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Programme of the Conference on Health, Ageing and Work, Trieste - Duino, October 21-23, 2004

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Editorial

by Orio Giarini

‘Society is getting older’ — how often have we heard this statement! But it is mistaken. The lengthening of the life cycle, involving better physical and mental conditions in most cases, introduces us to a counter-ageing society, where the older generations are clearly ‘younger’ than they have been in the past (in Italian this is called the process of ‘svecchiamento’). The rest of the developing world, where the generations of those under 30 and 20 years of age are still dominant, will soon (in two or three decades) achieve the demographic structure of the industrialized countries. In 2040, China will have a population of over-60-year-olds which, in percentage terms, will be greater than that of the United States. Such an estimate is reliable as the generations concerned have already been born. As in Japan or North America, we in Europe are in an advantageous position to prepare and manage a world which is living through the greatest social-demographic revolution in history; one which derives from the constant increase in life expectancy of two to three months per year. The challenge is tremendous: the achievement of decades of life — of good life — for humankind.

The following is just an introductory list of some of the key issues:

- First is the understanding and monitoring of scientific and technological advances in many scientific fields (biology, medicine, gerontology, communications, etc.).
- Being active and ‘productive’ beyond 60-65 years of age can and must be a privilege and the best ‘medicine’ for a longer and better life.
- Learning and education should be better integrated in all phases of the life cycle, well beyond 60 years of age.

The possibilities for society and economy should be better understood: we no longer live in an ‘industrial, manufacturing-based’ society, but one based on a ‘Service Economy’. Over 80% of all types of work are services, even within traditionally manufacturing companies. This reduces the number of people required to perform physically and sometimes mentally painful jobs. Studies have to be carried out to highlight employment demands and possibilities in the various service occupations and activities at all age classes and age cycles.

Each type of human activity is best performed within a certain age period: a tennis champion normally ‘retires’ before 30. The same applies to a theoretical mathematician, where the brain needs its full capacity for abstract reasoning. However, there has been an explosion in the need for things to be done in education, health care, tourism and all related activities. There is great potential for work (paid or voluntary) for those over 60.

Education and learning then must be related not only to update one’s specialization, but also to better prepare for new types of activities more in tune with each age class. A key issue is to see part-time work or activities as a cornerstone around which to build the new welfare.

Concerning the situation of the welfare state in the various European countries, it is easy to detect huge differences. However, the basic social and economic problems are very similar all over and within the next two to three decades (let’s be cautious...) they will lead to more and more convergent and generally ‘European’ solutions.

Yes, longer life in better health will mean increased costs for research and treatments in this area. They might double in terms of percentage of GNP in some countries within the next 20 or
30 years. However, these costs have to be recognized as real added value in economic terms: longer life in better conditions. In the coming years this will be an important part of the increase in the wealth of nations.

The management of the welfare system, related to ‘retirement’ (due to age and/or other reasons) will require a clear understanding of a Four Pillars Strategy:

1. The maintenance of a sustainable pay-as-you-go system (usually a state organized system) which is at least partly based on a fiscal redistribution logic. It should be viewed as a partial, age-related application of the ‘negative income tax’ system.

2. Capitalization system (there are many kinds and in some countries it is even compulsory — a trend which will grow).

3. Personal individual savings and provisions of all sorts.

4. ‘Part time’ work.

These four elements will, with time, be considered and promoted as complementary to one another. In this way the ‘costs’ of the ‘older’ will be lower and their employment will be facilitated; at the same time the dead-end-street of the younger generations, which should increasingly support the slack periods of the older ones, will be avoided.

These points and issues were the basic topics for the conference organized in Trieste-Duino on 21-23 October 2004. They are the inspiring reference for these EUROPEAN PAPERS ON THE NEW WELFARE.
Pension Economics and the Four Pillars: Success in a Never-Ending Challenge

by Patrick M. Liedtke

1. Introduction

Pensions economics is a complex field to work in, not least because of the many
dimensions it covers beyond the already complex economic questions, particularly in the social
and political sphere. The question as to how best (whatever this might mean in the discussion
in question — and there has been a lot of confusion in the past over the target definitions) set
up, finance and organize old-age security has been with us in its modern form for about a
century, since Bismarck’s landmark introduction of the German social security schemes at the
end of the 19th century.

It can only be described as odd that arguably the biggest achievement of modern societies
during the 20th century, an enormous improvement in the mean life expectancy in nearly all
countries, is often perceived as one of the fundamental ‘problems’ that we currently have to
solve — from an economic but also social point of view. We routinely speak about the ‘ageing’
of populations in a manner that, where not negative, is full of adverse and antipathetic
connotations. Tabloid headlines range from “The Ageing Problem” to “Old-Age Time Bomb”.
The fact that the wider public is being made aware of a complex set of issues that our old-age
security systems and our societies at large are and will be facing is certainly to be welcomed.
However, we must be very careful about avoiding two things:

a) allowing the tone of the debate to further entrench in the public mind’s existing
   misconception, namely that our societies are ageing in the sense of increasing the existing
   proportion of elderly, presumably handicapped, more frail and invariably more dependent
   people; and
b) falling into the trap of sticking to some traditional and long-established misconceptions that
   can cloud our understanding of the true problems and potential solutions to the extent of
   making us work on the right issues in the wrong way.

We have to remember that solutions to the problems which our current (and future) systems
will encounter can only succeed and be of lasting and positive impact if they are efficient
enough to solve the problem at hand while at the same time being robust enough to survive a
decent period into the future without causing undue stress to the social or the financial fabric.

The Geneva Association, the leading global think-tank of the private industry, has been
researching the issues of old-age security and pension economics almost since its inception in

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1 Article for the Risk Institute’s (Trieste) special publication on the new welfare state, January 2005.
2 Secretary General and Managing Director, The Geneva Association (www.genevaassociation.org).
3 See e.g. the special issue of the Geneva Papers on Risk and Insurance - Issues and Practice on Pensions and Employment, October
1973. In the following article, we will explain some of the initiatives that have marked the past and some activities that we are currently pursuing.

"Not many issues will have such a profound and long-term impact on our lives as the intelligent organization of an employment and retirement system that takes into consideration the key demands of a modern society benefiting from an extraordinarily increasing life-expectancy". Patrick M. Liedtke, Secretary General of The Geneva Association, in discussion with the German Chancellor Gerhard Schröder.

2. Summary of the Four Pillars Research Programme

The Four Pillars Research Programme of The Geneva Association is a research programme set up in 1987 with the aim of studying the key importance to the new service economy of Social Security, Insurance, Savings and Employment. The programme focuses on the future of pensions, welfare and employment. The main triggers for this programme have been:

- Changing demography and its impact on financing,
- Complementarity between social security and insurance,
- The changing perspective on the welfare state, employment and the life cycles.

The Geneva Association launched its Four Pillars Research Programme with a view to identifying possible solutions to the issue of the future financing of pensions and, more generally, for organizing social security systems. Demographic trends — especially increased life expectancy — could be seen as positive if we were able to devise ways of enabling 'ageing in good-health populations' to make a valid economic and social contribution to the functioning of our service economies over the decades to come.

The research programme has had four main objectives:

- Analysis of the key elements in organizing old-age security systems;
- Research of conditions for multi-pillar systems of pension financing;
- Encouragement of multiple and complementary solutions to the challenges of a changing welfare state;
- Understanding the role of insurance in the provision of old-age security systems.

Over the years, our main activities have included:

- Undertaking research on key issues and contributing to research undertaken by international networks (European Commission, GINA, Avenir Suisse, etc.).
- Stimulating pension and similar experts in reconsidering main-stream research and encouraging alternative views and approaches.
- Organizing seminars and conferences on these topics and participating in international events (European Commission, OECD, CSIS, insurance companies, national governments, universities, research centres, etc.).
- Publishing numerous materials: books, special issues of The Geneva Papers on Risk and Insurance (one issue every two years), The Four Pillars Newsletter (two a year, 34 to this date), dedicated issues of our working papers Etudes & Dossiers, brochures in English and French for a wider public, contributions to academic and professional reviews, etc.

The medium and long-term impact of the Four Pillars Research Programme for the insurance sector is manifold and includes achieving:

- A better knowledge of demographics and life expectancy prospects, and of the economic challenges and opportunities of an ‘ageing’ society;
• A better knowledge of social security, in particular pension issues and reforms, and thinking on the key role insurance can play in organizing systems;
• A better assessment of the importance of developing and reforming the Four Pillars of pensions worldwide and of the potential for the industry;
• A better assessment of the positive measures to deal with the ‘ageing’ of the workforce in our economies and in particular in the insurance sector.

3. History of the four pillars concept

As early as the mid-1980s, The Geneva Association, then lead by its visionary Secretary General Orio Giarini, was conscious of changing demographic and financial trends. It became concerned with the crucial issue of the future financing of pensions and with rethinking some of the terms of social security. The dependency ratio of non-active retirees to the active population was about to erode rapidly and will have gone from 1 to 5 in 1990 to less than 1 to 3 in 2020. For the Association, however, demographic trends — especially increased life expectancy — could be seen as positive if only we were able to devise ways of enabling our ‘ageing’ populations — most of whom these days enjoy good physical and mental health (P. Morniche) — to make a valid economic and social contribution to the functioning of our service economies over the decades to come.

The Geneva Association, through its work on the new service economy (PROGRES and ASEC Research Programmes) with the new variables and paradigms associated with that economy, was able, before most, to see that these demographic and financial constraints were occurring in a new economic context where four jobs out of five were in service functions. It was also becoming widely recognized that such service activities typically require less physical demands and greater mental abilities, which meant that, in principle, workers could easily remain productive longer, especially if retirement conditions could be made more flexible and adequate continuing training, among other things, made available. This meant that the problems posed by demographics could perhaps be turned into opportunities if older workers could be kept working later on a flexible basis. We have also been conscious that this new challenge was about to affect the entire planet. According to the Economic and Social Council of the United Nations, “this issue will soon be a worldwide one since in 2025 over 70% of the ageing population (60s and over) will live in the developing countries”.

When Orio Giarini as Secretary General formally launched ‘The Four Pillars’ research programme on work and retirement in 1987, two main objectives were defined:
1) the consolidation of the sources of pension financing; and
2) the promotion of a new design for retirement and of a fourth pillar additional to the first three pillars.

More recently, we have included a third objective which is the consequence of objective 2: work beyond 60 and the adaptation of working conditions to longer working lives.

“Achieving an entirely new design for retirement is every bit as necessary as consolidating the sources from which it is to be funded”. Denis Kessler, Former President of the French Federation of Insurance Companies (FFSA), Paris.

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*The term ‘fourth pillar’ owes its origin to the fact that in most countries the funding of pensions is drawn from resources from three pillars:
- the first pillar is the compulsory state pension, based on the pay-as-you-go principle;
- the second pillar is the supplementary occupational pension normally based on funding;
- the third pillar is made up of individual savings (personal pensions and investments as well as life insurance products).
We called our research programme The Four Pillars because, since the beginning (1987), we consider the fourth pillar a fundamental part of the future financing of pensions and more widely of social security.*
4. Consolidation of multi-pillar pension financing

The intention of the Geneva Association has been that first pillar pensions should continue to play an important part for the majority of our populations, but that occupational and personal pensions, by becoming normal practice — in some cases even compulsory — should be used to offset any relative fall in the value of 1st pillar pensions in future decades. Our approach has therefore been to study the advantages of supplementing public social policies (one of our epoch's most significant achievements) by private solutions, and to address the shift in the balance between the public and private sectors by stressing the importance of developing the latter. The capitalization-oriented second pillar was also seen as making for greater adaptability in the context of the increasingly common flexible career which is a feature of the new service economy and the cross-border labour market. It should also be noted that we have always advised a solid regulatory framework indispensable to widespread development of occupational pension schemes.

The Geneva Association's primary purpose in this field was to stimulate reflection among its membership, as well as participating in academic and public-policy discussions, about the crucial changes affecting the first three pillars. Indeed, the development of a capitalization-based second pillar (already compulsory in certain countries like the Nordic countries, the Netherlands, Switzerland and Australia), became progressively the focus of international seminars organized at the Association's initiative or with its assistance, received the attention of the European Commission and the OECD, and was the subject of numerous publications, in particular:


While national pension systems across the European Union were dissimilar in many respects, recent reforms have made for convergence and a better balance in the shape of multi-pillar arrangements.

Recently we developed an important and positive collaboration with the Center for Strategic International Studies in Washington, DC — Patrick Liedtke (Secretary General of The Geneva Association) is a commissioner — which launched the Global Initiative on Ageing (GAI), organized a series of conferences and prepared an important report, *Meeting the Challenge of Global Aging — A Report to the World Leaders*, 2002 (www.csis.org).

“The idea of extending the portion of the older population that remains economically active (the fourth pillar), either in full or part-time employment, is a prominent issue”.

5. Promotion of a new design for retirement: the fourth pillar

Since the mid-1990s, the Association’s research programme on the four pillars has concentrated on promoting the issue of ‘a new design for retirement’, that is, a re-examination of the end of career and the possibility of building a fourth pillar into our social policies.
The fourth pillar involves supplementing the first three pillars with resources from a fourth, that is, income from part-time work for some years after reaching retirement age or earlier in the case of early retirement. From the legal retirement age onwards, this fourth pillar income is accompanied by a partial pension. Because it helps to lighten the growing burden of funding pensions in the future, the fourth pillar has become one answer at least to the enormous problem of pension financing in the years to come. But it also marries up with many of the changes and needs that are specific to our contemporary service economies (the increasingly flexible nature of employment and of the life-cycle). The graph summarizes the trends towards a fourth pillar:

6. New context, new concept: gradual retirement as a substitute for early retirement

In the nineties, the concept of the fourth pillar had to be rethought to suit a short and medium-term frame and we proposed that gradual retirement become a substitute for early retirement.

Indeed, the changing attitudes of stakeholders towards employment at end of career have progressively given rise, although not homogeneously across Europe, to a new consensus about a later and more flexible age of retirement and new work conditions at end of career:
- The state and its policy-makers, for well-known financial reasons, needed to reform pensions and reverse the trend towards early retirement. Public deficits in most industrialized countries had risen enormously over the last decade and the Maastricht criteria for accession to the single currency required their drastic reduction. States were accordingly left with little alternative to limiting social protection expenditure. In recent years, policy makers introduced new policies aimed at the inclusion of older workers:
  - raising the age at which a person becomes eligible for a state pension;
  - drastically reducing early retirement incentives and allowances;
  - reducing access to disability and unemployment insurance for early retirees;
  - encouraging a gradual end to working life;
  - educating employers about the value of older workers.
- At the same time, more and more employers have realized that early-retirement policies have meant a considerable loss of experience and expertise which could have been useful to businesses. Some employers have already realized that it makes good business sense to recruit, develop, motivate and retain older workers, and this for five main reasons: return on investment, preventing skills shortages, maximizing recruitment potential, responding to
demographic change, and promoting diversity (Alan Walker, 1996). Moreover, employers know that they must adapt their management to an ageing work force and that career planning and employment of older workers, i.e. end-of-career management, are becoming a priority issue. More generally, it is occupational life as a whole that is being re-examined in order to adapt its cycle to the abilities and needs of the life-long worker.

- Trade unions have been in favour of early retirement especially when offered on favourable financial terms. But attitudes are now changing, since increasingly unions are becoming aware that the needs of the employee in the service economy are different from those of the worker in manufacturing and that continuing training and adjusted work conditions are also issues to be addressed (European Trade Union Institute).

- Older workers themselves are still fighting to secure good terms for early retirement while the latter are still available. But more numerous are those who recognize the need for a transition between a full-time career and full retirement and of adjusted work conditions which enable them to remain active later. Many know that our pension systems will not be able to afford the current periods of retirement (around twenty years or more) at these expense levels for much longer. At the heart of our project is the notion of productive ageing. Surveys have shown that there is a genuine desire among many older people for part-time or full-time work, managerial or non-managerial jobs, and a continuing contribution to society. Many more older workers today than ten years ago have benefited from continuing training.

### 7. Gradual retirement and its benefits

Gradual retirement, often referred to as partial or part-time retirement, offers a transitional period between full-time employment and full retirement. The worker, instead of working full-time one day and fully retiring the next, can reduce work hours according to graduated and agreed schedules while drawing part-time pay (and in some cases some form of state subsidy or partial pension). Approximately five years is the transition period most commonly encountered in the OECD countries, while in legislation in France and Germany worktime reduction is planned for workers between 55 and 65.

There are a number of advantages for employers and workers alike. For the employer, gradual retirement or work-time reduction

- reduces the wage-cost of hours worked;

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• raises productivity per hour (productivity per hour in many work functions increases when a worker moves from full- to part-time);
• retains skills and expertise together with the older worker’s specific contribution;
• reduces absenteeism (e.g. Swedish and French firms);
• makes for better age management;
• frees older workers for training duties.

For the employee, it:
• makes it possible to adapt work to the older workers’ changing abilities;
• reduces stress and increases job satisfaction;
• gives the older worker the opportunity to benefit from continued membership of a work team and from inclusion in the work place (e.g. Japan);
• provides the older worker with free time to develop extra-occupational activities.

8. Implementation and potential of gradual retirement in selected OECD countries

In addition to an important number of seminars and conferences on the topic organized by us or other organizations with our help, we were able with the European Commission’s support to launch a network and prepare and edit a book in 1996: Gradual Retirement in the OECD Countries: Macro and Micro Issues and Policies, by Lei Delsen and Geneviève Reday-Mulvey (Head of the Four Pillars Research Programme at The Geneva Association).

In this work, well-known social security and pension experts covered 7 countries: France, Germany, Japan, the Netherlands, Sweden, the United Kingdom and the USA. A typology of four models was proposed: the Swedish, Japanese, continental and Anglo-Saxon models. We showed that with 60 year-olds having a life expectancy of almost 25 years — most of the latter in reasonable health — there is considerable potential for keeping older people better integrated (i.e. more ‘actively’ than as mere consumers) in our societies in future. Gradual retirement can and already does provide an alternative to full early retirement which has receded in countries like Finland, Denmark, the Netherlands and France. New pension rules and employment policies have begun to have some impact on reversing early retirement policies. It is now widely recognized that in the medium- to long-term the de facto age of retirement will be later and more flexible.

At the same time, we published specific country studies or articles by either members of this network or other experts and specialists. Furthermore, we have been part of European and international networks and, by doing so, we contributed to important research and policy formulation studies. These studies show that extension of working life is seen everywhere as a crucial policy for reducing the burden of social expenditure in years to come. Because of its flexible nature which is well suited to end of career, gradual retirement is finding increasing favour with the majority of workers, and growing acceptance with management and trade unions.

Our research over the last few years has revealed that gradual retirement can be implemented on a wide scale and has considerable potential to facilitate an extension of working life in OECD countries. By promoting work and age management at end of career, workers will be prepared to work later and continue to contribute to pension schemes, and enterprise will be able to reduce costs and to benefit from increased flexibility.

“One can hardly overstress the importance of properly integrated public and company policies for promoting the employment of older people”. I. Shimowada.
9. Recommendations for public and company policies

Public Policies: What stands out as essential is that public policies need to be sufficiently comprehensive and accompanied by incentives at various levels. Those countries which so far have been more successful in implementing gradual retirement tend to be the ones which have designed global policies (Denmark, Finland, Sweden and the UK). It is essential to make early retirement options as well as disability and unemployment routes more difficult, more costly and their terms more stringent. It will be objected that current labour market conditions, especially rates of unemployment, make any progress difficult. It is precisely for this reason that gradual retirement cannot be handled outside the broader context of employment redesign and redistribution. In several European countries, legislation (or, in the Netherlands, collective agreements) promotes replacement of full early retirement by gradual early retirement and makes retirement more flexible and delays it. But such legislation clearly needs to be accompanied by financial incentives from the state. Changing the deeply-rooted mindsets of the early retirement culture requires drastic redesign, a good partnership between the State and enterprise, new age management policies and their gradual implementation, and last but not least a wide and lasting debate in firms, trade unions and with the media.

