
Supplementary Papers to the Report

Strengthening the Pensions System

A Strategy for an Adequate and Sustainable Maltese Pension System

Pensions Strategy Group

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Contents

01	Demographic Characteristics: A Review of the Period 1998 to 2012
02	Labour Market
03	Labour Market Supporting Policies

Figures

Figure 01	Malta's Population between 1998 and 2012
Figure 02	Changes in Malta's Population Structure between 1999 and 2012
Figure 03	Total Fertility Rate for Malta
Figure 04	Age Specific Fertility Rate for Malta
Figure 05	Age Specific Death Rates
Figure 06	Net Migration: 2008-2012

Tables

Table 01	Total Births in Malta between 1980 and 2012
Table 02	Stock of Third-Country National Workers by main category of skill level and year
Table 03	Persons Aged 15 and Over by Labour Status: 2005 to 2013
Table 04	Total Employment Rate
Table 05	Type of Employment: 2005 to 2013
Table 06	Male and Female Employment Rate between 2004 and 2013
Table 07	Unemployment Rate between 2005 and 2013
Table 08	Total Working Life Duration between 2004 and 2012
Table 09	Total Working Life Duration of Males and Females between 2004 and 2012
Table 10	Part-time Employment by Gender between 2005 and 2013
Table 11	Total Number of Persons in Involuntary Part-time Employment between 2004 and 2012
Table 12	Females in Employment and Number of Children between 2005 and 2013
Table 13	Persons Aged 0-3 having No Formal Care by Type of Working Family between 2005 and 2013
Table 14	Number of Hours of Informal Care by Relatives for Persons Aged 0-3: between 2005 and 2013
Table 15	Persons Aged 0-3 having a Form of Formal Care by Type of Working Family between 2005 and 2013
Table 16	Total Males and Females on Reduced Hours between 2005 and 2013
Table 17	Pro-family Friendly Measures Introduced by Government as an Employer between 2006 and 2010
Table 18	Employment Rate of Older Workers (55 years of age to 64 years of age
Table 19	Male and Female Employment Rate of Elderly Persons who are 65 years of age and over on Total Employment between 2005 and 2013
Table 20	Lifelong Learning between 2004 and 2013
Table 21	Male and Female and Lifelong Learning between 2004 and 2013
Table 22	Male and Female aged 55 to 74 years Undertaking Lifelong Learning between 2005 and 2013

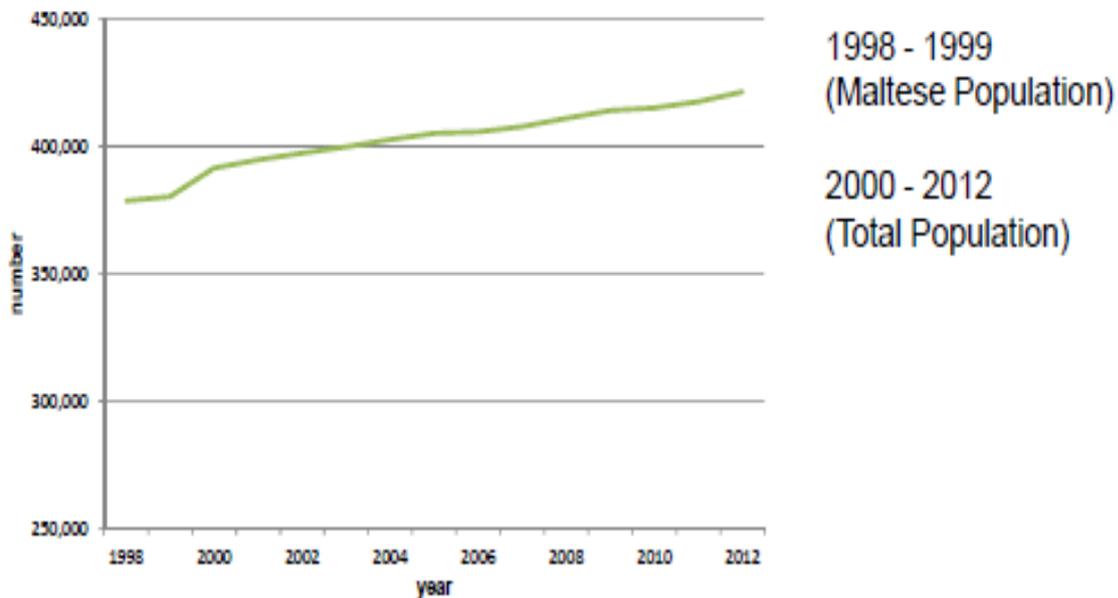
01 Malta's Demographic Characteristics: A Review of the Period 1998 to 2012

To grasp the challenges that future demographic changes will have on the sustainability and adequacy of Malta's pension system, it is important to consider the age structure of the population today, and how this has changed over time. This, in turn, will assist in understanding how the population is expected to look like in the future.

The Group reviewed Malta's population for the period 1998 to 2012. This period reflects the time frame when the debate in Malta on the need for pension reform started to take place in earnest, leading to the undertaking of actual reforms in 2007. The Group looked at the behaviour of fertility, life expectancy, and migration, during this period which have a direct and primary impact on the extent and speed of the ageing of Malta's population.

Malta's population increased during this period from approximately 385,000 in 1998 to 415,000 in 2012.

Figure 01: Malta's Population between 1998 and 2012¹

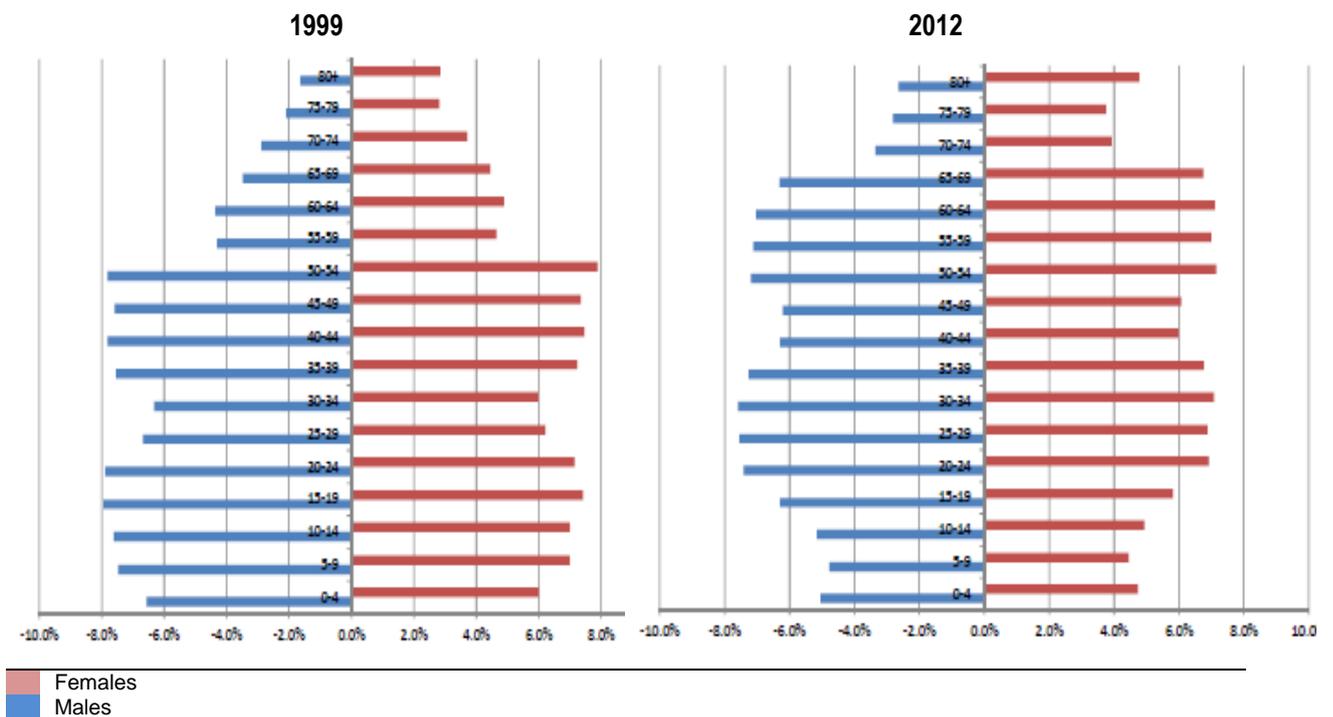


Moreover, Malta's population structure during this period experienced significant changes as shown in the Figures below. It is immediately evident that in 1999, Malta was already showing signs of an aging population. The lower base of the population pyramid, which should constitute the largest population cohort, was already smaller than the 15-19 years of age cohort, whilst the population structure had already lost the pyramid shape that represents a healthy population.

By 2012, the impact of aging on Malta's population was now more evident. The upper base of the pyramid, particularly, with regard to the 60 years to 69 cohorts of the population, was now representative of the age cohorts between 20 and 59 years of age. The lower base; the 19 years of age and under; shrunk considerably when compared to 1999. Indeed, in 2012, the 65 to 69 years of age cohort was larger than the 0-4 years of age cohort.

¹ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group. February 2014

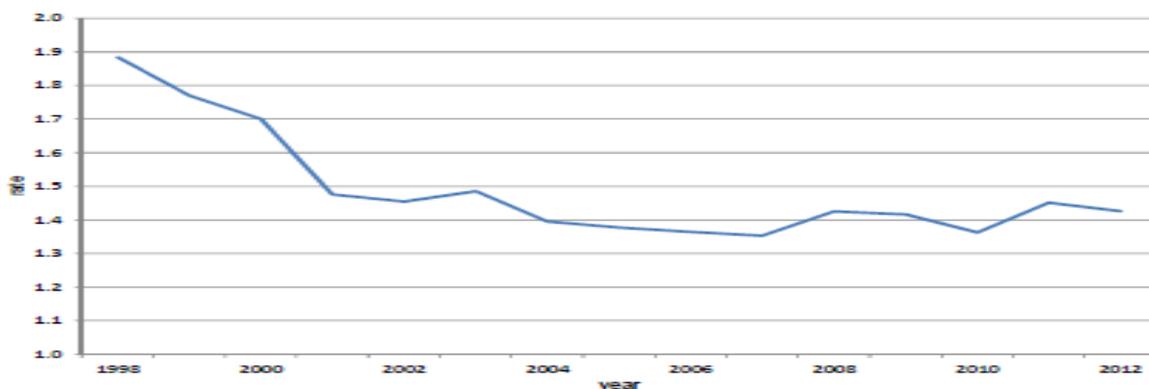
Figure 02: Changes in Malta's Population Structure between 1999 and 2012²



As can be seen from the Figure below, Malta's Total Fertility Rate (TFR) experienced a significant decline between 1998 and 2012. Thereafter it experienced a marginal decrease before it rebounded slightly in 2010, before falling once again in 2012.

Malta has now for over a decade experienced a fertility rate that hovers around 1.4. This is of concern, as a fertility rate of 1.4 means that Malta's population is likely to be on the decline assuming that there is no significant increase in migration. The TFR is lower by 0.7 when compared to the TFR of 2.1 required for a population to be deemed to be sustainable.

Figure 03: Total Fertility Rate for Malta³



The Table below presents the total births between 1980 and 2012. The total births between 1980 and 2010 decreased by 1,926 births, or by 33.1% over the said period. The number of birth rates rebounded marginally by 223 births in 2012 on 2010 figures, or 5.7%. Of particular significance is the

² Ibid

³ Ibid

increase in registered illegitimate births. In 1980 illegitimate births stood at 118 or 2.0% of total births. By 2010, this increased significantly to 1,100 births or 27.4% of total births.

Table 01: Total Births in Malta between 1980 and 2012⁴

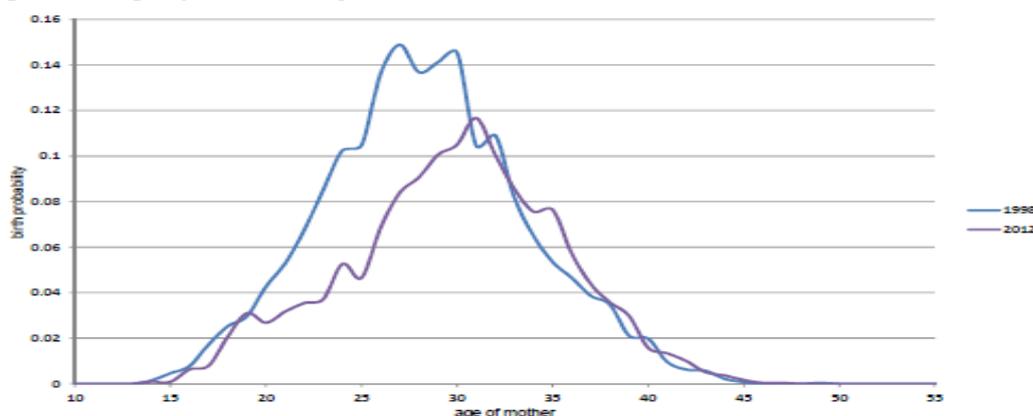
	1980		1990		2000		2010		2012	
	Maltese and other Births	Illegitimate Births								
Under 20	174	59	164	24	249	143	43	212	26	186
20-24	1,530	14	2,007	28	900	155	280	291	247	345
25-29	2,018	19	2,157	19	1,590	87	927	375	1,036	242
30-34	1,470	15	1,456	13	1,086	41	1,147	120	1,252	171
35-39	503	7	580	10	444	29	458	88	522	100
40-44	117	3	195	1	113	8	51	14	73	28
45-49	4	1	9	0	4	1	2	0	2	1
Sub-total	5,816		5,003	213	4,386	464	2,908	1,100	3,158	1,073
Total	5,934		5,216		4,850		4,008		4,231	

During this period, one other significant shift took place in Malta’s demographic structure – that with regard to the Age Specific Fertility Rate (ASFR). Between 1980 and 1990, the majority of births were by mothers aged 20 to 24 years. By 2012, this cohort of mothers fell to 592 from 1,544 in 1980 – a dramatic decrease of 61.7% - of which, in 2012, 345 of such births, or 58.3% of all births in this cohort were illegitimate.

A similar decrease is evident with regard to mothers in the 25 to 29 years of age. Births in this cohort fell from 2,037 (34.3% of all births) in 1980 to 1,278 (30.2% of all births) in 2012. On the other hand the number of births by mothers aged between 30 to 34 years proportionally increased from 25.5% to 33.6%. This trend is also found with regard to births by mothers aged 35 to 39 years which proportionally increased from 8.6% in 1980 to 14.7%.

The Figure below shows that the ASFR for mothers who have the first child has shifted towards mothers who are 30 years of age and over. This is interpreted to mean that as women are becoming more active in the labour market, they are differing their decision to start a family to later in life. This is one key reason for the decline of Malta’s TFR.

Figure 04: Age Specific Fertility Rate for Malta⁵

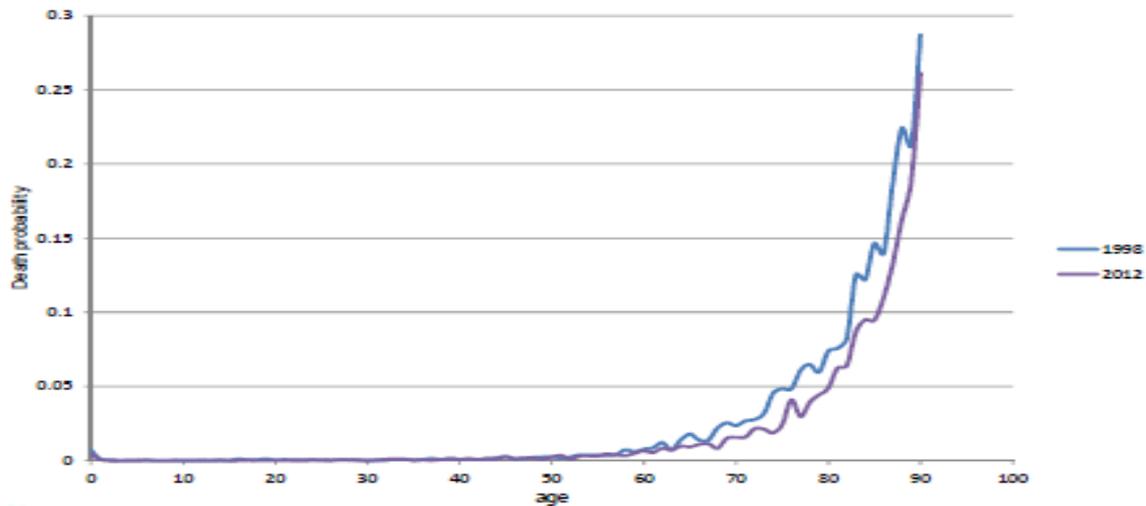


⁴ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, July 2014

⁵ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, February 2014

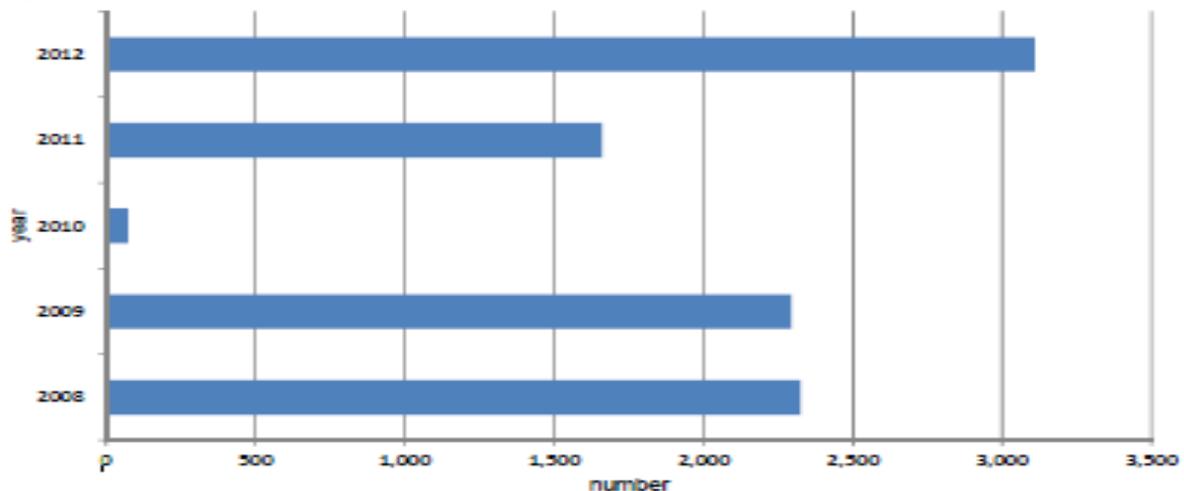
As can be seen from the Figure below during the period under review there has been a considerable shift downwards in the death probability rate for persons who are 65 years of age and over - in essence, showing that the unisex life expectancy rate increased.

Figure 05: Age Specific Death Rates⁶



The Figure below shows that net migration in Malta for the period 2008-2012 was approximately over 9,000 persons. This, in part, explains the increase that has taken place in the Maltese population as shown earlier in this paper. Immigration flows, other than returning Maltese persons, constitute, in ascending order of persons from the EU, asylum applicants, and Third Country persons excluding asylum applicants.

Figure 06: Net Migration: 2008-2012⁷



The Table below presents the stock of Third-Country National workers by main category of skill level and year. The largest stock of Third Country Nationals migrant workers is in the skilled category at 51.5%; followed by the highly skilled sector at 28.1%.

⁶ Ibid

⁷ Ibid

Table 02: Stock of Third-Country National Workers by main category of skill level and year⁸

<u>Skills</u>	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Highly Skilled	901	782	1,159	1,052	1,118	947				
Skilled	782	1,129	2,002	1,993	2,522	1,734				
Low Skilled	52	129	330	474	853	688				
	1,735	2,040	3,491	3,519	4,493	3,369				

02 Labour Market

As can be seen from the Table below, the number of persons employed increased from by 26,000 persons or 15.4% between 2005 and 2013. Unemployed persons increased by 900 persons or 8.1%, whilst the number of inactive persons fell by 1,300 persons or 7.8% from the same period respectively.

Table 03: Persons Aged 15 and Over by Labour Status: 2005 to 2013⁹

	2005	2006	2007	2008	2009	2010	2011	2012	2013
	'000s								
Employed	149.4	151.2	155.4	158.6	159.5	162.6	166.6	170.3	175.4
Unemployed	11.1	1	10.8	10.1	11.8	12	11.3	11.5	12
Inactive	166.5	168.1	167.1	168.4	169.7	169.3	168	167.5	165.2

The Table below presents the employment rate in Malta for the period under review. Employment between 2004 and 2013 for the cohort 20-64 years grew by 7.5 from 57.3 to 64.8; or 13.1% on 2004. Teenage employment, age 15+, also grew though at a lower rate: 4.4 between 2004 and 2013 or 9.7%.

Both categories enjoyed significant growth which extended the active participation base in the labour market. Growth in employment in Malta was on-going even in 2009 when the global economic recession and the Euro Zone Area turbulence.

Table 04: Total Employment Rate¹⁰

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Age 15+	45.4	45.7	45.8	46.6	47.1	46.8	47.3	48.2	48.8	49.8
Age 20-64	57.3	57.4	57.9	58.6	59.2	59.0	60.1	61.6	63.1	64.8

The employment of full-time persons increased between 2005 and 2013 by 16,727 persons or 12.4% on the 2007 base. Persons in full time employment constituted 84.4% of all employment – which is a decrease of 5.7% when compared to 2005.

The proportional reduction in full-time employment is compensated by the significant increase in part-time employment between 2005 and 2013. Part-time employment during the period under review increased by 9,706; or a 72.7% increase on 2005.

⁸ Pg 21, Ibid

⁹ Labour Force Survey: Q3 2005 to Q3 2013, National Statistics Office, <http://www.nso.gov.mt/site/page.aspx>

¹⁰ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdec420&plugin=1>

Table 05: Type of Employment: 2005 to 2013¹¹

	2005	2006	2007	2008	2009	2010	2011	2012	2013
	'000s								
Full-time	134.7	138.0	139.3	141.1	142.8	145.7	146.3	146.8	151.5
Full-time+reduced hours	1.4	1.6	2.7	3.5	3.1	3.6	4.5	4.7	4.8
Part-time	13.3	13.9	15.5	15.1	15.2	16.0	17.2	21.0	23.0
Total	149.4	153.5	157.5	159.7	166.1	165.3	168.0	154.5	179.3

As can be seen from the Table below, the growth in employment rate is mainly fuelled by the considerable growth in female employment during the period under review. Between 2004 and 2013, female employment grew by 15.5% or 45.2% on 2004.

Although the female employment rate is below the EU28 MS average of 62.5% in 2013, and is the second lowest following Greece at 43.3% (the highest is Sweden at 72.2%) it, nonetheless, represents a considerable success of the myriad of policy measures introduced by government to stimulate increased female labour participation.

Table 06: Male and Female Employment Rate between 2004 and 2013¹²

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male 15+	75	73.5	73.6	73.5	72.9	71.9	72.5	73.8	73.8	74.1
Male 20-64	81.2	80.6	83.5	84.8	85.5	77.1	77.9	78.9	79.0	79.5
Change		-0.6	+2.6	+1.3	+0.7	-8.4	+0.8	+1.0	+1.1	+0.5
Female 15+	31.6	33.4	33.7	36	37.7	38	39.5	41.5	44	47
Female 20-64	34.3	35.1	35.3	37.5	39.4	39.8	41.5	43.4	46.8	49.8
Change		+0.8	+0.4	+2.2	+1.9	+0.4	+1.7	+1.9	+3.5	+2.0

Of note, however, is the fact that active male participation in the labour market fell by (1.7%) for the period under review or (2.1%) on 2004. The decrease in male participation stems from a significant fall of (8.4%) in 2009 as a result of the economic crisis; though thereafter the employment rate was on the increase. It is pertinent to note that the male employment rate at 79.5% is in the upper quartile of EU employment rates and somewhat higher than the 74.2% (2013) EU 28 MS average.

The Table below shows the unemployment rates by age groups over the period 2005-2013. In the period 2005 to 2013, unemployment for the 15-24 age cohort, fell from 16.2% to 15.1% for males, and decreased from 16% to 10.4% with regard to females. With regard to the 25+ age cohort, the percentage of unemployed increased from 4.5% to 5.3% for males and 5.2% to 5.3% for females for the period 2005 to 2013

¹¹ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdec420&plugin=1>

¹² Ibid

Unemployment between 2008 and 2009, the period when the full force of the financial crisis impacted the Maltese economy, increased only marginally by 0.6% for males and 0.4% for females in the 25+ age cohort.

Table 07: Unemployment Rate between 2005 and 2013¹³

	2005		2006		2007		2008		2009		2010	
	M	F	M	F	M	F	M	F	M	F	M	F
15-24	16.2	16	16.4	14.4	15	11.8	13.1	10	16.2	12.5	14.4	11.8
25+	4.5	5.2	4.3	6.1	4.2	6.5	4.3	5.8	4.9	6.2	5.5	3.8

	2011		2012		2013	
	M	F	M	F	M	F
15-24	13.7	12.9	13.5	14.7	15.1	10.4
25+	4.7	5.6	4.5	5.6	5.1	5.3

The total duration of the working life for the period 2004, when the first comprehensive pension reforms was initiated, to 2012 increased marginally– from 28.0 years in 2004 to 31.6 years in 2012. This is an increase of 3.6 years in a person’s working life or 12.8% over 2004. Be that as it may, a working life duration of 31.6 years is on the low side when compared with other MS. Sweden with a working life duration of 40.6 years tops the MS. Malta precedes Croatia (31.1), Hungary (30.4), and ranks equal with Bulgaria.

Table 08: Total Working Life Duration between 2004 and 2012¹⁴

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	28.0	28.4	28.5	29.0	29.4	29.7	30.3	31.0	31.6	
Change		+0.4	+0.1	+0.5	+0.4	+0.3	+0.7	+0.7	+0.6	

The total work life for males for the period 2004 to 2012 experienced a series of decreases. Between 2004 and 2008, this fell from 38.5 years to 37.9 years. It increased again in 2009 to 38.1 years rising to 39.1 years in 2011, before it fell again to 38.9 years in 2012. In essence, this shows that over the past 9 years the Total Working Life duration for men hovered around 38 years - higher than the contributory period of 35 years of the Transitional Group, but lower than the 40 year contributory period of the Switchers Group. It is pertinent to note that during the earlier part of the period under review, the Government and large private sector entities, introduced a number of early retirement schemes as part of entity restructuring.

¹³ Ibid

¹⁴ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdde420&plugin=1>

Table 09: Total Working Life Duration of Males and Females between 2004 and 2012¹⁵

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	38.5	38.2	38.1	38.1	37.9	38.1	38.6	39.1	38.9	
Change		-0.3	-0.1	0	-0.2	+0.2	+0.5	+0.5	-0.2	
Female	17.1	18.2	18.4	19.6	20.4	20.8	21.6	22.3	23.7	
Change		+0.9	+0.2	+1.2	+0.8	+0.4	+0.8	+0.7	+1.4	

On the other hand, the working life duration of females in employment increased significantly by 6.6 years or 38.6% over the same period. This is a remarkable increase and reflects the success attained by a mix of policy instruments which include family friendly measures; pension credits for child rearing; free childcare centres and pre and post school centres; tax incentives; etc. directed to increase the participation of females in Malta's labour market.

The Table below compares part-time employment by gender during the period under review. The percentage of males in part-time employment has traditionally been considerably lower than that of females. In 2013, however, the number of males in part-time employment increased significantly on 2012 – by 2,370 persons or 30.5% on 2012. It is too early to determine whether this increase of males in part-time work reflects a structural shift in the labour market or is a one off spike.

Table 10: Part-time Employment by Gender between 2005 and 2013¹⁶

	2005		2006		2007		2008		2009	
	M	F	M	F	M	F	M	F	M	F
Part-time	4,809	8,547	5,283	8,691	4,187	10,259	4,700	10,455	5,342	9,916
	2010		2011		2012		2013			
	M	F	M	F	M	F	M	F		
Part-time	5,149	10,898	6,937	17,216	7,762	13,299	10,132	12,933		

The Table below presents the number of persons between 15 to 64 years of age who are in involuntary part-time employment – that is, persons working part-time because they are unable to find full-time work. Over the period under review, the number of persons in involuntary part-time employment decreased by 4.3% or 21.1% on 2004. At 16% in 2012, the number of persons in involuntary part-time employment is significantly lower than that of the EU 28 MS average which in 2012 stood at 27.6%.

¹⁵ Ibid

¹⁶ Ibid

Table 11: Total Number of Persons in Involuntary Part-time Employment between 2004 and 2012¹⁷

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	20.3	22.0	22.1	17.1	16.1	15.2	19.6	16.1	16.6	16.0
Change		+1.7	+0.1	(0.5)	(0.1)	(0.9)	+4.4	(3.5)	+0.5	

The decrease in persons in involuntary part-time employment is particularly evident with regard to women, where the rate fell from 19.2 in 2005 to 12.1 in 2013 – 7.1 or 36.9% on 2004; whilst that relating to males increased marginally by 0.4 between 2005 and 2012. This decrease in female persons in involuntary part-time employment is consistent with the increase of the experienced in the labour market.

03 Labour Market Supporting Policies

03.1 Supporting Parents in Employment: Child Care Infrastructure and Support

Labour market participation patterns in Malta have for a long time remained unchanged by family structures. The ‘male breadwinner’ model was the dominant form, with men starting their careers in in the late teenage years or in the early twenties, marrying and starting a family around their mid to late twenties. The impact of children on a man’s working life has long been small if not insignificant.

Over the past decade, major changes have occurred as a result of policy instruments directed to increase the active labour participation of women. The formerly predictable life course of men and women has changed radically, and family patterns have become more diverse, with people, as shown earlier, seen to postpone marriage and / or parenting or refraining altogether from having children. Today, the career choices of men and women vary substantially according to the timing and nature of their decisions and expectations on family life.

The participation of women in the labour market continues to rise but still depends on various factors. Women’s participation in the workforce continues to be affected by their predominant role in the care of children. Thus, the presence and number of children, as well as the age of the youngest child may have a marked influence on female employment rates.

The Table below presents the employment rate of males and females with the number of children for the period 2005 to 2013. Of particular note is the fact that the number of women in employment who have one child is higher than that of women with no children and equal to women with 2 children.

¹⁷ http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa_eppgai&lang=en

Table 12: Females in Employment and Number of Children between 2005 and 2013¹⁸

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Employment of Female									
No child	40.8	39.8	40.9	41.2	40.9	43.3	44.1	45.4	48.0
1 Child	40.9	40.9	43.0	45.4	47.4	47.5	47.7	52.7	58.0
2 Children	29.2	31.0	36.6	38.2	38.4	42.2	48.1	53.1	58.0
3 Children	25.4	22.9	22.0	30.0	32.5	31.3	34.2	41.3	40.8

This is positive - an increase from a participation rate of 40.9% in 2005 to 58.0% in 2013. Indeed, women with one child active in the labour market in 2005 were only 0.1% more than women with no children.

The number of women with 2 children has increased at an even more rapid rate - from 29.2% in 2005 to 58% in 2013. The number of females in employment with 3 children is at 40.8% lower than the other categories, though still relatively high. The number of mothers with 3 children, who are active in the labour market, has increased between 2005 to 2011, from 25.4% to 34.2%. A significant increase took place between 2011 to 2012 from 34.2% to 41.3% - though this dipped slightly in 2013 to 40.8%.

The above supports the earlier discussion which shows that the growth in the labour market over the period under review was primarily driven through the increased participation of women in the labour market. It is also evident that supporting policy measure that have been introduced; such as increasing public and private childcare infrastructure, and rendering them free as well as pre and after school facilities within State schools, amongst others, suggest that women in employment who have between one to two children are succeeding in combining work and motherhood.

Be that as it may, it may also be the case that part of this significant increase of women participation in the labour market may be occurring because many mothers cannot afford to remain inactive since the spouse's income may not be enough for the family to make ends meet. Within Malta's context, given the strength of the extended family, as well as the close proximities, family support, primarily grandparents, has traditionally acted as the primary mainstay for child care support to working parents.

Indeed, the number of children who are three years and younger who are cared for by relatives increased from 1,451 to 3,246 from 2005 to 2012, with regard to families where both parents work – an increase of 1,795 persons or an increase of 123.7% on 2005; and from 609 to 1,128 from 2005 to 2012, with regard to families where one parent works full-time and one person works part-time – an increase of 519 persons or an increase of 82.5% on 2005.

The above shows that as more women entered into the labour market between 2005 and 2012, either on a full or part-time basis, families continue to look to their parents to 'informally' take care of their children. The increase in the dependency on relatives for informal care shows that the 'informal' care system in Malta continues to be strong.

¹⁸ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, July 2014

Table 13: Persons Aged 0-3 having No Formal Care by Type of Working Family between 2005 and 2013¹⁹

<u>Type of Working Family</u>	2005	2006	2007	2008	2009	2010	2011	2012
Both parents full-time	1,495	1,309	1,429	1,416	2,021	1,498	2,535	1,963
One person full time and one person part-time	609	314	660	332	359	473	567	777

As can be seen from the Table below, the extent of informal care of children who are three years and younger, provided by relatives, increased in all of the categories reviewed.

Table 14: Number of Hours of Informal Care by Relatives for Persons Aged 0-3: between 2005 and 2013²⁰

<u>Number of Hours in Informal Care</u>	2005	2006	2007	2008	2009	2010	2011	2012	% Δ 05/12
1 - 10	389	727	202	359	758	799	1,401	891	129.1
11 - 20	484	247	652	448	231	324	724	555	14.7
21 - 30	437	400	406	1,013	715	547	831	1,442	229.9
31 – 40	550	190	305	639	525	599	1,299	619	12.5
41+	133	107	177	93	119	299	208	428	221.8

Although the informal relative childcare network continues to be robust, over the said period the number of children who are three years and younger, who attend public or private child care increased significantly: with regard to families where both parents work – an increase of 1,522 persons or an increase of 204.1% on 2005; and from 582 to 1,019 from 2005 to 2012 with regard to persons where one parent works full-time and one person works part-time – an increase of 491 persons or an increase of 84.3% on 2005.

¹⁹ Survey on Income and Living Conditions, National Statistics Office, Malta

²⁰ Ibid

Table 15: Persons Aged 0-3 with a Form of Formal Care by Type of Working Family bet. 2005 and 2013²¹

<u>Type of Working Family</u>	2005	2006	2007	2008	2009	2010	2011	2012
Both parents full-time	746	1,014	1,237	724	1,752	1,249	1,498	2,268
One person full time and one person part-time	582	504	873	401	436	281	339	1,019

The average number of weekly hours of care for children, between the ages of 3 years to the minimum compulsory school age has also increased – from 3.1 hours in 2005 to 5.7 hours in 2012: an increase of 3.6 hours or 116.1% over 2005. This compares well with the EU 28 MS average of 4.4 hours.²² The number of children between the age of 3 years to the minimum compulsory school age who have at least of one hour of informal care marginally increased – from 24.4% in 2005 to 27.6% in 2012: an increase of 3.2% or 13.1% over 2005. This is slightly below the EU 28 MS average of 29.0%.²³

The increase in the use of formal child care facilities is positive as it implies increased trust in such facilities. Over the long term, use of formal child care facilities is expected to increase given that the extended family network is likely to weaken as a result of increased female participation in the labour market and more extended careers. As the number of women who remain active in the labour market up to the statutory age of 65 years increases, the less likely they will be in position to provide informal childcare support to their working children.

The relationship between childcare costs and labour force participation has been proven by many; research suggests that when costs of childcare services go down, labour force participation goes up, especially among mothers. Although the use of formal child care support has increased over the past ten years, it is recognised that the primary obstacle to more extensive use of such services, and hence presenting a barrier to an accelerated increase in the active presence of women in the labour market, is the cost of child care services.

To minimise the impact of this obstacle, previous governments had in 2012 introduced support measures which rendered parents who paid fees for childcare services for children below the age of 3 with registered centres children to be eligible for a deduction of a maximum of €1,300 for every child or the amount of fees paid during 2012 upon the filing of the income tax return.

In order to completely eliminate this barrier, the Government, in accordance to its pledge in the Electoral Manifesto, introduced as from April 2014, a scheme which allows working parents to send their children to any child care centre, they choose – public as well as private: of which there are 15 of the former and 55 of the latter – for free.

03.2 Supporting Parents in Employment: Family Friendly Measures

The design of family friendly measures is of importance, as it not only provides a framework which allows a family to balance work and family responsibilities, which allows both the husband and the wife to actively participate in the labour market; but maintains a high rate of women active in the labour market, whilst securing a more moderate decline in the fertility rates.

²¹ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, 3th July 2014

²² http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_camnohall&lang=en

²³ <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do?dvsc=0>

Malta has over the past years seen the introduction of a host of family friendly measures – some by statutory legislation, and hence placing obligations in this regard on employers, and in the main through pro-family human resource management policies such as flexi-time, tele-working, reduced hours, etc. With regard to the latter, the Government as an employer has set the example by extending a broad range of pro-family measures across both the public service and government agencies.

Persons on full time employment on reduced hours in 2013 stood at 2.5% of persons employed and constituted 6.3% of full-time females in active employment.²⁴ In 2005, the number of persons on full time employment, who were on reduced hours, stood at 1.2% of persons employed: constituted of 3.4% of females and 0.2% of males respectively in full-time employment.²⁵

As can be seen from the Table below, reduced hours for parental responsibilities, is the domain of the female member of a family. Women on reduced hours increased from 1,260 in 2005 to 4,374 in 2013 – an increase of 275% during the period under review. The significant increase in take-up primarily reflects the increased presence of females in the labour market.

Table 16: Total Males and Females on Reduced Hours between 2005 and 2013²⁶

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	154	229	186	310	213	372	124	182	383
Female	1,260	1,724	2,424	2,845	2,562	2,849	3,658	3,863	4,374
% increase of Female on RH		36.8%	40.6%	17.4%	(9.9%)	11.2%	28.4%	5.6%	22.5%
Total	1,414	1,495	2,610	3,155	2,775	3,221	3,782	4,045	4,760

Data obtained from Eurostat with regard to tele-working is difficult to interpret as males consistently top the number of persons who are on tele-working. For example, men topped women with regard to tele-working use - by 1,641 persons in 2013. The data has other interpretation problems. For example it is difficult to understand why the number of persons on tele-working fell from 12,145 in 2006 to 5,905 in 2012, when it should have been rising and why did it thereafter spiked up to 9,667 in 2013.

The data presented below was published by the Malta Council for Economic and Social Development. This data is dated. As can be seen from the Table below over 400 employees within the government sector were working through tele-working.

