Ensuring adequacy and sustainability – the impact of raising the age of entitlement to an old-age pension

Response to the Green Paper

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by

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Introduction

According to the 2009 Ageing Report, the fiscal cost of retirement pensions is expected to increase over the coming decades, given programmes as currently legislated for. By 2030, it will have risen by some 1.2-1.3 percentage points of GDP; by 2060, by some 2.3 percentage points of GDP. At the same time, and again based on programmes currently legislated for, the hypothetical replacement rate of pensions will have fallen. It will have fallen by about eight percent over the next twenty years and by about one fifth over the next fifty years. This is shown in Table 1.

< Table 1 here >

The Green Paper makes the proposition that "[a]dequacy and sustainability are two sides of the same coin". The implications of this statement are twofold. On the one hand, it suggests that only sustainable pension systems can provide adequate pensions. On the other hand, it suggests that only pensions systems that pay adequate benefits will be sustainable. Sustainability has a different meaning in each case. In the first case, it is fiscal sustainability that is meant; in the second case, it is social or political sustainability.

The Green Paper is not as explicit as it might be about how fiscal sustainability is to be assured alongside social sustainability. However, some hints are given. In presenting the Green Paper, Commissioner Andor emphasised how "the number of retired people in Europe compared to those financing their pensions is forecast to double by 2060 – the current situation is simply not sustainable." His proposition was that "the balance between time spent in work and in retirement needs to be looked at carefully" (Andor, 2010). The Green Paper, itself, contains a number of indications of what might happen if the age of exit were increased – particularly, in so far as it argues that "[t]he steep rise in old-age dependency ratios could be largely avoided if people would work longer. Without this a painful combination of lower benefits and higher contributions would be inevitable" (p9). However, it does not explain how

much longer it might be necessary to work, or how severe the reduction in benefits that would otherwise have to occur might have to be.

The fiscal consequences of later retirement

When the Commission, working together with the OECD, produced its first study on the fiscal consequences of societal ageing (EPC, 2001, see also Dang, Antolin and Oxley, 2001), it did seek to show how the projected outcomes might change if certain determinants of expenditure were to change. Subsequent Ageing Reports have repeated and modified this process to show the outcome of changes in labour market behaviour. Specifically, they have asked what might happen if

- a) the employment rate of people of all ages were to increase by one percentage point above its baseline level, or
- b) the employment rate of older people were to increase by five percentage points above its baseline level.

Such sensitivity tests were also conducted in the 2009 Sustainability Report.

However, the impact of more fundamental changes in behaviour – and in particular of later retirement – have not been considered, or at least not until very recently.

The 2009 Sustainability Report contained a first attempt to estimate the impact of an hypothetical increase in the age of retirement upon expenditure. The assumption was that "exit ages for each Member State increase by two years – on top of the baseline – from 2010 to 2020 in a linear fashion. After 2020, the exit ages keep rising by two-thirds of the increase in remaining life expectancy" (EC, 2009b, p60). This would take the average exit age from approximately 62 in 2008 to approximately 67 by 2060, with it reaching approximately 65 in 2030. Without the change, the exit age was assumed to have reached rather above 63 by 2030 and to have remained at that level thereafter. Such a change in retirement behaviour was projected to have reduced pension expenditure by 2060 by 1.8 percentage points of GDP across the EU27 countries as a whole. No breakdown was given for individual countries and no data was available for intermediate periods.

How significant or otherwise the contribution of postponing the retirement age would be, compared to other changes in labour market behaviour, was not made explicit. However, postponing retirement can be seen to contribute far more to fiscal sustainability than does either increasing the employment rate overall or increasing the labour force participation of older people. This is because, whilst higher employment increases contribution income, those who work also accrue pension rights and so generate expenditures. In other words, whatever benefits there might be from increasing employment rates amongst people of working age – and there might be many, economic or social – these seem to be small if the objective is to increase the fiscal sustainability of public pension systems. The impact of postponing retirement is far greater. No more benefit entitlements are built up. Access to an oldage pension is delayed. Those who are not drawing a pension – or at least some share of them – are considered to be working and, so, to be contributing.

Table 2 summarises the results of various changes in behaviour. It draws together results reported at various points in the 2009 Stability Report and the 2009 Ageing Report.

< Table 2 here >

Strictly speaking, the impacts of changes in behaviour should not be added together. They have been calculated on a *ceteris paribus* basis. Even if they were added together, they would be approximately equivalent to the increase in expenditure otherwise projected. However, Table 2 also shows that the decrease in expenditure consequent upon behavioural changes is smaller than the decrease in expenditure that results from reductions in the generosity of public pension systems which have already been legislated for and which have already been factored into the Commission's calculations.

