Active Aging: Mandatory Retirement as a Barrier

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We are living in an aging world and Europe is the oldest continent of all. Population trends in the 27 European Union countries are currently very similar, reflecting the world's lowest rates of growth, lowest birth rates and highest life expectancies.

According to UN demographic projections, the total EU-27 population will decrease by 3 million between 2005 and 2025. However,, the loss of population will not be similar in all age groups of the EU population. In fact, although there will be a reduction in the numbers of children, adolescents, young adults and adults under 55, there will, simultaneously, be an increase in the numbers of older workers, over-65s and of the very old (over 85).

Parallel to this aging revolution, the traditional intergenerational division of labor has changed dramatically, so that whereas in the past people usually started working (at least in white collar jobs) at about 20 years of age and had mandatory retirement at 65, they now begin when they are 30 and frequently retire at 55 in line with early retirement policies. Therefore, working lives have been reduced from an average of 45 years to an average of 25 years. And since life expectancy has increased in the same period from around 63 to 80 years, it means that Europeans are living longer and working less in both absolute and relative numbers of years.

This demographic situation requires active aging policies. Active aging has emerged as a new paradigm supported by the following assumptions: the plasticity and reserve capacity of human functioning, the modifiability of one's bio-psychological capacity for improvement, the possibility of compensation for dysfunctions and, therefore, the need to implement programs to promote active aging in order to extend active and satisfactory life throughout the life span.

This article deals with a demographic overview, focusing on the barriers to active aging presented by labor regulation. This overview begins with a review of the European protection system, in particular Mandatory Retirement (MR) and its effects on the individual and socie-

tal levels, and continues to offer recommendations before a few concluding remarks.

Current demographic trends in Europe

Recent population trends in Europe (and indeed most short-term forecasts) suggest a general population decline in this area, due to a persistently low birth rate (below replacement level) and an increasing aging of the population. Population trends in the 27 European Union countries are very similar at present, reflecting the world's lowest growth rates, lowest birth rates and highest life expectancies. The combination of these three processes is producing the most aged populations in the world. If these trends continue, the population of the European Union will not only decline, but will become even more aged, with the labor force shrinking further. Some of the measures proposed to avoid such a situation include increasing fertility and/or immigration, on the assumption that this will increase population growth, make the population younger and increase the workforce. However, higher fertility and immigration are not the only possible answers to this situation, and some benefits may even be derived from non-growing and aging populations, provided that societies adopt the changes that adapting to the new demographic situation requires (Díez-Nicolás, 2004).

Life expectancy has increased slowly but steadily in all European countries over the past two decades, and since 1985 the total birth rate has remained below the replacement level in most countries. Some European countries (14 out of 25) slightly increased their birth rate in very recent years, though only by one or two decimal points in most cases, and in 2007 all twenty-seven countries remained below the replacement level. In the majority of cases, the small increase is a result of female immigrants' higher fertility rates. In 1980 most EU countries had a total population growth rate of less than 1 per cent/year, but five countries had rates slightly above 1%, and only Hungary experienced a negative growth rate. On examining the components of total population growth, we find that in 1980 most countries had a positive natural growth (though Austria and Germany already had negative natural growth), as well as positive net migration. And in all but six countries, the natural growth component had greater weight than the immigration component in determining the total growth rate. By 2007 the situation

had changed significantly, as shown in Table 1. Eight countries showed negative total growth rates, and the rest had rates of less than 1% (Cyprus, Ireland, Luxembourg and Spain being the exceptions). However, in fifteen countries, the net migration component has a greater effect on total growth than natural growth, in eight countries natural growth is greater, and in four countries the two components carry the same weight.

UN projected rates of the total growth of the 27 member countries of the EU between 2007 and 2025 are all below 1% (Romania being the only exception). In 13 of these countries, the total projected growth is expected to be negative, and in three other countries zero growth is expected.

At this point it is important to stress that there is no basis for expecting a significant increase in fertility that would help reverse, reduce, or even halt the aging process of the population composition in European Union countries. However, immigration, in spite of its important absolute and relative weight in many European populations, has not had significant effects on the aging process, which continues at an even greater rate. The proportion of the population aged over 65 in all 27 countries is at present between 14 and 19 per cent, and will be close to 25% by 2025, according to UN projections.

Eurostat projections (EC, 2006) summarize the population growth prospects for three shorter periods within the longer period of 2005 to 2050. According to these projections, the total population in the EU will decrease by more than 8.6 million between 2005 and 2050, and the loss will be much greater in the period 2030-2050, given that in the two previous periods (2005-2010 and 2010-2030) some positive growth is expected (though UN projections estimate a loss of 3 million inhabitants in the period 2007-2025, as shown above). But the loss of population will not be similar for all EU population age groups. In fact, there will be a reduction of 19% in the number of children aged 0 to 14 during the total 45-year period, a reduction of 24% in the number of young people aged 15 to 24, a reduction of 25% in young adults aged 25 to 39, a reduction of 19% in adults aged 40 to 54, but an increase of 9% in the number of older workers (aged 55 to 64), an increase of 44% in the number of those aged 65 to 79 and an increase of 172% in the number of 'frail elderly' (80 years and over).

