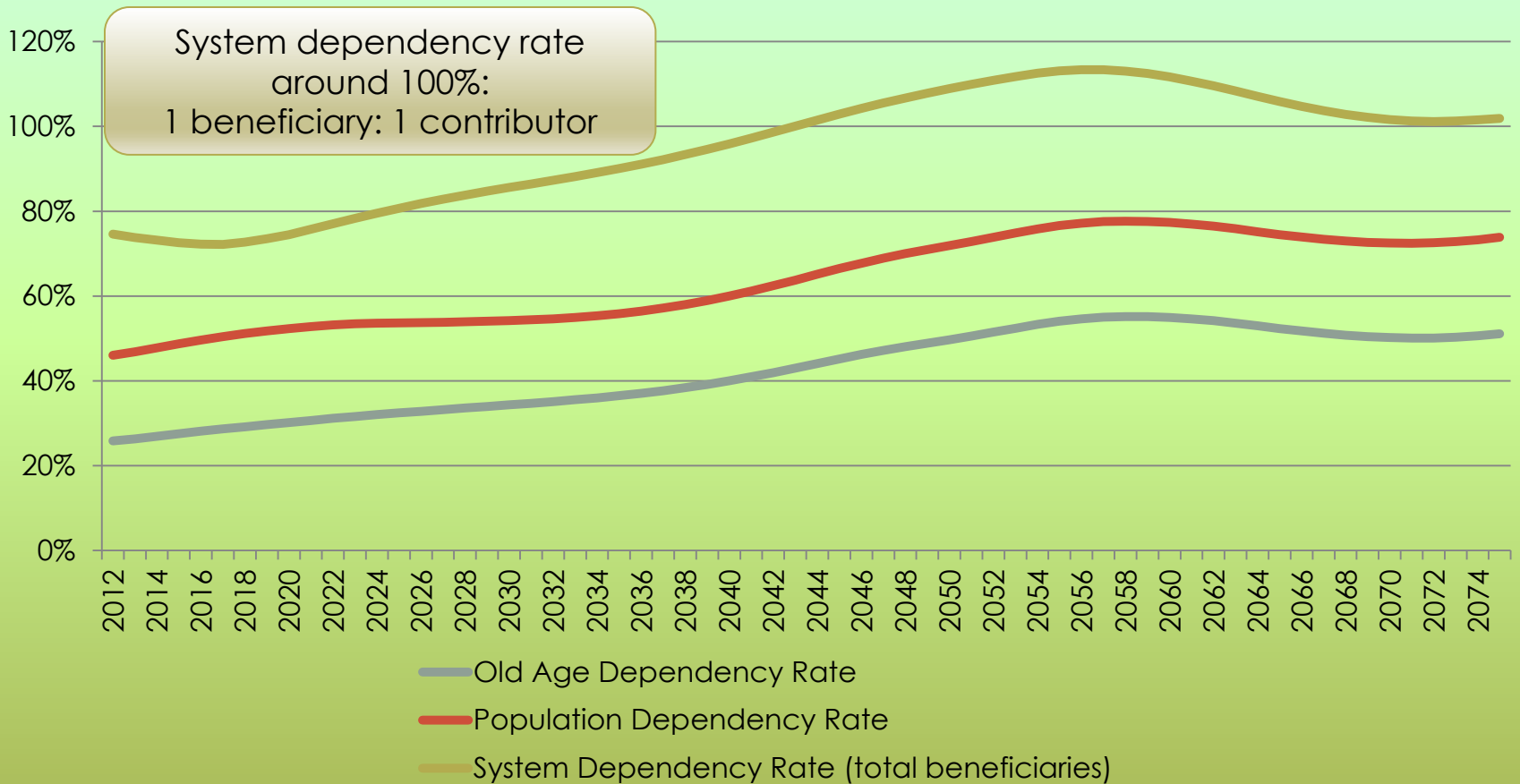


# DEMOGRAPHIC TRENDS

## PROST Population Pyramid

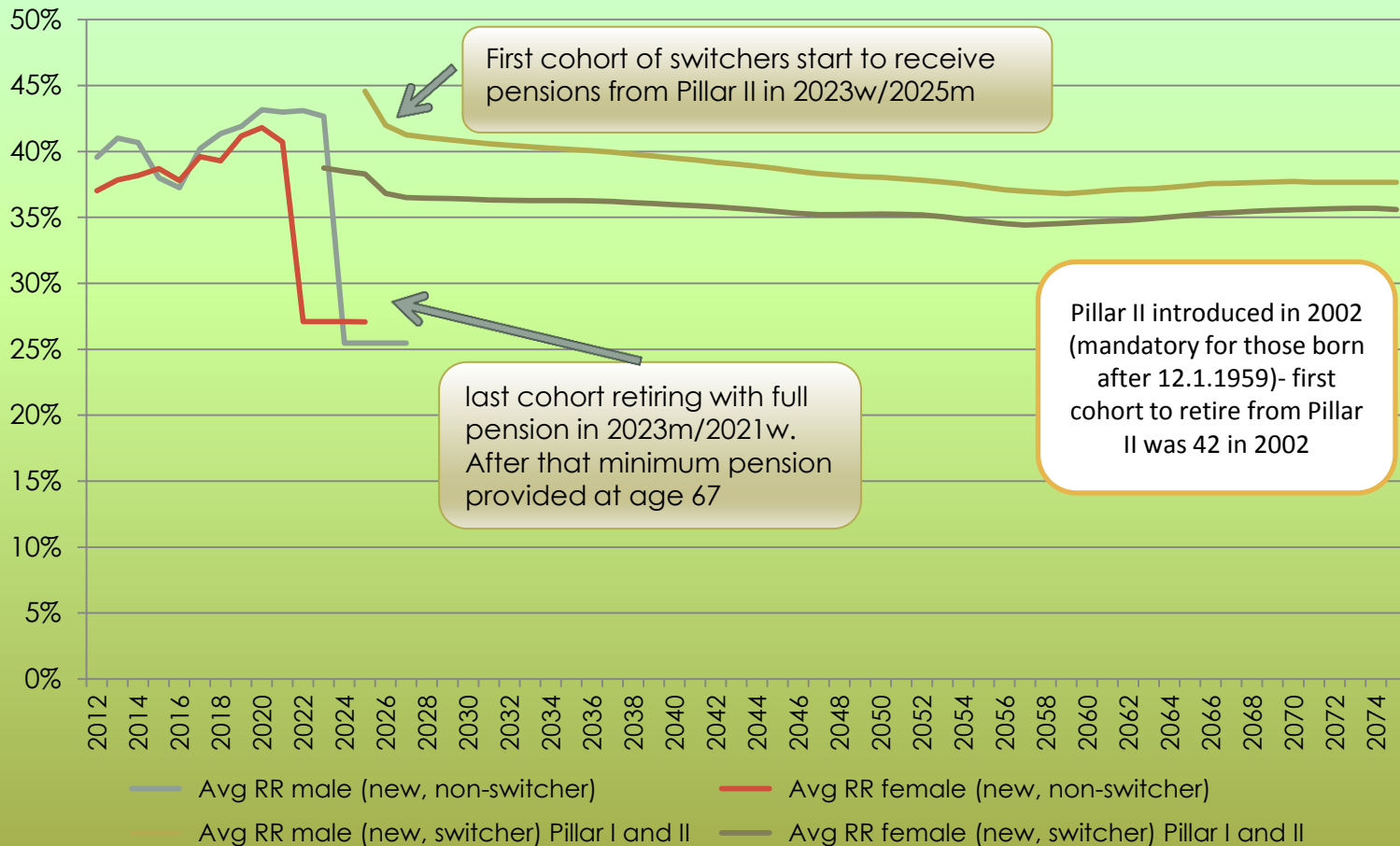


# WORSENING DEPENDENCY RATES

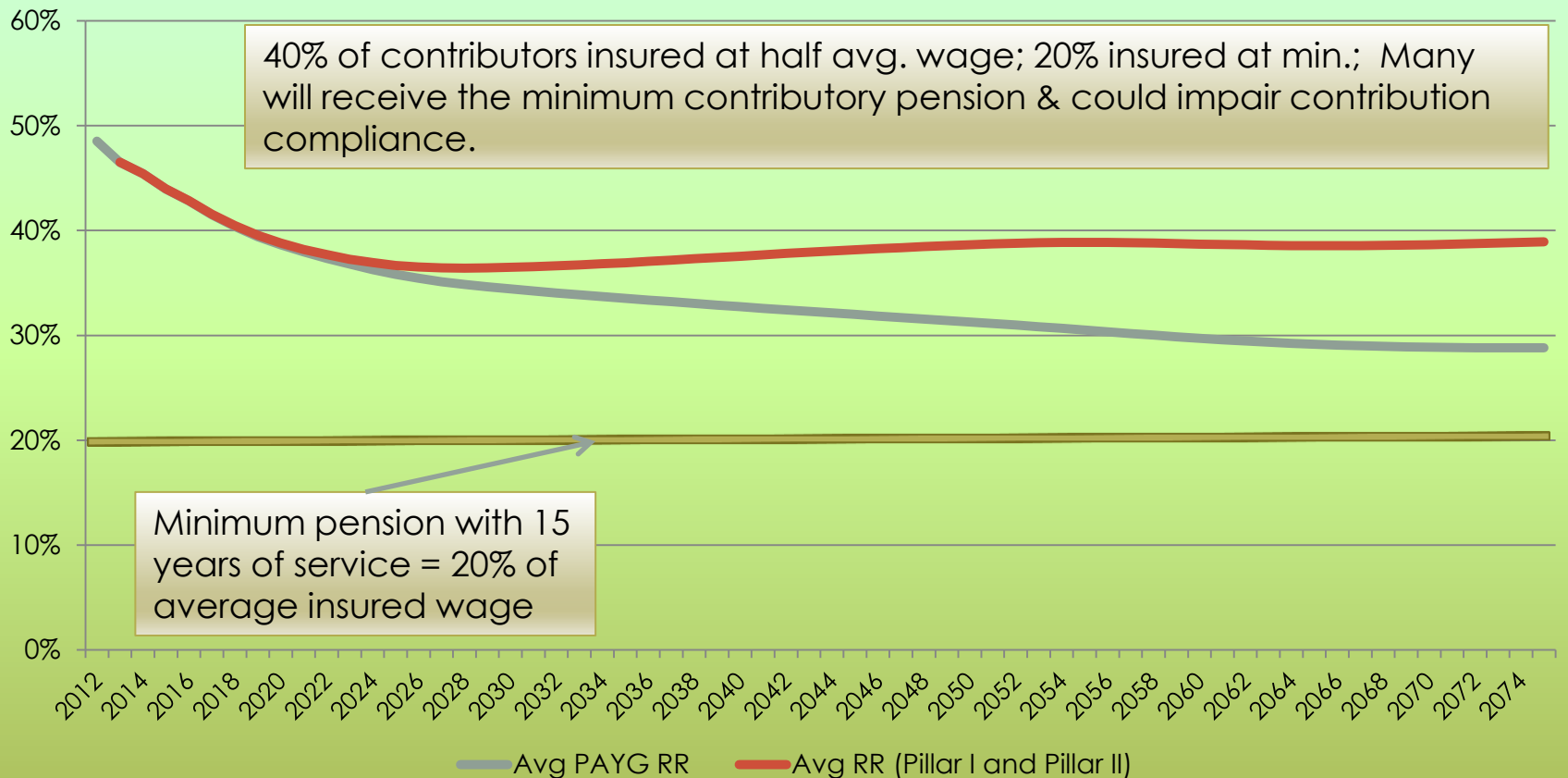


12.8% PAYG contribution rate could only afford to pay 12% PAYG replacement rate

