



Polish Ministry of Finance

AWG grupa robocza ds. starzenia się ludności

Joanna Stachura
Departament WU

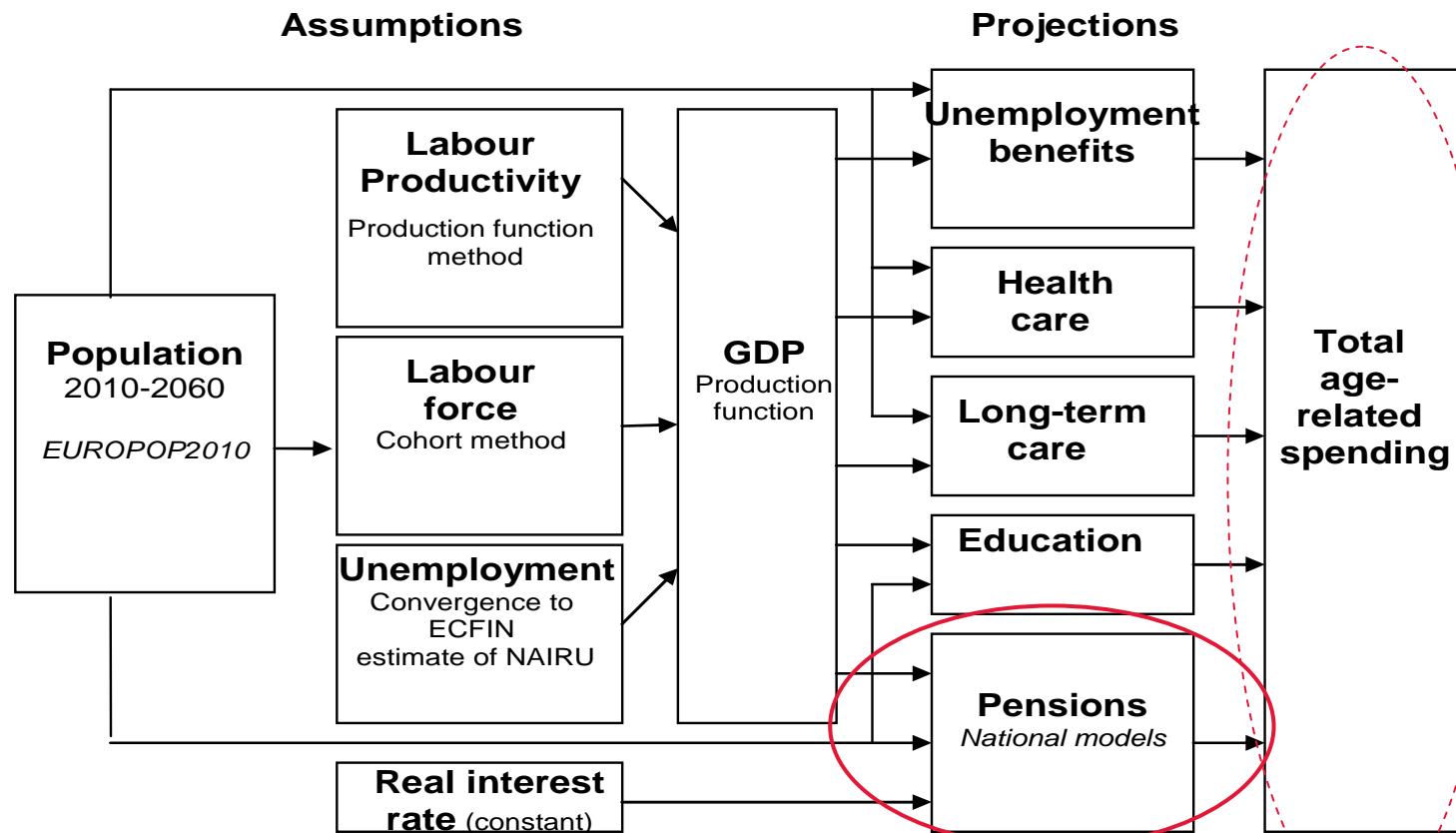
26.06.2013

Prezentacja

- AWG – zakres kompetencji, proces powstawania raportu
- Wyniki projekcji dla Polski
- Porównanie międzynarodowe
- Współpraca z innymi grupami

- AWG Working Group on Ageing Populations and Sustainability
- Ocena ilościowa wpływu starzenia się ludności na długoterminową stabilność finansów publicznych
- No policy change scenario – dotyczy założeń makroekonomicznych i stanu prawnego przy przygotowywaniu projekcji emerytalnych.