Table 1. European Union population (2007), main demographic indicators for 2007, and projected population for 2025*.

	Population mid 2007 (Millions)	Projected population (Millions)	Projected annual rate of increase (%) a 2002-2025	Rate of natural increase %	Net migra- tion rate per 1.000	Total fertility rate	Life expectancy at birth (both sexes)	Percent of population of age	
, Kusqi								< 15	65+
EU-27ª	495.2	492.3	-0,03						
Austria	8.3	8.8	0,33	0	4	1.4	80	16	17
Belgium	10.6	10.8	0,10	0.1	3	1.7	79	17	17
Bulgaria	7.7	6.6	-0,79	-0.5	0	1.4	73	13	17
Cyprus	1.0	1.1	0,56	0.5	29	1.5	78	19	11
Czech Rep.	10.3	10.2	-0,05	0	3	1.3	76	15	14
Estonia	1.3	1.2	-0,43	-0.2	-0	1.6	73	15	17
Denmark	5.5	5.6	0,10	0.2	2	1.9	78	19	15
Finland	5.3	5.6	0,31	0.2	2	1.8	79	17	16
France	61.7	66.1	0,40	0.4	2	2.0	81	18	16
Germany	82.3	79.6	-0,18	-0.2	0	1.3	79	14	19
Greece	11.2	11.3	0,05	0	4	1.3	79	14	19
Hungary	10.1	9.6	-0,28	-0.3	2	1.3	73	15	16
Ireland	4.4	4.9	0,63	0.9	16	1.9	78	20	11
Italy	59.3	58.7	-0,06	0	4	1.4	81	14	20
Latvia	2.3	2.2	-0,24	-0.5	-1	1.4	72	14	17
Lithuania	3.4	3.1	-0,49	-0.4	-1	1.3	71	16	16
Luxembourg	0.5	0.5	0,00	0.4	6	1.7	78	19	14
Malta	0.4	0.4	0,00	0.2	- 2	1.4	80	17	13
Netherlands	16.4	16.9	0,17	0.3	-2	1.7	80	18	14
Poland	38.1	36.7	-0,20	0	-1	1.3	75	16	13
Portugal	10.7	10.4	-0,16	0	5	1.4	78	16	17
Romania	21.6	17.1	-1,16	-0.2	0	1.3	71	16	15
Slovakia	5.4	5.2	-0,21	0	1	1.3	74	16	12
Slovenia	2.0	2.0	0,00	0	4	1.3	78	14	16
Spain	45.3	42.0	-0,40	0.3	7	1.4	80	14	17
Sweden	9.1	9.9	0,49	0.2	6	1.9	81	17	17
UK	61.0	65.8	0,44	0.3	4	1.8	79	18	16

^{*} Source: Population Reference Bureau, World Population 2007 [2].

^a Calculated by the authors.

In conclusion, the total population of the EU is expected to decrease by 2050 and, most likely, even by 2025. Fertility is expected to grow positively but by only one or two decimal points, and men's life expectancy will probably increase by about seven years, while life expectancy for women will increase by five years. However, the repercussion of these trends for the age structure is that the 'old-old' will increase more than proportionately, that is, much more than other age groups. Significant increases in the birth rate are not envisaged, and increases in the immigrant population do not seem to have a large effect on the age structure, so that neither of these factors will succeed in modifying the long-term trend toward the ever-increasing aging of the European populations. On the contrary, in spite of immigration, population aging in the EU is expected to continue at an even greater rate – though getting people to live longer, it must be said, should not be considered a problem but rather a success.

Given the situation described above, 'over-65' is clearly a very broad and diverse category, and should perhaps be divided into two subgroups: 65-79 and 80 years and over. A large proportion of this broad group has an enormous potential to contribute to an aging world.

Active aging

As already described, the second half of the 20th century was characterized by increasing life expectancy and a strong decline in birth rate, the combination of which has led to an increase in absolute and relative numbers of people over 65 throughout the world. Such changes are undoubtedly due to the geometric progression of human and social (scientific, technical, political, etc.) developments.