# PROJECTED AVERAGE REPLACEMENT RATE FOR A NEW OLD AGE PENSIONER

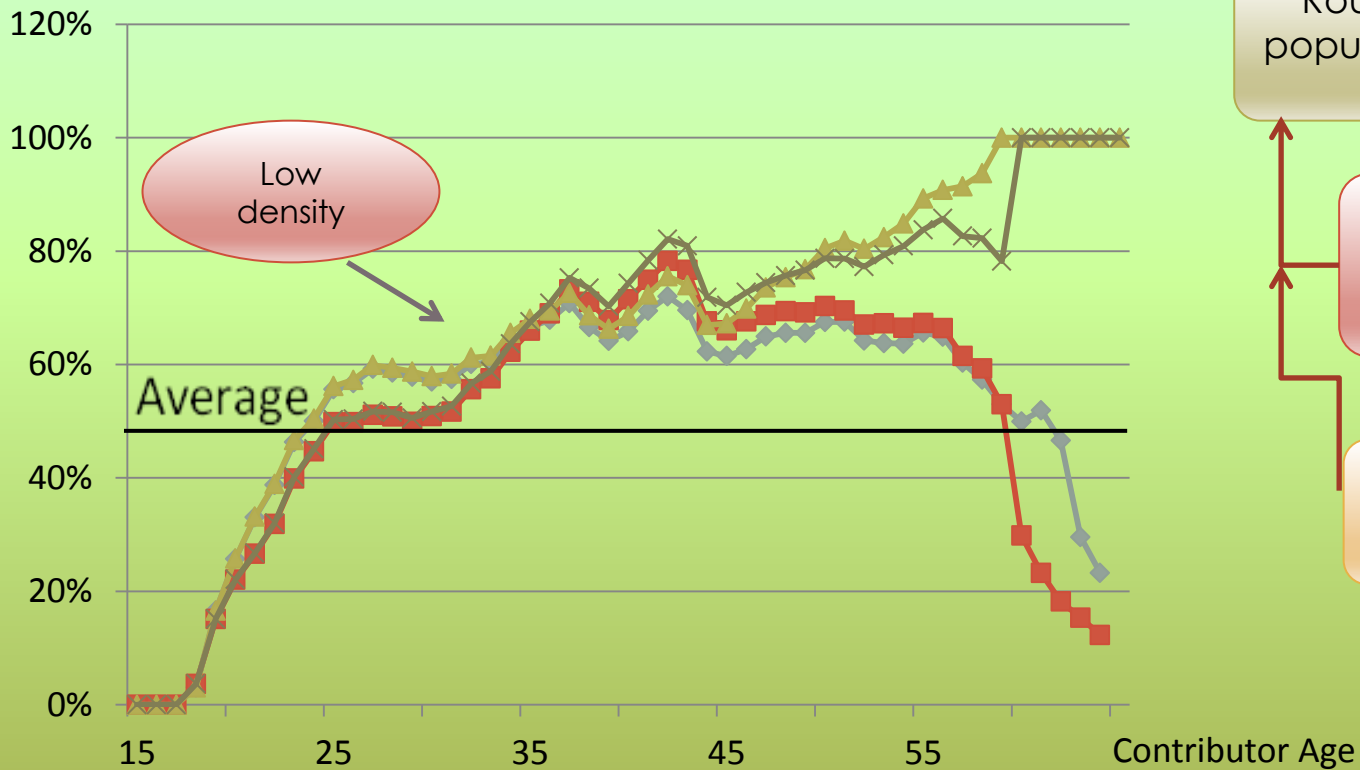


# PROJECTED AVERAGE REPLACEMENT RATE FOR AN EXISTING OLD AGE PENSIONER



Funded Pillar Replacement Rate: Assuming