²⁴ http://www.nso.gov.mt/statdoc/document_file.aspx?id=3980

²⁵ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, July 2014

²⁶ Ibid

Table 17: Pro-family Friendly Measures Introduced by Government as an Employer bet. 2006 and 2010²⁷

<u>Family Friendly Measure</u>	<u>Duration</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Maternity Leave	14 weeks paid	93	138	161	216	581
Adoption Leave	5 weeks paid	4	3	5	5	5
Leave for Fostering	1 year unpaid	0	0	1	0	0
Responsibility Leave	1 year unpaid – renewable	32	31	37	30	56
Parental Leave	1 year unpaid	314	284	280	271	470
Career Break	Up to 5 years unpaid	213	207	240	234	272
Leave to accompany spouse on government assignments abroad	1 year unpaid, renewable	5	3	8	7	12
Reduced hours	1 year paid, pro-rate	771	879	934	995	989
Teleworking		0	0	117	225	414
Flexible Work Schedules		0	0	157	433	280
Total		1,432	1,545	1,940	2,416	3,079

As can be seen from the above Table, the number of employees who opt for the different pro-friendly family measures provided by the government as an employer has increased considerably over the period of reviewed.

03.4.3 Supporting Parents in Employment: Elderly in Employment

Eurostat defines 'older workers' as persons in employment, who are aged between 55 and 64 years. The statutory retirement age in Malta was 61 years of age until 2012. As part of the reforms, in 2013 the retirement age was increased to 62 years for persons who were 54 years of age as at 1st January 2007. As can be seen from the Table below, the employment rate of older workers in employment in Malta at 35.9% is low – significantly below the EU 28 MS average of 50.1% - with Malta outranking only Slovenia at 33.5%.

²⁷ Malta Council for Economic and Social Development Newsletter, Issue 01/May 2011

Table 18: Employment Rate of Older Workers (55 years of age to 64 years of age)²⁸

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	31.2	31.9	30.7	29.5	30.1	29.1	31.9	33.2	34.7	36.2
Change		+0.7	(1.2)	(1.2)	+0.6	(1)	+9.6	+4.1	+4.5	+4.3%

During the period under review in the employment rate of older workers increased –17.3% on 2004. The increase in the employment rate from 2010 shows that the pension reform measure, which removed the cap on income earned by pensioners (which in 2009 to 2011 included people who retired at the then statutory retirement age of 61 years of age), had a successful impact.

The success of this measure is more marked when one reviews its impact on cohorts of elderly persons who are 65 years of age and over. The Table below presents the employment rate of elderly males and females who are 65 years of age and over.

Table 19: Male and Female Employment Rate of Elderly Persons who are 65 years of age and over on Total Employment between 2005 and 2013²⁹

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	3.8	3.8	3.2	3.1	5.0	6.8	7.1	7.2	7.7
Female	:	:	:	:	:	:	:	:	1.2

As can be seen from the above Table, the number of males who are 65 years of age and over, in employment, over total employment, was low, and was on the decrease between 2005 and 2008. Following the introduction of the aforementioned reform measure, the presence of elderly males in the labour market started to increase year on year. In 2013 the percentage of males who are 65 years of age and over in employment, over total employment, stood at 7.7% - or 102.6% over 2005. Data with regard to the number of females in employment, over total employment, with regard to this age cohort, is under represented. At 2013, this, however, stood at 1.2% of total employment.

03.3 Life Long Learning

Too often, discussions about Malta's ageing population are mainly focused on the urgent need for pension and retirement age reforms. Forward-looking policies are needed, not only for pensions or in increasing active female participation in the work force, but also on lifelong learning issues. Many people today experience their chronological age as a determining factor. As shown earlier, Malta has a significant exit rate with regard to the continued employment of persons beyond the statutory retirement age. In part, this stems from the fact that people feel they have 'earned' their right to retire and re-orientate their lives towards different priorities.

²⁸ Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, July 2014

²⁹ Ibid

Yet, there are others who tend to give up on an active life when they reach a certain age as they feel, or have picked up labour-market signals, that they are too old to learn. In particular, many are inhibited by an overemphasis on information and communication technologies skills, to the neglect of more general workplace skills, attitudes and experience.

The number of persons aged 25 to 64 years who were engaged in lifelong learning in Malta, in 2013, stood at 7.7% - which is somewhat lower than the EU 28 MS average of 10.4%. Malta ranks in the middle quartile, out ranking countries such as Belgium, Bulgaria, Ireland, Greece, Croatia, Italy, and Cyprus, amongst others, but significantly behind Denmark (31.4%), France (17.7%), Netherlands (17.4%), Austria (13.9%), Finland (24.9%), Sweden (28.1), and the UK (16.1)

Table 20: Lifelong Learning between 2004 and 2013³⁰

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	4.3	5.2	5.5	5.9	6.2	6.1	6.0	6.4	6.9	7.5
Change		+0.5	+0.3	+0.4	+0.3	-0.1	-0.1	+0.3	+0.5	+0.6

Lifelong learning education and training, increased significantly, during the period under review – by 3.4 p.p. on 2004. This increase reflects the importance that governments attached to re-skilling and up-skilling training and education, as an important supporting policy instrument to pension reform – that of ensuring that employees remain active in the labour market beyond the statutory retirement age due to accrued new or upgraded skills and competencies.

The percentage of females in lifelong learning at 7.9% in 2013 is slightly higher than that of males. This follows the EU trend where the average EU 28 in 2013 stood at 11.3% for females and 9.5% for males. Both males and females experienced significant increases over the period under review: 2.8% or 58.3% on 2004 with regard to males; and 4.1% or 107.9% on 2004 with regard to females.

Table 21: Male and Female and Lifelong Learning between 2004 and 2013³¹

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	4.8	5.8	5.5	6.2	6.3	6.0	5.8	6.0	6.5	7.4
Change		+1.0	(0.3)	+0.7	+0.1	(0.3)	(0.2)	+0.2	+0.5	+0.9
Female	3.8	4.6	5.5	5.5	6.1	6.2	6.2	6.8	7.3	7.7
Change		+0.8	+0.9	0	+6	+1	0	+0.6	+0.5	+0.4

Be that as it may, the number of male adult participation, between the ages of 55 years to 74 years, is low. Indeed this has been on decline since 2009, although it experienced an increase in 2013 of

³⁰ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tsdsc440>

³¹ Ibid

52.4% on 2012. It is uncertain whether 2013 represents a new trend in the uptake of lifelong learning, by this cohort of persons, or whether this is a one off spike.

Table 22: Male and Female aged 55 to 74 years Undertaking Lifelong Learning between 2005 and 2013³²

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	2.4	2.0	1.9	2.6	2.7	2.2	2.4	2.0	3.0
Change		(0.4)	(0.1)	+0.7	+0.1	-0.5	+0.2	-0.2	+1.0
Female	1.5	1.7	1.7	2.6	3.1	2.6	3.1	2.9	3.7
Change		+0.2	0	+0.9	+0.5	(0.5)	+0.5	(0.2)	+0.8

The percentage of females, in this age cohort who undertook lifelong learning, is higher than that of males – though this was not always so, as between 2005 and 2007, this was considerably lower. In 2013, the percentage of females in lifelong learning increased by 35.7% over 2012 to 3.8%. Once again, it is uncertain whether 2013 represents a new trend in the uptake of lifelong learning by this cohort of persons, or whether this is a one off spike.

³² Ad hoc report prepared by the National Statistics Office for the Pensions Strategy Group, July 2014

Contents

	Abstract
	Introduction
01	What purpose do pensions serve? How much have they changed over the last decade?
02	Pension system design issues - the main questions
	How to optimise poverty alleviation effectiveness?
	What roles does the state have in smoothing over the life course
	How best to balance contributions to benefits
	Can the system be made more responsive to demography and other risks
	Is the country able to handle the pension reform?
03	Conclusion
	References

Tables

Table 01	Projected change in spending on pensions (2010 to 2050)
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Abstract

The last two decades have been characterised by significant changes in national pension arrangements. While at first, a consensus seemed to be evolving around a one-size-fits-all reform, more recently, the trend has been towards a better customisation of reforms. This paper reviews this process, focusing on five pension policy design issues. These are how policymakers have sought to optimise poverty alleviation effectiveness; the redefinition of the state's role in smoothing incomes over the life-course; the balancing of contributions to benefits; adjusting the system to be more responsive to demographic, economic and social changes; and ensuring that reforms will be long-lasting.

While the role of state pensions still appears to be on a diminishing path, there has been a growing realisation of the need to ensure that they remain adequate. This has led to the setting up of innovative minimum pension schemes and credits for periods of childcare and unemployment. The expanding role of private pensions has also led governments to intervene more in their operation. Policymakers have shown strong interest in automatic adjustment mechanisms, to try to bring about required economic changes. However, there is greater understanding that for the latter to happen, the state has to engage more with its citizens. While changes in pension systems can help societies respond to the ageing transition, for instance by removing incentives to retire too early or by aligning better the generosity of benefits to contributions made, there will need to be a much broader policy response.

01. Introduction

At their inception, pensions were not seen as a social benefit for the masses. Rather, they started as deferred payment for preferred workers (such as civil servants).³³ Collective bargaining and political movements gradually spread this benefit more broadly. These programmes also started to merge or overlap with social assistance or charity schemes, which had tended to be geared towards the elderly. However, even with the great expansion of the welfare state in the New Deal in the US and in the post-war era in Europe, pensions still remained mainly an insurance kind of welfare benefit, as relatively few survived to pension age and for not very long.³⁴ All this changed with the lengthening of life spans after the 1950s, which transformed pensions into a benefit which would be accessed by most citizens.

Just as this happened, the capacity of economies to provide them began to be called into question.³⁵ This reflects growing concern of the impact of the ageing process – caused by the combination of the retirement of the Baby Boom generation, the decline in fertility rates and the acceleration in longevity improvements. Besides potentially boosting pension spending, this transition is expected to have significant economic effects.³⁶ However, as Hering (2006) notes, while all countries face similar demographic trends, governments have responded differently, with some changing the parameters of their systems, while others transforming them into something very different. This suggests that reforms also reflected the preferences and options of governments. For instance, reforms carried out in Central and Eastern Europe focused on shifting the responsibility of retirement income provision unto individuals, in an attempt to spur the growth of private enterprise and deepen financial and capital markets.³⁷ Moves towards tighter links between contributions and benefits have been justified as resulting in actuarially fair pension systems with correct incentives for individuals to contribute and work. Other reforms have tried to reflect social changes, such as the move away from a male breadwinner model in a full-employment economy, and adjust systems to new realities by individualising pension claims and providing more flexibility.³⁸

The scope of this note is to review some of these changes and delineate broad policy lessons. Starting by looking at the purposes pensions serve, this review then asks five system design questions and provides an overview of the different answers policymakers have adopted. The main conclusion, besides the usual 'one size does not fit all' argument, is that to be sustainable, solutions need to be framed clearly in terms of the objectives and constraints that the specific pension system has. Unless citizens are made aware of what their pension system can deliver and at what cost, it is unlikely that solutions can work beyond the very immediate term. As policy reversals in countries as far afield as the UK, Chile and Hungary attest, not getting this right the first time means having to start again a few years down the line. Only if economic behaviour changes in response to an acceptance of policy changes can solutions prove long-lasting.

³³ One of the first pension schemes was set up for Royal Navy officers in the 1670s.

³⁴ Back in 1950, just 7.7% of the population in more developed regions was over 65, according to the United Nation's World Population Prospects database. Life expectancy at birth in 1950-55 was just 64.7.

³⁵ IMF (2011) suggests that spending on pensions in advanced economies nearly doubled between 1970 and 1990, growing by 3.1% of GDP mainly due to increased generosity, though ageing also contributed. Since 1990 there has been an increase of just 0.2%, as the growing impact of ageing was countered by a higher labour participation, tightening eligibility conditions and a less generous growth in generosity.

³⁶ Maddaloni et al (2006) suggest that in the absence of reforms, under the assumption of an unchanged rate of labour utilisation and productivity growth, demographic trends imply a decline in average real GDP growth for 2020-2050 in the euro area to 1%, from the average of 2% observed in 1980-2005.

³⁷ There has been a long academic debate on funding pension systems. Feldstein (1974) argues that social security taxes distort labour supply and lead to lower saving, while the system's implicit rate of return is lower than that on saving. These arguments have been countered by Orszag & Stiglitz (1999) and Barr (2000).

³⁸ See De Graaf et al (2007).

2.0: What purpose do pensions serve? How much has changed over the last decades?

Pension plans have a relatively long history, but they became more common in the wake of industrialisation and urbanisation. Holzmann & Hinz (2005) portray the rise of modern systems as a reaction to the socioeconomic changes of the nineteenth century, noting that “as individuals moved out of the traditional agricultural family structure, there was a need to establish formal risk management arrangements that could substitute for the informal arrangements that were eroding in the face of the transition”.³⁹ State income-transfer programmes towards the elderly can be traced to the late nineteenth century, first in Germany and Denmark. The reasons why pensions were established in these two countries differed significantly. In Germany, Chancellor Bismarck was interested in “tying workers’ interests to the new German state”,⁴⁰ while the Danish scheme was introduced as a locally administered means-tested scheme for needy citizens over age 60. This distinction reflects two different aims – in the German case: a need for income stability over the life-course, and in the Danish case: a need to alleviate poverty during old age. These two aims have characterised pension systems throughout the decades, and while some systems remain in policy rhetoric focused on one particular aim, nowadays, most pension systems serve both purposes.⁴¹

Barr & Diamond (2006) argue that “from an individual viewpoint, income security in old age requires two types of instruments: a mechanism for consumption smoothing, and a means of insurance”. The first purpose involves the transfer of consumption from productive middle years to retired years, allowing one to choose the preferred time path of consumption over working and retired life. Barr & Diamond (2006) further contend that “a second reason for government involvement (in pensions) is that public policy generally has objectives additional to improving consumption smoothing and insurance, notably poverty relief and redistribution”. Thus, pensions serve as a means to target resources on people who are poor on a lifetime basis and also redistribute incomes on a lifetime basis (subsidising the consumption smoothing of low-income individuals). Pension systems can, moreover, be used to redistribute across generations. Besides, these primary objectives, policymakers have secondary goals mostly relating to the effect of the system on economic behaviour in labour and capital markets, and to create incentives for socially required, but unpaid, activities such as caring and child rearing. If not conceived as aims, these effects can be seen as constraints. Thus, if a system results in too high tax rates, it would adversely affect economic growth, while a system that provides very generous benefits may displace private saving and thus result in smaller capital markets.

The main constraint on pension systems is the financial resources allocated for this purpose. From the very beginning, this factor played an important role in shaping pension policy. In most countries when pensions were established, governments established specific taxes or contributions to finance them. These concerns persisted over time and systems in some countries (such as the UK and Australia) took a relatively long time to move beyond a basic poverty alleviation role or tended to involve private sector employers (rather than the state) in income replacement. The pre-funding of pension promises also tended to be quite common and in some British ex-colonies, such as Singapore and Malaysia, has survived to this day. In most countries, this hypothecation of tax revenue or pre-funding shifted towards the pay-as-you-go scheme (PAYG) of financing pensions, when the coverage and generosity of pension schemes was boosted in the post-war years. More recently, this shift has been depicted as an attempt by the post-war generation to play a Ponzi game with the burden of paying for pensions being shifted unsustainably to future generations.⁴²

³⁹ Caucutt et al (2007) also explains the emergence of social security in the US in terms of the population shift from rural to urban areas.

⁴⁰ See Palacios & Sluchynsky (2006).

⁴¹ Ove Moene & Wallerstein (2003) studies empirically the importance of these two roles in shaping pension (and other social) expenditures in OECD countries.

⁴² See for instance, Disney (2000). This depiction has been criticised. For instance, Hills (1995) argues that rather than depicting PAYG as an exploding ‘chain letter’, one would be more correct in thinking of it as a single line of people passing a box of chocolates to each other. Unless someone panics in the interval between passing on their original box and receiving their neighbour’s and stops the game, there would be no losers. Thus “provided the line carries on indefinitely and that no one changes the rules” PAYG need not be unsustainable. This does not necessarily apply when one has a shrinking population, as here the line becomes less populated.

At the start of the 1990s, one model dominated Europe. Pensions were run by the state, based on PAYG funding and with earnings-related defined benefit (DB) determination. There were variants – for instance Germany’s points system,⁴³ Ireland’s flat rate system,⁴⁴ and the Dutch state system supported by quasi-mandatory occupational provision. However, throughout most of the second half of the twentieth century, reforms in Europe, had tended to move countries closer to this single pension model, with even Beveridgean countries,⁴⁵ like the UK, introducing earnings-related features, and countries in Southern Europe moving away from traditional methods of family support during old-age. The 1990s, however, saw a clear break in this trend. European Commission (2010a) includes a comprehensive review of this break, noting that the main features involved the strengthening of contributory principles, a greater role for pre-funding, the establishment of automatic adjustment or periodic review mechanisms, changes in coverage, minimum income provision and indexation, increasing complexity and a closer link with the labour market.⁴⁶

Hering (2006) notes that “two-thirds of the fifteen old EU countries reproduced their pension systems by enacting numerous marginal adjustment measures, focusing either on the refinancing or retrenchment of public pensions...but four countries—Sweden, Italy, Germany and Austria—restructured their pension systems by cutting public pensions and replacing these increasingly with private ones, and thus, began a gradual shift from the dominant pillar model to the multi-pillar one”. Besides these countries, many Eastern European countries also opted for systemic reforms, i.e. moving away from the DB determination structure and adopting a defined contribution (DC) system.⁴⁷ Here, one can discern two types of reforms: World-Bank inspired multi-pillar reforms based on personal accounts (e.g. Slovakia and Hungary) and the adoption of Notional Defined Contribution (NDC) systems⁴⁸ (e.g. Sweden, Italy and Poland). Some countries, while not shifting totally, have adopted some DC elements. For instance, France has introduced a link between the number of contribution years required for a full pension and life expectancy while Germany has adopted a sustainability factor that links the level of pension benefits to the dependency ratio.

The main difference, between parametric and systemic reforms, lies not in the financial impact on pensioners (or contributors), but in the sharing of risk between the current generation and future ones or the state (the custodian of future generations in this respect). In fact, as can be seen from Table 1, the projected change in pension spending has tended to be quite large even in countries, such as Cyprus, Greece and Spain, which have focused on parametric reforms. By introducing some DC elements, countries like France and Germany are also converging to the projected spending path of countries, like Italy and Sweden with NDC systems. Across the EU, the reforms conducted in the last 6 years are estimated to have cut the projected rise in spending between 2010 and 2050 from 2.5% of GDP to 1.5%. This despite that longevity projections have been revised upwards while potential GDP growth has been lowered as a result of the crisis.

⁴³ Under a points system, entitlement is based on pension points accumulated. A year’s contribution at the average earnings earns one point. Points are multiplied by a pension value to determine the monthly benefit.

⁴⁴ Under a flat-rate system, all those who meet the set conditions get paid the same benefits. In an earnings-related DB system, benefits are determined as a ratio of a set salary – the final salary, the average lifetime salary or an intermediate figure - on which contributions were paid.

⁴⁵ A common categorisation of European pension schemes is between Bismarkian and Beveridgean systems (see Bonoli (1997)). This harks back to two different pension schemes, that introduced by Bismarck in Germany where pensions are related to employment and represent a deferred salary, and that advocated by Beveridge in the UK where pensions tend to be less linked to previous income and instead are meant to reduce poverty.

⁴⁶ Zaidi et al (2006) also provides a succinct review.

⁴⁷ In a DC system, the benefit is determined by the value of assets accumulated. These assets are typically invested, with capital gains/losses borne by the contributor (unless rate-of-return or capital guarantees are provided). Since funds are invested, they cannot be directly used to finance current pensions; i.e. they break the PAYG chain, and force governments to redeem the implicit debt of their pension systems.

⁴⁸ In an NDC system, contributions are placed in a notional account and given a notional interest rate. Benefits are determined on the basis of the balance on these accounts spread over the expected lifetime of the individual. For an in-depth review of how NDC systems work, see Palmer (2006).

Recently, in the wake of the financial crisis, some governments have been rethinking these changes. In Latin America, Chile introduced a number of important changes, notably the introduction of a solidarity pension to provide a robust system of poverty relief.⁴⁹ A number of Central and Eastern European countries, such as Poland and Hungary, have reversed some of the multi-pillar reforms.⁵⁰ Moreover, as European Commission (2010b) points out “most automatic mechanisms have not yet been applied in practice” and that even “prior to the crisis, a few countries had already taken political decisions to postpone automatic adjustments”. For instance, Italy delayed the automatic updating of life expectancy projections in its NDC system while Germany increased pension benefits beyond what was allowed by its automatic adjustment mechanism.

Table 1: Projected change in spending on pensions (2010 to 2050)

	2012 report	2009 report	2006 report	2001 report
Austria	2.3	1.3	-0.6	2.1
Belgium	5.7	4.4	5.1	3.4
Bulgaria	1.2	1.7		
Cyprus	6.7	8.6	12.9	
Czech Rep.	1.9	3.1	5.8	
Denmark	-0.5	0.2	2.7	0.8
Estonia	-0.9	-1.1	-2.6	
Finland	2.9	2.6	2.5	4.3
France	0.6	0.7	1.9	2.7*
Germany	2.2	2.1	2.6	5.7
Greece	1.9	12.4		12.2
Hungary	1.5	1.9	6.7	
Ireland	3.9	5.0	5.9	4.0
<i>Italy</i>	0.4	0.7	0.7	0.2
<i>Latvia</i>	-3.3	0.7	0.7	
Lithuania	2.1	3.9	1.9	
Luxembourg	9.0	13.5	7.4	1.8
Malta	3.0	3.7	-1.8	
Netherlands	3.6	3.8	3.6	4.5
<i>Poland</i>	-1.8	-1.7	-3.3	
Portugal	0.6	1.4	9.7	1.4
Romania	2.9	6.4	7.3	
Slovakia	4.2	2.8	2.3	
Slovenia	6.7	8.1	2.3	
Spain	3.8	6.6	6.8	8.4
<i>Sweden</i>	0.3	-0.6	1.1	1.1
UK	0.5	1.4	2.0	-0.7
EU	1.5	2.2	2.5	2.9

* Period covered is 2010 to 2040, as 2050 projection unavailable.

Note: Unavailable projections left blank. Countries with NDC systems are in italics.

Source: Own workings using projections in various EU Commission Ageing Reports

⁴⁹ See Barr and Diamond (2008), pp.239-256.

⁵⁰ See Whitehouse (2012).

03: Pension system design issues – the main questions

Given that state pension systems have become the main item of government expenditure in many countries, and that pensioners are fast becoming the majority of the voting electorate in many democracies, it is not surprising that there is considerable literature on pension system design. The debate has been somewhat dominated by international economic institutions, though more recently academics have increasingly contributed to change this 'consensus'. This section will focus its attention on what we believe are the main system design issues and present examples of best practice from a number of countries.

03.1: How to optimise poverty alleviation effectiveness?

As mentioned previously, in some countries, state pensions evolved out of poverty alleviation programmes, and policymakers continue to see them mainly as an anti-poverty measure. In other countries, where the main focus is on income smoothing, there tends to be some conflict between providing a good poverty alleviation function and the need to ensure actuarial fairness and the strict application of the contributory principle. There are a number of different ways in which countries have tried to tackle this trade-off.⁵¹

Some countries have opted for a clear separation of roles, setting up a non-contributory flat-rate pension, which is awarded either on the basis of an income test,⁵² or else on other conditions such as residence or citizenship (e.g. New Zealand and the Netherlands). The main difference between these approaches centres on incentives. While means-tested systems cost less, as the more affluent are excluded, they may create incentives that reduce saving or work. Means-testing can also be difficult to implement, especially as regards income from self-employment or capital. Flat-rate pensions do not raise these issues as everyone gets the same, no matter what. However, one needs to consider that flat rate pensions need to be financed from somewhere, and if this is through distortionary taxation (e.g. income tax), they also indirectly create disincentives to work and save for taxpayers.⁵³ That said, countries with flat-rate universal pensions tend to have very low levels of pensioner poverty (e.g. 1.5% and 2.1% in New Zealand and the Netherlands, respectively).

The situation is even more complicated when poverty alleviation is conducted within the main earnings-related pension scheme. Here again, there are a number of options. For instance, there could be a minimum pension floor/guarantee, which is applicable to anyone who fulfils the set conditions. In many cases, these involve a minimum number of contribution years (e.g. the UK's full Basic State Pension is granted to those with 30 years of contributions). Even in fully funded DC schemes, such as those in Chile, there are ways of granting a minimum pension, for instance by giving a minimum guaranteed return on assets⁵⁴. The main problem with this approach, lies in the need for people to have contributed, leaving out those with little labour market attachment (mostly women). To minimise this, policymakers have introduced a number of contribution credits, such as for years devoted to child care or spent in unemployment.

The tension between maintaining the contributory principle and providing effective poverty alleviation has, however, increasingly tended to be resolved by the setting up of new schemes. In Chile, there was the creation of the Solidarity Pension while, a decade earlier, the UK introduced the Pension Credit. In other countries, this trade-off was tackled by introducing graduated pension guarantees. This ensures, that those with small contributory pension benefits, get benefits higher than the guarantee. For instance, in Sweden, the guarantee pension is withdrawn completely only for those persons whose earnings-related pension exceeds more than a third of average earnings. In the UK, government appears to want to do away with the income smoothing principle altogether, and focus on providing a single flat rate benefit to all.

Besides deciding on the form of minimum benefit, policymakers also need to decide at what level to set it. Again, there is a wide variety of approaches, which results in very different results.⁵⁵ Some

⁵¹ For an overview of minimum pension systems in the EU, see Social Protection Committee (2006).

⁵² This means-test can be quite complicated. For instance, in Australia it is combined with a capital test.

⁵³ See Barr and Diamond (2008), pp. 113-115.

⁵⁴ See Jousten (2007).

⁵⁵ For a comparison across the OECD, see <http://dx.doi.org/10.1787/888932370797>.

countries, like the Netherlands, link the minimum pension to the minimum wage, while some look at the average wage. In some cases, such as Estonia or Germany, policymakers refer to minimum budget standards (i.e. that income which would allow the consumption of a given basket of essential goods and services). The effectiveness of the minimum pension, however, rests crucially on how its value changes over time. In most countries, not only are minimum pensions set below the relative poverty threshold, but they are also indexed to prices, meaning that over time they lose their relative value. While there is considerable evidence that policymakers tend to raise minimum pensions above what is statutorily required,⁵⁶ indexation combined with rising longevity poses significant poverty risks for the very old.⁵⁷ This has led some countries (such as the UK) to reinforce indexation, while some others (such as Malta) have introduced age-related top-ups for older pensioners.

03.2: What role does the state have in smoothing income over the life-course?

While there is some consensus on the role of government in alleviating pensioner poverty, there has traditionally been a divide on the state's role in smoothing income over the life-course. A number of countries, such as the US, Australia and the UK, place this role more squarely on the shoulders of individuals. However, there are a number of economic reasons, primarily related to adverse selection, moral hazard and myopia, why this role has been organised on a national basis.⁵⁸ On a more technical side, it is increasingly better understood, that decentralised or individualised income smoothing arrangements, tend to come at great cost and fail to take advantage of economies of scale in investment and administration.⁵⁹

Despite the little agreement on what amounts to an adequate degree of income smoothing⁶⁰, international organisations have come up with benchmarks. The ILO's 1952 convention on social security benefits states that pensions should be equivalent to 45% of wages. Holzmann & Hinz (2005) set out the World Bank's view that "for a typical, full-career worker, an initial target of net-of-tax income replacement from mandatory systems is likely to be about 40% of real earnings", while replacement rates higher than 60%, are seen as unaffordable. The main issue with these benchmarks is that, if replacement rates are the same across the wage distribution, this could result in higher poverty among those on low incomes. This is one of the main issues faced by countries that tried to make their systems more actuarially fair. Removing progressiveness, unless the underlying income distribution or labour participation is relatively equal, exacerbates poverty risks.

Policymakers in many countries, appear to be more willing to sacrifice the income smoothing role of state pensions, than its poverty alleviation function.⁶¹ One of the main changes has been a move towards determining benefits on the basis of career-average earnings, rather than final or best years. This has lowered replacement rates, for those on high earnings, especially those with strong earnings progression. Some countries, such as the UK, have also skewed accrual rates, by reducing them just for those on medium-to-high wages. In some cases (for instance in 1983 in the US), this was done on pensions in payment, with cost-of-living adjustments being granted just on small pensions. Modifying the maximum pensionable income, by less than earnings growth, while adapting a different approach to the income on which contributions are paid also acts against those on high incomes. While it may seem unfair to focus pension cuts on those on medium-to-high incomes, one needs to consider that compared to those on lower incomes, they are more likely to draw their pension, and to do this for much longer periods.⁶² This gap appears to have increased in many countries, and therefore it is not certain that despite that pension cuts have focused on this group, its members have ended up with noticeably smaller overall pension transfers.

⁵⁶ See Social Protection Committee (2006) and European Commission (2010b).

⁵⁷ See Grech (2012).

⁵⁸ See Jousten (2007).

⁵⁹ Countries that used to rely exclusively on private competition are increasingly interfering. For instance, in the UK after legislating caps on charges, government has set a scheme to offer a low-cost alternative to savers.

⁶⁰ See Grech (2013) for a discussion of this topic.

⁶¹ See Grech (2014) for an analysis across EU countries.

⁶² In the UK those in the highest socio-economic groups live beyond 65 up to 3.5 years more than those at the bottom (see Longevity Science Advisory Panel (2012)), implying they draw their pension for a fifth longer.

A primary reason why policymakers may have felt more comfortable reducing income smoothing is that there exist several financial products that can help fulfill this role. The growing reliance on private pensions has, however, led governments to focus their attention more on the regulation of this market. For instance, in the UK, following a number of mis-selling incidents,⁶³ there has been a significant emphasis on improving financial education, restrictions on selling/ marketing, improving transparency and reducing charges. Concerns about funding have also led to the establishment of protection funds to help reduce the impact of scheme insolvencies and there has been an increased focus on imposing portfolio limits. Countries that at first had hoped that given the right information, consumers would choose optimally, such as Sweden,⁶⁴ have had to redraw their schemes to limit choice and focus on providing good default funds for those not wanting to make a choice. The shifting of responsibility on individuals, has not resulted in a clean break for governments. In some cases, such as in Eastern Europe, lacklustre performance has led to partial reform reversals. Governments have also had to offer considerable tax incentives to make people save (for instance, the success of Riester pensions in Germany reflects the innovative subsidies offered), and in some cases when this failed they have had to auto-enroll individuals into personal pensions (see NEST in the UK and Kiwi-saver in New Zealand).

03.3: How best to balance contributions to benefits?

While it might seem directly related to choices made by policymakers on the relative scope of poverty alleviation and consumption smoothing, the decision on how best to balance contributions to benefits is, in many respects, separate. As Barr and Diamond (2008) state; “there are two polar extremes: benefits can be determined by past contributions and the returns on those contributions, in which case benefits can exceed or fall short of initial expectations; this is called a pure defined-contribution plan...or benefits can be determined on other criteria and guaranteed to be paid no matter what the eventual return on contributions: this is the definition of a pure defined-benefit plan.”⁶⁵

The two approaches are quite different. In the first, pensions are to a great extent individualised, with little scope for redistribution intra- and inter-generationally. In the second, pensions for different persons can also be different (as they will satisfy the required criteria in different ways), but there is greater scope for redistribution. The risks borne by contributors are also different. In DC pensions, individuals face rate-of-return risk, longevity risk, and unless there are generous crediting arrangements, labour market detachment risks. In DB systems, they do not face these risks to the same extent, though the parameters of the plan may be changed to account for them. As Barr (2013) in his study of the Swedish NDC pension system notes; “the central idea that every krona of contribution for every person should count the same ... embodies a self-imposed constraint that the costs of adjustment fall on current contributors and pensioners ... since benefits are strictly related to contributions, the arrangement by implication gives fiscal sustainability priority over adequacy.”

The shift towards DC schemes has occurred in both public and private plans. While it may appear in many respects to be due to plan sponsor concerns on the impact of longevity, there have been other drivers. In particular, it reflects the trend towards greater individualization, seen across the more developed regions since the 1980s. In this climate, having a pension system that forces everyone to retire at the same time, and with similar benefits appeared to be a straitjacket. The concept that one’s pension benefits will reflect the contributions one makes, is intrinsically attractive and claims that a system is actuarially fair are bound to make it seem more equitable. However, it is very hard in practice to achieve either actuarial fairness or actuarial neutrality.⁶⁶ Take for instance, someone who retires under an NDC scheme. The scheme will assume the person will live a given set of years, but it is hardly likely that this will turn out to be correct. Similarly, it is relatively hard to judge how best to ensure that the relative value of retirement benefits remains actuarially fair throughout retirement. Moreover, a system which is completely inspired by this concept, of course, reproduces in retirement the same income inequity present in working age.

⁶³ For an overview of these episodes, see Barr and Diamond (2008), pp. 157-158.

⁶⁴ See Barr (2013).

⁶⁵ pp. 37.

⁶⁶ See Queisser and Whitehouse (2006).

Reflecting these concerns, in some countries (notably Sweden), policymakers have allowed horizontal redistribution, giving credits for care and unemployment. They have also sought to provide a good safety net. In others (e.g. Poland), these provisions do not appear that strong and may give rise to gender (and overall) equity issues in coming decades.⁶⁷ Similarly, the imposition of one access age for benefits has been addressed in some countries. Those with DC or NDC have flexible retirement ages, while many DB schemes now have bonus features (in many cases with uneven schedules favouring late retirement).⁶⁸ Relying overly on the rationality of individuals and assuming they will accept lower living standards, if they appear to be caused by their own labour market and investment decisions, may however be optimistic. As IMF (2012) points out; “that while in most countries there will be no legal obligation for government to step in, a contingent liability could arise from an implicit social obligation of the pension system to ensure adequate income in retirement, especially for low-income groups”. In many cases, the decision to contribute or not, and the wage an individual contributes on, is hardly completely in one’s discretion.

One aspect that is frequently forgotten, is that a fully actuarially fair system may be unnecessarily inflexible. It might be better for an economy, if adjustment is staggered over a period of time. This idea of optimal tax smoothing underpins a number of pre-funding arrangements, for instance the US’s Social Security Trust Fund arrangement. The idea is that plan sponsors carry out regular long-term assessments and enact the required changes smoothly in a way that does not place the whole burden on one particular generation. The criticism that these arrangements frequently fail to deliver the required changes due to political inaction is fair, but in truth it remains to be seen whether schemes with automatic adjustments will actually automatically adjust without any problems.

03.4 Can the system be made more responsive to demography and other risks?

Where economic and social changes are fairly easy to forecast, forward-looking policymakers would be able to develop the right balance between contributions and benefits. Experience has shown how naive this assumption is. Even something that historically has been fairly stable, longevity, has managed to befuddle actuaries. Few would have guessed a couple of decades ago that about one-third of babies born in 2012 in the UK are expected to become centenarians.⁶⁹ Likewise, the social planners of the 1940s and 1950s, were taken by surprise by the Baby Boom, as fertility is another supposedly stable phenomenon. The same surprises occurred in economic variables, such as output growth and inflation. Time and time again, forecasters failed to indicate large turning points, such as the high inflation and unemployment in the 1970s, and the great recession of the late 2000s.

Initially, the main concern for policymakers was how to ensure that rapid economic growth or inflation would not erode the relative value of pensions. This contributed to the setting up of post-retirement indexation. However, the growing realisation of the possible impact of longevity soon turned the focus on how to reduce financial pressures. In fact, one of the most frequent reforms has been to reduce indexation to be below wage growth. In the long run, this can have very substantial effects. In the UK, the state pension in a matter of less than two decades fell from over a third of the average wage to closer to one-sixth. Some countries with DB systems have also changed the valorisation of earnings; that is they no longer fully adjust past earnings to take into account of changes in living standards between the time pension rights accrue and when they are claimed. A more hotly debated topic has been the adjustment of the pension age, even though most advanced economies have done this. Initially this has mostly concerned the equalising of pension ages between genders, soon followed by an increase for both genders. In many cases this change was heavily contested and was placed far in the future (for instance in the US the change was announced twenty years in advance). This has changed in recent years, with countries pushing changes more rapidly (for instance the pension age in Germany will be 67 at about the same time as in the US, even though the latter enacted the change decades earlier). In others, such as the UK, governments have quickened the pace of already announced pension age changes.

⁶⁷ See Grech (2012).

⁶⁸ Queisser and Whitehouse (2006) suggest pensions should be reduced by 8% for every year before age 65, but that OECD countries, on average, reduce them by just 5%.

⁶⁹ Unforeseen longevity developments are not necessarily an upside risk. For instance, few would have foreseen that male life expectancy in the Russian Federation, after having risen by ten years between 1950 and 1990, would have fallen by more than five years between 1990 and 2005. Similarly in South Africa, after having increased by 20 years between 1950 and 1995, female life expectancy fell by 13 years between 1995 and 2010.

The political complexity of changing pension age, as well as concerns that policymakers may be caught out again by an unexpected rise in longevity, have heightened interest in automatic mechanisms.⁷⁰ Countries like Denmark, Greece and the Netherlands have specified an amount of years for which pensions are to be paid, and mandated changes in the pension age if longevity increases this period. In NDC and DC systems, retiring at the same age despite higher life expectancy automatically lowers benefits. Less well-known are more complex automatic adjustments that affect valorisation or post-retirement indexation. For instance, in Portugal new old-age pensions are adjusted downwards on the basis of how life expectancy at 65 in the year before pension entitlement compares with that observed in 2006. In Germany and Japan, the adjustment is conducted on the basis of changes in the system dependency ratio: i.e. when the number of beneficiaries to contributors increases, the pension is reduced. The Swedish automatic balancing mechanism is even more complex, adjusting the notional interest (i.e. the valorisation of contributions) whenever there is a projected deficit between projected revenues and outlays. In Canada, the adjustment takes the form of either freezing indexation or else raising the contribution rate.

The main risk of automatic mechanisms that impact solely on pensions-in-payment is that they could make them inadequate, particularly for the very elderly. This solution appears quite sub-optimal, as these pensioners can take very little action to remedy for increasing longevity. Adjustments of the pension age are less inequitable, though to be economically effective, many countries would need to carry out substantial labour reforms to raise effective retirement ages. Countries like Italy or Greece, where according to Eurostat the duration of the working life is of just 30 and 32 out of the possible 49 years, between age 16 and 65, may have automatically indexed pension ages, but it is clear that unless something major changes individuals will just end up exiting the labour force on other benefits. Adjustments that affect valorisation, or like in France the link between longevity and the contribution years required to get a full pension, could possibly induce economic behaviour changes, such as working longer or saving more. However, to be effective, individuals need to be made quite aware of these complexities and be in a position to respond to incentives.

