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The Future of Retirement Pensions in the European Union

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Abstract :

More than 10 years after the introduction of the "open coordination method" that was supposed to launch a process whereby the various national retirement systems would draw closer together, it has to be admitted that the retirement systems in Europe still differ greatly in the way they function and in terms of their financial situation in spite of forecasts of an ageing population, which typifies the present and future environment. However this situation will demand an in-depth reform of the retirement systems everywhere in Europe and this will probably have to start with changes in behaviour.

TWO MAJOR MODELS CONTINUE TO EXIST

Just a few years ago we read that in terms of retirement pensions there were "two Europe and soon there would be three"[1] : a Beveridgian model typifying the north of Europe, a Bismarckian model typifying continental Europe, and the so-called "World Bank model" based on "pay-as-you-go" which would absorb Central and Eastern Europe, whose social protection system was then being rebuilt.

But it has to be admitted that ten years after there are still two main models in Europe even though the continental model has undergone major change in the face of predictable demographic ageing. Hence the two main models continue to typify the scene of European retirement systems: the first model is Beveridgian based on the (1942) Beveridge Report which constrains public intervention to combating poverty and often to providing a safety net (a lump-sum on the creation of the systems) in terms of retirement pensions; the other is Bismarckian based on labour and comprises pensions as "replacement income". The Bismarckian model is based largely on a pay-as-you-go system and they are qualified as contributory (rights depend on the contributions paid) whilst the Beveridgian systems often go together with a significant development of fully funded systems.

As for the countries in Central and Eastern Europe they have often predominantly maintained a more or less reformed pay-as-you-go system that can be completed, or not, by "funds". Amongst the countries where reform has been the deepest Poland opted for so-called "notional accounts" which are like the point system i.e. based mainly on contributions since each wage unit earned gives rise to an accumulation of pension rights. The Czech Republic reformed its existing system.

In the 1990's Esping-Andersen [2] adopted a subtler definition of retirement systems to include successive trends: the emergence of a minimum pension in the Bismarckian systems which aim to cover the unemployed, proportional pension complements which are no longer lump-sums in the Beveridgian countries. Esping-Andersen then distinguished between "liberal" Anglo-Saxon systems – which are lump-sum, funded by contributions (UK and Ireland for example) "social democratic" systems typified by the Scandinavian countries, which are universal, lump-sum and funded by taxation (the Netherlands also fall into this type of system) and the "conservative-corporatist" systems typified by continental and southern Europe, which are contributory and funded by contributions and taxation, the management of which is often fragmented. To a certain extent, fragmentation apart, the systems in Central and Eastern Europe, in Sweden and Italy are the result of a centralising and non-corporatist change in this system. They clearly still resemble insurance schemes. Indeed these systems are managed as "pay-as-you-go" systems (with the working population paying for the pensioners) with "funds" - which are sometimes qualified as being virtual – accrued either by points or monetary units that are in no way real but which credit individual accounts virtually; this is why these systems are qualified as "notional accounts". On retirement each person has a virtual capi-

1. *« Les retraites dans l'Union européenne », La lettre de l'observatoire des retraites, n°3, July 2003.*

2. *Esping-Andersen, G. The Three Worlds of Welfare Capitalism, Cambridge: Polity Press & Princeton: Princeton University Press, 1990.*

tal – that increases according to an index as it accumulates – i.e. the GDP, or inflation – which is divided into annuities. Since the principle adopted is that of actuarial neutrality (the actual equivalent sum of the contributions made by an individual must be equal to the actual equivalent sum of the benefits which that individual will receive), the number of annuities depends on the age of retirement chosen by the individual and the generation to which he/she belongs, therefore of his/her life expectancy. The pension is therefore a product of a liquidation factor and a virtual capital accumulated during the person's working life. Based on a principle of actuarial neutrality (therefore individual), this type of system is not self-correcting since demography and the economic situation are not taken into account [3]. The long term balance of these systems is therefore also based on a reserve fund dynamic, which is vital to the overall logic of these systems. These funds are managed according to traditional funds, just like private pension funds.

PENSIONERS' LIVING STANDARDS

Pensioners' living standards have reached a level comparable to those amongst the working population almost everywhere in Europe, even though we might note some differences in levels and developments.