real interest earned on individual account is 3 percent annually.

# COVERAGE OF THE WORKING AGE POPULATION



Roughly 55% of WA population contributed in 2011

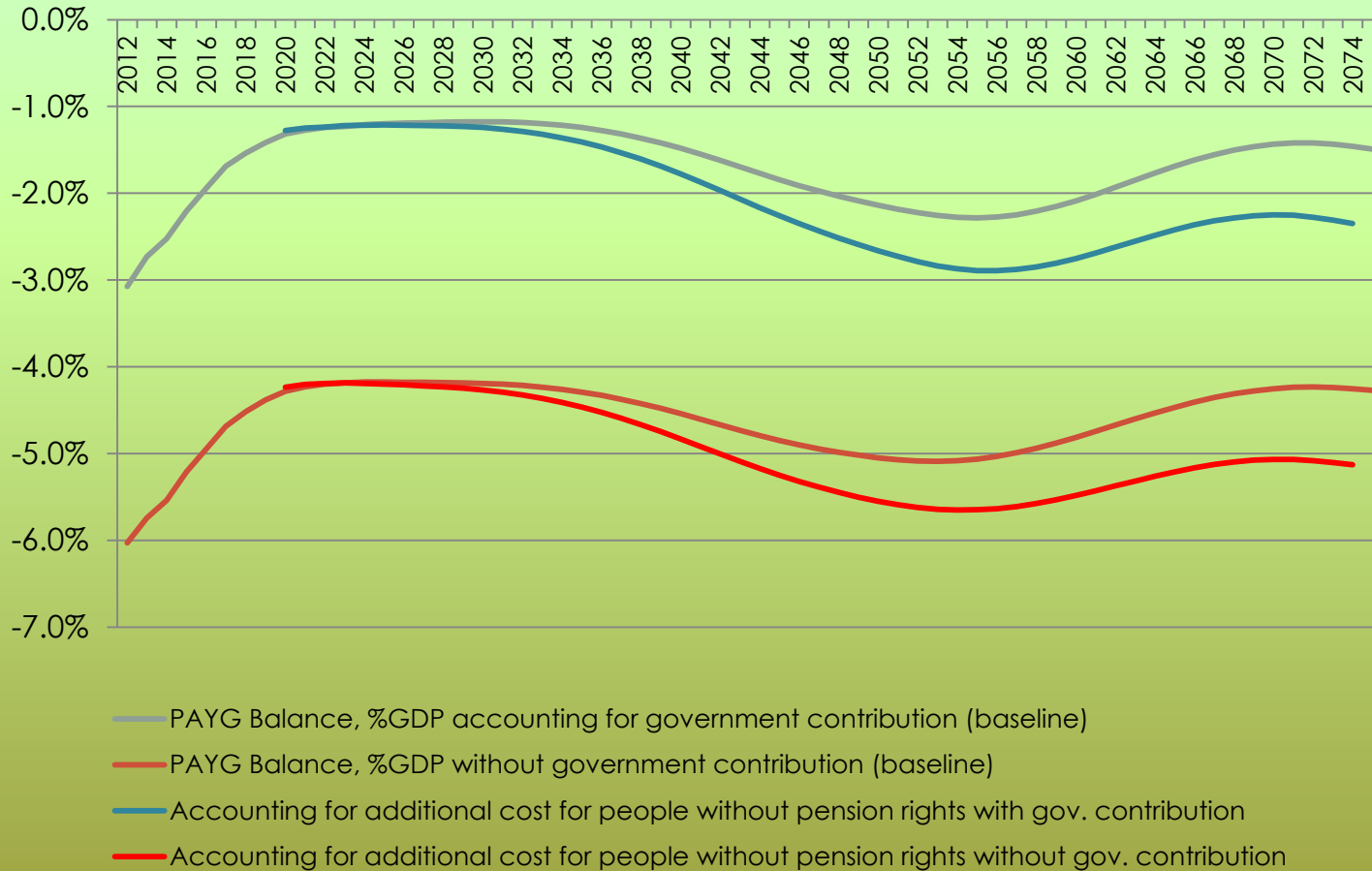
Movement between formal and informal employment