Metodologia AWG



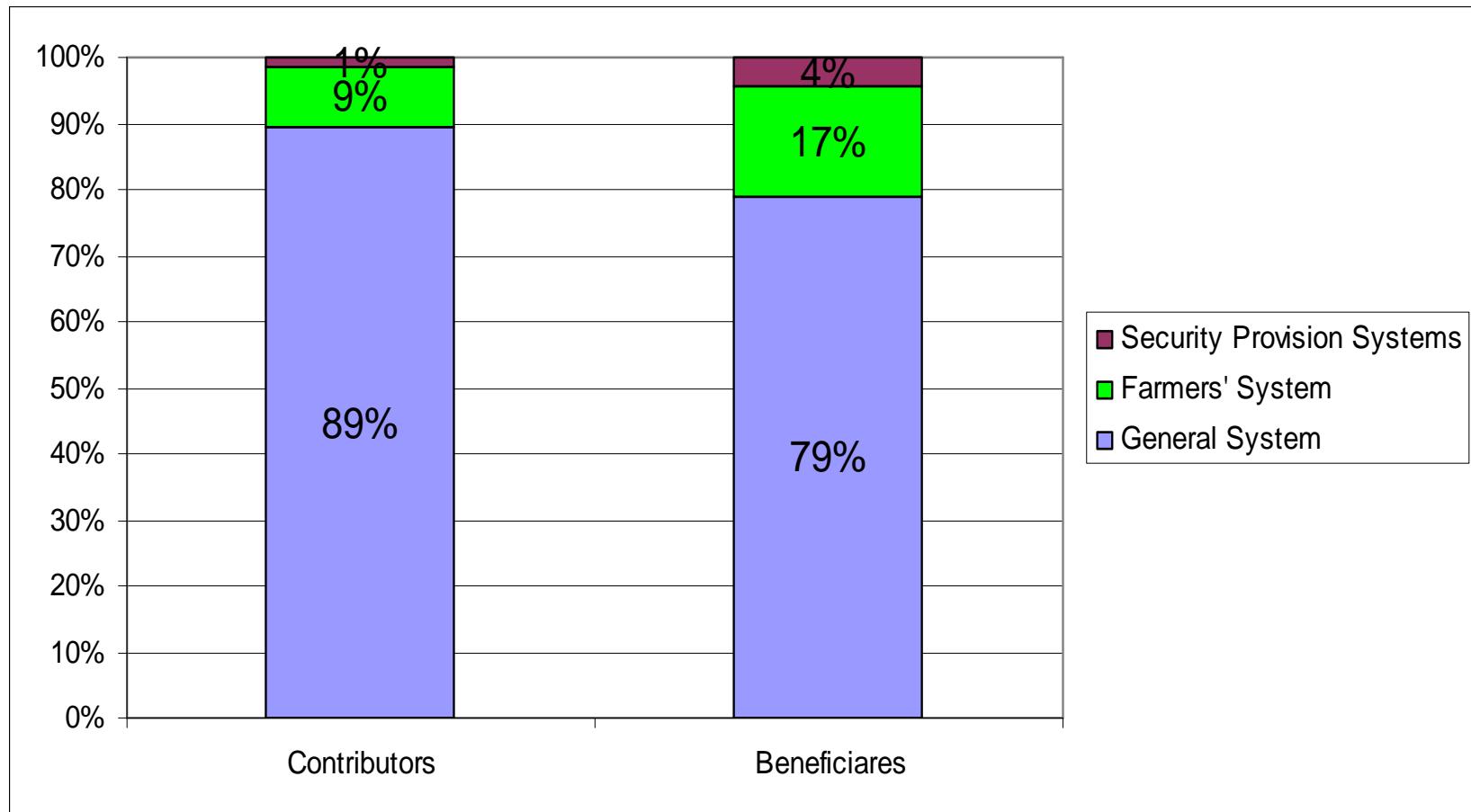
Proces powstawania raportu

- Wnioski poprzedniej projekcji i proponowane zmiany
- Prognozy demograficzne Eurostatu
- Dyskusje nad metodologią
- Założenia makroekonomiczne Komisji Europejskiej (no policy change scenario)
- Przygotowanie projekcji przez Kraje Członkowskie
- Przygotowanie projekcji przez Komisję Europejską
- Peer reviews i country fiches
- The Ageing Report

Instytucje krajowe zaangażowane w prace AWG

- Instytucja wiodąca MF
- Członkowie grupy MF, NBP
- Projekcje
 - ZUS
- Dane
 - MON, MSW, MS, ZUS, KRUS
 - MZ, NFZ, MPiPS