Relative median income of the over 65's compared to the under 65's

(Source: SILC European survey)

	1995	2005	2011
European Union(15 States)	0.852(1)	0.84	0.88
Poland	-	1.09	0.94
Czech Republic	-	0.93(2)	0.82
Denmark	-	0.70	0.72
Germany (FRG until 1990)	0.916	0.94(2)	0.90
Ireland	0.767	0.66	0.86(3)
Greece	0.716	0.79	0.81
Spain	0.952	0.75	0.83
France	0.91	0.90	1.01
Italy	0.897	0.85	0.92
The Netherlands	0.885	0.88(2)	0.87
Sweden	-	0.81	0.77
UK	0.677	0.74(2)	0.81

1. Eurostat Estimate
2. Break in series
3. 2010

It is difficult to foresee developments in pensioners' living standards. The level of retirement pensions, which represent over 60% of pensioners' income in the European Union, will probably have to be adjusted in order to overcome demographic developments. However other adjustments will be made which might limit the reduction in average living standards of pensioners like the rise in the number of women pensioners in the wake of female employment and the increasing significance of measures such as the combination of earnings and pension.

DEMOGRAPHY WILL PROBABLY DEMAND CHANGES

Due to a decline in fertility, an increase in life-expectancy, the retirement of the baby-boomers, the ageing (defined as the bulge in the age ladder as it reaches the highest age categories) of the population is inevitable.

3. Turner John A. Social security Financing: Automatic adjustments to restore solvency, AARP Public Policy Institute Research report, February 2009

European Population: structural indicators

(source: Eurostat)

	Median Age			0-14 years / 15-64 years			+ from 65 years/ 15-64 years		
	1960	2000	2012	1960	2000	2012	1960	2000	2012
EU (27 States)	-	38	41.5		25.7	23.4		23.2	26.8
EU (15 States)	-	38.6	42.5		24.4	23.4		24.2	28.5
Poland	26.4	35.1	38.4	54.5	29.1	21.2	9.5	17.8	19.4
Czech Republic	33.2	37.3	40.1	39.5	23.9	21.2	14.6	19.8	23.4
Denmark	33	38.2	40.8	39.8	27.6	27.2	16.4	22.2	26.7
Germany (FRG until 1990)	34.4	39.8	45	31	23.1	20	15.8	23.9	31.2
Ireland	29.8	32.4	35	53.2	32.8	32.5	19.2	16.8	17.9
Greece	31.2	38.1	42.6	37.6	22.9	21.8	14.2	24.2	29.9
Spain	29.6	37.4	40.7	42.6	21.8	22.6	12.7	24.5	25.8
France	-	37.3	40.2		29.4	28.9		24.3	26.6
Italy	31.2	40.1	43.8	37.4	21.2	21.5	14	26.8	31.6
The Netherlands	28.7	37.3	41.3	49.1	27.4	26.1	14.6	20	24.4
Sweden	36	39.3	40.8	34.5	28.8	25.9	17.8	26.9	29.2
UK	35.6	37.5	39.8	35.7	29.4	26.7	18	24.3	25.9

The result is that the share of national wealth taken up by retirement pensions will increase significantly if legislation is not changed. According to forecasts by the European Commission [4], the share of retirement pensions is due to rise from 11.3% on average at present to 12.9% in 2060 – an average that masks extremely varied situations however.

Share of State Pensions in the GDP

	2010	2060	Variation 60/10
EU (27 States)	11.3	12.9	1.5
Poland	11.8	9.6	-2.2
Czech Republic	9.1	11.8	2.7
Denmark	10.1	9.5	-0.6
Germany	10.8	13.4	2.6
Ireland	7.5	11.7	4.1
Greece	13.6	14.6	1.0
Spain	10.1	13.7	3.6
France	14.6	15.1	0.5
Italy	15.3	14.4	-0.9
The Netherlands	6.8	10.4	3.6

4. European Commission- The 2012 ageing report: economic and budgetary projections for the 27 EU Member States (2010-2060), European Economy 2/2012, May, Brussels.

Sweden	9.6	10.2	0.6
UK	7.7	9.2	1.5

Source : Ageing Report 2012, Commission européenne

These forecasts reflect several things: on the one hand demographic dynamics per country. In countries where there is rapid ageing (Spain, Germany) retirement spending may rise sharply. However other countries where there is also rapid ageing, like in Italy, Sweden and Poland are experiencing negative and moderate variations in public retirement spending.

