

The Economic Implications of Pensions

Chairman
2010 Pensions Working Group

Launched on 1st March 2011

To be concluded on 31st May 2011

Will be led by Chairman, Pensions Working Group

Documentation available on www.pensionsreform.gov.mt

Electronic Consultation on pensionsreform@gov.mt

Consultation

Camilleri Report – 1997/1998

Galdes Report – 2000/2003

World Bank Report – 2004

White Paper – 2004

Spiteri Gingell Report – 2005

Government's Principles for Reform – 2006

Parliamentary Debate - 2006

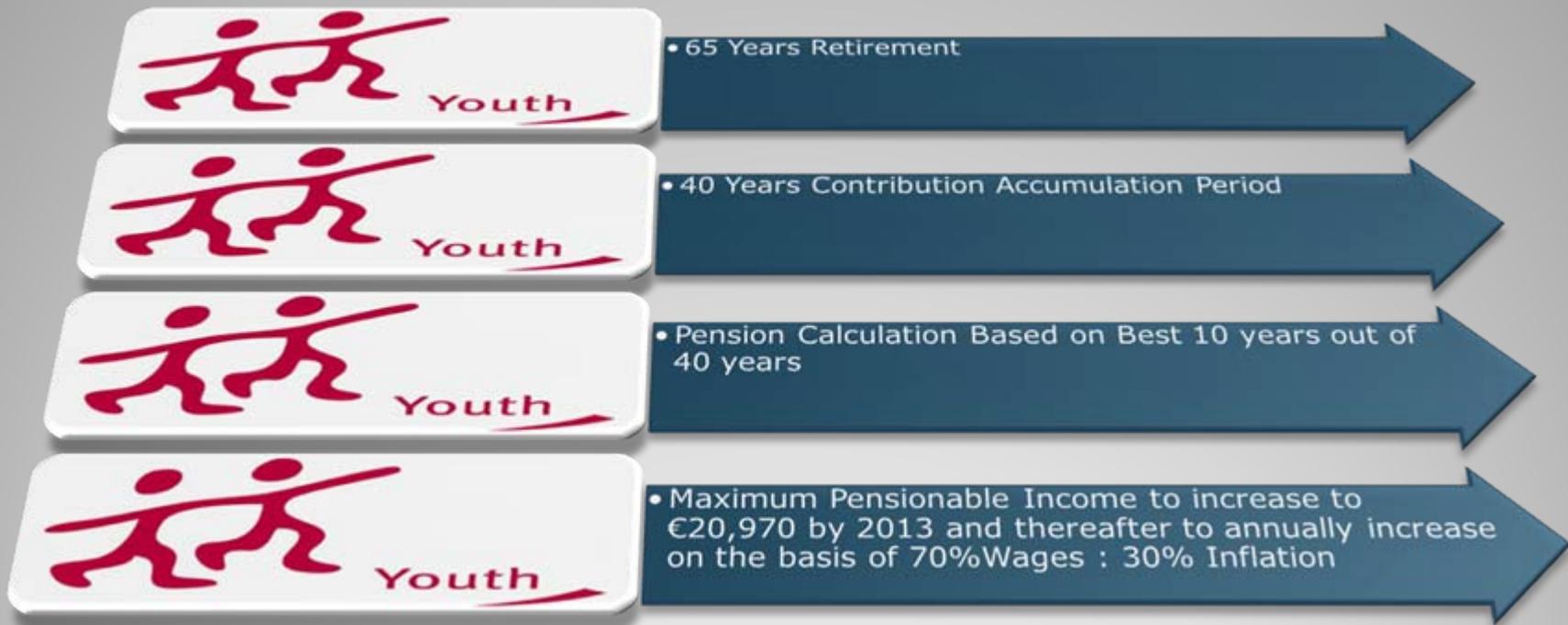
Enactment of Legislation – 2006

Review of Second and Third Pillars - 2009

A Decade of Reform



The Need for On-Going Review



2007 Reform Impact on Switchers



- Child Rearing Credits Awarded for 2 Years for every Child (4 years if child is disabled)

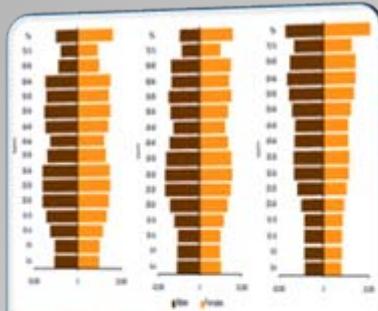


- Must Return to the Labour Market for an equivalent amount of years for Credits Awarded

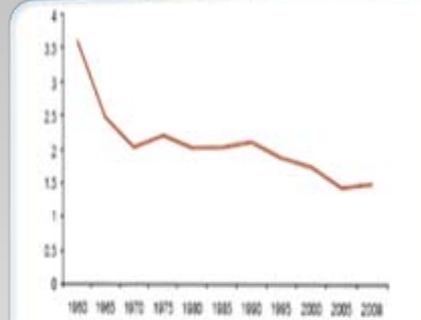


- May be shared between both parents to maximum assigned

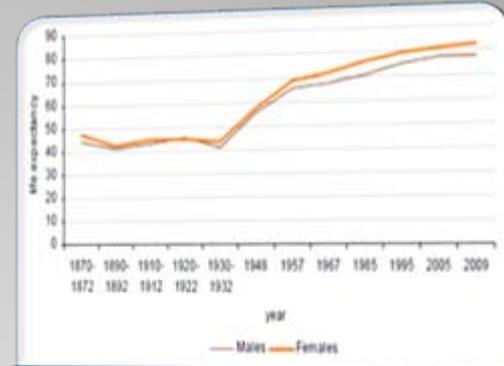
Crediting of Contribution for Parents for Child Rearing



Population



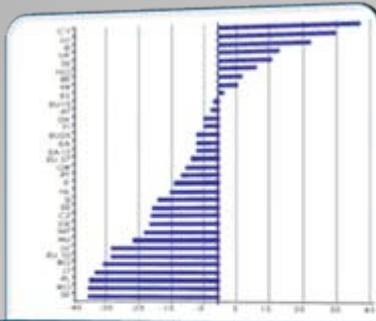
Fertility



Longevity



Demographic Projected Behaviour



Children Below 15 years - 2060



	Men			Women		
	1	2	3+	1	2	3+
2000	100	100	100	100	100	100
2005	100	100	100	100	100	100
2010	100	100	100	100	100	100
2015	100	100	100	100	100	100
2020	100	100	100	100	100	100
2025	100	100	100	100	100	100
2030	100	100	100	100	100	100
2035	100	100	100	100	100	100
2040	100	100	100	100	100	100
2045	100	100	100	100	100	100
2050	100	100	100	100	100	100
2055	100	100	100	100	100	100
2060	100	100	100	100	100	100

Employment Rates by Children



Age Group	2000		2005		2010		2015		2020		2025		2030		2035		2040		2045		2050	
	Rate																					
15-19	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20-24	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
25-29	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30-34	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
35-39	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
40-44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
45-49	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50-54	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
55-59	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
60-64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
65-69	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
70-74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
75-79	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
80-84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
85-89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
90-94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
95-99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Live Births by Age of Mother