03.5 Is the country able to handle the pension reform?

The increasing complexity of pension systems, leads to an important, but frequently ignored, policy question; namely whether a country can implement optimally a proposed reform. Pension systems may look great on paper, but unless policymakers can implement them effectively, they will fail or lead to ad-hoc and inconsistent adjustments or, worse still, policy reversals. There are several examples of such failures occurring in developed economies which supposedly had the right conditions.⁷¹ For instance, in Poland, despite considerable emphasis on building the administrative infrastructure, the introduction of the NDC scheme, nearly failed due to issues with the implementation of the new computer system, compliance problems and administrative inefficiency. In Chile, the individual accounts system did not reduce the large informal sector and the state had to come in to pay more generous minimum pensions once people started to retire on the new system. In Sweden, after initial strong interest in the personal accounts part of the system, the bulk of contributors gradually stopped making an active investment choice.

As Barr and Diamond (2008) emphasise; “effective reform requires at least three sets of skills: in policy design, administrative and technical implementation, and political implementation”.⁷² They point that if implementation issues are not given importance at the design stage but treated as an add-on, this is a recipe for disaster. These considerations reflect the main conclusions of the World Bank’s assessment of its pension policy assistance (World Bank (2006)); namely that “to ensure well-tailored assistance to country conditions and consistent policy prescriptions, the Bank needs to implement guidelines for Bank staff for the development of pension operations, paying more attention to the minimum macroeconomic and financial sector preconditions necessary for multi-pillar reforms”. The review also stresses the need that “the Bank needs to ensure that client capacity to implement pension reform is adequate” and the need to focus on “consensus-building among stakeholders”.

⁷⁰ See for instance European Commission (2012), pp.93-95.

⁷¹ See Fultz & Stanovnik (2004).

⁷² See pp. 151.

Among the important lessons, are that decentralised systems have been costly and not necessarily have led to the enhanced competition and improved performance that reformers had foreseen. Centralised systems, while more cost-efficient in the long run, require a significant start-up cost, and considerable institutional effort in the short-term. Rather than assuming away the underlying economic and social conditions of a country, such as the size of the informal sector and the development of its financial industry, reforms need to take these into careful consideration. The assumption that individuals will change behaviour once a new system is in place has hardly been realised, even in the face of supposedly strong financial incentives. Behavioural economics has provided us with a substantial number of explanations of why what appears irrational behaviour is in fact perfectly rational. Pension reforms need to be part of holistic economic reforms, which involves amongst other things, active labour market policies, welfare benefit reforms, financial education campaigns and an overhaul of financial sector regulation and oversight. It also does not make sense to ignore transition costs, particularly the impact on government finances of pre-funding future pension claims.

Finally policymakers need to work towards achieving as wide a consensus as possible, and try to achieve changes that prove long-lasting. Typically, this process has been facilitated by setting up technical or bipartisan commissions (e.g. the UK Pensions Commission was formed by three respected representatives of employers, trade unions and academia, while the Greenspan Commission in the US included members appointed by both parties who were in close contact with their party leaders). These commissions placed significant emphasis on proving the case for reform and being recognised, as the national experts on the subject. Equally as important, is the need to have a good degree of political debate and possibly even more crucial is the process of public discussion and information dissemination. One common thread uniting pension policy reversals, is that reforms had been ideologically driven, with some inspired by external experts relatively unfamiliar with the country's conditions, and that very often little was done to ensure that citizens were adjusting in the right way.⁷³

04. Conclusion

The last two decades have been characterised by significant changes in national pension arrangements. While at first, a consensus seemed to be evolving around a one-size-fits-all reform, more recently the trend has been towards a better customisation of reforms. In the face of pressures, from the ageing transition, the role of state pensions appears to still be on a diminishing path, but there has been a growing realisation of the importance of ensuring that pensions remain adequate. There has been increased interest in setting up innovative minimum pension schemes and providing contribution credits for periods of childcare and unemployment. The expanding role of private pensions, in providing income smoothing, has led to governments intervening more in their regulation and performance monitoring. Here again, the initial focus on decentralised provision, is now changing, to reflect concerns about administrative costs and the relative lack of engagement of citizens in active investment.

While there still is a strong interest in (and great faith in the promise of) automatic adjustment mechanisms, there is greater understanding of the fact that for economic behaviour to change optimally, the state needs to engage more with its citizens. Policymakers, have increasingly recognised that what really matters is that future generations need to be put in a position to accommodate the economic pressure of having a larger dependent population. While changes to the pension system can help achieve this, by, for instance removing incentives to retire too early or by aligning better the generosity of benefits to contributions made, there will need to be a much broader policy response.

⁷³ For instance, Chlon-Dominczak (2000) notes how while surveys in Poland showed that "most people felt they were well informed and that information on the pension reform was readily available", they also indicated "that the knowledge of the pension system was limited to slogans rather than a deep understanding". The study also finds that "a significant proportion of people simply joined the pension fund of the first agent they came across".

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Contents

	Background
01	What purpose do pensions serve? How much have they changed over the last decade?
02	Main Features of the Scheme
03	Key Recommended Features of Eligible Savings Products
04	Recommended Rate of Tax Relief

Appendices

Appendix A	Summary of the report submitted by the Advisory Group on Private Pensions
Appendix B	Theoretical and International Tax Treatment of Voluntary Pensions
Appendix C	Tax treatment of voluntary funded pensions
Appendix D	The Pensions Regulatory Framework in Malta
Appendix E	Taxation of Investments and Investment Income
Appendix F	<i>Consultation on tax incentives for Personal Retirement Schemes</i>
Appendix G	Justifying the choice of the initial level of the pension contribution allowance

01. Background

In the 2014 Budget Speech, on 4th November 2013, the Minister for Finance announced that during 2014 he would be establishing a regulatory framework for private pensions, which will be accompanied by effective fiscal incentives. This followed the work of a technical working group which reported its findings prior to the Budget (Appendix A). Subsequently the working group carried out a consultation exercise, where the main financial services' organisations, were asked to provide feedback on a number of proposals (Appendix E).

The purpose of these fiscal incentives is to help reinvigorate the culture of long term savings among the Maltese. Higher private saving can help address the possible pension adequacy gap that may evolve over the next decade due to the gradual weakening of the generosity of state pensions. It is also necessary to help generate the funds required to finance an improvement in Malta's investment ratio, and to further develop Malta's financial industry, generating high quality jobs and attracting more foreign direct investment. Moreover, one of the Country Specific Recommendations issued in June 2013, specified that amongst other measures, to ensure the long-term sustainability of public finances, the Government of Malta needs to encourage private pension savings.

02. Main Features of the Scheme

1. The Supporting Retirement Saving (SRS) incentives scheme will be composed of two components. The first component will be the provision of a tax refund on contributions to a personal retirement scheme (PRS) up to a maximum of €1,000 a year. Moreover, any investment income or gains made on these qualifying contributions will be exempt from income tax. The second component will be the ability to set up a special deposit account, known as an Individual Saving Account (ISA), and deposit in it up to a maximum of €1,000 a year. Any interest earned on ISA balances would be tax free.
2. The Scheme shall become operative in 2014, and a budget allocation of €1.5 million has been made. Initial projections indicate, that based on the experience of the UK and countries, with similar schemes, when demand for these types of savings, matures the cost of tax relief, under the conditions envisaged, could eventually rise to €5 million.

03. Key Recommended Features of Eligible Savings Products

1. For a saving product to be deemed a PRS, and be eligible for tax incentives, they need to fulfil set criteria. These can be summarised as:
 - (i) Schemes need to operate under the Retirement Pensions Act or similar legislation like the Insurance Business Act;
 - (ii) Benefit payments shall not start earlier than age 50 or later than 70;
 - (iii) Only up to 30% of assets be given as a lump sum, the rest through annuity or drawdown in accordance to set regulations;
 - (iv) Schemes to be subject to specified investment restrictions under the Retirement Pensions Act; and (v) schemes to have transparent charges and provide regular information to savers. While individuals will be free to contribute more than the maximum amount eligible for tax refunds, scheme operators will need to maintain separate records for qualifying and non-qualifying contributions. At any one point, individuals will have to hold all their qualifying contributions into one PRS.
2. At any one point, individuals will be allowed to have only one ISA, with a licensed banking institution. Accumulated deposits will be allowed to be transferred to an alternative provider once a year. This provision is meant to reduce administrative costs and induce banks to compete on

the level of interest they offer. Once an amount is withdrawn from an ISA it cannot be deposited back, and unutilised deposit allowances will not be transferrable over successive years.

3. If individuals on middle income save the maximum amounts, based on conservative return assumptions, income from these savings would more than compensate for the projected decline in relative state pension generosity resulting from the reforms enacted by the previous administration (see Appendix F). Granting higher allowances than those envisaged here, would unduly benefit those on high incomes. However, allowances should be reviewed every five years and their relative value should be maintained.

04. Recommended Rate of Tax Relief

1. The objective of this scheme is to provide support for those on low to middle incomes, to save for their retirement and reduce their dependence on (declining) state pensions. Higher income individuals, are already saving, and therefore require no assistance. As a result, rather than providing for tax relief at effective marginal rate of tax, we propose using a single rate of tax, namely 15%. This would mean that all taxpayers would get the same amount of tax refund for the amount of saving they make. The maximum tax refund would be of €150 a year initially.
2. One of the added benefits of applying this rate of tax relief would be to effectively increase the minimum tax threshold by a maximum of €1,000, for those low-income individuals opting to save in a PRS. On the other hand, people on high incomes, who are already saving, will get very little material benefit, from carrying on with the same saving behaviour as before. Most of the benefits of the tax refunds would go to those who really need to be rewarded for saving more.

Appendix A: Summary of the report submitted by the Advisory Group on Private Pensions

1. Given that the relative generosity of the state pension is declining, and in view of the drop in the saving rate since the mid-1990s, Government needs to help sustain a culture of savings so that individuals are better able to achieve their desired standard of living during retirement.
2. Economic literature and international practices (see Appendix B), suggest that the optimal way to provide tax incentives, in support of retirement savings, is to grant them at the contribution and the accumulation phase. Pension pay-outs would then be taxed.
3. Savings products eligible for tax incentives should fulfil set criteria (Appendix C and D set out the existing pensions regulation and investment taxation frameworks). The core set are: (i) schemes need to be regulated by the Malta Financial Services Authority; (ii) benefit payment shall not start earlier than age 50 or later than 70; (iii) only up to 30% of assets be given as a lump sum, the rest through an annuity or drawdown in accordance to set regulations; (iv) schemes to be subject to specified investment restrictions; (v) schemes to have transparent charges and provide regular information to savers. Additional criteria at this stage appear unnecessary and would require additional, possibly onerous, legislation.
4. Initially, the pension contribution allowance, could be set at €1,000 a year (equivalent to around a third of current median household savings). For someone aged 25, who contributes till pension age, this could result in a pension equivalent to 9% of the average wage and offset the projected relative drop in state pension replacement rates between now and 2060 (see Appendix F).
5. Tax relief on earned income, should be granted using a single rate of relief, rather than effective tax rates. The latter, would cost much more, and the benefits would mostly accrue to those on higher incomes. The best solution would be to use the 15% as it is the lowest marginal tax rate. This would provide better incentives for those on low-to-median earnings (who tend to be younger), where the need to support savings is higher.
6. To supplement personal retirement schemes, tax-favoured accounts could be introduced. Interest earned on these accounts (to which an individual could deposit up to €1,000 a year) would be tax free.

Appendix B: Theoretical and International Tax Treatment of Voluntary Pensions

1. Given that the relative generosity of the state pension is declining, and in view of the drop in the saving rate since the mid-1990s, Government needs to help sustain a culture of savings so that individuals are better able to achieve their desired standard of living during retirement.
2. Economic literature and international practices (see Appendix B), suggest that the optimal way to provide tax incentives in support of retirement savings is to grant them at the contribution and the accumulation phase. Pension pay-outs would then be taxed.
3. Savings products eligible for tax incentives should fulfil set criteria (Appendix C and D set out the existing pensions regulation and investment taxation frameworks). The core set are: (i) schemes need to be regulated by the Malta Financial Services Authority; (ii) benefit payment shall not start earlier than age 50 or later than 70; (iii) only up to 30% of assets be given as a lump sum, the rest through an annuity or drawdown in accordance to set regulations; (iv) schemes to be subject to specified investment restrictions; (v) schemes to have transparent charges and provide regular information to savers. Additional criteria at this stage, appear unnecessary and would require additional, possibly onerous, legislation.
4. Initially, the pension contribution allowance could be set at €1,000 a year (equivalent to around a third of current median household savings). For someone aged 25, who contributes till pension age, this could result in a pension equivalent to 9% of the average wage and offset the projected relative drop in state pension replacement rates between now and 2060 (see Appendix F).
5. Tax relief on earned income should be granted using a single rate of relief, rather than effective tax rates. The latter would cost much more and the benefits would mostly accrue to those on higher incomes. The best solution would be to use the 15%, as it is the lowest marginal tax rate. This would provide better incentives for those on low-to-median earnings (who tend to be younger), where the need to support savings is higher.
6. To supplement personal retirement schemes, tax-favoured accounts could be introduced. Interest earned on these accounts (to which an individual could deposit up to €1,000 a year) would be tax free.

Introduction

A number of EU member states, have introduced reforms aimed at increasing the role of voluntary savings, at times accompanied by reforms in the public pension, aimed towards increasing responsibility of households, to save privately through occupational and individual pension plans. Although such pension reforms share similar approaches, the institutional environments of the 'third pillar' of pension savings differ considerably across countries.

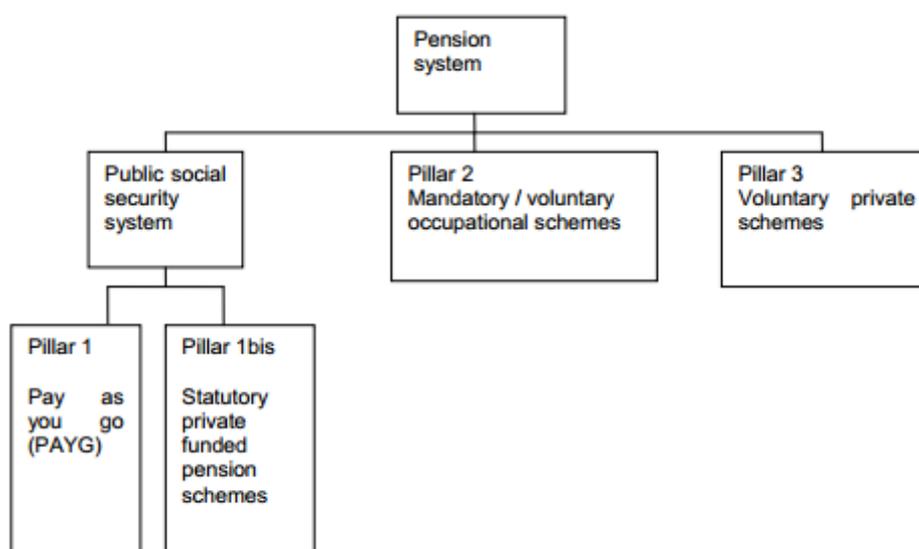
The primary purpose of this paper is to provide a comparison of different third-pillar systems, across EU Member States. In providing this comparison, it also gives an overview of four regimes of tax treatments (EET, ETT, TEE, and TEE).

This paper is organised as follows. The next section provides a brief discussion of the different types of pension systems. Section 3 underlines the need of tax incentives on pension savings. Section 4 deals with the effects of tax reliefs on savings. The fifth section discusses other factors affecting retirement saving rates, while section 6 outlines risks during the decumulation phase. Section 7 illustrates different tax retirement regimes and supplies a hypothetical example to report the net present value of tax, the pre- and post- tax rate of return. Consequently, the advantages and disadvantages of these treatments are presented in section 8. Section 9 gives an overview of actual pension systems and tax treatment of voluntary private pension across EU Member States. Section 10 presents the European Commission's view. Section 11 deals with the limitations on the extent to which third pillar pensions can classify to advantageous tax reliefs. The final section concludes giving some recommendations.

Retirement Income Systems

Income for retirement can be defined in different ways. The most commonly used typology is the 'third-pillar' approach underpinned by the World Bank (1994). Therefore, across the EU27 countries, a general classification of pension types can be divided in the following pillars, as shown in Figure 01 below.

Figure 01: The Structure of Retirement Income Arrangements



The Public Social Security System is characterised by a strong involvement of the public sector, which consists of pillar 1 and pillar 1 bis. Pillar 1 is based on a pay-as-you-go (PAYG) system while pillar 1 bis, is a regime in which its social security pension schemes are partly funded and are generally operated and managed by private institutions. By 2011 the European Parliament (2011), outlines that nine of the 27 EU Member States, switched part of their PAYG to statutory private funded pension schemes.

Savings within the second pillar aim to provide retirees with an adequate replacement rate (i.e. an adequate pension income relative to their previous earnings). Not all Member States have occupational pension schemes, with some States having both mandatory and voluntarily occupational schemes.

The third pillar consists of a voluntary pension in which an individual chooses to enroll in order to provide for himself or herself. It can also be a plan that an employer chooses to introduce for its employees, participation in which may be also voluntary. The third pillar includes private savings, mostly on a voluntary basis, supported by tax privileges in many countries. These systems perform best in combination with a dynamic labour market, which includes a low unemployment rate and high and increasing participation rate of older workers.

The development of the multi-pillar system will ease the burden on public finance associated with ageing. At the same time, it may be difficult for a country to switch from a PAYG system to a funded model as tax payers have to bear the expenditure associated with existing pensioners (transition costs), as well as to fund their own pensions. Having said that, this paper will be focusing on different models of third pillar pensions, and their respective tax regime.

Why the Need for Special Tax Treatments?

In theory, any form of taxation hurts economic efficiency by distorting behaviour. The typical explanations given for special tax treatments in retirement savings are explained below.

Insufficient Retirement Income

A primary argument raised by Whitehouse (1999) regarding the favourable tax treatment of pension savings, reflects the fact that retirement savings are more important than other forms of savings. Individuals may be myopic and fail to predict their needs in old age (Thaler and Shefrin, 1981), which typically translates into difficulty in saving sufficiently once retirement age has been reached. One factor that explains the lack of willpower is that individuals have large discount rates (Thaler, 1981; Laibson *et al.*, 1998). Indeed, Thaler (1991) shows that the level of patience encountered by people is directly associated with the time-frame of decision making; such that *a priori* a high level of patience is manifested to long-term decisions. Consequently, the state should encourage individuals to save for retirement, during their working life, so as to ensure a sufficient standard of living in retirement. Hence, tax incentives may be required because in the absence of inducement lifetime savings will not be optimised.

However, this argument may not be valid since it is hard to measure the permanent income (Nyborn and Stuhler, 2011), and consequently, calculate the 'sufficient' level of income needed during retirement age. Moreover, tax incentives may fail to achieve the optimum level of saving, i.e. either render insufficient amount of savings relative to the minimum standard or are over-provided. Engen, Gale, and Scholz (1996), observe that households with tax incentives on saving have taken more debt than other households. Nevertheless, households that participate voluntarily in saving may have stronger tastes for saving than other households. For example Ameriks *et al.* (2003) and MacFarland *et al.* (2004), conclude that countries with strong 'propensity to plan' have a greater commitment to retirement savings. For these reasons, other means of ensuring sufficient retirement income, such as the introduction of the second pillar, is considered mandatory.

Moral Hazard

The second argument relates to moral hazard – individuals will under-provide savings given that they know that the state promises an adequate minimum income that serves as pension income of last resort (Börsch-Supan, 2004), especially for low-income earners. Therefore “by encouraging individual provision for retirement, the cost of social security benefits may be reduced, particularly when means-tested benefits are an important source of retirement income” (Whitehouse, 1999). In ‘no tax-incentive’ scenario, means-tested benefits act as a large disincentive to save for retirement, especially for low-income earners.

Savings

The third motive is one of capital stock. “The state should increase long-term savings to add to the level and/or stability of capital available for investment” (Whitehouse, 1999). This is further discussed in the following section.

Low Retirement Risks

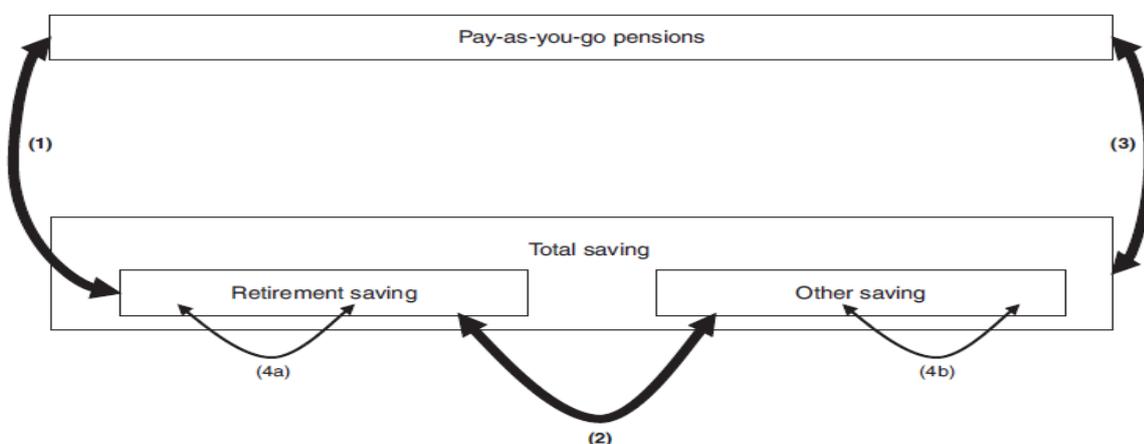
Decision-making is the result of two spheres: an emotional and cerebral dimension (Weber, 2004). The former bears a dread risk - the fear of catastrophe – while the latter holds an uncertainty risk – the fear of the unknown. Both risks are low in retirement, as there is neither sufficient degree of catastrophe nor a great deal of uncertainty to voluntarily prepare for retirement (Blake, 2006) due to rational ignorance. Therefore, behavioural economists argue that one needs to employ commitment devices that assist lasting changes in behaviour (Laibson, 1997; Laibson *et al.*, 1998), *inter alia* tax incentives.

Substitution between PAYG and Private Pensions

According to economic theory, models with consumption smoothing predict substitution between PAYG and funded pensions (both pillar 2 and pillar 3), and the effect of tax incentives to shift from unfunded to funded pension regimes depends on the dominance of the substitution over the income effect.

First, it is imperative to distinguish between two types of substitution, as illustrated by the arrows in Figure 02. The two types of substitution are (a) substitution between retirement wealth (future claims on PAYG pensions) and real wealth (claims on assets paid only for retirement, such as occupational or individual pensions) (see arrow 1), and;(b) substitution between retirement wealth (usually cannot be liquidised freely, such as no availability before retirement age) and other wealth that have no liquidity restrictions (see arrow 2).

Figure 02: Substitution among savings types



Source: Borsh-Supan (2004)

The two substitution mechanisms outlay interesting considerations, which render them important in the pension reform discussion. The first substitution mechanism implies that if the PAYG becomes less generous (i.e. reduced); people will accumulate more retirement savings. This is evident in economic models with consumption smoothing and overlapping generations - such as in Auerbach and Kotlikoff (1987); Miles (1999); and Börsch-Supan, Ludwig and Winter (2003) – that include both PAYG and life-cycle motive for retirement saving. The second mechanism of substitution entails that when individuals are faced with an incentive to accumulate more retirement savings, they accumulate less assets for a smaller down payment, say by buying smaller houses.

These two effects are central to the argument of crowding out debate between Feldstein (1974) and Barro (1974). The general debate with regard to pensions is to what extent a push towards a funded pension design is superior to a PAYG system. New savings are created if the first substitution exceeds the second substitution mechanism. However, the contrary would happen if the second mechanism is strong, as it only shifts existing savings from one medium to another. This combination is shown in arrow 3 in Figure 02.

Theoretical Impact on Saving Rate

Following the discussion about the two types of substitution effects, it is important to assess the theoretical impact on the saving rate, if tax incentives are granted to voluntary retirement saving.

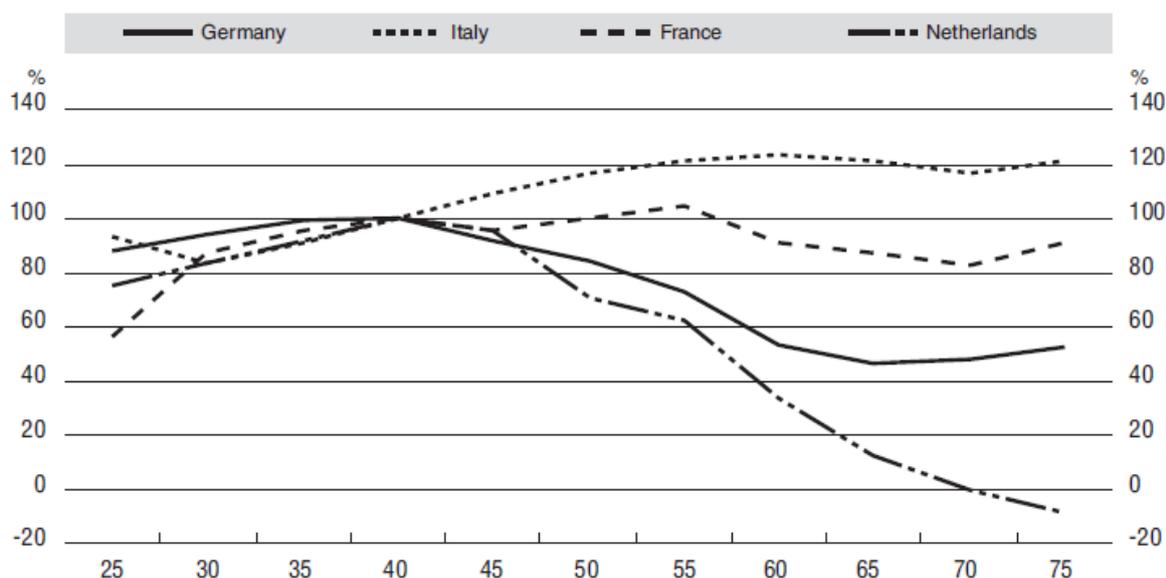
It is argued that tax incentives have two consequences on the individual private pension plans (Le Blanc, 2011). First, it is expected that the degree of tax incentives affects the willingness to save for pension retirement. By way of example, generous tax treatments will be compensated by an increase in private savings. However, this might not necessarily lead to an increase in total private saving because private saving for retirement and private saving for other purposes are substitutes. Therefore, the effect of tax incentives on private saving depends on the magnitude of the substitution effect and the income effect.

On the one hand, if individuals have a fixed target for retirement savings, tax incentives for pensions could induce them to save less during their working life since the level of retirement income would remain unchanged. On the other hand, a positive relationship is expected between tax incentives and pension savings because a higher level of incentive payments increases the opportunity cost of dissaving. This might not, however, necessarily lead to an increase in total private saving because private saving for retirement and private saving for other purposes are substitutes. Thus, the effect of tax incentives on private saving depends on the magnitude of the substitution effect and the income effect.

Cross-National Evidence

Cross-national evidence produced in Borsch-Supan (2004) shows that the extent of first substitution mechanism is stronger in countries where private retirement income is considered unnecessary due to high replacement rates of the public pension system.

Figure 03: Age-specific saving rates (cohort corrected)



Source: Borsch-Supan (2004)

Figure 3 shows the median saving rates in France, Germany, Italy, and the Netherlands by age cohort, to represent life-cycle saving. The life-cycle hypothesis states, that an individual's saving rate takes an inverted U-shaped curve, illustrating that a young age and elderly age dissavings take place, which are financed by saving rates in the working-age. Saving rates in France, Germany, and Italy are rather flat, indicating that there is no dissaving in old age. Indeed, in Jappelli and Modigliani (1998), private retirement saving was compared to a PAYG system, to explain that the observed phenomenon, as mainly due to over-preventive public pension systems. By contrast, the Netherlands has a more hump-shaped curve that agrees with the life-cycle postulation, possibly because of the low public pension provision at that time.

Substitution between retirement income and other saving

From Borsh-Supan (2004), one can also deduce that there is clear evidence on the partial effects of tax incentives (shown in arrow 3, 4a, and 4b). Several econometric studies using micro data sets - like Börsch-Supan and Stahl (1991), and Walliser and Winter (1999) - have shown that tax treatments measures for specific investment vehicles dedicated to retirement have had a positive impact on the relevant form of savings.

However, evidence on the total effects, i.e. the generation of new savings, is controversial. Conclusions from empirical literature are two-fold (Le Blanc, 2011); though inconclusive (Whitehouse, 1999). On one hand, several studies found that tax incentives lead to negative net savings and households shift their private savings from their taxable accounts to tax-deferred accounts in order to reap the benefits of the tax deferrals. By contrast, other studies conclude that tax-incentives bring about positive net savings. For instance, Antonlin, de Serres and de la Maisonneuve, (2004: 23) deduce from various studies that there is a strong relationship between tax-incentives and savings of low- and middle-income earners. In addition, tax incentives are likely to induce high-income earners to increase savings. Indeed, they state;

“The existence of tax-favoured pension arrangements does not seem to be questioned even though these schemes appear to be costly from a public finance point of view. In fact, more and more countries are either introducing them or extending their coverage. A question that arises is whether tax-favoured arrangements can be justified even if they fail to rise private and national saving.”

Hence, as argued above, a review of the literature indicates that there is no clear evidence that the level of tax generosity affects the level of saving. However, shifting the composition of saving towards long-term retirement products might at times be beneficial.

Other Factors Affecting Retirement Saving Rates

The preceding section showed that retirement savings rates are positively influenced by tax relief measures. However, it should be noted that savings for pensions are influenced by other factors, such as expectations about future pension reforms, and other behavioural and psychological factors, which may boost or reduce the effectiveness of savings incentives.

First of all, it is expected that anticipated future pension reforms, often related to reduction of generosity of the first pillar pension provision have a positive effect on retirement saving rates. By way of example, it is expected that a decline in the degree of generosity in the first pillar pension regime could be compensated by an increase in private savings.

Another factor that affects retirement saving, is uncertainty about saving incentives that inhibit the effectiveness of tax reliefs on retirement income. Engen, Gale and Scholz, (1996) postulate that poorly designed, low intertemporal elasticities of substitutions households, and lack of awareness about the need and opportunities for saving are the core reasons why retirement savings are relatively inelastic to tax incentives.

Other factors that influence actual retirement savings, are behavioural and psychological factors (ability of individuals to make and execute plans in accord with conventional optimising theory), procrastination and myopic behaviour. For example, Choi *et al.*, 2003, estimates that human decision making is often marked with inertia or procrastination. Generally, members tend not to alter their contribution rate or their chosen investment fund as they choose to take “the path of least resistance”, implying that individuals makes the easiest choices with might not reflect optimality. In the same lines of thought, Mitchell and Utkus (2004), postulate that the initial conditions used to justify a decision, to engage in a particular investment pension fund, remain important over time, even though it might be irrational. The authors found significant anchoring effects on investment decision-making.

A common behavioural constraint in voluntary pension economics is choice overload and herding. Standard economic theory states that people are better-off the more choices they have. However, with regard to the choice of investment fund for pension contributions there is a probability of choice overload (Sethi-Iyengar *et al.*, 2004). Indeed, individuals may feel deluged and refrain from participating in any possible scheme. In addition, evidence produced by Duflo and Saez (2004), shows that saving decisions are often influenced by the behaviour of peers: a worker joins a private scheme if other fellow workers join. This is referred to as herding behaviour.

Moreover, behavioural economists, often state that individuals tend to be overconfident about their future and make significantly optimistic forecasts. Overconfidence in decision making may result into lack of diversification (De Bondt, 1998; Goetzmann and Kuman, 2001), such as owned portfolios from sectors that are highly correlated.

So far, the focus has been on factors affecting retirement saving during the accumulation phase. But maximisation of utility of consumption during retirement, is also relevant to this study. There is a range of risks, which can lead to lower consumption than anticipated in a rational lifecycle financial framework, say due to longevity risk, inflation risk, health risks and capital market risks (Blake, 2006).⁷⁴ These factors also condition the decisions related to consumption during retirement.

⁷⁴ For further discussion of factors affecting the decumulation phase see Blake (2006).

Approaches to Taxing Retirement Savings

There are three points on savings, at which taxation is possible:

- i. when money is contributed to the fund, either by employees or employers;
- ii. when investment income and capital gains accumulate to the fund; and
- iii. when retired scheme members receive benefits.

Taxation can be levied at each of the stated points. At each of these three points, the cash flows can be taxed (T) or exempted (E). The presence of a 'T' indicates the imposition of taxation while 'E' reflects tax exemption at the respective point. However, 'T' does not reflect the overall burden of the tax but it is an indication of the incidence of taxation at that particular stage.

Theoretical taxation combinations render eight taxation models; of which four are of interest. These are shown in the Table below.

Table 01: Fiscal Incentive Framework Options

	Contributions	Returns	Benefits	Name
i.	T	T	E	Comprehensive Income Tax
ii.	E	T	T	Deferred Income Tax
iii.	E	E	T	Classical Expenditure Tax
iv.	T	E	E	Pre-paid Expenditure Tax

The simplest way to explain and illustrate differences between these regimes is through the aid of a hypothetical example. The following working assumptions are adopted:

- i. 10 per cent annual real return
- ii. 25 per cent tax rate
- iii. Five-year investment term
- iv. No inflation

The four hypothetical examples are presented in Table 1 above.

The first column shows the tax, tax, exempt (TTE) regime which corresponds to the comprehensive income tax. The amount of saving that reaches the pension fund is €75, implying that €25 out of €100 is taxed. This taxation approach also stipulates that investments returns are taxed, but not the benefits which are reaped out of the pension fund.

The exempt, tax, tax (ETT) model, known as deferred income tax, is shown in column two. Contributions are exempt, whereas both the earnings and the benefits are taxed. The amount of savings that reaches the fund is €100, from which the rendered post-tax investment return is equal to €43.56 and tax collected from benefits paid is equal to €35.89. Therefore the produced net pension is equal to €107.76.

Although the first two regimes (TTE and ETT) render the same net pension income, since the rate of taxation does not change, the effect on saving is different. Both TTE and ETT render a post-tax rate of return which is lower than the pre-tax rate of return. This implies a disincentive to saving, because consumption now is worth more than consumption in the future.

Table 02: Alternative Pension Taxation Regimes

	<i>TTE</i>	<i>ETT</i>	<i>EET</i>	<i>TEE</i>
	€	€	€	€
Pre-tax Contribution (A)	100.00	100.00	100.00	100.00
Tax (B)	25.00	-	-	25.00
Fund (C = A - B)	75.00	100.00	100.00	75.00
Net accrued income (D)	32.67	43.56	61.05	45.79
Fund at retirement (E = C + D)	107.67	143.56	161.05	120.79
Tax on pension withdrawal (F)	-	35.89	40.26	-
Net pension (G = E - F)	107.67	107.67	120.79	120.79
Memorandum item:				
Net present value of tax	33.14	33.14	25.00	25.00
Pre-tax rate of return	10.00	10.00	10.00	10.00
Post-tax rate of return	7.50	7.50	10.00	10.00

Source: Whitehouse (1999)

The third regime of exempt, exempt, tax (EET), known as classical expenditure tax, exempts contributions from tax and investment income or capital gains, however, taxes benefits from retired pension scheme. The amount of net pension is €120.79.

Tax, exempt, exempt (TEE) regime is produced in the forth column. The pre-paid expenditure tax involves taxed contributions, but not taxes are laid on the fund's investment return and tax-free withdrawal of pension benefits. The amount of saving that reaches the pension fund is €100, which after accumulation of investment return reaches a net pension sum of €120.79.

Both the third and forth taxation model are equivalent in effect and render a post-tax rate of return to saving equal to the pre-tax rate of return of 10 per cent of compound interest. This implies that people who save for future consumption, pay the same tax as those who consume now; meaning that these regimes are equitable in their treatment of different individuals.

Finally, it is pertinent to note that both EET and TEE have a net present value of tax revenue of €25 while TTE and ETT yield a higher value of €33.14. In other words, TTE and ETT yield a higher net present value of tax revenues to the government relative to EET and TEE.

However, in practice, EET and TEE systems may not have the same effect on saving because of the different stage at which the tax exemption occurs. The pre- and post-tax rates of return may no longer be equalised if the individual pays a different rates of taxation while in work when compared to the tax paid during retirement. The individual may benefit most from an EET regime given that the marginal rate during working period is generally higher.

In public finance literature, the first two regimes (TTE and ETT), are referred to as 'comprehensive income tax' because they tax citizens according to their ability to pay. By contrast, the last two regimes (EET and TEE) are equivalent to the 'expenditure tax' because they tax only consumption or expenditure and at the same rate whether consumption is undertaken now or in the future.

Advantages and Disadvantages of an Expenditure Tax Regime

The previous section indicates that an expenditure tax, preferably an EET system, has some desirable properties since it equalises consumption between the working life and retirement. However, the TEE system brings revenues forward from funded pensions. This helps to alleviate the transition pension deficit that arises in the cases of systemic reforms from a defined-benefit to a defined-contributory pension system.

In addition to this, an expenditure tax is simpler to administer than comprehensive income tax because investment returns are difficult to capture, especially those in the form of unrealised capital gains. Indeed, a TEE system limits tax avoidance and evasion as tax revenue, is collected up-front. In this regard, revenue is also collected from individuals independent of their domiciliation and the intention to emigrate on retirement.

A pre-paid expenditure tax has also the benefit of raising more revenue from individuals during their working life, assuming that a progressive tax system captures higher income streams during their working life but pay at a standard rate during retirement.

Finally, another advantage of an expenditure taxation regime is that it maintains equal pre- and post-tax real returns whatever the mix of inflation and real returns in nominal interest rate. By contrast, the burden of the comprehensive income tax depends on the rate of inflation. Theoretically, a pure comprehensive income tax would only tax real returns; however, in practice one would tax nominal returns; implying that the burden of taxation increases with inflation. Consequently, the post-tax real return falls further still below the pre-tax real return. But with a comprehensive income tax more revenue is raised. As shown in Table 02 above, the net present value of tax is higher under the comprehensive tax base when compared to the expenditure tax base. This implies that under the first two regimes (TTE and ETT), the rate of taxation could be lower; meaning that it may improve labour-supply incentives and reduce work in the 'black' or 'shadow' economy. Nevertheless, this still means that savings choices are distorted.

Another disadvantage of an (classical) expenditure tax regime, is that it incentivises individuals to undertake riskier investments because pensions are taxed on withdrawal. The government becomes a co-investor sharing the risk of any losses in the pension fund. This implies a riskier portfolio choice.