Forecasts are counting on ongoing or future reform and on the success of this. Usually we analyse the increase in the share of spending in order to reveal the influence of the different variables like demography, employment of the 20-64 year olds (which measures the "fiscal base"), replacement rates (pension-salaries ratio), the coverage rate (the number of pensioners amongst the over 65's ; note that this variable can develop favourably in both directions: a positive development may indicate a decline in informal work – in the case of the emerging countries – whilst a negative development might mean a rise in the period of time worked – the case of ageing developed countries-). Except for in the UK and the Netherlands, we note that the countries of the EU have often opted for a reduction in replacement rates and therefore for a reduction, either relative – in pensioners' buying power in comparison with the working population or in absolute real terms (de-indexation in comparison with inflation). Generally all countries are counting on an increase in median employment ages but also on an increase in coverage rates, i.e. on an increase in the age of retirement and the employment of seniors. This is particularly the case in countries that have introduced systems based on high contributions or in the shape of notional accounts: Italy and also Central and Eastern Europe have adopted these systems. Poland is quite emblematic from this point of view.

The table below shows how the countries have planned to "neutralise" the ageing effect on their pension spending.

Contribution of the different variables to the increase of the weight of retirement pensions in GDP between 2010 and 2060.

	Contribution of the rate of :			
	long term care	coverage	employment	**replacement**
European Union 27	8.5	-2.9	-0.8	-2.7
Poland	14	-5	-0.4	-8.7
Czech Republic	9.3	-4.6	-0.6	-0.2
Denmark	5.9	-4.2	-0.4	-1.2
Germany	7.9	-1.8	-0.5	-2.2
Ireland	5.3	-2	-0.4	0.1
Greece	10.4	-3.4	-1.9	-3.6
Spain	9.7	-0.8	-2.2	-2.3
France	9.1	-3.5	-1.2	-3.1
Italy	9.5	-5.5	-1.3	-2.9
The Netherlands	6	-1	-0.2	-0.8

Sweden	5	-0.8	-0.5	-2.7
UK	3.1	-1.4	-0.2	0.8

Note: the sum is not equal to the column 60/10 in table 3 since residual effects or interaction have to be taken into account.

The growth in public retirement spending and its breakdown are extremely sensitive to the selected macro-economic and demographic hypotheses. Rates of coverage and employment depend not only on the decisions that are taken by governments – notably in terms of coverage rates – but also economic conditions and growth rates as well as how the labour market is functioning. The replacement rate depends on political decisions and the way pensions will be calculated and indexed in the future but also on productivity growth rates and the economy in general. From a general point of view pensions are indexed either on salaries or on prices, or on a composite index that takes both variables into account. As soon as pensions are no longer re-assessed according to salaries any increase in growth or productivity not only leads to a relative impoverishment of the retired but at the same time it reduces pension spending. This can lead to a slowing in pension spending growth. France, notably but also Spain and Italy (depending on the pension level) re-assess their pensions like inflation and are good examples of the search for savings via de-indexation.

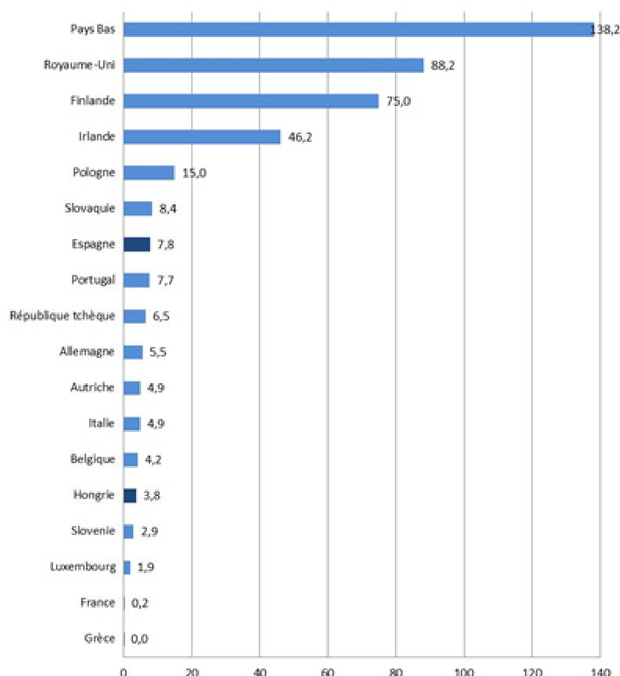
CRISES AND RIFTS AFFECT PUBLIC AND PRIVATE PENSIONS

The economic crisis which started in 2007 with the sub-prime crisis affected European economic growth severely. With employment rates lower than planned, difficulty in retaining senior workers, low economic growth, state pensions have suffered because of the crisis.