Company Policies: Four areas at least, among the many that require attention, should be a particular focus for this integrated policy approach: First, training. In order for older workers to remain motivated and productive, continuing training should not terminate at 45 or 50 years but should continue until end of career. Countries where such company policies exist are in a much stronger position when the decision to extend working life is taken. In Sweden the extent of training is impressive and there seems to be little discrimination towards older workers. In France and Germany, especially in bigger companies, the same policy is more frequent. A second key variable is pay policy. It is clear that seniority-based pay policy, by raising the wage costs of workers at end of career, constitutes a real obstacle to all forms of extension of working life. In several countries, there is a growing trend in wage calculation today towards reducing the weight of the seniority factor and increasing that of performance. In America and Britain, this trend is prevalent in bigger firms, but is now to be found in other countries (e.g. in Japan, Germany and France in some sectors, such as insurance). Third, occupational pensions: many Dutch, British and American pension funds are final-salary based but there is an increasing consensus to modify them and make them average-salary based. And fourth, part-time and flexible work. The development of part-time and flexible forms of employment is obviously important for gradual retirement. Most countries have seen such development at either end of the life-cycle. Countries such as the Netherlands and the UK have a high rate of part-timers. Some have improved legislation in this respect so as to provide better levels of protection for part-time work (for example, France and the Netherlands). In other countries, there is availability of part-time jobs for older workers either inside (e.g. Sweden) or outside main career employment (Japan, UK, USA).

In conclusion, gradual retirement seems to stand at the crossroads of two important issues: • redesigning the end of career and flexibly extending working life for pressing financial reasons which have to do with demographic prospects, but also because of the need for proper management of human resources and skills; and • developing well-protected and regular part-time and flexible work not only as a desirable transition from full employment to full retirement, but also as an ideal opportunity for moving towards a socially fairer and more efficient division of labour within our society (Giarini and Liedtke, 1998).

Our work has been well recognized by key organizations, such as the European Commission and the OECD, and the academic world. In the press, our proposals and research have been mentioned in several prestigious journals and newspapers such as The Economist, The Financial Times, Le Monde and Neue Zürcher Zeitung.
More widely, our concepts and proposals on the future of work — with the best-seller in Germany (and translated into eight different languages) of the Report to the Club of Rome *The Employment Dilemma and The Future of Work* by Orio Giarini and Patrick Liedtke — have influenced the political debate.

“For years The Geneva Association and a few others have been attempting to put the concept of gradual retirement on the policy agenda. That has finally proved successful. The work-retirement transition is now at the centre of the policy stage... and your work was an important influence in formulating our policy advice to OECD ministers”. Peter Hicks, OECD, Paris, December 1998.

10. Work beyond 60: the adaptation of working conditions to longer working lives

In the longer-term, the extension of work life that gradual retirement makes possible will generate a fourth Pillar of retirement, i.e. income from flexible part-time work after the retirement age. Productive ageing is a useful concept for it conveys the idea that older persons could continue to make an economic and social contribution, and in a manner that benefits their physical and mental health and social inclusion.

Increasingly, employers are starting to adopt a longer-term view, realizing that it makes good business sense to retain and motivate older workers. This new age management, achievable through career planning, training, ergonomics and work-time reduction, not only benefits workers at end of career, but implies an overall reappraisal of the work-life cycle in order to adapt occupations to the abilities and needs of the life-long worker. On these issues, we have been able to collaborate with several important organizations, such as the ILO, ISSA (International Social Security Association), the OECD, the European Foundation for the Improvement of Working Conditions, EurolinkAge, the European Parliament, the UN Economic and Social Commission for Europe, and various universities and research centres.


We also contributed to several pieces of research on the new and important issue of employment at end of career and wrote several reports, articles and chapters of books on the issues. One recent example of these studies (some are mentioned in Section 4) is the research we did for the Foundation Avenir Suisse based in Zurich on *Promoting Longer Working Lives in Europe*. The study focused on good practice in public and company policies to increase the participation rate of senior workers on the labour market, with the example of four countries: Finland, Denmark, France and the United Kingdom. Three outside experts contributed to the research. A press conference and an expert conference were organized in Geneva in June 2002 to present the results of this study: *Encourager une vie professionnelle prolongée*; Geneviève Reday-Mulvey, Report to Avenir Suisse, Zurich, 2002.

With its research programme on The Four Pillars, The Geneva Association was able through research, seminars, publications and networking to:

• advocate maintaining the first pillar pensions at a reasonable level;
• encourage the development of second and third pillar pensions;
• devise ways of making a longer working life on a flexible basis possible, that is, establishment in the long-term of a fourth pillar and in the medium term of the practice of gradual retirement.
Based on this work and a conference we organized in March 2003 in Vienna together with the Club of Rome, our Research Director for the Four Pillars Programme, Ms. Geneviève Reday-Mulvey, will publish a new book on the future of retirement called Work Beyond 60. It shall be available as of March/April 2005 and will regroup a lot of the results of The Geneva Association’s work of the past years.

11. Pension economics and the insurance sector

The insurance sector is an important provider of old-age security solutions and a key supporting element of the construction of a modern welfare state. The Four Pillars Research Programme is not only relevant to the public side of the debate but also the insurance sector in six main areas, as follows:

1. Global partnership between the public and private sectors
   The current need for reforming social security has been felt in all countries. The main objective of this reform has been to reduce the hitherto substantial share of the GDP devoted to social expenditure. The key challenge here has been to consolidate the partnership between the public and private sectors. Almost all States have had to redraft or readjust their Welfare policies on health and pensions so as to avoid creating public deficits which would otherwise place too great a burden upon future generations.

2. Development of second and third pillar pensions
   With recent and current reforms of public pensions aimed at future sustainability — involving inevitably a fall in the relative level of old-age benefits — the development of second and third pillar pensions has become a priority. In many countries, second pillar pensions have been made compulsory and, where not already compulsory, have been encouraged by all kinds of financial and fiscal incentives. Private pension funds will play a growing role in securing future retirement income.

3. Promotion of an extension of working life, i.e. of a fourth pillar
   However, it must be understood that even substantial development of second and third pillar pensions will probably not be sufficient to compensate both longer life-expectancy and a rising proportion of people over 65 years. With good health expectancy it is not only possible but also essential to plan for flexible extension of working life. Pension funds must encourage and facilitate this extension which will also benefit the insurance sector workforce.

4. Encouragement of global savings and life insurance
   In a more general way, it is essential to encourage long-term savings for retirement and longer life expectancy. Insurance companies have a key role in designing adequate and tailored products to cater to a wide range of needs and means.

5. Age management of the workforce of insurance companies
   In insurance, as in other sectors of the economy, workforce ageing will require planning for improved age management as a matter of urgency. Our studies at the European and international levels have shown that, among other things, continuing training, worktime reduction, job redesign and a review of the seniority-pay principle, will need increasingly to be addressed by individual insurance companies. Codes of employment might be an ideal place to start in developing new age management strategies.

6. Debate and communication
   Developing multi-pillar pension systems and promoting an extension of occupational life depend on certain conditions being met and will need to be preceded by a coherent, broad-based, informed and on-going debate of all these issues. With our research programme and
its fourth-pillar proposals we have been able to do pioneer work in this field and have, we believe, made a significant contribution to this all-important debate.

12. Coming to terms with the old-age dependency ratio

The burden that projected increasing old-age dependency ratios will place upon societies where an increasingly smaller proportion of the working-age population will have to generate the goods and services to be consumed by retirees (if exogenous factors are discounted) is all too real. We only need to look at the widely available tables on forecasts of the old-age dependency ratios in most developed countries to get some idea of the magnitude of this issue. And things might get even worse since, according to some experts, several developed countries may be underestimating the fiscal and economic consequences of population ageing because their official population projections assume, perhaps wrongly, that adverse trends in longevity and fertility will substantially reverse.

However, while the trends described above are undoubtedly correct, they convey the wrong idea. What they seem to indicate is that our societies are ageing. But what they really tell us is that the share of the people in a given age-group is increasing relative to that of other groups in the population. This is a rather different thing.

Most often than not, saying that our society is ageing creates a misconception in people's minds. As long as we merely mean that most people today achieve an older age than they expected to several decades ago, then the statement is acceptable. But in itself, the expression 'ageing society' is somewhat inappropriate. We must first recognize that there has been an increase in the length of the life cycle. Second, it must be observed that what is really becoming older is the notion of age itself. We only need to read the European literature of the XIX century to learn what it was like to be 50 years of age. It is obvious that the onset of physical and mental decline has been pushed back far later than was hitherto the case. In other words, at 50, 60 or 70 years of age, we are much younger today than we would have been at those ages in the not-so-distant past. Therefore our societies are in a sense getting younger, because we live longer and better. This phenomenon concerns the majority of countries around the world.

Part of the problem of this misperception of age and ageing in general lies in the fact that we are accustomed to counting forward. However we should use those parameters that are best suited to our problem. Counting forward the time that has elapsed since a person's birth in order to determine their future behaviour and, most importantly, their future investment decisions, is not particularly useful nor likely to produce the best results. Investment theory dictates that one discount future (sic!) cash flows to determine today's (net present) value. Why then do we assume, in the case of populations, that their behaviour is primarily dictated by how much time has passed rather than by how much time is left to them?

To pursue this argument further, we have to analyze 'investment age' in our societies in terms of how much time a person or a given group of people will have to profit from their investment decisions. This 'investment age' corresponds to remaining life expectancy. According to this approach, 'investment age' would be measured as the difference between the current date and a prospective, statistical (and of course uncertain) date when the body of the person would cease to function. If we take the example of a statistically average female and male in Germany today, at age 60, they would have a time span of respectively 22.85 and 18.48

For more detailed discussions of this issue refer to the work of The Geneva Association’s Research Programme on Health and Ageing headed by Dr. Christophe Courbage (www.genevaassociation.org).
years left to enjoy life. This corresponds to their investment horizon, if we discount alternate motives like bequests, etc.

In order to understand how young or old our societies are, we have to put this 'investment age' of 22.85 and 18.48 years into an historic perspective. Only by calculating the ages during the past century or so at which an average German woman and man would have the same 'investment age', i.e. the years (22.85 and 18.48) remaining left to them according to actuarial life tables, we then can truly determine how old we are. The result is: we are young. The age of 60 years today corresponds to the late 40s about 100 years ago. That is only four generations back.

Economists have had and are still having a hard time understanding why the 'elderly' are not behaving as they should. They are deemed to be neither as risk-averse as they should be nor are they dissaving as much as they ought to. Part of the reason for the perceived irrationality is linked to a very rational understanding of their own position in a society that is young longer — despite increasing chronological age indications — and characterized more by changing risk distribution over the life cycle than by age-correlated risk-aversion.

We are just beginning to understand how best to organize pension systems that take fully into consideration not only the above but also other important developments like lower fertility rates, a shift of risk-bearing from the state and other group entities towards the individuum etc. Few questions are as relevant for individuals as also for the states and the economic environment individuals live in, as the issue of how to organize income throughout the life cycle. The Geneva Association has been researching this topic since almost its foundation over 30 years ago, and continues this work through its Four Pillars Research Programme.

Only an efficient, inter- and intra-generationally fair, and sustainable system for providing old-age income has a future, provided it take full advantage of the specific benefits offered by the different players — state, employers, insurance, and individuals — as well as by the various mechanisms — pay-as-you-go and capital funding — and organizational structures — 1st, 2nd, 3rd and 4th (part-time work after 60/65) pillars. The challenge will be with us for our life-time and well beyond.
The Challenge of Increasing Life Spans for Employment and Pension Schemes: An Open Letter to All Those Who Are, or Will Be, 65

by Orio Giarini

Dear Madam, Dear Sir,

May I draw to your attention an issue that is constantly being talked about in the press, is on the lips of almost every politician and economist, something that you have probably had occasion to discuss even with your next-door neighbour: namely, that population ageing in industrialized countries, and in the long run in all other countries as well, is one of the major problems of our time.

Not true, I am afraid. Believing this is akin to attempting to drive a car with your eyes glued to the rear-view mirror.

In reality, what we are witnessing is a spectacular lengthening of the average lifespan which people, because of outmoded assumptions, perceive as a process of ageing. In fact, it is old age itself that is ageing as the time of its onset constantly recedes. For today, on average, a 60-year-old human being enjoys the physical and psychological fitness that would have been normal in a person 10 to 15 years younger two centuries ago. The fact of the matter is, and it is good news indeed, that the average lifespan is now growing longer. In Europe, life expectancy is now rising by one whole year in every four. Meanwhile, for all age groups, at least until the age of 80, the general state of health is improving slowly and steadily. Today, it is at 80 years that one has finally to settle for being old, and even at that age happily there are exceptions.

So, if the big change occurring in our societies is not population ageing but essentially an increase in the length of life, then perhaps what we need to do is to welcome with open arms the existing and future cohort of 65-year-olds, 90 per cent of whom are likely to enjoy relatively good health until they are at least 80. Those belonging to this age group, that is, you and I, dear reader, possess all the credentials for entitlement to an active role and a full life within our society. But before that becomes possible, there are a number of obstacles and prejudices to be overcome.

The Pocket Larousse, for example, defines the ageing individual as ‘someone of diminished vitality, out of date, no longer in use’. To age is ‘to be valued no longer’ and ‘to cease to measure up to the standards of the times’. Fair enough. But, in today’s world, these definitions properly apply, if at all, only to those who are 80 or over. The problem has primarily to do with exclusion, autonomy and dependency, all of which affect the entire population in varying degrees. Now, obviously, such difficulties occur more frequently at an advanced age, but for people over 70 their incidence is only two or three times greater than for the rest of the population.

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1 This is the first chapter of a book entitled Path for Retiring at 80. The original French version was published by Economica, October 2002.
2 Special Advisor and former Secretary-General, The Geneva Association.
Our main purpose, then, must be to ‘restore’ to the mainstream of life, to as active and full a life as possible, that vast army of 65- to 80-year-olds who, thanks to lengthening of life, remain ready for active service. As a 65-year-old, would I be wrong in thinking that you who share my age, or will do one day, also share my concern in this matter? If you do, then, may I ask you to join me in my quest for at least another 15 years of active living?

**Forget about growing old for the time being**

Most biologists will tell you that the oldest age a human being can reach is 120, an age which appears to apply only to a very tiny number of exceptions but which even so defines the outer biological limits of our species. For the time being, it is the 100-year-olds whose number appears to be on the increase and it is to be hoped that this involves an extension of life rather than mere survival in an abject state.

My concern, however, is that the debate about what it means to live to the age of 120 should not overshadow what seems to me to be the number one social and human priority of our times: namely, how to provide a normal and enriching lifestyle for all those who live to the age of 80 years and beyond.

In fact, it is this age group, the 60- to 80-year-olds, who are the essential focus of the current somewhat skewed debate about population ‘ageing’. Our use of this term betrays our difficulty in adapting an outmoded idea to fit a new situation. As I have said, we are ageing later today than hitherto, but the notion of ‘ageing’ still places an intolerable burden on the shoulders of those who reach 60 years and beyond. We simply have to stop using the term to describe those in that age group, and that is by no means any easy task.

We need to bear in mind that culture and custom at times exert an inhibiting influence. Just think of how every day we talk about the sun ‘rising’ and ‘setting’. We continue to do this even five centuries after Galileo Galilei began his battle to convince the world that it is the earth that rotates around the sun rather than the sun around the earth. It was not until 1822 that the Church retracted its condemnation of Galileo for his discovery. And quite apart from the still substantial number of human beings on our planet who persist in their belief that the sun rotates around the earth, we have still not been able, after all these centuries, to modify the concepts we use, so that, in almost every language humans speak, we continue to talk about the sun ‘rising’.

The battle, then, to give to the term ‘ageing’ a meaning that more aptly reflects the new situation may be harder and may take longer than we think. It will certainly depend as much on the perception that 60-year-olds have of themselves in the future as on society’s ability in general to update its assumptions.

**A life expectancy of 20 years at 60**

There is one point we need to clarify straightaway. There has clearly been a tremendous improvement in the life expectancy of the population particularly as a result of an enormous fall in infant mortality. Some people assert that this is the main reason for current demographic developments.

There is, however, another statistic we need to consider if we are to fully appreciate the significance of this growth in length of life. And that statistic has to do with life expectancy at 60 and 65 years. The latter currently varies between 15 and 20 years in industrialized countries, with most of the other countries beginning to catch up. This means that countries which are ‘young’ today, with the bulk of their population less than 20 years old, will be facing enormous ‘ageing’ problems in 20 to 30 years’ time. China, for instance, has already had to think about
the issue. So that what the ‘older’ countries manage to achieve today in terms of solutions could serve as a valuable benchmark for all those other countries tomorrow. In this respect, industrialized countries have no more than a head start.

Nor should one forget that, regarding life expectancy at 60 and 65 years, there is a big difference between men and women with, in many countries, women living four or five years longer — another thing that needs to be thought about carefully.

Finally, our statistics need to be refined to give a clearer picture of the effective levels of autonomy, health, training (especially updated training) and informal activities of 60- to 65-year-olds.

All of this involves a range of economic and financial measures and initiatives affecting the structure of training and the nature of occupational and leisure activities we pursue.

**Optimizing the first three pillars of retirement**

First, let us take a look at the financial situation of 60- to 65-year-olds. We shall start with what in most countries is the basis of most people’s pension, albeit with significant variations. To begin with, we have what is called the first pillar that in some countries accounts for the main part of a person’s pension whether the latter begins at 65 or 60 years (the time of entitlement varies considerably from one country to the next). This first pillar is based on the pay-as-you-go principle: monies are collected from a levy on wages by the state that, often out of necessity, adds extra financial resources derived from other kinds of tax. Such monies are then disbursed to those entitled to a pension (that is, you and me, who are also tax-payers) as and when our pensions are drawn. The idea behind this first pillar is to provide ‘retirees’ with a minimum income, which in some countries is subject to a maximum amount per couple; in Switzerland, for example, this ceiling is around 7200. This means that in the case of the highest earners this pillar functions as a channel for wealth redistribution. The main problem with this system, however, is that if the number of those in work diminishes in proportion to the number of those drawing a pension, then taxes have to be increased to make up the difference and we are all affected.

In my native town of Trieste, the press recently reported that the number of retirees has just drawn level with those in work (who, in theory at least, must pay from their wages for the pensions of those no longer working). But, think about it for a moment, such a system, if acquired entitlements are defended at all costs, is bound to run into trouble, i.e., bankruptcy, with inflation either directly or indirectly causing a drastic reduction in pensions. And, as the more senior members of the community, should we not feel a little ashamed at having to rely to such an extent on the wages and earnings of the younger members? After all, I have always maintained that we should think of the generations to come and secure a better future for them. And just what sort of future is that going to be if they have to work harder to keep us retirees afloat? Beyond a certain point, indeed, intergenerational solidarity begins to be affected and the need not to discourage youngsters from working becomes paramount.

Let us, then, by all means preserve the first pillar, which will always remain the mainstay of our social welfare system, but let us, at the same time, be careful not to allow our short-term concerns to destroy it. I, for one, will be concerned to preserve part of my financial resources in the form of a first pillar that is both realistic and sustainable over the medium and long term.