Finally, pre-paid expenditure tax may suffer from a 'policy risk'. A TEE may confine future governments since it has to honour previous governments' commitments while revenues have already been absorbed at an early stage. On the contrary, future governments can argue that they are not bounded by commitments of previous governments and thus remove pension tax regimes in payment or investment returns.

Costs to Government

Different tax treatments have different public finance implications, mainly depending at which point retirement savings are taxed. This can be better explained by illustrating a hypothetical example. Suppose that an individual contributes €100 in a type tax regimes from one stipulated in Table . Assume, for simplicity, that the individual is subject to a 25% marginal income tax, and that investment earns a 10% annual return. Pension fund income is taxed at a 10% rate, when applicable. The discount rate is set to 10%. Finally, ordinary savings are taxed both on the initial amount and on the accrued income, similar to a TTE tax regime. A shift from ordinary savings to pension savings is generally more expensive for government, because the latter is more generous. Changes in costs to government after substituting funds from ordinary savings to pension savings are compared to ordinary savings, which is considered to be the baseline. This analysis was adapted from Yeol Yoo and de Serres (2004).

Table 03 below shows income flows of €100 pension fund for 5 consecutive years under an EET regime. At year end, the total gross pension fund accumulates to €161.05, from which €40.26 in taxes are deducted such that the net pension fund is equal to €120.79. Alternatively, the individual could have contributed the €100 fund in ordinary savings. The difference between taxes paid in ordinary savings (row 5) and the private pension (row 2) is the cost to the government in current price (row 7) resulted from a shift from ordinary savings to pension savings. The discount factor (row 8) was used to calculate the net present value term, such that the net tax cost to government per euro of pension savings in the present value term is equal to €0.08.

Table 03: Net Tax Cost of EET-Type Pension Savings

		Row	Contribution (year 0)	1	2	3	4	5	With- drawal (year 5)	Net tax cost (pv)
Private pension (EET)	Gross Balance	1	100.00	110.00	121.00	133.10	146.41	161.05	161.05	
	Tax paid	2	0.00	0.00	0.00	0.00	0.00	0.00	40.26	
	Net balance	3	100.00	110.00	121.00	133.10	146.41	161.05	120.79	
Ordinary savings (TTE)	Post-tax balance	4	75.00	82.50	90.75	99.83	109.81	120.79	118.04	
	Tax paid	5	25.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Net balance	6	75.00	80.63	86.69	97.56	107.31	118.04	118.04	
Difference in taxes paid (TTE-EET)	Revenue Lost	7= 5-2	25.00	1.88	2.06	2.27	2.50	2.75	-40.26	
	Discount factor	8	1.00	1.10	1.21	1.33	1.46	1.61	1.61	
	NPV revenue loss	9 = 8/7	25.00	1.70	1.70	1.70	1.70	1.70	-25.00	8.52

Assumes a 10 per cent pre-tax rate of return and discount rate, 25 per cent marginal tax rate and five years of investment.

If it is assumed that the government sets an ETT pension regime, then as illustrated by Table 04, the government can recover a part of lost revenue from implementing a 25 per cent tax on accrued income. Indeed, the overall net tax cost to the government is lower than an EET system by €0.04, implying that on each euro of pension savings, the government losses €0.03 in revenue in net present value terms.

Table 04: Net Cost of ETT-Type Pension Savings

		Row	Contri- bution (year 0)	1	2	3	4	5	With- drawal (year 5)	Net tax cost (PV)
Private Pension (ETT)	Gross Balance	1	100.00	110.00	121.00	133.10	146.41	161.05	159.59	
	Tax paid	2	0.00	1.00	1.10	1.21	1.33	1.46	39.90	
	Net balance	3	100.00	109.00	119.90	131.89	145.08	159.59	119.69	
Ordinary savings (TTE)	Post-tax balance	4	75.00	82.50	90.75	99.83	109.81	120.79	118.04	
	Tax paid	5	25.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Net	6	75.00	80.63	86.69	97.56	107.31	118.04	118.04	

balance										
Difference in taxes paid (TTE-ETT)	Revenue Lost	5-2 -7	25.00	0.87	0.96	1.06	1.16	1.28	-39.90	
	Discount factor	8	1.00	1.10	1.21	1.33	1.46	1.61	1.61	
	NPV revenue loss	8/7 =9	25.00	0.80	0.80	0.80	0.80	0.80	-24.77	4.20

Assumes a 10 per cent pre-tax rate of return and discount rate, 25 per cent marginal tax rate and five years of investment, and a 10 per cent tax on pension fund income.

Table 05 and 06 measure the net tax cost of both TEE and TTE type of pension savings tax regimes. On each euro of pension savings, the net tax cost to government is €0.09 and €0.00 in present value terms respectively.

Table 05: Net Tax Cost of TEE-Type Pension Saving

		Row	Contribution (year 0)	Accumulated asset					Withdrawal (year 5)	Net tax cost (present value)
				1	2	3	4	5		
Private pension (TEE)	Gross Balance	1	100.00	110.00	121.00	133.10	146.41	161.05	120.79	
	Tax paid	2	25.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Net balance	3	75.00	82.50	90.75	99.83	109.81	120.79	120.79	
Ordinary savings (TTE)	Post-tax balance	4	75.00	82.50	90.75	99.83	109.81	120.79	118.04	
	Tax paid	5	25.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Net balance	6	75.00	80.63	86.69	97.56	107.31	118.04	118.04	
Difference in taxes paid (TEE-ETT)	Revenue Lost	7 = 5-2	0.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Discount factor	8	1.00	1.10	1.21	1.33	1.46	1.61	1.61	
	NPV revenue loss	9 = 8/7	0.00	1.70	1.70	1.70	1.70	1.70	0.00	8.52

Assumes a 10 per cent pre-tax rate of return and discount rate, 25 per cent marginal tax rate and five years of investment.

Table 06: Net Tax Cost of TTE-Type Pension Savings

		Row	Contri- bution (year 0)	Accumulated asset					With- drawal (year 5)	Net tax cost (pv)
				1	2	3	4	5		
Private pension (TTE)	Gross Balance	1	75.00	82.50	90.75	99.83	109.81	120.79	118.04	
	Tax paid	2	25.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Net balance	3	75.00	80.63	88.69	97.56	107.31	118.04	118.04	
Ordinary savings (TTE)	Post-tax balance	4	75.00	82.50	90.75	99.83	109.81	120.79	118.04	
	Tax paid	5	25.00	1.88	2.06	2.27	2.50	2.75	0.00	
	Net balance	6	75.00	80.63	86.69	97.56	107.31	118.04	118.04	
Difference in taxes paid (TTE-ETT)	Revenue Lost	7 = 5-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Discount factor	8	1.00	1.10	1.21	1.33	1.46	1.61	1.61	
	NPV revenue loss	9 = 8*7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Assumes a 10 per cent pre-tax rate of return and discount rate, 25 per cent marginal tax rate and five years of investment, and a 10 per cent tax on pension fund income.

A European Comparison of the Tax Treatment of Pensions

Further to the explanation of the theory of taxation in relation to pensions, this section compares taxation regimes in practice, in a range of EU Member States. Table 07 summarises the tax treatment of pensions in EU Member States at three stages identified in the previous section: contributions, returns, and benefits.

Table 07: Tax Treatment of Personal Pension Plans

	Contributions	Returns	Benefits
<i>Pillar III – EU Member States</i>			
Austria	E	E	T
Bulgaria	E	E	E
Czech Republic	C	E	E
Denmark	E	T	T
Estonia	E	E	T
Germany	E	E	T

Ireland	E	E	T
Latvia	E	T	T
Lithuania	E	E	T
Slovenia	E	E	T
Slovakia	T	T	T
Spain	E	E	T
Sweden	E	T	T
United Kingdom	E	E	T

C = Tax Credit; E = Exempt; T = Taxed

Source: derived from country fiches

The majority of the EU Member States, adopted pension savings tax regimes, in accordance to the EET or ETT system. This means that the contributions are tax deductible, the investment results are usually exempt (with an exception to Denmark, Latvia, and Sweden), and the benefits are taxed.

The following sections provide some context in relation to each of the countries covered. Unless otherwise stated, all information was collected from the country's fiches on their pensions system as published by the website of Commission Services.

Austria

In Austria, the most important source for the provision of retirement income is the PAYG scheme, whereas other pillars are of de facto minor importance. Under the third pillar regime, there is a range of investment instruments that fulfill the purpose of old-age provision. Pension directed provisions are aided by the state in order to encourage the development of the third pension pillar.

The third pillar consists of private life insurance and private pension insurance. The most popular pension instrument is the "premium-aided pension savings scheme" (*Zukunftsvorsorge*). This was introduced in 2003, as a kind of life insurance (including a capital guarantee), subsidised by the state with a tax premium, which is currently 9% of the respective insurance premium. This is however, subject to a ceiling of insurance premium of €2,263.79 per year (Fink, 2010). The taxpayer can receive pension payments after a minimum investment period of 10 years. If benefits are received before the stipulated period, half of the allowed state bonuses must be refunded, coupled with a retroactive tax of 25% on the capital gains, and the capital guarantee is lost. If the entitlements are transferred or used for pension payments, no tax will be due. This scheme has been recording strong growth since its launch in 2003.

Bulgaria

The Bulgarian pension system has experienced considerable structural reforms since the late 1990s. The traditional PAYG system has shifted into a three-pillar system through the introduction of compulsory and voluntary fully funded pensions. The third pillar pension is capital-based. They involve voluntary contributions at the expense of insured persons or at the expense of insured persons, and the insurer or at the expense only of the insurer in order to provide life- or term pension for old age or disability, as well as survivor pensions. Licensed shareholding companies handle the organisation and administration of the supplementary voluntary pension schemes.

The occupation pension schemes were introduced into this pillar in 2007. Both the contributions paid by employers and insured persons are tax exempt, however, subject to a limit equal to 10 per cent of the taxable income. The benefits paid may be different between life-long, time-limited pension or lump sum. The same applies to employer contributions and investment income. Benefits were used to be taxed, however, they are now also exempted (Pension Funds Online, 2013). Hence, Bulgaria runs an EEE system.

Czech Republic

The Czech pension system is based on the first pillar and the third pillar. The third pillar is voluntarily, supplementary, fully funded and state-subsidised pension scheme based on defined contribution (DC) and available to those who participate in the first pillar or in public health insurance. In addition to the subsidies granted by the state, any employer can sustain his employees with additional contribution to employee's fund. Furthermore, both employers' and employees' contributions are subject to additional tax allowances. Members of the voluntary pension systems are allowed to switch between different pension fund providers. The third pillar pension system plays a minor role relative to the first pillar.

Pensions can be paid from a minimum age of 60, provided that a minimum number of contributory years are met, depending on the regulations of the pension fund. Otherwise, grants granted by the state during contributions have to be repaid with an additional tax (Pension Funds Online, 2013). In addition, the state matches employees' contributions with the level of contributions. For contributions between CZK 100 and 199, the state adds CZK 50 plus 40% of the member contribution above CZK 100. If the pension plan member contributes between CZK 200 and 299, the allowance is CZK 90 plus 30% of the sum above CZK 200. If a member contributes more than CZK 500, the allowance increases gradually with the highest allowance being CZK 150 (Pension Funds Online, 2013).

Employers' contributions can be deducted from their tax base, up to 3 per cent of an employee's assessment base. Employer contributions of up to 5% of their wages are exempt from income tax for the employee (Pension Funds Online, 2013).

A number of reforms to the third pillar were valid as from 2013, with the aim of increasing the security of the capital of participants and of encouraging people to increase their contributions to the system. Capital accumulated from contributions was separated from assets of pension institutions, implying that there will be no longer the guarantee of at least zero returns as state regulation came to an end. Moreover, pension institutions are allowed to offer new investment products with higher rates of return, at the expense of higher risks. Another relevant change was an increase in the minimum and maximum state contributions in form of subsidies to encourage participants to save more, depending on the level of participant contribution.

Denmark

The Danish pension system is composed of three pillars. Of importance is the third pillar which consists of individual, voluntary pension schemes. The public voluntary early retirement pension (VERP) is also placed in this pillar.

The individual pension schemes generally consist of capital pension or annuity pension schemes, but may also be current life-long pensions. The amount of the pensions paid relies on the savings (including return) made by the individual.

All employees and self-employed persons, who are registered in the unemployment insurance fund and the VERP scheme, can apply for the VERP. This scheme is designed for members of age of 60 years, but who are not yet 65 years old. To be eligible for the VERP one needs to be a member of the unemployment insurance fund and paid the voluntary early retirement contributions for 30 years. Moreover, the membership and the contributions can start once one reaches the age of 30.

The basis benefit paid in the VERP is €24,300 annually, if retiring before the age of 62. This amount is further reduced based on the person's pension wealth. Concretely, this means that benefit paid is reduced by 3 per cent of pension wealth above a threshold of €37,000. If retiring at the age of 62 or later, the basis benefit is raised to €26,800 and the reduction based on the pension wealth is avoided. In 2010 the VERP expenditure amounted to 2.3 per cent of GDP.

As a general rule, Pillar 3 pensions, are taxed ETT. Once contributions are paid into the scheme they can be deducted from the ordinary income tax. But contributions are still taxed with the 8 per cent payroll tax. Furthermore, contributions to capital pensions are not deductible in the top tax rate. Pension savings are not taxed until the pensions are paid out.

When pensions are paid, they are subject to the personal income tax, but not the payroll tax. Benefits from capital pensions are taxed with a flat 40 per cent rate.

The Denmark's fiche projects that government's revenue is expected to increase, are resulting from increasing pension payments, despite the rising public debt due to tax deductions for pension contributions made today. This coincides with the European Commission's argument for deferred tax payments reviewed earlier in this paper.

Estonia

Estonian pension system is based on the three-pillar approach whereby the third pillar is supplementary individual voluntary pension scheme. The first possibilities for third pillar were created in 1998, when the necessary legal framework was enacted. This was amended in 2011 which influenced the scheme in a number of ways.

Participation in the supplementary pension scheme can take two forms. Firstly, the purchase of pension insurance policies offered by licensed private life insurance companies (either with guaranteed interest rate or with investment risk). Secondly, the purchase of voluntary pension fund units managed by private fund managers (Estonia.eu).

The following tax incentives have been introduced to encourage participation in the supplementary pension scheme:

- i. Contributions can be deducted from one's taxable income, however, limited to 15 per cent of the annual gross income.
- ii. The Estonian Tax and Customs Board refunds 21% from the contributions made during the calendar year.
- iii. During the decumulation phase, paid pensions are taxable at a lower rate (10 per cent) of income tax, instead of the normal rate of 21 per cent, but only if the collected money is taken as a lump-sum upon retirement. Payments of pensions made periodically, once a month or quarterly are not taxed.
- iv. There is a minimum contractual age limit of 55 years to which tax exceptions can apply. The following changes with regard to voluntary pension schemes were ratified in 2011:
 - shares could be exchanged easier and more flexible by abolishing the minimum amount of shares needed to be exchanged and time limit between consecutive exchanges;
 - transfer between different pension insurance or pension fund is not taxed;
 - exchange of different products were regulated by the law;
 - there are no penalties if one withdraws pension savings before age 55;
 - investment providers are obliged to assess the suitability of voluntary pension to each prospectus saver;
 - a limit of €6,000 per annum is set to tax-free contributions, and employers can contribute to the fund of an employee up to 15 per cent of his salary or €6,000 without paying income and social tax (Segaert and Vörk, 2012).

Germany

The pension system in Germany is based on three pillars. Both the second and the third pillars are non-mandatory and cover occupational and private pension system. Both systems are tax-promoted and subsidised by government. One of the requirements to be eligible for tax treatments is that at least the nominal value of contribution payment should be guaranteed (zero rate of return). This type of pension is referred to as Riester pension (Augurzky, Mennicken, and Schmähl, 2012), which refers to the German Retirement Savings Act that was introduced in 2001 to provide saving incentives to boost retirement savings (ibid).

Subsidies can be categorised into two forms: a match of the participants' contribution and the deduction of all contributions from income for tax purposes. The regulations and subsidy methods

were very complex; however these were simplified in 2005 (Börsch-Supan, Coppola, and Reil-Held, 2012).

The amount of subsidies on Riester pensions depends on individuals' income and number of children. In addition, every individual insured in Germany's public pension system and public officials, as well as other eligible spouses, are also allowed to get these subsidies. Subsidies could also be paid as lump-sum or tax deduction. The former is generous for low-income households with children, while the latter is advantageous for high-income households. The current regulation is summarised in Table, as produced in Bucher-Koenen (2011).

This table summarises the state subsidies for Riester products as applicable from 2008 onwards:

Table 08: Riester Subsidies

Minimum percentage of income required to be saved to obtain full subsidies	4%
Minimum own contribution in Euros per year	60
Per capita subsidy in Euros per year	154
Subsidies for children in Euros per year:	
- Children born before 1.1.2008	185
- Children born on 1.1.2008 and after	300
One-time bonus if the subsidised individual is younger than 25 in Euros	200
Maximum tax deductible amount in Euros per year	2100

Source: Bucher-Koenen, 2011

Ireland

The pensions system in Ireland is comprised of 3 main pillars. It is pertinent to note that both pillar II and pillar III are voluntary.

Under pillar II, pensions can be provided through a person's employment or directly through financial institutions acting as pension providers. A tax relief regime applies to contribution, returns, and benefits stages.

During the contribution stage tax relief, contributions are categorised into employee contributions and employer contributions. The former are relieved at the employee's marginal income tax rate, at which the maximum tax relievable contribution is subject to a cap as a percentage of remuneration. For example, for a pension plan of €100 at a tax rate of 41%, the real cost to the employee is €59 and tax relief is €41. Similarly, for the same pension plan of €100 at a tax rate of 20%, the real cost to the employee is €80 and the tax relief is €20. This implies, that with a progressive income tax rates, employee's tax relief is proportionally lower at higher levels of income. Furthermore, there are limits to the amount of tax relief available based on the age at the date of making the contribution. Employers also contribute to the retirement fund through a defined percentage of their employees' salary to their retirement fund. Employers also benefit from tax relief on any contributions to the employees' pension plan as these can normally be fully offset against Corporation Tax as a business expense (Society of Actuaries in Ireland, 2012).

During the accumulation stage, contributions are invested in pension funds, which are exempt from Irish Tax; though there is still some external tax leakage for pension fund investors as a result of dividend withholding taxes that are applied in some jurisdictions.

The third pillar pension in Ireland is comprised of the voluntary non-pension sources of income in retirement. It would typically include private savings, private investments and income from other sources. Other than capital gains tax of 30%, that is subject to a cap, there are few if any fiscal incentives that are targeted at the wider working population.

Latvia

Latvia has three-pillar type of pension system. The third pillar was in operation since 1998. Both DC and DB plans can be offered.

Workers can participate in the pillar 3 pension regime, directly or with involvement of their employer. Both the contributions amounts and timing are flexible, i.e. the participant can contribute in as much when s/he wished. Pensions can be received from accumulated pension capital from the age of 55, whilst one may opt to continue contributing and receive capital in parts (Bite, 2012).

Contributions that do not surpass 20% of a person's gross income in the tax year are not deducted. Investment income is taxed, while benefits are tax-exempt up to a certain limit. In contrast to the 2nd tier pension, a private pension is inheritable.

Lithuania

Since 2004, the Lithuanian pension system consists of three pillars of which there is a voluntary private funded pension scheme.

The DC pillar 3 pensions rests on the system of personal accounts. Contributions are exempted from social insurance pension contributions. This pillar offers certain tax advantages (Jankauskienė and Medaiskis, 2012).

The Lithuanian pension system grants third pillar pension savings in pension funds or life-insurance companies to have tax advantages. Income and corporate tax allowances are granted to contributions to the third pillar pension scheme if they do not exceed 25% of the person's annual earnings, and any amount above that level is taxed at a reduced rate of 15% rather than the regular rate of 27% (Pensions Fund Online, 2013). The investment returns on the contributions are not taxed while benefits received from contributions are partly taxed on the accumulated amount covering the contributions paid (Jankauskienė and Medaiskis, 2010).

In addition, there is a legal framework in pension accumulation that allows contracts to be terminated before reaching retirement age given that the maturity is not earlier than 10 years after the beginning of accumulation.

Slovenia

Slovenia's pension system rests on multi-pillar approach.

Two kinds of voluntary supplementary pension insurance exist. These are collective insurance in which workers can be included via their employer who fully or partly finances the pension scheme, and individual insurance where insured persons pay contributions for themselves

The supplementary pension fund has the following conditions:

- the contributor has at least 58 years of age;
- the contributor has right to the first tier pension;
- at least 120 months have elapsed since the inclusion into the voluntary supplementary pension insurance.

An insured person also has a right to transfer the funds to another approved pension scheme.

In addition, the contributor (employer or individual) is entitled to tax relief for the paid-in premium; however the pension plan needs the approval of the Ministry responsible for labour.

Slovakia

The Slovak pension system consists of three pillars.

The third pillar was introduced in 1996 as a supplementary part of the pension system. It is a voluntary, fully funded, contribution defined, privately managed pension scheme. As of 2011, the third pillar is no more supported by tax incentives in the form of tax allowance as part of the fiscal consolidation package (Vagac, 2012).

Spain

The pension regime is categorised under two groups: the public system and private pensions.

Private pensions are voluntary (non-mandatory), supplementary and includes both individual and occupational pension funds. Occupational pensions include occupational plans and collective pension insurance plans (with retirement benefit purposes). They are usually agreed in the wage bargaining process, and are both financed by employers and employees.

Contributions to private pension plans enjoy a favourable tax treatment (EET) with the exception of collective insurance that does not enjoy tax exemptions. Benefits received from pensions are taxed at labour income.

Sweden

The new Swedish public old-age pension system was fully implemented in 2003. The new earnings-related old-age pension system consists of a notionally defined contribution (NDC) PAYG component and a fully funded, defined contribution (DC) pension system.

Tax-deductions apply for voluntary private pension saving, something that is especially important for self-employed who not are covered by any occupational pension plans.

Since 2008, the capped yearly deduction allowed is €1,260, however, self-employed, who are not eligible to occupational saving plans, are granted higher deductions. The latest country fiche reports that in 2009 approximately 39% of the population 20-64 years made tax-deductions for private pension savings, in average €570 and in total €1,120 billion.

Private tax-deductible pension savings are taxed ETT.

The European Commission's View on Tax Regimes

The Commission supports the system of deferred income taxation (ETT) for three reasons:

- i. "contributions to pension funds diminish a person's ability to pay taxes;
- ii. encourages citizens to save for their old age;
- iii. Helps Member States to deal with the demographic time-bomb, as they will be collecting more tax revenues at a time when more elderly people may call on the State for care." (European Commission, 2013).

However, the Commission notes that many Member States do not allow mobility of pensions, i.e. tax reliefs for pension contributions paid to pension funds in other Member States. This effectively is hindering competition in national pension markets and created major obstacles to free movement of labour.

Limitations on Deductibility

As highlighted in the countries' pillar III profile above, the majority of countries have a restriction on the extent to which pension contributions can classify to advantageous tax treatments. This is typically to control tax avoidance and/or because of distributional issues (Whitehouse, 1999). Generally higher-income earners have a larger pool of funds and are more able to make relatively larger pension contributions leading to a larger tax advantage.

Restrictions on pension contributions can take a number of forms:

- i. absolute limits on the amount of contributions;
- ii. limits on the proportion of contributions that can be deducted;
- iii. limits on the proportion of income on which contributions can be made;
- iv. limits on the deductibility of contributions at higher rates of income tax.

Hypothetical can be drawn to illustrate the implications for Government revenue of different tax treatment regimes, alongside the interaction with restrictions on contributions. The results drawn are sensitive to the assumptions adopted as shown below.⁷⁵ A similar framework used in Section 6 is to be adopted to analyse the implications of the last restriction on pension contributions for higher-rate taxpayer as shown in

Table 09 below. The first case assumes that an individual pays a higher tax rate of 40 per cent, during both his working life and retirement. By contrast, the second case depicts a situation whereby an individual pays the higher rate of tax in work, but pays a standard rate of tax during retirements, assumed to be 25 per cent.

Table 09: Alternative tax treatments for higher-rate taxpayers

	Case 1				Case 2			
	Higher rate in work and retirement				Higher rate in work, basic rate in retirement			
	<i>EET</i>	<i>TEE</i>	<i>EET with limit</i>	<i>ETT</i>	<i>EET</i>	<i>TEE</i>	<i>EET with limit</i>	<i>ETT</i>
Contribution	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tax	0	40.00	15.00	0	0	40.00	15.00	0
Fund	100.00	60.00	85.00	100.00	100.00	60.00	85.00	100.00
Net Investment Return	61.05	36.63	51.89	33.82	61.05	36.63	51.89	33.82
Fund at Retirement	161.05	96.63	136.89	133.82	161.05	96.63	136.89	133.82
Tax on Pension	64.42	0	54.76	53.53	40.26	0	34.22	33.46
Net Pension	96.63	96.63	82.14	80.29	120.79	96.63	102.67	100.37
Net present value of tax	40	40	49	50.14	25	40.00	36.25	37.68

The first column shows the classical expenditure tax. Contributions are deductible at the higher rate of 40 per cent when contributions are paid and investment returns accumulate. However, when pensions are paid, the annuity is taxed at the higher tax rate, so that net pension is equal to €96.63. As already explained earlier in the paper, EET tax treatment is equitable, i.e. people who save for future consumption pay the same tax as those who consume now.

The pre-paid expenditure tax is shown in the second column. Contributions are taxed at the higher rate of 40%, rendering a fund equal to €60. The net pension result is the same as the classical expenditure tax of €96.63.

The third column illustrates an example on limits imposed on the deductibility of contributions at higher rates of income tax of 40% for EET tax treatment. The deductibility of pension contributions is constrained to the standard rate of tax – assumed to be 25%. This implies a partial deductibility of €15 per €100, which is the difference between the higher and standard rates. Given that the pension fund is relatively lower, the generated net investment return is less than the unrestricted expenditure tax by €14.49 or 15 per cent, meaning that the net pension is less generous for EET tax treatment with limits. However, the net present value of tax is €9 higher, implying greater revenue for government. It is to be noted that since the fund at retirement is relatively smaller there is less to tax when the pension is paid.

The deferred income tax regime (ETT) is produced in column 4. In this example, the net investment return is taxed at the standard rate, 25%. Note that the net pension and the net present value of tax of

⁷⁵ Scenarios may need to be calibrated on the basis of actual policy parameters.

EET and ETT are alike. This shows that if one restricts the deductibility of contributions the EET regime would be similar to the ETT tax treatment.

Similar to Case 1 under Case 2, the TEE regime renders a lower net pension but a higher net present value of tax relative to the EET. Again, limiting the deductibility of contributions to the basic rate (see column seven) reduces the value of net pension from €120.79 to €102.67 and the net present value of government revenue collected from taxes increases from €25 to €36.25. Just like Case 1, the net present value of tax under an EET tax regime with limit yields similar results to the ETT regime.

Conclusions

This paper provides a number of theoretical and policy insights on the application of different regimes of tax treatments and their implications in incentivising voluntary third pillar savings. Firstly, the literature indicates that an expenditure-tax system is considered as the best way to tax pensions, because, unlike the comprehensive income tax it does not distort intertemporal consumption, i.e. people's preferences in relation to consumption and saving over the course of their life. Furthermore, it is easier to administer and the tax burden does not change with inflation.

Secondly, preferential tax treatment to retirement savings should not be implemented with the aim to increase aggregate savings as this might not be the case. Rather, the scope of tax incentives is closely related to the level of retirement income deemed to be adequate by an individual contributor.

Thirdly, there is clear evidence which supports substitution between state PAYG pensions and private retirement savings in the long run. People tend to accumulate more private retirement savings, the less generous the state PAYG becomes. Further, tax reliefs entice people to accumulate retirement savings possibly at the expense of other assets.

Finally, this paper outlines the advantages and disadvantages of the expenditure tax regime. In this view, most countries adopt ad-hoc system close to EET. This is in spite of the European Commission's preference for an ETT tax regime. The TEE, however, is also desirable from a public finances point of view since it collects revenues up-front.

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Appendix D: The Pensions Regulatory Framework in Malta

The Special Funds (Regulation) Act, 2002 provides a regulatory framework to allow the establishment of pension schemes in the form of: [a] a trust; [b] by contract or [c] an Investment Company with Variable Share Capital established under the Companies Act.

Revision of the Legislation

The Retirement Pensions Act (Chapter 514 of the Laws of Malta) was published by means of Act No. XVI of 2011, in the Government Gazette on the 5th August 2011. This Act will repeal and replace the Special Funds (Regulation) Act (Chapter 450 of the Laws of Malta), regulations and directives issued thereunder, once it comes into effect when the Pension Rules to be issued thereunder are published. **The scope of the Retirement Pensions Act is to create a more flexible and user friendly piece of legislation, rather than undertaking a complete overhaul or making drastic changes to the current legislation.**

The Retirement Pensions Act ("RPA") provides the legal framework for the licensing and regulation of retirement schemes, retirement funds and service providers related thereto as well as the requirement of recognition for persons carrying on back-office administrative activities. The detailed requirements and conditions for licensing or recognition as well as on-going obligations of persons licensed or recognised under the Retirement Pensions Act are stipulated in the law itself, in secondary legislation and Pension Rules which may be issued from time to time under the said Act. The Retirement Pensions Act, secondary legislation and Pension Rules, also transpose the provisions of Directive 2003/41/EC of the European Parliament and of the Council of the 3rd June 2003 on the activities and supervision of the institutions for occupational retirement provision (the IORP Directive). The draft Pension Rules have been issued for consultation and feedback received is currently being mapped.

Pursuant to Article 38(1), the administration of the RPA is vested in the Malta Financial Services Authority as the Competent Authority for the purposes of the Act.

A retirement scheme means a scheme or arrangement with the principal purpose of providing retirement benefits. A Retirement Scheme may take the form of Defined Benefit Schemes and Defined Contribution Schemes. A Retirement Scheme established under the RPA, is open to occupational and personal schemes. Any operator can establish such a Retirement Scheme and sell it to Maltese Residents as there are no prohibitions in this regard at law.

In terms of the RPA, an "occupational retirement scheme" is a retirement scheme established for, or by, an employer/s or an association representing employers, jointly or separately, for the benefit of employees. A "personal retirement scheme" means a retirement scheme which is not an occupational retirement scheme and to which contributions are made for the benefit of an individual.

A scheme/arrangement shall not constitute a retirement scheme under the RPA if it provides for:

- (a) the payment of retirement benefits to five or fewer members; or
- (b) the commencement of payment of retirement benefits to a member on a date that is earlier than that on which such member has attained the age of **fifty, or later than the age of seventy**, except in those cases where the scheme or arrangement provides that:
 - (i) the payment is made by reason of the disability or death of a member; or
 - (ii) the payment, in the case of an occupational retirement scheme, is made to the member without the necessity of the member's consent in line with any Pension Rules, in the event that the member is no longer employed by the employer and other Schemes providing cover against investment or biometric risk.

No retirement scheme shall carry on any activity for the provision of retirement benefits in or from within Malta, unless such retirement scheme is situated in Malta and is duly licensed under the RPA.

The Pensions Regulatory Framework provides for the authorisation and regulation of service providers providing the following licensable activities:

1. Retirement Scheme Administration - administering the operation of a retirement scheme.
2. Custodian or Trustee Services
 - acting as custodian or trustee of a retirement scheme
 - acting as custodian or trustee of a retirement fund.
3. Investment Management
 - management of the assets of a retirement scheme
 - management of the assets of a retirement fund

Points to take out from Pensions Framework in relation to Third Pillar Pensions

1. Operations of the Scheme

The contributions to the Scheme will be invested in accordance with the Scheme investment objectives and shall respect the following **investment restrictions**:

- i. The Retirement Scheme Administrator shall arrange for the Scheme assets to be invested in a prudent manner and in the best interest of Members and Beneficiaries. In the case of a potential conflict of interest, the Scheme Administrator, or the Asset Manager that may be appointed to manage the Scheme's assets, shall ensure that investment activity is carried out in the sole interest of members and beneficiaries;
- ii. The Retirement Scheme Administrator shall ensure that the assets of a Scheme, are properly diversified in such a way as to avoid accumulations of risk in the portfolio as a whole.
- iii. A Retirement Scheme should not engage in transactions with any of its members or connected persons thereto.
- iv. A Retirement Scheme should not grant any loans to any of its members or connected persons thereto.
- v. A Retirement Scheme should not engage in borrowing in connection with property purchases, on behalf of any of its members or connected persons thereto, provided that the Scheme may borrow only on a short term basis in relation to the management of its assets and should not engage in any leverage.
- vi. The investment policy should be clearly specified or agreed, as the case may be, with the Member and there should be clear disclosure awareness by client of applicable risks.

2. Programmed Withdrawal Arrangements

Retirement Benefits shall be **paid out in a stream of income payments**, other than benefits paid on death or permanent invalidity of the member.

- i. On retirement, 30% of the assets of a member in a Retirement Scheme or Retirement Fund, as the case may be, may be paid as a cash lump sum. The remaining assets shall be used to provide a retirement income.
- ii. The Retirement Scheme shall, at the request of the Malta Financial Services Authority, demonstrate that any remaining assets of a member which are not paid in the form of a cash lump sum as outlined in para. (i) above, generate sufficient income to the retiree. The Retirement Scheme shall in making its calculations, use annuity/drawdown rates applicable in law in the country of residence of the retiree or of no such rates exist, annuity/drawdown rates

applicable in the country of residence of the transferor scheme. If annuity/drawdown rates do not exist in either jurisdiction, the Retirement Scheme Administrator shall base its calculation of a retiree's stream of income on publicly available annuity/drawdown rates.

- iii. Where subsequent to a valuation of a retiree's assets, it is established that the retiree's value of assets is more than sufficient to provide the retirement benefit determined in accordance with para. (i) above, then 50% of the excess value of such assets as determined by the valuation may be withdrawn as a lump sum.
- iv. The valuation shall be performed not more than once every financial year, and not within the first three years, from commencement of retirement benefits.
- v. The above shall be without prejudice to any other limitations on withdrawal of retirement assets as specified by any other pensions or taxation legislation to which a retiree is subject to.
- vi. In the case where a retiree is domiciled in Malta the conditions in para. (iii), shall only apply where the annual retirement benefit from an annuity exceeds €50,000.
- vii. This value shall be adjusted annually to take account of changes in the index of inflation, as published by the National Statistics Office in the Government Gazette of Malta.

1. Income chargeable to tax under the Income Tax Acts:

- (a) dividends, premiums, interest or discounts;
- (b) any pension, charge, annuity or annual payment;
- (c) rents, royalties, premiums and any other profits arising from property;
- (d) capital gains arising from any transfer of:
 - immovable property or any rights over such property.
 - shares and stocks and such like instrument that participate in any way in the profits of the company and whose return is not limited to a fixed rate of return.
 - units in a collective investment scheme as defined in article 2 of the Investment Services Act, including any redemption, liquidation or cancellation of such units or shares.
 - units and such like instruments relating to linked long term business of insurance, including maturity or surrender of linked long term policies of insurance.
- (f) capital gains arising from a transfer of the beneficial interest in a trust.
- (g) capital gains arising from the transfer of the ownership or usufruct of or from the assignment or cession of any rights over any interest in a partnership.

A transfer causa mortis is not chargeable to tax.

2. Investment Income Provisions:

The tax rate is 15%, which is the lowest tax rate applicable to individuals other than the zero rate. Three cumulative conditions have to be satisfied for the application of the investment income provisions, i.e.:

- the nature of the income has to fall within the definition of investment income.
- there must be a 'payor' of investment income as defined by the relative provisions.
- there must be a 'recipient' of investment income as defined by the relative provisions.

Investment income means only the following categories of income:

- bank interest payable by a Maltese bank;
- interest, discounts or premiums payable by the Government of Malta;
- interest, discounts or premiums payable by a corporation or authority established by law interest, discount or premiums payable in respect of a public issue by a company, entity or other legal person howsoever constituted and whether resident in Malta or otherwise;
- interest, discounts or premiums payable in respect of a private issue by a company, entity or other legal person howsoever constituted and resident in Malta paid to a CIS: extension of previous provision to private placements but this is only applicable when the income is payable to

a CIS – not to any other person. Really just ‘plugging’ a loophole, because otherwise ‘prescribed funds’ would not be subject to tax thereon;

- capital gains arising on the disposal of units in collective investment schemes upon the redemption, liquidation or cancellation of units held in a resident non-prescribed fund or a non-resident non-prescribed fund: in the latter case the disposal has to be made through the services of an authorized financial intermediary;
- capital gains arising on the surrender or maturity of units and such like instruments related to linked long term business of insurance where the benefits are at least 85% determined by reference to the value of units in collective investment schemes (Maltese licensed funds or foreign UCITS). For the purposes of the calculation of the capital gain: no account is taken of any part of the benefits that is determined by reference to the value of units in prescribed funds subject to the condition that such underlying investments were not acquired within 3 years from the surrender or maturity of the policy. The cost of acquisition is equal to the total premiums paid in relation to the linked portion of the contract of insurance;
- capital gains on redemption, liquidation or cancellation of securities (other than CIS units or units in LLTCIs) and not being company shares;
- Profits distributed by a non-resident CIS where such dividends are paid through the services of an authorised financial intermediary (AFI);
- interest payable by a foreign bank where it is made through the services of an AFI;
- profits distributed by a non-resident company (other than a CIS) which are paid through the services of an AFI to a Maltese-resident individual for whom the distributed profits constitute income derived from shares each of which is a qualifying asset as defined in article 9B – but WHT rate of 35%.

A recipient is defined as:

(a) a person (whether corporate or non-corporate) who is resident in Malta during the year in which the investment income is paid, other than:

- a bank carrying on the business of banking in Malta;
- a person carrying on the business of insurance;
- any other company which is owned and controlled, directly or indirectly, by any of the above (excluding listed companies s.t.c);

(b) a receiver, guardian, tutor, curator, judicial sequestrator or committee acting on behalf of a person referred to above;

(c) a trustee or foundation by virtue of which money is paid to or for the benefit of a person referred to above.

Tax deduction amounts to 15%, except that profits distributed by a non-resident company, (other than a CIS) to a Maltese-resident individual through an AFI, is subject to tax at 35% and payments, (other than local bank interest income) to a prescribed fund at 10%.

The recipient has an option to receive the investment income gross where:

- an election in writing has to be submitted to the payor;
- election is effective as from 14 days following the receipt of such notice by the payor; however an election made on the opening of a bank a/c or on the purchase of bonds, loan stock or other

instrument has immediate effect (because A/c must be regulated in some way from the beginning).

Such an election may be revoked for any subsequent transactions, and the 14 day period also applies for a revocation. Option is flexible and can be applied on the basis of the particular circumstances.

Where an election has been made to receive the investment income gross, the resident investor is required to declare such investment income in his tax return and be charged to tax on such income under normal rates.