Polish Pension Systems



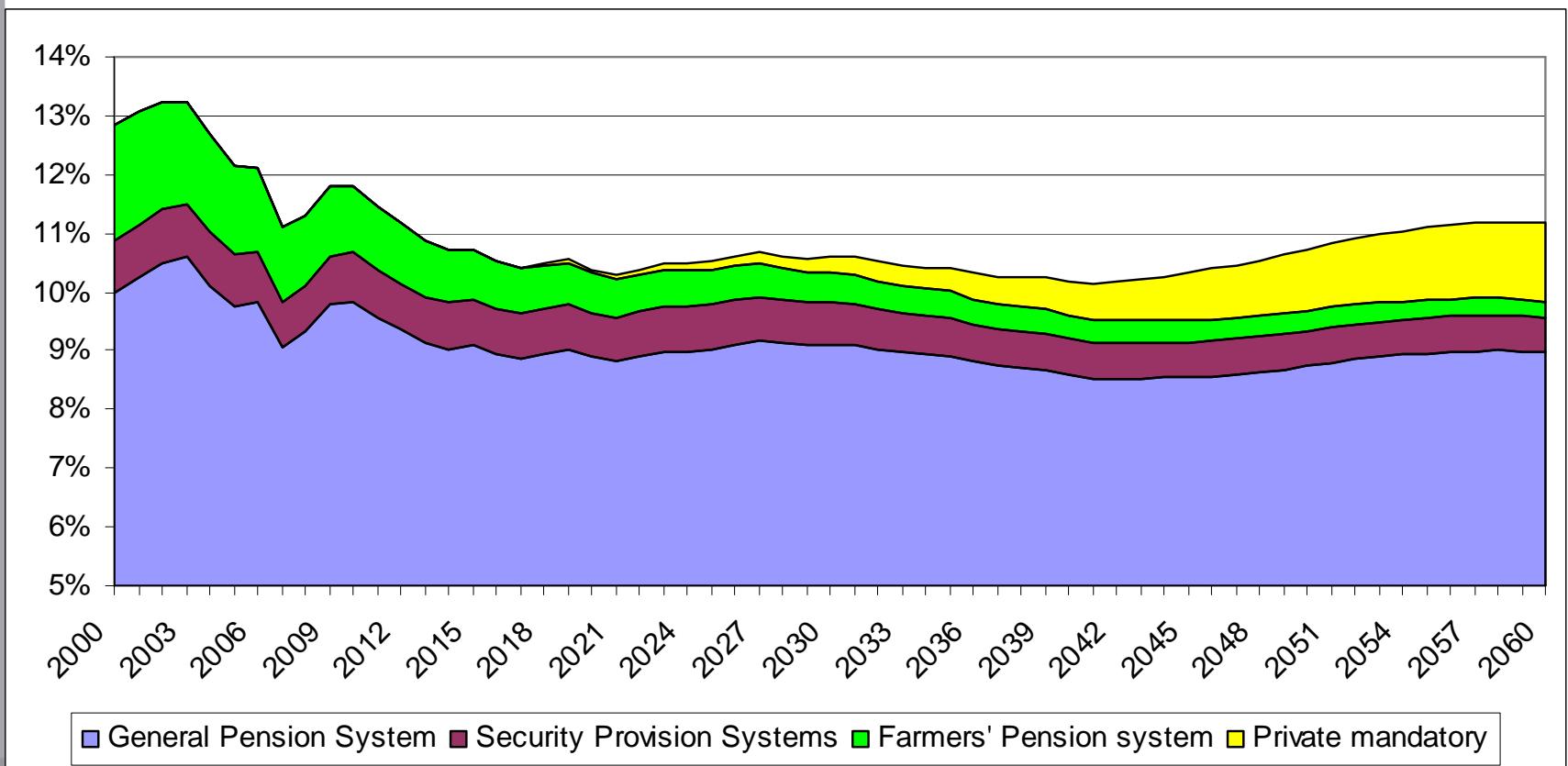
Zakres prognozy – system powszechny

NDC	SUB	FDC	Savings and additional insurance
PAYG mandatory, administered by the public institution, individual accounts	PAYG mandatory, administered by the public institution, individual accounts	Funded mandatory, administered by private institutions, individual accounts	Funded voluntary, administered privately, individual accounts
First Tier		Second Tier	Third Tier

General Pension System

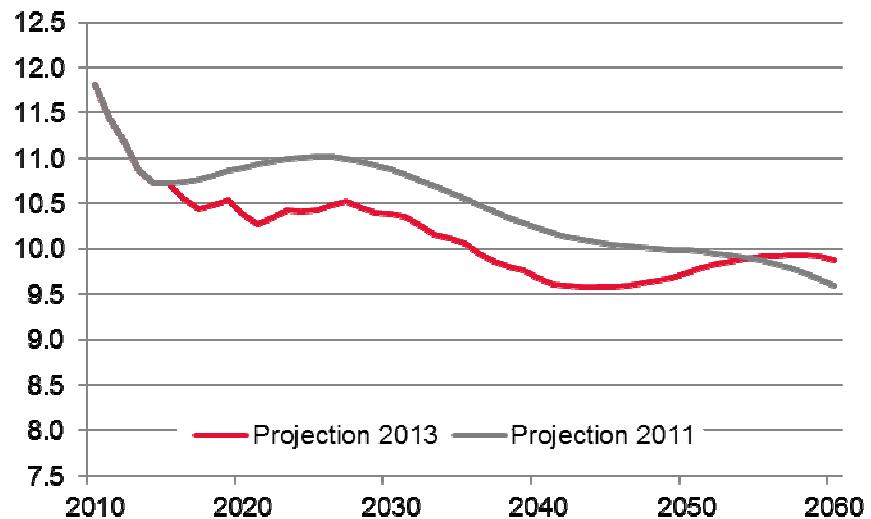
	Born before 1949	Born after 1948 and before 1969	Born after 1948 and before 1969, entered labour market before 1999	Born after 1968, entered labour market before 1999	Entered labour market after 1998
DB system	+				
One pillar system		+			
Two pillars system			+	+	+
Initial capital		+	+	+	

Projected gross public pension spending: by scheme (as % of GDP)