Let us now take a look at another financial resource available to those aged 65 and over: the second pillar. This is essentially a system based on funding and it takes a number of different forms, mostly linked to employment. It is also often called the supplementary system. It involves collective (either directly or indirectly) savings, which provide an income on retirement according to calculations of probable survival. This means that with the same capital
amount, if I start drawing my pension later, I can expect a higher income. The main snag with this second pillar, however, is inflation: if at 65 years I draw €1000 per month, with a rate of inflation of only 2 per cent per annum, by the time I am 75 I will have lost around one-quarter of my purchasing power. And with an average inflation rate of 3 to 4 per cent per annum, my €1000 will have lost half its value.

Now let us suppose that I live on for 20 years after retirement. In that case, over time, my second pillar is not going to amount to much; and this is why control of inflation is such a crucial issue. One could, of course, look to one’s return on capital to offset the impact of inflation, but that merely introduces a second element of uncertainty.

Funds must be really accumulated and protected. We must be sure that we do not fall into the ‘Enron trap’.

Things, of course, would be rather different if the return on capital was expressed in terms of its ‘real’ rather than ‘nominal’ value. But even so, there are many investors and economists who maintain that a little inflation, ‘to oil the works’, is no bad thing. After all, it helps investors and risk-takers to pay off part of their debt.

The third pillar is made up of any savings, liquid and fixed assets we may have individually set aside for a number of reasons, often, where circumstances permit, as a supplement to our pension.

So we find ourselves at the age of 65, or about to enter retirement, with three pillars with which we try to make ends meet as best we can. In the absence of any ideal solution or recipe, we will probably find it advisable to spread our risk across the three pillars and so optimize our income and minimize the risk of any unpleasant surprises.

But think for a moment. If we lived in the 19th century, at the time of Bismarck, for example, when the age of retirement was used to calculate the average age of mortality, there would be no real problem. But do we really wish to say goodbye to all those magnificent opportunities for living that, in spite of all else, the industrial revolution has bestowed upon us? At 65 years, we have before us, at least most of us do, the possibility of living until 80 in relatively good health: a period of time extensive enough to make us think long and hard about the soundness and strength of our three pillars.

Despite an almost universal aspiration to get into retirement as quickly as possible, the statistics show that leaving the workplace results in a sudden rise in the number of suicides, in health costs, and in the incidence of major family problems and of various other kinds of upheaval. We thought we were entering paradise only to find ourselves moving into a world of decline and disappointment. Those who survive the experience are precisely those with a marked capacity and desire for productive activity. Even the ravages of Alzheimer’s disease seem to be less devastating for those who remain active. So let us prevent our dreams from turning into nightmares from which we cannot escape.

The real challenge, then, that faces us when we enter retirement, is that of remaining active: not only in the shape of preserving our good health but also in terms of adding a fourth pillar to the three we already have. The aim of this open letter is precisely to trigger an in-depth discussion of this fourth pillar: something which I, for one, intend to continue to build on until I am at least 80.

Remaining active: the all-important fourth pillar

The fourth pillar is not just another way of postponing the age of retirement. It involves a change to the organization of the ‘welfare state’ and is based on part-time work (roughly the equivalent of 20 hours per week). We see it as part of a social policy for the recovery and
integration of those aged 60 to 65. Part-time work does, of course, also apply to youngsters who combine it with training, to working families, and to those who pursue in parallel a number of different occupational activities.

As an integral component of the four pillars strategy, part-time work reflects the fact that as of age 60 or later, even though we need to remain active, we cannot work as hard as we did at 30 or 40. A new balance has to be found. If tennis players, for example, quit the professional court at 30 it is not because they are ‘old’ in any absolute sense. There is, in other words, an optimum age range for any activity, and this has to be accepted.

The unavoidable current debate about postponing the age of retirement would be much more constructive were part-time work to be given its proper place. As early as 1983, The Geneva Association launched its research programme in this field devoting a number of articles and books to the issue of gradual or progressive retirement.

Our approach to the four pillars concept must be a broad one, even though in some countries the accumulation of income from work with a pension is still illegal, revealing a failure to understand that it is thanks to accumulation that we all of us have our best chance of finding a satisfactory solution to our financial problems. That our total assets are thereafter subject to tax merely ensures that the state or public political authority is able to regulate to achieve social solidarity and justice in the manner it deems most appropriate. But first, let us establish and promote all four pillars so that each of us is given the best possible chance, especially those in the 60- to 80-year age bracket.

**If we are going to help the young, then let’s be serious about it**

One of the habitual arguments against the fourth pillar is that ‘old’ persons by working later fill jobs that would otherwise be available for young workers. Quite apart from the fact that opportunities for job substitution are not as frequent as many believe, this argument is both specious and misleading: for the young themselves will be increasingly discouraged from working if they have to forego a growing share of their wages in order to finance retirees’ pensions. Moreover, available jobs are to be found above all in those sectors (teaching, tourism, health, research) which suit the over-60s most. Finally, people everywhere are talking about the approaching labour shortage (something that is already happening in some sectors), which will have to be met also by recourse to immigrant labour. This means that there is room for many more in the labour market, for ‘outsiders’ as well as for retirees who should no longer be treated as outsiders by their own communities.

**Towards a fiscal system that aims at social progress**

Our defence of part-time work for the 60- to 80-year-olds does, however, call for additional comment and qualification. First, the seniority principle at work can no longer be rigorously applied: it would be pointless to expect at the age of 65 to be able to continue up the ‘career ladder’ as one did before retirement, especially in middle- or senior-grade jobs, or to expect necessarily to be earning half one’s final salary or more, except possibly if one’s holding a key position in management. Let us not forget: the fourth pillar is very much part and parcel of a social strategy of which all four pillars are essential components. This will dovetail with the financial interest of those willing to employ you were it not for the prohibitive social costs involved. What is more, after 65 you won’t be having to contribute, or if you do it will be much less, to your first- and second-pillar pensions. There have to be fiscal adjustments as well. You will, after all, be taxed on your global income which will include your first- and second-pillar, frequently partial, pensions, other income as well as your fourth-pillar earnings.
And all parties stand to gain: the state, those with work to offer, and especially you yourselves who in the long run achieve greater financial security, greater social satisfaction and, at the end of the day, better health. For freelancers or the self-employed, the issue of an age limit for retirement is already much less acute. The proportion of freelance work will doubtless increase, due to the specific stimulus of the four pillars system, with a full range of mixed options between salaried employment at one extreme and full self-employment at the other.

Remunerated part-time employment, however, is by no means the only kind of productive work in existence. Voluntary work is catching on everywhere. It is high time, indeed, to develop economic indicators to reflect the extent to which this type of work contributes to national wealth. Voluntary and remunerated work is becoming increasingly interdependent, it is frequently complementary and on occasions poses an economic dilemma: should we, for example, build more crèches and/or promote care of children in the home? Unfortunately, our somewhat distorted traditional economic thinking tends to approach everything in purely budgetary terms. In fact, however, in growth sectors like training, health, tourism, cultural pursuits and so forth, voluntary and remunerated work frequently combine in different ways, and our tools for economic analysis need to take greater cognizance of this fact. Such recognition will only serve to increase the job satisfaction of those working in the voluntary sector and so encourage them to further efforts. And if in our societies money is essential, it is even so absurd to suggest that only those things which are wage-earned or paid for are of any real value. But that is precisely what happened during the first phase of the industrial revolution when women’s work in the home and fields was suddenly devalued. It is high time there was a more complete inventory of all activities contributing to the wealth of nations.

And one consequence of proper recognition of the economic value of voluntary work would be the use of economic incentives (tax breaks and modest subsidies) to encourage it.

So, our fourth pillar could well include voluntary work. Nevertheless, as an essential component of our four pillars system, it must be made to contribute directly or indirectly to our financial equilibrium. It is also clear that for the more affluent among us the problem of fourth-pillar earnings does not really arise. But artistic and cultural pursuits, friendship, billiards and cards, travel and hobbies of all kinds have always constituted a very active non-remunerated fourth pillar for many people making them fully-fledged members of what is often termed the ‘leisure society’. Indeed, in a number of areas, leisure pursuits themselves can be, and frequently are, productive activities. All agreeable, truly engaging work provides pleasure, often keener than that to be derived from leisure pursuits proper. Whatever the case, the same question applies to any activity: does it enhance our personal well-being and add to the wealth of society?

Freedom to be conquered

All very well, I hear you say, but after 30 or 40 years of working, you have had enough and want a bit of peace and quiet, time for yourself! Fair enough; but let us be clear about the terms we are using. To set our minds at rest, then, we need a four pillars strategy to insure ourselves against economic risk and the hazards of living, unless, of course, we are very well off, in which case we can settle for a good financial adviser. And even then...

As to having time for yourself, I have seen all too many friends enter retirement with a shout of ‘freedom at last!’ They have looked forward to savouring every moment of a problem-free existence, only, in most cases, to find themselves on a fast track to decline, unless they happen to be committed to some sort of activity, albeit entirely voluntary. It is also a matter of individual choice. I personally find that life’s problems and accidents occur whether we like it or not and, more often than not, unexpectedly. I prefer to take the initiative and to settle for some problems that in any case are bound to occur: at least they will be occurring in the domain...
of one’s choosing and that way one enjoys a slight advantage when it comes to solving them.

This being said, from a social point of view and for the vast majority of workers even in rich, industrialized countries, there remains the major challenge of preparing for being 60 or 65 but in circumstances that leave us as individuals with some room for manoeuvre. Automatic marginalization, even though accompanied by fine words, must at all costs be avoided. There is a real issue of substance here which has to do with continuing training, training which must have as a priority preparation for an active life after 65.

I am someone who has always, at least since 1959, worked full time. But I have always had a second, and even a third, part-time activity alongside my main one. And it is these parallel activities that have enabled me to make deliberate choices about what I do. True, I have been blessed so far with good health that has made it possible for me to make the choices I have made. And in saying this, I am not suggesting that everybody should do as I have done. Nevertheless, as of the age of 50, it is, or should be, within our power to update our skills and to develop the professional knowledge and training we have acquired in new, and if possible complementary, directions. Over time, we should be able to recognize where in terms of knowledge and experience our strengths lie, and what the shortcomings are which affect our lives and work negatively.

Ultimately, recognizing where we have gone wrong and where the gaps in our knowledge lie provides opportunities for improving that knowledge and for learning from our mistakes. And this is something we have in common with even the greatest geniuses, for all human knowledge is both incomplete and partial. The task, even so, of sifting our knowledge, of rooting out out-of-date ideas or those that are downright detrimental to what we do is indeed a difficult one. And we should not expect to be able to change all that much, especially with advancing age, but the more we are able to recognize our mistakes and to pinpoint our areas of ignorance, the more we shall be able to breathe new air into the system and new ideas into our thinking. The point of all of this is, of course, to be able to live better.

Modern technology, and the purposes it is made to serve, will help all of us enormously with the adjustments that will make a fourth pillar possible. Even Einstein, who was not reckoned to have been a particularly good pupil at school, when he developed the theory that was to earn him a Nobel Prize for physics and a unique reputation, had conducted most of his research as a minor employee in the Patents Office in Berne. His is a good example of someone pursuing an activity which was initially secondary, parallel to his main job. Admittedly, few of us can expect to become 21st-century Einsteins, but I do believe that most of us are capable of making a success of the decade and a half or so until we are 80 and of benefiting fully thereby. God speed and good luck.

Managing the cost of better health

The last point I want to make has to do with the good health we all require between the ages of 60–65 and 80 years to be able to lead active and satisfying lives. Almost all studies on people of our age show that the best way of maintaining one’s health is to remain sensibly active. Then there are the recommendations about a wholesome, balanced diet, a modicum of physical exercise, about not smoking, and you can take consolation from the fact that a glass or two of a reasonably good wine is not only permitted but positively desirable.

That being said, with advancing age, the human machine begins to need repair and a number of spare parts already exist (indeed have existed for almost a century now and in an epoch of mounting efficiency) for replacement purposes. The textbooks on the history of medicine all concur that up to the end of the 19th century doctors were not able to achieve much in terms of changing things, their ministrations being practically without effect. Ours, by contrast, is a
blessed age even if accidents still occur, diagnoses are not always correct and treatment is at times ineffective. But in spite of everything, we nowadays manage to treat successfully one cancer in two.

Take, for example, hip replacement. There comes a time when your thigh bone or femur can no longer turn within the pelvis because the cartilage (which is like the lubricating oil that makes a door turn easily on its hinges) has disappeared. After the age of 60, one in ten persons begins to suffer from a problem of this sort and is in considerable pain. If the average age of the population remains 60 years or less, then very few people are affected. In the past, up to the middle of the last century, when the hip joint seized up all one could do was to insert a pin to block leg movement and reduce the pain. But moving about was pretty well out of the question and part-timework not really an option. Last year, 1,100,000 hip replacement operations were performed worldwide and the average age for a first replacement was 63 years. The total bill for these operations (pre- and post-operative costs included) amounted to around €20 billion or $20 billion.

There are, of course, various other types of prosthesis. As a result, health costs are rising and on average you and I are feeling better. One day, within say a few decades, it will perhaps be possible to replace the cartilage or grow a new one; possible, and also very necessary, given the lengthening lifecycle of our planet’s population. Over time, new treatments could both cost less and be more easily borne by the patient who at present must wait several weeks, sometimes even months, while not only bone and prosthesis, but also muscles which were sectioned to provide access, weld back together.

But the results are there in the number of replacement beneficiaries some of whom are even able to ski or climb mountains. Our generation is thus able to enjoy a whole new lease of life.

Another example is the screening and treatment of colonic cancer both of which can be performed at a relatively low cost thanks to optic fibres.

We live, then, right at the heart of a period when vast amounts of biological and chemical research are going to make possible the increasingly high levels of health and well-being that we shall need to build our lives after 65.

We also need to be thinking carefully about the economic implications of health costs. If they are rising, it is largely because we are increasingly able to benefit from advances in medicine. There are, of course, other kinds of problems — the efficacy of treatment, over prescription, and so forth — but the heart of the matter is the fact that we spend more on health to be able to live longer and better. And if in this sector there are crises, breakdowns and even major incidents, then medicine is no exception since such things occur in every domain of human endeavour.

One is, however, struck by the fact that medical ‘costs’ are often presented as ‘negative’ costs. I personally can see no difference between buying a car to be fully mobile (except in city centres) and paying for the sort of treatments described above which do no more than enable us to use our own bodies for the purpose of moving about. In both instances, car and health treatment, we are paying for efficiencies that enable us to live better. This is an idea, which may seem at first glance to be innocent and obvious enough, but which opens up a whole new vision of the economy and economics which I have had the occasion to develop further in other writings.

There is one further point we need to bear in mind: health costs are not evenly distributed across the lifecycle. Early childhood excepted, they increase on average with age and their increase also reflects new therapeutic discoveries and procedures. The problem, therefore, remains of how to finance such costs with advancing age.

In many countries, health is essentially part of a state-run social security system. In others, there are private systems often involving public participation and subsidies. However, in the
health sector, there remains the question as to whether the system should be run wholly or in part on a pay-as-you-go basis, or whether reserves should be constituted during the healthier relatively disease-free years so as to meet the higher costs that inevitably begin to occur after 60. The private insurance people assure us that reserves are accumulated during the low-cost years in order to offset the higher costs that occur with advancing age. But, frankly, the situation is far from satisfactory. In the first place, the reserves in question only very partially offset the rise in costs (and in premiums) as people grow older. Secondly, especially in a free-market system, year on year, companies are in competition with one another leaving very little surplus for the accumulation of decent reserve funds. It seems to me that we, as consumers, would be well advised to combine a properly managed universal pay-as-you-go system with something akin to the second-pillar pension schemes based on a capacity to generate reserves which can be used whenever they are needed. One might even think in terms of combining both second pillars — pensions and health — into a single scheme or system.

The issue is indeed a complex one and we can do no more here than point to one or two fundamental aspects, for example, the very simple but highly significant fact that unavoidably health is something that must be managed throughout the lifecycle. There is also the matter of being able to take immediate action when treatment is required: for example, hip arthritis triggering appalling pain may occur very suddenly practically without warning. Suffering for sometimes months on a waiting list is simply not good enough. How, then, can the private and public systems best complement each other? If the interests of the patient were seriously taken into account, would it really be so difficult to find an answer? The situation varies considerably from one country to the next, but one is frankly baffled by British Prime Minister, Tony Blair’s statement last year that things were improving because the patient waiting list had dropped by 100,000 to 1.3 million.

I think you will agree with me on one point: the health system must be capable of improving our quality of life not only between the ages of 65 and 80 years, but hopefully also beyond that age.

In any case, let us be convinced: society is not ‘ageing’. We are essentially facing an incredible new event: a longer lifecycle, full of opportunities.
Strategies for the Welfare Society in the Larger Europe: The Insurance Perspective

by Sergio Balbinot
CEO - Amministratore Delegato, Assicurazioni Generali

The future welfare scenario in the European Union is taking place after the European Union's recent enlargement to 10 new member states. It is a welcome debate, which deals with welfare issues in the context of labour and medical research.

This event enhances the historical role of Trieste as a reference point for finance and insurance in what is known as Mitteleuropa.

The debate will also focus on the contribution of the 10 new EU Member States to the creation of a common welfare model. As Managing Director of Assicurazioni Generali, I am very interested in this issue as Eastern Europe is one of the main pillars of our growth strategy.

Generali were among the first western insurance companies to operate in this area. We believed in its potential even in the first stages of the transition to a market economy, when Eastern European countries were heavily affected by inflation, recession and unemployment.

Moving on to the specific theme of the conference, I am going to develop some thoughts from an insurer’s perspective, that is on the role of insurance within the welfare reform process.

Everyone knows that in Europe, both old and new, the cost of social protection is continuously rising as a result of the increasing number of people who need support and the demand for better welfare services.

Indeed, with the fall of birth rates and the lengthening of life expectancy, the fraction of elderly people in the population has increased. People are more demanding about their health. In addition, the advances in medicine increase the costs of healthcare. New cultural models have spread, assistance by family members is declining and new structures and resources are necessary to support people who are no longer self-sufficient.

The increasing pressure on welfare costs forces governments to radically rethink their social policies. This is necessary to avoid inflicting the burden of unacceptable costs on future generations and jeopardizing social cohesion and political stability.

In the pension sector, this is a global problem which affects the relation between labour and retirement. Western economies have realized that they cannot rise to the challenge posed by globalization unless people work more and longer.

In Europe, on average, men retire at 60. At this age, health conditions are generally good and life expectancy is longer than it was 20 years ago. Pensioners could therefore continue to contribute significantly to the economy instead of weighing on public finances. Abolishing mandatory retirement age, while maintaining a minimum age limit is certainly an aim to pursue.

\(^1\) of the conference – see programme on page 158.
The pension reforms started in the Nineties have increased the retirement age and introduced penalties for those who leave their jobs earlier or incentives to postpone retirement. This has so far stabilized pension costs compared with GDP, but pressure deriving from an ageing population in the future will call for new actions.

Therefore, the Four Pillars proposal, long advocated by the Geneva Association, must be a cornerstone in the welfare reform process. Retirement must not be a traumatic experience for workers, but a gradual process taking into account health conditions.

The pace of welfare reforms has accelerated in recent years, but what has been done is not enough. States will have to further reduce their role and this creates room for private funds. Private funds have to cover a wide range of risks: the risk of contracting diseases, the risk of becoming unable to work, the risk of being unable to perform basic functions, the risk of running out of money during retirement thus having no means of support, etc.

In other words this is the job of insurers. We have devoted a massive effort to meet policy-holders' demands. Our policies are extremely flexible in terms of guarantees offered in order to maximize protection. Let's take for instance universal life policies, which contain a dynamic management of policy-holders' savings combined with death and other risk covers.

However, although insurers can do a lot, some risks still remain particularly dangerous for insurers themselves. In life and health insurance we are exposed to anti-selection, deriving from the information asymmetry in favour of policy-holders.