Where no election has been effected, a resident individual is not obliged to disclose the relative investment income in the tax return. Maltese resident companies must include reference to the income in their audited accounts and consequent tax returns.

However, no resident person (whether individuals, companies or other) would be charged to further tax on investment income which has been subject to withholding tax – for companies, the particular profits are allocated to the FTA and no further tax thereon should be imposed on distribution to shareholders.

Persons Exempt from Income Tax are:

- (a) The Income of the University of Malta;
- (b) The income of any trade union registered under the Employment and Industrial Relations Act in so far as such income is not derived from a trade or business carried on by such trade union;
- (c) The income of a non-profit making organisation so long as such non-profit making organisation does not carry out a business;
- (d) The income of bona fide band clubs;
- (e) The income of any pension fund, provident fund or other fund approved by the Minister responsible for finance;
- (f) The income of any institution, trust, bequest or foundation, of a public character, which is engaged in philanthropic work;
- (g) The income of any political party including the income of clubs adhering to political parties;
- (h) The income of bona fide sports clubs;

Income Exempt from Income Tax is:

- (a) Social Security Benefits specified by the Minister. As of date, the Minister specified the following benefits as being exempt:
 - (i) Disability Pension and Pension for the Visually Impaired;
 - (ii) Social Assistance;
 - (iii) Age Pension;
 - (iv) Marriage Grant;
 - (v) Maternity Benefit;
 - (vi) Children's Allowance;

- (vii) Foster Care Allowance;
- (viii) Disabled Child Allowance from the payment of tax.
- (b) Any interest, discount, premium or royalties accruing to or derived by any person not resident in Malta. The exemption applies provided such income is not attributable to a permanent establishment the non-resident has in Malta.
- (c) Wound and disability pensions granted in respect of wounds or disabilities caused by war and any pensions granted to dependent relatives of members of the armed forces of the Commonwealth killed on war service.
- (d) Any capital sum received by way of commutation of pension, retiring or death gratuity or received as consolidated compensation for death or injuries.

An introduction to the taxation of collective investment schemes in Malta

Collective Investment Schemes (“CISs”), are vehicles that enable potential investors the possibility to entrust their funds with a licensed entity, to carry out collective investment activities. The advantages of investing in a CIS include the spreading of investment risk, and the possibility of participating in investment opportunities that would otherwise not have been feasible to the sole investor.

Funds are typically set-up as separate legal entities in their own right, and operate locally in terms of the provisions of the Investment Service Act. Funds may take up the corporate form under the provisions of the Maltese Companies Act 1995, including the setting-up of an investment company with variable share capital (SICAV), an investment company with fixed share capital (INVCO) and a partnership ‘en commandite’, having its share capital divided into shares. Furthermore, CISs may be set-up by way of trust (Unit Trust) and by way of contract (Mutual Fund).

The taxation of Collective Investment Schemes, is governed by the applicable provisions of the Income Tax Act, the Collective Investment Scheme (Investment Income) Regulations, and the Collective Investment Schemes Inland Revenue Guidelines.

Taxation at the fund level

The tax regime applicable to CISs is generally based on the classification of funds into prescribed and non-prescribed funds. A CIS may be composed of a number of sub-funds and the classification between prescribed and non-prescribed applies to each sub-fund within the CIS.

A prescribed fund is broadly a fund formed in accordance with the laws of Malta, that has declared that the value of its assets, situated in Malta, represents at least 85% of the value of the fund’s total assets.

A non-prescribed fund is that fund which is not classified as a prescribed fund and would typically be an overseas based fund, a foreign UCITS, registered under the laws of a foreign country or a local CIS, registered under the laws of Malta, that has declared that the value of its assets situated outside Malta, represent more than 15% of the value of its total assets.

Prescribed Funds

The income received by a prescribed fund is subject to tax at source when such income is “investment income”, as defined by the 'investment income provisions' of the Income Tax Act.

Investment income includes (refer to full list under Article 41 of the Income Tax Act):

- Local bank interest and certain foreign bank interest;

- Interest, discounts or premiums payable by the Government of Malta, by a corporation/authority established by law, or payable in respect of a public issue by a company resident in Malta or otherwise.

The tax withheld at source in Malta, by the respective payors, when making payments of investment income to a CIS, is at the rate of 15%, in the case of local bank interest and 10% in the case of any other investment income listed above.

Income from immovable property situated in Malta, is subject to the normal corporate tax rate of 35%, while any other income and gains, not being investment income, received by a prescribed fund, will not be subject to tax in Malta.

Non-prescribed funds

The income and gains received by a non-prescribed fund based in Malta are exempt from tax in Malta, unless such income is income from immovable property situated in Malta.

A non-prescribed fund not based in Malta, licensed as a UCITS, would not be taxable on its foreign source income and capital gains on the basis that the fund would not be resident and not domiciled in Malta. Local source income would also be exempt in the hands of the non-resident fund insofar that such income relates to interest, dividends, premiums, discounts, royalties and capital gains derived from the transfer of shares, subject to the satisfaction of certain conditions.

Credit for tax at source

A CIS, whether prescribed or non-prescribed, is not entitled to a credit or refund of any tax at source or withholding tax from income received by the CIS. Capital gains, dividends, interest and any other income derived from overseas investments, may be subject to tax imposed by the overseas jurisdictions, and such taxes may not be recoverable by the CIS or its shareholders.

Taxation at the level of the investor

The CIS's investment policy would typically set out the terms under which profits will be distributed, and would designate the fund or sub-fund as either an accumulator fund or a distributor fund. An accumulator fund is a fund that invests in longer-term investments aimed at capital accretion while a distributor fund's investment objective would be to provide a regular income, to its investors. In this respect, the fund's investors may consist of either accumulator unit holders or distributor unit holders. It is also possible for the same fund to consist of both types of unit holders.

(a) Dividends

Dividends distributed by a local CIS

Profits allocated to the Maltese Taxed Account, which are distributed by a local CIS (whether the funds are prescribed or non-prescribed), will not be subject to a withholding tax or any further tax in the hands of the investor, whether the investor is a resident or a non-resident person. The tax element allocated to the Maltese Taxed Account, suffered by the local CIS, will be available as a credit against the investor's tax liability by way of the full-imputation system.

As from year of assessment 2010, investment income (as defined) of a prescribed fund which has been subject to the withholding tax, under the investment income provisions of the Income Tax Act, will be allocated to the Final Tax Account. Distributions by the CIS from the Final Tax Account will not trigger any further tax in the hands of the shareholder and will also not entitle the shareholder to any credit or refund of the withholding tax incurred on such profits.

A CIS may also as from year of assessment 2010 have profits which may be allocated to the Immovable Property Account. An allocation to the Immovable Property Account of a CIS (excluding CISs which may be dealing in Maltese immovable property), should primarily entail dividends from the Immovable Property Account of other Maltese companies.

Foreign source profits are allocated to the Untaxed Account, unless the foreign source profits include income received by the fund that has suffered a withholding tax (under the investment income provisions) deducted by a local authorized financial intermediary. Dividends distributed by a local CIS, from the untaxed account to a resident investor, which is not a company, are subject to a withholding tax of 15%. The withholding tax would, however, be available as a credit against the investor's tax liability.

Dividends distributed by a foreign fund

Dividends distributed by a foreign fund, being a non-prescribed fund, to a resident investor, are taxable in the hands of the investor. The investor may however request a local authorized financial intermediary to deduct a final withholding tax at the rate of 15% from the dividend received from the foreign fund. In which case, the investor will not be subject to further tax. Those investors that do not request an authorized financial intermediary to withhold such tax, would be required to disclose the income in their tax return and will be subject to the normal rates of income tax.

(b) Capital Gains

Capital gains arising on the transfer of units in a CIS, may be subject to Maltese tax. The chargeability to tax or otherwise of capital gains in the hands of the investor depends on:

- The type of transfer i.e. redemption, liquidation, cancellation or straight transfer;
- The type of fund in which the units are held i.e. prescribed or non-prescribed; and
- The tax residence of the investor.

Transfers of units in a local non-prescribed fund and non-resident non-prescribed funds

Capital gains arising on a transfer of units in a resident or non-resident non-prescribed fund by resident investors will be subject to tax in the hands of the investor.

In the event that the transfer involves the redemption, liquidation or cancellation of units in a resident non-prescribed fund, the gain may be subject to a 15% final withholding tax; which tax would be deducted at source by the local non-prescribed fund. The investor has however the option not to have such tax deducted at source, in which case the capital gain would have to be declared in the investor's income tax return and the normal rates of tax would apply.

A resident investor deriving capital gains on the redemption, liquidation or cancellation of units in a non-resident non-prescribed fund may also opt to have tax deducted at source at the rate of 15%. However the investor must request a local authorized financial intermediary to deduct the tax. Again, the investor could opt not to have such tax deducted by an authorized financial intermediary and would consequently be required to declare the gain in his income tax return and be subject to tax at the normal investor's rates.

The cost of acquisition for the purposes of calculating any chargeable capital gains/allowable capital losses on transfers of securities, in quoted non-prescribed funds is, determined on an average cost basis. The average cost of acquisition per unit/share is calculated by dividing the total cost of acquisition of all units/shares, held by the transferor on the date of transfer, by the total number of such units/shares. In the case of units/shares, held prior to 1 March 2001, the cost of acquisition will be the higher of:

- The quoted price on the date of acquisition, and
- The last quoted price before 1 March 2001.

The 15% final withholding tax would not apply to capital gains arising on the direct transfers of units by resident investor to third parties. Gains arising on transfers not constituting a redemption, liquidation or cancellation would need to be declared by the investor in his tax return and the normal rates of tax would apply.

Non-resident investors realizing gains on the transfer of units in a local or foreign non-prescribed fund would not be subject to tax in Malta, whether such transfer is made through a redemption or otherwise. The non-resident must, however, be the beneficial owner of the units being disposed of and should not be owned and controlled by, directly or indirectly, nor act on behalf of a person ordinarily resident and domiciled in Malta for such an exemption to apply.

Transfers of units in a prescribed fund

Capital gains arising on the transfer (including the redemption, liquidation or cancellation) of units in a prescribed fund by a resident investor would not be subject to tax, insofar that, the local CIS is listed on a stock exchange recognised under the Maltese Financial Markets Act (the Malta Stock Exchange is a recognised exchange).

The realization of capital gains by non-resident investors on the transfer (including the redemption, liquidation or cancellation) of units in a prescribed fund would be exempt from tax also in the event that the CIS is not listed on a stock exchange. The exemption would apply as long as the non-resident investor is the beneficial owner of the units, being disposed of, and is not owned and controlled by, directly or indirectly, nor acts on behalf of a person ordinarily resident and domiciled in Malta.

Transfers of units in a foreign fund not licensed as a UCITS and not licensed in Malta

Capital gains derived by a resident investor on the redemption, liquidation or cancellation of securities in a foreign fund, not licensed as a UCITS, and not licensed in Malta, may constitute investment income in terms of the investment income provisions only to the extent that the securities being redeemed, liquidated, or cancelled, do not consist of shares in a company. Capital gains derived in such a case, may at the option of the investor be subject to tax at the rate of 15%. In the event that such an option is exercised, an authorized financial intermediary would be required to calculate and withhold the tax due on the gain.

Other miscellaneous provisions for CISs:

Tax implications of the reclassification of a fund

The reclassification of a fund from a non-prescribed to a prescribed status, may attract tax on the eventual disposal of the units/shares held in the fund. For the purposes of calculating the capital gain/loss on the transfer of the units held in the reclassified fund, a disposal will be deemed to have been made on the date of the reclassification. The disposal value will be the last quoted price prior to the reclassification date of the fund and the tax on any capital gain will be due once the units are all eventually disposed of.

Units disposed of in a fund that was reclassified from a prescribed to a non-prescribed fund, will be treated as units in a non-prescribed for the whole holding period, regardless that gains may have accrued during the period that the fund was classified as a prescribed fund. Tax will therefore be charged on the gains, if any, accruing during the full holding period without any relief being given for the gains accruing during the period in which the fund was classified as a prescribed fund.

Switching of securities in a CIS

An investor may choose to switch securities from one sub-fund to another sub-fund within the same CIS (and also within different CISs subject to certain conditions). In terms of the CIS Rules, a switch will constitute a transfer for capital gains purposes, and may eventually be subject to tax, on the eventual final disposal of the securities.

Upon a switch, no gain or loss is deemed to arise for income tax purposes, and therefore any gains derived on a switch will not be subject to tax at the time of the switch. It is only upon the eventual final disposal of the securities in a CIS that the gains or losses derived by switching may be subject to tax.

In the case of a final disposal of securities held in a non-prescribed fund, the capital gain or loss derived on the disposal will be calculated by reference to the disposal value and the original acquisition cost of the securities ignoring any gains or losses arising on switching, insofar that, such switching did not involve a switch of securities from a prescribed fund.

In any other case, the capital gain or loss, arising on a disposal of securities in a CIS, will be calculated by aggregating any chargeable gains and allowable losses, arising on the switches and the final disposal.

Duty on transfers

An exemption from duty applies to any transfers of securities by a local CIS or transfers by investors of securities in a local CIS. The exemption in terms of the Duty on Documents and Transfers Act, only applies when the CIS is licensed under the Investment Services Act.

An exemption from duty would also apply in the case of transfers of securities by foreign UCITS (not licensed under the Investment Services Act), or transfers by investors of securities in foreign UCITS where:

- The foreign UCITS is a company;
- More than 50% of its ordinary share capital (including voting rights and rights to profits), is held by persons that are not owned and controlled directly or indirectly by persons resident in Malta; and
- None of the assets held by the foreign UCITS are situated in Malta (except for any assets held by the UCITS for the purposes of carrying on its business).

Value Added Tax

The services of a CIS should be considered to be exempt without credit supplies on the basis that the CIS is licensed, in terms of the Investment Services Act, and the supplies consist of the arrangement of a scheme. The supplies of a CIS consisting of transactions in shares, debentures and other securities, should also qualify as exempt without credit supplies.

CISs providing solely exempt without credit supplies, will not have the right to claim any input VAT suffered on expenses and overheads incurred. Consequently, a CIS providing exclusively exempt without credit supplies, would not be required to register for VAT purposes.

Appendix F: Consultation on tax incentives for Personal Retirement Schemes

An initial consultation meeting was held in November 2013, with representatives of the main financial services providers, namely the Malta Insurance Association (MIA), Malta Bankers' Association (MBA), Malta Association of Retirement Practitioners (MARSP), Malta Funds Industry Association (MFIA) and the College of Stockbroking Firms (COS). These were given a set of consultation questions, and subsequent meetings resulted in important changes in the proposed legislation. The initial feedback of these organisations is presented below.

- There was not considerable support to the initial proposal that **only products that fulfil the Retirement Pensions Act (RPA) eligibility criteria should be granted incentives**, with only one organisation (MFIA) accepting this unconditionally. RPA criteria were deemed fit for personal pensions, but could also be revised (COS & MBA). In particular, there is a need to have incentives reconciled with both the RPA as well as the insurance business regime (MARSP & MIA).
- No detailed specifications were suggested for **the type of product that would work best for Maltese savers**, as long as such investment products are duly approved by the MFSA, are of a long-term nature and financially strong to cater even for investors with limited education (MBA). A suggestion was made for retirement schemes to be set up as trusts (MARSP). A few simple revisions to the Insurance Business Act should make the linked long term contracts of insurance under its framework eligible for fiscal incentives (MIA). Savers should also be able to invest in both direct securities as well as other investment funds that are UCITS compliant (COS).
- Adherence to specified eligibility requirements remains important for the **granting of fiscal incentives for new saving in existing products not regulated by the RPA**. Respondents suggested that incentives should be given to products if they either fulfil all the RPA requirements, are lined in or plugged into RPA regulated pensions schemes, or at least, are invested in a new, approved/authorised product. Lumps sums should be allowed to be transferred into pension schemes, enabling these lump sums to become exempt after a ten-year tie down period (COS).
- Only one organisation (MARSP) **deemed the RPA criteria to be sufficient to make the launch of personal retirement schemes successful with Maltese savers**. The RPA could also reflect the UCITS Directive in terms of investor protections measures (MFIA). The need for clarity, flexibility and regular performance reporting was emphasised, with provisions enabling the availability of a default investment, a cap on charges and simple investment choices (MIA and MBA). Third pillar pensions should be designed to help the introduction of a second pillar whilst requiring an investment of 30% in Malta listed/registered securities (COS).
- Organisations were not in favour of imposing a **capital preservation guarantee**, arguing that it would limit the ability to introduce an array of investment products, offset potential gains and would not normally function in longer-term horizons. Also, in the current low interest rate environment, the cost of a guarantee could erode a significant portion of the return (COS and MBA). Products and their features should be left in the hands of providers and not made mandatory through legislative/regulatory requirements (MFIA). Rather, the approach should be towards 'cautious' risk profiling and regulation (MARSP). Investment life-styling also offers the benefit of predictability without the high costs/charges of guarantees (MIA).
- More important than **imposing a cap on management fees in the absence of regulations on capital guarantees or minimum rates of return**, respondents argued for transparency and full disclosure of fees. Capping management fees may restrict the choice/availability of funds (MIA). Market participants should compete on management fees and be competitive without intervention and instead the objective should be to pitch the fee and tax incentives at a level where the market size can grow sufficiently quickly to ensure economies of scale (COS and MBA). However, suggestions for the total expense ratio to be capped at 1.5% per annum (MFIA) and for net returns to exceed inflation over the longer term (MIA) were put forward.

- In terms of **the scope for investment choice/advice**, the importance of not having any imposition on the asset class or asset allocations within investment portfolios was stressed. Service providers should ensure that products meet the risk profile and risk tolerance of their clients. Although the customer's risk profile may change on approaching the payout phase (MIA), the Government should not be responsible for identifying and determining investment strategies. Investment restrictions should possibly reflect those under the UCITS IV Directive (MFIA), though the new investment restrictions with respect to private pensions should suffice (MARSP). Offering a default investment choice should be mandated (MBA).
- Organisations agreed to have **transfer of personal retirement schemes regulated**. While rigid restrictions were deemed not in the consumer's interest, the need for regulation was felt to (a) prevent excessive sale and reinvestments (MIA and MBA); (b) provide a restriction on transfers of schemes outside the EU (MARSP); and (c) limit transfers of personal retirement schemes to changes from one trustee to another or transfer of assets from one regulated scheme to another (MARSP). Although no limits on transfers should be allowed, providers should be allowed to charge a transfer or early exit fee to cover administration costs (COS). These however, should be clearly communicated, kept to a minimum and not paid to intermediaries (MIA and MBA).
- Organisations were generally not in favour of **stricter regulations on marketing/selling practices**, arguing that the current and proposed pension rules should provide adequate regulation. While sales commissions should be permitted (MFIA), greater attention should be given to fee disclosure (MARSP). Indeed, sales commissions on initial sales must be allowed as in the absence of marketing, fiscal incentives would not be enough to encourage savers (MIA).
- **The provisions in the RPA were deemed to be sufficient for early access** in the case of permanent invalidity or death. Guidelines however, may be introduced to ensure permanent invalidity and to reflect the proposed Civil Union Act (MARSP). While early access should not be encouraged, given the high incidence of persons taking on early retirement, phased withdrawals may be useful, for instance 15% of investment may be withdrawn at 55 and again at 60 (MFIA). In case of death, inheritance rules should apply. Individuals should be allowed to withdraw a fixed amount or a percentage of the fund for certain events, such as marriage, first home (MIA).
- The Government, in joint initiative with the MFSA, NGOs and the private sector should launch a **financial education campaign to accompany the scheme**, with the main message highlighting the importance of saving for the future. Suggestions were made for a fully-fledged campaign, making use of billboards, information material, website, a call centre and the use of local councils.
- **The size of the personal retirement scheme market in terms of annual contributions** will depend on the level of disposable income, fiscal incentives and the attractiveness of the investment products (MBA). Estimates that third pillar pensions could attract €40 million are ambitious and would require a number of years to achieve, with further incentives (COS). Other estimates were made of a market generating around €30 million per annum (MIA). Respondents warned that Government faces a balance between the attractiveness of such schemes and the tax leakage that results from incentives. The maturity of the market will depend on the degree of awareness and education and may take a decade to reach from the year the scheme is launched (MIA).
- Respondents agreed that **the EET is the regime most likely to make the market attractive**. Suggestions were made to limit the tax burden post-retirement (MIA) or introduce other preferential post-retirement tax rates for people who invest more than the allowance (MARSP). Government could also provide an added contribution equivalent to the individual's tax savings, making such a contribution more identifiable and easier to market the scheme (COS).
- There is no consensus on the **size of the pension contribution allowance**. Capping at €1,000 annually may be unlikely to create enough savings (MIA and MBA) - amount could be raised to €1,200 (COS), €2,400 (MARSP) and up to €2,500 per annum (MIA). Allowances should increase over time on the basis of mechanisms such as growth in RPI, pensionable income, median income or a combination of factors (MIA).

- In order to **ensure that maturing long-term savings products are drawn down gradually rather than taken as a lump sum**, only the 30% lump sum should be tax free, with the remainder withdrawn through a phased drawdown approach. The current withdrawal rules, may also be modified, to ensure that prior to the 30% withdrawal lump sum, an assessment is carried out to ascertain that the individual has sufficient income to ensure gradual drawdown (MARSP).
- The **single rate tax relief is not considered as the most effective form of tax credit**. Respondents tended to argue for a progressive rate, giving higher savers greater tax benefits.
- Respondents argued strongly in favour of the **retention of tax exemptions of lump sums**.
- **Tax relief should be linked to any income earned**, with the highest rate of relief limited to the marginal rate of tax (MIA). Most argued in favour of **allowances for dependants** (except COS).
- Whilst some argued that **employers who contribute to their employees' retirement scheme should be given tax relief** (MBA), given that this may pave the way for second pillar pensions (MFIA). Conversely, limiting it to individuals would keep message clearer (COS and MIA).
- Respondents argued that **having a two-tier tax relief system would create confusion**.

Appendix G: Justifying the choice of the initial level of the pension contribution allowance

Forecasts made in the *Strategic Review on the Adequacy, Sustainability and Social Solidarity of the Pensions System* (Pensions Working Group, 2010), indicate that the average replacement rate of state pensions in Malta will decline from 54.7% to 45% in 2060. To make good for this drop, the Pensions Working Group had proposed a carve-out of NI contributions of about 4% of wages. This was deemed to result in a replacement rate of 9.2% by 2050, offsetting the drop in relative state pension generosity.

The Central Bank of Malta's Household Finance and Consumption Survey indicates that, on average, the saving rate in Malta is 4% with median annual household savings of €3,000.

When choosing the initial level of the pension contribution allowance, the Advisory Group was driven by these two considerations; i.e. the projected drop in relative state pension generosity and the currently available pool of savings. Government should provide incentives to individuals in proportion to the projected decline in state pension generosity.

The amount of the pension contribution allowance should not be set too high, as this would only serve to reduce the tax burden of high income individuals who already do not rely on the state pension (due to the cap on maximum pensionable income) and who are saving. Rather, it should enable the average person to save enough to make up for the projected decline in relative state pension generosity. The amount should also be in line with average household saving, rather than with the (higher) saving rates observed among higher income individuals.

Assuming that the individual contributes always the same amount (and that charges remain relatively speaking stable over time), the generosity of the pension payout will depend crucially on the difference between the rate of return earned on savings and the growth in average wages. In the long run, growth in real average wages has to equal growth in labour productivity. Otherwise, the share of labour in total output would not stabilise. Assuming labour participation remains unchanged, growth in labour productivity is equal to real GDP growth less working age population growth.

Given that working age population growth is either close to zero or negative, this would imply that growth in labour productivity should be equal to GDP growth. In turn, if the economy is dynamically efficient, the real interest rate must exceed the growth rate. In fact, OECD long-term forecasts suggest that there is a gap of more than one percentage point between real GDP growth and the real interest rate in the Euro area.

On this basis, and assuming a long-run inflation rate of 2.5% (the average inflation rate in Malta over recent years), we modelled the return from a constant saving of €1,000 from someone aged 25. The €1,000 is equivalent to 5% of current gross wages (similar to the average saving rate). Someone aged 25 today has a life expectancy at age 65 of 22 years (according to latest Eurostat projections). The real rate of return was set at 2.5% and real wage growth at 1.5%. Upon reaching 65, the individual's accumulated pension pot would be converted into a fixed-sum annuity or drawdown arrangement (also earning a 2.5% real interest rate). This fixed-sum annuity or drawdown would be equivalent to a replacement rate of 9% (of the contemporary wage in 40-years' time) if one assumes that no lump sum is taken. In conjunction with the projected replacement rate from state pension, the average individual would thus have the same relative retirement income as someone retiring today just on the state pension.

Note, however, that if the full 30% lump sum is taken, then the replacement rate would fall to just 5.6%. Similarly, if the rate of return was to be just 1.5% (the lowest possible rate, unless one allows for dynamic inefficiency), the replacement rate with no lump sum taken would fall to 6.4%. Higher returns would, of course, result in higher replacement rates. If contributions are not made throughout one's career, replacement rates drop, particularly if saving occurs just in the later years (as investment returns would be less). Investing effort to ensure the young save makes much more sense than trying to raise savings among the older part of the working age population. Finally, someone on high income who opts to save the tax-favoured amount, would end up with a lower return (4.5%), than someone on average wages or someone on the minimum wage who saves a fifth of the allowance.

This shows how the way the scheme is planned, should result in much better incentives for those on low-to-medium incomes.

Replacement rates under a number of different scenarios

	<i>No lump sum</i>	<i>30% lump sum</i>
Someone on average wage contributing full with 2.5% real return	9.0%	5.6%
Someone on average wage contributing full with 1.5% real return	6.4%	4.4%
Someone on average wage contributing full with 3.5% real return	12.7%	7.3%
Someone on average wage contributing full between age 45 to 64 with 2.5% real return	2.6%	1.7%
Someone on average wage contributing full between age 25 to 44 with 2.5% real return	6.3%	4.0%
Someone on double average wage contributing full with 2.5% real return	4.5%	2.8%
Someone on the minimum wage contributing €200 with 2.5% real return	8.1%	5.1%

01	Introduction
02	Behaviour for Saving and Retirement
03	Pension Saving Schemes designed to Counter Heuristics that Influence Behaviours
04	The New Zealand and United Kingdom respective Automatic Enrolment Private Pension Savings Schemes

The 2004 and 2010 Pensions Working Groups (PWG) respectively proposed the introduction of a mandatory Second Pension. The rationale behind this recommendation was that a mandatory Second Pension would strengthen the sustainability of the pensions system through the diversification of risk away from demographics, and to ensure that persons would have accumulated sufficient personal savings that would bring their retirement income closer to that enjoyed, whilst in employment.

The respective PWGs argued that evidence from the behavioural economics and psychology literature shows that persons are bad at committing to save for retirement. Procrastination, myopia and inertia lead many persons to postpone or avoid making the commitment to save sufficiently for retirement, even when they know that this is ultimately in their best interest.

The reactions to the recommendations for the introduction of a mandatory Second Pension were mixed. Be that as it may, both the then Government and Opposition rejected the recommendations made by the respective PWGs. The positions taken were that mandatory savings through a Second Pension would result in lower competitiveness and lower disposable income, and, therefore, acting as a break on economic growth. Additionally, the concern was stated that given the thinness of domestic financial markets increased savings could flow out of the Maltese economy, and be invested abroad, rather than generate further economic activity in Malta.

It was further argued that mandatory enrolment is not necessary for all individuals, depending on the design of the overall pension system. Low-income workers, for instance, may not need to contribute in a mandatory Second Pension, if they already enjoy high replacement rates from the pension system.

The Government, as pledged in its Electoral Manifesto, has opted to boost savings for retirement, through a voluntary Third Pension. A legislation titled Income Tax (Amendment) was enacted at the House of Representatives. The legislation introduces provisions relating to investment income from retirement schemes. The legislation provides for an incentive to persons who place an amount that is equal to the lower of (i) 15% of the aggregate of contributions made or premiums paid immediately preceding a year of assessment in respect to membership of personal retirement schemes or (ii) €150 or such other amount as may be prescribed by the Minister is allowed a credit against income tax chargeable, in Malta, to a person who is a member of a personal retirement scheme.

The Third Pension framework in Malta, thus, is recently launched. The next few years will show whether the new Third Pension framework as legislated will be successful or otherwise. It is pertinent to underline, that there are countries that have trodden this path and which concluded that their schemes to incentivise persons to save for retirement were not leaving the desired results and as savings accrued were not enough for retirement. Two such countries are the United Kingdom and New Zealand.

This Supplementary Paper looks at what alternative could be considered vis-à-vis the traditional Third Pension instrument (as introduced in Malta). The paper concludes that an important alternative to a traditional Third Pension scheme is an Automatic Mandatory Roll-In with a Voluntary Opt-out Pension scheme.

Analyses of the level of saving in personal private pensions, (that is excluding occupational retirement pensions) in EU Member States (MS) show that there is a significant degree of under-saving for retirement on the part of individuals and households. This is not a new problem. The issue of under-saving for retirement has long been acknowledged, and potential solutions debated and introduced.

Traditional economic theory underlines that a person acts rationally, where-in throughout his or his lifecycle s/he will borrow when young, save in middle age and builds wealth and spends his or her savings in old age. In truth, a person does not act rationally when he or she comes to plan long term. Behavioural science suggests that people cannot plan over their lifetime, as they display biases and use judgements based on rules of thumb or social and cultural norms.

This conclusion is supported by many a survey and studies related to behavioural economics and retirement planning. Thus, for example:

- A research study carried out in the UK in 2011 by the Society Centre and the Institute for Social and Economic Research found that most pension saving, among employees is done through occupational schemes and not private pensions, with approximately 50% of employees saving into an occupational pension while just over 7% into a voluntary personal pension.⁷⁶
- A National Association of Pension Funds (NAPF) 2012 Workplace Pensions Survey, showed people's confidence about their financial well-being in retirement declines markedly with age, suggesting they regret not having saved more, as they get closer to the point of retirement.⁷⁷
- Evidence from the 2012 Attitudes to Pensions survey, also found that around a third of retired people strongly agreed that they should have started saving for their retirement sooner.⁷⁸

Behavioural science recognises that people use heuristics, or mental short cuts and biases, to help them make behavioural choices. The Box below looks at the common types of heuristics that influence behaviour.⁷⁹

Box 01

Common types of heuristics that influence behavior

Anchoring

People find it easier to judge issues that are far away or uncertain by referencing something that is familiar. When judging retirement income, people may use a rule of thumb based on their current income or wealth and not on what their future needs might be. Research suggests that the further one is from retirement, the higher is the uncertainty of what the future may hold and, hence, the least likely to have a realistic assessment of what their standard of living will be like in retirement.

Inertia

One of the most powerful heuristics is that of habit or inertia – that is the tendency for people to simply do what they have always done, without giving it a lot of conscious thought. Inertia is also one of the key barriers associated with saving privately for later life, where some people know they should save for retirement, but tend not to do anything about it or find reasons for not doing it. Research suggests the younger a person is, the less likely they are to place saving for retirement as a priority. This cohort of persons is the least likely to have a private pension, so this result might

⁷⁶ Pg 2, Bryan, M., Lloyd, J., Rabe, B., and Taylor, M., Who Saves for Retirement?, Institute for Social and Economic Research, University of Essex and The Strategic Society Centre, 2011

⁷⁷ National Association of Pension Funds, 2012 Workplace Pension Survey, March 2012

⁷⁸ Department of Work and Pensions Research Report No. 813, Attitudes to Pensions: The 2012 survey, 2012

⁷⁹ Pp 52-56 MacLeod, P., Fitzpatrick, A., Jones, A., et al. Attitudes to Pensions: The 2012 survey, Research Report, No 813, Department for Work and Pensions, 2012, UK

be symptomatic of a lack of engagement in pension issues.

Availability

People often display bias according to the availability or ease with which they can imagine the possibility or consequences of something happening. Research suggests that persons in the lower age groups are likely to see the pension system as something which will always be there and which will provide them with the same level of income during retirement as that received by their parents.

Loss Aversion

A natural bias people have is a tendency to be loss averse – they feel a current loss more keenly than a longer-term reward. Through observations of people’s behaviour it has been suggested people display what has been described as a lack of self-control with people taking a short-term view of planning for later life and over-consuming in the short-term.

Given these types of heuristics that influence behaviours, policy designers have sought to overcome such barriers by introducing special tax arrangements or tax incentives to encourage retirement saving. Introducing a tax advantage to a saving retirement instrument is, in most cases, equivalent to a modest increase in the rate of return to that particular asset - given that many of these schemes are associated with a tax credit rather than being entirely exempt from taxes. Savings for retirement schemes can be taxed at three points:

- Income may be taxed before a person has the opportunity to allocate some of it to savings.
- Returns may be taxed when they accrue as capital gains or interest or dividends.
- Withdrawals from the asset may be taxed.

Persons, therefore, may be exempt from taxes on the income that is contributed to a given scheme (often within a certain limit), and on (some of the) returns to their asset but they are subsequently taxed when resources are drawn from the asset, typically at retirement. This would constitute an E(xempt) E(xempt) T(ax) fiscal incentive scheme. Alternatively, if interest payments, capital gains and withdrawals are untaxed then contributions to such accounts typically need to be made out of taxed income thus giving a TEE fiscal incentive scheme.

OECD and other research define voluntary private pensions to include both occupational as well as personal pension plans. Identifying empirical results of up-take as a result of personal pension plans is difficult. In order to understand coverage gaps, especially in countries where private pensions are voluntary, and their implications for retirement income adequacy, OECD provides indicators on coverage from private pensions in eight OECD countries (Australia, Germany, Ireland, Italy, the Netherlands, Spain, the United Kingdom and the United States), on the basis of socio economic characteristics which include age, income, gender, type of employment (full-time versus part-time), and type of contract (permanent versus temporary).⁸⁰

The OECD 2012 analysis shows that, younger individuals tend to be less often enrolled in privately managed funded pensions, especially in voluntary systems. In Ireland, as in other OECD countries where voluntary private pensions are prominent, coverage increases with age. Coverage also increases with income, especially in voluntary systems. The coverage rate in voluntary private pensions generally increases with income, reaching a plateau after the 7th or 8th income deciles. In voluntary systems however, the coverage among the poorest income groups is quite low, at around 15%, except in the United States where it reaches 29%.⁸¹

Yet, when people are left by themselves to provide for retirement empirical evidence suggests that some of them will not save enough for retirement. Estimates in Ireland suggest that 41.3% of the individuals working in the private sectors aged 20 to 69 are covered by a voluntary private pension plan. Of these, 31% are covered by occupational private pension plans, while only 12% are covered

⁸⁰ Pg 48, OECD Reviews of Pensions Systems: Ireland, OECD, 2014

⁸¹ Pg 65, Ibid

by personal pension plans. Similar rates of coverage for occupational pension plans are reported in Canada and the United Kingdom.⁸² The coverage of voluntary pension plans is very low (below 5%) in countries such as Greece, Luxembourg, Portugal, and Turkey.⁸³

The low take-up of voluntary private pensions (excluding occupational retirement pensions) is a direct result of the types of heuristics that influence behaviours for generational planning as is the case with regard to saving for retirement.

It is pertinent to note, however, that Germany also experienced an important increase in coverage, thanks to the introduction of *Riester* pensions in 2001 as part of a major pension reform. *Riester* products can be purchased by anyone covered by the social insurance system, and who is subject to full tax liability. Participants qualify for subsidies or tax relief from the government, the level of which depends on the respective contribution rate and number of children. To receive full State subsidy, pension participants must invest at least 4% of their previous year's income in a *Riester* plan.⁸⁴

Contributions could be increased through mandates or with the help of “nudge” measures. OECD in 2012 argued that the simplest, less costly and most effective way to increase coverage, given international experience, is through *compulsion* as this is ultimately the most effective policy in reaching high coverage levels. In OECD countries, the difference in coverage rates between countries with mandatory and voluntary private pension systems is as much as 30%. Both mandatory (as in Australia) and quasi-mandatory solutions (as in the Netherlands) can ensure high coverage rates.⁸⁵

In order to reduce these barriers, to get people to save enough for an adequate retirement income, a number of governments have introduced mandatory opt-in voluntary opt-out or automatic enrolment schemes. Such schemes are directed to capture young people in the labour market automatically, and hence countering behaviour limiting issues such as myopia or inertia. By automatically capturing young people early, it is believed that they are more likely to remain within the pension scheme, given that they structure such investment as part of their long term savings profile, before they assume long term expenditures resulting from a decision to raise a family, purchase a house, etc.

Automatic enrolment is, therefore, intended to work by turning on its head the inertia that currently inhibits saving. This will overcome people having to make a proactive decision now about their future, as they are automatically saving for a private pension unless they decide to opt out. Evidence from countries which have adopted such schemes suggest that the application of automatic enrolment has a pervasive positive impact. In the United States, case studies show that changing the design of pension plans (e.g. 401(k) plans), by making enrolment the default option, enrolment increased membership of similar schemes among new employees from around 20-40% to around 90%.⁸⁶

New Zealand has experienced a substantial increase in coverage, thanks to the introduction of automatic enrolment supported by government subsidies. Until the introduction of the “KiwiSaver” scheme in 2007, coverage rates had declined to less than 10% of the working-age population. Italy has been less successful in raising coverage rates after the introduction of automatic enrolment in 2007, with private pension plans only covering 13.3% of the working-age population at the end of 2010.⁸⁷

The United Kingdom has since 2012 rolled out the new National Employment Savings Trust (NEST). As at March 2014, the scheme already had over one million members with assets under management of £104 million, making it according to its Chair “one of the most successful pension policies in a generation.”⁸⁸

⁸² Ibid

⁸³ Pg 188, Pensions at a Glance: 2013, OECD and G20 Indicators, OECD 2013

⁸⁴ Pg 119, OECD Pensions Outlook: 2012, OECD

⁸⁵ Pg 172, Ibid

⁸⁶ Pg 9, Enabling and encouraging saving: the evidence around pension reform and saving, Department for Works and Pensions, February 2013, UK

⁸⁷ Pg 48, OECD Reviews of Pensions Systems: Ireland, OECD, 2014

⁸⁸ <http://www.nestpensions.org.uk/schemeweb/NestWeb/includes/public/docs/nest-corporation-annual-report-and-accounts-2013-2014.PDF.pdf>

Research, however, suggests that automatic enrolment on its own may not be enough. Most such schemes already implemented have been accompanied by additional incentives. Success is not inevitable even then, as other factors, some cognitive, such as the level of financial capability; some structural and external, such as the economic climate and social norms; and some affective, such as trust in government and employers, and so on are important.⁸⁹ Evidence suggests that factors that may influence success include⁹⁰:

- The extent and appeal (how it is framed or presented) of any matching contribution from the employer and government. This was found to be a factor in the success of individual automatic enrolment initiatives in the US.
- Any other associated incentives, such as the ability to withdraw funds early. This was a feature of the New Zealand Kiwisaver scheme introduced nationally in 2007. Kiwisaver also provided other government contributions.
- Making choices and the 'default' option as simple and straightforward as possible.
- Allowing those automatically enrolled as much freedom to procrastinate as possible. People tend to defer making a decision to opt out if they believe they can always opt out later. They may accept the default given that they have the option to opt out later, although they may never exercise that option. In economic terms, the default allows them to defer incurring the decision-making costs associated with actively making a decision; this tendency to procrastinate is consistent with 'hyperbolic discounting', whereby people tend to over-value the immediate and short-term relative to the medium- and longer-term.
- The extent of inertia or 'status quo bias', amongst those one most wishes to influence. It has been suggested that young people today are less susceptible to such bias, having more desire to control their own economic circumstances and being more questioning of 'authority'.
- Delaying the perceived impact of decisions. The longer the delay in realising the impacts of the default decision, the easier it should be to choose the default: thus, the effects of making a decision about increasing pension saving from future income are easier to accommodate mentally than making a decision now that impacts on current income.
- Presenting default options that are not only simple but also familiar concepts to people. Thus, 'saving' should be a familiar concept, one that has resonances, but 'pensions', to people who may never have had one, may not be.
- Whether, and the extent to which, there may be prior competing claims on people's incomes. The effectiveness of defaults is hypothesized through 'going with the flow' of people's existing biases and their mental status quo. If, however, people have pre-existing plans, these could serve to act as a competing status quo, undermining the power of the default option.