For similar reasons, to which we might add weak and even negative financial yields, private pension funds – just like pension reserve funds – have also been severely affected by the crisis.

The impact of the financial crisis has been proportional to the weight of private pension funds in the economy, a variable weight in line with the division of systems – between, the Bismarckian and Beveridgian.

Weight of Pension Funds as Share of the GDP (2011), % of the GDP (source OECD)



With yields close to -40% in 2008 the Irish pension funds were sorely affected. In Finland and the Netherlands results were slightly less negative (-18%) whilst British funds dropped to -13%.

Whilst we might immediately believe that defined benefit systems (whose commitments vis-à-vis pensioners are set ab initio) have not suffered as much as defined contribution plans (in which pensions can vary) whereby pensioners or future pensioners have lost a share of their assets – this is far from the truth. Indeed the crisis has reduced pension fund reserves to below 100%. Hence they will have to recapitalise in an economic situation in which it is difficult to demand additional contributions on the part of businesses and their employees.

We should note that these negative results are also to be found in the pay-as-you-go pension fund reserves which indirectly affect public retirement plans a second time round.

THE SYSTEMS ADAPT TO THE CRISIS BUT STILL HAVE TO CHANGE

As far as pension funds are concerned we have seen for several years that there has been a trend on the part of businesses to promote defined contribution, rather than defined benefits pension funds. Undoubtedly this shift will continue.

However defined benefits pension funds have sometimes undergone significant change. Hence the Dutch pension funds have to reach a level of 105% by the end of 2013 otherwise the pace of rights acquisition will have to be slowed, and pensions might even be reduced. However the discount rate used to calculate funds will have to develop towards a so-called "ultimate forward" rate (of 4.2%) in order to circumvent fluctuations in market rates. This mechanically increases the rates of the fund provisions. American private pension funds adopted a similar measure on the occasion of the so-called "MAP 21" reform ("Moving Ahead for Progress in the 21st century bill, section "Pension Funding for Stabilization") approved on 6th July 2012 that will increase the discount rate. Some critics then pointed out that there is a danger that resources will be inadequate.

As for public pensions we have shown that – even if we can count on the effectiveness and efficacy of the reforms – their cost measured in terms of national wealth will tend to increase in the European Union. The very existence of these reforms seems to show that the question of the share of the GDP to devote to retirement pensions has been decided and that States will try to curb any increase of this figure.

The reforms depend greatly on an increase in the activity levels of senior workers, a vital pre-requisite for an increase in the retirement age or the length of time worked, otherwise governments will decide to decrease replacement rates and/or endogenous (because contributors will not have accumulated the necessary annuities for the acquisition of a full pension) or exogenous pensions. A reduction in indexation rates is a relatively easy option amongst possible adjustments. Another way of reducing the pension rights of some is to move over to a single point based system in countries which have annuity or mixed systems (like France for example) or towards a notional account system. These highly contributory systems are also expected to reward long careers.

Unless there is structural reform like this, replacement rates may decrease and this might impoverish a great number of pensioners. In the Bismarckian countries some plead in support of targeted solidarity, which would tend towards more Beveridgian, Anglo-Saxon systems, in which only the poorest would benefit from redistribution.

CONCLUSION

In all events in countries where public pensions still take up a major share of pensioners' income, increasingly people will turn to individual savings to fund their retirement. Recent statistics by the European Central Bank [5] show that in 2010 and across all of the Union's countries – within financial savings, 15% of overall wealth – 26.3% is devoted to life in-

5. European central bank, The eurosystem household finance and consumption survey. Results from the first wave. Statistics paper series, n°2, April 2013.

surance or facultative pension funds. This share will undoubtedly increase since the alternative is that on retirement people will "consume" other types of accumulated wealth.

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