Anti-selection can be controlled through an appropriate underwriting policy and the use of demographic tables based on the company’s experience, but it is clear that, as long as the portfolio is limited, the variance of these tables will remain high. Therefore, it is in everybody's interest, as well as in ours, that the life and health market should grow to improve the diversification of this kind of risk.

Our policies also contain deductibles and limitations in order to prevent insured people from taking advantage of the presence of a third payer by being too demanding for unjustified reasons. Moral hazard, which is quite common in the health insurance, must be prevented to avoid an increase in health expenditure with negative consequences on the system as a whole.

Moreover, risks can change over time and quoting risks may be difficult. Let's take annuities, for instance. Insurers are exposed to the longevity risk, a systematic risk which cannot be minimized by diversifying portfolios, so it may have devastating effects on an insurer's balance sheet.

In the last few years we have witnessed the lengthening of life expectancy. In order to calculate the value of annuities, companies have to use projected mortality tables. This poses a further risk for insurers, in addition to that of stochastic deviations: the risk of getting the estimated life expectancy wrong.

The insurance world has to be strictly connected to the scientific one. Only thus can we understand or rather prevent any impact that the development of scientific knowledge may have on our business. The new frontier is represented by genetic research which can potentially change the insurance scenario through its effects on human life.

The annuity market is still underdeveloped, but is set to grow in the future. This business will grow in the countries where the law ties tax incentives to the conversion, partial or entire, of the accrued capital into annuities. This is the case in Germany and Austria, where the accrued capital must be fully converted into annuities, and in Italy, where the capital share to be converted must be at least 50%.

In the countries which grant the saver freedom of choice, the growth of the annuities market
is hampered by the fact that savers are convinced that they receive from the state more than it can offer in the future and that there are psychological barriers to the conversion of a definite, tangible, usually large, capital into an annuity for life.

Another important aspect to be considered here is the management of households savings. Life policies are flexible and include different lines of investments in order to meet savers’ requirements in terms of risk aversion and length of investments. Policy-holders can switch their investments from one class of assets to another according to changes in their needs during their life cycle.

However, if we focus on pension funds, we must bear in mind that the primary aim of supplementary funds is ensuring that an adequate standard of living is maintained throughout retirement. This means that there is no room for risky investment policies.

In some countries financial guarantees are mandated by law or are often demanded by the policyholders themselves who are thus certain of their future standards of living. These guarantees pose serious risks to insurance companies. If the financial management cannot achieve the expected returns, the company has to resort to shareholders’ money.

Therefore, financial guarantees must be consistent with the opportunities offered by financial markets: there is no point in making promises which cannot be kept.

This implies that investment strategies cannot be separated from obligations towards policyholders. In this respect, the insurance sector has developed ALM models which allow a fine-tuned co-ordination between technical and commercial strategies on one hand and the investment policy on the other.

European legislation encourages insurance undertakings to better control their risks in order to maximize complying with obligation to customers. Given the positions which have emerged in the EU works on the new solvency margin, Solvency 2, insurance companies will have to meet more risk sensitive capital requirements.

During these works, the idea was that the statutory capital may be determined following general rules or, alternatively, by using internal models of risk assessment. In other words, the companies using those models will be able to reduce their capital requirements and, as a consequence, capital remuneration costs and, as a final result, the costs of products.

As for the latter issue I would like to add some words on the role of insurers in the financial markets and savings accumulation. The specific characteristics of the insurance business have stimulated financial innovation both in terms of demand of new financial instruments — which have to be coherent with liabilities — and products offered to policyholders. Insurers have launched on the market products with minimum financial guarantees, for instance the reimbursement of premiums paid at the end of the accumulation period, and a yield linked to a specific index.

Insurance has also greatly contributed to the growth of financial markets as a result of the huge amount of savings managed by insurance undertakings. Currently, European insurance undertakings are managing assets for something like 4 trillion euro, half of the GDP of the area, an enormous sum of money which gives witness to the importance of our sector in the economic world.

Let me stress another aspect of our role as insurers which may sometimes pass unnoticed.

By offering advice on a daily basis, our financial advisors contribute to raising our customers’ awareness on the need to protect themselves from risks. Workers’ expectations concerning the ability of the welfare system to offer adequate levels of protection in the future continue to be too high. This is the reason why some European governments have launched
informative campaigns aimed at promoting supplementary funds.

If we were to use the famous “invisible hand” metaphor, we could say that the interest of insurers to make profits corresponds to the interest of customers. For us, making profits means establishing long-term relations with our customers in order to have a stable portfolio and this can be achieved only through high-quality advice and services.

Through the action of insurers in increasing customers’ awareness about the risks they run, more resources are available in the system, part of which can be used for scientific research in the medical field. This is, for instance, an aspect which distinguishes Europe from the United States: although the American health care system is not appropriate for us for a whole series of social and cultural reasons, undeniably, medical research is more advanced overseas and this stems from the fact that research institutes have more funds in the US.

To conclude, insurance is at the heart of the changes taking place in welfare systems in Europe, both old and new, as I said at the beginning. We can play a crucial role in the modernization of welfare states, stimulating savings accumulation, increasing protection against risks, contributing to innovating financial markets and gathering new funds for medical research.

However, ultimately our efforts will be successful only if all the players involved in a country — politicians, the economic and scientific community — jointly strive to improve social protection and the population’s living conditions. It is our moral duty to offer our children a social model that may protect them from any risks and an environment in which they may progress as we did thanks to our predecessors.
Building the European Welfare Policy

1. The welfare state in 20 years — An attempted look into the future

by Jaroslaw Pietras Ph.D.
Minister for European Affairs, Poland

In today’s debate on a need for socio-economic transformations in Europe, one can frequently encounter an opinion that the welfare state, as we know it from the 20th century, sinks into oblivion. Ageing of the societies, high unemployment rate, low social activity and inefficiency of taxation and insurance systems preclude maintenance of high levels of social transfers. Without a radical reform of the foundations of the European social model, many of the European states can be threatened by bankruptcy. One can certainly ask a question — what shall come in exchange? Are we in time perspective of the coming 20 years to see a return of the late 19th century social model, where the assistance to the poor was founded on a charity and persons who — for various reasons — were unable to compete against others could solely count on support from their families? If it were so to happen, this would signify a return to a system that faced criticism not only from the most eminent philosophers or ethicists but also a vast majority of economists.

When reflecting on what social model of the state we will be dealing with in 20 years, first one has to go 20 years back and recall what the situation was like. This will give us proper perspective. Let us try to look at Poland today and 20 years ago, i.e. in 1985. Presently Poland is a member of the European Union and NATO; then we were a member of the Council for Mutual Economic Assistance Council and Warsaw Pact. For a layman there has been no change here. Both now and 20 years ago we have been a member to an economic and military alliance. But the difference is huge. Let us have a look at the labour market situation. In 1985 there was no unemployment or unemployed persons in Poland. Did this ensue from excellent economic and social situation? Certainly not. There was simply no legal definition of unemployment since a job was guaranteed to everyone. At the same time employees’ efficiency was several times worse than the present level and an average salary was at the level of 20 to 30 euro. As people in Poland used to say then: the state pretends it pays, employees pretend they work. It is hard to imagine a system more demoralizing in economic terms. Let us also see how the migration situation has changed. In 1985 several dozen thousand people left Poland with the intention of staying abroad permanently. Those were usually people with university education, who did not see any development prospects in Poland for themselves. Most of them returned as late as in the 1990s, when they came to a conviction that their country of origin gave them better development opportunities than foreign countries. This year several dozen thousand people will come to Poland from many countries of the world. Just as Germany, Italy, France or the USA used to be destinations for Poles, now more and more frequently Poland becomes a dream place for living and working.

Those few examples show how difficult it is to forecast future in a mid-term perspective. In my opinion one has to be optimistic. The example of Poland shows that many things that seemed unattainable can be carried into effect in a very short time. If I may give the reins to my imagination, it seems to me that Cassandra-like forecasts of social ‘futurologists’ will fail to come true. In 20 years the European Union will be more powerful than it is now. A different
social model will be in place, but it will be still founded on the rule of subsidiarity. A greater social activity will be needed, income differences will be most probably greater, but people in need will be always able to count on state assistance. Responsibility of governments of individual states will lead to a discovery of a golden mean — performing social reforms and winning social approval for them. This will allow for maintenance of individual and unique character of the European model, where a human being is treated as the most important subject of policy, and preclude transfer of simple solutions offered by supporters of the American or even Japanese model. If we are to attain that, however, we need to continue the debate on challenges we are facing today and those we will face in the nearest future. This purpose is served by making comparisons of various visions of social development.

Poland views this process from the point of view of the objectives we wish to attain within 20 years. Firstly, we wish to be an active member of the European Union, one that has its own opinions on all major issues pertaining to the future of Europe. At the same time we wish to be a member that is open to compromises made in the name of a common interest. Secondly, we wish to catch up swiftly with the states that presently are at a higher level of economic development. Thirdly, we wish to ensure a high level of living standards to our citizens, which, however, must not signify simple transfers and systemic support for passive attitudes. A modern state should be socially active, i.e. ensure support to citizens in difficult situations. Each person needs to rest assured that he or she can count on the country. However, he or she must also be aware that he/she has certain obligations towards the country. The most fundamental of them is an active attitude and willingness to help himself/herself. In my opinion such an approach will allow for securing social welfare and developing a model that will survive longer than the one we are bidding farewell to now.

2. Development of a social policy after enlargement

by Maciej Duszczyk

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The present EU enlargement brings many challenges but also many opportunities for the increasingly uniting Europe. Opinions presented before 1 May 2004 focused on the one hand on issues pertaining to widening of development gaps within the European Union, which might endanger cohesion, and on opportunities relating to acceleration of economic growth and enhancement of competitiveness of the enlarged European Union on the other. The first approach resulted, amongst other things, in transitional periods in the area of free movement of workers. The latter one resulted in joining single market operations by new member states — which intensified competitiveness within the Union.

It is true that the states that acceded to the European Union on 1 May 2004 are relatively less affluent and developed than those comprising the Union so far. This, however, is not a new situation. Similar ones took place twice before. Firstly in the case of Greece. And secondly in the case of Spain and Portugal. One has to assume that subsequent enlargements will be also of similar character. There is a single reason for that. Practically all well developed European states already are Single Market members. Only Switzerland remains outside, but it increasingly unites economically with the European Union. The examples of Norway or Iceland show that despite non-participation in political integration, states can participate in economic integration.

The largest enlargement of the European Union took place in a very special moment in history. The European Union has faced an enormous challenge to effect changes that will help it respond to globalization-related challenges. The reform package adopted in 2000 and called Lisbon Strategy failed to take into account two fundamental issues: European Union
enlargement and increased competition from such states as China or India. That is why the Lisbon Strategy requires adjustments to the events that have taken place after 2000. One of the key aspects of the Lisbon Strategy is the upgrading of the European social model. This is to be the main challenge for social policy performed both at member states level and co-ordinated at the Union level.

Recently at least four very important documents have been published, which contain opinions and recommendations concerning the future of social policy. They are:


Authors of all four reports are unanimous. The necessity to reform the European social model ensues from changes relating to the demographic factor and intensification of global competitiveness and to the European Union enlargement. What is more, members of the High Level Group directly prove that accession of new member states with lower level of social security can be an opportunity to effect the necessary changes.

Analysis of the situation in the European Union suggests that it faces three key challenges:

1. How can we counteract adverse effects of the ageing of European societies?
2. How can we increase employment level and minimize adverse effects of unemployment?
3. How can we win social approval for reforms of social security systems, which will inevitably decrease security level of excluded persons?

Let us try analyzing those three issues and formulating foundations for some recommendations.

**Challenge 1**

Contrary to common opinions, accession of new member states to the European Union did not change the pan-European trends in the scope of demographic changes. It is true that new member states — particularly Poland — are relatively young societies. However as a result of the drop in the number of births, which has been observed in those countries since late ’80s of the previous century, in mid-term ageing of societies will be a problem afflicting all EU member states. This situation will not be changed by the accession of Bulgaria, Romania or Croatia. A change might be brought by the accession of Turkey to the European Union — but presently this is a controversial issue. Ageing of societies brings many adverse economic effects. The major ones include: inefficiency of social insurance systems and the necessity to bear higher expenditure in health care field. On the other hand, the lengthening of lifespan is a key element of a welfare state. Let us think how we can counteract adverse effects of the ageing of societies. Three methods are usually given in the reports:

- Lengthening of employment time by delaying retirement age,
- Increasing migration level,
- Conducting active pro-family policy.

It seems that the development of a social policy in the nearest future will rather tend towards the third method, which seems least controversial. Delaying of retirement age is very
controversial from the social point of view. Limitation of the period when the pension earned by a citizen is paid out can only be voluntary. Given the present level of pensions in EU Member States, it is difficult to imagine a situation where persons over 65 on a mass scale consent to remaining occupationally active longer with a view to receiving higher pensions. Even if such situation takes place, the period of lengthening the employment time will be rather short and thus will fail to bring about the expected savings. In this context it seems that a positive outcome can be brought through elimination of fraud in the system of disability pension granting and limitation of the grey zone area. States that amended their ‘pay-as-you-go’ systems and introduced individual insurance are in a better situation here.

Equally controversial is the issue of increasing the migration level. It needs to be stressed that hitherto external migration from CEECs has become internal migration as a result of the enlargement. Moreover migration from such states as Poland was the most agreeable one for citizens of ‘old’ member states. As a result of lack of social approval for migration from Asian countries, India or Africa and difficulty in integration of those immigrants with the European society, the scale of migration will remain on low level from the point of view of the ageing of the society. An important observation in this context is also certain migration gaps in ‘new’ member states. Recently from typical emigrant countries, they have become emigrant-immigrant countries. In the years to come most of them can be expected to become typical immigrant countries. Therefore one can expect that they will accept a larger number of emigrants than before.

Given the two issues above, the best method to counteract the ageing of societies seems to be an active pro-family policy. Its elements can be found for example in the Lisbon Strategy, which encourages member states to increase the number of places in kindergartens. Of particular importance here are also new forms of employment, which help reconcile professional career with home duties. Other elements exceeding the boundaries of social policy are, for example, pro-family taxation systems.

Challenge 2

In recent years, there has been less and less talk about unemployment level and the stress is increasingly laid on measures aimed at improving employment level. It is obvious that we will not attain by 2010 the level of 70% employment as assumed in the Lisbon Strategy. Hitherto activities have brought about some positive results but they do not allow for a fundamental improvement in the situation. As a result of the enlargement, employment rate dropped by over 2% and amounts to slightly more than 62%. Time has come to undertake actions that — despite difficulties in winning social approval for them — should be implemented in the name of responsibility for the future of the European Union. They have to lead to a greater flexibility of the labour market. The European Social Model, which in many cases allows people to remain occupationally passive despite many job offers, needs to be upgraded. Currently in many member states actions are undertaken to upgrade social models. Among the most important ones is the Hartz IV programme implemented by the German government. In this field new member states are in a way in a better situation. The level of social security forces people to seek employment actively, minimizing occupational passivity. At the same time a high unemployment level gives rise to willingness to escape into pension systems, which — despite low level of income — guarantee social security. In Poland, which has the highest unemployment level and the lowest employment rate in all EU member states — the scale of challenges is even higher than EU average. Therefore activities of the Polish government go along the line of primacy of work over unemployment and occupational passivity. Performance of any job that brings income and is consistent with minimum standards guaranteed by labour law gives added value and should be given priority treatment.
With a view to improving employment in individual member states, it is also necessary to undertake such actions at the Union level that will eradicate barriers to entrepreneurship. The draft directive on services on the single market, whose entry into force should be an impulse for development of services sector — which is the most pro-employability branch — gives high hopes.

**Challenge 3**

The third issue is directly linked to the two previous ones. Changes introduced to the detriment of many social groups, which undermine security level and impose new obligations, always meet with social resistance. Unfortunately the only way to cope with this problem is strong resolve in all actions. This must be complemented by an active social policy targeted at excluded persons, which will propose clear prospects of benefits ensuing from occupational activation instead of high level of social security. The worst situation would be if persons hitherto deprived of means of earning their living are not offered any other forms of securing their upkeep. Therefore an upgrading of the European social model has to be accompanied by an active state policy in the field of active forms of counteracting unemployment. This will not be possible, however, without undertaking measures lessening burdens to employers related to hiring new employees. Thus a reform of the labour law is also necessary.

In the case of a discussion on consequences of the ageing of societies, one must also not forget the univocal character of the undertaken solutions. When analyzing social programmes of many European states one can notice a priority role of measures targeted at counteracting ageing of societies through — inter alia — the raising of retirement age accompanied by playing down the problems of social exclusion of youth. In many member states of the European Union (e.g. in Italy, Poland, Spain) youth constitute the major social group staying out of employment. This leads to numerous negative social problems, which are extremely difficult to solve (e.g. crime, addictions) as well as frustration pertaining to inability to satisfy needs and lack of prospects relating to setting up a family. This results in postponement of the decision to set up a family until undefined future, which is also related to postponement of the decision to have offspring. This contributes to a drop in the number of births and deepening of the problem of ageing in the long-term perspective. The above diagnosis brings a single conclusion. Implementation of a policy targeted at counteracting ageing of societies must not be limited to measures targeted at people of advanced age. It is necessary to expand measures that would result in a rise in employment of young people. It would be also advisable to build systems counteracting problems typical for this age group. Just as we need a pact for elderly people, we definitely need a pact for youth. In this context a significant role can be played by the European Union, which — in the frames of its activities in the scope of counteracting social problems — should give priority to youth as a major group of beneficiaries of support from structural funds. This can be of fundamental importance for quality of states in the long-term perspective.

Fundamental social reforms are difficult to carry into effect in the European Union. In this context new quality can be contributed by new member states. They bring a development potential lacked by ‘old’ member states. This is corroborated, amongst others, by indicators of economic growth rate or rate of improvement of employees’ efficiency. The European Union’s enlargement opens many new development possibilities to the entire EU. One should also remember that the new member states brought into the European Union ‘the dynamics of change’. CEECs have made an unprecedented leap in the last 15 years, which not only enabled them to access the Community but also allowed them to meet many challenges pertaining to the growing global competitiveness. The scale of changes, which have been introduced, amongst others, in Poland, is practically incomparable with what the
European Union needs to do now to improve its competitiveness and maintain the foundations of the European social model. One can say that from this perspective the European Union faces a much easier task. But to accomplish this task, many member states must become infected with this optimism for changes that characterizes societies of new member states.

Summing up, in my opinion social policy implemented both at the Union and national level faces many challenges. If we don’t meet them, we will face a danger of slump in European Union’s competitiveness and a decline in political significance. Without many socially difficult decisions it will be impossible to maintain the foundations (formulated a long time ago by Bismarck and Beveridge) of the European social model, which — if unreformed in the mid-term — will disintegrate altogether in the long-term. We must bear in mind that this model makes the European states positively stand out on the global arena — giving to citizens the foundations for social and economic welfare.
The Demographic Situation Now and in the Next 10 to 20 Years

by Raimondo Cagiano de Azevedo
University of Rome ‘La Sapienza’

Vincenzo Marigliano says that we have cultural barriers to the accepting of some evidences from the medical or the statistical point of view. I would like to do the same exercise with you: to read the same data with the current cultural barriers and without them.

In many text books the ageing of the population starts from the population structure; and from the statistical, economic and cultural point of view, the population structure in our society is linked to the so-called life cycle, in which we consider first the young population, which is decreasing in time. This is the case of Italy, but it is the same all over Europe. As far as adults are concerned, there is a small decrease, but it is more or less constant. There is an increase in the old population and a dramatic increase in the oldest population: the centenarians.