However, since the 'old-old' is the age group with the highest rate of increase, and is strongly associated with illness and disability, from a bio-medical perspective, the aging phenomenon is considered a threat at an individual, familial and societal level (Schroots, Fernández-Ballesteros & Rudinger, 1999). Moreover, based on this bio-medical view of aging, social stereotypes encourage a negative view of aging as 'senescence' (unavoidable decline), thus over-generalizing the elderly as ill, frail, cognitively impaired, rigid and inflexible, poor workers, etc. (Fernández-Ballesteros, 2006). Such stereotypes are decisive for producing ageism and discriminatory behavior at individual, group and

societal levels. Finally, as several authors have pointed out, stereotypes and self-stereotypes act as self-fulfilling prophecies, and underlie elders' negative behaviors (such as memory performance or walking speed), the expectations and behaviors of family members and care professionals, and indeed many of the discriminatory regulations of social life, such as mandatory retirement.

However, although the prevalence of illness (physical and mental) and the increased costs of social and medical care throughout the life span justify some degree of the threat related to aging, scientific discoveries also support a positive view of aging.

Bases of active aging

Over the last three decades, research has yielded new data, considerably changing the perspectives on the subject. Fernández Ballesteros (2008) summarizes the three most important bases of active aging: compression of morbidity, interindividual variability and the plasticity of human beings.

At the population level, a *first* observation is that, throughout the 20th century, human beings did not only live increasingly longer, but their health had also steadily improved. At the beginning of the 1980s, Fries and Crapo (1981) argued against the medical model for the study of aging. They claimed that with our new knowledge about human aging, morbidity, mortality and survival, we could arrive at the following syllogism: the human life span is fixed, the age at first infirmity will increase, therefore the duration of infirmity will decrease. This is based on the idea that an increase in life expectancy would involve a prolongation of vitality and good health, rather than a prolongation of morbidity and disability.

This syllogism emerged from the analysis of human survival curves, decade by decade, from 1900 to 1980. From this analysis, Fries and Crapo arrive at three conclusions: (i) these curves demonstrate that the maximum age of survival is fixed (close to 100 years), (ii) the proportion of survival is not only increasing in the first years of life but at almost all ages up to the predicted limit of human life, adopting a 'rectangular' shape, and (iii) this 'rectangularization' expresses the postponement of infirmity and the compression of morbidity.

These conclusions, arrived at by Fries and Crapo in 1981, are supported by recent demographic data from several sources (for a review, see Robine, 2001). Meslé and Vallin (2003), for example, examined the

rectangularization of survival curves for French women during the last 250 years; both cross-sectional (data from 1802, 1906 and 1996, and projections for 2102) and cohort (data from 1806, 1906 and 1996 cohorts) data (assuming 105 years as maximum life length) showed that while the curves for the year 1806 and the 1806 cohort are quite similar, one hundred years later the cohort born in 1906 is much more rectangular than the curve for the year 1906, with this effect continuing in subsequent years.

In sum, the rectangularization of the survival curve represents – like changes in aging patterns – a demographic revolution attributable to human development and social improvements in living conditions (hygiene, health services, education, etc.). However, living conditions are diverse both because socio-economic and cultural environments are diverse and because individuals behave differently in different environmental and cultural contexts. Such environmental diversity produces extensive inter-individual variability in the ways people age.

Therefore, the *second* assumption considered by most authors in the field concerns the well-documented variability of the aging phenomenon itself, which can be classified as: usual, pathological or optimal (*e.g.*: Baltes & Baltes, 1990; Fries, 1989; Lerner, 1984; Plomin & Thompson, 1986; Rowe & Kahn, 1987). These three broad categories appear to maintain their descriptive and heuristic power even in very old people (see, for example: Baltes and Smith, 2003¹ in over-70s; Motta et al., 2005² in centenarians).

In fact, any pattern of decline across ages has high variability, and variability increases over the life span (Smith & Baltes, 1999). Therefore, there is great heterogeneity in the way aging is expressed at the level of individuals: from active, healthy and successful aging to normal aging or aging with disability. In other words, older people differ more than younger people.

By way of example, Figure 1 shows variability (standard deviation) in three physical (tapping speed), health (number of health problems reported) and social (social interaction frequency) conditions involved

They regarded the oldest old at the limits of their functionality. The very old individuals in the BASE study can be classified according to these three categories.

In their study of centenarians (N=602), they classified 20% as in good health, independent and maintaining good cognitive functioning, though maintaining no social or productive activity; 33.4% as intermediate-functioning, and 46.6% as having poor health and functional status.

in the EXCELSA study – assessing aging, health and competence – which was carried out in 7 European countries (N=672) with people from ages 30 to 85 (Fernández-Ballesteros, Zamarrón, Rudinger, Schroots et al., 2004). With age, the standard deviation is found to increase regarding health, physical and psychosocial conditions.

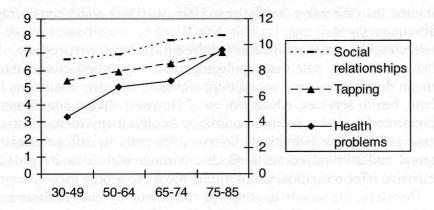


Figure 1. Variability (SD) in three bio-psycho-social conditions from the EXCELSA study (30 to 85 years; N=672) (Fermández-Ballesteros et al. 2004).

