

A fiscal outlook for Poland using Generational Accounts

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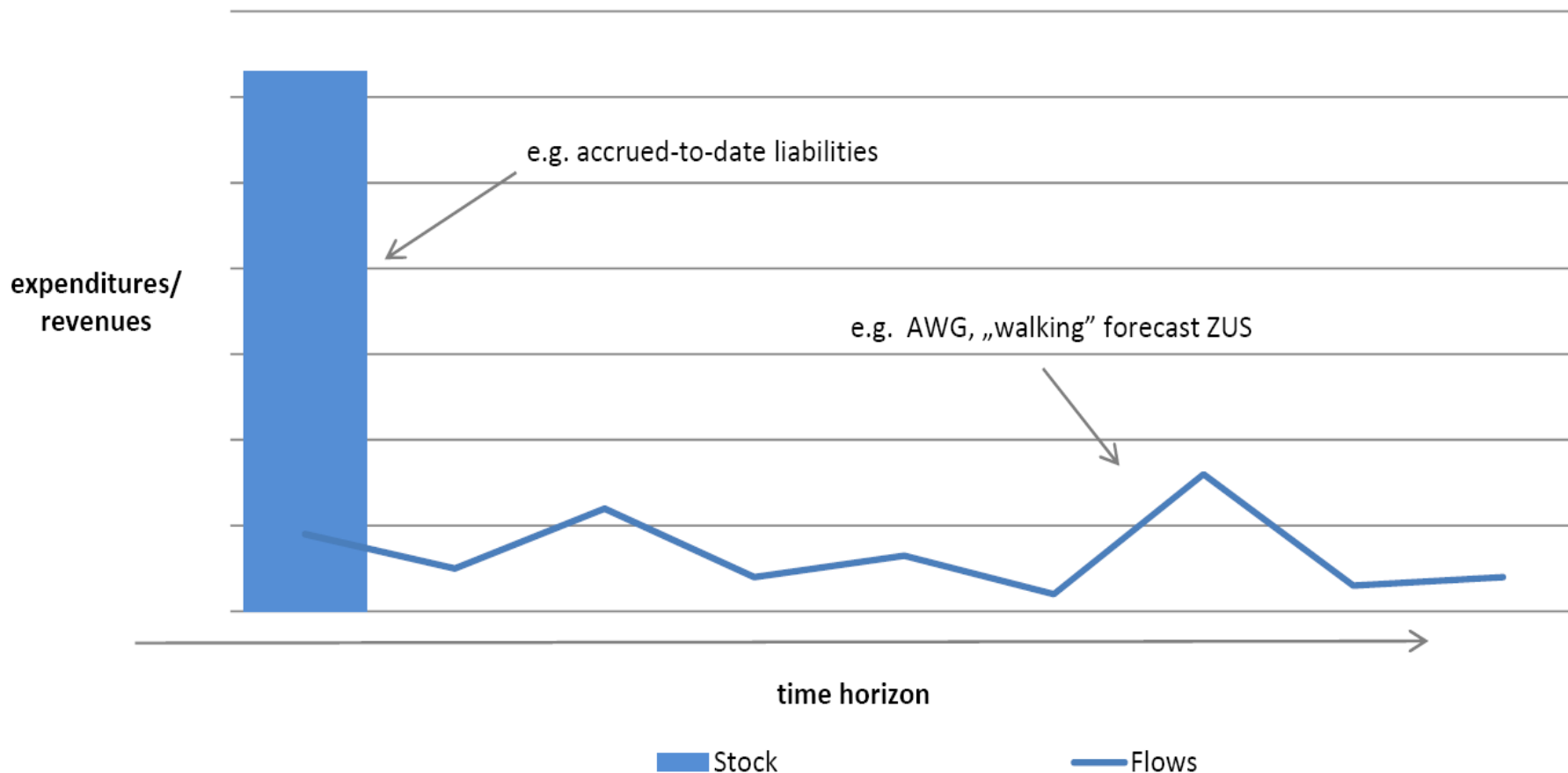


A fiscal outlook for Poland using Generational Accounts (and more ...)

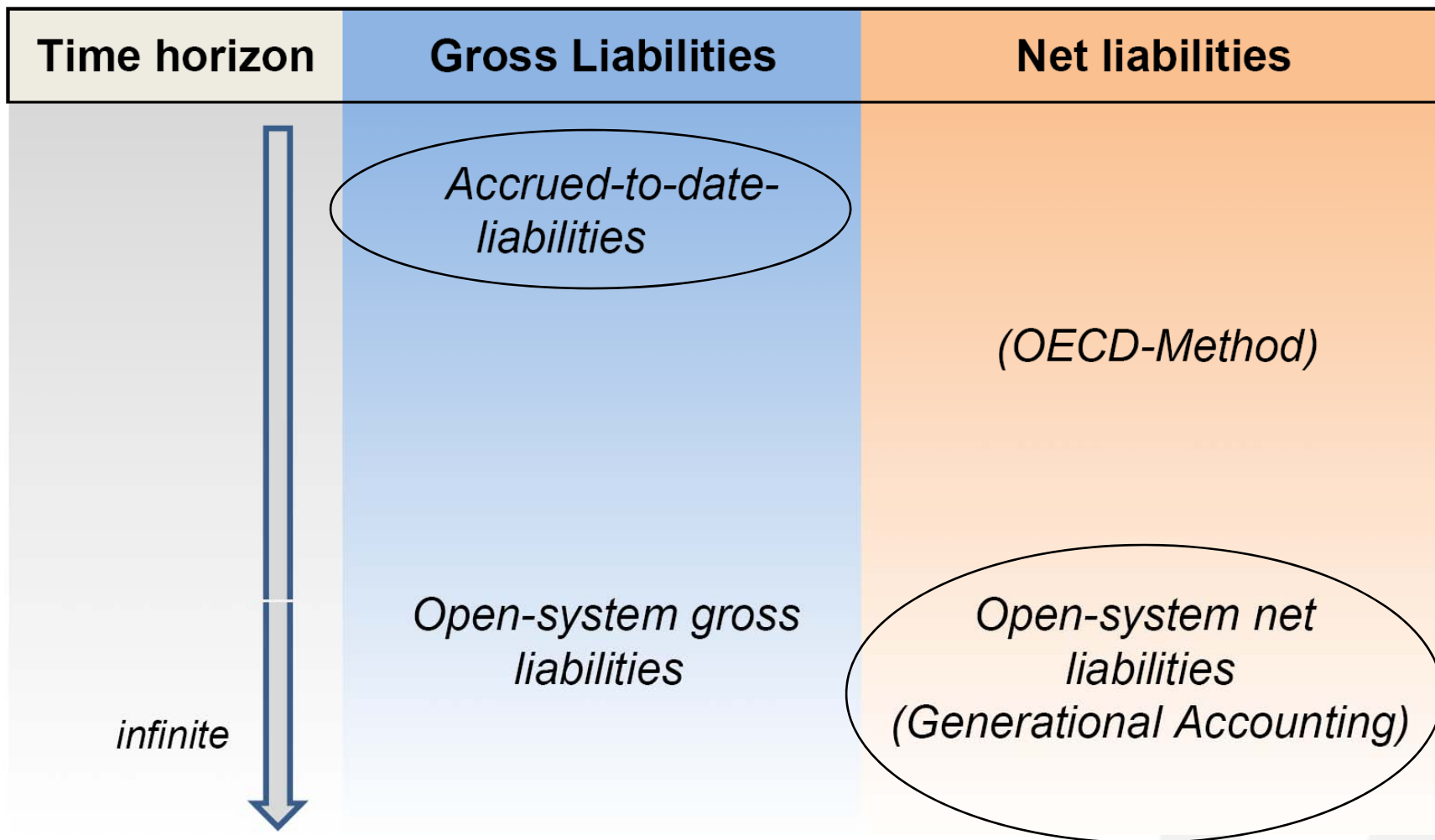
1. Scope of the fiscal projection
2. Modelling approach
3. Results and indicators
4. Conclusion and discussion