This is the starting point for our current thinking on the population ageing which you can find in any textbook, conversation or conference. All the statistical indicators that we normally use for describing ageing of population are based on this thinking. There are several indicators presented in the table below: the aged percentage, the oldest old percentage, the old age dependency ratio, and the ageing index.

Table 1: Demographic indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Aged percentage (%)</th>
<th>Oldest old percentage (%)</th>
<th>Old-age dependency ratio</th>
<th>Ageing index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>8.3</td>
<td>1.1</td>
<td>12.5</td>
<td>31.4</td>
</tr>
<tr>
<td>2000</td>
<td>18.1</td>
<td>3.9</td>
<td>27.1</td>
<td>127.1</td>
</tr>
<tr>
<td>2050</td>
<td>35.9</td>
<td>14.1</td>
<td>63.2</td>
<td>301.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Aged percentage (%)</th>
<th>Oldest old percentage (%)</th>
<th>Old-age dependency ratio</th>
<th>Ageing index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>13.5</td>
<td>2.3</td>
<td>21.2</td>
<td>60</td>
</tr>
<tr>
<td>2000</td>
<td>16.6</td>
<td>3.9</td>
<td>24.9</td>
<td>99.5</td>
</tr>
<tr>
<td>2020</td>
<td>20.7</td>
<td>5.7</td>
<td>32.2</td>
<td>163.5</td>
</tr>
</tbody>
</table>

In Italy the ageing index has reached an alarming level, since we consider the adult population in relation to the young population or the old population, both of which are considered as dependent populations. In Europe it is exactly the same. We find that the young are decreasing, adults are constant, the aged population is increasing and the numbers of the oldest old are rising more.

As for life expectancy, the same problem appears in Italy, in Trieste too, and all over Europe. It will rise to over 80 years of age in the European population in 2050. This result has already been reached by the female population, whereas for men it stands at the age of 78 in Italy and Europe. The median age is another very relevant indicator of the ageing status in
Europe. There is an increase in the median age, with cultural barriers. The median age is the line that divides the young population from the old population and it is increasing in Italy, in Europe and all over the world. These are the classic statistical data and different indicators of ageing.

Table 2: Life expectancy and median age (1950-2050)

<table>
<thead>
<tr>
<th>Life expectancy</th>
<th>Median age</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>EU 15</td>
</tr>
<tr>
<td>1950</td>
<td>66.0</td>
</tr>
<tr>
<td>2000</td>
<td>78.7</td>
</tr>
<tr>
<td>2050</td>
<td>82.5</td>
</tr>
</tbody>
</table>


In a report by the United Nations, where a population overview is given, it is highlighted that the median age will continue to increase to about 50 years; world population will be divided into a young population under 50 and an old population over 50 (“Over the next 50 years, the world median age will rise by nearly 10 years to reach 37 in 2050. Among the developed countries, 16 are expected to have a median age of 50 or more; Italy at about 52.” United Nations, World Population Prospects: the 2002 Revision, N.Y., 2003).

What happens, if we use the median age without cultural barriers? In Figure 1 we can see a comparison in parallel ages in the European Union with its 15 member states between 1980 and 2020. The median age was 33 years in 1980, and this will be about 44 years in 2020, which is tomorrow in demographic terms, except that all the population of year 2020 have already been born.

Figure 1: Comparison of ages in the EU
The median age proceeds from 33 to 44: eleven years of difference! Without cultural barriers, there are eleven generations from the oldest part of the population to the youngest part. This is a rejuvenation process, and not an ageing process. We have a rejuvenation process for eleven generations in the next 15 years. If we read the median age with the same culture and technical interpretation that we give today to our life cycle, we have eleven generations which will stop being older in the next 50 years and remain young.

We can remove the cultural barrier and we can take into consideration two populations: the young population and the old one are two different populations in Italy and in Europe. If we take into consideration the total population we again have the ageing index: starting from 1991 Italy was the first country in the world to have an ageing index of more than a hundred old people on a hundred young people. We can continue the exercises with the young and the old population according to our cultural barriers. The young population have the same indicator that we have used for the total population. We can consider all young people (those of 30-40 years of age) especially from the point of view of fertility or of the family formations, as old people. We have major disparities among the young population in respect of a very very young (0-10) years old: it is the exactly the same indicator as that for the total population. We looked and we found in statistical terms that we were able to see in every case that the effect is that the young population is ageing: what’s ageing in modern society is the young population! In 2001 it was largely more than a hundred and in 2020 it is 142,5 both for men and women.

We can take now into consideration the old population and we will proceed in the same way. The oldest old are those more than 80, compared to the young old, those between 60 and 70. Among the latter we have a rejuvenation not because old people are not increasing but because of the increasing of the very very old there is a rejuvenation of the young old. In fact the young old help the ageing old population to be a younger population like in Egypt or Costa Rica. Young populations in the world are ageing too but in very different way in respect to the ageing of the mature populations.

*Table 3: Total population*

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P (65+) / P (0-14) (M)</td>
<td>27.7</td>
<td>32.2</td>
<td>37.6</td>
<td>49.4</td>
<td>76.3</td>
<td>100.9</td>
<td>157.9</td>
</tr>
<tr>
<td>P (65+) / P (0-14) (F)</td>
<td>35.1</td>
<td>46.0</td>
<td>55.1</td>
<td>74.7</td>
<td>117.9</td>
<td>154.8</td>
<td>220.5</td>
</tr>
</tbody>
</table>

*Table 4: Young population*

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P (30-40) / P (0-10)</td>
<td>72.8</td>
<td>90.3</td>
<td>80.2</td>
<td>96.5</td>
<td>137.0</td>
<td>169.2</td>
<td>142.5</td>
</tr>
<tr>
<td>P (30-40) / P (20-30)</td>
<td>76.0</td>
<td>95.4</td>
<td>97.0</td>
<td>93.6</td>
<td>85.4</td>
<td>117.4</td>
<td>109.1</td>
</tr>
<tr>
<td>P (30-40) / P (0-10)</td>
<td>80.7</td>
<td>97.5</td>
<td>85.9</td>
<td>102.5</td>
<td>143.4</td>
<td>175.2</td>
<td>142.5</td>
</tr>
<tr>
<td>P (30-40) / P (20-30)</td>
<td>79.6</td>
<td>99.6</td>
<td>100.5</td>
<td>95.7</td>
<td>87.2</td>
<td>118.6</td>
<td>109.1</td>
</tr>
</tbody>
</table>

*Table 5: Old population*

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P (80+) / P (60-70)</td>
<td>14.4</td>
<td>17.1</td>
<td>15.5</td>
<td>18.2</td>
<td>22.7</td>
<td>24.9</td>
<td>39.0</td>
</tr>
<tr>
<td>P (80+) / P (60-70)</td>
<td>15.4</td>
<td>19.1</td>
<td>22.2</td>
<td>30.7</td>
<td>38.2</td>
<td>46.4</td>
<td>62.7</td>
</tr>
</tbody>
</table>

This reading of statistical details give us the final indication that in the near future we will have few children, the ageing of young people, especially the extinction the adult population, and a rejuvenation of the old. We have an increase of the oldest old people and from the economic and social point of view we have to prospect, without cultural barriers, new images unfavourable to fertility; a new image of support for young people becoming old at a young age: a sort of pensions system for young people; we have to protect the adults, extend the working life of the young old and protect the pension systems for the very old and very very old: this is politically incorrect today.

This is not only my personal opinion. This subconsciously is the opinion also of the United Nations. They write that the threshold of the ageing is 77 years. In negotiations today anybody will accept these indications but this is the sign of our counter-ageing society: “In the absence of migration, to maintain in 2050 the 1995 ratio of persons of working-age to each older person past working-age, would require increasing the upper limit of the working-age span to 77 years” (Chapter “Italy”. United Nations Population Division, “Replacement Migration, 2001”; T/ESA/SER.A/206).

In this case the extension of working life, the so called active ageing, is the simplest consequence of all our reflections, the message of every international organization today. But this was already invented by Seneca two thousand years ago when he said that at 50 years (man) will stop working and have some offices till 60 and then he will be quiet. (A quinquagesimo anno in otium secedam, sexagesimus me annus ab officiis dimittet – Seneca). What we do not have today is the economic of having something to do between 50 and 60 years as in Seneca’s case. Today the period is between 65 and 75.

On this basis we are working on many academic scenarios with a view to taking from them some economic and financial implications and at the same time taking into account the invariance of a certain number of variables. But the conclusion of every scenario, and the most sophisticated scenarios that we can produce, is that if we remove the cultural barriers we have to move ageing to very old age, and if we do that we save a lot of money.

2. Demographic structure: Consequences of the change

by Benedetta Cassani
University of Rome ‘La Sapienza’

This part of the report concentrates on the demographic aspects of current and future population ageing and its consequences. The radical changing in the population structure represents the new challenge not only for Italy but for all developed countries during future decades. In addition to the growing number of the elderly, a phenomenon already explained in the previous chapter, in the next fifteen years demographic transition will involve an important decline in the group of the active or working-age population (15-64) with significant consequences for the stability of the welfare system including the social, health care, training and employment services. Ageing will be reflected in changes in the relative weights of broad age groups; it will be fundamental to face this deep trasformation and to change the inadequate traditional definitions in accordance with the new population structure.

The pension system strongly depends on the demographic structure of the population. The first step to achieving the stability of the welfare system is to ensure the intergenerational equilibrium irrespective of the demographic situation. This will be possible only through the introduction of a new vision of the elderly people, viewed no longer as a burden but as an important resource for the development of society. For several years the European guidelines have addressed the increase in the employment of the elderly as the first goal which needs to
be achieved in the next few years.

The focus of this analysis will be the identification of a new age threshold for reaching the ageing condition and retirement age. In order to better understand the situation it will be useful to see some hypothetical scenarios. These are only simple exercises but they clearly show how the demographic structure would change by modifying the traditional definitions and the measures of ageing. On this occasion the Italian population will be considered. We could analyze the European population in the same way.

As a starting point it is important to consider the present population structure. Elderly people are defined as those who have overcome a prefixed age-threshold. In fact in the current situation, 65 years is the age limit which generally equates to the pensionable age and represents the threshold beyond which bureaucracy and common sense see the beginning of senility. The consequences of maintaining the value of the ageing threshold constant are noted. We notice that the percentage of the elderly has quickly increased in recent years and will do so even faster in the near future reaching 23.5% in 2020.

<table>
<thead>
<tr>
<th>Year</th>
<th>Elderly people</th>
<th>Ageing threshold (X)</th>
<th>Population X (%)</th>
<th>Life expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>3,895,184</td>
<td>65</td>
<td>8.2%</td>
<td>12.6 (M)</td>
</tr>
<tr>
<td>1981</td>
<td>7,485,126</td>
<td>65</td>
<td>13.2%</td>
<td>13.6 (M)</td>
</tr>
<tr>
<td>2001</td>
<td>10,555,935</td>
<td>65</td>
<td>18.2%</td>
<td>16.5 (M)</td>
</tr>
<tr>
<td>2020</td>
<td>13,150,930</td>
<td>65</td>
<td>23.5%</td>
<td>18.5 (M)</td>
</tr>
</tbody>
</table>

Source: own calculations based on the ISTAT (Italian National Statistical Institute) database.

We will witness an increase in the absolute value of the number of elderly people at that time, while life expectancy will be increasing considerably in the course of the coming years. In other words it is possible to affirm that the population is ageing in demographic terms, but at the same time is rejuvenating in the biological sense. That is, we can hope to live more years in comparison to the past. It is important therefore to verify the conditions of life during the years gained; good health and independence in the daily life should progress along with long life expectancy.

If we modify the previous scenario by adopting a dynamic threshold in accordance with life expectancy the situation changes considerably. We hypothesize that to qualify as ‘elderly’ people are thought to be identified within a temporal horizon (the average years that the population is meant to live) equal to a mounting number of years. We maintain constant the life expectancy up to the values of 12.6 for men and 13.7 for women, values surveyed during 1951. In this case the number of elderly people surviving to an advanced age, living under the same conditions, will increase less in comparison to the previous scenario, the same as the old age index, and it would be possible to limit the weight of the elderly to the value of 11.3% for men and 13.7% for women. In this case there will be a slight demographic ageing, without biological ageing since life expectancy in the hypothesis is constant.

1 Technically, it is the average number of years of life remaining to a person at a specified age, assuming current age-specific mortality rates continue during the person’s lifetime.
Another case might be that we decide to maintain the absolute number of people constant at the value stated in 1951. This could result in a rejuvenated population because the percentage of the elderly population will drop from 8.2% to 6.9% but life expectancy will decrease by nearly 4 percentage points. Demographic evolution will lead to a 15 years modification of the threshold and we can reach the age 80 by 2020. To sum up we can say that the population will get old later in life. The average life expectancy will decrease for both men and women; that is why we speak about demographic rejuvenation and biological ageing.

Table 8: The absolute number of elderly people is maintained constant at the level of 1951

<table>
<thead>
<tr>
<th>Year</th>
<th>Absolute Value</th>
<th>Ageing Threshold (X)</th>
<th>Population X (%)</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>3,895,184</td>
<td>65 (M) 65 (F)</td>
<td>7.6 (M) 8.8 (F)</td>
<td>12.6 (M) 13.7 (F)</td>
</tr>
<tr>
<td>1981</td>
<td>5,594,682</td>
<td>67 (M) 70 (F)</td>
<td>9.5 (M) 10.2 (F)</td>
<td>12.6 (M) 13.7 (F)</td>
</tr>
<tr>
<td>2001</td>
<td>6,199,331</td>
<td>71 (M) 73 (F)</td>
<td>9.2 (M) 12.1 (F)</td>
<td>12.6 (M) 13.7 (F)</td>
</tr>
<tr>
<td>2020</td>
<td>6,793,369</td>
<td>73 (M) 76 (F)</td>
<td>11.3 (M) 12.9 (F)</td>
<td>12.6 (M) 13.7 (F)</td>
</tr>
</tbody>
</table>

In confirmation of the inadequacy of the usual definition of elderly people in the following scenario we could consider as constant the percentage of the population over the ageing threshold. In this case, compared to 1951 we could achieve the same value moving the ageing threshold from 65 to 78 in 2020. As a result people over 78 years old would be considered elderly. In this scenario the population would not be ageing from a demographic point of view (population ageing indicated by the increases in the proportion of the elderly in the total population) but it would be biologically ageing in the sense of a decrease of the life expectancy.

Table 9: The percentage of population over the ageing threshold is maintained constant at 8.2%

<table>
<thead>
<tr>
<th>Year</th>
<th>Absolute Value</th>
<th>Ageing Threshold (X)</th>
<th>Pop X (%)</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>3,895,184</td>
<td>65</td>
<td>8.2</td>
<td>12.6 (M) 13.7 (F)</td>
</tr>
<tr>
<td>1981</td>
<td>4,637,682</td>
<td>70</td>
<td>8.2</td>
<td>10.5 (M) 13.4 (F)</td>
</tr>
<tr>
<td>2001</td>
<td>4,743,209</td>
<td>75</td>
<td>8.2</td>
<td>9.9 (M) 12.5 (F)</td>
</tr>
<tr>
<td>2020</td>
<td>4,590,741</td>
<td>78</td>
<td>8.2</td>
<td>9.8 (M) 12.2 (F)</td>
</tr>
</tbody>
</table>
It could be interesting to suggest another scenario in which the total number of the remaining years of your life could be kept constant. It is possible to measure the number of the years of life\(^2\) using the life table\(^3\). We will fix the number of years of life that people of the age of 65 expected to live in 1951. In this case the number of the elderly people would not undergo particular alterations. It could be interesting to have the same discussion about the problem of the stability of the welfare system; the remaining years, from a theoretical point of view can be made to correspond to the years of pension that the population must receive. This implies that the resources allocated to the pension system must remain steady, because this scenario is constructed on the basis of the constancy of the residual years of life. The consequence of this hypothesis would be that the number of elderly people and the ageing index would not change very much compared to those of 1951, but the threshold for ageing would rise to the age of 79 in 2020.

Table 10: The total expected years of life of the population aged 65 and over is fixed at 1951

<table>
<thead>
<tr>
<th>Elderly people</th>
<th>Absolute value</th>
<th>Ageing threshold (X)</th>
<th>Population X (%)</th>
<th>Life expectancy</th>
<th>Years of life TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>3,895,184</td>
<td>65</td>
<td>8.2</td>
<td>12.6 (M)</td>
<td>19,803,114</td>
</tr>
<tr>
<td>1981</td>
<td>4,389,960</td>
<td>71</td>
<td>7.8</td>
<td>10.1 (M)</td>
<td>19,803,114</td>
</tr>
<tr>
<td>2001</td>
<td>4,155,527</td>
<td>76</td>
<td>7.2</td>
<td>10.5 (M)</td>
<td>19,803,114</td>
</tr>
<tr>
<td>2020</td>
<td>4,531,274</td>
<td>79</td>
<td>8.0</td>
<td>9.3 (M)</td>
<td>19,803,114</td>
</tr>
</tbody>
</table>

Source: own calculations based on the ISTAT database.

The results show overall that it is necessary to increase the pensionable age if we want to maintain the stability of the welfare system. It is impossible not to take into consideration the key question as to how future demographics will interact with the stability of the welfare structure.

The future ageing process involves change not only in the field of social security but also in the labour market. Another way to achieve a decrease in the pension expenditure would be to introduce the possibility of part-time work for the elderly. The aim of this scenario is to examine the changes at the end of the active years brought about by the introduction of part-time. This hypothesis has been based on several changes in the labour market as a consequence of the rapid ageing of the labour force; part-time employment would fit perfectly this part of the population. Gradual retirement is not very common. On the whole, the proportion of people working beyond standard retirement age is very low in all European countries and particularly in Italy.

---

2 Years of life \((L_x)\) average number alive between age \(x\) and \(x+1\), or total years of life lived between \(x\) and \(x+1\) by those who attain age \(x\): \(L_x = (b_x + b_{x+1})/2 = b_x + 0.5 d_x\) (because \(d_x = b_x - b_{x+1}\)) generally \(L_x = b_x + a d_x\). Cumulative sum of \(L_x\) \((T_x)\) from all values of \(x\) up to the end of the table: total population aged \(x\) and over in a stationary population generated by constant births and subject to the life mortality table: \(T_x = L_x + L_{x+1} + \ldots + L_{w-1}\).

3 The life table summarize the mortality experience of a population: it follows a generation of births from age to age throughout life, subjecting them to certain rates of mortality at successive ages and observing survivals at each age up to an upper limit beyond which it is convenient to regard the number of survivors as negligible.
Part-time jobs as a tool for the elderly to remain in the labour market after retirement will have a strong impact on the stability of the welfare system. In this last scenario, using the life table we can see how the introduction of this flexible contract could almost halve the social expenditure. Using the life table to calculate the years of life in 2000 we see that if we put the ageing threshold at 65 and we suppose part-time employment for the elderly from 65 to 76 years of age, we could almost halve the years of life requiring social expenditure.

We must remember these are oversimplifications but they show clearly the way in which the introduction of part-time jobs would positively affect the welfare system. All these theories are based on the assumption that every year of life corresponds to a year of pension expenditure. With the life table we can calculate how many years the welfare system will have to pay for these people. The image of demographic ageing changes radically. It is important to adjust gradually the economy and social policies to changes in the age structure of the population. The perception of the social status of the elderly is changing. In the near future the aim will be to transform something that today is perceived as a problem into a new resource for global wealth and social integration. In other words, the definition of ageing and the status of the elderly must be reconsidered and rethought; and at the same time social and economic policies will have to face the demographic situation: the lack of adequate interventions, measures and services to increase the employment of the elderly is in contrast with the demographic ageing that has been ongoing and which has been forecast to accelerate in the next 50 years.