Fertility Impact

	2008	2009
	Mar-Dec	Mar-Dec
Labour Supply	171,468	171,943
Employment	166,171	162,918
Unemployment	15,297	19,025
Inactive	171,179	171,907
Activity rate (%)	96.7	94.4
Employment rate (%)	96.6	94.9
Unemployment rate (%)	8.1	7.4

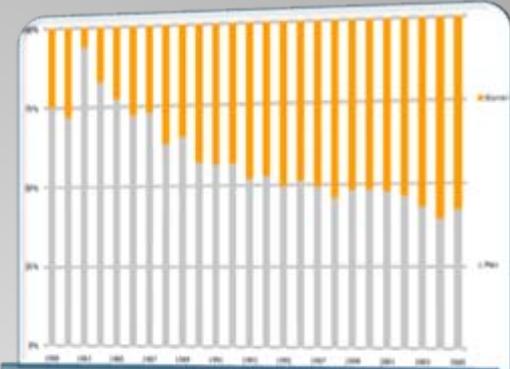
Source: National Statistics (ONS)

2009 Active Participation Rates



Age group	Sex		Total
	Males	Females	
	%	%	%
April - June 2010			
15-24	41.5	41.1	41.3
25-34	91.1	85.1	88.5
35-44	48.7	12.1	30.2
Total	73.5	37.5	55.9

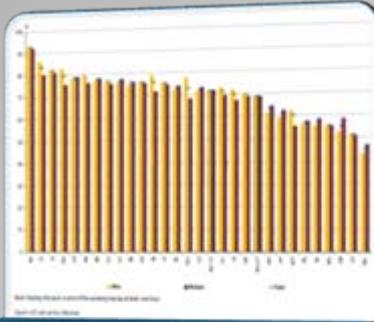
Employment Rate by Age



Female University Graduates: 1980 - 2005



Increase Active Participation



Employed on Flexi-Time: 2006



	Miles		M2000	
	Unusually	Exaggeration	Unusually	Exaggeration
2001-01	1.0	1.0	1.0	1.0
2001-02	1.0	1.0	1.0	1.0
2001-03	1.0	1.0	1.0	1.0
2001-04	1.0	1.0	1.0	1.0
2001-05	1.0	1.0	1.0	1.0
2001-06	1.0	1.0	1.0	1.0
2001-07	1.0	1.0	1.0	1.0
2001-08	1.0	1.0	1.0	1.0
2001-09	1.0	1.0	1.0	1.0
2001-10	1.0	1.0	1.0	1.0
2001-11	1.0	1.0	1.0	1.0
2001-12	1.0	1.0	1.0	1.0
2002-01	1.0	1.0	1.0	1.0
2002-02	1.0	1.0	1.0	1.0
2002-03	1.0	1.0	1.0	1.0
2002-04	1.0	1.0	1.0	1.0
2002-05	1.0	1.0	1.0	1.0
2002-06	1.0	1.0	1.0	1.0
2002-07	1.0	1.0	1.0	1.0
2002-08	1.0	1.0	1.0	1.0
2002-09	1.0	1.0	1.0	1.0
2002-10	1.0	1.0	1.0	1.0
2002-11	1.0	1.0	1.0	1.0
2002-12	1.0	1.0	1.0	1.0
2003-01	1.0	1.0	1.0	1.0
2003-02	1.0	1.0	1.0	1.0
2003-03	1.0	1.0	1.0	1.0
2003-04	1.0	1.0	1.0	1.0
2003-05	1.0	1.0	1.0	1.0
2003-06	1.0	1.0	1.0	1.0
2003-07	1.0	1.0	1.0	1.0
2003-08	1.0	1.0	1.0	1.0
2003-09	1.0	1.0	1.0	1.0
2003-10	1.0	1.0	1.0	1.0
2003-11	1.0	1.0	1.0	1.0
2003-12	1.0	1.0	1.0	1.0
2004-01	1.0	1.0	1.0	1.0
2004-02	1.0	1.0	1.0	1.0
2004-03	1.0	1.0	1.0	1.0
2004-04	1.0	1.0	1.0	1.0
2004-05	1.0	1.0	1.0	1.0
2004-06	1.0	1.0	1.0	1.0
2004-07	1.0	1.0	1.0	1.0
2004-08	1.0	1.0	1.0	1.0
2004-09	1.0	1.0	1.0	1.0
2004-10	1.0	1.0	1.0	1.0
2004-11	1.0	1.0	1.0	1.0
2004-12	1.0	1.0	1.0	1.0
2005-01	1.0	1.0	1.0	1.0
2005-02	1.0	1.0	1.0	1.0
2005-03	1.0	1.0	1.0	1.0
2005-04	1.0	1.0	1.0	1.0
2005-05	1.0	1.0	1.0	1.0
2005-06	1.0	1.0	1.0	1.0
2005-07	1.0	1.0	1.0	1.0
2005-08	1.0	1.0	1.0	1.0
2005-09	1.0	1.0	1.0	1.0
2005-10	1.0	1.0	1.0	1.0
2005-11	1.0	1.0	1.0	1.0
2005-12	1.0	1.0	1.0	1.0
2006-01	1.0	1.0	1.0	1.0
2006-02	1.0	1.0	1.0	1.0
2006-03	1.0	1.0	1.0	1.0
2006-04	1.0	1.0	1.0	1.0
2006-05	1.0	1.0	1.0	1.0
2006-06	1.0	1.0	1.0	1.0
2006-07	1.0	1.0	1.0	1.0
2006-08	1.0	1.0	1.0	1.0
2006-09	1.0	1.0	1.0	1.0
2006-10	1.0	1.0	1.0	1.0
2006-11	1.0	1.0	1.0	1.0
2006-12	1.0	1.0	1.0	1.0
2007-01	1.0	1.0	1.0	1.0
2007-02	1.0	1.0	1.0	1.0
2007-03	1.0	1.0	1.0	1.0
2007-04	1.0	1.0	1.0	1.0
2007-05	1.0	1.0	1.0	1.0
2007-06	1.0	1.0	1.0	1.0
2007-07	1.0	1.0	1.0	1.0
2007-08	1.0	1.0	1.0	1.0
2007-09	1.0	1.0	1.0	1.0
2007-10	1.0	1.0	1.0	1.0
2007-11	1.0	1.0	1.0	1.0
2007-12	1.0	1.0	1.0	1.0
2008-01	1.0	1.0	1.0	1.0
2008-02	1.0	1.0	1.0	1.0
2008-03	1.0	1.0	1.0	1.0
2008-04	1.0	1.0	1.0	1.0
2008-05	1.0	1.0	1.0	1.0
2008-06	1.0	1.0	1.0	1.0
2008-07	1.0	1.0	1.0	1.0
2008-08	1.0	1.0	1.0	1.0
2008-09	1.0	1.0	1.0	1.0
2008-10	1.0	1.0	1.0	1.0
2008-11	1.0	1.0	1.0	1.0
2008-12	1.0	1.0	1.0	1.0
2009-01	1.0	1.0	1.0	1.0
2009-02	1.0	1.0	1.0	1.0
2009-03	1.0	1.0	1.0	1.0
2009-04	1.0	1.0	1.0	1.0
2009-05	1.0	1.0	1.0	1.0
2009-06	1.0	1.0	1.0	1.0
2009-07	1.0	1.0	1.0	1.0
2009-08	1.0	1.0	1.0	1.0
2009-09	1.0	1.0	1.0	1.0
2009-10	1.0	1.0	1.0	1.0
2009-11	1.0	1.0	1.0	1.0
2009-12	1.0	1.0	1.0	1.0