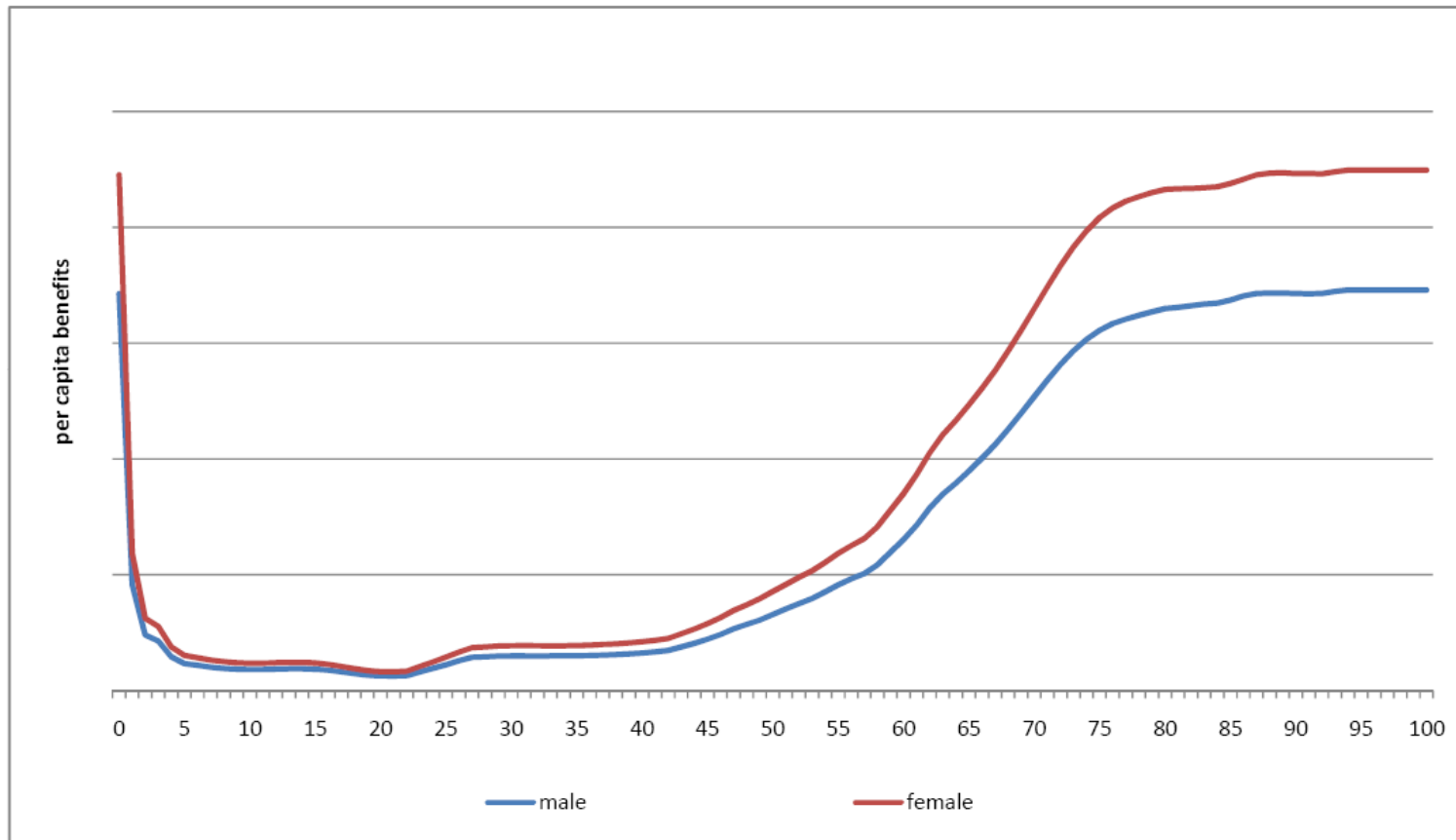
Stock and Flow Concepts



1. Scope of the fiscal projection – What is modelled ?



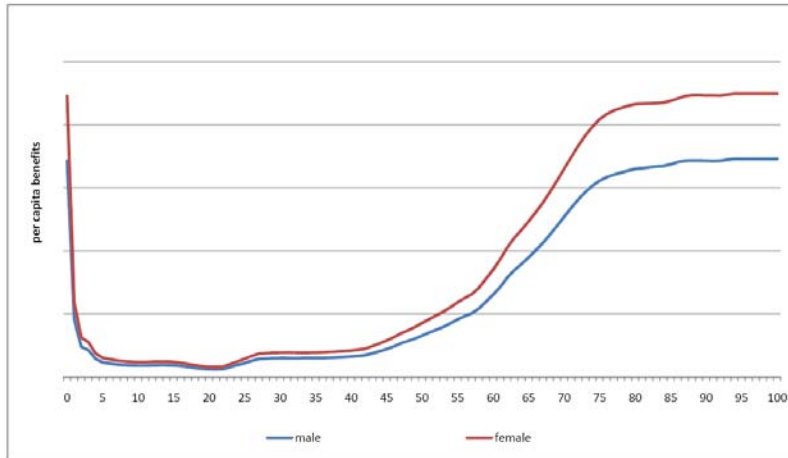
Step 1: Derive age- and gender-specific profiles from micro data



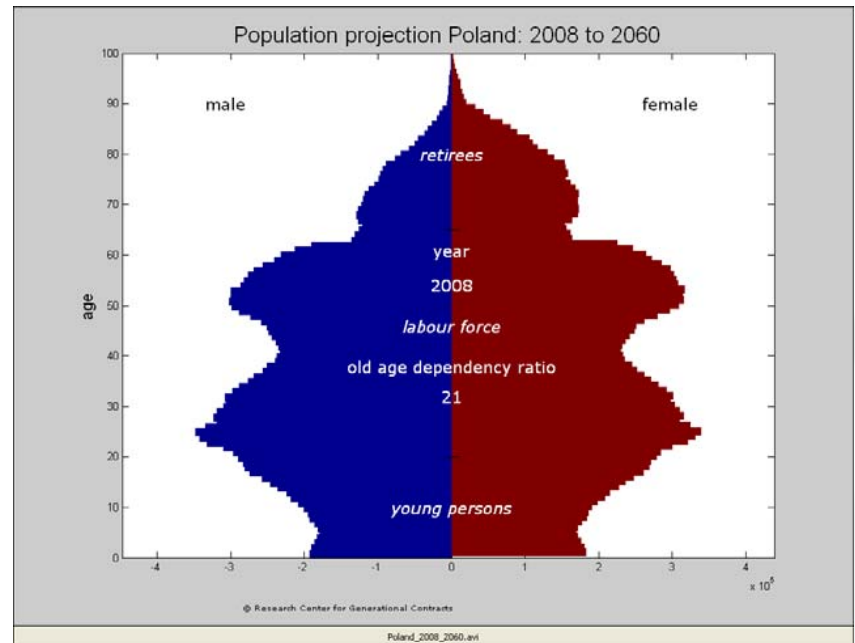
Profile for hospital treatment

Step 2: Combine age- and gender-specific profiles with the population structure

...weighted with cohort sizes



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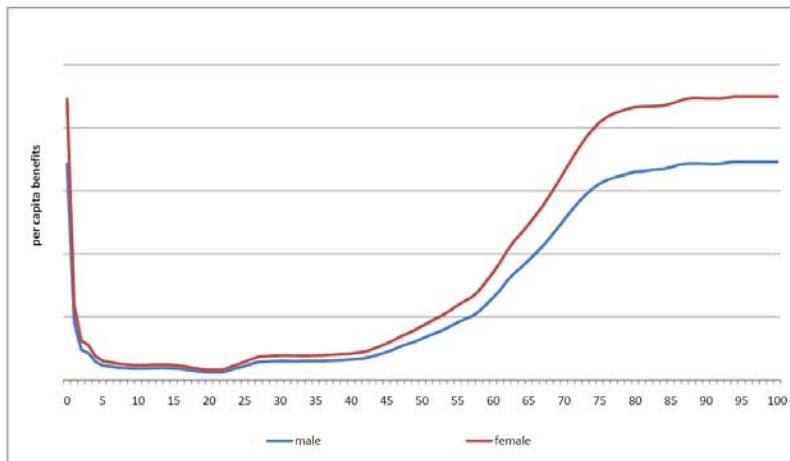