This suggests that, if preventing expenditure from rising at all is the goal, changes in pension age are not a substitute for changes in benefit levels; they are a necessary complement to them.

Simulating consequences for sustainability and adequacy

The method by which the Commission arrived at its results is not entirely transparent. However, the basis for the sensitivity tests can be broken down into four components, respectively

- a) the dependency rate effect (population 65+/population 15-64)
- b) the coverage or eligibility rate effect (pensioners/population 65+)
- c) the employment rate or labour market effect (workers/population 15-64), and
- d) the benefit ratio or generosity rate effect (the average pension/the average wage).

A raising of the age of pension eligibility has its impact upon the second and third of these elements – it reduces the number of pensioners, and it increase the number of workers. Holding all else constant, pension expenditure as a proportion of GDP, which is the product of items a) through d) above, can be calculated (see EC, 2009a, p153-4; also IMF, 2010, p68-9). Pension expenditure (the numerator) is reduced because, holding the pension level constant, the number of pensioners falls. GDP (the denominator) is increased because, holding individual output/wages constant, the number of workers increases.

The equivalent reduction in pension expenditure as a share of GDP can be obtained by adjusting the benefit ratio - i.e., by reducing the replacement rate as measured by average pension to average wage.

< Box1 here >

A sensitivity test was conducted to examine the impact of a one-year, a two-year, a three-year and a four-year increase in the age of eligibility for an old-age pension. A two-year increase is equivalent to that already legislated for in countries such as Germany and France. This increase is intended to be effective by 2029 in Germany and by 2018 in France. A three-year increase has been legislated for in the UK, to be effective by 2046. However, this date could be brought forward. Proposals for increases in the retirement age to as much as 70 have been made in a number of countries, and the impact of a hypothetical retirement age of this level is even to be found in the Green Paper (see figure 2, p25).

The results of the sensitivity test are shown in Tables 3 and 4. The test considers not merely 2060, as in the Stability Report, but also the year 2030. It compares changes in the expenditure and changes in the replacement rate that would generate an

equivalent reduction in expenditure. Results are presented both for the EU27 taken together, and for the EU15 countries, again taken together.

< Tables 3 here >

An increase of two years in the age of eligibility for an old-age pension by 2030 would reduce pension expenditure in the EU27 by some 1.3 percentage points of GDP and in the EU15 by some 1.4 percentage points of GDP. In both cases, this would more than offset the amount by which expenditure would otherwise have been expected to rise. An increase of three years by 2060, which is approximately the same as that envisaged in the 2009 Stability Report, would reduce pension expenditure by 1.8 percentage points of GDP. This is very similar to the result reported in Table 2. Such a reduction offsets about three quarters of the increase in expenditure that is otherwise projected. An increase in the retirement age of four years by 2060 would more than hold expenditure constant.

For each of the reductions in expenditure consequent on increases in the age of entitlement to an old-age pension, an equivalent cut in pension benefits – i.e., a cut that produces the same saving – can be calculated. The results are shown in Table 4.

< Table 4 here >

Comparing the results shown in Table 4 with the projections shown in Table 1, it can be seen that, were the age of entitlement to be increased by two years by 2030, this would generate a reduction in expenditure more than sufficient to compensate for the reduction in pension benefits that is projected to occur by 2030. Equally, were the age of entitlement to be increased by four years by 2060, this would generate a reduction in expenditure sufficient to compensate for the reduction in pension benefits that is projected to occur by that year.

Comments and issues for consideration

The Sustainability Report recognises that "[c]ountries whose current policy will lead to strong declines in their benefit ratios may come under significant political pressure to introduce ad hoc increases to pension levels or to change their social security

systems to increase the standard of living of pensioners."(p73). This suggests that fiscal sustainability might well conflict with social or political sustainability and that pressure to maintain the latter objective might frustrate the realisation of the former objective. However, the analysis conducted here also suggests that fiscal sustainability can be achieved in ways other than reducing the generosity of pension benefits. Increasing the retirement age provides a way by which both objectives could be achieved.