Employed on Tele-working: 2006

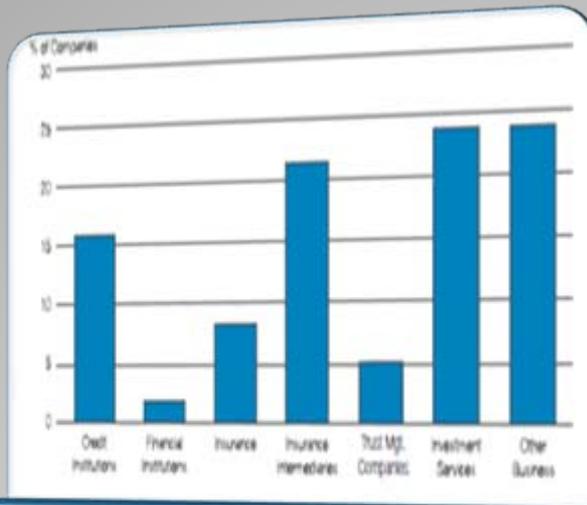


	Dec-05	Dec-06	Dec-07	Dec-08	Dec-09
Labour Supply	146,012	147,518	149,266	151,891	151,507
Employed	138,633	140,357	143,094	145,510	143,827
Direct Production	42,309	42,636	41,792	40,436	38,330
Market Services	95,509	96,988	100,603	104,251	104,855
Temporary Employed	815	733	699	711	642
Part-Time Employment	39,283	42,115	45,235	47,090	49,736
Unemployed (part 1 & 0)	7,379	7,161	6,172	6,373	7,680
Unemployment rate (%)	5.1	4.9	4.1	4.2	5.1

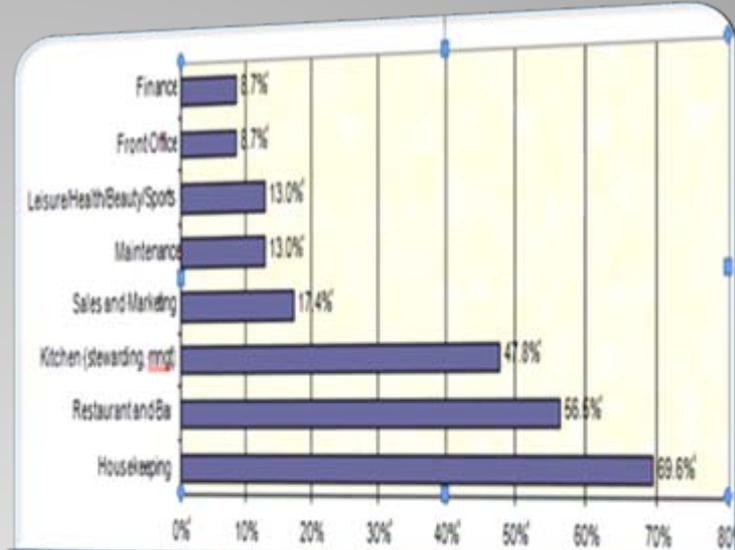
Employed Part-Time: 2009



Atypical Employment



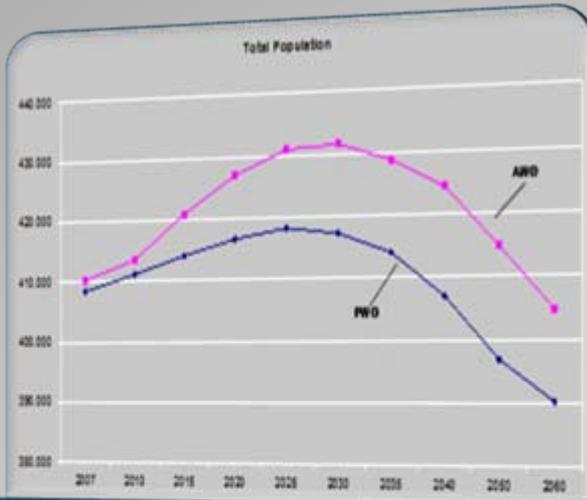
Skills Gap in the Financial Services Sector