Step 3: Match micro and macro data

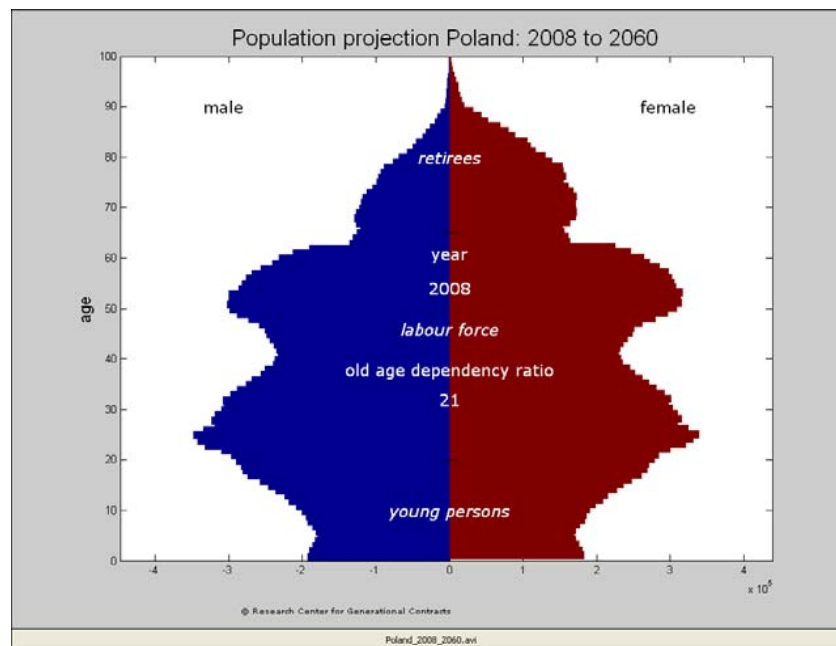
Aggregates (in bn. Zloty)	2007	2008
medical specialist services	3.1	3.8
basic medical health care	4.7	5.6
dentists' services	1.3	1.7
long-term home health care services	0.7	0.9
hospital treatment	18.6	22.8
Other NFZ expenditures	12.0	12.6
other healthcare expenditures	13.2	14.4
primary and secondary education	56.1	59.5
higher education	10.7	10.7
unemployment benefits	2.2	1.8
active forms of dealing with unemployment	2.7	3.2
...

Step 4: Project expenditures and revenues (I)

weighted with future cohort sizes ...



&



Step 4: Project expenditures and revenues (II)

Further issues to be considered	Examples
<i>growth assumptions</i>	growth of health care expenditures
<i>indexation rules</i>	pension indexation
<i>fiscal reforms</i>	partial abolishment of disability pensions, time-varying ZUS-contribution rates
...	...

*Building a **new pension model** to reflect the profound pension reform of 1999 ...*

*from standard **profile approach** → **probability approach** (incl. NDC accounts)*