The question remains whether rising the age of entitlement to an old-age pension is socially or politically acceptable. . Protests on the streets of Paris and elsewhere indicate that this is not a solution that can be imposed lightly. The Commission and the Member States face a challenge of explaining how life expectancies have been increasing and how working lives – relative to total lives – have steadily become shorter. In this respect, they have to encourage and participate in a process of bringing the public – both individually and collectively – to understand what societal aging means and to accept that a longer working life is not necessarily an imposition but can also bring advantages. However, they also have to pay closer attention to a related discussion – that of health in later working life. It is insufficient to point to increasing life expectancy without also addressing the issue of increasing healthy life expectancy. Much of the relevant data with respect to the latter refers to morbidity in very old age. Morbidity in later working life – which determines whether increases in the age of entitlement to an old-age pension do in fact result in longer working to the extent that is assumed they will – might not be decreasing as fast as morbidity in very old age. The Green Paper recognises this when it states: "Health policies aimed at helping citizens age in better health can contribute to extending working lives, reduce pressure on pension systems and can improve sustainability. Poor health is one of the drivers of early retirement" (p12). Its shortcoming is that it does not return to this subject under the critical heading of "better awareness and information" (Section 3.4).

Sustainability and adequacy are issues that have to be confronted. However, the Green Paper, whilst devoting space to achieving a sustainable balance between time spent in work and time spent in retirement, does not link the issue of sustainability closely enough to the issue of pension adequacy. It does not spell out the trade-offs between the two. Important results produced by the authors of the Sustainability

Report are not referred to, but even that important piece of work was incomplete. This submission has tried to make an analysis of trade-offs clearer and more complete. It has suggested that adequacy and sustainability can be complements and not merely substitutes, but it has also suggested that the achievement of both objectives presents significant challenges to policymakers.

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Tables and box

Table 1: Public pensions expenditure and generosity						
	2010	2030	2060	Δ2010-30	$\Delta 2010-60$	
Fiscal costs (% of GDP and percentage point change)						
EU27	10.2	11.4	12.5	1.2	2.3	
EU15	10.3	11.6	12.6	1.3	2.3	
Replacement rates (% of average wage and percentage change)						
EU27	50.9	46.8	40.1	-8%	-21%	
EU15	52.1	47.8	42.3	-8%	-19%	

Source: Ageing Report Table A81, Table A67

Table 2: Sensitivity of projections – increase or decrease in expenditure on public pensions, expressed as % of GDP, EU27, 2060					
Baseline		I	-4 -6		
projection	Impact of				
total increase	achieving	achieving	achieving	failure to enact	
2007-2060 ^a	higher	higher	higher	existing reforms	
	employment	employment of	effective age	reducing benefit levels e*	
	of all ages b	people 55-64 °	of exit d*	levels e *	
2.4	-0.1	-0.1	-1.8	2.1	

Source: Stability Report 2009, p61 (item d); 2009 Ageing Report, Table A81 (item a), Table A77 (item b), Table A79 (item c), Table A85(item e).

^{*}Reference is to change 2008-2060 not 2007-2060.

Table 3: Impact of increase in age of entitlement to a pension					
	expenditure falls by PPs of GDP				
	2030		2060		
age of entitlement increased by	EU27	EU15	EU27	EU15	
1 year	0.7	0.7			
2 years	1.3	1.4	1.3	1.2	
3 years	2.0	2.1	1.8	1.8	
4 years			2.4	2.4	

Reading the table: For EU27, if the age of entitlement is increased by two years, pension expenditure falls by 1.3 percentage points of GDP by 2030 relative to no change.

Table 4: Cut in pension benefits producing equivalent fall in expenditure					
	cut in pension (%)				
	2030		2060		
age of entitlement increased by	EU27	EU15	EU27	EU15	
1 year	5.9	6.1			
2 years	11.7	12.0	10.0	9.9	
3 years	17.3	17.8	14.8	14.6	
4 years			19.4	19.2	

Reading the table: For EU27, an increase in the age of entitlement of two years produces the same savings as a cut in pension benefits of 11.7 per cent.

Box1: Explanation of calculations

For the purposes of calculating the impact on pension expenditure, it is assumed that an increase in the retirement age by one year reduces the number of pensioners by a number equivalent to the share that people of a single year of age make up within the total population aged 65 and over. In other words, the impact is experienced solely upon people of pension age and over (regardless of whether or not they are pensioners) rather than upon those who are pensioners (regardless of their age). This is justified on the grounds that younger pensioners have retired not on age but on other grounds – they are "early pensioners. It is also assumed that, of those who no longer are able to draw an old-age pension, one half work. This assumption has been used elsewhere (Barrell, Hurst and Kirby, 2009).

For the purpose of calculating the reduction in the level of pensions that would generate an equivalent reduction in expenditure, a replacement rate, as measured by average pension to average wage, can be calculated. Average wage, itself, can be generated by assuming that workers' compensation constitutes 50 per cent of GDP (see Eurostat nama_gdp_c). GDP, employment and number of pensioners are maintained at the baseline level.

All data used in the calculations is taken from the statistical annex of the 2009 Ageing Report or from the Eurostat interactive database.