In sum, our second assumption is that there are large individual differences in adaptive mechanisms across the life span, thus reflecting the diversity in aging trajectories (*e.g.*, Baltes & Baltes, 1990; Carstensen, 1993; Greve & Staudinger, 2006).

Our *third* and final assumption is based on findings from experimental, longitudinal and cohort research carried out from psychological and neurobiological perspectives, indicating the extensive plasticity and reserve capacity of human functioning. Thus, research in gerontology supports the existence of a basic multilevel principle of plasticity at the biological level, including the central nervous system (CNS), which, at the phenotypical level, is expressed by cognitive, emotional and behavioral plasticity measured by changes in individuals after training. In fact, plasticity is also the basis for the results, indicating that most conditions, which decline over the life span, can be modified through environmental interventions.

Figure 2 shows learning potential (as a measure of cognitive plasticity), assessed via a verbal learning task with 6 trials. The participants were healthy elders (N=100; Mean age = 73.13), persons with mild cognitive impairment (N=50; Mean age = 74.89), and patients with Alzheimer's disease (N=50; Mean age = 75.07). The task used is from a Battery for Assessing Learning Potential in Dementia (BEPAD, Fernández-Ballesteros, Zamarrón, Tárraga, Moya & Iñiguez, 2003).

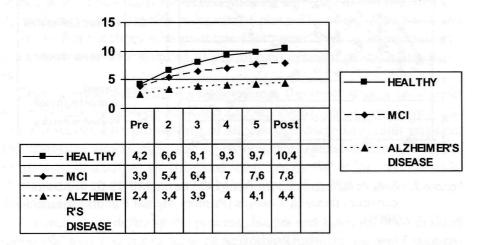


Figure 2. Learning potential (cognitive plasticity) in a verbal task with 6 learning trials (AVLT-PA) in healthy elders (N=100), Mild Cognitive Impairment individuals (N=50) and Alzheimer's disease patients (N=50) (Fernández-Ballesteros et al., 2003).

Results show a broad plasticity in healthy subjects, but also that even mild cognitively impaired individuals and patients with Alzheimer's disease are able to learn. Furthermore, plasticity reflects changes in cohorts throughout history; therefore, over the course of the 20th century, new cohorts showed better cognitive functioning than previous cohorts, as shown in Figure 3. As Schaie (2005) pointed out from the Seattle longitudinal cohort study results, there is a substantial and linear increase in cohort performance in Inductive Reasoning and Perceptual Speed (approximately 1 SD). Similar, but less pronounced, patterns are found for Spatial Orientation and Verbal Memory. Finally, a modest negative gradient (approximately 0.1 SD) is found for Numerical Facility and Verbal Comprehension.

In sum, the plasticity of human functioning – the modifiability of one's bio-psychological capacity to improve, reserve capacity and/or to compensate for dysfunctions – is a cornerstone of active aging.

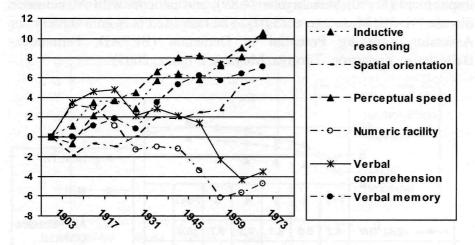


Figure 3. Cohort differences born from 1903 through 1973 for the latent construct factor in T-scores (Primary Mental Factors)(from Schaie, 2005).

Active aging concept

In recent decades, positive aging has been a relevant research issue, adopting several names: healthy, successful, optimal, competent, active and/or productive aging. This new set of concepts is based on two general psychosocial theories of aging: activity theory (Havighurst, 1963) and continuity theory (Atchley, 1989). Both theories assume that older people either continue activities into old age or compensate for the loss of traditional roles, and both have empirical support.

Fernández-Ballesteros (2008) examined the evolution of the use of most of these terms in scientific literature databases (bio-medical and psychological) from 1970 to 2007. Figure 4 shows the comparison between the PubMed and PsycINFO databases. In short, 'healthy' aging is the term most commonly used in the bio-medical literature, while 'successful' aging is the usual keyword in psychology literature; 'active', 'productive' and 'optimal' aging are significantly less widely cited, although their use has been increasing in bio-medical literature since the 1990s and in psychological databases since the first decade of the 21st

century. These results reflect the history of the concept, which we shall consider presently.

Embracing this set of concepts, there are dozens of definitions of the positive form of aging, which have been classified into two broad categories: outcome and process definitions. Perhaps the oldest term in this field is 'healthy' aging, extensively used in bio-medical literature. Obviously, healthy aging has 'good health' as its outcome, defined by research with bio-medical indicators such as survival, morbidity, disability, and longevity. But this reductionist perspective has received strong criticism from authors who maintain that positive aging is multidimensional and cannot be reduced to just one component of the aging process.