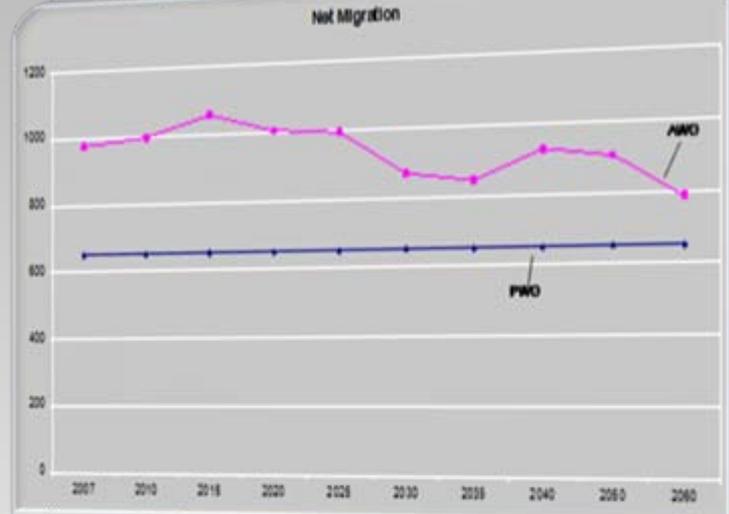
Skills Gap in Tourism Sector



Targeting Skilled Immigration



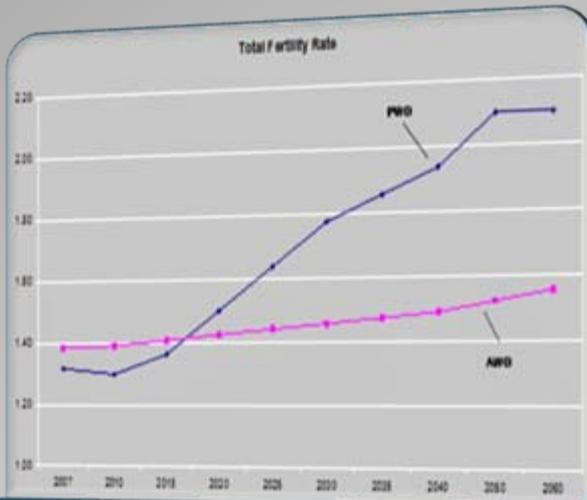
Total Population



Net Migration



Assumptions



Total Fertility Rate



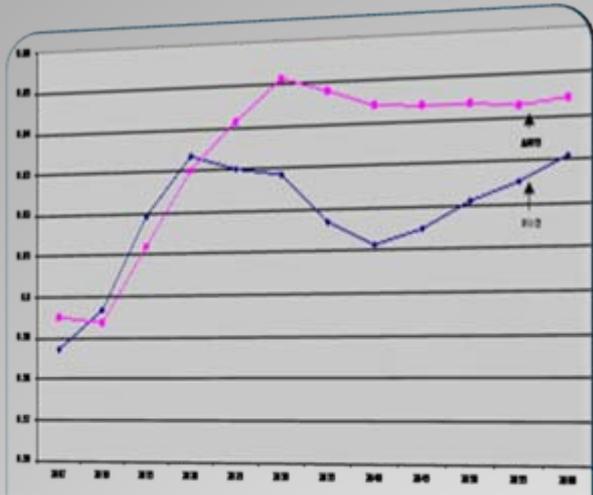
Gains in Life Expectancy: Comparison of various projections (2008 - 2060)

	Males	Females
EUROPOP 2008	8.3	7.5
PWG Baseline	5.1	4.2

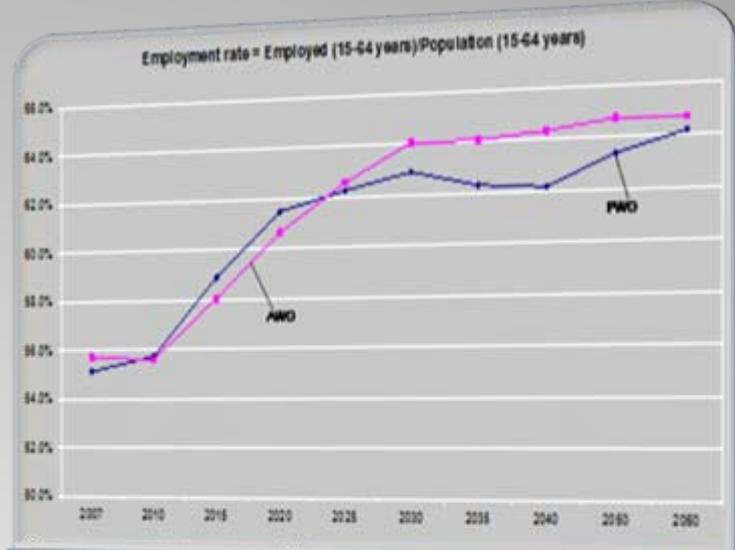
Longevity



Assumptions



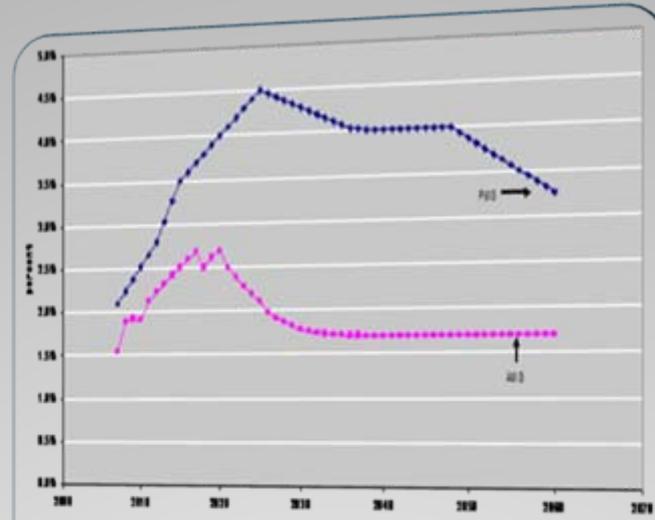
Participation Rate



Employment Rates



Assumptions



Labour
Productivity



Assumptions

Average Labour Productivity Growth in the EU: 1991-2007 (cont.)

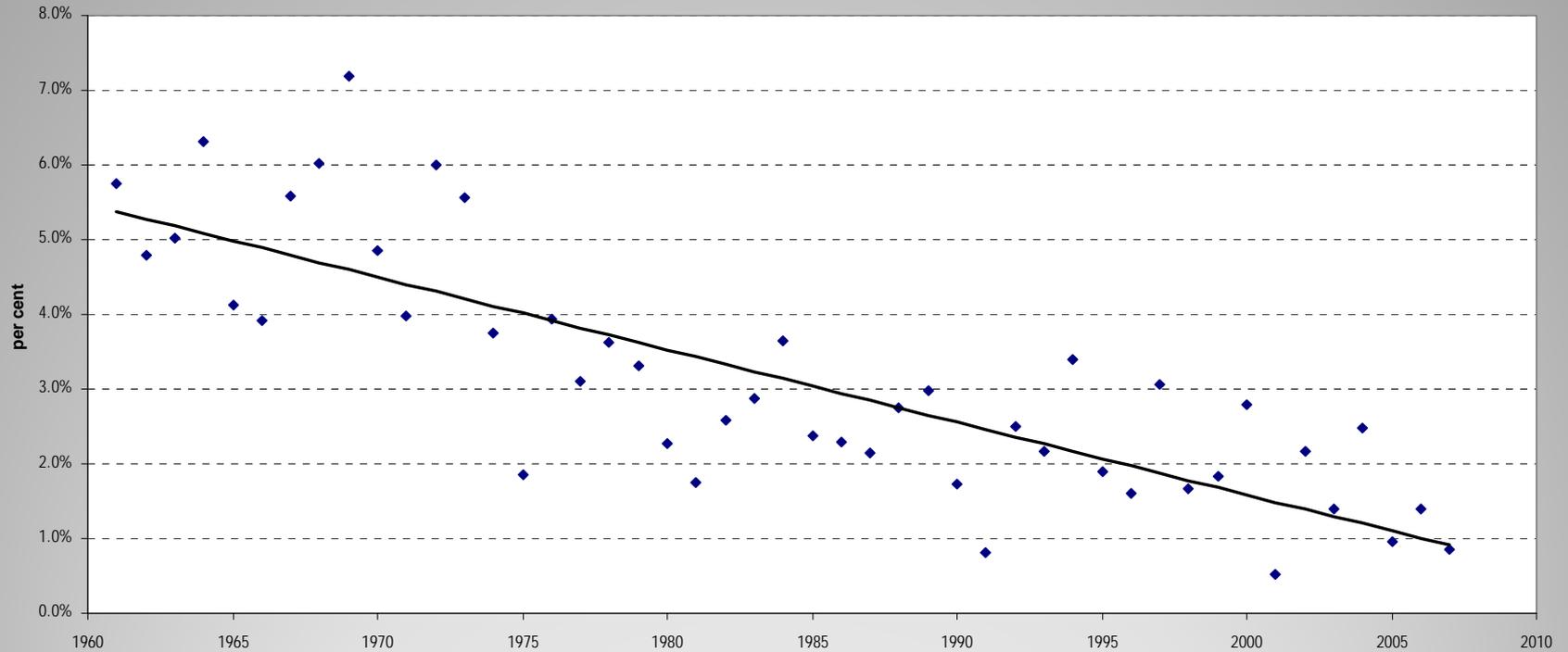
Middle Income Countries

Low Income Countries

Cyprus	1.8%	Bulgaria	1.5%
Malta	1.7%	Estonia	4.1%
Greece	1.9%	Hungary	2.4%
Portugal	1.8%	Latvia	3.5%
Czech Republic	2.2%	Lithuania	1.8%
Slovenia	3.0%	Poland	4.3%
		Romania	3.4%
		Slovak Republic	4.4%
Average: 1991-2007	2.1%	Average: 1991-2007	3.2%
Average: 2001-2007	2.2%	Average: 2001-2007	5.2%