High rates of youth unemployment

—◆— male contributors —■— female contributors —▲— male beneficiaries added —×— female beneficiaries added

# PROJECTED ANNUAL CURRENT BALANCE, % GDP

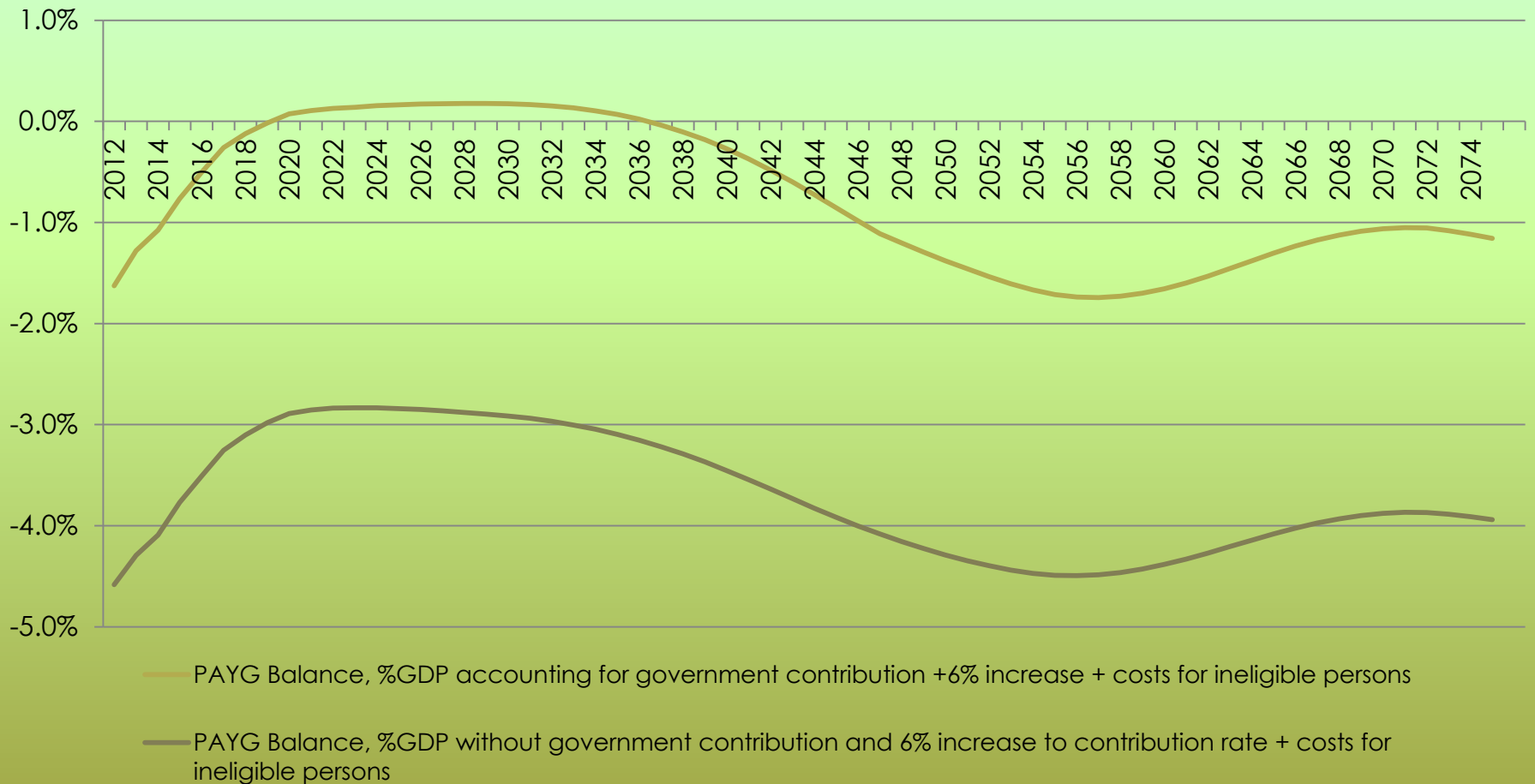
**Projected PAYG Deficit, % GDP**



Graph on the left shows the projected deficit with and without the estimated additional cost of financing social pensions for people without rights to the pension system