From a multidimensional consideration, the most widely used definition is that by Rowe and Kahn (1997; 1998), for whom successful aging involves low probability of illness and disability, high physical and cognitive functioning and high social engagement. Thus, 'healthy' aging was, in a sense, transformed into 'successful' aging, so that indicators used in research are not only bio-medical, but also physical, cognitive and social.

Among others defining the process, Baltes and Baltes (1990) defined successful aging as the process of Selective Optimization and Compensation (SOC model), which takes into consideration how individuals reach old age in good physical, mental and social shape. These outcomes and process definitions also have broad empirical support from cross-sectional, longitudinal, cohort and experimental data.

Nevertheless, as Figure 4 shows, the use of 'active' aging began more recently, particularly due to the strong influence of international organizations in the wake, for example, of the Second International Plan of Action on Aging (MIPAA; UN, 2002). The MIPAA focuses on three priority directions: older people and development, advancing health and well-being into old age and ensuring enabling and supportive environments. Furthermore, the MIPAA "is a source for policy-making, suggesting ways for governments, non-governmental organizations and other actors to reorient the way in which their societies perceive, interact with and care for their older citizens" (UN, 2002).

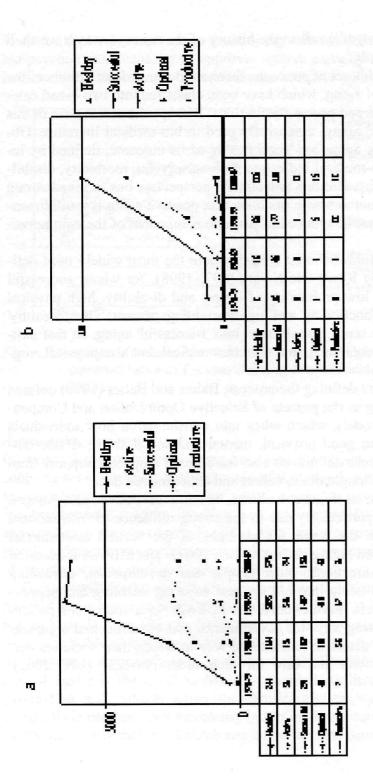


Figure 4. Active ag(e)ing and related concepts research in PubMed (a) and PsycINFO (b) scientific data bases (1970-2007) (Fernández-Ballesteros, 2008).

Based on the MIPAA, the United Nations Economic Commission for Europe and North America also developed a Regional Implementation Strategy (RIS)(UNECE, 2003) through ten commitments, several of them related to the promotion of active aging, ensuring the full integration and participation of older people in society (including the labour market).

Furthermore, in 2002 the World Health Organization (WHO) published the booklet *Active Aging; A Policy Framework* (after the publication in 2001 of *Health and Aging; A Discussion Paper*). Consequently, the WHO changed from the most commonly used term (healthy aging) to the more comprehensive and necessarily multidimensional 'active aging', which was defined as "...the process of optimizing opportunities for health, participation and security in order to enhance well-being and quality of life as people age...". The determinants of active aging at the population level are health and social services, social, economic and environmental conditions, and at the individual level, behavioral life styles and biological and psychological characteristics.

In line with the WHO proposals and the priority directions of the MIPAA and RIS, it follows that policies for promoting active aging should be implemented throughout the world, at both individual and societal levels, particularly in those continents with very high numbers of older citizens, such as Europe.

The WHO (2001, 2002) makes the following proposals for promoting active aging: (1) Reduce risk factors associated with major diseases and increase factors that protect health throughout the life course, thus promoting healthy behavioral life styles, (2) promote protective factors of cognitive functioning, (3) promote positive affect, control and coping, and (4) promote psychosocial functioning and participation.

Selecting from these four areas that which involves psychosocial functioning and social participation would embrace the following recommendations: to encourage empowerment in old age; to promote positive images about the aged, age and aging; to enable people to build collective and self-efficacy beliefs and to promote social participation. Thus, psychosocial functioning and social participation would be considered the crux of active aging.

In sum, the discussion on emerging productivity in the 21st century is strongly related to active aging, but also to potential social barriers raised by labour market regulations.

Living longer, working less

As was shown above, demographic data and research suggest that the population aging process is taking place globally due to an accelerated increase in life expectancy and a world reduction in fertility, though both processes are more visible in the more developed countries. More specifically, aging in more developed countries has been much more intense and has taken place in a shorter period of time than forecasted only a couple of decades ago by international organizations in general and the UN in particular. Consequently, although there are differences in the level and ranking place between more and less developed countries, global trends in total population growth are increasingly approaching zero. Consequently, the resulting demographic structure is losing its pyramidal shape to acquire a more rectangular one in which the proportion of people in one age group is very similar to the proportion in other age groups, since most people are reaching increasingly advanced ages.