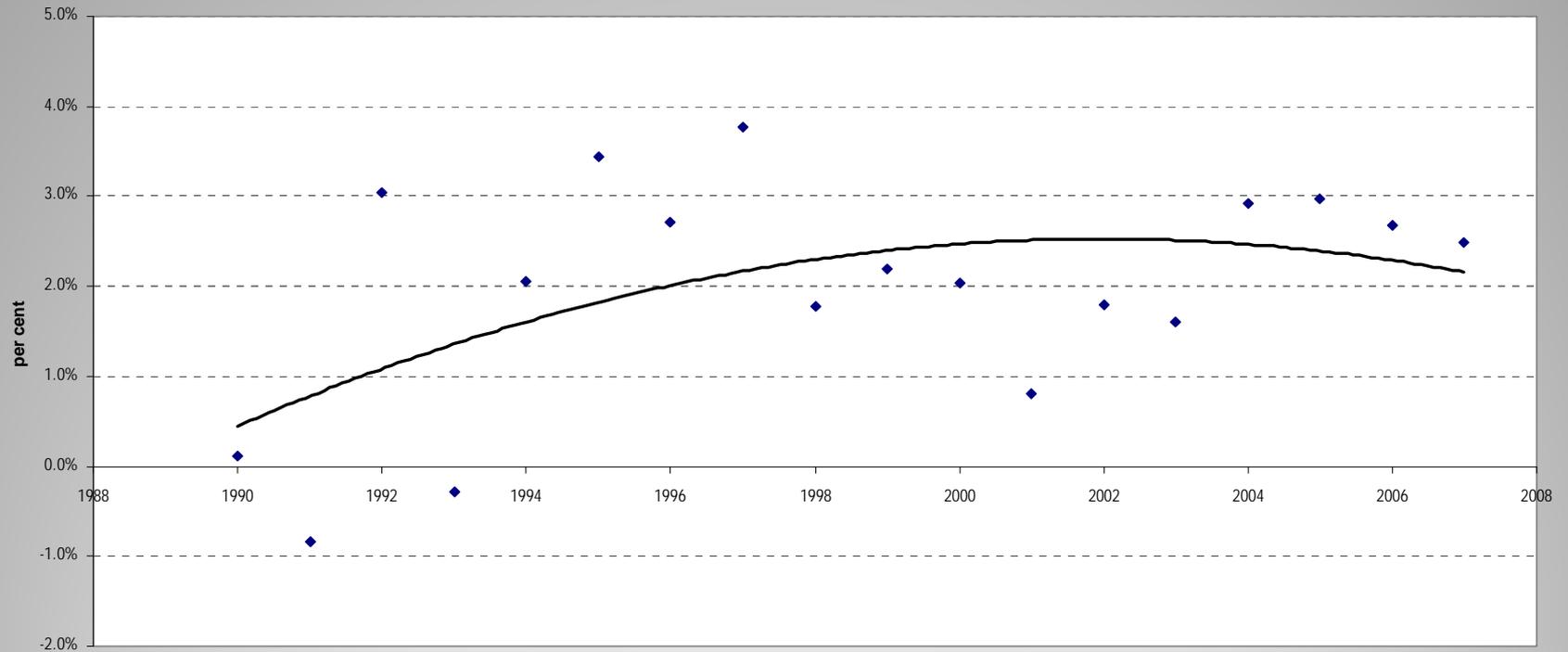
Assumptions

Labour Productivity Growth in a Selection of High Income EU countries



Labour Productivity Growth of High Income EU Countries

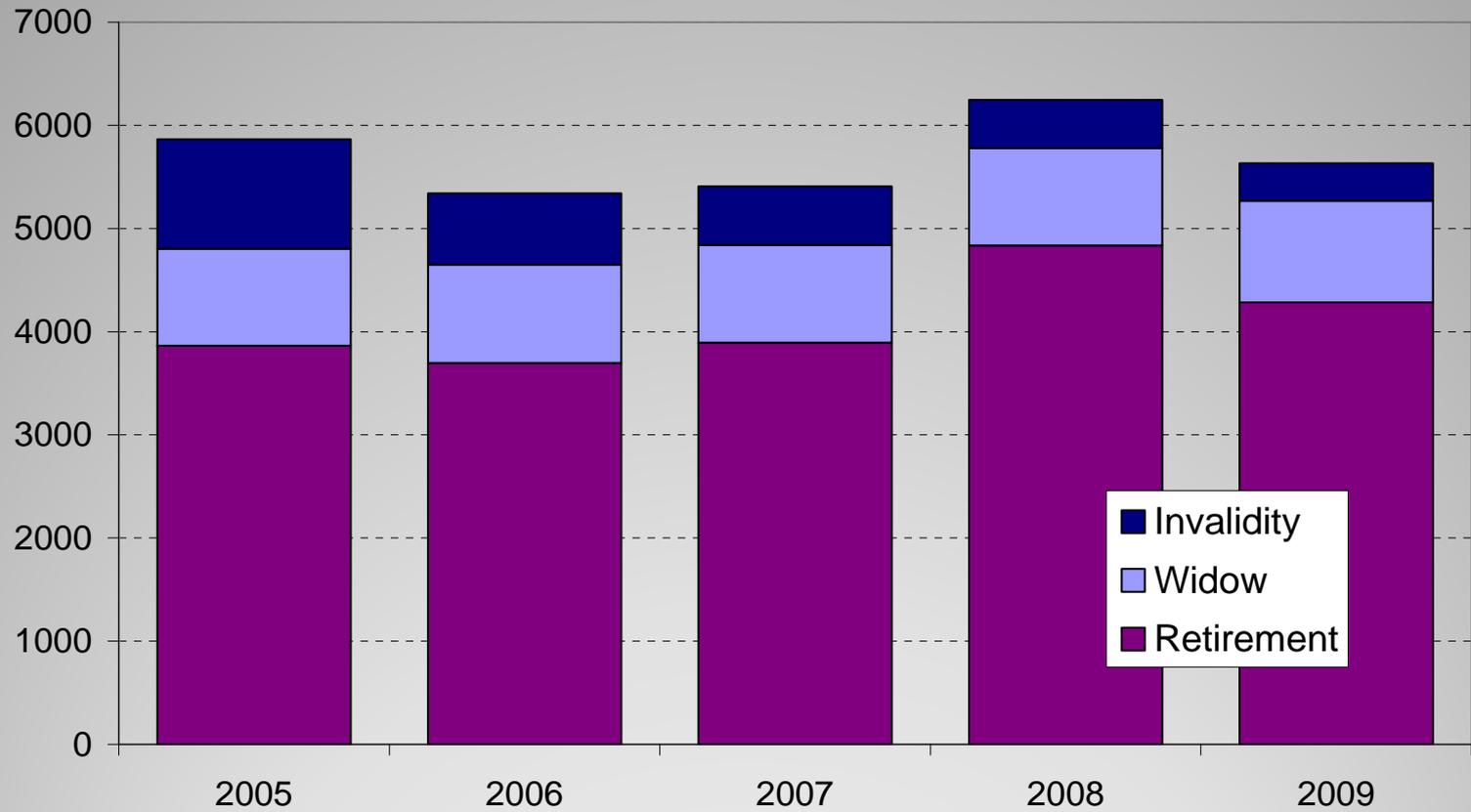
Labour Productivity Growth in Middle Income EU Countries