All this involves paradoxical considerations but these show clearly, from the demographic point of view, that changing the 65-years threshold has become inevitable. On the basis of these considerations, it is important to note the existence of a large number of people over 65 years of age whose demographic evolution is consequently bound to shift, in the definition of the national statistical and economic system, from the contingent of the elderly to the contingent of the active population.

Table 11: The population between 65 and 76 is supposed to work part-time

<table>
<thead>
<tr>
<th>Elderly people</th>
<th>TX Years of life</th>
<th>Part-time</th>
<th>TX Years of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001 65</td>
<td>110,568,400</td>
<td>65-76</td>
<td>64,138,616</td>
</tr>
<tr>
<td>2020 65</td>
<td>141,147,318</td>
<td>65-76</td>
<td>85,547,896</td>
</tr>
</tbody>
</table>

Source: own calculations based on the ISTAT database.
Longevity: A Right to Be Achieved

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1. Introduction

The questions of how man is born, grows and dies, are the most fascinating mysteries not only for philosophy but for all human science and above all for medicine which seeks to respond to man’s yearning to escape the natural determinist cycle, to independently determine his own health and his own survival.

At a world level the average age of man is at the most about 80 years while Maximum Lifespan Potential or MLP, which is species-specific, is about 120 years, about double that of the chimpanzee, the animal genetically most closely related to us (only 0.6% difference in the genome) (I). Only a few individuals attain the extreme age of life defined as longevity, and still fewer come close to reaching the maximum life span by becoming centenarians. Why is this the case?

Fig. 1

At birth each of us receives an inheritance of resources which constitutes the functional reserve to be used over the course of our life span and, as demonstrated in many studies, this reserve is genetically programmed. Every man is subject to an astronomical clock which will measure out his time in seconds, minutes, hours, etc., but he will also be subject to a biological clock which for every individual begins to run after conception and will differentiate development and the successive impoverishment of the initial inherited resources with the passage of time, not only of the organism but also of its organs, tissues and cells all of which can be of different biological ages. The speed of the biological clock depends on the interaction between genetic inheritance and environment. A bad interaction will lead to a premature death, a perfect one to natural death at 120 years of age. In this context we can describe growing old as a complex cascade of processes which leads to the progressive reduction of the functional reserve of the entire organism, of the single organs and systems (2).
Observation of the increase in incidences of pathologies with the increase in age has erroneously supported the idea that ageing is inevitably linked to, not to say synonymous with, illness. But in our judgement old age is not a pathological state, but rather a physiological adjustment of functions.

In particular the specific determinants of longevity act by postponing and adapting the intrinsic modifications linked to ageing. Longevity is attained when ageing occurs in a uniform manner, that is when all organs and systems suffer a deterioration and a functional decrease at the same speed, preventing the collapse of a function (from wear and tear, aggression, or lack of use) from involving the entire organism. The ageing process, increasing the vulnerability of the old and causing the loss of adaptability, constitutes the substratum on which environmental factors act: if it is not we who decide our genetic inheritance, we can ensure that our genes make the most of their potential, minimizing the risk factors relating to various pathologies. Longevity is therefore a right which we can all enjoy but the achievement of which depends on us. Excluding pathogenic damage, the exogenous factors commonly considered able to modify the expression of the individual genetic programme are: diet, luxury habits, physical activity and psychic factors. To study whether a ‘balanced life’ as well as an optimum genetic base is necessary for a healthy ageing we observe the lives of centenarians (3), individuals who more than anyone have come close to reaching maximum life span.

2. Life style of centenarians

We have evaluated the life style of a sample of 168 extra long living Lazio inhabitants: average age 101.8±1.9 years (range 100-108), 23.5% males and 76.5% females, with a male-female ratio of 1:3, which reflects the national trend. The sample was evaluated by means of interviews lasting about an hour, carried out by a doctor trained in geriatrics, at the residences of the patients. In our sample 84.6% of the subjects had never smoked and this data helped reinforce the hypothesis that smoking does indeed have a bearing on life expectancy and that abstention from this sensual habit contributes to the ‘successful ageing’ of those ultra-centenarians. Although there are smoking centenarians, these are exceptional individuals possessing a defence mechanism capable of avoiding the negative effects of smoking on life expectancy; they represent in fact only 15.4% of the whole sample (4).

Analysis of total cholesterol in 36 centenarians showed an average level of 183.5±32.4 mg/dl, a level which fits into the accepted normal range (130-200 mg/dl). Triglycerides were also within the norm, between 35 and 160 mg/dl, in the major part of the sample where the
average level is 98.51+30.59 mg/dl.

It has been proven that throughout their lives long-living people have always followed a varied and balanced diet, in which the calories intake was constantly sufficient for their needs and that they have maintained a stable body weight or at least one without excessive variations (5). The qualitative aspect of their diet plan proved that theirs was a typically ‘Mediterranean’ diet, with limited consumption of meat and fats, especially of animal origin, and with a preference for fruits, vegetables, bread, pasta, milk and cheese. A modest consumption of wine, equal to 20.56+13.87 grams of alcohol a day and one cup of coffee a day are also notable (6). These results would corroborate the already widespread idea that a low-calory diet aids longevity (7).

Regular physical activity also proved to be a characteristic of the long-living, also because of the meagre possibility of using transport for the first 50 years of their lives. This is an important element if one considers the effect of physical exercise on the general state of health (8) and blood pressure (9). Could these good life habits be predisposed by an optimum psychic state or by a good capacity for responding to environmental stimuli, in other words to stressors?

3. Psychic factors

The study of the psychological state using GDS (Geriatric Depression Scale), in our sample of centenarians, revealed an average score of 9. Only 12.8% presented a pathological score.

In our centenarians the presence of anxiety was investigated using the State-Trait Anxiety Inventory (STAI) (10). Our findings describe the long-living as having a low anxiety trait, or rather they present an emotional tendency to react to stressful events with a low average
anxiety score of 49±11.9 (range 20-80).

What elements determine this low propensity to anxiety and depression in centenarians? Could it be an obvious consequence of the absence of stressors in the lives of those who have attained extreme longevity?

4. Stressors and longevity

According to some writers the relationship between age and stress is describable as a U curve whose extremes correspond to young adults (30-40 years) and to the very old (<85 years) (11). Young adults live a more stressful life from the socioeconomic and work point of view, they are subject to a greater number of positive and negative acutely stressful events (marriages, divorces, births, etc.) which tend to lessen with age until retirement. On the other hand, the young old are subject to increasing stress because distressing events regarding friends and family increase in number, susceptibility to age-related and age dependent illnesses increases (12) and consequently disability does too, which is considered the most important cause of chronic stress at every age. Consequently at the extreme of this parabola we find the centenarians who, although presenting a low comorbidity, present a higher level of disability caused by the high prevalence of conditions linked to age-related deterioration. In fact our sample presented an auditory deficit in 54.1% of the cases, sight deficit in 41.3%, incontinence in 45.9%, fracture of the femur in 23.9% and slowness of movement in 20.4% (13). Evaluation of self sufficiency according to the Activity of Daily Living (ADL) scale (14) showed that only 26.6% of the subjects were self sufficient in the 6 variables taken into account (taking a bath, feeding, dressing, getting from bed to a chair, use of hygiene facilities, continence). Moreover the average score on Instrumental Activity of Daily Living (IADL) (15) proved to be very low (1.4) with 40% of the subjects being dependent in all the functional activities of everyday life (using the telephone, managing money, making purchases, preparing meals, doing the laundry, housework, taking medicines, using means of transport). The contradictory findings of a high level of stress due to dependence against a low level of anxiety and depression in the long-living can be explained by a favourable temperament trait.

Once ascertained that centenarians are subject to chronic stress linked to the sense of impotence because of the progressive loss of autonomy, their good general psychic state can be ascribed to a good temperament structure and to a good capacity for adjusting to adverse events in life.

5. Temperament traits of centenarians

Stereotypes suggest that people become more rigid, irritable, introvert, passive, cautious, frustrated in older age — changes which would seem to increase the risk of depression with age. For some time now these clichés have been rebutted, and the stability over time of differences in personality traits from adult age and beyond has now been demonstrated: for example, people who were extrovert at 30 years remain so even when they grow old. On the basis of this argument we think that it is possible to investigate whether among centenarians there is a predominant personality or character trait which can have favoured a good response to stressors.

The problem of the description of personality has been one of the most debated arguments of psychology over the last 10 years. Some studies seem to indicate that different systems can be reduced to 5 fundamental aspects, the so-called Big Five: extroversion, friendliness, conscientiousness, openness to experience and emotive stability (16). The people who obtain high scores in the extroversion aspect tend to describe themselves as very energetic, dynamic,
active and loquacious. This temperament of people commonly defined as sunny and positive could presuppose an optimistic view of life, by means of which stressors would be experienced as positive stimuli.

People who obtain lower scores in this area, instead, tend to describe themselves as lacking in dynamism and activity, subdued and taciturn and tend to experience as stressful any unexpected event in their lives. The high percentage of extrovert centenarians pushes us to seriously consider the temperament substratum as another predictive element of longevity together with genetic predisposition and life style.

6. Capacity for adaptation and longevity

In our sample of centenarians it was also discovered that there was an inverse correlation between an anxiety level trait and a determined cognitive state using the Mini Mental State Examination (MMSE) (17); cognitive deficit corresponds to a low adaptability to stress and hence to a greater propensity to anxiety. This finding would show how important, even in advanced age, is an adequate capacity to revise environmental stressors. The effect of the environment in fact can be modulated by cognitive interpretation. Citing Selye once more we can state that “regarding stress what is important is not so much what happens as the manner in which we interpret it. The secret of health and happiness lies in the capacity to adapt successfully to the eternally changeable conditions of the world. The prices one pays for lack of success in this great process of adaptation are illness and unhappiness”. Advanced age can bring with it an increase in cognitive complexity in understanding emotions; this greater emotive maturity generates a greater ability to accept incidences of dependence without feelings of shame. Adaptation, moreover, can be carried out using compensation strategies within the individual including modification of one’s objectives, social comparison with those who are in worse conditions, greater trust in the care giver, use of aids, etc. In conclusion the processes of mental development seem to protect centenarians from the perception of the feeling of impotence due to disability, corresponding to a risk of anxious-depressive state.

7. Conclusions

Centenarians present a good genetic structure not predisposed toward any pathology as the constant familiarity with the longevity ‘character’ demonstrates, and as evidenced in different studies. No less important however is the verification of good life habits in these subjects: in fact, the low prevalence of risk factors for pathologies and the presence of factors which favourably influence the state of health, such as physical exercise, and low level of anxiety and depression, increase the possibility of a harmonious physiological ageing, with a consequent increase in survival. The challenge for modern medicine is to identify the means through a ‘programmed’ operation of prevention of pathologies to reach 100 years and the challenge for each one of us will be to make real our hypothesis that longevity is not an exceptional phenomenon but a right which we can all achieve so that we can die a natural death at 120 years of age.
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The ageing of the world population points up many problems and new aspects. At economical level, extending life is connected with evident social and economic problems. Life after retirement can be extended by many decades and while some necessities more connected with the life of younger adults decrease in the older age groups, others rapidly increase. Coping with chronic-degenerative diseases is one of the major issues, which continuously increases with further ageing. Comorbidity is quite common in the later stages of human life. Residual functional capacities are reduced and extended medical support is necessary. Greater understanding of what the new needs of an aged population are is more and more important especially in the Western countries. In fact, extending life is connected to a disease pattern shift. This pattern is different in different aged groups of people, i.e. in people over 65 it is not the same as in people over 90. Greater understanding of what the health conditions in the extreme ages of life are can give an index pattern of the health problems which will affect a large proportion of a future aged population.

1. Epidemiology of ageing

The northeastern Italian province of Trieste has one of the oldest populations in the world and this gives us the opportunity to take a look at the probable future of Western countries in about 30 years.

The recent population ageing history, as estimated by the Trieste data, is something that started in an evident way only in the past century. Looking at the survival shift by age groups, it is possible to note that the first ageing process of the Trieste area population begins with a rapid decrease in perinatal deaths in the 1930s, due to better hygienic conditions. In the 1940s and 1950s a rapid increasing of survival is noted in children and young adults. This fact is probably connected with the development of anti-infective agents. But a real increased survival of people over 65 is evident only in the 1960s and 1970s, a period in which better life conditions affected the entire Italian population. During the 20-year period from 1985 to the present time, the proportion of the male population over 65 went from 15% to 21%, while the over-65 females fraction moved from 25% to 31% and that of those over 75 is now 17% of the female population and is expected to increase in the next 20 years (Fig. 1 and 2).

This population ageing shows a disease pattern shift. An easy method to monitor these changes consists in analyzing the causes of death in different age groups for different periods of time. If the rank order of the causes of death is taken into account in people who die before the age of 65, those between 65 and 95 years and those in the extreme ages of life (over 95), it is possible to understand how different the disease pattern is in the very old population. If this

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1 University of Trieste and International Centre for Genetic Engineering and Biotechnology, Trieste (stanta@icgeb.org).
2 Registro dei tumori (cancer registry) della Regione Friuli Venezia Giulia.
3 Original data from the Trieste Cancer Registry.
fact is socially not too important in a young population, in which the fraction of people who
die in the extreme ages of life is not significant, it can be relevant to the population ageing
process. Cardiovascular diseases and tumors are the first two causes of death in both those
under and those over 65 years (Table 1). In the extreme ages of life, cardiovascular diseases are
still in second place in the rank order, but tumors are only in fifth place. Pneumonia can be
found in first place among causes of death in people over 95 years of age. This fact is not too
surprising if we think that ageing is associated with a progressive decline in the functional
reserve of many organs, and this functional restriction can compromise the tolerance of stress.
Functional capacity is critically reduced in the so-called ‘frail elderly’, who use their functional
reserve for basic living and present negligible tolerance for stress. In this way an infection of
the respiratory tree is the final cause of death in a compromised organism.

In these old persons, accidents are surprisingly reported in third place in the rank order of
causes of death. These are peculiar accidents, characteristic of people over 95 years of age,
such as pathological falls involving hip fracture, immobilization to bed connected with
pneumonia due to the immobilization itself and consequent death.

<table>
<thead>
<tr>
<th>Tab. 1 RANK ORDER OF CAUSES OF DEATH BY AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
</tr>
<tr>
<td>Tumours</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
</tr>
<tr>
<td>Arteriosclerosis</td>
</tr>
<tr>
<td>Accidents</td>
</tr>
<tr>
<td>Digestive app. diseases</td>
</tr>
<tr>
<td>Pneumonia</td>
</tr>
<tr>
<td>Other respiratory diseases</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Septicaemia</td>
</tr>
</tbody>
</table>

It is possible to identify two distinct pathological patterns in the old and in the oldest old. Among persons aged 65-90, chronic diseases are more prominent, whereas among the oldest old the most prevalent lesion is diffuse organ atrophy. The selective sparing of cerebral and coronary circulation among centenarians suggests that preservation of these circulatory beds may represent a precondition to advanced ageing.5

2. Malignant tumours and ageing

Tumour frequency increases with age (Fig. 3). The apparent decrease of frequency in the extreme ages of life is explained with a more difficult clinical diagnosis in the elderly. However, there is a real decrease in frequency after 90 years of age.6

There are also differences among tumours of different anatomical localization, and the median age presents an evident shift of even a couple of decades (Fig. 4). The general median age in the Trieste population is around 71 years for the malignant tumours at all sites combined in males and females. But if we look at the tumours of different anatomical sites it is possible to note that the median age for skin melanoma in males is 61 years and 76 for prostate gland tumours with 15 years of shift. In females the median age pattern change is even more evident: for cervix uteri tumours and skin melanomas the median age is 59 years, while for pancreatic tumours it is 78 — a difference of almost 20 years. So we have three different groups of malignant tumours: those with a relatively young median age, that show a relative decrease with the ageing of the population; those that are around the general median age of malignant tumours for which no frequency changes are expected; and those characteristic of older persons, like gastrointestinal tumours that are expected to increase with the population ageing process.

Malignant tumours prevalence decreases in the later ages of human life. In people that die between 75 and 90 years of age, the tumour prevalence is around 36%. The expected...
frequency is that one third of the population is going to develop a malignant tumour. Some years ago the common belief was that if everyone lives enough time they incur a malignant tumour. But the prevalence of cancer decreases to 22% in nonagenarians and to only 16% in centenarians (Table 2). This frequency decrease is also linked with less aggressive biological behaviour. In people under 90 years of age, cancer was the cause of death in 70% of cases, whereas in nonagenarians and centenarians cancer was involved with death in only 43% of the cases. In most of these cases the metastatic spreading was not the final cause of death, but other local complications of the tumour such as infections or massive hemorrhages. The metastatic spreading was present in 2/3 of the elderly below 90 years, but only in 1/3 of the nonagenarians and in less than 1/4 of the centenarians. Cancer in the oldest old could be considered in a different way from cancer in younger people. Often it is not the main disease influence the patients very greatly, but it is only one of the many chronic degenerative diseases that affect any person of this age, and, frequently, it is not even the most important one.

If we analyze time trends in cancer incidence, it is possible to note that the prevalence of tumours in people between 75 and 90 years of age was, in the years before the population ageing process (1940 - 1960), lower than nowadays: 11% versus 38%. This is probably the effect of environmental factors but also the effect of greater population ageing.

The importance of environmental factors in the development of malignant tumours can be higher in the elderly than in young people. It was shown that, in the case of lung cancer, environmental pollution can be important in 28% of the cancers in persons under 70 years of age but in 46% of those over 70 (Table 3). This can be explained by the fact that aged persons

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Tab. 2: MALIGNANT TUMOURS PREVALENCE, CAUSE OF DEATH AND METASTATIC SPREADING IN ELDERLY

<table>
<thead>
<tr>
<th>AGE</th>
<th>75-90</th>
<th>95-98</th>
<th>99-106</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUMOURS PREVALENCE</td>
<td>36%</td>
<td>22%</td>
<td>16%</td>
</tr>
<tr>
<td>TUMOUR AS CAUSE OF DEATH</td>
<td>70%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>METASTASES DETECTED</td>
<td>63%</td>
<td>31%</td>
<td>23%</td>
</tr>
</tbody>
</table>


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were already subjected to many hits in the multistep process of cancerigenesis and one more could be the one leading to the clinical disease.

3. Biology of tumours and ageing

Cancerigenesis is a multistep process. A single genomic alteration in the cell is not sufficient to determine cancer development. The first damage gives the cell a competitive advantage in comparison with the other cells and for this reason its replication is faster with a clonal selection. Further hits give further advantages and further clonal selection to the development of an overt clinical cancer.

We know that tumour frequency is strictly connected with ageing at least until the extreme ages period. How ageing and cancer are related can be explained by a small group of rare autosomal recessive inherited cancer syndromes. These syndromes are connected with the alteration of genes related to a correct DNA replication. The alteration of these genes leads to the accumulation of damages in the genomic DNA, such as those that can be found over longer time in the physiological ageing process. This accumulation of rapid DNA damages leads to the development of malignant tumours and also to signs of premature ageing. One of these syndromes in fact is a true progeroid syndrome with a complete ageing process in the early stages of life (Werner syndrome). So genetic damage accumulation is a common process related to ageing and tumour development. This fact raises the question of how in the extreme ages of life tumour frequency decreases, when the level of DNA damage accumulation should be at the maximum level. There can be at least two explanations: the first one is that the organism in the extreme ages of life has lower possibilities of growing a cancer. The second explanation can be related to a specific genetic predisposition to reach the extreme ages of life that is connected also with a low level of cancer development risk.