On evaluating these trends, it is clear that population aging should not be considered a problem, but rather a great achievement by humanity, since it implies that most of the individuals in a given cohort will live until very advanced ages, which are approaching 100 years. And this aging process is taking place in all countries, though it did, of course, first occur in the more developed countries and, specifically, in the member countries of the European Union.

Parallel to this aging revolution, the traditional division of labour between age groups has changed dramatically. Some key patterns are displayed graphically in Figure 5. At the beginning of the twentieth century, those aged 15 years and under were considered young, while those over 65 were considered old. At that time, people generally started working at the age of 18/22 (depending on whether they were blue or white-collar workers) and finished working more or less when they died, since few survived long after the retirement age of 65 (Díez Nicolás, 2006). Today, people require a very long academic and/or professional training, so that they start working (at least in white-collar

jobs) around the age of 25, whilst reaching mandatory retirement at the same age as people did 50 years ago, that is, at 65. However, taking early retirement programs into account and since the mean retirement age is about 55, people have 20-25 years ahead before dying, since life expectancy is approaching 80 years.

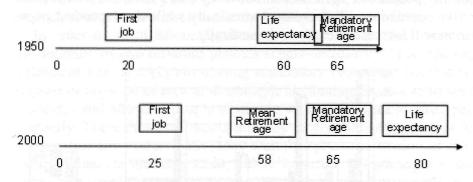


Figure 5. Changing work patterns across the life span in 1950 and 2000 (modified from Díez Nicolás, 2005, and Fernández-Ballesteros, 2008, p. 69).

However, this is not all. As Avramov and Maskova (2003) have pointed out, from the beginning of the twentieth century until about 1970, men's age at retirement was around 65 years in most European countries (data for women are much more heterogeneous due to their very low employment rate), however, since 1970, the average age at retirement has been steadily decreasing.

Figure 6 shows that the proportion of people aged 60 or more who are still working is extremely low in Northern, Southern and Western European countries, in respect of both men and (with even lower figures) women. Clearly, this situation is an expression of the aging process in the labour market.

As Marin (2007) emphasized during his lecture at the International Conference on Aging: ever later labor-market entry and much earlier workforce exit compresses working life into the early-middle adulthood – the 'prime age' of 25-54.

Moreover, and as has been shown above, demographic data suggest that in European countries we can expect significant reductions in the population proportion aged 15-24, 25-39, 40-54 and 55-64 during the coming decades, especially between 2030 and 2050, while the population aged 65-79 is simultaneously expected to increase by almost 50%, and the population aged 80 and above by more than 150%. Thus, the active population will decrease dramatically while the dependent population will increase even more dramatically.

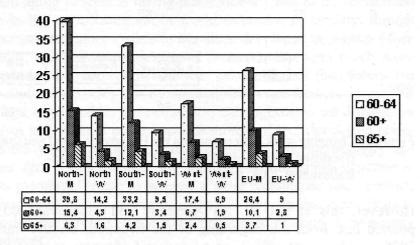


Figure 6. Percentage of working men and women by EU regions and by age group (from Avramov & Mascova, 2003).

As a consequence, traditional age working patterns can no longer be used. However, as stressed by Avramov and Maskova (2003), the mismatch between demographic structure and processes as well as policies in the field of employment (such as maintaining mandatory retirement age) reflects turning a blind eye to the structure of the population and to the individual variation in aging. Thus, adapting employment regulations to the new social reality of the positive demographic and individual changes (high life expectancy, good performance in old age) seems essential. If individuals remained in the active population for around two-thirds of their total life span of 65 years in societies with preindustrial demographic structures, given the current postponement of labour-market entry until age 25 or even later and long-term unemployment or early retirement (mandatory or voluntary) at age 55, combined with an increase in life expectancy until age 80, individuals may

be part of the active population for an average of just one-third of their total life. No society can support such a situation, therefore the social structures must adapt to the new demographic reality of an increasingly older population (around 20% over 75 years of age in the very near future in European societies) as well as a population of young people who delay their age of entry into the labour market and, consequently, their emancipation from the nuclear family until age 30 or even later.

In order to adapt labour regulations to the demographic structure, the adoption of two different policies seems necessary: (1) postponing retirement age, and (2) eliminating mandatory retirement (except for reasons of physical or mental disability), facilitating flexible retirement processes and allowing people to decide when they want to retire permanently. These measures would not only be economically positive for society, but more importantly, they would imply an extension of individual rights. On the other hand, failure to accept this principle would once again imply unacceptable age discrimination with impacts contrary to the commonly accepted idea that nobody should be discriminated against in respect of sex, age, race, religion, ideology or social condition.