⁸⁹ Pg 13, Hardcastle, R., How can we incentivise pension saving? A behavioural perspective, Working Paper, 109, Department for Works and Pensions

⁹⁰ Pp 13-14, Ibid

Automatic enrolment schemes are characterised by five main parameters. These are presented hereunder. This discussion is sourced from an OECD document titled 'Review of the Irish Pension System: Preliminary Version' dated April 2013.⁹¹

Tax Population An automatic enrolment scheme can be designed to target only employees or both employees and self-employment. A minimum entry age could be set, though this should be premised on the principle that people should contribute for long enough periods, and therefore the system should encourage people to start contributing *early*. It may also be necessary to introduce transitional arrangements for early leavers from the system, who may only accumulate small funds at retirement. People within ten years from retirement, for example, may be exempted from entering the new system.

The introduction of automatic enrolment for employees of small firms and the self-employed require careful consideration. An entry earning level could also be put in place with regard to low-income workers who do not need to contribute in private pension plans, as they already enjoy high replacement rates from the pension system.

Existing private provision could sit beside automatic enrolment provided that they share the same rules. Thus, an employer who has already introduced an Occupational Retirement Pension (ORP) scheme can be exempted from an automatic enrolment scheme.

Financial Incentives Historically, the primary fiscal incentive instrument is through the tax system which gives the greatest level of incentive to saving for retirement to those with the highest level of income, while those in most need get the lowest incentive. Keeping this tax incentive structure within an automatic enrolment scheme, would most likely make the scheme backfire, as many people would likely opt out. It would also fail to reach low to middle-income earners.

According to OECD (2012), an alternative way of introducing tax incentives that changes the incentive inversely with income is the use of a tax credit. Tax credits entail that after calculating taxable income, and applying the tax rates relative to the income brackets, to determine the tax due, one can apply a deduction to the tax due. This deduction can be a fixed amount equal for all income levels, or a percentage of contributions with a cap.

In either case, the incentive of tax credit is lower for higher income individuals. Replacing tax deductions with tax credits, may therefore, help increase coverage among middle-to-low income individuals.

The low paid, who pay little or no income taxes, hardly benefit from tax credits. Targeting the low paid, requires a third type of incentive, in the form of a government subsidy or matching contribution into the individual's retirement savings account. For example, for every n% of one's wage that is saved in a pension plan, government or employers will pay the equivalent of a percentage point of wages. The match can be capped so it is less valuable as income increases.

⁹¹ Pp 123 -137, Review of the Irish Pension System, Preliminary Version, OECD, April 2013

Default Contribution Rate

The rate at which contributions should be set, depends on how the system interacts with the PAYG pension system. If the PAYG system already provides generous benefits, the auto-enrolment scheme only needs to target a low replacement rate to achieve *overall* retirement income adequacy. If the target replacement rate is set for instance at 30%, for example, for the automatic enrolment scheme, the needed total contribution rate to achieve it would be around 5% of wages, assuming a contribution period of 40 years.

To minimise opt-out, contribution rates could be set below the desired level initially and raised afterwards (ideally in an automatic manner according to a set calendar). This is the solution chosen in the United Kingdom, where the minimum total contribution rate will raise from 2% between 1st October 2012 and 30 September 2017, to 5% between 1st October 2017 and 30th September 2018 and 8% from 1 October 2018 onwards. Another example is New Zealand where members joining the KiwiSaver before 1 April 2009, were assigned to a default contribution rate of 4%. Since April 2009, the default contribution rate was reduced to 2%. Inland Revenue statistics show that as of 30 June 2011, 80% of people who joined the KiwiSaver, after April 2009, contribute 2%, the default, while 62% of those who joined when the default contribution rate was 4%, still contribute 4%.

Opt-out Window and Re-enrolment

Different measures can be adopted. For example, in Italy and New Zealand the opting out decision can only be made once, within a period of respectively six months and two months, following automatic enrolment. After that period, people cannot opt out anymore, and there is no automatic re-enrolment process. This system is straightforward and does not create too much burden on the employers.

Alternatively, as chosen in the United Kingdom, people may opt out at any time, with an automatic re-enrolment every three years. This assumes that people may not have chosen the right decision when opting out. It also implies a heavy burden on employers, who have to keep track of each employee's status as regard membership and automatically enroll them back at regular intervals if they opted out.

Contribution Holidays

If contribution holidays are introduced, it is critical to set clear time boundaries and to 'nudge' workers to increase their contributions after the end of the holiday period; (for instance, by automatically increasing the contribution rate temporarily). Affordability is the main reason people cite for not taking out a private pension.

Allowing for contribution holidays may therefore encourage employees to stay in an auto-enrolment scheme, especially the low-income earners for whom affordability may be an important concern. Contribution holidays may be appropriate in auto-enrolment schemes where there is no possibility to opt out after a certain period in order to give some flexibility to workers.

The first two OECD countries, that introduced automatic enrolment, at the national level, were Italy and New Zealand. In 2012, the United Kingdom also saw the introduction of nation-wide automatic enrolment, for all those workers who are not currently covered by a private pension arrangement. A new national, trust-based pension scheme - NEST - was established by the Government that may be used by employers looking for a relatively low-cost alternative to establishing their own plan or hiring existing private sector pension providers. This paper reviews the New Zealand and the United Kingdom respective automatic enrolment schemes.

04.1 KiwiSaver: The New Zealand Automatic Enrolment Private Pension Savings Scheme

KiwiSaver was introduced to address concerns about inadequate saving for retirement among New Zealand’s population. A study carried out in 2007 by the New Zealand Treasury concluded that about 20% of the population aged 45-64 years needed to save more for retirement.⁹²

It was felt that middle-income New Zealanders were at particular risk of a substantial drop in their living standards at retirement unless they saved more. There were also fears that younger workers may have lower standards of living in retirement than current retirees, and those approaching retirement, due to high levels of debt, student loans, child-bearing at later ages and potentially fewer mortgage-free homes.

The situation was exacerbated by the fact that New Zealand had relatively low levels of private pension saving. Following the withdrawal of tax concessions for private pensions in the late 1990s, coverage of occupational pension plans declined over time, from 22.6% of the employed workforce in 1990 to 14.7% in 2006. And, in 2006, only around 5% of working age people contributed to a personal pension.⁹³

KiwiSaver is primarily a work-based savings scheme designed to help people prepare for their retirement. The objective of KiwiSaver is "to encourage a long-term savings habit and asset accumulation by individuals who are not in a position to enjoy standards of living in retirement similar to those in pre-retirement. The Act aims to increase individuals’ well-being and financial independence, particularly in retirement, and to provide retirement benefits. To that end, this Act enables the establishment of schemes (KiwiSaver schemes), to facilitate individuals’ savings, principally through the workplace."⁹⁴

KiwiSaver is designed to lock in savings until age 65, via a voluntary approach to retirement savings, with incentives for everyone and automatic enrolment (with opt-out provisions), for new employees, as well as compulsory employer contributions. The main features of the KiwiSaver scheme, in relation to overall scheme design, coverage and obligations of employees, obligations of employers, tax and subsidies, housing and forthcoming changes are presented below.⁹⁵

Automatic Enrolment	When a person starts a new job, if s/he is eligible and is not already a member, his / her employer is required to automatically enroll such a person in KiwiSaver.
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Opt-out	After being automatically enrolled into KiwiSaver, a new employee can then choose to opt-out within an eight week period.
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Overall, there was a decreasing trend in the number of opt-outs from the scheme each year since it began from 166,721 in 2008 to 72,816 in 2011. An evaluation of the KiwiSaver scheme, found that people in a younger working age group (18 to 44 years), with one job on lower to middle incomes (between less than NZ\$10,000 and NZ\$40,000 with many earning less than NZ\$10,000), were more likely to have opted-out. Further analysis found that 41% of those who re-joined KiwiSaver were 30 years of age or younger, with an average annual income of \$30,000 or less.

⁹² Kritzer, B. (2007). KiwiSaver: New Zealand’s new subsidized retirement savings plans. Social Security Bulletin 67(4)

⁹³ Pg 23, Collard, S., and Moore, N., Review of international pension reform, Research Report, No 663, Department for Work and Pensions, 2010

⁹⁴ Section 3 (1), KiwiSaver Act 2006

⁹⁵ Pp 13-25, KiwiSaver Evaluation, ational Research and Evaluation Unit, Inland Revenue for the KiwiSaver Evaluation Steering Group, Annual Report: July 2011 to June 2012, Inland Revenue, 2012

Choosing a Provider and Fund	<p>Members can choose their own KiwiSaver scheme, be nominated for one by their employer or be allocated to a default scheme, by Inland Revenue. At 30 June 2012, 65% of KiwiSaver members chose their scheme and 35%, were by default allocated by Inland Revenue or allocated to an employer-nominated scheme.</p> <p>Members who are automatically enrolled, can transfer schemes within the funds holding period (of three months), when they initially join KiwiSaver, and members can elect to change schemes at any point during their membership.</p>
Choosing a Contribution Rate	<p>Members contributing to KiwiSaver, through deductions from their salary or wages, can choose to contribute 2%, 4% or 8% of their gross salary or wage. Over half of KiwiSaver members (59%), are currently contributing 2% of their salary or wages to their accounts; 36% of members are contributing 4%, and 4% are contributing 8%.</p>
Member Tax Credit	<p>An annual Member Tax Credit (MTC) is paid to members 18 years or older until they are eligible to withdraw their savings. The maximum annual MTC payment was NZ\$1,042.86 for periods up to and including 30 June 2011, and reduced to NZ\$521.43 from 1 July 2011 onwards. In order to receive a maximum payment, a member must have been a member for a full 12-month period (July – June) and contributed at least \$1,042.86 to their account. Employer contributions and government contributions, such as the kick-start, do not count towards eligibility for this credit. Any contributions made by members aged 17 or younger, are also not eligible for MTC payments.</p>
Contribution Holidays	<p>Members who have been making KiwiSaver, contributions for 12 months or more, can take a contributions holiday of between three months and five years. Early contributions holidays within the first 12 months of becoming a member, are considered for members experiencing, or likely to experience, financial hardship.</p> <p>People in a younger working age group (18 to 44 years), with one job on lower to middle incomes (between less than NZ\$10,000 and NZ\$40,000, with many earning between NZ\$10,000 and NZ\$20,000), were more likely to have taken a contributions holiday.⁹⁶</p>
Purchasing a Home	<p>The home ownership features of KiwiSaver – first home withdrawal and the first home deposit subsidy – became operational in July 2010. The objective of these features is to assist members to enter home ownership by helping them overcome the barrier of not having sufficient funds to purchase a house.</p> <p>After three years of membership, members may withdraw their KiwiSaver savings (excluding Government contributions) to put toward buying a first home, or a second home if a member's circumstances are the same as a first home buyer. They may also be eligible, after three years of contributing, for a one-off subsidy payment towards buying a home of NZ\$1,000 for each year of contribution up to a maximum NZ\$5,000.</p>
Withdrawing Savings for Retirement	<p>Members who have been in KiwiSaver, for five years and are 65 years of age, are eligible to withdraw all or part of their savings for retirement. On 1 July 2012, the first KiwiSaver members, who were 65 years of age and had been in the scheme for five years became eligible to withdraw their savings.</p>
Employer Contributions	<p>As KiwiSaver is a primarily work-based savings scheme, employers play a significant role in its delivery. They are responsible for automatically enrolling new staff, facilitating opt-outs and making deductions from members' salary or wages. Employers are also required to make contributions, equivalent to 2% of each member's salary or wages. Most employers contribute the minimum 2% of the salary or wages of their employees. It is estimated that 72,114 would be eligible to</p>

⁹⁶ Ibid

withdraw their savings in June 2013.

State Contributions	Costs to the Crown of KiwiSaver come from the NZ\$1,000, kick start to new members joining and the annual member tax credit.
Contributions Collection	Contributions are collected by the Inland Revenue, mainly through the “pay as you earn” (PAYE) tax system. The Inland Revenue then allocates these contributions to the respective pension provider, and carries out enforcement activities to ensure contributions are received from employers. Employer compliance is high.

The following is review of the state of play of the KiwiSaver scheme as at 30th June 2012.⁹⁷

Total Membership	1.97 million
Enrolment	68% of members proactively opted-in to KiwiSaver
Members in the eligible population	49% of the eligible population are members Includes 29% of eligible children and 67% of people between 18 - 24
Individuals who opt-out and remained out of the KiwiSaver	255,935
Contribution rates	59% of members contributing at the 2% default rate
Contribution holidays	83,370
Withdrawing for retirement	72,114 eligible to withdraw in the coming year
Employer contribution	\$866 million Five years to date \$2.7 billion
Crown contribution	\$1,045 million Five years to date \$4.7 billion
Total KiwiSaver managed funds.	Five years to date \$12.9 billion

The rate of growth in 2012 was slower than previous years. On a monthly basis, membership grew on average by 17,500 individuals. This compares with, on average, 25,000 individuals a month in 2011. Over half of current members (62%) have pro-actively opted-in to KiwiSaver (as opposed to being auto-enrolled), and there has been continued growth of membership within all age groups in the eligible population. Nearly 67% of eligible people aged 18 to 24 years enrolled.⁹⁸

KiwiSaver, therefore, has a range of features and incentives designed to encourage savings and asset accumulation among members. These include: the ability to opt-out, choice between schemes, choice re level of contribution, receipt of kick-start payments and annual member tax credits, ability to take a contributions holiday and use savings to buy a home. Research shows that in 2012 there was a decreasing trend in the number of opt-outs from KiwiSaver from 2008 to 2011.⁹⁹

04.2 NEST: The United Kingdom Automatic Enrolment Private Pension Savings Scheme

In December 2002, the then Labour Government established the Pensions Commission, in response to concerns that individuals were not saving enough for their retirement, and that measures taken to encourage private sector pension provision might not be succeeding. The Pensions' Commission published reports in 2004 and 2005, followed by a final statement in 2006.

The Pensions Commission indicated that private pension saving was in “serious and probably irreversible decline”. It found that employers' willingness, voluntarily, to provide pensions, was falling and that initiatives to stimulate personal pension saving had not been successful. The Commission

⁹⁷ Pg 3, Ibid

⁹⁸ Ibid

⁹⁹ Ibid

concluded that the current voluntary private funded system, combined with the current State system, was not fit for purpose for the future.

The Pensions Commission's concerns about private pension saving were supported by recent evidence from the Department of Works and Pension's (DWP) Family Resources Survey. This research highlighted a gradual decline in private pension saving, over the past 10 years, with a particular decrease among two demographic groups; men of all ages and people under 40. The survey found that in 2009–10, only 38% of working-age people—11.6 million out of 30.4 million people - were saving into a private pension, compared with 46% in 1999–2000. Over the same period, pension saving among men fell from 52% to 39%, and among individuals aged between 20 and 39, from 43% to 31%.

Having identified this serious deficit in retirement saving, the Pensions Commission concluded that people would be far more likely to enter a pension scheme, if they were automatically enrolled with a right to opt out, than if they were required to make a positive choice to join a pension scheme. They described this model as adopting the "power of inertia" in order to achieve an increase in pension saving.

The Commission, thus, recommended the automatic enrolment of employees in occupational pension schemes and a role for the State as an organiser of pension savings. The Commission envisaged the establishment of "a low cost, national funded pension saving scheme into which individuals will be automatically enrolled, but with the right to opt out, with a modest level of compulsory matching employer contributions, and delivering the opportunity to save for a pension at a low Annual Management Charge".

Based on these recommendations, the Pensions Act 2008 established a duty on employers to automatically enroll jobholders into, and to contribute to, a qualifying workplace pension scheme. The Act also made provision for the introduction of a new "personal accounts" scheme as a State-supported savings vehicle. In January 2010, the Government announced that the National Employment Savings Trust (NEST) would be the permanent name of the personal accounts scheme. This was subsequently implemented by statutory instrument, and the NEST Corporation became operational from 5 July 2010.

In 2010, the Coalition Government set up a review to look at whether the proposed scope for the auto-enrolment policy was still appropriate. The Making Automatic Enrolment Work review reported in October 2010. It recommended some adjustments to the design of the policy, including an optional waiting period of up to three months before an employee needs to be automatically enrolled and an increase in the minimum earnings threshold for auto-enrolment, but otherwise adopted the reforms. These changes were included in the Pensions Act 2011.

The following are salient features of the NEST automatic enrolment model¹⁰⁰.

Target Audience	Persons who are aged at least 22 and under State Pension age and earn over £7,475 a year would be automatically enrolled into a pension scheme chosen by their employer. Employees earning under £7,475 could join their employer's pension scheme if they wish, although their employer is not required to pay a contribution.
Incentive	The model for auto-enrolment provides tax relief for scheme members on contributions. Contributions and tax relief are paid on earnings between £5,035 and £33,540 a year.
Contributions	The minimum total pension contribution is 8% of relevant earnings. This includes: a minimum pension contribution from their employer equivalent to at least 3% of their earnings; and tax relief on contributions of around 1% of their earnings.

¹⁰⁰ Pp5-56, Automatic enrolment in workplace pensions and the National Employment Savings Trust, Eight Report of Session, Work and Pensions Committee, House of Commons, 2012

The minimum levels of contributions will be phased in gradually, to help employers and employees adjust to the cost of the reforms. The minimum rate of employers' contributions, start at 1% of the worker's salary, rising to 2% in October 2017 and 3% in October 2018.

Opt-out

Employees are able to opt out of auto-enrolment pension saving at any time. Employees who opt out and continue to meet the criteria for automatic enrolment will be re-enrolled into their employers' pension scheme every three years.

Individuals who leave one job to start another one will be automatically enrolled by their new employer, provided they meet the criteria.

Self-employed people are not automatically enrolled but can make their own pension arrangements; for example, they can invest in a NEST scheme

Choosing a Provider

Eligible employees are enrolled into a pension scheme chosen by their employer. Employers can choose either NEST or a private provider which has met the criteria defined by the DWP and published by the Pensions Regulator (TPR).

NEST has a public service obligation to be available to all employers who wish to use the scheme to meet their duties under auto-enrolment. Unlike private providers, NEST must therefore accept business that the existing market may consider loss-making or not commercially viable.

If employers do not comply with their duties, under auto-enrolment, TPR will be able to issue warning notices and penalties. In the most serious cases, it can prosecute.

The criteria for auto-enrolment pensions, as determined by the Government and published by the TPR, currently do not restrict the level of charge that can be applied by a pension provider. The DWP has stated that it monitors charge levels across the market and emphasised that it has reserve powers in the Pensions Act 2008, which would allow it to a charge cap should auto-enrolment charges reach inappropriately high levels.

Active Member Discounts

Individuals can face higher charges for their pension schemes when they are no longer making contributions into that scheme, for example when they have moved to another employer. These higher charges are referred to as "active member discounts" or "deferred member penalties".

Contributions Collection

Contributions will not be collected by a single Government agency, but instead will be paid by employers direct to pension providers. As a result, the onus will be on pension providers and the TPR to ensure that contributions are delivered on schedule.

Implementation

The Government's intention was for all existing employers to be enrolled by September 2016. In November 2011, the Government announced a delay to the timetable for smaller employers. Under the revised timetable, small employers (those with fewer than 50 employees) will not be required to auto-enroll employees until between May 2015 and April 2017. They were originally due to enroll between May 2014 and February 2016.

The DWP estimated that, 9–10 million people would be eligible for automatic enrolment into a qualifying workplace pension scheme. The DWP further estimated that 2–4 million individuals would opt out of automatic enrolment, leaving 5–8 million individuals newly saving or saving more as a result of automatic enrolment. The DWP research found that 65% of respondents would "definitely" or "probably" stay enrolled, whilst 20% would "definitely" or "probably" opt out.

The Government recognised that establishing and administering an auto-enrolment pension scheme, will create both immediate and ongoing financial costs for employers. As shown above, the Government introduced several mechanisms to help businesses manage the costs and complexities of auto-enrolment.

Employers will experience two types of cost—one-off upfront costs in setting up schemes and responding to the new legislation, and ongoing costs in the form of long term increases to their pension contributions.

01	Introduction
02	A Review of Property Ownership in Malta and Underlying Characteristics
03	Understanding the Equity Release Market
04	A Regulated Equity Release Market for Malta

76.4% of persons in Malta¹⁰¹ own (freehold and ground rent) their home. For the majority of people, buying a home would be the single largest investment made in their lifetime. By the time they reach retirement age, they would have paid most of the borrowing they used to purchase their home. In owning their home as they near retirement persons would have built up considerable amounts of equity in their home. The value of the property would constitute a high proportion of accumulated wealth of many an elderly period.

The high level of property ownership in Malta means that most persons are asset rich but cash poor. Today, there is no formal home equity market in Malta that is governed and regulated. Yet, people do release value from their property as they retire. Some persons will downsize by selling their home and move into a smaller house. Others enter into arrangements with private providers of residential homes for the elderly in exchange of their property. And others may have homes worth significant equity but limited savings with the State pension acting as the main source of income during retirement.

This paper builds on two supplementary papers which were drawn up by previous Pension Working Groups. The first paper titled: "Use of Property for Retirement" was drawn up as a supplementary paper to the Final Report of the 2004 Pensions Working Group on 30th June, 2005 ("2005 Property Paper"). The second paper, also titled 'Use of Property During Retirement', was a supplementary paper to the Strategic Review on the Adequacy, Sustainability and Social Solidarity of the Pensions System drawn up by the 2010 Pensions Working Group.

Equity Release Schemes (ERS) can take two different forms. The first is Lifetime Mortgages (LM) or Reverse Mortgages, also known as Loan Model Equity Release Schemes, which provide a loan that will eventually be repaid from the sale proceeds of the property. The second is Home Revision (HR), also known as Sale Model Equity Release Schemes, which involve an immediate sale of the property but provide for the right to the former owners to remain in occupation and to use the cash price for income in retirement.¹⁰²

In essence, therefore, an ERS must:

- Be a financial service.
- Be a source of liquidity for the future.
- Contain a strong entitlement to remain in occupation of the property.
- Rely solely on the sale of the property for repayment / payment of the funds released to be used as a retirement pension.

Payments under an ERS take the form of a lump sum or regular income, and are either secured by means of a mortgage on the property or generated by a sale. Under the LM model, repayment is made from the proceeds of the sale of the property either on the death of the homeowner or when the property is vacated.

ERS are found in the EU. The markets, to date, however, are small. In the UK, the LM has averaged at approximately 22,000 sales and just under €1b of lending annually between 2008 and 2012. This is equivalent to less than 1% of the residential mortgage market over the same period. The HR market is even smaller with less than 1,000 plans sold over the same period.¹⁰³

¹⁰¹ Census of Population and Housing 2011, Final Report, National Statistics Office, Malta, 2014

¹⁰² Reifner, U., Clerc-Renaud, S, et al, Study on Equity Release Schemes in the EU: Part I: General Report, Project No. MARKT/2007/23/H, Institut für Finanzdienstleistungen e.V, Hamburg, 2009

¹⁰³ Pg 9, Lord German (ed), Making the Most of Equity Release: Perspectives from Key Players, The Smith Institute, 2012

ERS are primarily issued by:

- Banks.
- Real estate providers.
- Specialist lenders.
- Insurance markets.
- Intermediaries.

Over the past twenty years the equity release market, in the EU, has changed significantly, where-in regulation by financial services competent authorities, have increased consumer confidence in ERS products. In the United Kingdom, for example, the Financial Services Authority took over regulation of mortgages in 2004 and the ERS in 2007.

This paper assesses the validity of introducing appropriate ERS, as a means to allow an aging population, to access the wealth accumulated in the form of his or her home, while being able to continue to live in it to supplement his or her pension income. Thus, an illiquid asset becomes a source of liquidity, mainly for consumption purposes during retirement.

02.1 Household Wealth

As can be seen from the Table below, household savings by means of deposits in banks (including savings by non-financial corporations (NFCs)) have been on the increase since 1987. During the period 1987 to 2013 the increase was €10,286.6m. There is a significant increase in 2013 on 2012 – €2,262.8m or 25.3%.

Table 01: Resident Deposits¹⁰⁴

	1987	1997	2007	2008	2009	2010	2011	2012	2013
	€millions								
Household and Non Financial Corporations Deposits	924.5	3,414.9	6,541.8	7,899.6	7,802.4	8,196.7	8,406.4	8,948.3	11,211.1

€5,771.0m – or 51.5% of the deposits in 2013 were composed of overnight deposits. Overnight deposits expanded by 14.3% on 2012. During the fourth quarter of 2013, households' overnight balances grew rapidly, with the annual growth rate rising to 12.0% in December from 11.2% in September. Overall, this persistently strong preference for holding liquid monetary assets by households, may be stemming from the reduced opportunity cost brought about by low interest rates in recent years.¹⁰⁵

A study by the Central Bank of Malta (CBM) estimated households' net wealth, which is defined as the sum of real and financial assets net of financial liabilities, at a median value of €215,932. The Survey further showed that a higher level of net wealth was reported when the reference person in the household was a university graduate or self-employed or was aged within the 55 - 64 age bracket.¹⁰⁶

The median net wealth of households represented by reference persons with tertiary, secondary and below-secondary levels of education respectively was found to be €319,994, €226,126 and €129,469 respectively. The Survey shows that the median for net wealth, of all households, the median for households represented by a self-employed person was 2.5 times higher. The median net wealth of households whose reference persons were aged between 55 and 64 years was €272,625.¹⁰⁷

The Survey further shows that the main residence accounted for 51% of household wealth in the form of real assets. Furthermore, the share of the main residence in the net wealth of those households in the highest 20% net wealth percentile was lower, contributing about 30% to their total real assets. For the lowest 20% percentile in net wealth terms this was more than half.¹⁰⁸

¹⁰⁴ Central Bank of Malta, Quarterly Reviews

¹⁰⁵ Pg 67, Central Bank of Malta, Quarterly Review, 2013, Vol.46 No.4

¹⁰⁶ Pg 8, Caruana, K., and Pace, C., Household Finance and Consumption Survey in Malta: Main Results of 2010 Exercise, Central Bank of Malta, 2013

¹⁰⁷ Ibid

¹⁰⁸ Pg 9, Ibid

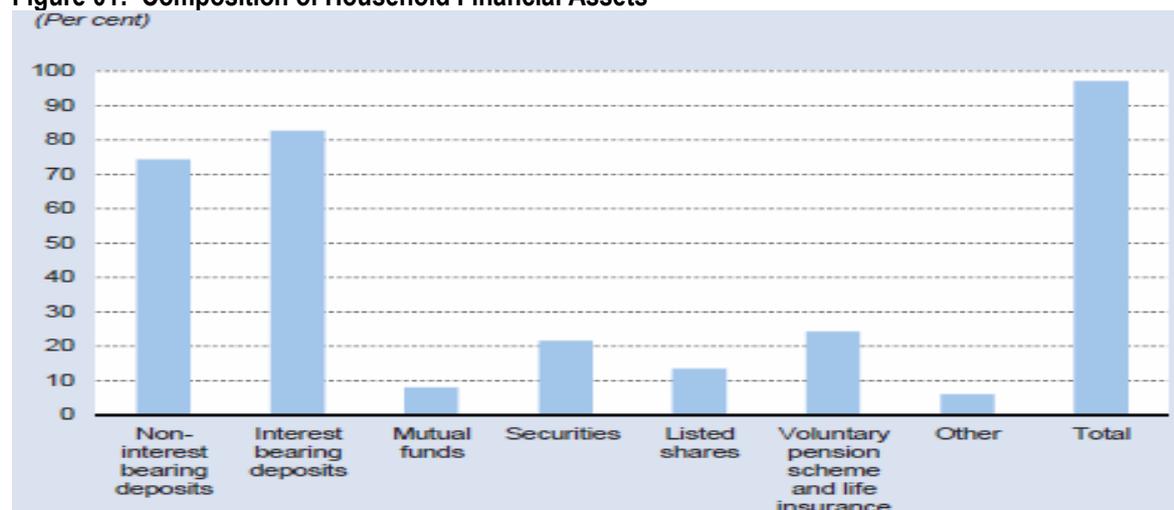
Table 02: Household Net Worth¹⁰⁹

EUR		
Household characteristics	Mean	Median
Gross Income Percentile		
Less than 20	180,169	125,983
Between 20 and 40	246,703	175,276
Between 40 and 60	251,483	176,447
Between 60 and 80	351,553	240,343
Between 80 and 100	800,592	380,004
Age of the Reference Person¹		
Under 35	192,991	131,004
35 - 44	289,813	223,249
45 - 54	579,370	240,667
55 - 64	422,153	272,625
Over 65	260,502	158,311
Labour Market Situation of Reference Person		
Employee	303,346	235,587
Self-Employed	1,363,253	531,981
Retired	301,022	193,427
Other	243,176	165,965
Level of Education of the Reference Person		
Below secondary education	212,736	129,469
Secondary education	402,277	226,126
University education	453,427	319,994
Status of the Main Residence		
Ownership (Full or Part)	448,186	267,033
Other	79,107	21,739
Number of household members in employment		
None	222,413	145,774
One	457,645	200,024
Two	357,478	252,777
More than 3	535,203	343,415
Number of household members		
One	191,303	106,877
Two	326,229	202,668
Three	317,782	223,309
Four	342,636	255,101
More than five	895,611	339,110
Net Wealth Percentile		
Less than 20	20,664	16,130
Between 20 and 40	113,857	113,149
Between 40 and 60	215,476	215,961
Between 60 and 80	345,620	338,191
Between 80 and 100	1,133,827	693,081
All Households	365,988	215,932

The Survey identifies that more than 97% of households owned at least one financial asset. Financial assets represented 13.4% of their total assets. The most widely held financial asset was an interest bearing deposit with a bank, with almost 83% of households holding this type of asset. Non-interest bearing accounts (that is current accounts) were held by 74.3% of households.¹¹⁰

Furthermore, 21.6% owned some form of debt security, mainly corporate bonds and government securities. Equity was held by 13.4% of all households, while 8% also owned mutual funds. The Survey shows that 24.2% of all households were covered by a life insurance policy or participated in a pension scheme.¹¹¹

Figure 01: Composition of Household Financial Assets¹¹²



¹⁰⁹ Pg 9, Table 3.1, Ibid

¹¹⁰ Pg 10, Ibid

¹¹¹ Ibid

¹¹² Ibid

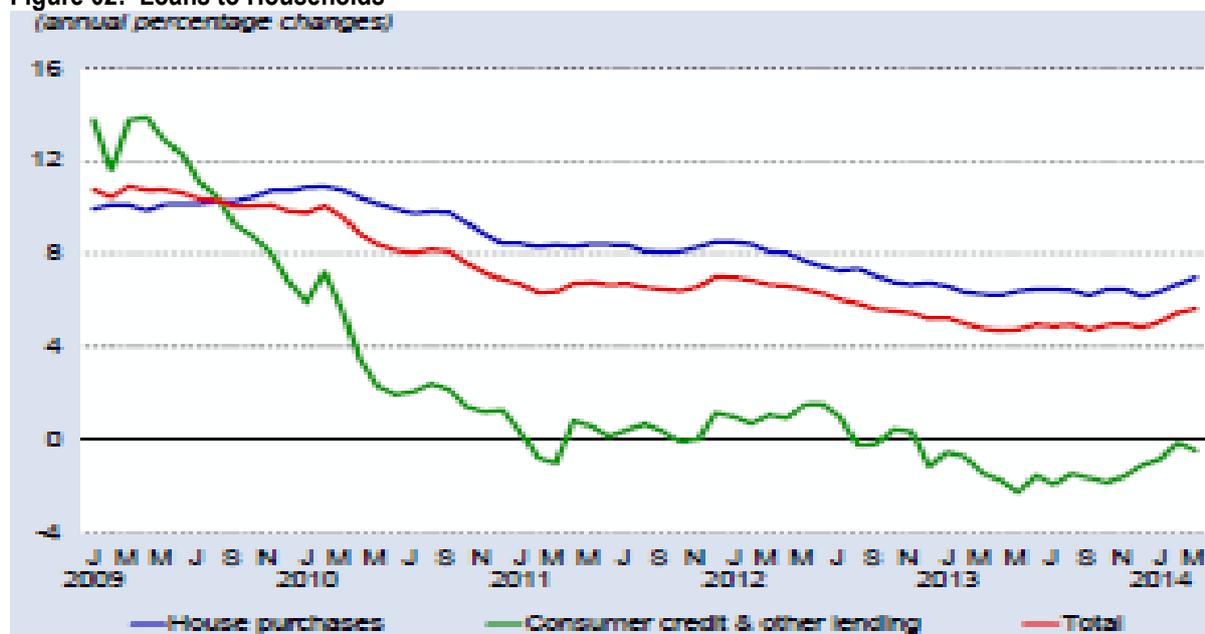
The Study estimated the overall median value of holdings of financial assets at €26,229. The median value of financial asset holdings, was found to vary with the educational attainment and work status of the reference person representing the household. For example, households whose reference person was an employee accounted for 36% of all households and owned financial assets with a median value of €29,769, while households whose reference person was self-employed persons representing 8% of all households, held financial assets with a median value of €68,856.¹¹³ The median financial asset holdings for retired persons (27% of all households) stood at €28,906.¹¹⁴

Households with a primary level of education (23% of all households) owned financial assets with a median value of €17,015; those with a secondary level (62% of all households) held financial assets with a median value of €25,407, while those holding a university degree (15% of all households) owned financial assets with a median value of €54,029.¹¹⁵

02.2 Household Debts

Lending to households expanded at a faster rate, during the first quarter of 2014, with the annual growth rate rising to 5.6% in March from 4.8% in December. This was driven by loans for house purchases, which is the principal component of lending to households and which grew by 7.0% year-on-year.¹¹⁶

Figure 02: Loans to Households¹¹⁷



The Survey shows 34.1% of all households, had some type of domestic debt liability which averaged €35,814 per household. Almost 16% of households had an outstanding bank loan to finance the purchase of their main residence or other real estate property. Moreover, the average mortgage debt value of indebted households increased progressively with higher net wealth. 15.5% of home owning households used their main residence as collateral for the bank loans they obtained in connection with the purchase of their home.¹¹⁸

¹¹³ Ibid

¹¹⁴ Ibid

¹¹⁵ Ibid

¹¹⁶ Pg 61, Central Bank of Malta, Quarterly Review, 2013, Vol.46 No.4

¹¹⁷ Pg 62, Ibid

¹¹⁸ Pg 10, Caruana, K., and Pace, C., Household Finance and Consumption Survey in Malta: Main Results of 2010 Exercise, Central Bank of Malta, 2013

The majority of households financed the purchase of their homes through loans provided by banks. On average the initial amount borrowed by households stood at around €63,560 and the average repayment period was 26.5 years. The effective interest rate paid by households on their home loans was 4.1%, while the monthly debt repayment averaged €296. The average amount still owed by households to the banks stood at €44,003.¹¹⁹

02.3 Property Prices

The Central Bank of Malta’s property price index indicates that the property market suffered two successive slumps in recent years. The market bottomed at an approximate decrease of 2.25% and 2% in market prices in Q1 2011 and in Q4 2013 respectively. Throughout 2013, the property market rebounded and rose at an annual rate of 6.4% by the fourth quarter of 2013.

Figure 03: Movements in Residential Property Prices based on Advertised Prices¹²⁰

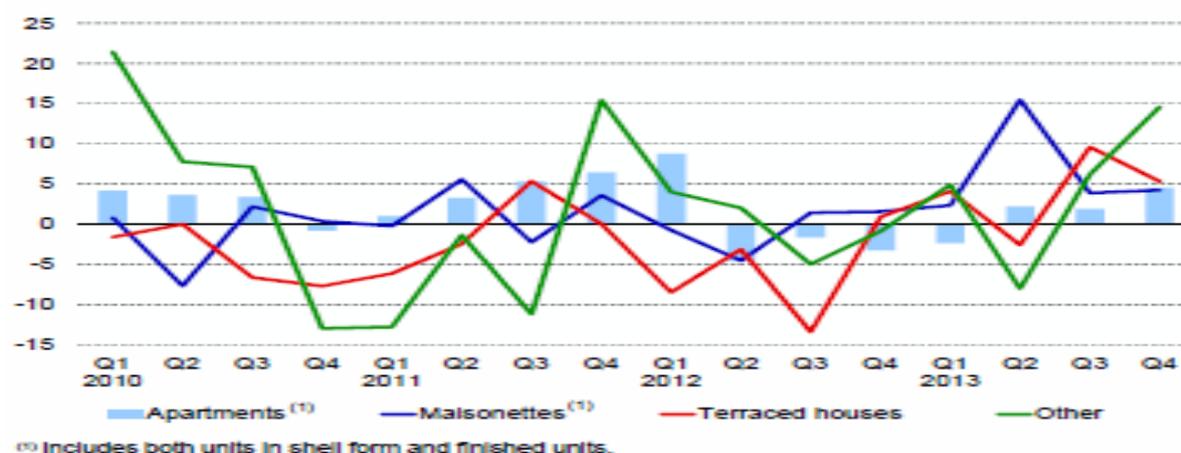


The property price index shows that prices went up across all main sampled categories included in the index. Stronger annual rates of change were recorded in the prices of apartments, maisonettes and of property in the “other” category, which consists of town houses, houses of character and villas. Meanwhile, the annual rate of change of terraced house prices moderated in the quarter under review.