Understanding individual cancer predisposition can be important in explaining the extreme ageing predisposition. Ponder has hypothesized that apart from familiar predisposition to cancer there is an individual predisposition. This is related to the fact that any genetic individual code is different, with different single nucleotides in many sequences of the genome. This is called ‘single nucleotide polymorphism’ (SNP) and is connected with most of the individual’s physical characteristics, but also with the predisposition to specific diseases. In such a way several different SNPs can define different levels of risk of developing a disease, such as a tumour. Following this hypothesis, Pharoah reported that a “substantial fraction of sporadic cancers (non familiar cancers) may occur in a predisposed

\begin{tabular}{|c|c|c|}
\hline
\textbf{AGE} & \textbf{ALL} & \textbf{<70} & \textbf{>70} \\
\hline
\textbf{Tobacco smoke} & 88\% & 96\% & 82\% \\
\hline
\textbf{Occupation} & 25\% & 24\% & 26\% \\
\hline
\textbf{Residence} & 37\% & 28\% & 46\% \\
\hline
\textbf{ALL} & 94\% & 98\% & 93\% \\
\hline
\end{tabular}


minority of the population\textsuperscript{9}.

The same can be hypothesized for the capability of successful ageing. We know that in long-living families of centenarians the siblings tend to live longer than siblings of short-living families. They have a 3 to 4 times probability of reaching the 80s and 90s compared to short-living families\textsuperscript{10}. In a similar analysis performed in Trieste using nonagenarians’ families (Fig. 5) a similar pattern was found. The interesting fact is that only about 10\% of the siblings of the long-living families has a successful ageing, while the other 90\% die at a normal age. So there must be a large number of genetic characteristics (SNPs) inherited in different proportions from relatives that give a final genetic pattern to win a successful ageing in the lottery of life.

In the Trieste longevity study comparing the causes of death of siblings of short- and long-living families, no differences were found for the major diseases in the two groups except for perinatal deaths which were quite common at that time. In long-living families, perinatal deaths of the siblings are almost half of those in short-living families (Fig. 6). This leads us to consider that factors connected with the birth period are also related to the ageing process. But in Western countries nowadays there are almost no perinatal deaths anymore, so a mechanism of natural selection related in some way also to ageing is lost. For these reasons a major number of bad ageing characteristics can be transmitted to the next generation. This fact raises the provocative idea that we cannot be so sure that the optimistic

\textit{Fig. 5: Trieste longevity study: siblings of nonagenarians live longer in comparison with siblings of people dying at normal age}

\textbf{Fig. 6: Trieste longevity study: causes of death among siblings of long-lived and short-lived individuals}

Jobs-Led Development Incorporating
Svecchiamento as an Asset?

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1. Demographic transition

Barely 20 years ago the world was confronted with a population explosion. Now we witness a more complex phenomenon: while in some countries population is exponentially increasing resulting in an age distribution where the majority are younger than 25, in most of the developed countries the fertility rate has dropped to about 1.5 (considerably lower than the replacement level of 2.1) and the life expectancy has increased resulting in the number of persons older than 60 becoming greater than the number of those under 25. This phenomenon — called demographic transition1,2 — occurred within a short time period of at most two decades, and has been generated by science and technology producing enormous improvement in health care. It occurs for the first time in human history. Superimposed on this pattern are huge migrations. Demographic transition causes tensions between regions and countries and sometimes even within a country. It makes special demands on health and social care systems. At present it seems that no country is capable of sustaining the required enormous retirement expenses nor of assuring even modestly adequate health care3. Moreover, countries that now exhibit increasing population will soon have a large portion of persons older than 65. Some cultures favour male offsprings and since progress in medicine enables choices, in some countries there is a shortage of women. In different cultural environments age distribution is accompanied by different implications. Information-education systems enable quite young children to be informed and capable of various actions that do not require either physical strength or emotional maturity, and on the other hand an extended education distances young people from economic productivity and marriage, significantly reducing the period when women consider motherhood.

The Club of Rome has been among the first to point out the importance of limits to growth4. Specifically, the exponentially increasing population with a characteristic doubling time of 40 years — which decreased to less than 25 years during most of the 20th century — is certainly unsustainable. Various criticisms and suggestions led to improvements in the original formulation of the limits5, but the main idea is now widely accepted, particularly concepts of sustainable development6 and sustainable consumption7. It is interesting to ponder why the importance of the limits has not been appreciated by the political process or by academies of science.

7 International Forum for Transition to Sustainability, InterAcademy Panel, Tokyo, 2000.
The nature of the political process is currently such that any long-term perspective is inherently weak. Global aspects are relevant for all countries, but the political process rarely treats them properly. The political process is too much focused on a short-term aim. It is possible that this is one of the most important reasons why citizens do not trust politics and political institutions. Aristotle calls politics a master science. But for him the aim of politics is not knowledge but actions. Politics as a ‘science’ in the sense of activity does however require science for knowledge and understanding. Politics and knowledge are therefore intertwined, now more than ever before because knowledge is the main political power. However, politics and science differ in many ways, e.g. science asks for transparency and new ideas, even heresy, while politics does not tolerate them. Politics thrives on conspiracy; science does not tolerate it. Scientific activity is very efficient but political activity is not. Politics and knowledge depend on each other in a very complicated manner. Science and politics differ in two major ways. First, science solves problems within a well-defined domain. Politics on the other hand encompasses everything. Second, problem-solving in science includes and depends on a rather small number of persons, while in politics, even in totalitarian regimes, it requires a very large number of people. Since politics requires a very large number of people, it is necessary to ask these people what they think and what they want. One way of ‘asking’ is polling. Gallup International's 2002 Voice of the People survey, designed in collaboration with Environics International and conducted from July to September 2002, included face-to-face and telephone interviews with 36,000 citizens across 47 countries on six continents. With this sample, results are statistically representative of the views of 1.4 billion citizens. The respondents were asked to rate their level of trust in 17 different institutions: parliaments, governments, UN, World Bank, IMF, WTO, legal system, armed forces, education system, religious institutions, police, health system, media, trade unions, NGOs, TNC and large national companies. The results are shocking. Around the world the principal democratic institutions — parliaments — are the least trusted. Only in North America and in non-EU Europe the percentage of those who trust parliaments is larger than of those who do not trust. However, in the same survey people from these regions said that their countries were not governed by the will of the people. In addition, a very systematic survey by the National Science Foundation, Science and Engineering Indicators carried out from 1973 till the present, shows that people trust scientists much more than they trust politicians. Public confidence in the scientific community stays constant at 40%, while confidence in leadership of all other institutions is below: government (20% and decreasing to 15%), congress (20% decreasing to 13%), press (25% decreasing to 14%), and educational system (40% decreasing to 25%). The only institution ranked higher than the scientific community is medicine, but even it decreased from 55% to 44%.

Academies, and more broadly academia and research institutions through their relationship — not to use the word dependence — on political institutions sometime refrain from issues that could displease their respective political leadership. The recent case of the position of leading scientists in the Russian academy concerning global warming is very instructive as is the fact that the Duma eventually ratified the Kyoto protocol, and President V. Putin signed it. The activities of the InterAcademy Panel, of the World Academy as well as of the European Academies and Allea are certainly encouraging, as are those of some national academies, but nevertheless it seems that there is still a demand for action on the part of such fully independent bodies as The Club of Rome. The other reason is the compartmentalization of the academic-research system, lack of inter-disciplinary and of trans-disciplinary approach, and not enough interaction with the decision-making process.

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8 Ivo Šlaus, invited talk on the occasion of the 90th birthday of Sir Joseph Rotblat, International conference organized by the Swedish Pugwash.
10 National Science Board, Science and Engineering Indicators, 2000, NSF, Arlington, USA.
Demographic transition is a typical example of what in The Club of Rome has been called ‘problematique’\(^\text{12}\) where numerous issues are interconnected. Therefore, the demographic transition with its inputs and consequences profoundly interconnected with security and development, the dangers, threats and opportunities facing the contemporary world requires the attention and the action of The Club of Rome. Here we will address two aspects of the ‘problematique’ inherent in demographic transition: economy and culture.

2. Economy and culture

“Work is a love made visible” wrote Gibran. Everybody including ill and disabled persons can and do enjoy some kind of work. Not all work is performed by employed persons. Actually, the concept of employment as currently used is only few centuries old. However, employment — even in this narrow current sense — is very important socially, economically and politically. The unemployed person has all sorts of problems: social, economic and political, as well as psychological. He/she cannot obtain loans, cannot form a family, or if he/she has a family, it can break as a result of unemployment stress. The unemployed person loses social esteem. Most importantly, the unemployed person becomes unhealthy, uneducated and poor. Over the last two centuries the pattern of employment changed. First, the proportion of persons engaged in agriculture in developed countries has decreased from about 90% to about 5%. The proportion of persons in manufacturing has also decreased, typically to less than 40%. The remainder is engaged in what is referred to as service economy. A wide spectrum of activities is lumped together under the heading of service economy ranging from waiters and clerks to physicians, researchers and educators, and it is necessary to disaggregate this sector. Before attempting any disaggregating of the service sector, one has to distinguish between monetized, non-monetized and non-monetary work\(^\text{13}\). The classical industrial period is characterized by productive employment in which work is remunerated, i.e. monetized. All unremunerated activities with a market value, e.g. grandparents taking care of their grandchildren, are non-monetized. It is estimated that the total global non-monetized activities amount to about 70% of the total global monetized activities. However, there is a portion of non-monetized activities that cannot be easily expressed in monetary terms and we refer to this as non-monetized or non-monetary activity including various forms of self-improvement and self-production, which prompted Alvin Toffler to claim that a modern consumer is transformed into a producer-consumer, i.e. ‘prosumer’. Many activities that are now in a service sector are constantly transformed into non-monetized activities: e.g. self-service restaurants and travellers planning their own itineraries, making reservations and booking tickets via the Internet. The transition and transformation between these two sectors are not new phenomena. These have been occurring in both directions. As initiated already by J. Tinberger, the first Nobel laureate in economy, it is necessary to improve the concept of GDP\(^\text{14}\). It would be advisable, in my opinion, to distinguish the areas of research, education and health care from the other activities lumped together in the service sector. Many attempts of improving the concept of GDP are under way. Notably, the index of sustainable economic welfare — ISEW — corrects and enlarges the GDP by a monetary equivalent of unpaid domestic labor, while it decreases GDP for the cost of pollution.

Second, the reduction of the workforce in agriculture and manufacturing reflects the fact that fewer person-days are required in these fields now to achieve the same results. This is also

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\(^\text{13}\) See note 3, pp. 86-88.

\(^\text{14}\) Already in 1908 A. Pigou pointed out the paradox that a person employing a servant and then marrying him/her causes the GDP to decrease. J. Tinberger initiated a reassessment of the GDP concept. In 1995 the world GDP was estimated to amount to 23 trillion USD, and non-monetized contribution amounted to 16 trillion USD in 1995 (see note 3, p. 88). In 2002 the GNI — gross national income — was estimated at 31.7 trillion USD, and in 2003 at 36.5 trillion.
true in some other fields, e.g. even for military activities in warfare. The reduction is generated by science and technology. There are activities that require more person-days and these are research, education and health care. Contrary to the ideas of ‘the end of history’, ‘end of politics’ etc., and contrary to the claims of J. Horgan’s book The End of Science, research and education and consequently health care do not end15.

By working, a person enlarges her/his freedom and contributes to the wellbeing of fellow human beings. Work is one of the basic human rights. One could question whether the free market mechanism is adequate for assuring the fulfilment of any human rights. Though it may not be adequate as the only mechanism, it could very well be a useful addition. For example, it would be disastrous to reduce R&D exclusively to the demands and pulls of the free market, but it would also be wrong to exclude the free market entirely from the R&D, educational and health care activities.

Though employment is only a narrow segment of the entire concept of work, unemployment is currently a serious problem, even in countries which have not surpassed an alarming level of say 15%. This has prompted the Congress Party of India to consider introducing a constitutional guarantee of employment16. Guarantee of employment does not and should not imply a rigid employment, a guarantee of maintaining a current job. It is clear that fast changes do require changes of jobs. A vibrant economy demands the easy replacement of workers — easy firing and hiring. These characteristics of the job market coupled with the fact that fewer person-days are required to achieve the same result almost inevitably lead to huge surplus of workers, and therefore to unemployment.

The only solution is to generate a much greater need for jobs, possibly different jobs, but also jobs having many similarities with present jobs. For instance, the areas where the demand for workers even now is much greater than the supply are in research and development, in education, health care, all highly creative and particularly high-risk endeavours. Of course, the workers needed for these jobs have to have somewhat different qualification from those their parents had just ten years ago. Most importantly, they will have to be able to change.

It seems that the idea of constitutionally guaranteed employment provides an additional impetus for creating a knowledge-based society, a society where the majority of inhabitants will be constantly learning and engaged in creative activities in every social sphere.

Development crucially depends on biological and cultural diversities17. The environment molds the biological species through evolution. Cultures are formed and evolve in constant interactions among themselves. Sometimes we belong to more than one culture. No culture is complete without these interactions. Though preservation of many different cultures is essential, it is neither possible nor desirable to maintain a culture unchanged. I argue that all cultures should change. Of course, most cultures have been constantly changing, however, not necessarily enough and sometimes irrelevantly or in a wrong direction. The modification of cultures while simultaneously preserving their essence (the question ‘what is their essence’ has to be explored and tested) is a major task facing contemporary society. Modification, change is an imperative, but also a risk. We argue that in order to minimize the risk any change of culture should satisfy the following four conditions: first, recognition and respect of individual human rights; second, compatibility with globalization and knowledge-based society18; third, its own uniqueness; and fourth, the capacity to change without losing its value.

18 Ivo Slaus and Mario Slaus, Knowledge-Based Society, Acque & Terre XIV, No. 2 (2003), Marzo/Aprile, p. 37-40/p. 61-63.
3. Ageing and counter-ageing

The fact that demography shows that in 50 years the number of persons over 65 will reach over 50% of those aged 20 to 64, and that the number of centenarians will keep increasing is called ageing. This ratio, 50%, is called dependency ratio suggesting that older persons entirely depend on those between 20 and 64.

Both statements are incorrect and in addition economically and socially unsustainable. First, life expectancy has dramatically changed during the last 100 years and it is currently increasing at a rate of 3 months per each year. This means that a 70-year-old person today has a greater life expectancy than that of the 50-year-old a century ago, and the quality of life of the 70-year-old today is considerably higher than the 50-year-old had a century ago. It is useful to introduce the concept of the healthy active life expectancy (HALE) and again one concludes that persons over 70 and even older have healthy active lives. Second, some great persons have done their most significant work when over 70. Work capacity and creativity beyond the age of 60 has to be studied, but it is expected that older persons and even oldest old can be socially active and creative. Third, old have experience that the younger generations simply do not have and that experience has to be used and not wasted. Fourth, even ill and disabled persons do not have to be entirely dependent on others.

Our words carry the connotation they have acquired through their usage. Therefore, the word ‘ageing’ implies the same meaning as it did a century ago, while we actually need a new word. The expression ‘counter-ageing’ has been proposed, but we argue that the Italian translation — svecchiamento — is even better and we advocate its use.

4. Case study - Croatia

The population of Croatia in 1991 was 4.78 million, it decreased to 4.44 million in 2001 and it is expected to drop to 3.78 in 2040, when the percentage of those over 65 will be 21.7% compared to just 17.6% of those younger than 15. Out of about 4.7 million inhabitants in 1980, Croatia had 450 thousands retirees. Today the number of retirees has increased to over one million while the population has slightly decreased. The dependency ratio — percentage of retirees with respect to the total number of employees — changed from 23% in 1980 to an unacceptably high 75% in the year 2000. Pensions represent a huge 14% of the national GDP, an increase from 11.3% in 1990. Nevertheless, the average pension as a percentage of the average salary decreased from 60% in 1980 to about 40% in 2000. The GDP of Croatia in the year 2000 was 157 billion kunas (exchange rate € 1 = 7.6 kunas), and in terms of purchasing power equivalent to about € 6000 per capita. Social expenditure amounts to 26% of the GDP — the lion’s share goes to pensions (51%, i.e. 14% of GDP) and to health care (32.3%). The GINI income inequality index is 0.352, one of the highest among the countries in transition. Neither the Keynes-Beveridge welfare state nor the two additional pillars introduced in the Croatian pension system in 1999 can solve the problem. A fourth pillar — part-time work and gradual change from full employment to retirement — is necessary.

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22 Ivo Šlaus, Knowledge-based society as a solution for unemployment and retirement problems, SEF 003, Warsaw, 19-21 November 2003, panel 40, Strategies and reforms for employment, retirement and pensions in an integrated Europe.
5. Freedom, risk and creativity

Basic features of the contemporary world are globalization and fast changes. They are not imposed on us, they are created by us humans, and more precisely our creativity is their generator. Indeed, I create, I learn, therefore I change. Development includes incremental, quantitative changes, kind of ‘more of the same’. However, it also includes fast changes producing qualitative transformation. It is because of these rapid changes producing qualitative effects that to be is becoming much more important than to have. Therefore, the essential resource is the human potential — underused and enslaved by prejudices and lack of education, but also fearing risk taking. “People are the real wealth of nations. The basic purpose of development is to enlarge human freedoms... — human capabilities by expanding the choices that people have to live full and creative lives. And people are the beneficiaries of such development and agents of the progress and change that bring it about. This process must benefit all individuals equitably and build on the participation of each of them”.

The middle age group — those between 25 and 60 — fathers and mothers — are least inclined to take risks, they cannot take risks since they have too many responsibilities. However, now, for the first time in history, there is a sizeable fraction of our population — those over 60 — that have experience and credentials, and in general should not have responsibility of taking care of anybody and could take risks. It is these characteristics — experience, credentials and preparedness to take risks — that make those over 60 a special asset in development strategies. A novel policy has to be formulated where all persons are employed regardless of age, but in different degrees — part time, different type of work (obviously neither in mining nor as ballerinas), a significant portion in research, advisory and teaching capacity, rarely in leadership roles, but frequently as role models. While older persons could take risks, and therefore could contribute to progress, they are — as we all are — prisoners of our prejudices, and their prejudices are ‘old prejudices’, sometimes incompatible with the age in which they live. The old used to have special authority. Though this feature is rapidly decreasing, they could still be a barrier if they remain in the position they had earlier.

Demographic transition requires lifelong education. Since it is superimposed on a fast-changing world, it is necessary to structure the lifelong education so as to assure more frequent changing of professions, and it could allow for considerably earlier inclusion in the job market than is currently the case. Rather than being a burden and a problem, demographic transition resulting in svecchiamento becomes an asset and an instrument stimulating the creation of the knowledge-based society. Each culture can and should find the best way of making svecchiamento an asset and in this process it will modify itself.

6. Vision and the plan of action

Knowledge and politics are two necessary tools in addressing the problems, dangers and threats facing the contemporary world. It is the only approach realizing the opportunities we are being offered. Politics should not be striving solely for political power, it should not be reduced to obtaining a ticket for power, grabbing it and keeping it. Politics, just like science, should be mainly the art of problem solving. Opening the Indira Gandhi conference ‘India — Next Decade’ in November 2004, Prime Minister of India Manmohan Singh said that the political process has to find its true role and that is not just power grab. He pointed out that politics has to rediscover — should we say find — its role as a purposeful instrument for managing — and we should add stimulating — social change. In order to be capable of solving

23 Aurelio Peccei, in Congressional Record — Senate S 8690, June 28, 1984.
problems, the political process has to be intertwined with knowledge and creativity. In parallel with the Indira Gandhi conference in New Delhi there was a conference “Uncommon opportunities: A Road for Employment, Food and Global Security”. This was one of the pre-conferences preceding the World Academy of Art and Science general assembly to be held in November 2005 in Zagreb focusing on the future of knowledge and covering among others the following topics: politics in knowledge society, uncertainties and policy making, changing our minds: electronic and chemical modifications of our cognition and emotions, revolution of rising expectations and how to provide a constructive response, jobs and employment in a global society, demographic transition, jobs or jihads as a security issue, and the changing role of science and scientists.