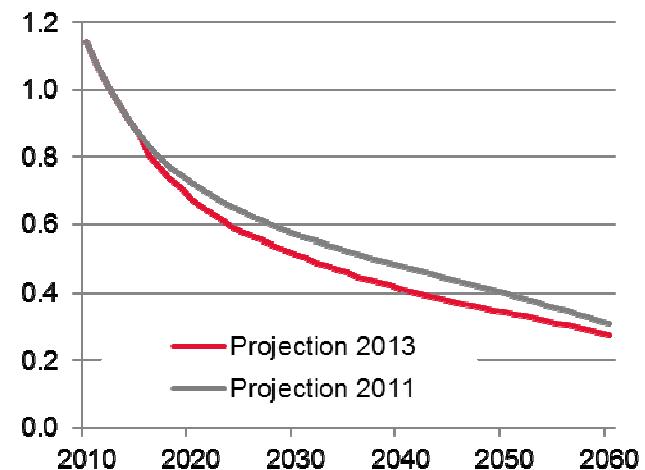


Total pension expenditures/ GDP – by systems

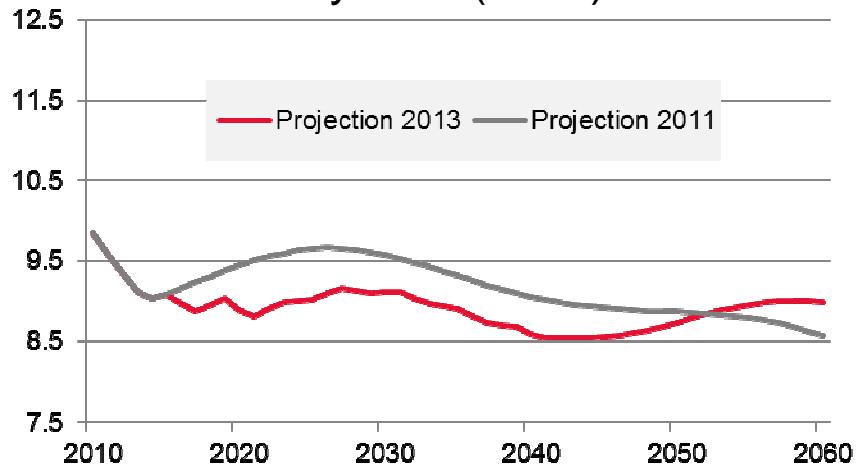
Total - All systems



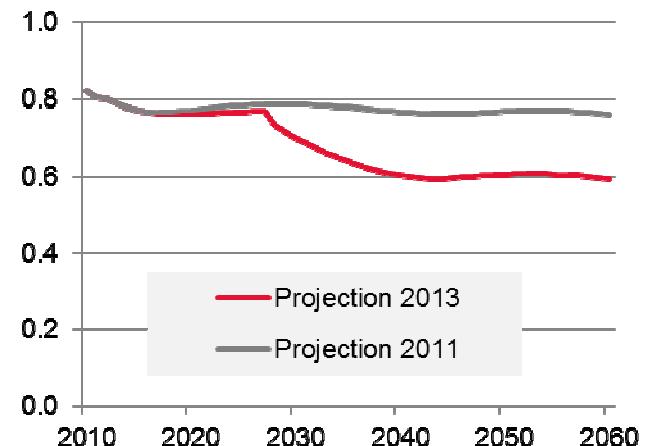
Farmers (PAYG)



General system (NDC)

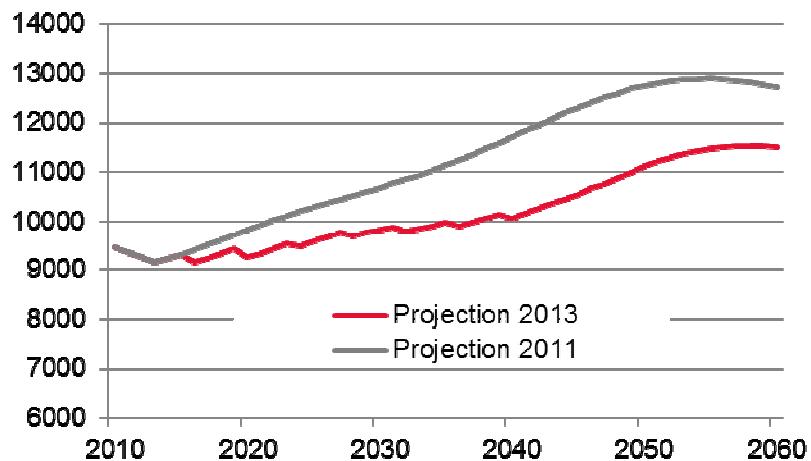


Security (direct from the budget)