Contributions

&

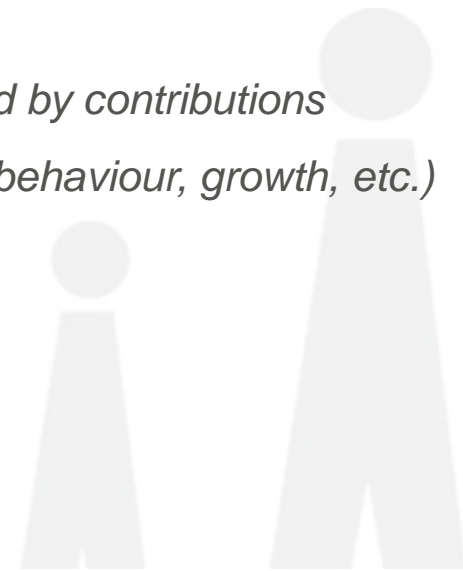
**NDC
accounts**

=

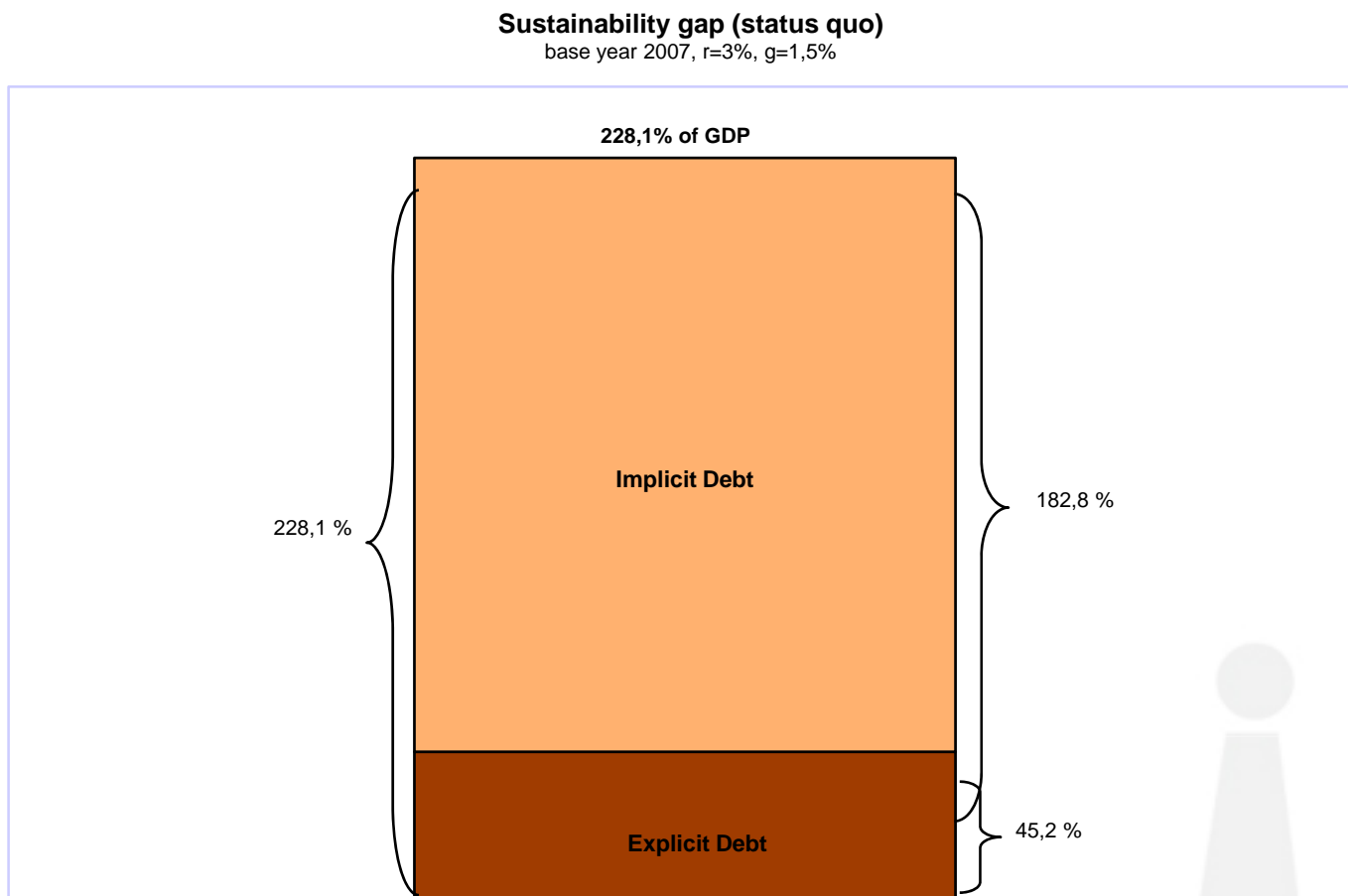
NDC pensions

*(determined by wage,
contribution rates, retirement
behaviour, etc.)*

*(determined by contributions
retirement behaviour, growth, etc.)*

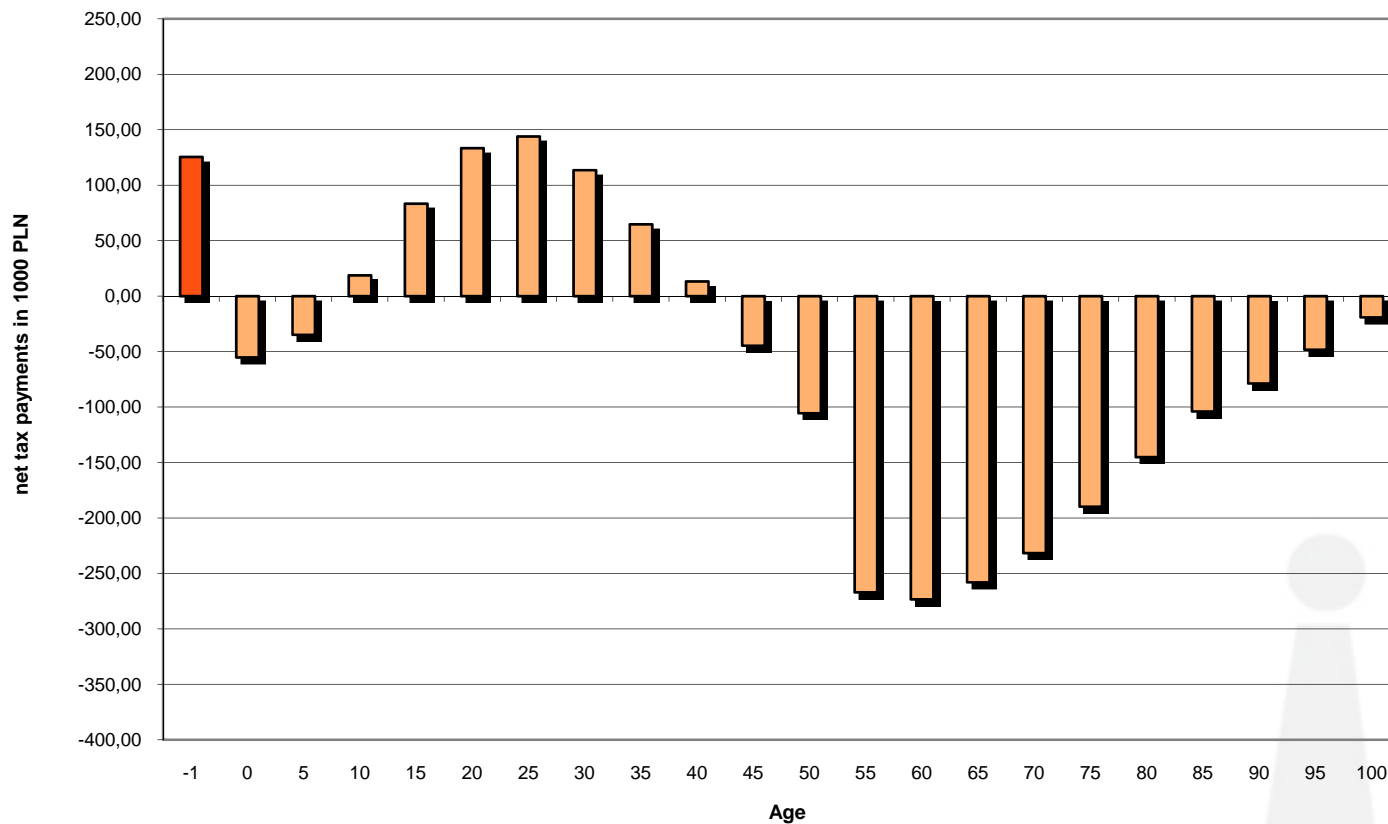


Explicit debt is only the fiscal 'iceberg' → Implicit debt is four times higher



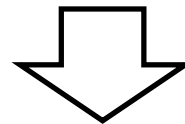
Generational Accounts – a tool to assess intergenerational redistribution

Generational accounts, status quo
base year 2007, $r=3\%$, $g=1,5\%$



Which fiscal category shall policymakers adjust?

**VAT? Pension contributions? Disability benefits? Free
healthcare services? etc...?**



Maybe Generational Accounting missed popularity due to a lack of more precise suggestions, which category could be modified to regain intergenerational equilibrium

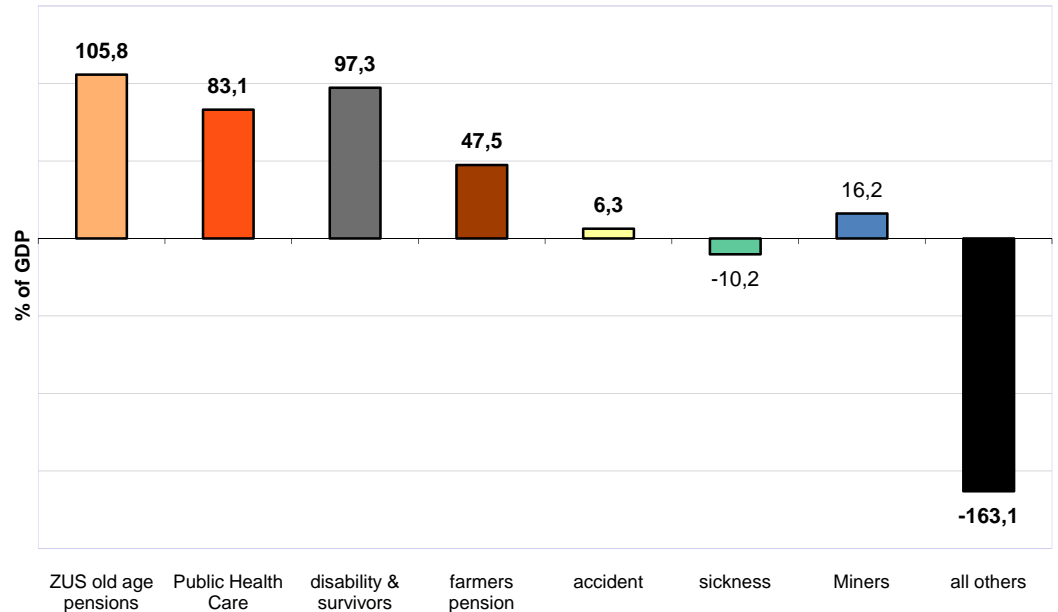
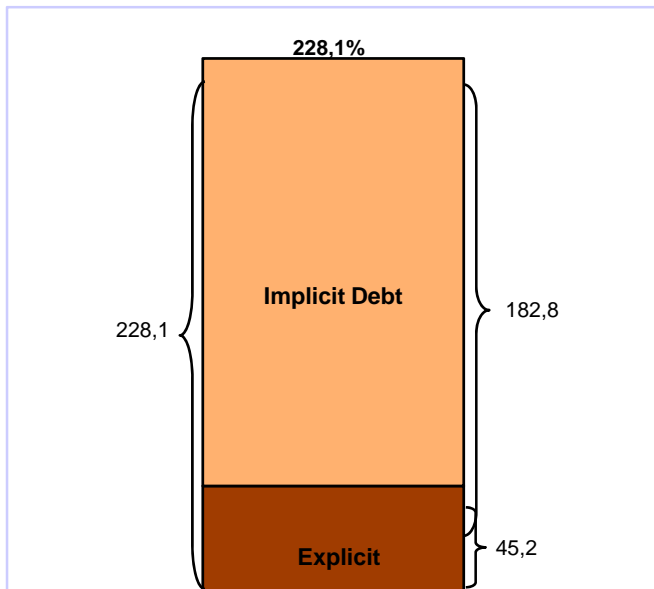
???



The modification of the standard method:
'Isolations'
of particular subsystems may be a a better tool for
policy makers

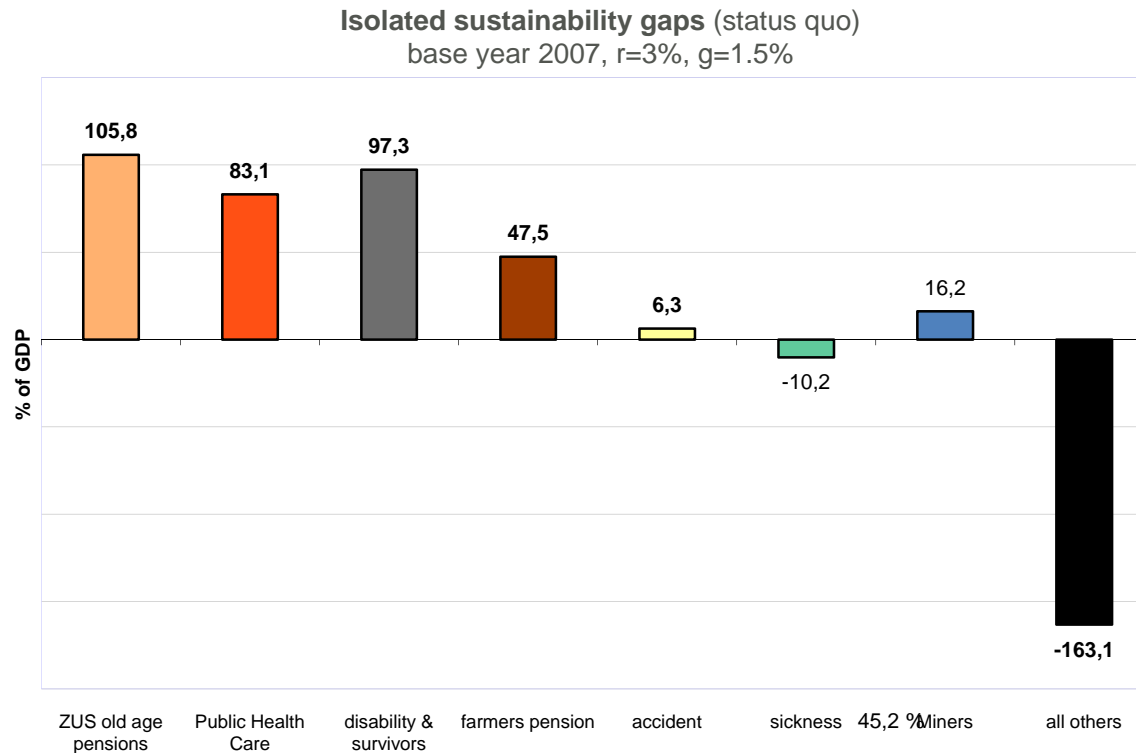
By disaggregating
this:

we get these:



Which are the major drivers of the Polish fiscal unsustainability? (I)

The standard isolation approach:



Two types of isolations

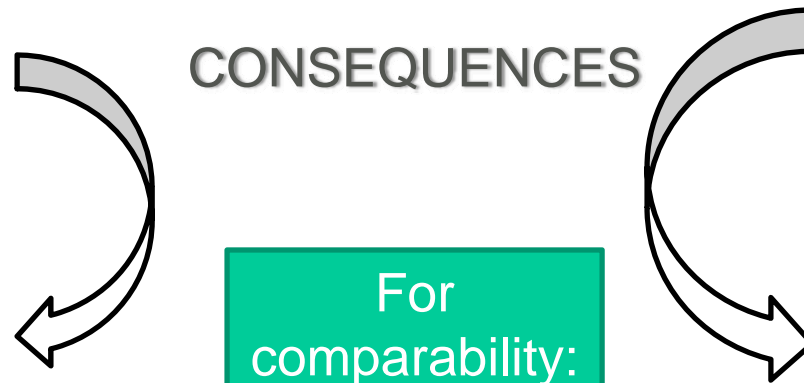
Subsystems with 'own' revenues

ZUS funds: for pensions, disability, accident, sickness; NFZ; farmers' social insurance; ...

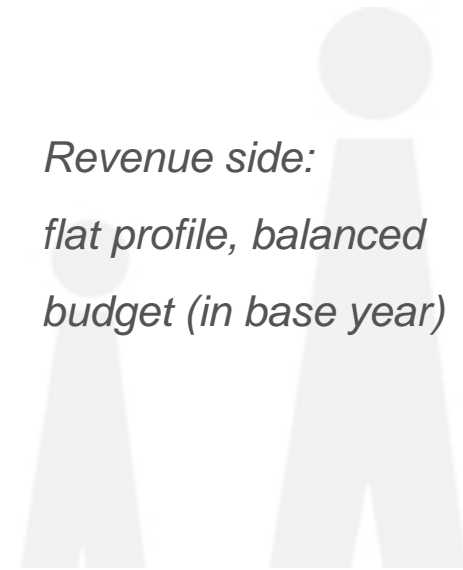
Subsystems financed from 'taxes'

Civil servants (uniformed services, judges); education

*Revenue side:
varying age- and gender-
specific profile, balanced
budget not necessarily*

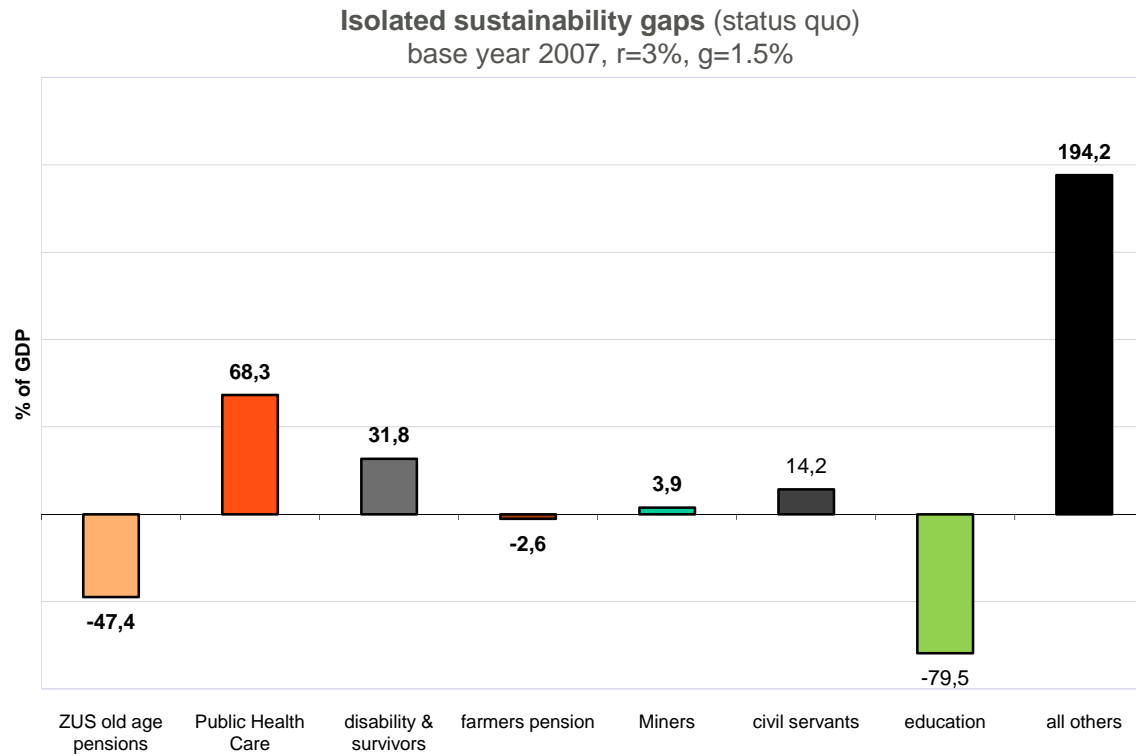


*Revenue side:
flat profile, balanced
budget (in base year)*



Which are the major drivers of the Polish fiscal unsustainability? (II)

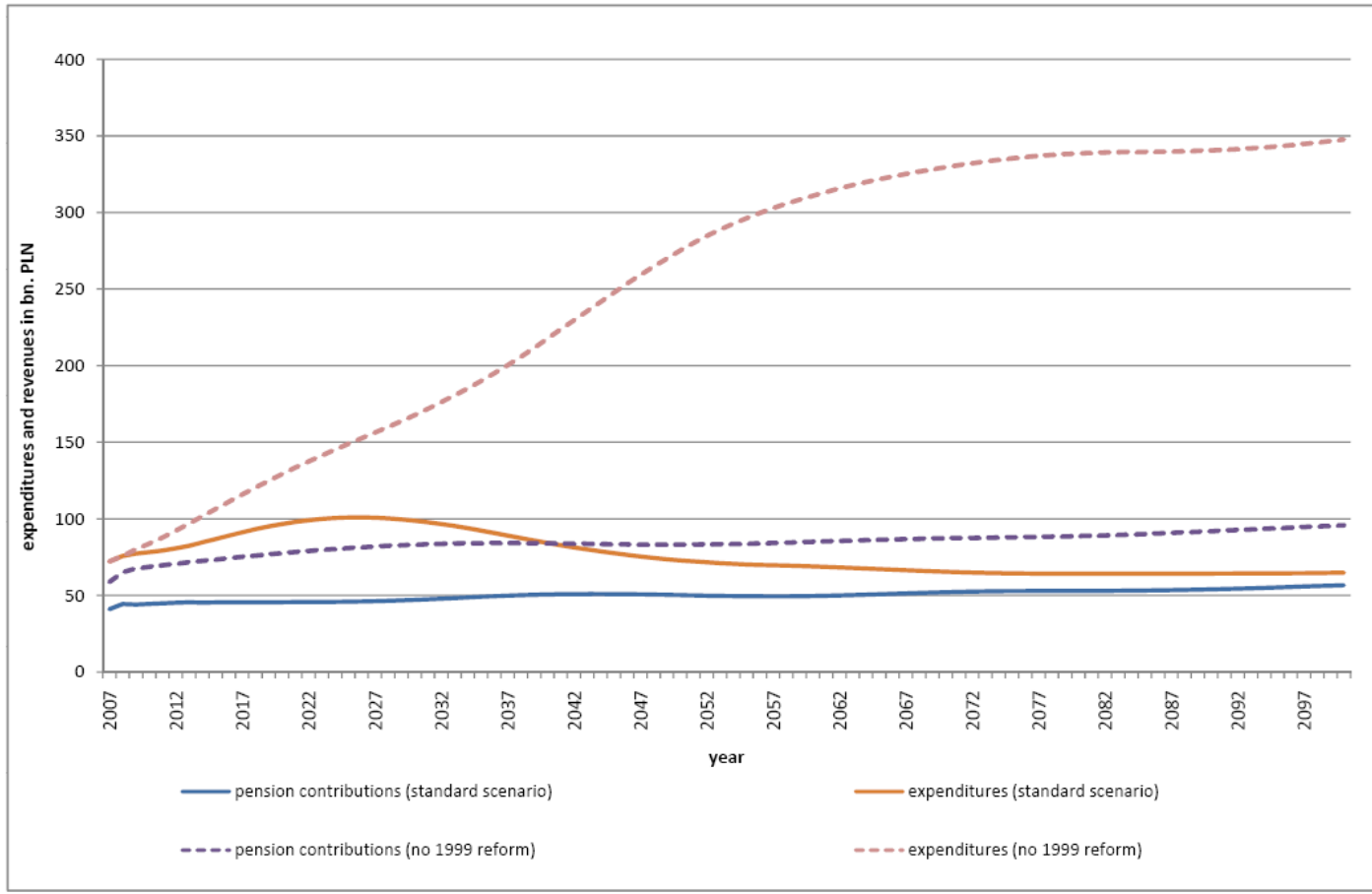
The balanced budget isolation approach:



A tool to assess reform measures ...

The example of the 1999 pension reform:

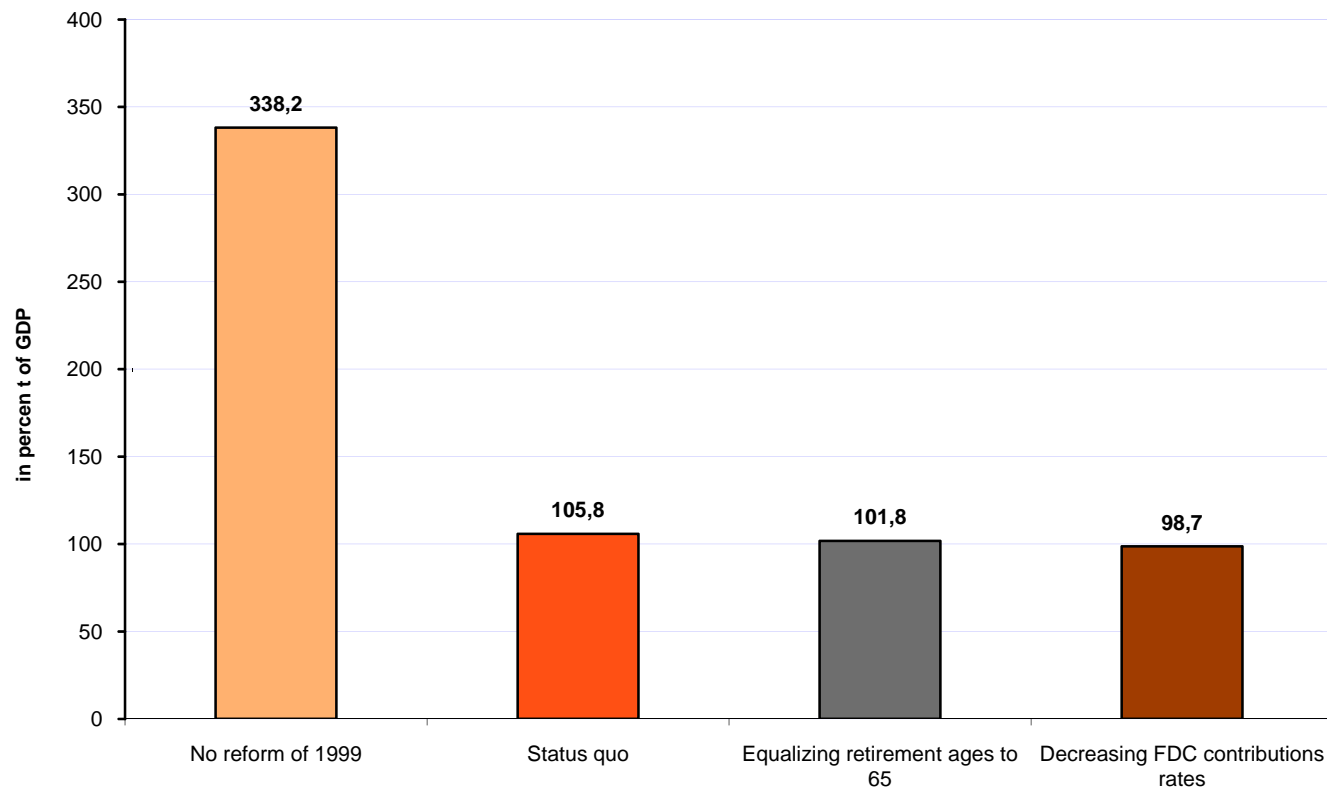
Cash Flows of ZUS pension contributions and expenditures
base year 2007, $r=0\%$, $g=1,5\%$



GA – a tool to assess reform measures ...

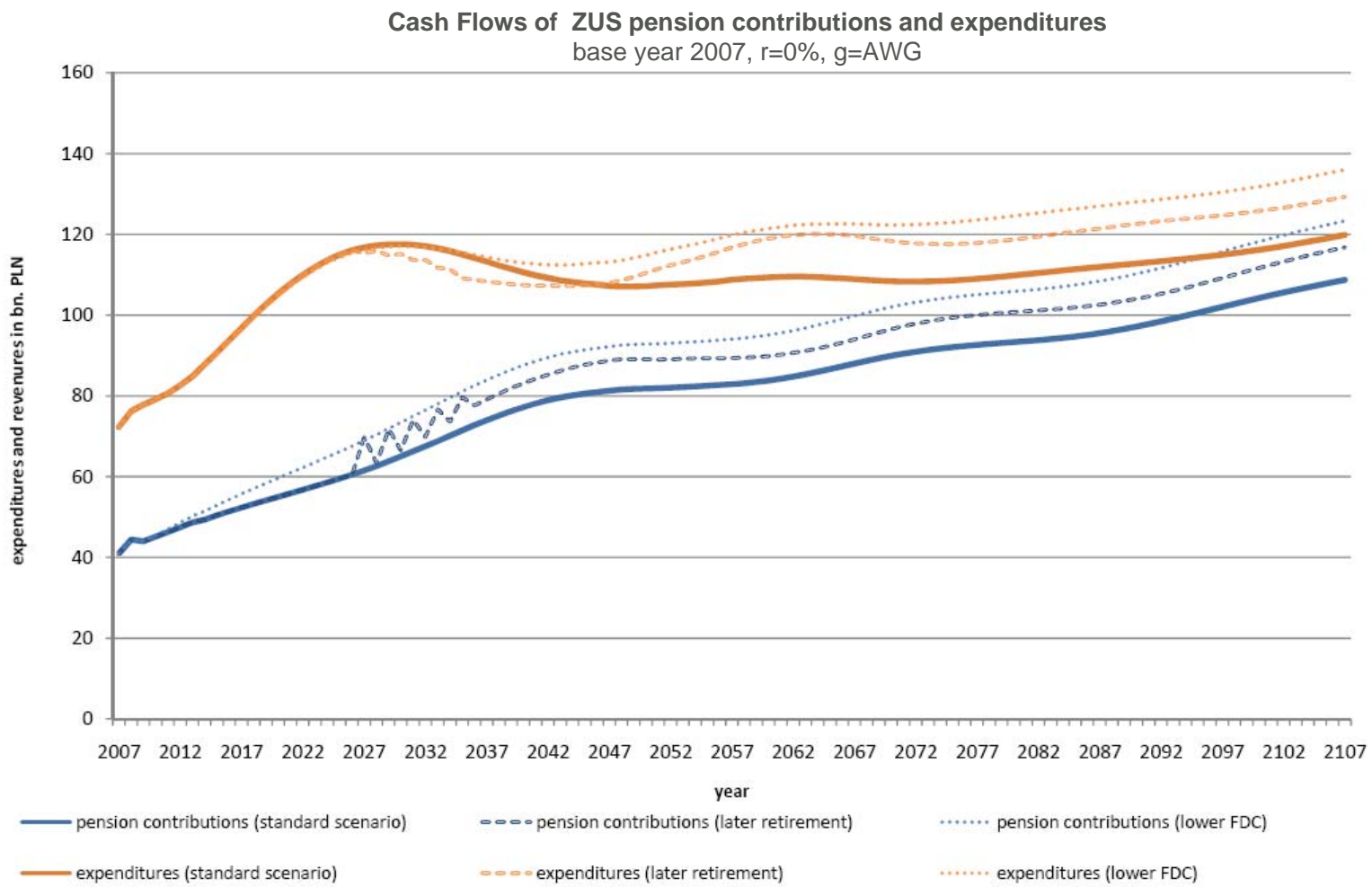
Sustainability examination of pension reforms:

Isolated sustainability gaps of the ZUS old age pension system
base year 2007, $r=3\%$, $g=1.5\%$



In the coming 20 years ZUS will be confronted with an increasing mismatch of contributions and expenditures

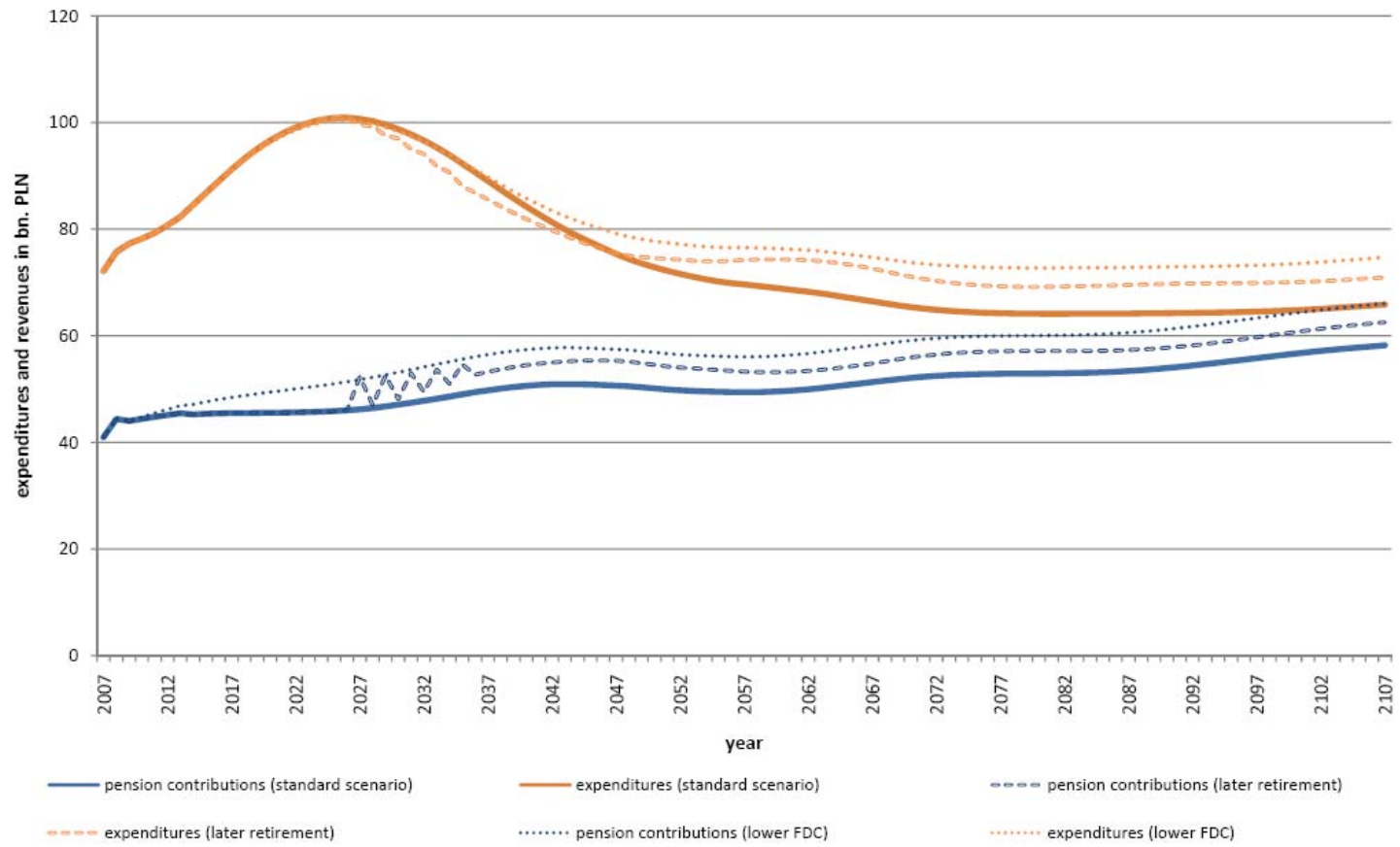
Cash flows: impact of the recently discussed pension reforms (I)



Growth assumptions make a difference ...

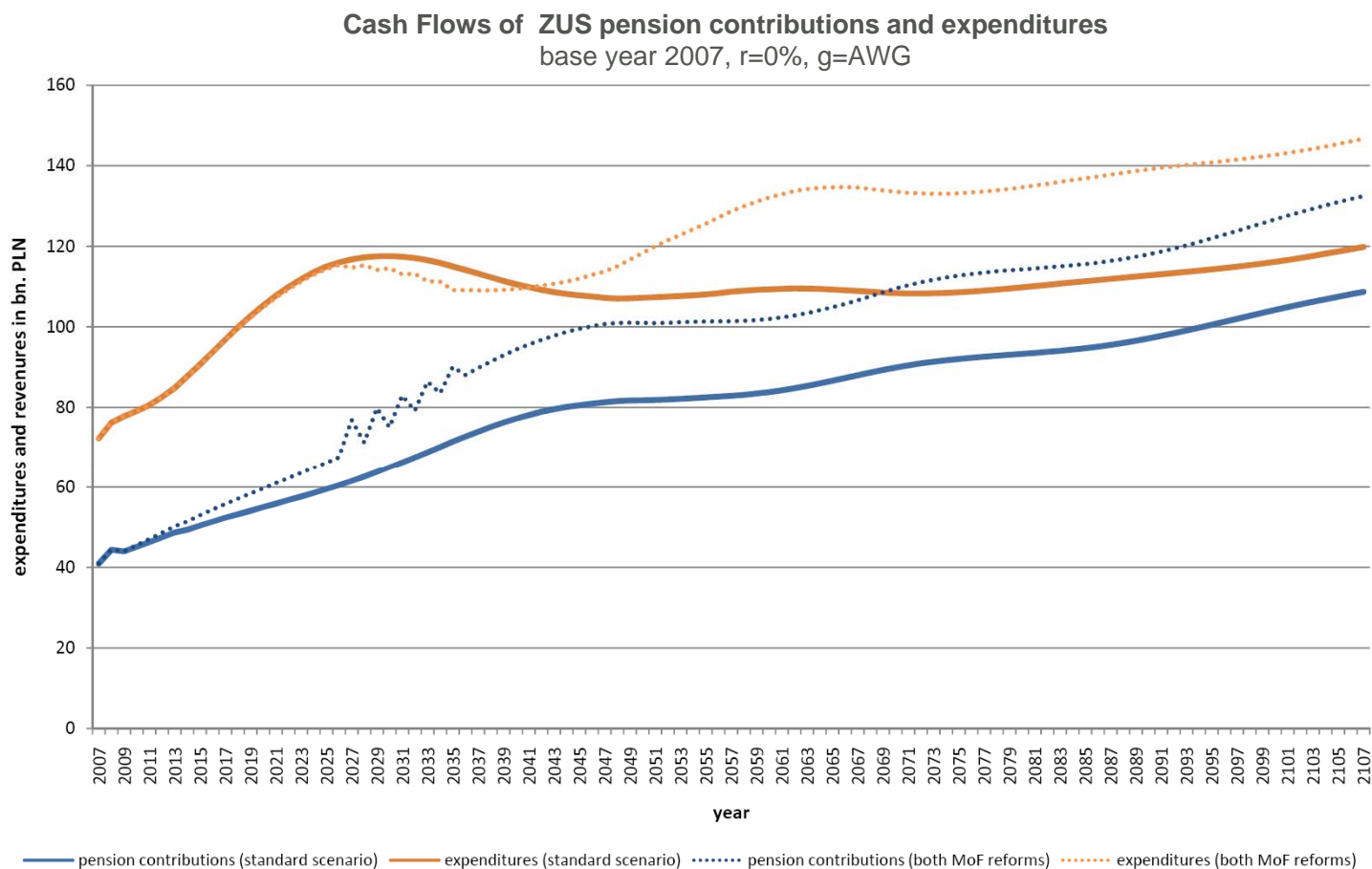
Cash flows: impact of the recently discussed pension reforms (II)