# OPTION TO INCREASE THE CONTRIBUTION RATE

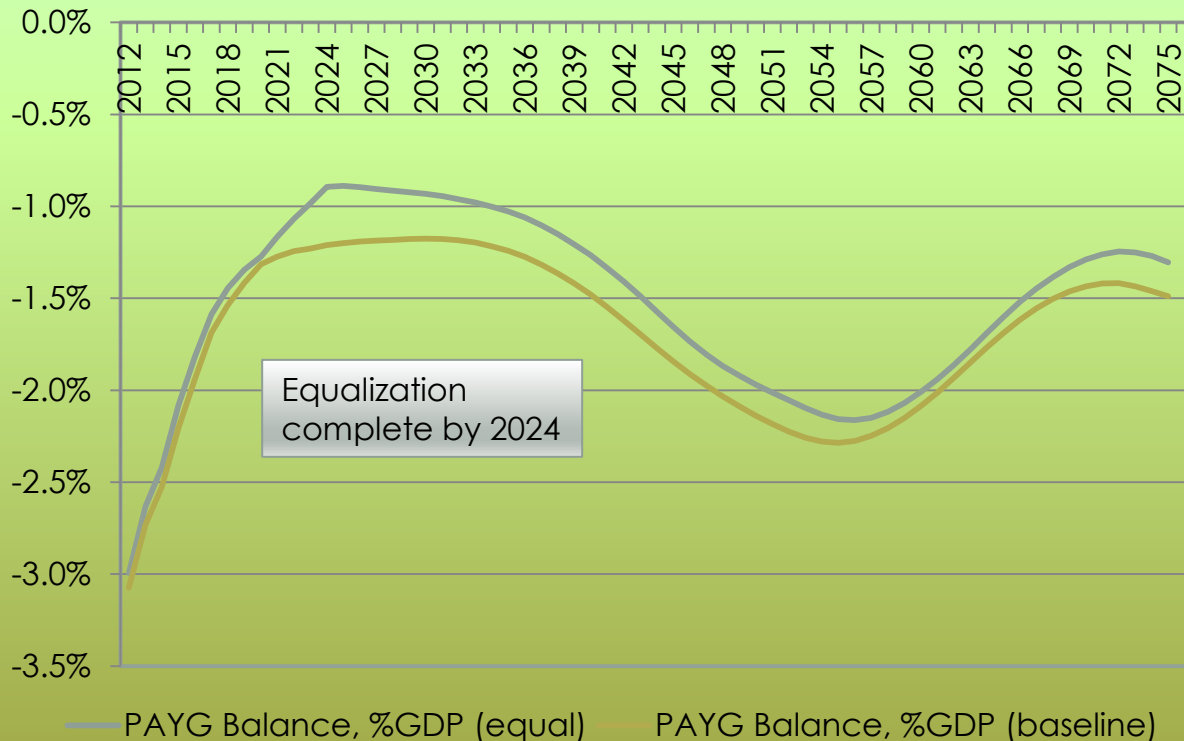
An increase of 6 percentage points improves the fiscal state



# EQUALIZATION OF RETIREMENT AGES BETWEEN MEN AND WOMEN AT 65

Projected fiscal savings (2024-2050) of about 0.3 percent of GDP (accounting for roughly 20 percent of the system's deficit)

PAYG Balance, % GDP: baseline vs. reform



Why the savings are not even greater: Currently the actual difference in effective retirement ages between men and women is smaller than the gap in official retirement ages

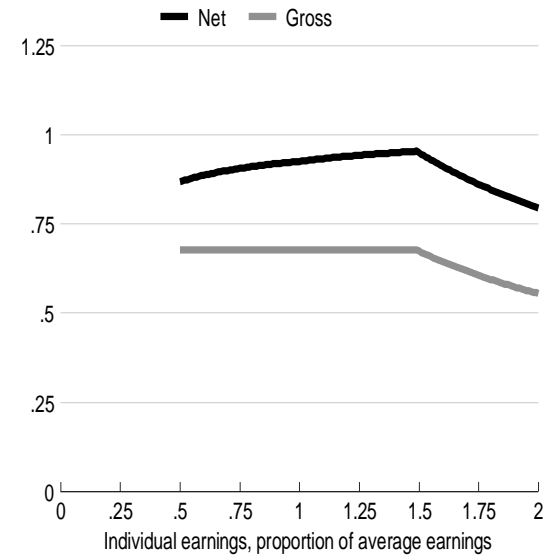
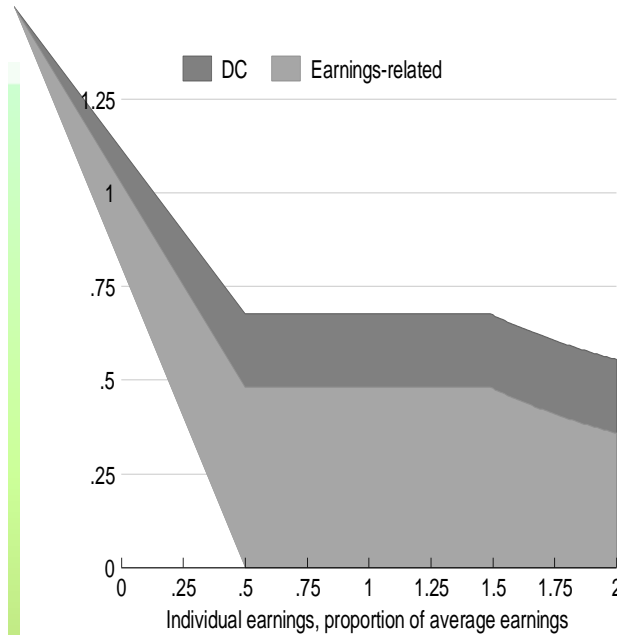
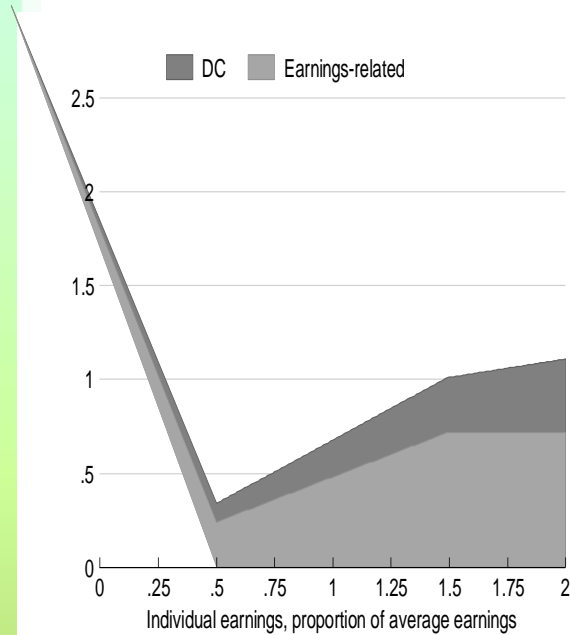
Women tend to work until later ages in order to meet the length of service requirement (lower contribution density due to more career breaks, especially due to having children)