¹¹⁹ Pg 9, Ibid

¹²⁰ Pg 44, Central Bank of Malta, Quarterly Review, 2013, Vol.46 No.4

Figure 04: Movements in Residential Property Prices based on Advertised Prices¹²¹
(annual percentage changes)



The aforementioned Survey, estimated the median value of residences owned by households at €186,643 or €1,066 per square meter.¹²² The average value of the main residence owned by the richest percentile households was estimated at €1,661 per square meter, while for the lowest 20% net wealth percentile this was estimated at €629 per square meter.¹²³

02.4 Dwellings and Home Ownership

The 2011 census shows that there are 152,770 occupied dwellings – an increase of 13,592 and 33,291 dwellings on the 2005 and 1995 respective census base lines. Home ownership – freehold as well as ground rent –increased considerably in terms of number of dwellings on the 2005 base line by 12,183 dwellings on 11.4% on 2005. Proportionally, however, the total stock of occupied dwellings that is privately owned changed marginally by 1.3% – from 75.1% in 2005 to 76.4%. This constitutes a high percentage of home ownership and compares well with other MS, other than eastern European countries that were previously under the sphere of influence of the former Soviet Union – Romania, Lithuania, Bulgaria, etc. where own occupation rates are over 90%.

The Table below shows that the rental of property as residences, whilst still very low, more than doubled between 1995 and 2011. The increase in 2011 on 2005 is 2.1% and this indicates that there is the beginning of a marginal shift away home ownership to renting of property.

Table 03: Occupied Dwellings by Ownership¹²⁴

	1995	%	2005	%	2011	%
Owned Freehold	81,242	68.0	76,689	55.1	92,281	60.4
Owned with ground rent			27,922	20.1	24,513	16.0
Rent furnished	30,824	25.8	24,383	17.5	22,351	14.6
Rented furnished	2,957	2.5	4,377	3.1	7,994	5.2
Held by emphyteusis			2,112	1.5	1,438	0.9
Used free of charge	4,407	3.7	3,695	2.7	4,193	2.7
Non-respondent	49	0	-	-	-	-
	119,479	100	139,178	100	152,770	100

¹²¹ Pg 45

¹²² Pg 8, Caruana, K., and Pace, C., Household Finance and Consumption Survey in Malta: Main Results of 2010 Exercise, Central Bank of Malta, 2013

¹²³ Pg 9, Ibid

¹²⁴ Table 95, Census of Population and Housing 2011, Final Report, National Statistics Office, Malta, 2014

The largest categories of occupied dwellings are:

- Terraced houses / town houses constitute 34.7% of total stock. Of these, 86.1% are privately owned.
- Flats / apartments / penthouses constitute 29.4% of total stock. Of these, 62.0% are privately owned.
- Maisonettes / ground floor tenements constitute 28.9% of total stock. Of these, 77.2% are privately owned.

Of what can be termed to constitute high end property 93.3% of semi-detached dwellings are privately owned; 90.1% of fully detached dwellings; and 70.1% of farmhouses are privately owned.

Table 04: Occupied Dwellings by Type of Property¹²⁵

	Terraced house / Townhouse	Semi-detached	Fully detached house	Maisonette/ Ground floor tenement	Flat/ Apartment/ Penthouse	Semi-/Fully detached farmhouse	Other
Owned Freehold	38,007	4,012	2,107	25,536	21,727	687	205
Owned with ground rent	7,212	1,413	965	8,523	6,124	229	47
Rent furnished	5,104	153	128	6,890	9,542	223	311
Rented unfurnished	591	97	78	1,518	5,670	-	40
Held by emphyteusis	399	30	32	471	410	91	5
Used free of charge	1,206	107	73	1,207	1,446	76	78
Total	52,519	5,812	3,383	44,145	44,919	1,306	686

It is important to note that:

- 72.6 % and 20.3% of terraced houses / town houses are in a good state and in need of minor repairs respectively.
- 79.0% and 16.6% of flats / apartments / penthouses are in a good state and in need of minor repairs respectively.
- 73.0% and 20.1% of maisonettes / ground floor tenements are in a good state and in need of minor repairs respectively.

¹²⁵ Table 96, Ibid

Table 05: Occupied Dwellings by Condition of Property¹²⁶

	Total	Terraced house / Townhouse	Semi-detached	Fully detached house	Maisonette/ Ground floor tenement	Flat/ Apartment/ Penthouse	Semi-/Fully detached farmhouse	Other
In good state of repair	113,781	38,136	4,531	2,467	32,228	35,479	641	299
In need of minor repairs	29,364	10,664	1,046	712	8,876	7,466	405	195
In need of moderate repairs	6,857	2,671	187	155	2,156	1,465	154	69
In need of serious repairs	2,621	1,009	48	47	833	481	100	103
Dilapidated	147	39	-	2	52	28	6	20
	152,770	52,519	5,812	3,383	44,145	44,919	1,306	686

Of what can be termed to constitute high end property:

- 77.9% and 17.0% of semi detached dwellings are in a good state and in need of minor repairs respectively.
- 72.9% and 21.0% of fully detached dwellings are in a good state and in need of minor repairs respectively.
- 49.1% and 31.0% of farmhouses are in a good state and in need of minor repairs respectively.

Of the total dwellings that are in a good state of repair 80.5% are privately owned.

The Table below shows the occupied dwellings by age of occupant. The age cohort 66 to 85 years, occupies 36,175 (23.7% of the total stock) dwellings, of which 26,076 or 72.1% are privately owned. The generation aged 46 to 65 years occupies 64,804 (42.4% of the total stock) dwellings, of which 50,520 or 78.0% are privately owned. The generation aged 26 to 45 years occupies 46,494 (or 30.4%) dwellings, of which 37,183 or 79.2% are privately owned.

Table 06: Occupied Dwellings by Age¹²⁷

Age	Total	Terraced house / Townhouse	Semi-detached	Fully detached house	Maisonette/ Ground floor tenement	Flat/ Apartment/ Penthouse	Semi-/Fully detached farmhouse	Other
<= 25	2,573	299	26	25	561	1,569	30	63
26-35	20,270	3,320	357	135	6,545	9,695	86	132
36-45	26,224	7,214	886	405	8,398	9,046	164	111
46-55	31,166	12,010	1,555	797	8,260	8,125	291	128
56-65	33,638	13,285	1,557	997	8,825	8,544	306	124
66-75	23,141	9,401	948	624	6,722	5,130	233	83
76-85	13,034	5,800	408	326	4,007	2,299	155	39
Over 85	2,724	1,190	75	74	827	511	41	6

¹²⁶ Table 90, Ibid

¹²⁷ Table 94, Ibid

There are two legal forms of ERS in the UK: the sale of a home and conversion of capital into money - home revision (HR), or taking up a loan, secured against the home, which may be repaid out of a postponed sale or liquidation of the home - lifetime mortgage (LM).

A HR is an arrangement between a plan provider and a home owner, comprising of one or more instruments or agreements, in which a plan provider buys all or part of a qualifying interest in the home at a discount, in return for a lump sum payment or a regular income. The home owner retains the right to continue living in the property until the earlier of either his / her death or moving to another property. Under this agreement, the home owner no longer remains the owner of part or all of the property that is sold.

The plan provider either owns the property itself or finds an investor for the property. The lump sum generated from the sale of property depends on:

- The age of the owner/s.
- An actuarial assessment of life expectancy.
- The value of the property.

The lump sum is drawn in whole, or is invested into an annuity or some other type of investment, which provides the home owner with a regular income. In the case where either the home owner or the joint home owners moves to a nursing home or dies, the plan will terminate and the property is sold.

Research shows that, sale-based equity releasing products, however, only make up a small proportion of total schemes in the EU, either displacing the relatively small numbers of remaining private schemes, or they are in fact not strictly speaking ERS at all, since they lack the element of retirement provision.¹²⁸

Definition of a 'Home Revision Plan' by the UK Financial Services Authority Handbook¹²⁹

(In accordance with article 63B(3) of the Regulated Activities Order), an arrangement comprised in one or more instruments or agreements which meets the following conditions at the time it is entered into:

- (a) The arrangement is one under which a person (the reversion provider) buys all or part of a qualifying interest in land from an individual or trustees (the reversion occupier);
- (b) The reversion occupier (if he is an individual) or an individual who is a beneficiary of the trust (if the reversion occupier is a trustee), or a related person, is entitled under the arrangement to occupy at least 40% of the land in question as or in connection with a dwelling and intends to do so; and
- (c) The arrangement specifies that the entitlement to occupy will end on the occurrence of one or more of:
 - (i) A person in (b) becoming a resident of a care home;
 - (ii) A person in (b) dying; or
 - (iii) The end of a specified period of at least twenty years from the date the reversion occupier entered into the arrangement.

In this definition "related person" means:

¹²⁸ Pg 6, Reifner, U., Clerc-Renaud, S, et al, Study on Equity Release Schemes in the EU: Part I: General Report, Project No. MARKT/2007/23/H, Institut für Finanzdienstleistungen e.V., Hamburg, 2009

¹²⁹ <http://fshandbook.info/FS/html/handbook/Glossary/L>

-
- (A) That person's spouse or civil partner;
 - (B) A person (whether or not of the opposite sex) whose relationship with that person has the characteristics of the relationship between husband and wife; or
 - (C) That person's parent, brother, sister, child, grandparent or grandchild.
-

A LM allows the home owner to take out a mortgage loan secured on the property. The loan can be used to fund an annuity, and provide regular income (such as an annuity) or a lump sum payment. Such a financial product includes draw-downs which provide a regular income that is not linked to investments.

The value of the loan is based on the age of the owners, their life expectancy and the value of the property. Under a LM product, the ownership of the property remains with the home owner as it separates the ERS transaction from a property transaction in terms of the home. Technically, the difference lies in the time of the sale.

Definition of a 'Life Time Mortgage' by the UK Financial Services Authority Handbook¹³⁰

A regulated mortgage contract under which:

- (a) Entry into the mortgage is restricted to older customers above a specified age; and
 - (b) The mortgage lender may or may not specify a mortgage term, but will not seek full repayment of the loan (including interest, if any, outstanding) until the occurrence of one or more of the following:
 - (i) the death of the customer; or
 - (ii) the customer leaves the mortgaged land to live elsewhere and has no reasonable prospect of returning (for example by moving into residential care); or
 - (iii) the customer acquires another dwelling for use as his main residence; or
 - (iv) the customer sells the mortgaged land; or
 - (v) the mortgage lender exercises its legal right to take possession of the mortgaged land under the terms of the contract; and
 - (c) While the customer continues to occupy the mortgaged land as his main residence:
 - (i) no installment repayments of the capital and no payment of interest on the capital (other than interest charged when all or part of the capital is repaid voluntarily by the customer), are due or capable of becoming due; or
 - (ii) although interest payments may become due, no full or partial repayment of the capital is due or capable of becoming due; or
 - (iii) although interest payments and partial repayment of the capital may become due, no full repayment of the capital is due or capable of becoming due.
-

While with an HR product, the transaction begins with the sale of the dwelling, the sale in LM occurs at the end of the transaction. Thus, the loan including interest is repaid when the property is sold either:

- On the event of the home owner's death; or
- If the home owner moves into long-term care.

Some LM products allow the home owner to pay the interest on the loan, and the **principal** amount is paid when the property is sold. A LM may be paid off at any time, where-in charges may apply, with the ownership of the home remaining within the home owner. This enables heirs, should they so decide, to keep the home, as they redeem the mortgage, so that no transfer of the title in the property occurs at all.

¹³⁰ <http://fshandbook.info/FS/html/handbook/Glossary/L>

The potential size of the market for LM is limited by demand, and the need for additional sustainable liquidity, homeownership with sufficient equity, and the fact that moving house is not the obvious option.

Box 01: Types of Equity Release Schemes¹³¹

Roll-up Mortgage

The scheme allows the owner of the home to take smaller sums over time and is also called 'a drawdown mortgage' as it allows for sums to be taken regularly or when required.

Fixed or variable interest is added to the loan monthly or yearly. Interest is not paid until the home is sold. This could occur when the person dies or needs to go to enter into a care home. Interest is charged on the loan and also on all the interest added.

If a single cash lump sum is chosen, the amount owed will grow quickly. If smaller sums are taken over time, the amount will grow at a slower rate.

Interest-only Mortgages

The loan is in a cash lump sum. Fixed or variable interest is paid on the loan each month. If the interest rate is variable and the pension or other source of income is fixed it may be more difficult to meet repayments when interest rates rise.

The amount originally borrowed is repaid when the home is sold.

Fixed repayment Mortgage

Instead of a loan a cash lump sum is provided. Instead of being charged interest on the loan, the owner agrees to pay the lender a higher sum than borrowed when the home is sold. This higher the sum agreed at the outset - and the value will depend on age and life expectancy.

The lender takes this higher sum in repayment for the mortgage, when the home is sold. When the owner dies, the lender may charge interest on this higher sum, from the date of death to when the mortgage is paid.

Home reversions

The sale proceeds for the home is in cash, which can be paid as a lump sum or in regular installments. The owner will get less than the full market value for the home. Typically, this would be between 20% and 60%, as the buyer cannot re-sell the property until the owner dies or moves out. The older the owner is when he / she starts the scheme, the higher is the percentage received for the home.

The minimum age for such a scheme is usually higher than for a lifetime mortgage. The owner is normally provided with a lease giving him / her the right to carry on living in the home for the rest of his / her life or until such time he / she no longer requires it because he / she moves into a home for the elderly.

Normally the ex-owner does not pay rent, but with some schemes one can pay a higher rent in return for more money from the sale. Once the scheme is initiated the buyer benefits from any rise in the value of the house.

¹³¹ Equity Release Schemes: Raising money from your home, the Money Advice Service

The following are examples of how equity release schemes work.

Box 02: Worked Examples of Equity Release Schemes¹³²

Life-time Mortgage

Interest only Mortgage

Mr. Zammit is 65 years old and is married. The home is valued at €200,000. They want to release €30,000 from the home. A lifetime mortgage with an interest rate of 5.99% is taken out.

The upfront costs total €1,445 - consisting of a valuation fee of €345, a solicitors' fee of €600 and a brokers' fee of €500. In addition, the lender charges an arrangement fee of €599 and a telegraphic transfer of €35; both of which are added to the loan balance. The loan, therefore, starts at €30,634. Mr. and Mrs. Zammit make no further payments, but each year interest is added to the total. The impact is the following.

Year	Balance at Start €	Interest 5.99%	Owed at the end of the Year €
1	30,634.00	1,882.51	32,516.51
5	38,904.87	2,390.55	41,295.42
10	52,444.48	3,235.73	55,680.21
15	70,712.92	4,353.94	75,066.66

The effect of compound interest results in the debt growing very quickly making this an expensive way to borrow.

Roll-up Mortgage

Mr. and Mrs. Zammit borrow €30,000 but do not need access to the money all at once. In year 1, they take €3,000 to repair their roof. In year 2, they take €2,000 to visit their new grandchild in Brussels. In year 3, they take €3,500 to buy a replacement car. In years 4 and 5, they draw nothing.

At the end of year 5, they would have borrowed €8,500 out of the potential €30,000.

The charges remain the same, so they would still have to pay €1,445 in upfront fees and €634 would again be added to the initial €30,000.

Year	Balance at Start €	Amount Borrowed	Interest 5.99%	Owed at the end of the Year €
1	3,634.00	0	217.68	3,851.68
2	3,851.68	2,000	350.52	6,202.19
3	6,202.19	3,500	581.16	10,283.35
4	10,283.35	0	615.97	10,899.33
5	10,899.33	0	652.87	11,552.20

Given that the amount of money actually borrowed is smaller, the interest has grown much more slowly.

Home Reversion Scheme

Mr. Zahra is 70 years old. The home is worth €200,000. The reversion company will not buy less than 30% and not more than 90% of the property.

The company offers Mr Zahra the following amounts:

Percentage Sold %	Cash Released €
90	89,975
70%	69,980
50	49,986
30	29,992

Mr Zahra decides to release 31% of the value of his home. This gives him €30,991. His costs total £1,590, made up of a valuation fee of €240, legal fees of €650 and a brokers' fee of €700.

Mr Zahra lives for another 15 years. By the time his house is sold, after his death, the value has increased to €350,000. The reversion company is entitled to 31% of the new valuation or €108,500. John's family receives the remaining 69% which is worth €241,500.

¹³² Research into the Future Housing and Support Needs of Older People - Scoping Study: Assessment of the Potential of Equity Release for Older Owner Occupiers, Fiona Boyle Associates, Northern Ireland Housing Executive, October 2010

A study by the Institute für Finanzdienstleistungen, on ERS, identifies the differences that exist between LM and HR. These are shown in the Table below.

Table 07: Differences between Loan Model and Sale Model Equity Release Schemes¹³³

	Life time Mortgage	Home Reversion
Time of sale	End of contractual relationship	Beginning of contractual relationship
Owner of the property	Consumer	Provider
Maintenance of the property	Consumer	Provider (where not transferrable and transferred to the tenant)
Risk of negative equity	Possible	No risk
Profit from increased house prices	Consumer	Provider
Loss from fall in house prices	Consumer but potentially the provider if negative equity occurs and guarantee against this is promised	Provider only for total sale; Consumer and Provider for partial sale.
Repayment of principal	Possible in case of negative equity	None
Payments due	Occasional servicing of interest payments	Occasional rental payments
Provider	Banks and some other mortgage lenders	Insurance / other provider
Amount of equity released	Typically less than 100%	Typically 100%
Cultural Acceptance	Low in countries where a home is regarded as the most important asset	High in countries where tenancy and home ownership have similar status.

It is pertinent to mention, that most recently, in the UK, a new 'sale and lease back' market has taken hold. Such offerings are different to ERS, not just because of their lack of regulation, but because they confer no absolute security of tenure, and will require regular payment from policy holders in the form of a monthly rent. As opposed to the regulated equity release products that give consumers the right to live in their homes for life, sale and rent back arrangements involve a company buying an owner's home for significantly less than the market value, and then allowing that person to continue living in the property, but only by paying full market rent and often with only an assured short hold tenancy agreement.¹³⁴

03.1 Regulation of Equity Release Schemes in the United Kingdom

Equity release products in the UK are, however, regulated by the Financial Services Authority (FSA) as well as through self-regulation by a Code of Conduct published by the industry body Safe Home Income Plans.

The regulatory regime introduced by the FSA consists of eleven "high-level" Conduct of Business principles, which apply to all financial transactions within the FSA's jurisdiction; detailed rules in the Mortgage Conduct of Business Sourcebook (MCOB) on matters such as advertising and promotions (MCOB 3), responsible lending (MCOB 11), and charges (MCOB 12) applicable to all regulated mortgage

¹³³ Pg 8, Ibid

¹³⁴ Pg 7, Reifner, U., Clerc-Renaud, S, et al, Study on Equity Release Schemes in the EU: Part I: General Report, Project No. MARKT/2007/23/H, Institut für Finanzdienstleistungen e.V, Hamburg, 2009

and home finance contracts; and specific rules, also in the MCOB, that adapt the FSA's rules on disclosure (MCOB 9) and advice (MCOB 8) to the particular characteristics and circumstances of loan and sale forms of equity release.¹³⁵

The FSA maintains a regular reporting system with regard to the equity release market complemented by site visits. Lifetime mortgages have been incorporated into the FSA's thematic review of the effectiveness of mortgage regulation. The FSA has taken compliance correction which included negotiated changes to the standard contract terms through its powers under the Unfair Terms in Consumer Contracts Regulations.¹³⁶

The FSA sets out a general standard for communications by a financial firm, including that, advertisements and other financial promotions must conform to principles 6 and 7 of the FSA's Principles for Business, and as such must be "clear, fair and not misleading". This general standard is elaborated in MCOB 3, in the form of detailed rules on the conduct and content of written and non-written communications about qualifying credit (including lifetime mortgages) and home reversion plans, as well as the territorial scope of the FSA's rules.¹³⁷

The first important document is the Initial Disclosure Document which describes the nature and scope of the services that the firm provides. While the equity release advising and selling standard is MCOB 8, this standard, incorporates the disclosure rules from MCOB 4, which apply to all regulated mortgage transactions. MCOB 4.4.2 clarifies that for transactions involving more than one firm, such as an intermediary and a lender, the Initial Disclosure Document should be provided by the firm that first makes contact with the consumer, normally the intermediary. Any other firm involved in the transaction "should take reasonable steps to establish that the customer has been provided with an initial disclosure document as required by MCOB 4.4.1".¹³⁸

An "updated and suitably adapted illustration" must be provided as part of the offer documentation for the equity release contract. The purpose of this illustration is to enable the consumer "to check the features and price" before entering into the contract and to enable the consumer to compare the offer with the information received before making the application.¹³⁹

The SHIP self-regulation body, seeks to ensure customer safety in the equity release market by requiring members to provide the following safeguards:

- A right to live in their homes until they either die or move into long-term care.
- A guarantee that they will never owe more than the value of their property, and therefore there will never be a debt left to their estate.
- In the event of a lifetime mortgage, the interest rate will either be fixed or capped so that they will know how much they owe at any one time and they will not have to worry about interest rates spiraling out of control.
- They can move from their main residence without financial penalty.
- They must take independent legal advice and their solicitor must sign the SHIP certificate to confirm complete client understanding.

¹³⁵ Financial Services Authority, Mortgage and Home Finance Conduct of Business Sourcebook (MCOB) is available at: <http://fsahandbook.info/FSA/html/handbook/MCOB>.

¹³⁶ Pg 12, Reifner, U., Clerc-Renaud, S, et al, Study on Equity Release Schemes in the EU: Part II: Country Reports, Project No. MARKT/2007/23/H, Institut für Finanzdienstleistungen e.V, Hamburg, 2009

¹³⁷ Pg 17, Ibid

¹³⁸ Pg 22, Ibid

¹³⁹ Pg 28, Ibid

- All applications must come from a specifically qualified adviser whom has followed a robust advice process, including the consideration of implications for the owner and the family.
- All members of SHIP agree to provide fair, simple and complete presentation of their plans.

03.2 Benefits and Risks for Home Owners

The advantages of entering into an equity release scheme is derived from the fact that an elderly person is able to release capital from the home to complement pension income and continue to live in his or her home until he or she dies or decides to enter into a retirement home. It is to be noted that in the UK, income released from home equity is tax free. Additionally, it provides an elderly owner of his or her home, to continue to live in the community, and the environment he or she is most comfortable in to the extent that this is possible. Possibly, unique to the market in the UK, is that an owner is able to leave a proportion of the equity totally protected, thereby ensuring that not all the potential inheritance is used up during later years.

The vulnerability of the customer base, means that this market must always be supervised as having a high risk of consumer detriment. Indeed risk management has increased significantly - in the UK as a result of the no negative equity guarantee. The risks include:¹⁴⁰

- Advice: There exists the risk of inappropriate products being sold particularly in the event that financial advice to the home owner is not mandatory. The home owner may not have the sufficient level of knowledge to make the appropriate choices. As shown in the work examples an interest-only mortgage can grow into a considerable debt within a very short time.
- Entitlement to benefits: A home owner who enters into an ERS, may have his entitlement to State benefits negatively affected given that as a result of the income raised s/he may exceed the means criteria.
- Taxation: Depending how the legislative framework for ERS is designed the release of equity from a home may have a negative effective on the home owner's tax position. Changes in legislation could affect ERS models based on regular income payments: those payments may not be taxable at the time the ERS is established, but could become taxable as a result of fiscal changes at some point during the subsistence of the contract
- Inheritance: Taking an ERS implies that there is a reduction in the future wealth to be bequeathed to one's heirs.
- Valuation of the Property: A specific risk factor with regard to an HR ERS in the UK, in terms of consumer detriment is property valuation. Although the law concerning home reversions clearly states that the valuer is the agent of the consumer, there appears to have been a significant drift in actual practice as this is reported to be no longer the case.
- Credit and elderly people: There are barriers confronting elderly people in the credit market, in which ability to pay is still assessed on the basis of income from employment and the number of years over which the borrower will have sufficient income. If providers request additional security, elderly people most in need of additional income in old age may be excluded from the ERS market.
- Market behaviour: There has been a sharp drop in house prices in Malta, over the past years, which put to rest the myth that the Maltese property market is immune to negative equity. In the UK,

¹⁴⁰ Pp 77-85, Reifner, U., Clerc-Renaud, S, et al, Study on Equity Release Schemes in the EU: Part I: General Report, Project No. MARKT/2007/23/H, Institut für Finanzdienstleistungen e.V, Hamburg, 2009

the economic crisis resulted in providers lowering the payment for a home, which averages approximately 60%.

- Consumer is forced to move out: If a LM ERS is arranged, say, for only a five- or ten-year period, after which time, it can be renegotiated or recalled, external developments, such as changes in the property valuation, can lead to an unforeseen premature cancellation of the credit contract imposed on the consumer. The unexpected immediate repayment obligation would systematically lead to the consumer having to sell his / her home, in order to pay off the outstanding mortgage loan, if the amount due had accumulated over time or if the housing market had changed unfavourably.
- Risks to mobility and risks of health: LM ERS potentially hinder borrowers' mobility. In some schemes, the borrower is penalised by means of a redemption fee payable on early repayment of the loan. Early repayment fees are often charged when the house is sold, except where the borrower has died or leaves the home to enter long-term residential care. Home owners may be inclined to stay in an inappropriate environment rather than leaving home for a period in order to obtain treatment or to convalesce.
- Liabilities in terms of property maintenance: While there is technically no risk of payment default by the consumer, default is possible in the form of failure to fulfill obligations under its terms and conditions. Many ERS have an obligation not to leave the property vacant for more than a certain amount of time in the course of a year. Others place a specific legal obligation onto the customer to carry out necessary maintenance of the property in a responsible manner.
- Poverty risks: Poverty risks may result from the products themselves where the products do not meet the needs of the consumers. Those risks may also result from choice of the wrong product due to aggressive marketing and/or little understanding of the products by consumers. Furthermore, poverty risks could be caused by unforeseeable changes in circumstances, after signing the contract, such as provider bankruptcy, changes in interest rates.
- Inflation: Price rises for goods and services, generally over the term of the ERS contract, may cause a decline in the purchasing power of the money received under the scheme. This is especially true for ERS models, where monthly payments do not allow for payment adjustments.
- Changes in interest rates in the future: the risk relating to changes in interest rates depends on whether a fixed interest rate or a variable interest rate has been agreed with the creditor. Poverty risks for the consumer arise where consumers bear the risk associated with fluctuating interest rates. The borrower will face considerable risk if he wishes to buy back the property, and the rise in interest rates causes him to pay back more than originally expected.
- Inducement into the contract: Poverty risks may also result from terms and conditions that provide for financial inducements, leading to contracts unsuited to the needs of the customer. Some offers provide for the payment of a bonus, in the event of contracting within a certain (short) period of time from the date of the ERS offer.
- Provider bankruptcy: Bankruptcy of the provider could give rise to poverty, especially in ERS models involving monthly payment, and where the provider has the benefit of the mortgage. The worst case for the customer would be losing ownership of the home, and the right to stay in the property, without having received any money in return. In the case of bankruptcy, the provider would stop making monthly payments.
- Longevity of the consumer: The lifespan of the customer may also become a poverty risk. Although normally the provider bears this risk, there are ERS models where the longevity risk is borne by the customer. A number of providers offer products in which the monthly payments terminate at a certain age.

The 2004 PWG in its final report had recommended that the financial services market, should offer a regulated property pension scheme, as a Third Pillar product. It had underlined that property should not be seen as a substitute source of retirement income to Second and Third Pillar pensions – but rather as a complement thereto. It emphasised that further research is carried out regarding the need or otherwise of a tailored regulatory regime for such plans, and other related areas such as inheritance law and taxation, and supporting educational campaign which are important, in order to build understanding and literacy.

The 2010 PWG, had recommended that the Ministry for Pensions and the Malta Financial Services Authority, should consider studying the introduction of a regulated home equity release market directed to allow a person to boost his or her retirement income, without the need to sell his or her property during their lifetime.

The following issues were raised during the consultation of the strategic review:

- Whether a specific legal framework would be required and whether amendment to the law of succession is required.
- The design of a regulatory framework that would ensure the proper conduct of business by entities providing such products as well as securing robust protection of consumers.
- The introduction of appropriate governance mechanisms to prevent concentrated ownership of property by a limited number of private sector operators.
- The risks and mitigation thereof of persons adopting home ownership products upon retirement.
- Inter-generational tensions and conflict between the desire to leave an inheritance and the need for money to live on in older age.
- The implication of equity release products in relation to taxation and succession duties.
- Not all private homes would interest financial services firms providing home equity products which would mean that such schemes would provide new forms of social injustice, given that certain persons who can enter into a home equity release product, will have a higher pension income in retirement than a private home owner who is not in a position to do so.

Not all members of PWG 2010, were comfortable with a recommendation for the setting up an ERS market in Malta. A minority argued that such an ERS market will result in the following issues:

- (i) A danger that a high stock of property may end up concentrated in the hands of a small number of private sector players.
- (ii) That whilst the local housing market has traditionally proven to be stable, it does not mean that Malta will not suffer declines in the prices of housing or for the matter that it may never suffer a negative equity collapse. Indeed this was experienced in the early 2010 as shown in this paper.
- (iii) Increased investment in property which may create further pressures on a sector that is categorised by a high number of vacant property.

The fact is, however, that an 'informal' ERS market is actually in place today. It is known that owners of homes enter into agreement with private providers of residential home care for the elderly, where-in the home is exchange for a place within the private care institution. There is no legislation in place for ERS today and thus, consumers, have no protection.

Furthermore, the fact that there is no formal ERS market results in a state of play where the 'home' exchange is taking place with a very limited number of private care for the elderly providers. De facto, this is resulting in a concentration of homes with very few private operators.

A potential model that may be considered to counter the issue of property concentration is the creation of a Home Equity Bank. A Home Equity Bank would take the form of a public agency that is underwritten by the State whose primary function would be to enable people to release equity for their homes from it, in return of an income which is payable for life. A Home Equity Bank may result in the following¹⁴¹:

Older Person

Advantages	Disadvantages
Older people who are asset rich and income poor, are able to convert part of their assets to income. This will allow them to have a more comfortable retirement and fewer financial worries.	If the income is not directly linked to house prices, then users may feel that they did not get a 'fair share', assuming they have given up a percentage of their home
Assuming that the income is inflation protected (either linked to inflation or house prices (though this could lead to a more volatile income)), the improvement will be durable.	
The asset income exchange can be priced with only an allowance for administration costs, hence giving higher income than if bought from a commercial provider.	
Individuals normally trust government financial institutions more than commercial firms and so should enjoy greater peace of mind.	
Unless the whole value of the home is used, users will still benefit from rising house prices.	

Government

The Equity Bank will help reduce pensioner poverty and improve well-being and help people to remain in their homes for longer and keep them in better order.	If house prices go up a lot, there could be pressure to increase income, but not the other way around, in which case Government would be faced with difficult choices (again, only if a percentage of the home is given up).
It will help make a contribution to care costs when and if they are required, and help moderate growth in state funded social care.	If a person dies early there could be pressure on compensation to heirs (but again not the other way around). The scheme could be designed to avoid large financial loss but this would mean generating less income.
If house prices go up, this could be an additional source of profit for Government (but only if a percentage of the home and not a fixed sum is transferred into state ownership).	Heirs may contest that their elderly relation did not understand what they were doing, which underlines the necessity for good financial advice.

¹⁴¹ Mayhew, L., Smith, S., The UK Equity Bank - Towards Income Security in Old Age, City University London, 2014

There is an upfront cost and depending on the age offered there could take several years to break even.

Heirs

Heirs would see a member of family with more income in old age and potentially take some financial pressure from their shoulders.

Heirs would lose some of their inheritance – this would be particularly distressing if a family member dies early unless there is protection built in for early death.

If family member has to go into care, the net cost of the equity release, will be lower than expected, due to it being more likely that the government will fund more of the care costs due to means testing.

Private Sector Market

If equity release becomes more popular as a result of the introduction of the Equity Bank, commercial providers might receive more business from those outside the qualifying criteria.

They would be up against a new competitor that can borrow money cheaper, has a different pricing mechanism and has a better 'brand' of trust so sales will be harder.

The Government may decide to franchise the product, in which case, commercial providers could compete with, as well as against, the Equity Bank.

Malta has no regulated market for equity release products on that allows older people who are asset rich but income poor to liquidate their private home into income for retirement. Over the next decade, the number of older people, will increase substantially, so facilitating elderly persons to manage personal wealth more effectively rather than fall on the State to pay for day to day costs, assumes greater importance.

There is no doubt that establishing an ERS market is not a panacea. As this paper has showed, an ERS has risks and good governance through regulation, is mandatory.

Be that as it may, denying elder people who are asset rich but income poor from a regulated and formalised ERS market is not acceptable, particularly if participation in long term saving products remains low.

To kick-start the process, the Government should conduct a study of how large the informal ERS market is, and assess the possibility of the take-up of more formal arrangements. The Government should also study how to finance the setting up of the Home Equity Bank, either through EU Social funds or borrowing from multilateral institutions, such as the European Investment Fund. An alternative approach would be to get funding from the National Development Bank, mentioned in the Government's electoral manifesto. The scheme would be run by the Ministry for the Family and Social Solidarity. Private providers should be allowed to participate in this market, and there should be an appropriate market regulatory framework.

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01	Introduction
02	Methodology
03	General Overview of the Pensioners' Situation
04	EU SILC 2012 NSO data – more specific analysis
05	Conclusions: What Needs to be Done

01. Introduction

The aim of this supporting document is to shed some light on pensioners' and older persons' exposure to poverty in Malta. The final messages of this report should be the answers to the following questions:

- a) What are the characteristics of the poorest pensioners' households in Malta? How many are they?
- b) Which groups of pensioners' households should be considered a priority?
- c) What type of assistance is needed to help the most needy pensioners' households? How to assist pensioners' households which are ARP?
- d) What are gender specificities of Malta's most vulnerable old persons? What specific measures are required to reduce gender bias?

The aim of this supporting document is not to establish the reference budgets for families whose main income is pension, or old age related social benefit. Also, the aim of this paper is not to examine how people in Pensioners' households feel about their situation when relying on low income.

The document presents income distribution of Pensioners' households group,¹⁴² and examines the number of persons living in this type of households, who are exposed to the risk of poverty. The paper also takes as a reference point two other income distributions – one of the residual group of households, here called Active population group, and the so called Strictly Active population sub-set of Active population group of households – a group excluding those households with at least one person earning old age benefit.

The median equivalised income based on all types of earnings is used as a reference for the calculation of 60% threshold of at the risk of income poverty (ARP).

It is expected that this supporting paper will help the Pension Strategy Core Group make policy decisions on the basis of facts related to the intensity of ARP of the Pensioners' households group.

02. Methodology

For the purposes of this exercise the total number of 152,986 private households and 408,907 persons (based on EU SILC weighted sum data) were divided in three distinctive groups:

1. **Pensioners' households group** – this group (38,101 households and 62,873 persons) comprises all households where the highest income in the household is that one related to old age – be it contributory pension (e.g. Two Thirds pension) or non-contributory pension/social benefit (Age pension), irrespective on the age and number of other members of the household.
2. **Active Population group** – this group (114,885 households and 346,034 persons) includes all remaining private households. It is pertinent to say that there are pensioners and older people living in some of these households, however their income is not the highest and therefore, for the purposes of this exercise, it was understood that these older persons enjoy the standard of living attributable to all other members in the household.
3. **Strictly Active Population sub-group** – this is a sub-set of the Active Population group and it includes only households, where all members of the household are below pensionable age (93,230 households and 281,615 persons). For the purposes of this exercise, persons in this sub-group are

¹⁴² Please refer to the Methodological section for definitions.

taken at maximum of 60 years (both men and women) who are not being in receipt of old age benefits. It was presumed that majority of the individuals in this sub-group of households are employed with wage/salary earnings.

The approach used in this paper, based on the **highest household income by type** i.e. being income from pension or old age related social benefit was introduced for two reasons:

- a) the EU SILC does not apply the concept of 'head of household', usually used in Census data collections, and
- b) the approach draws on the well known argument in economics, the so called 'intra-household bargaining hypothesis', introduced by McElroy and Horney (1981), which implies that the partner with the largest [sic] bargaining power has the largest say in decisions taken at household level (Bettio, 2013:53). Therefore, the team opined that the wellbeing of the whole family depends mainly on the decisions of the highest income earner.

The above approach was used given that in the EU SILC, income category Old Age Benefits includes all personal income linked to old age. This is the variable which is recognised for EU SILC purposes – and therefore it was not possible¹⁴³ to work with Old Age Beneficiaries by type of income, given the time and available resources.

The starting premise is that the current and internationally accepted at-risk-of-poverty threshold tied to 60% of the Median National Equivalised Income (60% Md NEI) might not be the only poverty indicator we should rely on when measuring exposure to poverty of the Maltese older and pensioners in particular. There are several reasons for this:

- a) In the past, the Two-Thirds pension income cap was almost frozen for more than two decades – from 1981 till 2004, thus not allowing pensioners to benefit from a gradual increase in their retirement income in line (but not necessarily at par) with wage increases. This definitely puts Malta on an unequal footing with other EU MS where pension systems encouraged a dynamic approach to pensionable income capping.
- b) AP – Age Pension rates for a single person in both 2012 and 2013 were fixed at a level lower than the 60% Md NEI, respectively at €5,336.24 and €5,457.40 while income poverty threshold was at €6,869 in 2012. Therefore, the very concept of Age Pension has poverty exposure embedded in it.
- c) SPA - Supplementary Allowance, by definition, was not created with intention to 'close the gap' between pension and old-age benefits, and income poverty threshold. In 2013, the rates of SPA stood at € 8.13 for a married couple and €4.57 for single persons. In case of a single person (and consequently no equivalisation of income), the SPA brings only €237.64 annually – an amount evidently not sufficient to close the gap to 60% Md NEI. In case of married persons, the SPA rate means equivalised sum of €281.84 for each spouse annually, again an insufficient amount to bridge the gap between AP and 60% Md NEI. In 2013, persons who were over age of 65 and who were at risk of poverty were entitled to a higher rate of €10.05 a week for a married couple and €6.49 for single persons.
- d) Having a pension system based only on one pillar puts pensioners, and particularly those who did not accrue income in old age from other sources such as rent income, income from interest on savings etc. on an unequal footing with their European counterparts, where such additional pension pillars were institutionalised long time ago.

¹⁴³ Should such task would have been pursued, it would have required a considerable amount of time and effort, which was not available to the Team.

- e) The lowest pensions as they are today, are not tied to the 60% Md NEI (as they will be in the future) – the proposal introduced in the Strategic Review, of December 2010, Pension Reform page 8., and confirmed in the Government’s Electoral Manifesto 7.039. This is believed, will secure an adequate relative position of low income pensioners in the future.