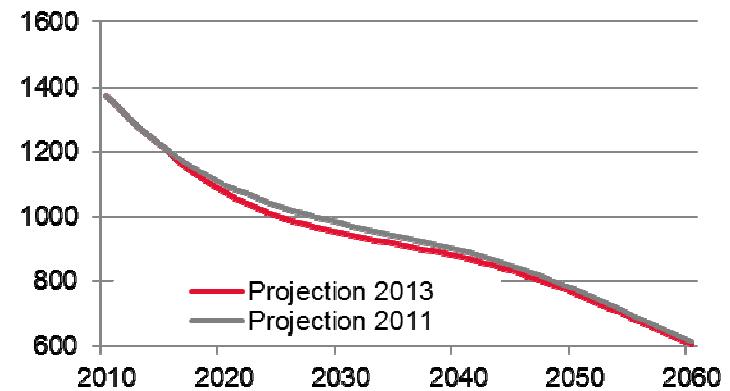


Changes in the number of pensioners

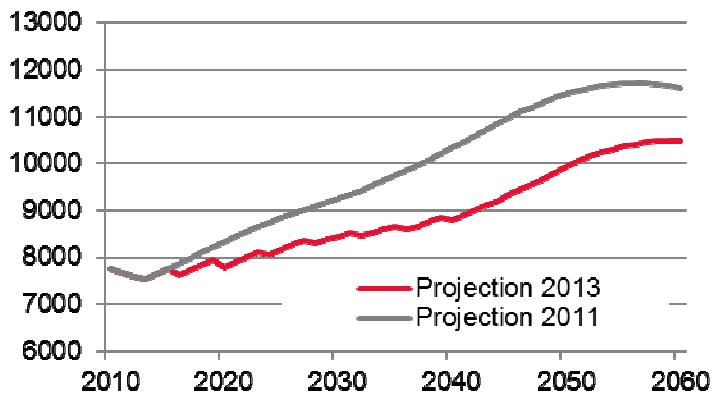
Total - All systems



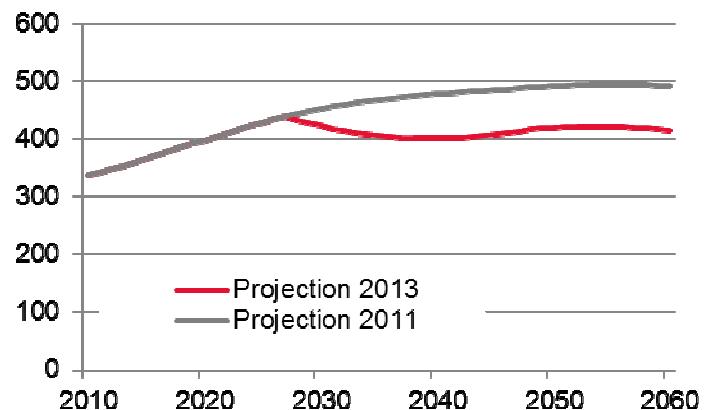
Farmers (PAYG)



General system (NDC)



Security (direct from the budget)



Total pension expenditures/GDP – main results

Total - All systems AFTER THE REFORM (AWG 2013):

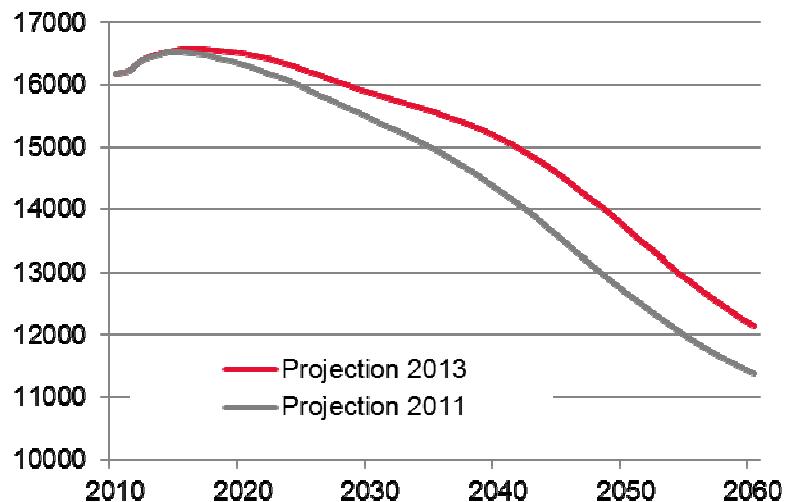
	2005	2010	2020	2030	2040	2050	2060
Total public pensions	12.1	11.8	10.3	10.3	9.6	9.7	9.8
Old age and early pensions	10.0	10.2	9.1	9.1	8.1	8.1	8.5
Disability pensions	1.5	1.1	0.8	0.8	0.9	0.9	0.8
Others (survivors)	0.6	0.6	0.4	0.5	0.6	0.6	0.5

Total - All systems BEFORE THE REFORM (AWG 2011):

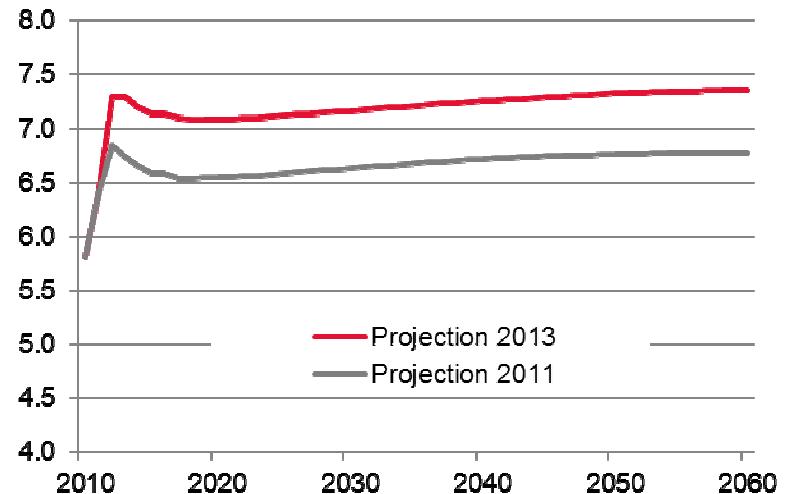
	2005	2010	2020	2030	2040	2050	2060
Total public pensions	12.1	11.8	10.9	10.9	10.3	10.0	9.6
Old age and early pensions	10.0	10.2	9.8	9.9	9.1	9.0	8.7
Disability pensions	1.5	1.1	0.7	0.6	0.7	0.7	0.6
Others (survivors)	0.6	0.6	0.4	0.4	0.4	0.4	0.3