On top of that, more men retire before the official pension age because mostly men work under labor categories I and II (dangerous occupations, military, police, etc.) where retirement ages can be lower



# PENSION ENTITLEMENTS

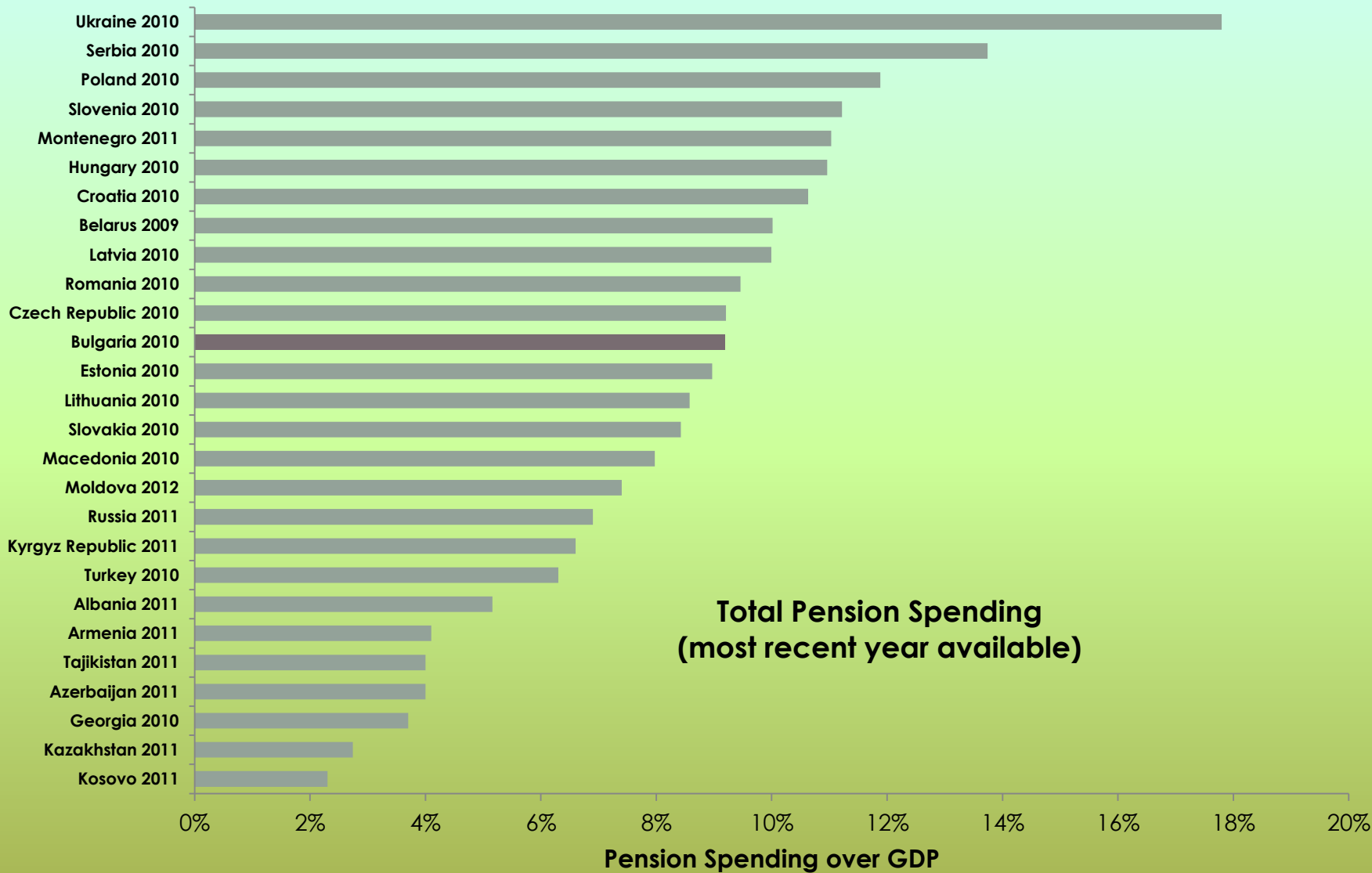
## ➤ Two tiers of pension system in Bulgaria