In this document, equivalised income concept is used to depict the position of the individual, person who is exposed to that kind of income, irrespective whether that member of the household is dependent or not i.e. earner or not. On the other hand, whenever the non-equivalised income concept is used, such income pertains to the disposable income of the household, as a sum of the disposable income of all members of the household.

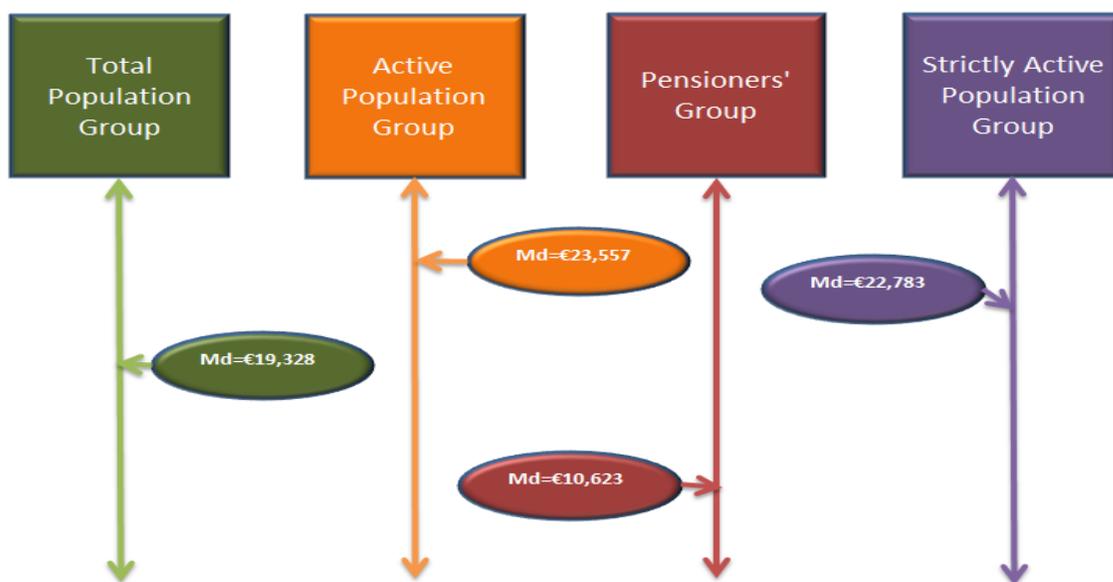
Until 2011, survivors’ benefits and disability benefits, paid to persons aged 65 and over, were included with Old Age Benefits in the SILC. From 2012, survivor benefits and disability benefits for persons aged 65 and over are not part of the Old Age Benefits variable, but are accounted for in the SILC variables Survivors’ Benefits and Disability Benefits (as is the case for all other ages). This means that there is a slight discrepancy in the time series.

In this exercise the equivalised income data were based on the revised (post-2011 Census) weights.

02. General Overview of the Pensioners' Situation

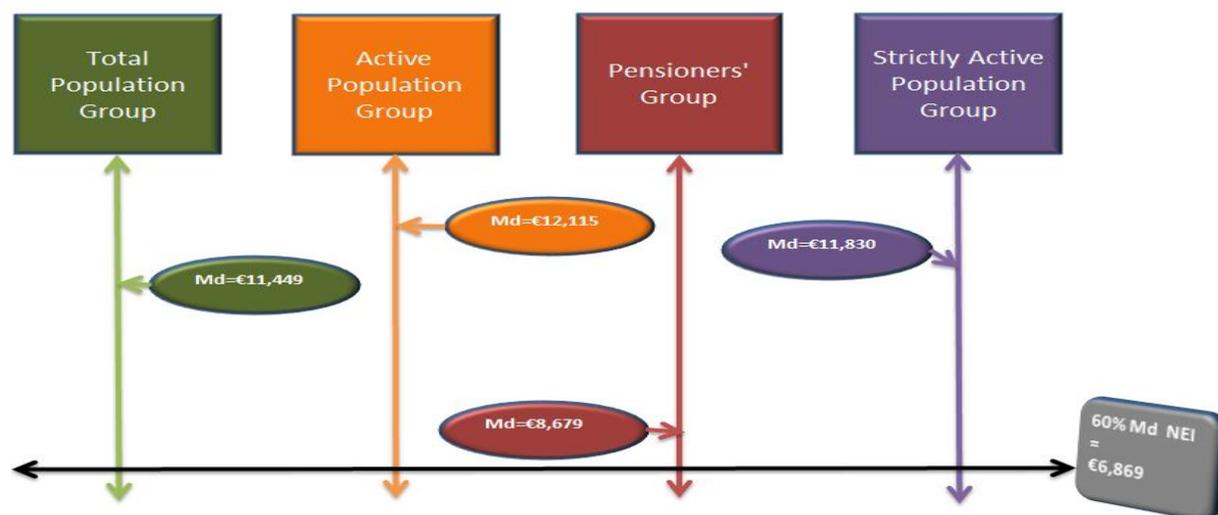
Pensioners’ households have lower Md income than the other two groups, namely, Active population household group and Strictly Active population sub-group as well as the Total households group. The overall income distribution would be also different, given that pension income levels are in similar ranges by definition, and that the likelihood of earning additional income once well into retirement age is unlikely in Malta. Graph below helps visualise the approach adopted in this exercise. The first part refers to a disposable income while the second refers to non equivalised disposable income - which by virtue of equivalisation adds another dimension influencing the exposure to poverty.

Figure 01: Median Value of Disposable Income by Type of Household (SILC 2012, NSO)



The Figure below transforms the non equivalised disposable income across the different type of households into an equivalised income.

Figure 02: Median Value of Disposable Equivalised Income (SILC 2012, NSO)



Equivalisation, by number of persons in the household and their age, impacts the relative position of each group of households, with pensioners' household income being least affected.

2012 EU SILC data NSO	Total	Active	Pensioners	Strictly Active
Median disposable income	19327.79	23556.63	10623.13	22783.42
Median equivalised disposable income	11448.91	12115.38	8678.94	11830.12
difference after equivalisation	7878.88	11441.25	1944.19	10953.3
Average equivalisation factor	1.69	1.94	1.22	1.93

Table 1. Median income before and after equivalisation, SILC 2012 NSO data

This is due to pensioners' specific position on the life cycle, as they become least taxed by equivalisation of income. The added weight is only 0.22 after equivalisation. Nevertheless, the median equivalised disposable income of this group is still lowest of all.

After equivalisation, Strictly Active population sub-group appears to have lower median income than the Active population group (which might include some pensioners and older persons), despite its marginally higher average equivalisation factor. This can be explained by the fact that persons in younger families where there are no pensioners or older persons living on old age benefits could be living in households with low/er work intensity, or no work intensity at all.

Comparing the current levels of poverty thresholds with the levels of minimum income provisions for older people is not an easy task. The EU Commission (2011:4) states: "Direct comparisons of poverty lines with levels of minimum income benefits are complex. On one hand, because one should take account of different types of household configuration and on the other hand because one should also reflect other

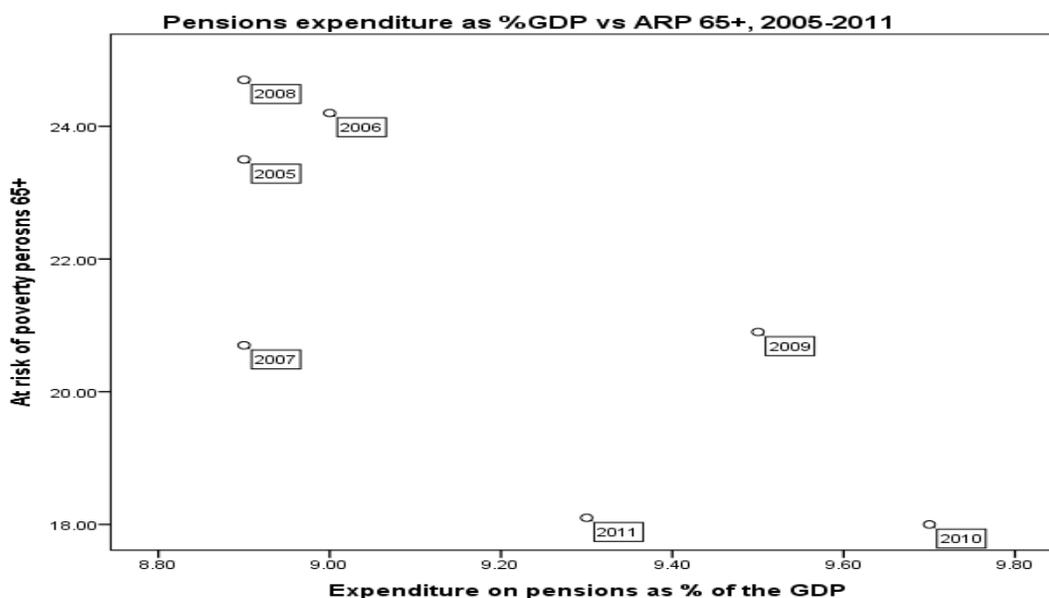
benefits to which beneficiaries of minimum income benefits are eligible.“ This *per se*, should be the final message of this report.

How and to which extent the assistance should stretch? Although 60% Md NEI threshold could be difficult to reach for many current low income Pensioner’s households, their distribution below this poverty line matters. Although it does not make any difference, if none of these individuals could be moved above that line, in terms of poverty reduction as such, the distribution of pensioners’ households, which is closer to the ARP threshold, would be so much more beneficial for their well being. From this point of view, it matters which groups of Pensioners’ households should be helped first? Which are the poorest of the Pensioners’ households?

The recent EU Cion’s document (2014) uses factor analysis to reflect on Member States Performances on pensions and the three main dimensions identified are: factor 1 - employment of older workers and life-long learning, factor 2 - poverty and income in the context of adequacy of pensions and factor 3 - unemployment and part-time employment of older workers. Malta was slotted to the third group of countries, together with Belgium, Cyprus, Greece, Croatia and Italy and described as having “rather poor results in terms of poverty and income, as well as for most of them in the area of employment and life-long learning ... performance in the area of part-time employment and unemployment is mixed and ... there is a room for improving both the adequacy of pensions and the labour situation of older workers” (EU Commission, 2014: 20).

Malta still has a window of opportunity in terms of population ageing – given its later decline in total fertility rate (TFR) and later entry into the second demographic transition than other countries. It is an imperative to create appropriate conditions for older workers to remain in the labour market in the future (EU Commission, 2010: 63), and in case of Malta, to make longer work pay in terms of pension entitlements.

How is Government’s pension expenditure affecting pensioners’ exposure to poverty? Is the poverty of persons in older age increasing? How efficient is the public expenditure on pensions? The ARP of persons 65+ and expenditure on pensions as % of the GDP figures (Eurostat, extraction 06/02/2014) show that in Malta, increase in expenditure on pensions is accompanied by declining ARP of older persons 65+ (Graph 3).



Graph 3. ARP and expenditure on pensions.

This would seem as a positive development, however when compared with other EU countries, different picture is obtained. Ireland for example, had similar ARP of persons 65+, with much lower pension expenditure than Malta (2008 data, EU Cion 2011: 9).

Undoubtedly, the effective labour market exit age in Malta of 60.9 years (61.1 men and 60.3 women) is far too early in comparison with some other EU MS – Cyprus 64.4 years, Sweden 64.2 years, Estonia 63.6 years, the UK 63.5 years, Portugal 63.5 years, the Netherlands 63.1 years, Spain 62.9 years, Denmark 62.9 years while the EU average stood at 62.1 years (EU Commission, 2012b, 2010 data).

A more detailed look at our exit and retirement ages on average shows further split – are we retiring too soon?

Early exit from the labour market could be another driver to ARP in old age in Malta. In 2009, the average exit age for persons in early retirement and retirement stood at 59.56 years, in 2012 it stood at 59.76 years, while the average age of those who stopped working for reasons other than retirement and early retirement stood at 54.37 and 54.84 years respectively (data NSO¹⁴⁴, LFS).

Table 2. Average exit age for persons in early retirement and retirement

	Male	Female	Total
	Mean	Mean	Mean
2009	59.72	58.98	59.56
2010	59.90	58.94	59.72
2011	59.92	59.07	59.75
2012	59.86	59.32	59.76

Source: NSO, LFS data

Table 3. Average exit age for persons who stopped working for any reasons other than retirement and early retirement

	Male	Female	Total
	Mean	Mean	Mean
2009	54.57	54.03	54.37
2010	54.59	53.77	54.26
2011	55.11	54.01	54.68
2012	55.25	54.25	54.84

Source: NSO, LFS data

Note: Both tables include persons who stopped working at the age of 49 or after.

¹⁴⁴ The difference between the average effective labour market exit age between 2010 Eurostat data and NSO data is due to a difference in methodological approach where Eurostat uses a probability model of relative changes of activity rates from one year to another at a specific age. The NSO does not use the probabilistic model.

Income distribution through life-time

For the analysis of exposure to income poverty in old age, it is important to analyse the equivalised income in old age relative to the equivalised income in pre-retirement years. The Median relative income of older people (tespn020), defined as the ratio between the median equivalised disposable income of persons aged 65 and over and the median equivalised disposable income of persons aged between 0-64, indicates a relative constant trend with the ratio of 0.8 in 2012 (see Table 4. Monetary poverty of older people).

Given the statutory pensionable age in Malta, in the transitional years 2006-2012, it is pertinent to look at the trends of the Median relative income of older people aged 60+ too. The figures mirror those of the 65+ segment of the population, and in 2012, this ratio stood at 0.83 (see Table 4. Monetary poverty of older people). The relativity of incomes in these two population strata remained stable during this period.

Aggregate replacement ratio of the median individual gross pensions of persons 65-74 years of age relative to median individual gross earnings of 50-59 age category (tsdde310) without other social benefits, compares more closely the income situation of pensioners, without taking into consideration the household composition such as in the case of equivalised income. The aggregate replacement ratio, in Malta, has been gradually increasing, and in 2012, it stands at 0.49 (see Table 4. Monetary poverty of older people). Similarly, when other benefits are included (tespn070) identical ratios are obtained in the same time range.

The first cohorts of baby-boom generations, are now in retirement, while the young baby – boom generations are in ‘the high earning’ stage. This contributes even more to the discrepancy between older pensioners who retired on low capped maximum pensionable income. “The customary sequence of an initial phase of higher spending in the early years of retirement as people seek to fill their leisure time followed by a later phase as they take fewer holidays and spend more time at home may change” (EU Commission, 2012a p.51). This spike in expenditure could have been dampened somewhat in case of Maltese pensioners who retired at the time when the pension cap income was already in place for several years, as the gap between earnings and pension income could have been significant. This could have contributed to a low ability to afford certain items expressed in terms of material deprivation.

In fact, the NSO 2011 EU SILC data (NSO, 2013), show with old age the propensity of living ARP increases from 16.9% for persons 60+ to 18.2% for persons 70+. There are some 7,295 persons aged 70+ who are ARP. This number increases to 8,542 in case of persons 70+ who are ARPE. While the S80/S20 ratio (ratio of sums of the lowest 20% and highest 80% equivalised income) for the total population is 4.1, due to the capping of the pension income, this ratio declines to 3.7 and 3.3 for 60+ and 70+ respectively (NSO, 2013: 6).

House ownership is also an indication of exposure to poverty in old age with 21.5% of tenants being ARP (3,176 persons) and 17% homeowners being ARP (7,784 persons). It is pertinent to say that the system of low rents, from both private and state landlords, prevents further hardship of the families in rented tenure in Malta including those with older persons.

Gender differences in the risk of poverty

The exposure to poverty in old age appears to be higher for men than for women increasing from 18.5% for 60+ to 21.5% for 70+ in case of men and for 15.7% to 15.8% for women of the same age (NSO, 2013:5). This could be explained by the fact that older women could be living in extended families more often than men, given their traditional role in the household and care, they provide for the younger members of the family.

The 2006-2012 data (tespn240) indicate higher ARP of men, 65+, living in single person households than women, in almost all years (barring 2006, 2008, and 2009). However, this 'trend' cannot be used for analytical purposes, as it transpired that the sample size rendered unrepresentative number of cases and therefore, this indicator should be used with caution (see Note in the Table 4. Monetary poverty of older people).

Gender differences in the relative income of older people (65+) living in single person households (tespn250) indicate that relative to males, women were always better off in old age than men, 2012 absolute difference in relative income of older people (65+) stands at -0.12%. This means that the ratio of pension income of persons 65+ to income of those aged 0-64 was higher in case of women than of men. This could be attributed to the fact that the income of 0-64 old women is lower than that of men, as a result of 'income role specialisation' which was particularly evident in Malta, where women had a tendency to 'specialise' in child rearing and housework, while men 'specialised' in work at the formal labour market (Bettio et al., 2013:55) which contributed to the overall higher relative income of older women 65+ than that of older men.

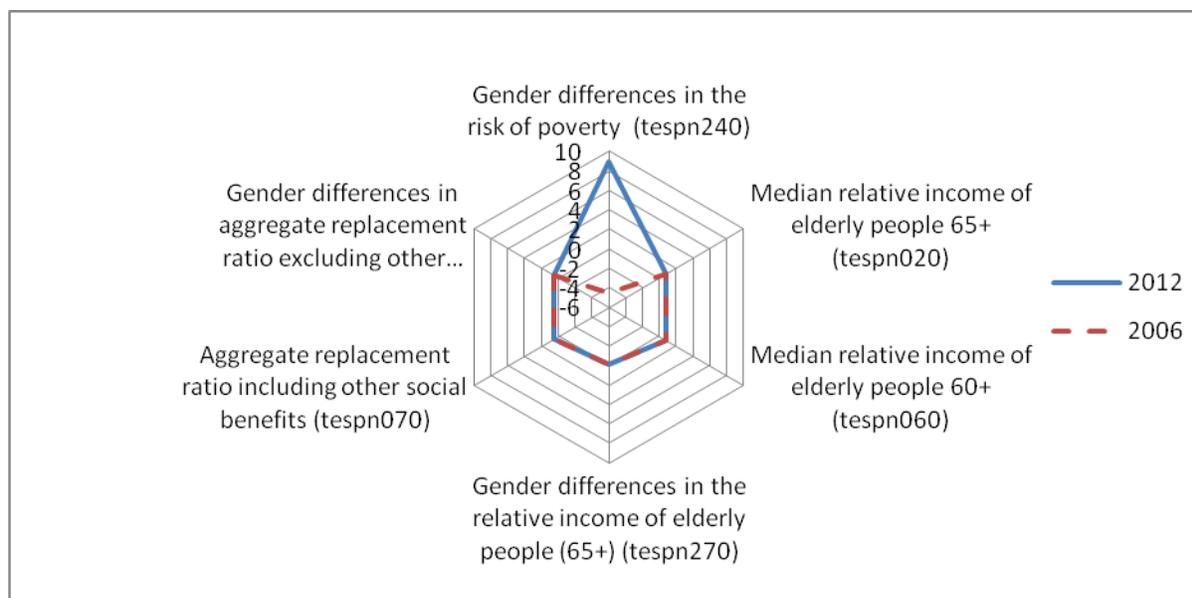
Gender differences in aggregate replacement ratio indicate better position for men than for women when their median individual gross pension at the age of 65-74 is compared to their median individual gross earnings of the 50-59 age category. This could be contributed to lower credits accumulated by women throughout life, due to childbearing. Men who are in the traditional family model, considered as main bread winners, would have accrued full pension entitlement (see Table 4. Monetary poverty of older people).

	2006	2007	2008	2009	2010	2011	2012
Gender differences in the risk of poverty (tespn240)*	-4.6	8.7	-8.8	-1.7	5.1	9.6	8.9
Relative median income of older people 65+ (tespn020)	0.79	0.77	0.73	0.76	0.81	0.8	0.8
Relative median income of older people 60+ (tespn060)	0.81	0.79	0.74	0.79	0.82	0.82	0.83
Gender differences in the relative income of older people (65+) (tespn270)	-0.16	-0.34	-0.2	-0.08	-0.09	-0.14	-0.12
Aggregate replacement ratio without other social benefits (tsdde310)	0.47	0.48	0.42	0.47	0.46	0.47	0.49
Aggregate replacement ratio including other social benefits (tespn070)	0.47	0.48	0.42	0.47	0.46	0.47	0.49
Gender differences in aggregate replacement ratio excluding other social benefits (tespn260)	0.47	0.48	0.42	0.47	0.46	0.47	0.49

Source: Eurostat, EU SILC data extracted on 6/02/2014

*Note – The sample count for men in this indicator were low e.g. which explains the fluctuation of figures from -8.8 in 2008 to 9.6 in 2011. This indicator to be used with caution.

The radar chart below (Graph 4), indicates relatively unchanged position between 2006-2012 except for the ARP of older women living in single person households, where there is a reversal of position and men are in 2012 more exposed to the risk of poverty (see methodological note in Table 4).



Graph 4.

A recent survey indicates the value of pensioners' asset value: "The median financial asset holdings for retired persons (27% of all households) stood at €28,906" (Central Bank of Malta, 2013: 10). It is pertinent to note that even families with very low disposable income manage to make some savings. Pensioners' families by virtue of their position on the life cycle have higher average savings.

The differences in propensity to save are evident: "On the basis of the Malta Survey sample, it is estimated that the overall savings ratio for Malta, measured by the ratio of savings, to gross household income, was 4%. Maltese households with the highest net wealth had a savings ratio of 7.1%, whilst households in the lowest 20% net wealth percentile saved 1.3% of their gross income. Higher savings ratios were reported when the reference person representing the household was self-employed. In such cases, the rate rose substantially to 8%. However, on average, it was also observed that when the reference person was a retired person, the saving ratio was 1.5 percentage points higher than the overall household average" (CBM, 2010:13).

Material deprivation and low work intensity

On average Maltese person aged 65+, experience higher ARP rate than their EU28 counterparts, being at 15.9% and 11.7% respectively. There are around 10,000 Maltese persons 65+ ARP. There are 1,000 persons 65+ who are both ARP and SMD (lacking 4 out of nine items of MD). In addition, there are some 2,000 persons 65+ who are experiencing SMD. Therefore, the priority rests with those 1,000 who are both ARP and SMD in this aggregate of 13,000 Maltese persons 65+ who are in need of assistance. Those who are exposed to SMD, be it with or without ARP, need some sort of assistance: a) financial or 'in-kind' based on the type of material goods or services they are lacking, and b) in the form of counseling on budgeting and priorities to be covered from their monthly income.

Pensioners' households fair best when it comes to lacking 4+ items of material deprivation with only 7.4% experiencing SMD (2012, NSO data), which is less than 9.5% in active persons households, 10.2% in strictly active persons households and 9% of the total population. This could be attributed to pensioners' position on the life-cycle. More interesting, for the purposes of this report, is the situation in the bottom three deciles, and even here pensioners' households fare better in terms of items of material deprivation with least share of such households, only 39.2% which is less than 64.1% in active persons households, 63.7% in strictly active persons households and 58.8% in total households. However, such share is higher than in 65+ persons group (33.3%).

Another question which needs analysis is: if the person 65+ lives in the household which is not ARP and still experiences SMD, then the issue is what type of goods and services are lacking and why? Is it a question of money management or a question of priorities – what kind of action or communication is needed here, in order to render better living conditions for these persons. If the old age income is sufficient for all members of the household to live above ARP, which are the items on the list of MD which are most lacking:

1. The ability to pay for one week annual holiday away from home – this is a very salient indicator showing that as much as 57% or 6,246 persons 65+ ARP cannot afford one week holiday away from home.
2. The ability to face unexpected financial expenses (of €450 and over) through own resources - this can be subjective, and could be also an issue of redistribution of available resources. 26% of persons 65+ ARP reported incapacity to absorb these expenses or 2,807 persons 65+.
3. The ability to keep home adequately warm in winter - 20% of persons 65+ ARP or 2,173 persons who are ARP are also unable to afford this expense.
4. The ability to have a meal with meat, chicken, fish or vegetarian equivalent every second day – only 12% of 65+ ARP were unable to afford this kind of meal which translates into 1,325 persons 65+ ARP (data NSO, News Release 128/2013, p.5-7).

Persons 65+, who are living in the households with low work intensity, do not seem to represent a significant number, with 0% rate. Similarly, the rates of those SMD and in LWI and those ARP, SMD and LWI are also equal to 0%.

When ARP is combined with MD, then poverty is assumed to be consistent. The NSO data show that consistent poverty of persons living in pensioners' households has been declining continuously from 6.5% in 2008 (3,716 cases) to 4.1% (2,561 cases) in 2012. Similarly, the share of persons 65+ exposed to the risk of consistent poverty, has declined from 4.6% in 2008 (2,423 persons) to 2.8% (1,819 persons) in 2012. These two groups are the only groups where such declining trend occurred, other groups have been experiencing an increase in exposure to consistent poverty.

The first priority in terms of well being of persons 65+, should be given to 1,000 persons, who are both ARP and SMD. Here, depending on items of MD, help should be provided in cash or in kind. Second, most important priority are 10,000 persons 65+ who are ARP – here, given that work intensity of other members of the hold, does not seem to be an issue, and therefore not an avenue of help to take- the remedy rests in benefits or other types of financial help. The third important category are 2,000 persons, who are not ARP, however they show lack of items of MD, more precisely four items of MD which places them under SMD. This segment of the older persons welfare, is not strictly speaking the remit of the Pension Strategy Group, however it comes naturally as a concern.

There are around 3,000 persons living in Pensioners' Households group, who by virtue of their exposure to MD or/and ARP, cannot be detected from the readily available databases. While households ARP can be traced through IRD and CDB databases, and eventually helped through income supplements, in case of MD there is no such data records readily available which can be consulted and used as administrative source of data.

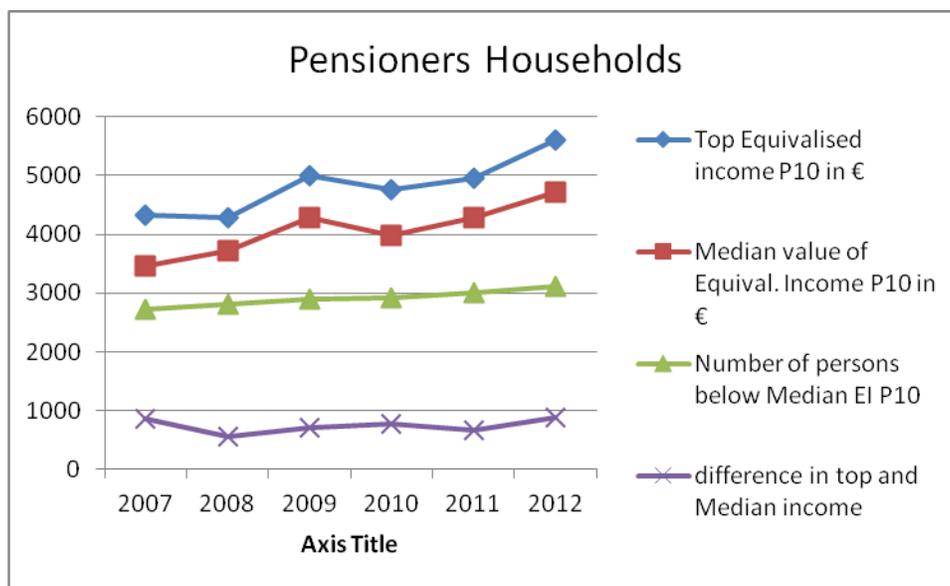
04. EU SILC 2012 NSO data – More Specific Analysis

Caritas study (2012:37) shows that the minimum estimated cost necessary for decent living of older couple (65+), stands at €6,328 a year – when equivalised, this gives €4,219. This research (Ibid. :36) also assumed that such households include members who are in receipt of Pink Card, Food Aid assistance, reside in subsidised rented property, and receive energy benefit; all of which add to these households well-being.

This reference budget is less than €4,721.37, which represents the higher cut off point of the 5th percentile. In other words, less than 5% of persons living in Pensioners' households live on less than this reference budget; i.e. less than €4,721.37. This translates in some 3,144 persons (based on EU SILC 2012 data).

The overall Median equivalised income of persons living in Pensioners households, who are ARP, stood at €4,450.67 (2012 data, 65% of €6,869 income poverty threshold for the whole population) with 2,194 persons living below this median level. This means that 50% of persons in Pensioners' households group are €2,000+ away from 60% Md NEI ARP threshold, and this is a significant gap, higher than in the two other groups analysed here, namely Active and Strictly Active.

This is certainly the worst off category of persons in Pensioners households, since the median of persons ARP in Pensioners households is lower than the top cut off point of the 5th percentile (€4,721.37). The resulting 'relative median at-risk-of-poverty gap' is equal to 35% ($(€6,869 - €4,450.67) / €6,869 = 35.21\%$). When overall, 65 years and over population ARP is compared, the Relative Median ARP gap is equal to 17.4%, indicating better overall picture for those persons 65+ living in other types of households e.g. those in Active Population group (data Eurostat, extraction 05/03/2014).



Graph 5 – First decile income distribution, Pensioners' households, NSO unpublished data

The graph above indicates continuous increase of the top income as well as median income in the first decile (P10, NSO unpublished data). However, the number of persons below the Median income in the first decile is increasing – registering a gradual increasing trend. This is a worrisome scenario, which indicates that distribution of income within the lowest decile is unfavourable, for the most deprived pensioners’ households. Over 3,000 persons live in Pensioners Households, on an equivalised income of less than €4,721.37 (which is 69% of the income poverty threshold).

To close the gap of the ‘poorest persons in the Pensioners Group, which currently stands at more than €2,000 in equivalised terms, for around 2,200 persons, will be hugely challenging in the situation of the fiscal burden, and in view of the imperative to avoid further fiscal deterioration.

Median poverty gap by groups of households

Median poverty gap, as a share of the median of persons ARP, in the income threshold i.e. 60% Median NEI of the particular sub-group indicates that in comparison to the other types of households, persons in pensioners households, experience more homogeneous distribution of income, with the share being highest reaching 85.5% of the respective poverty threshold. In other words, relative to other types of households, the median income of persons living in pensioners households is ‘closest’ to their respective 60% Median equivalised income (at 85.5%). Therefore, if poverty is not measured relative to the whole national population, and therefore the impact of increase in wages would have been eliminated, the gap to be closed narrows in case of persons living in pensioners households.

Analysed as a separate category, therefore Pensioners’ Households exhibit most homogeneity (please refer to the box and whiskers graph below, Graph 5), with central 50% of the cases falling between 25% and 75% values, and with shortest 1.5 IQR (inter-quartile range) whiskers. The visible outlier appears only in the case of women 65+ years of age.

<u>2012 EU SILC NSO data</u>	Pensioner households	Active households	Strictly active households	Total households
Median equivalised income	8678.94	12115.38	11830.12	11448.91
threshold: 60% Median equivalised income	5207.36	7269.23	7098.07	6869.35
Median income of persons below the threshold	4450.67	5916.44	5813.07	5763.65
top income 5th percentile	4721.37	5314.00	5144.57	5249.68
Median poverty gap	14.53	18.61	18.10	16.10

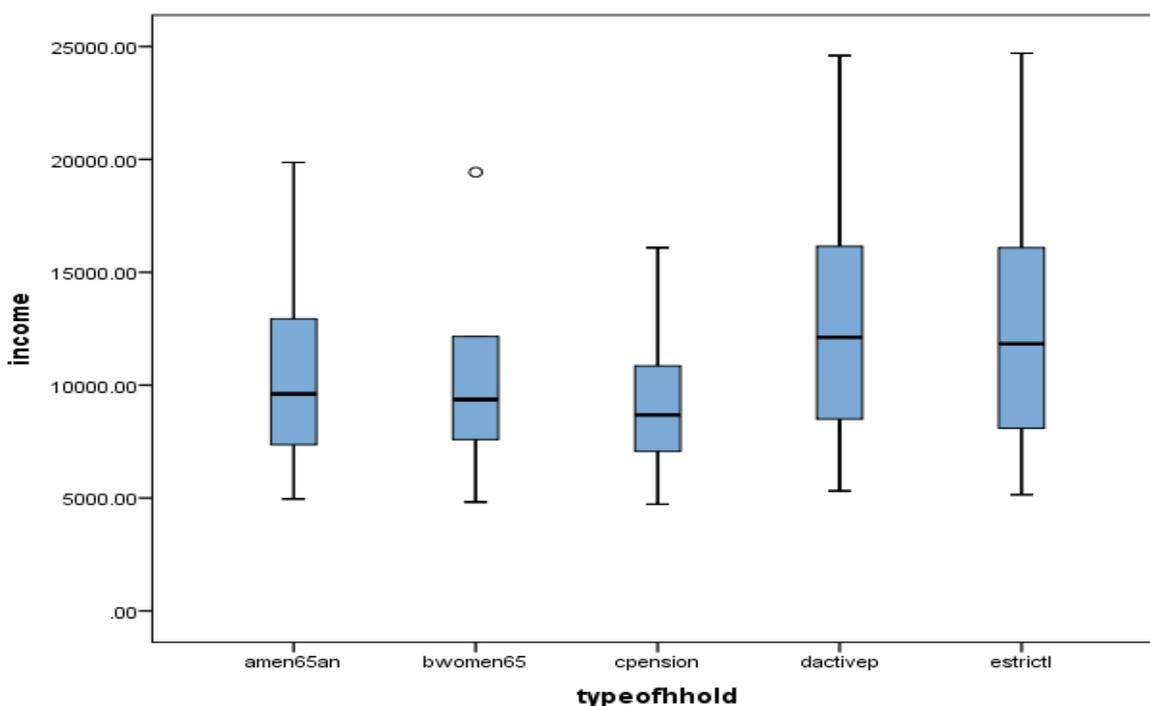
Table 6. Median poverty gap – analysis by type of household

Pensioners’ households are the only among the analysed groups, where the median income of those who are below ARP (it stands at €4,450.67), is lower than the lowest five percentile upper limit (the maximum income in this percentile is €4721.37). This indicates more clustering below the top income of the 5th percentile i.e. right skewed distribution in the case of pensioners’ households then in any other group presented above. Not only that pensioners’ income distribution is scaled downwards due to the nature of their income, but it is also concentrated towards lower end, more than is the case of other two groups of households and the total average.

In absolute terms (nominal income), as well as relatively, in terms of distribution of the poorest of the poor, the lowest paid pensioners are more exposed to poverty relative to their own peers – although their median poverty gap (calculated on their respective median values) is narrower than the national average as well as the gaps in other two groups.

Those 50% of persons who are ARP, and above the median income of the poor, require less amount of financial assistance, in order to reach the income poverty threshold of this group (the gap is only 14.53%). This is an attempt to show other measures of exposure to poverty, based on pensioners' household only. There is a difference of €1,312.98 between median of the 'poor' total population and pensioners. Irrespective of differences in basket of goods and services for these two groups, the median of the ARP i.e. 'poor' in the pensioners' households group provides only €371 a month – hardly an amount sufficient for a bare survival.

However, when compared to the national 60% Md NEI – pensioners are by far the most disadvantaged group with the gap between €6,869.35 and €4,450.67 of €2,419.



Graph 6. Box and whiskers plots, equivalised income by type of population /household group, 2012 NSO SILC data

The position of the median, clearly indicates pensioners' households relying on the lowest median equivalised income. In fact, when it comes to tackling poverty of persons whose main income is pension, the above graph shows that it is better to focus on this group rather than on age dimension per se. The differences between 65+ men and women subgroups, when compared to Pensioners' households group, show the difference (graph 6, first three box plots). When tackling the poverty of the pensioners, we are not tackling the poverty of older persons only, but the exposure to poverty of all those who live with them and share their income.

05. Conclusions: What needs to be done

This analysis attempted to present clear answers to the questions below:

- a) What are the characteristics of the poorest pensioners' households in Malta? How many are they?
 - b) Which groups of pensioners' households should be considered a priority?
 - c) What type of assistance is needed to help the most needy pensioners' households? How to assist pensioners' households ARP?
 - d) What are gender specificities of Malta's most vulnerable old persons? What specific measures are required to reduce gender bias?
-
1. Due to the pensioners' specific position on the life cycle, they become least taxed by equivalisation of income. The added weight (result of the applied OECD equivalence scales) is only 0.22 after equivalisation. Nevertheless, the median equivalised disposable income of this group is still lowest of all.
 2. After equivalisation, Strictly Active population sub-group appears to have lower median income than the Active population group (which might include some pensioners and older), despite its marginally higher average equivalisation factor. This can be explained by the fact that persons in younger families, where there are no pensioners or older persons living on old age benefits could be living in households with low work intensity, or no work intensity at all.
 3. There are around 3,000 persons living in Pensioners' Households group, who by virtue of their exposure to MD or/and ARP cannot be detected from the readily available databases. While households ARP can be traced through IRD and CDB databases, and eventually helped through income supplements, in case of MD, there is no such data file readily available which can be consulted and used for practical policy action.
 4. The overall Median equivalised income of persons living in Pensioners households who are ARP, stood at €4,450.67 (2012 data, 65% of €6,869 income poverty threshold for the whole population), with 2,194 persons living below this median level. This means that 50% of persons in Pensioners' households group are €2,000+ away from 60% Md NEI ARP threshold, and this is a significant gap, higher than in the two other groups analysed here, namely Active and Strictly Active population households. This is certainly the worst off category of persons in Pensioners households, since the median of persons ARP in Pensioners households is lower than the median of the first decile (€4,721.37).
 5. Over 3,000 persons live in Pensioners households group on an equivalised income of less than €4,721.37, which is the top income of the 5th percentile (which is 69% of the income poverty threshold). This is a result of an increasing trend in the absolute number of such persons, which has been developing since 2007.
 6. To close the gap of the 'poorest persons in the Pensioners Group, which currently stands at more than €2,000 in equivalised terms for around 2,200 persons, will be hugely challenging in view of the imperative to avoid further financial burdens.
 7. Not only that pensioners' income distribution is scaled downwards due to the nature of their income, it is also concentrated towards lower end, more than is the case of other two groups of households and the total average. In absolute terms (nominal income), as well as relatively, in terms of distribution of the poorest of the poor, the lowest paid pensioners are more exposed to poverty

relative to their peers – although their median poverty gap is narrower than the national average, and the respective gaps in other two groups.

8. Pensioners' household group exhibit most homogeneity with the share of income of those ARP being 85.5% of their respective group's poverty threshold. There is a need for more research in reference budgets of this particular group of households.
9. The median of the ARP group in the Pensioners' household group (€4,450.67) provides equivalised income of only €371 per month – an amount sufficient for a bare survival.
10. The analysis shows that it is more useful to focus on the type of household criterion, rather than on the age group criterion. Pensioners who live with other active members of household (Active group), enjoy better living conditions. Income supplements or specific benefits should cater for this difference.

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