Cash Flows of ZUS pension contributions and expenditures
base year 2007, $r=0\%$, $g=1,5\%$

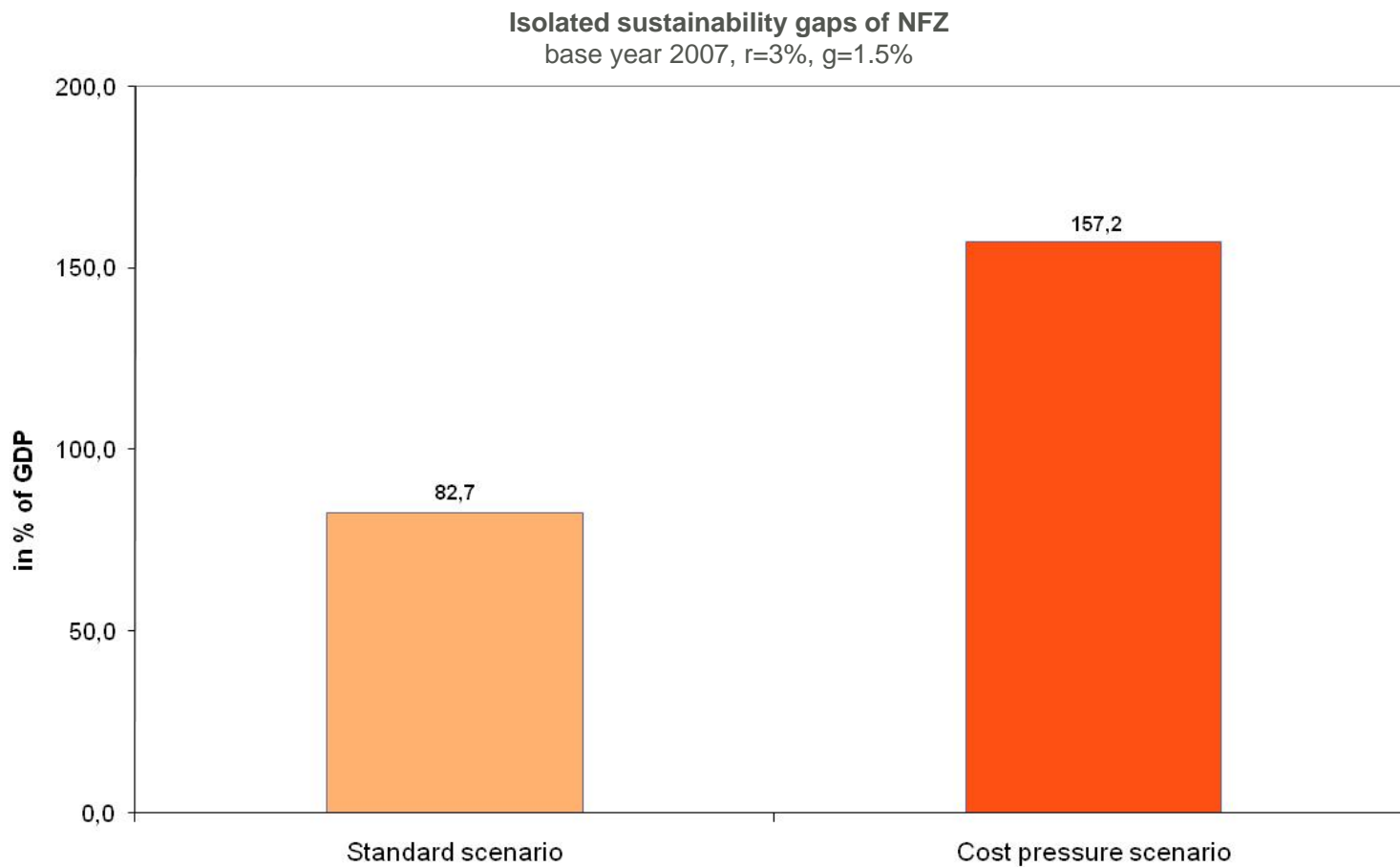


Both MoF reforms could partially bridge the ZUS deficits in the coming years ...

Cash flows: impact of the recently discussed pension reforms (III) – both reforms combined !

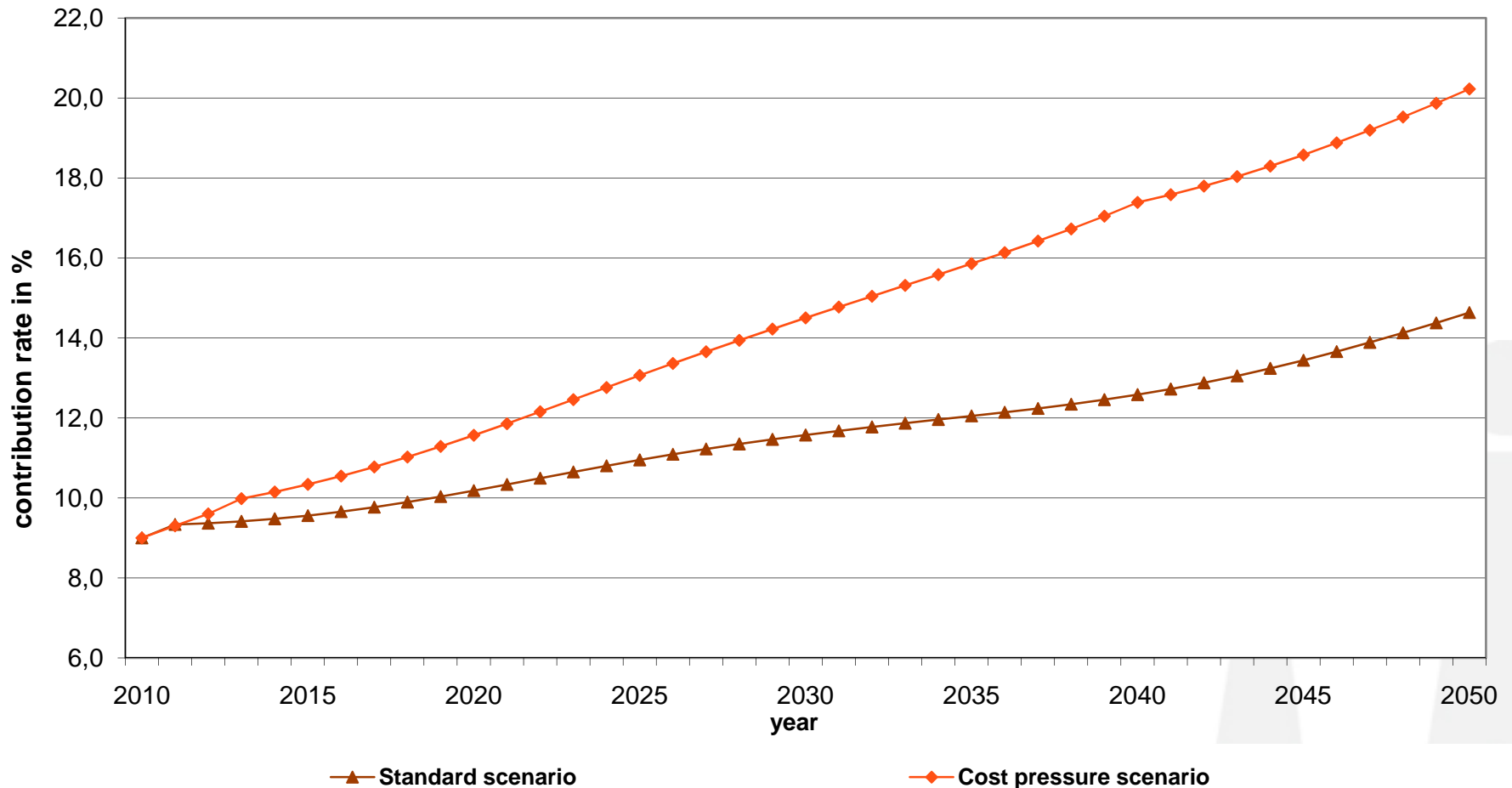


A closer look at the health care system – a possible major driver of fiscal unsustainability



Which contribution rates are we willing to bear in coming decades?

Nominal healthcare contribution rate to balance future NFZ budgets:



Conclusion and Discussion ...