Changes in contributions

Number of contributors



Contributions as percentage of GDP



Dekompozycja

	2010-20	2020-30	2030-40	2040-50	2050-60	2010-60	Average annual change
Public pensions to GDP	-1.5	0.0	-0.7	0.1	0.2	-2.0	0.040
Dependency ratio effect	4.3	3.0	1.2	2.9	2.0	13.5	0.246
Coverage ratio effect	-3.4	-1.3	-0.5	-0.5	-0.3	-5.9	-0.121
Employment ratio effect	-0.6	-0.3	0.1	-0.1	-0.1	-1.0	-0.018
Benefit ratio effect	-1.0	-1.0	-1.4	-1.8	-1.4	-6.5	-0.133
Labour intensity effect	0.0	0.0	0.0	0.0	0.0	0.0	0.000
Residual*	-0.8	-0.5	-0.2	-0.6	-0.1	-2.1	0.219

$$\begin{aligned}
 \frac{\text{Pension Exp .}}{\text{GDP}} &= \frac{\overbrace{\frac{\text{Dependency Ratio Effect}}{\text{Population 65 + }}}^{\text{Population 15 - 64}} \times \overbrace{\frac{\text{Coverage Ratio effect}}{\text{Population 65 + }}}^{\text{Number of Pensioners}}}{\overbrace{\frac{\text{Population 15 - 64}}{\text{Population Working People 15 - 64}}}^{\text{Employment Rate Effect}} \times \overbrace{\frac{\text{Average Pension}}{\text{GDP}}}} \\
 &\quad \times \overbrace{\frac{\text{Population 15 - 64}}{\text{Working People 15 - 64}}}^{\text{Hours Worked 15 - 71}} \times \overbrace{\frac{\text{Hours Worked d 20 - 64}}{\text{Hours Worked d 15 - 71}}}_{\text{labour int ensity effect}} \\
 &\quad \times \overbrace{\frac{\text{Working People 20 - 64}}{\text{Hours Worked 20 - 64}}}^{\text{HoursWorked d 20 - 64}} \times \overbrace{\frac{\text{HoursWorked d 15 - 71}}{\text{HoursWorked d 15 - 71}}}_{\text{residual}}
 \end{aligned}$$

Analiza wrażliwości

	2010	2020	2030	2040	2050	2060
Public Pension Expenditure						
Baseline	11,8	10,3	10,3	9,6	9,7	9,8
Higher life expectancy	0.0	0.1	0.1	0.1	0.2	0.2
Higher lab. productivity (+0.1pp.)	0.0	0.0	-0.1	-0.1	-0.1	-0.2
Lower lab. productivity (-0.1pp.)	0.0	0.0	0.1	0.1	0.1	0.2
Higher interest rate (+0.5 pp.)	0.0	0.0	0.0	0.0	0.0	0.0
Lower interest rate (-0.5 pp.)	0.0	0.0	0.0	0.0	0.0	0.0
Higher emp. rate (+1 p.p.)	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Higher emp. of older workers (+5 pp.)	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Lower migration (-10%)	0.0	0.0	0.0	0.0	0.0	0.0

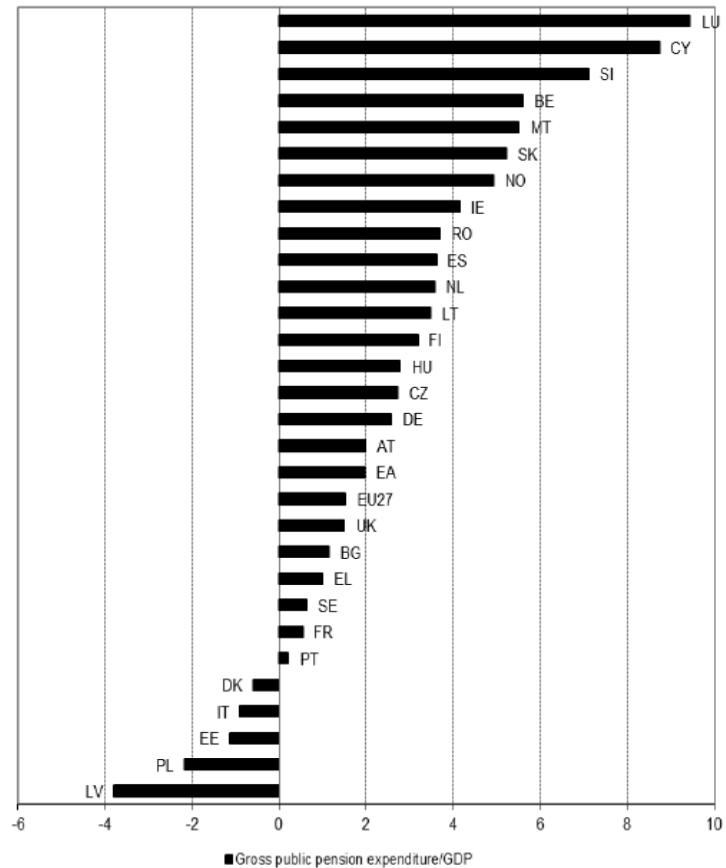
Wydatki na emerytury

Table 2. 5 - Change in gross public pension expenditure over 2010-2060 (in p.p. of GDP)