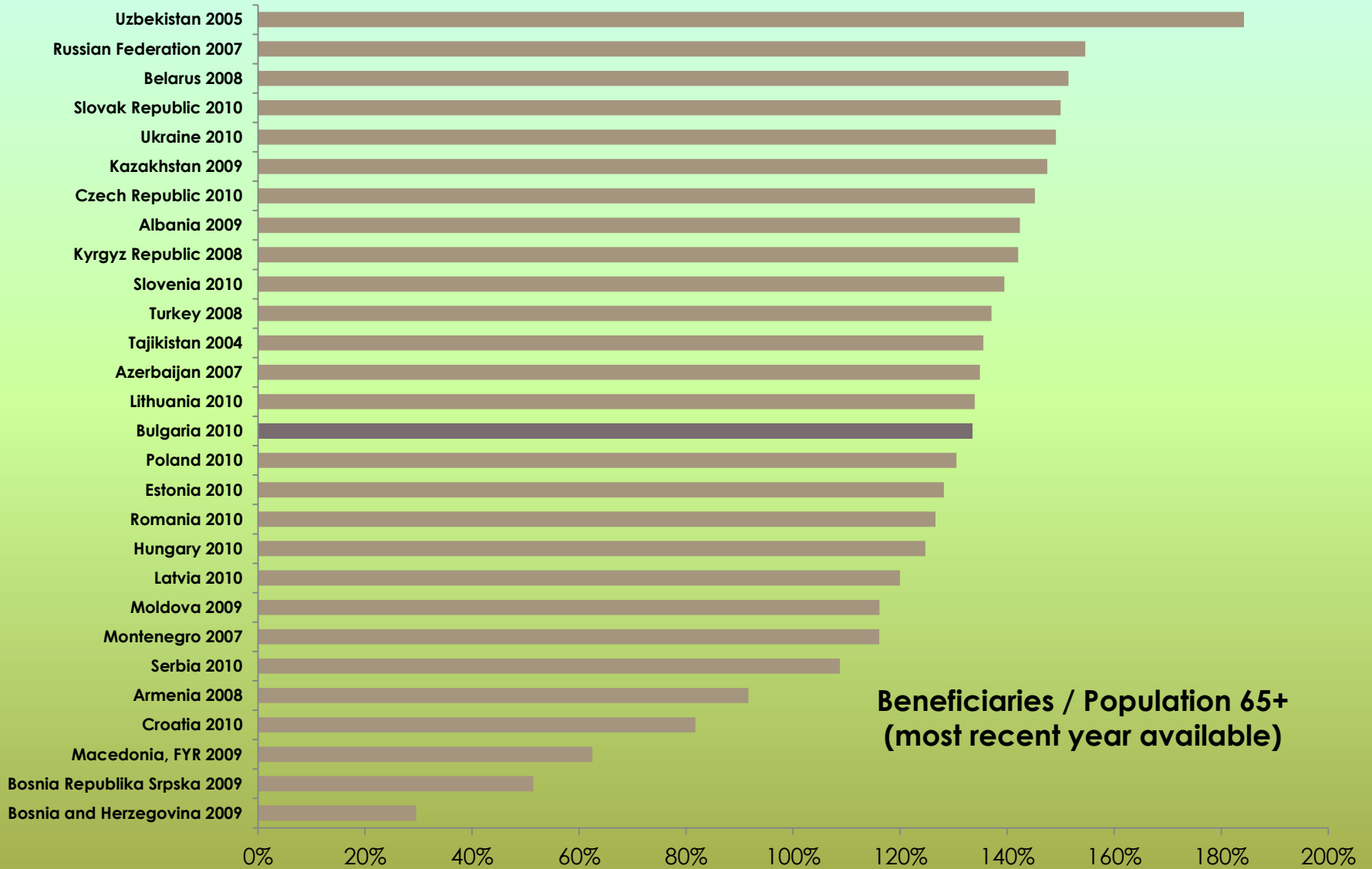


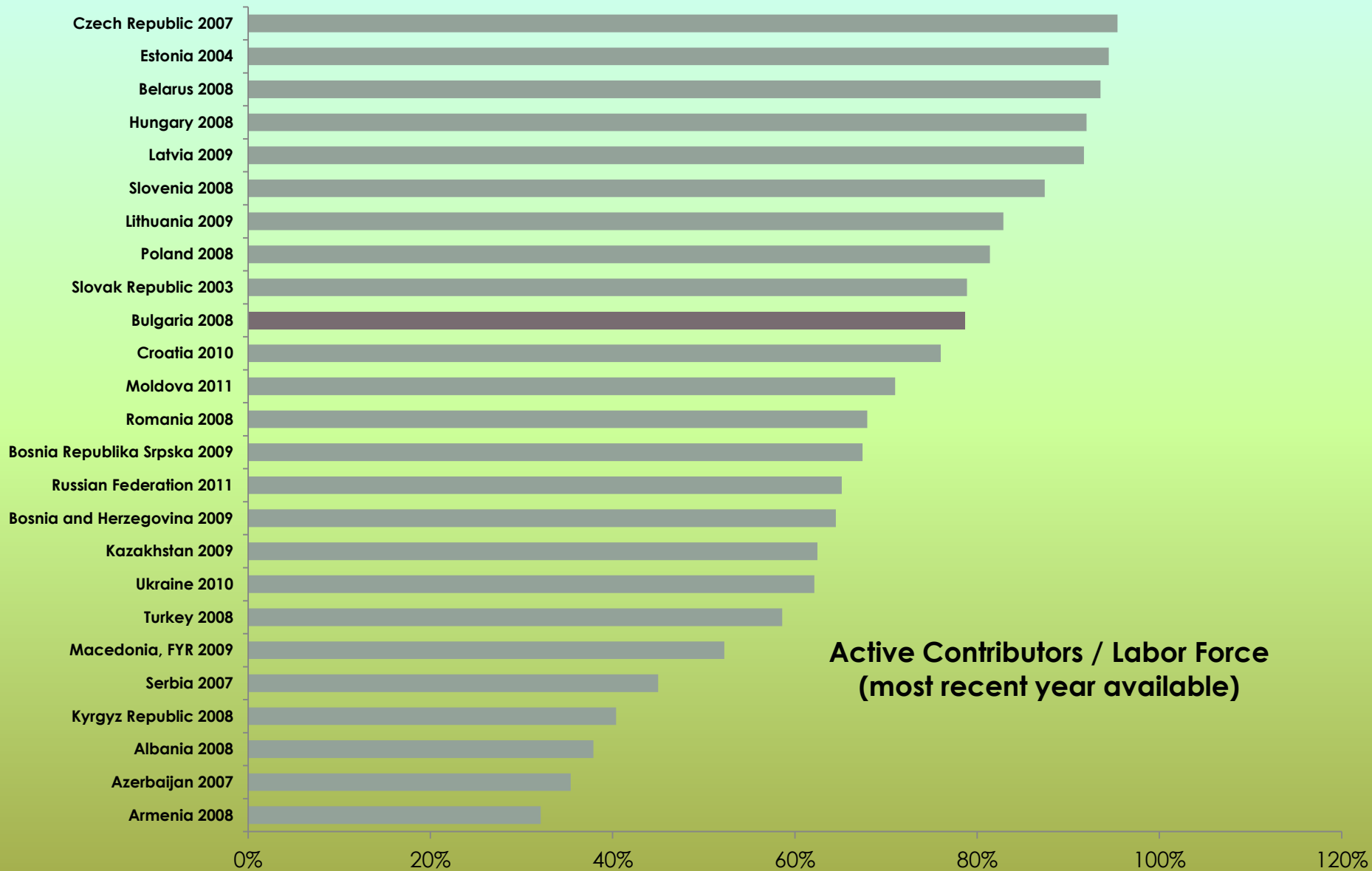
	Individual earnings, multiple of average				
	0.5	0.75	1.0	1.5	2.0
Gross pension level (% of average earnings)	33.8	50.7	67.6	101	110.8
Gross replacement rate (% of individual earnings)	67.6	67.6	67.6	67.3	55.4
Gross pension wealth, male (multiple of average earnings)	9.1	9.1	9.1	9.1	7.5