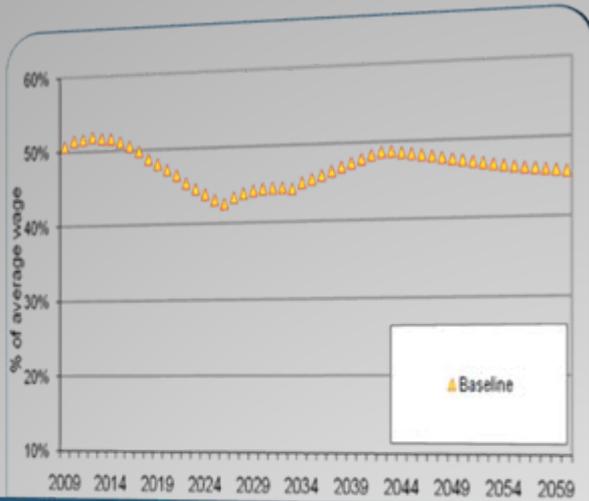
Labour Productivity Growth in Middle Income EU Countries

Group of Pension	Cases	Mean age	Proportion female	Mean annual payment	Median annual payment	Replacement Rate (on total average salary)
Retirement	52 656	69,6	26,1%	6 836	6 755	54,7%
Widow	16 165	73,9	99,2%	6 874	6 626	53,7%
Invalidity	7 499	56,0	25,4%	5 246	5 672	46,0%
Total	76 320	69,2	41,5%	6 688	6 621	53,6%

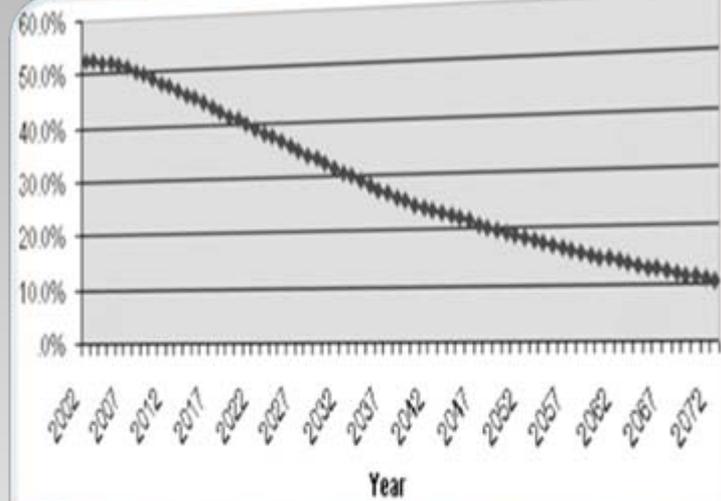
Profile of Pensioners as at 2009



New Beneficiaries



2010
Modelling:
APRR



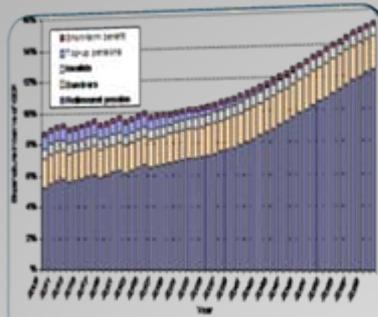
2005
Modelling:
APRR



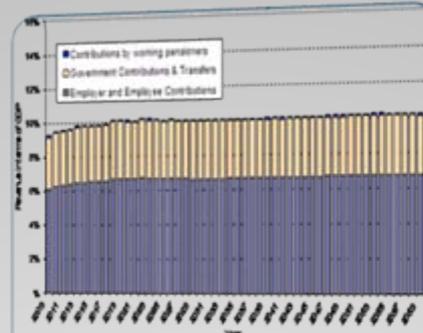
Base-line Model Behaviour

Concept		Year		
		2007	2008	2009
1	Social Security contributions	320	340	351
2	Direct contribution SSA 1987	160	170	175
3 = 1+2	Total Revenue (Contributions)	480	510	526
4	Invalidity	37	35	32
5	Retirement	262	294	320
6	Bonus	29	33	39
7	Widows (Survivorship)	90	94	98
8	Short term	13	13	14
9	Total Contributory Benefits	431	469	502
10 = 3-9	Current balance	49	41	24
11 = 10/3	Relative surplus	10.2%	8.0%	4.5%