In a few decades, postponement of retirement age will be a necessity in European countries due to a lack of social security funds. This has been recognized by the European Union through recommendations from the Lisbon, Stockholm and Barcelona conferences (as well as in the International Plan of Action on Aging and the European Strategy) on this matter, although there have been no repercussions regarding European employment regulations. Moreover, although electorates in European countries have contested such recommendations, governments would be wise to begin the adaptation process by stimulating voluntary permanence in the labour force through the abolition of mandatory retirement, only making it a consequence of physical or mental incapacity.

The attempt to justify mandatory retirement on the grounds of offering young cohorts a greater supply of jobs is based on a fallacy (there is no proof of the connection). Mandatory retirement not only fails to favor intergenerational solidarity, but also stimulates confrontation and conflict between generations. In line with the principle that the social structure should adapt to the demographic structure, societies should create work for young people, young adults and older people, but they

should also not take jobs away from one age group to give them to another.

Removing people from active working life only for reasons of age when they are in good physical and mental condition, preventing them from continuing their work and doing so when, with the present life expectancy, they will remain in this condition for some twenty or thirty years, does not seem to correspond to the new values of emancipation and respect for individual rights associated with modern democracies.

Finally, employment regulation policies in Europe run counter to other policies also related to population aging and recommended by international and regional organizations (UN, 2002; UNECE, 2003) as part of their active aging policies.

Social barriers to active aging, an example: Mandatory retirement

As Avramov and Maskova (2003) point out, on examining the activity patterns of older people as revealed by national and international aging studies throughout Europe, a variety of societal factors, such as cultural values, economic conditions and social policies in various domains, act as social barriers to active aging with mandatory retirement (MR) being one of the most powerful.

As far as social welfare systems in Europe are concerned, in premodern times people worked until they were disabled or died. It was at the end of the 19th century, with Bismarck's system for protecting the aged and disabled, that old-age pensions were first introduced and available from age 70. At that time, life expectancy at birth was approximately 45 years, and very few people surpassed the retirement age of 70. In the course of the 20th century, the retirement age was reduced to 65 in most European countries, nevertheless, as already mentioned, early retirement programs became increasingly common, so that since the 1970s the average age at retirement has been continuously decreasing in men, while very few older women were still working (see Figure 6).

Reasons for supporting MR and early retirement are often based on the argument that the labour market should be open to younger cohorts, using the excuse of solidarity, greater efficiency and social utility. Once more, it must be stressed that it is discriminatory to adopt such decisions based only on age criteria. Moreover, as Marin (2007) points out, only 1 in 7 jobs left by retired elders are occupied by a young worker. In contrast, there is clear potential for intergenerational solidarity in the field of vital organ donation from elderly people to young people and vice versa, provided this is done on a non-profit and voluntary basis, and not as a result of mandatory regulation. Finally, it should not be overlooked that population aging is in itself a source of new jobs in such areas as education, health care, personal attention for the sick, the elderly and the handicapped, leisure, fitness or tourism.

This situation in relation to the age of MR should be seen in the current context, notably with regard to two aspects: (1) life expectancy has dramatically increased to almost 80 years in most Western European countries, (2) research on aging has revealed positive physical and cognitive changes across cohorts (as referred to in a previous section); thus, today, a 65/70-year-old person could be situated (mentally and physically) approximately 1 SD above his/her counterpart when mandatory retirement was established (Baltes & Willis, 1982; Schaie, 2005). In sum, MR not only reflects the age discrimination and ageism of the welfare system, but is also contrary to common sense, as underlined in a previous section.

Moreover, from the political and economic perspectives, MR could be considered basically perverse in two particular senses: (1) Although the protection model in the welfare society is characterized by a voluntary agreement, and retirement could be considered as fully consensual among the parties concerned (opening the door for early retirement), mandatory retirement implies a forced behavior. Furthermore, MR obligations continue despite opposition from the general public; (2) The root of MR was the relationship between age and disability, so that the goal of this regulation was to maintain work efficiency. However, MR is independent of the worker's ability because it is exclusively based on age, even in those jobs with continual monitoring of performance (as with academics and scientists). Therefore, MR can be understood as going against not only individual rights, but also, indeed, organizational and managerial principles (see Gomez & Gunderson, 2007; Kesselman, 2004; www.abilitynotage.ca).

We have thus seen some of the supporting arguments for voluntary retirement from demographic, socio-political, economic and managerial points of view, and even acknowledged the alleged potential benefits of MR (it is, *e.g.*, necessary to open the market to young workers). Having drawn some conclusions on the perverse nature of MR, our purpose is

now to examine the extent to which MR is a barrier to active aging, so that it can be removed and an increase in retirement age and retirement made voluntary.