# ILLUSTRATIVE COMPARATIVE DATA

PENSIONS CORE COURSE







# ADEPT - HHS DATA

PENSIONS CORE COURSE

## Average Transfer Value - Targeting

**Table 3\_2 : Average Transfer Value, Per Capita**

*All households*

	<b>Total</b>	<b>XP</b>	<b>MP</b>	<b>NP</b>
All social protection	48.3	44.6	67.7	47.3
All social insurance	43.4	32.2	59.1	43.0
Old age pension	37.4	26.4	50.2	37.2
Disability pension/allowance	4.7	4.6	6.6	4.6
Survivorship pension	1.3	1.2	2.2	1.2
All labor market programs	0.4	0.4	0.3	0.4
Unemployment benefit	0.4	0.4	0.3	0.4
All social assistance	4.5	12.0	8.3	3.9
Social assistance	0.2	0.4	0.6	0.1
Child allowance, up to 2 yo	1.6	2.5	1.9	1.5
Other family allowances	0.2	0.0	0.2	0.2
Monthly child allowance	1.3	2.4	1.7	1.2
Heating allowance	0.3	1.8	1.4	0.2
Guaranteed minimum income	0.7	4.8	2.5	0.3
Other sa benefits	0.3	0.1	0.1	0.3
All remittances	6.1	1.0	2.4	6.6
Remittances	6.1	1.0	2.4	6.6



# Coverage

**Table 5\_3 : Coverage**

	<b>Total</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
<b>Direct and indirect beneficiaries</b>						
All social protection	70.5	88.6	81.8	73.0	62.2	47.2
All social insurance	54.5	68.8	65.9	60.2	45.4	32.1
Old age pension	46.5	59.3	57.4	50.5	39.6	25.8
Disability pension/allowance	16.2	22.3	19.6	18.1	11.6	9.5
Survivorship pension	8.5	10.2	9.4	9.3	7.8	5.9
All labor market programs	2.2	1.6	3.1	2.5	2.7	1.4
Unemployment benefit	2.2	1.6	3.1	2.5	2.7	1.4
All social assistance	27.5	39.0	29.4	23.6	25.9	19.6
Social assistance	0.7	2.3	0.6	0.0	0.3	0.3
Child allowance, up to 2 yo	5.9	8.5	7.3	3.6	6.3	3.9
Other family allowances	0.8	0.6	0.6	1.2	1.1	0.5
Monthly child allowance	20.7	24.2	21.2	18.8	22.3	16.8
Heating allowance	4.2	15.7	2.7	1.7	0.4	0.3
Guaranteed minimum income	3.8	12.6	4.5	0.8	0.5	0.5
Other sa benefits	1.8	2.3	2.2	2.0	1.7	0.8
All remittances	4.3	3.4	4.9	3.1	4.4	5.6
Remittances	4.3	3.4	4.9	3.1	4.4	5.6

# Generosity

**Table 9\_3 : Generosity**

*Direct and indirect beneficiaries*

	<b>Total</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
All social protection	29.5	62.9	41.2	29.5	20.5	11.6
All social insurance	33.8	66.2	45.2	32.5	24.3	14.2
Old age pension	34.0	64.8	44.4	33.1	24.0	14.6
Disability pension/allowance	12.9	22.9	16.7	12.4	10.3	6.3
Survivorship pension	5.9	11.9	8.2	6.0	3.7	3.1
All labor market programs	8.2	24.3	12.6	6.2	5.2	5.1
Unemployment benefit	8.2	24.3	12.6	6.2	5.2	5.1
All social assistance	7.8	20.1	9.9	6.4	5.6	3.7
Social assistance	14.0	19.4	11.7	9.6	10.3	9.1
Child allowance, up to 2 yo	13.6	27.0	15.3	16.1	11.5	8.1
Other family allowances	11.7	23.8	21.5	10.6	8.1	8.8
Monthly child allowance	3.0	7.8	3.6	3.1	2.3	1.6
Heating allowance	5.5	7.0	5.1	2.3	3.5	1.3
Guaranteed minimum income	14.5	21.3	9.5	15.0	2.7	8.3
Other sa benefits	6.2	9.4	13.3	3.6	3.7	0.9
All remittances	51.5	56.6	55.3	51.2	34.0	57.1
Remittances	51.5	56.6	55.3	51.2	34.0	57.1

Notes:

Generosity is the mean value of the share transfer amount received by all beneficiaries in a group as a share of total welfare aggregate of the beneficiaries in that group.

# SIMULATED POVERTY IMPACT (% POOR)

	Reduction in % Poor		
	Poverty Rate After pensions income	Poverty Rate with no pension income	Poverty Reduction with Pensions Income
<u>Individual level</u>			
Population	50.8%	58.8%	8.0%
Youth (0-14)	62.0%	66.5%	4.6%
Working Age (15-60)	47.2%	52.5%	5.3%
Elderly (60+)	35.0%	76.1%	41.1%
Elderly (60-74)	35.6%	73.8%	38.2%
Elderly (75+)	33.3%	82.8%	49.5%
Non-Elderly (0-59)	52.2%	57.2%	5.1%
<u>Household level</u>			
Elderly-only households	4.1%	85.1%	81.0%
Some elderly households	48.2%	72.8%	24.7%
Non-Elderly Households	43.3%	45.5%	2.3%
Total	42.0%	53.2%	11.2%

# SUMMARY

- PROST pointed out beneficial impact of increasing retirement age & contribution rate. But system dependency rates severe and will worsen
- Problem of adequacy, with low income replacement yet little room to increase benefits. Elderly overage projected to contract => creating additional fiscal pressure
- Sustained low fertility will burden current and future generations.
- ADEPT HHS data highlighted importance of social assistance expenditures for families aimed to support growth in fertility.
- Pensions also found to have profound anti-poverty impact.
- Some SA expenditures could be better targeted.
- But much of such expenditures may be necessary in recent economic conditions.