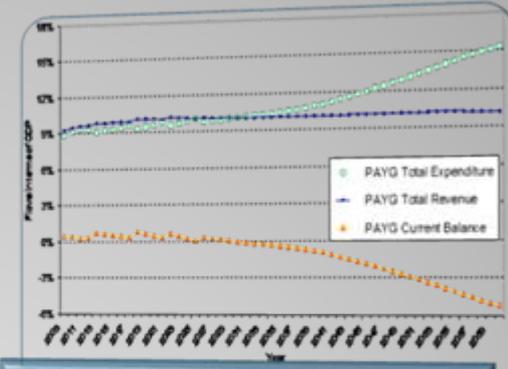
Actuarial State of Play



Benefits Payment



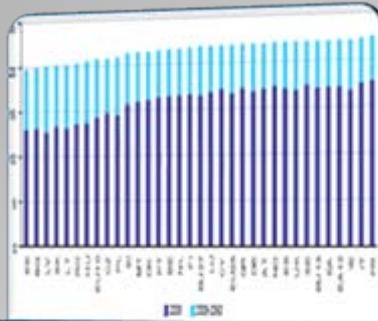
Contributions



Balance



Sustainability of First Pension



Projected Longevity by 2060

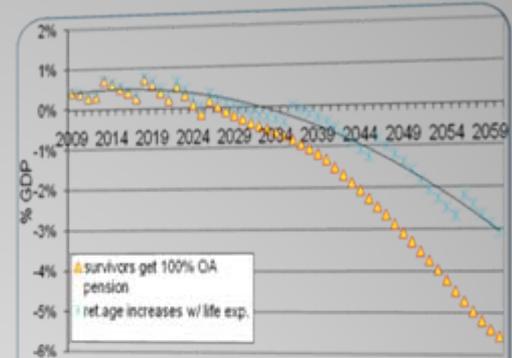


Year cohort	reaches 65 in	life expectancy at 65	Retirement age required	Time spent retired**	...compared to birth cohort 1950
1960	1961	82 y 3 mo	63 y	17 y 3 mo	0
1965	1965	82 y 7 mo	63 y 12 mo	17 y 12 mo	+0 mo
1970	1970	83 y 2 mo	64 y 6 mo	18 y 3 mo	+10 mo
1975	1975	84 y 7 mo	64 y 6 mo	18 y 5 mo	+1 y
1980	1980	85 y 1 mo	65 y 10 mo	18 y 7 mo	+1 y 2 mo
1985	1985	85 y 4 mo	67 y 1 mo	18 y 9 mo	+1 y 4 mo
1990	1990	85 y 10 mo	67 y 4 mo	18 y 12 mo	+1 y 6 mo
1995	1995	86 y 2 mo	67 y 7 mo	19 y	+1 y 7 mo
2000	2000	86 y 6 mo	67 y 10 mo	19 y 1 mo	+1 y 8 mo
2005	2005	86 y 9 mo	68 y	19 y 2 mo	+1 y 9 mo
2010	2010	86 y 11 mo	68 y 1 mo	19 y 3 mo	+1 y 10 mo
2015	2015	87 y 2 mo	68 y 3 mo	19 y 4 mo	+1 y 11 mo

* The calculation shows the retirement age required if the rate of the tax system is fully applied. The required retirement age for each cohort (2001-2010) is also indicated.

** The spent months included in its expectancy in the second retirement age.

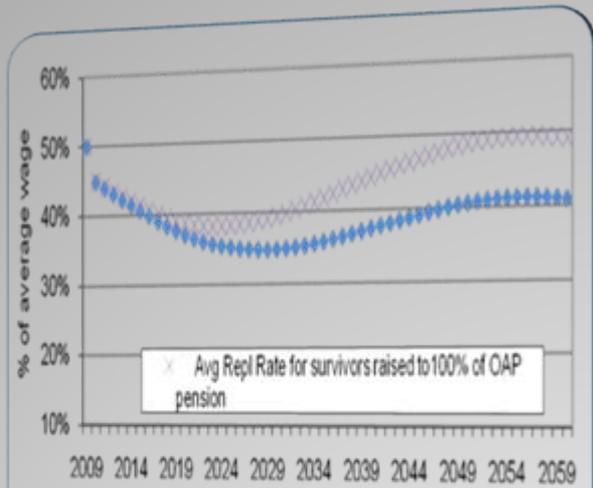
Swedish Longevity-Retirement Index



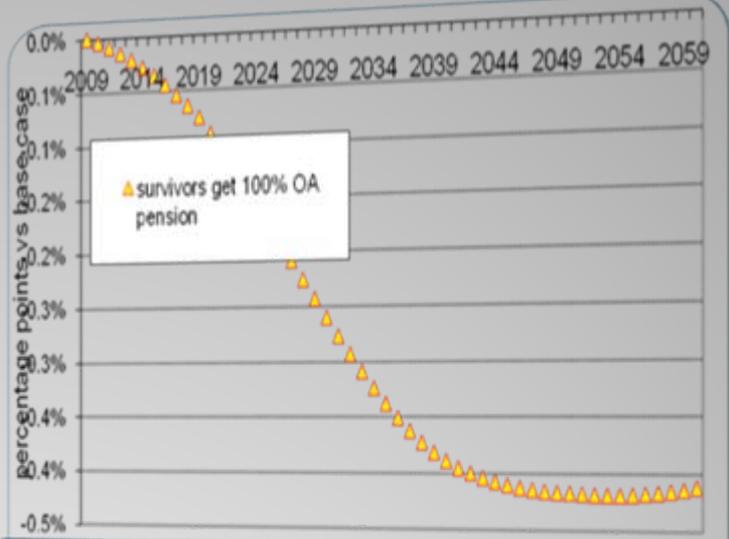
Introducing a Retirement-Longevity Index



Recommendations: Retirement Age



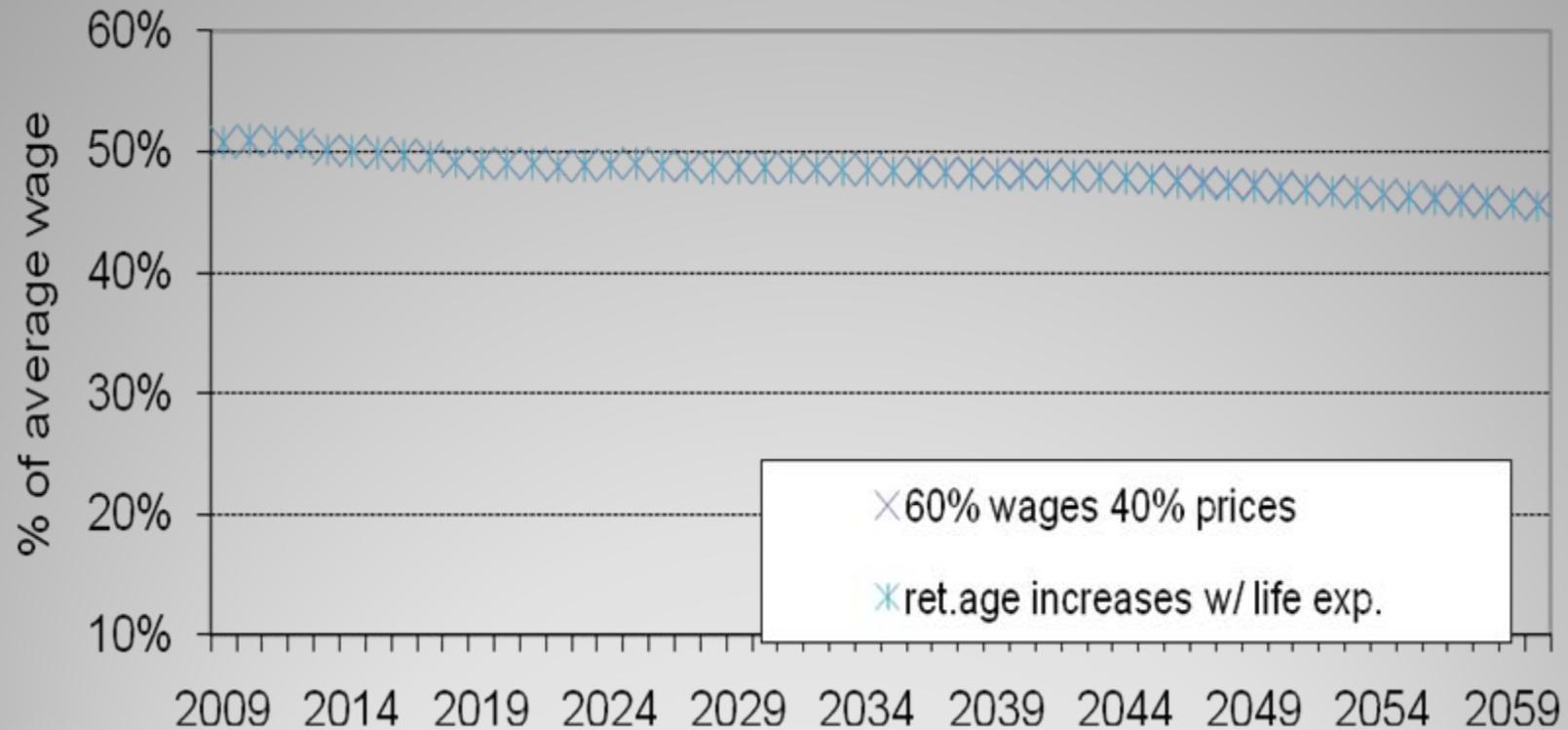
Adequacy impact of a Full Retirement Pension