Country	2010	2020	2040	2060	Change 2010-2060
BE	11.0	13.1	16.5	16.6	5.6
BG	9.9	9.2	10.1	11.1	1.1
CZ	9.1	8.7	9.7	11.8	2.7
DK	10.1	10.8	10.3	9.5	-0.6
DE	10.8	10.9	12.7	13.4	2.6
EE	8.9	7.7	8.1	7.7	-1.1
IE	7.5	9.0	10.0	11.7	4.1
EL	13.6	13.7	14.9	14.6	1.0
ES	10.1	10.6	12.3	13.7	3.6
FR	14.6	14.4	15.2	15.1	0.5
IT	15.3	14.5	15.6	14.4	-0.9
CY	7.6	9.5	12.1	16.4	8.7
LV	9.7	7.3	6.3	5.9	-3.8
LT	8.6	7.6	9.6	12.1	3.5
LU	9.2	10.8	16.5	18.6	9.4
HU	11.9	11.5	12.1	14.7	2.8
MT	10.4	10.6	11.4	15.9	5.5
NL	6.8	7.4	10.4	10.4	3.6
AT	14.1	15.1	16.5	16.1	2.0
PL	11.8	10.9	10.3	9.6	-2.2
PT	12.5	13.5	13.1	12.7	0.2
RO	9.8	9.2	11.6	13.5	3.7
SI	11.2	12.2	15.8	18.3	7.1
SK	8.0	8.6	10.6	13.2	5.2
FI	12.0	14.0	15.2	15.2	3.2
SE	9.6	9.6	10.2	10.2	0.6
UK	7.7	7.0	8.2	9.2	1.5
NO	9.3	11.6	13.7	14.2	4.9
EU27	11.3	11.3	12.6	12.9	1.5
EA	12.2	12.3	13.9	14.1	2.0

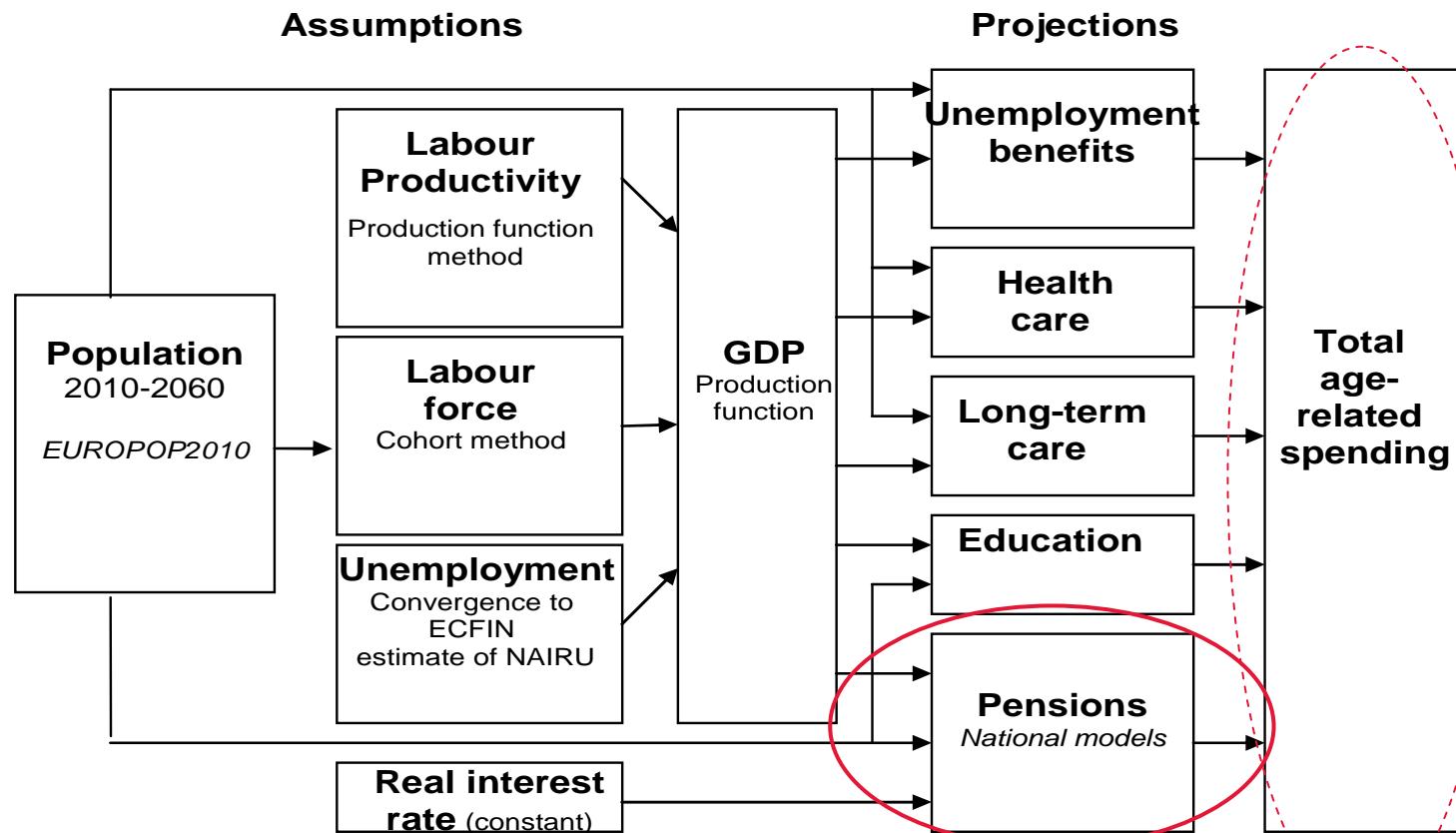
Source: Commission services, EPC.