Retirement is considered a positive life event, but its effect on health depends on both the social and individual subject's situation and on his/her coping abilities, so that its influence is very difficult to generalize. Whilst reviewing the literature in the field, Dave, Rashad and Spasojevic (2006) studied seven longitudinal waves of the Health and Retirement Study. Their results showed a minor retirement effect on health indicators (5-16% increasing mobility difficulties; 5-6% increasing illness conditions; 6-9% decline in mental health) over an average post-retirement of six years. However, the authors drew an important conclusion: the evidence indicated that retirement has more adverse effects on health in cases of involuntary retirement (similar results are provided by Bossé, Aldwin, Levenson & Ekert, 1987; Solinge & Henkens, 2007).

A second source of empirical evidence is based on the negative effects of retirement in different work circumstances. One of the covariants of aging is cognitive decline. Schaie and colleagues (De Fries & Schaie, 2001; Dutta, Yue, Schaie, Willis, O'Hanlon & Yu, 1986) found that although those elders who retired from routine jobs did not suffer adverse cognitive effects, those retiring from complex jobs showed significant cognitive decline.

A third source of potentially negative effects of MR is related to the importance of control and self-efficacy for active aging. As already mentioned, sense of control and perceived self-efficacy are two conditions for active aging, predicting survival and longevity in health (for a review, see Fernández-Ballesteros, 2008). Since MR is an uncontrolled event, it brings about reduced control but also reduced self-efficacy in the individual. Voluntary retirement would appear to be a strategy that favours active aging, increasing the sense of control at the individual level.

From these empirical results, an important conclusion is that not only can mandatory retirement have negative effects on physical and mental health in general, but, those elders who have had to retire against their will and those previously working in cognitively demanding jobs (such as academics or scientists) experience a more intensely negative effect on their health and more cognitive decline. Physical

health, mental health and cognitive functioning are all key issues for active aging.

Finally, the crux of active aging is social functioning and participation. Across Europe, policies aimed at increasing participation among the elderly are being introduced at European, national, regional and local levels. Most of these policies set out to involve retired elders in unpaid but productive activities, and this attempt at inclusion is welcome, though it must be stressed that such policies reflect a degree of cynicism and condescension, since, having been withdrawn from their active life in a renumerated working context, elders are maintained 'active' – though unpaid – and provided with 'a source of well-being' derived from 'making a contribution to society'. Finally, a negative repercussion of the whole perverse situation is that retirement also helps to reinforce negative stereotypes about the elderly, since they are regarded as retired because they are unable to work and are incompetent.

Consequently, MR is one of the most substantial barriers to active aging: (1) It has a negative effect on health and can increase cognitive decline, especially in those people who had worked in intellectually demanding jobs; (2) MR reduces the individual's sense of control and social empowerment; (3) MR eliminates a source of social participation (and a source of cognitive stimulation), and (4) MR reinforces negative stereotypes and negative self-images about aging.

A final argument against MR comes from its global rejection by the public. As Kasneci (2007) reports, several worldwide surveys of public opinion on MR were carried out in 2004 and 2005. Of the tens of thousands of respondents, 72% in 2005 and 80% in 2004 were opposed to MR³. Kasneci concludes: "Research has also revealed a strong and universal support for the idea that people's desire and ability to work should determine when they will retire" (p.6). These are indeed the two conditions for abolishing MR that reflect the arguments set out in this chapter.

³ In Spain, a recent poll on retirement (ASEP, December 2007, ASEP/JDS Data Bank, www.jdsurvey.net) has demonstrated very clearly that Spaniards firmly reject an extension of the age of mandatory retirement, they reject early retirement if this is decided by the entrepreneur (private or public), they favour early retirement decided by the worker, and they favour remaining in the labour force after the mandatory age of retirement, provided it is decided by the worker.

Summary and conclusions

An aging world requires a set of policies to increase health, security and participation throughout the life span and in old age. However, such policies may challenge other policies in Europe. One of the most serious barriers to the consolidation and extension of active aging throughout European countries is the mandatory retirement currently enshrined in Europe's labour market legislation.

Recommendations from several European summits have failed to improve the situation. For example, the 'Lisbon Strategy', which was announced in 2000, called for actions in several areas to improve active aging and increase working life, including eliminating mandatory retirement. However, as Marin (2007) emphasizes, there has been no change in the situation.

In spite of this, the EC Commissioner for Employment, Social Affairs and Equal Opportunities, Vladimir Spidla (2007), continues to voice support: "Demographic aging is both a challenge and an opportunity to the modernization of the European social models... The European approach to reform is the so-called 'active aging policy' that aims at encouraging older workers to stay substantially longer in the labor market" (p.1). Various reasons can be adduced for the abolition of mandatory retirement:

- Human rights: MR is direct discrimination based on age;
- Demographic: People live longer and in a better physical and intellectual condition. Labour regulation should adapt to this reality;
- Economic: There is no economic threat from the elimination of MR; on the contrary, demographic projections lend support for such a measure;
- Social: MR supports a negative image of the elderly and its abolition is supported by public opinion worldwide;
- Psychological: MR is a threat to the individual at cognitive and motivational levels.

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