Financial impact of a Full Retirement Pension



Recommendation: Placing Survivor's on a Full Pension



Impact of Proposed Changes to First Pension Replacement Rate to Average Wage

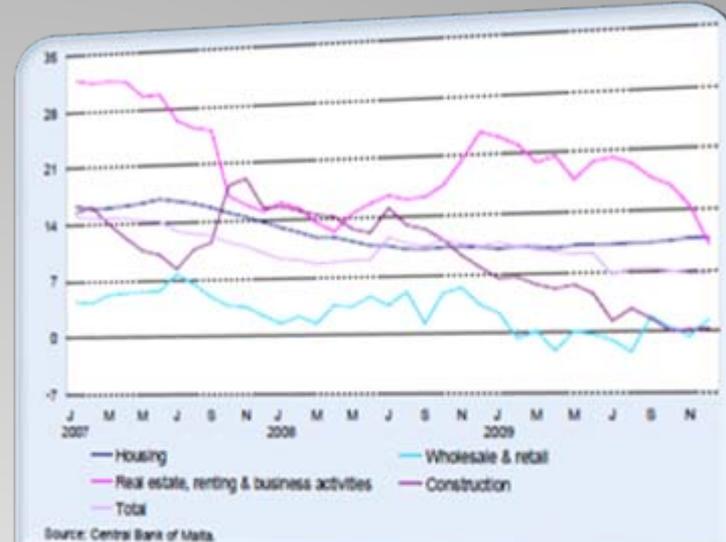
Income	1% carve out from Maximum Ceiling 2010 Neutral	+1% 2011 on Max €35,000	+1% = 2% Total 2020 on Max €35,000	+1% = 3% Total 2025 on Max €35,000
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€	€	€	€	€
50,000		350	700	1,050
35,000		350	700	1,050
24,000		240	480	720
16,000		160	320	480
10,500		105	210	315
8,000		80	160	240
6,000		60	120	180

Financial Impact of 2005 Recommendation on Second Pensions



Public / Private Saving: 2005-2008 vs 1994-1997



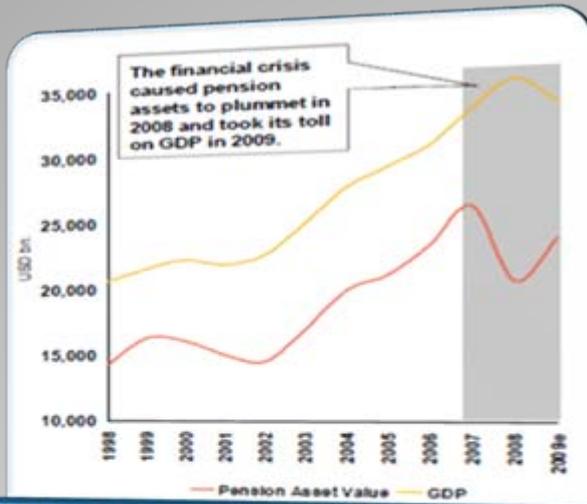
Annual Private Sector Loan Growth - 2009



Savings and Mortgages

Net Income Octiles of Reference Persons	Average Net Income	Annual Household Consumption	Difference
€6,000 to €8,000	12,048	€12,137	(€89)
€8,001 to €10,000	€14,342	€14,585	(€253)
€10,001 to €12,000	€18,431	€18,566	(€135)
€12,001 to €14,000	€20,478	€20,880	(€402)
€14,001 to €16,500	€23,254	€23,916	(€662)
€16,501 to €21,000	€26,668	23,748	€2,920
€21,001+	€39,132	30,022	€9,110

Household Budgetary Survey 2008



Global Pension Assets vs GDP - 2009



Nominal Investment Rate of Return



Private Pensions Behaviour

*Considered opinion that the financial and economic crisis, **of itself**, does not diminish the importance of private pension provision in a well balanced private and State pension framework directed to ensure a quality of life during retirement*

Key questions grappled with is not whether a Mandatory Second Pension is necessary but rather:

- *when should a Mandatory Second Pension be introduced;*
and
- *what is the best design framework for a Mandatory Second*

Mandatory Second Pension

Increase aggregate savings as well as individual savings

Negatively impact disposable income with particular regard to low income and lower middle income groups

Reduce revenue from VAT as a consumption today is deferred to one's retirement life cycle phase

Result in a loss of competitiveness

Negatively impact government finances as contributions paid by the State as an employer will be ring-fenced

Mandatory Second Pension: Impact on Local Economy

A decision to defer will impact the quality of life of future pensioners

• VS

A decision to introduce will have an impact on the quality of life on today's employees as well as employers

The Competing Pressures

As soon as possible - means issue can no longer be postponed or avoided:

But will take time. Sweden decision taken in 1994 and implemented in 2000

Consensus on design, phasing, governance et al of fundamental importance

Moving Towards a Mandatory Second Pension

*Establishing a Single Default Fund
Established by Government*

• *or*

*Hybrid Occupational Retirement
Pension with Mandatory Default
Option*

**Potential Framework Mechanism
for a Mandatory Second Pension**

Immediate

Based on an EET Fiscal Incentive Framework

Migrates into Mandatory Second Pension

Third Pillar: Third Pension

Year	Maturity / Surrender Value
2010	€34,000,000
2011	€36,000,000
2012	€40,000,000
2013	€34,000,000
2014	€43,000,000

**Fast Track to Third Pension:
Maturity of Financial Instruments:
2010 - 2014**

Year	Number of mortgages (accounts)	Total amount in Lm ('000s)^	Interest Rate (%)
2003	38,538	442,245	4.47
2004	41,981	539,092	4.30
2005	44,990	653,136	4.49
2006	47,055	759,837	4.95
2007	48,516	865,005	5.39

Third Pillar Leveraging Home Investment

Voluntary

Saving of Child's Allowance

Child assumes right of Account on 18 years

No cashable but transferrable into Pension Savings Account

Third Pillar Child's Pension Account

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Thank You