Graph 2. 2 - Change in gross public pension expenditure over 2010-2060 (in p.p. of GDP)



Source: Commission services, EPC.

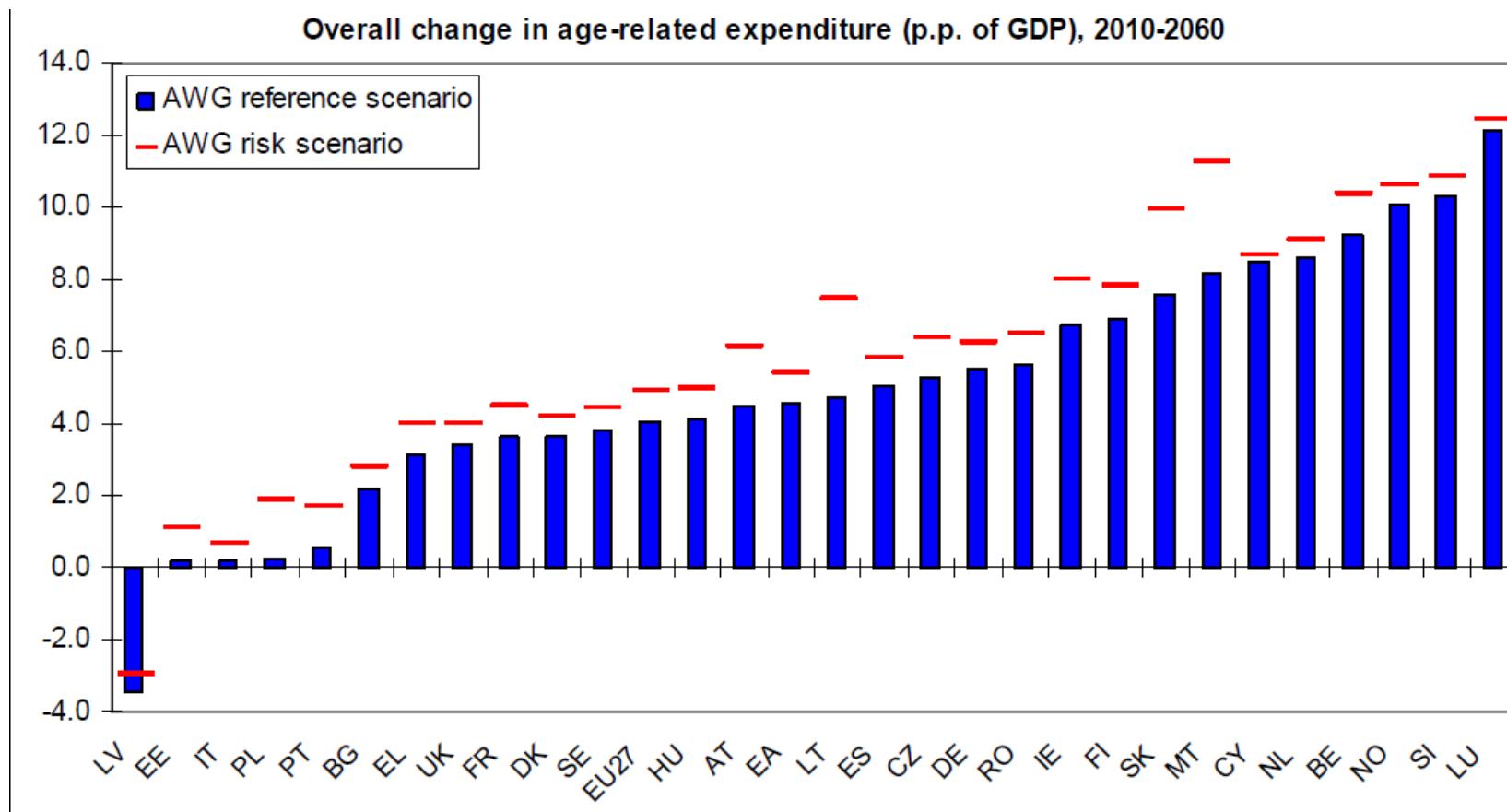
Metodologia AWG



Całkowite wydatki związane z wiekiem

	Ch 10-60	2010	2020	2030	2040	2050	2060
Pensions	-2	11,8	10,3	10,3	9,6	9,7	9,8
Health care	1,9	4,9	5,4	5,8	6,2	6,5	6,8
Long term care	1	0,7	0,8	1	1,3	1,5	1,7
Education	-0,4	3,9	3,4	3,5	3,1	3,2	3,5
Unemployment	-0,1	0,2	0,1	0,1	0,1	0,1	0,1
Total	0,4	21,5	20	20,7	20,3	21	21,9

Całkowite wydatki związane z wiekiem



Source: Commission services, EPC.

AWG współpracuje m.in. z ...

- Eurostat
- OGWG
- EPC
- SPC
- ISG Ageing Report

Wyniki prac AWG wykorzystywane są w wielu raportach Komisji Europejskiej m.in. raport na temat stabilności finansów publicznych, aktualizacja Programów Konwergencji i wielu innych

Dziękuję