Svecchiamento will be specifically addressed at the Zagreb WAAS General Assembly. Jobs-led comprehensive sustainable development appears as a strategy for reaching a goal of prosperous, employed, healthy and happy people regardless of their age involved in accomplishing tasks that each one of them can do in the best way. Sustainable development implies constantly increasing human options. Freedom — as emphasized by Amartya Sen — is an essential ingredient of development. It is necessary that the knowledge-based economy encompasses not just the elite, or only a middle-class, but everybody. Knowledge-based society cannot be an island in a sea of mediocrity. The spirit of knowledge has to permeate the entire society, the entire nation, the entire country, and — of course — the entire world.

Certainly, knowledge and creativity have been at the basis of our evolution, but so have also been solidarity and compassion. These characteristics are also necessary today as we build a knowledge-based society. Solidarity and compassion will help each one of us to find his/her best place and — at the same time — will provide support for those who are presently in need — disabled, underprivileged, presently unhealthy and uneducated, all the exploited and particularly women and children, all oppressed minorities, so that eventually everybody would make a significant contribution to comprehensive sustainable development.

The development of the strategy of realizing job-led growth is one of the primary goals of the Zagreb World Academy of Art and Science (WAAS) general assembly. “Employment has to be recognized as a fundamental human right, the economic equivalent of the right to vote. Access to gainful employment constitutes the economic franchise that lends legitimacy and functionality to a market economy.” Employment cannot be restricted to a specific age group. Actually, it is necessary to be able to have the first employment not later than in the early twenties, so that families can be formed thereby enabling them to have offspring. On the other hand, even very old persons can be usefully employed, as we emphasized particularly in jobs requiring risk taking based on credentials and experience. Prime minister Singh spoke of about 100 million new jobs in India by 2010, and normalizing according to the size of the population means that e.g. Croatia should create about half a million new jobs. This could bring the total employment in Croatia to about two million persons, which was reached at the peak of industrialization in the late '80s of the 20th century.

Creating new jobs requires initiatives, innovation, knowledge and proper political action. However, jobs are open in a global market influenced by migration and outsourcing. This implies that each country and each region have to find their specific niche of excellence and at the same time secure the exportation of their products. Though we speak about knowledge-based economy and though we emphasized that education, research and healthcare are domains requiring large human resources, jobs have to be created in various activities and this is where the bottom-up creativity is best manifested. It has to be allowed to flourish and it has to be

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supported. Each country has to establish and maintain an innovative, creative and competitive climate and this requires political action which is culture sensitive.

Obviously, this cannot be left just to one event, e.g. the general assembly. It is necessary to establish a continuous task force. We have already pointed out that neither the political structure nor the political process alone can secure the realization of jobs-led growth, and that an academic-research system alone does not achieve it either. Actually, international, global and European dimensions have to be built in from the start. Building a knowledge-based society implies an intertwining of excellence, general lifelong education of everybody, politics with all its uncertainties and interest and knowledge with its characteristic search for truth. All European countries, specifically countries in South East Europe (SEE) are integrated internationally and in various European associations. Their academies and universities are integrated in ALLEA (All European Academies) and in the InterAcademy Panel (association of all world academies), as well as ICSU (International Council for Science, an association of most of international scientific unions, e.g. IUPAC — International Union for Pure and Applied Chemistry, and similarly IUPAP for physics). In various ways these countries are integrated in the European Research Area and European Higher Education Area. In addition, scientists and scholars from Europe and SEE are individual members of Academia Europaea, of the European Academy of Science and Arts and of the World Academy. Various international non-governmental organizations, like Pugwash and The Club of Rome, have their national chapters in many European and specifically SEE countries.

A permanent task force embedded in the international and European system would be a combined structure involving national fellows of the WAAS, members of all European academies, possibly national chapters of The Club of Rome and Pugwash. Such a structure in SEE could be based on Forum Bled, Inter-University Centre Dubrovnik, Black Sea University, and particularly the impressive structure of international institutes in Trieste, and on national academies, universities and research institutes. These structures would have from the start international and specifically European dimensions, they would have significant scientific and scholarly credentials, and through their membership particularly in WAAS, The Club of Rome and Pugwash and through their multiple connections, would have necessary political impact. The first, specific task of such a structure in SEE would be to initiate a jobs-led comprehensive sustainable development including everybody.
Abstract

In view of the ongoing ageing and coming shrinking of their working-age population, the Member States of the European Union have agreed bold goals for increasing the employment rate and the exit age of older workers. Progress so far has been modest and with enlargement the challenge has become bigger. EU policies however lend constructive support and Member States are stepping up their efforts to institute better regimes of age management. As policy measures begin to kick in they are likely to be helped by an upward shift in the skill level of older workers and growing labour scarcity. Though it may be difficult to fully meet the targets of a 50% employment rate and a 5-year delay in the exit age by 2010, the relative role of older workers in the European workforce is likely to be substantially strengthened over the next 5-10 years.

1. Introduction

In its synthesis report for the March 2004 European Summit, the Commission highlighted active ageing — in the sense of working longer and retiring later — as one of the three core areas where much greater efforts are called for if the Union is to deliver on the Lisbon strategy. This elevation of the reversal of early exit patterns to one of Europe’s crucial policy priorities marks the culmination of developments under way since the Commission introduced the notion of active ageing in 1999.

In rapid succession the EU had adopted legislation outlawing discrimination in employment including on grounds of age (2000), agreed a special employment guideline on active ageing (2000), and set itself two important strategic objectives by 2010: to increase the employment rate of older workers to 50% (Stockholm 2001); and to delay by five years the age at which older workers stop working (Barcelona 2002). It had furthermore flanked these employment initiatives by agreeing a set of pension objectives, which pledged to secure good incentives to working longer in retirement related tax-benefit structures.

This article briefly reviews the background to and content of the active ageing agenda before tracing recent developments in EU policies, examines present progress towards the targets and discusses the likelihood of major advances over the next 5-10 years.

1 The assessments and views expressed in this article are those of the author and they do not necessarily match those of the European Commission or its Services.
2. The early retirement trend

The trend towards ever-lower exit ages has become a feature of labour markets across the European Union. Thirty years ago, the participation rates of male workers aged 55-64 were only 10-15 percentage points lower than those of prime-age workers. Today the difference has widened to 40-50 percentage points in some Member States. From the early 1970s till the late 1990s, the participation and employment rates of older (male) European workers have been in constant decline. Although recent data suggests that this trend may finally be levelling out, Europe is a long way from having reversed the ‘stampede’ towards early exit.

There are important variations in the form and extent to which it has manifested itself, but the trend towards ever-lower exit ages has been present in all Member States. While rooted in the erosion of workability, as well as in labour market pressures and age-biased work place practices, the decline in the participation of older workers has been accentuated and consolidated by public policies offering easy access to early retirement. Over time these policies led to the institutionalization of wasteful practices of age management. They also gave rise to a veritable culture of early retirement expectations and practices. Ageing workers, their colleagues and personnel managers began to expect work careers to end some 5 to 10 years before workers became eligible for an old-age pension — and to plan and act accordingly.

This is beginning to change. Governments have tightened access to early retirement and increased labour market support for older workers. But poor practices of age management in work places and labour markets are well ingrained and changes in these and in worker expectations are slow to occur. Without the active support and commitment from employers, trade unions and older workers themselves, participation and employment rates are unlikely to improve sufficiently. Policy makers are therefore increasingly seeking to work with the social partners and turning their interest to concrete strategies for improving the employability of older workers and for adjusting employment conditions so that better opportunities for work after age 50 become available. This is quite appropriate since many years of wasteful practices of age management have left relevant stakeholders fairly unprepared for the requirements of the coming period. Management practices will need to adapt to a tight and ageing labour market, placing a premium on innovative strategies, which retain and reintegrate older workers, whilst also securing productivity and profitability.

3. The prospect of an ageing and shrinking workforce

The economic and social impact of the ageing of Europe’s population will be particularly pronounced in the next decades, as the longevity growth and lower fertility levels of the last decades combine with the retirement of the ‘baby boomers’ to cause a sudden worsening of old age dependency rates. The European Union is faced with the prospect of an ageing and shrinking workforce. Over the next two decades, the number of people in the 20-29 age band will fall by 20%, while the number in the 50-64 age group will increase by 25%. If current early retirement practices continue among this latter group, participation rates may drop to just 1/3 of those of prime age workers. This will have a strong negative effect on overall labour supply.

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2 In the same period employment rates for women in this age group have been growing constantly as a reflection of the growing activity rates in successive cohorts of women. Yet, beyond this structural trend, female workers also encounter major barriers to continuous employment as they age and their problems are easily on par with those of their male colleagues.

3 Perception of early
and result in skill and labour shortages followed by wage drift and inflation. Obviously, it will also put an extra burden on social protection systems. To avoid such a scenario, Europe must adjust working practices to an ageing workforce and invest in its continued employability and productivity. It is imperative to enable and motivate the baby-boomers to remain in work for several years longer than present cohorts of older workers.

4. The active ageing agenda

As people enjoy healthier and longer lives, and in the broader context of population ageing it is both possible and necessary to raise the activity and employment rates of older workers and postpone the age at which people stop working and retire with a pension. Increasing the employment rate of older workers is possible and consistent with the increase in life expectancy and improvement of the health condition of the workforce. It is furthermore necessary in order to contain the ageing generated growth in transfers from the active to the retired population and counteract contractions in labour supply. This calls for an integrated package of policy responses aimed at setting up a virtuous circle ensuring equity and life opportunities as well as labour supply and financial sustainability of social protection.

5. The active ageing instruments at Europe’s disposal

Europe’s instruments to support Member States in their efforts to address older worker issues presently include the Employment Process, the European Social Fund (ESF), EU Social Dialogue, the Strategy for Health and Safety at Work, Corporate Social Responsibility, the Open Method of Coordination on Adequate and Sustainable Pensions, European legislation outlawing discrimination in employment including on grounds of age and an action programme on anti-discrimination.

Of these the Employment Process and the ESF are by far the most important ones. The European Employment Strategy is an integrated part of the EU strategy of mutually reinforcing policies for growth, more and better jobs and adequate and sustainable social protection. Background conditions of steady growth and employment friendly social protection are meant to facilitate the success of interventions in support of specific employment goals such as with older workers. The sizeable ESF funds support the implementation of the employment strategy in Member States.

6. Recent developments in EU policies on age and employment

6.1 Older workers issues and the EU agenda

Although the European Commission became interested in the challenges of future ageing from the late 1980s, it took quite some time before labour force issues took centre stage. Along with international debates, attention had focused largely on the consequences for pensions, and health and long term care. It was not until 1999 that older worker issues began to be addressed in the European Employment Strategy. Developments followed swiftly, however. The May 1999 Communication, “Towards a Europe for All Ages” located higher employment of older workers as one of the pivots of a successful policy response to the ageing challenge. “Active Strategies for an Ageing Workforce” was a major theme during the Finnish Presidency in 1999 and the employment package adopted at the Helsinki Summit gave considerable attention to
the age gap in Europe’s employment performance. The European Commission’s first recommendations to Member States emphasized the need to change tax/benefit structures that facilitated early exit and penalized those people who worked longer. Towards the end of 1999 the European Commission also presented a proposal for a directive to outlaw discrimination in employment, including on grounds of age. Encouragingly, this was adopted by the Council within less than a year.

Yet, more than anything, it was the launching of the ten-year strategy to make Europe “the most competitive and dynamic knowledge based economy in the world” at the Lisbon European Council in March 2000 that set the ball rolling. The Strategy committed the European Union to full employment by 2010 and to enabling social protection systems to weather the impact of demographic ageing. Since then, extending working life by improving the incentives and opportunities for older workers has become a major priority in European strategies for employment and for adequate and sustainable pensions.

As the issue slowly worked its way up the EU agenda, the approach matured considerably. The resolution on older workers adopted in 1995 called on Member States to “adapt to the needs and prevent the social exclusion” of older workers. When the issue was first mentioned in the employment guidelines, the emphasis was on securing equal opportunities for older workers. However, since the introduction of the separate guideline on active ageing and the Stockholm target on increasing the employment rate in 2001, older workers have primarily been portrayed as a “resource to be mobilised”. Older workers were no longer perceived as just another vulnerable group meriting special attention, but as a core element in the labour supply of the future and a factor in the sustainable development of Europe. In the same period, EU instruments evolved from soft suggestions to binding guidelines and recommendations and the focus was widened from tax/benefit structures to practices of age management in work places and labour markets and the important role of social partners.

6.2 The Stockholm Summit target and the 2001 guideline on active ageing

When EU leaders met at the Lisbon European Council in March 2000, they agreed a number of ambitious goals for policy developments over the coming decade. These included the attainment by 2010 of full employment, defined as an overall employment rate of 70% for those of working age. It soon became clear that such a target could only be achieved if Member States also managed to raise the employment rates for older workers. It was therefore logical that EU leaders at the 2001 Spring Summit in Stockholm adopted a specific employment rate target for older workers of 50% and requested a report on “Increasing labour force participation and promoting active ageing” for the Barcelona Summit in March 2002.

The separate guideline on active ageing introduced in 2001 pinpointed “existing social attitudes” towards older workers as one of the important barriers to be addressed. Furthermore, it drew up the following sequence of policy priorities:

- securing the best use of older workers’ experience;
- maintaining the work ability and qualifications of older workers;
- making working arrangements more flexible;
- alerting employers to the strong business case for employing older workers;
- ensuring that the right mix of incentives and disincentives are present in tax/benefit systems.

The underemployment of older workers accounts for about 25% of the difference in employment performance between EU and the USA.
The guideline represented a major advance towards a holistic approach to the problems of making work after 55 possible and attractive. Most importantly, the guideline underscored the link between the successful implementation of active ageing policies and the realization of some of the general policy goals of the Union. Promoting better employment opportunities for older workers, and enabling and motivating them to seize these, were thus finally on the way to become an integral part of Europe’s overall strategy for employment and growth.

Nevertheless, these policies should be assessed against the large disparity in the position of older workers across Members States. As Table 1 shows, employment rates for workers aged 55-64 vary considerably. Between the low (Luxembourg, Belgium, Italy) and the high (Sweden and partly Denmark) achievers there is a gap of more than a factor of 2. The UK is the only large Member State presently meeting the target. The rest of these hover around the EU employment rate average for this age group of 38.8%. Or, as in the case of France and Italy, they drop well below this, reflecting the fact that the pensionable age for men and women in the basic state schemes have, for a long time, been set at 60 and 60/55 respectively.

### Table 1: Employment rates of older workers aged 55-64, EU-15

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7. Initiatives culminating in the Barcelona target on delaying labour exit

In December 2001, the Laeken Summit in Brussels adopted 11 common objectives for a European strategy for adequate, sustainable and adaptable pensions. Higher employment rates for older workers were highlighted as an important element in making pension systems durable. Around the same time, this strategic assessment was amply confirmed by the findings of the Ageing Working Group under the Economic Policy Committee in its path-breaking forecast of public pension expenditure 2000-2050. Postponing retirement by extending working lives stood out as the single most powerful policy response to the problem of rising pension costs. A single year’s rise in the average effective pension age would neutralize between 1/5 and 1/3 of the expected growth in pensions expenditure if no extra rights were incurred in the process. Ensuring that pension schemes promoted longer working lives and later, more flexible, retirement was therefore also critical to the EU agenda for making pensions sustainable. Policy-makers furthermore underscored the need for a more ‘social protection friendly’ approach to age management in the workplace. The long-standing practice of off-loading employment problems onto pension systems, evident in early retirement patterns, had to cease. It was seen as essential that the cost of taking people out of labour markets through early retirement should be shifted to policies for retaining and re-integrating older workers. As in other areas, a shift from a passive to an active response to the employment
problems of older workers was seen as essential.

The February 2002 Joint Report on “Increasing labour-force participation and promoting active ageing” adopts a life cycle approach to labour force participation. It focuses, firstly, on policies to ensure that present and future working generations remained active as they grew older and, secondly, on ways to prolong the participation of today’s older workers. The recommendations cover five specific areas: more jobs and better quality in work; making work pay; providing higher and adaptable skills at work; making work a real option for all; and developing a partnership approach to deliver the strategy. These objectives are reflected in the revised European Employment Strategy 2003-2010. An increase in the participation of all people of working ages is regarded as critical to the success of the strategy. It requires promoting active ageing through the positive interaction of economic, social and employment policies, and strong support from the social partners. The strategy calls for measures to provide an attractive and adaptable work environment, to improve access to training and to enhance incentives for taking up and staying longer in employment. Existing models of retirement and recruitment would have to change and early retirement should no longer be a major means to handle personnel problems during downsizing and corporate restructuring.

In March 2002, the Spring European Council in Barcelona considered the older worker issue both from the point of view of maintaining labour supply and of making adequate pensions sustainable. In the particular ageing and pensions context of the Spanish host, the issue of raising the effective retirement age took on a crucial importance. The Spanish Presidency pressed this issue with vigour. The result was that the assembled heads of government and state concluded that “a progressive increase of about 5 years in the effective average age at which people stop working in the European Union should be sought by 2010”. By endorsing the report on increasing labour participation, the Summit had also embraced its set of instruments for prolonging working life.

Following a favourable review of the first five years of the European Employment Strategy, the Joint Council in June 2003 agreed a revised strategy and adopted a new set of guidelines. The fifth guideline of “increasing labour supply and promoting active ageing” commits Member States to:

“... promote active ageing, notably by fostering working conditions conducive to job retention — such as access to continuing training, recognising the special importance of health and safety at work, innovative and flexible forms of work organisation — and eliminating incentives for early exit from the labour market, notably by reforming early retirement schemes and ensuring that it pays to remain active in the labour market; and encouraging employers to employ older workers.”

Furthermore, it highlights that “... policies will aim to achieve by 2010 an increase by 5 years, at EU level, of the effective average exit age from the labour market (estimated at 59.9 in 2001)” and that “In this respect, the social partners have an important role to play”. Thus, it continues the comprehensive approach adopted by the guidelines for 2001.

8. The challenges as defined by the Stockholm and Barcelona targets?

Raising the average exit age by 5 years in the remaining 8 years before 2010 is an ambitious goal. To some observers, the target agreed in Stockholm — of raising the employment rate of older workers from the EU average of 38.8% to 50% in 9 years — had already appeared quite daring. They were therefore apprehensive when the Spring European Council in Barcelona went substantially further. Other commentators, however, appreciated the emphasis of European leaders on enabling older workers to continue working in labour markets, which had, up to now, demonstrated a marked tendency to squeeze them out.
Table 2 ranks EU-15 countries according to their performance in relation to the average exit age and the employment activity and unemployment rate. The EU average exit age stood at 59.9 years in 2001: 60.5 years for men and 59.1 years for women. Thus, the Barcelona agreement commits the Union to lift the average effective exit age to about 65 years by 2010. The ranking in relation to the exit age and the employment rate differs somewhat. But there are also important elements of stability. Sweden, Denmark, the UK and Portugal are among the 5 top performers for exit ages as well as for employment and activity rates.

When we move to unemployment rates, the picture is more complex, since low unemployment rates may result from low activity and low exit ages as well as from high employment rates. Thus, there are important differences between the Barcelona and Stockholm measurements that need to be highlighted.

(1) The Stockholm target is about increasing the employment of those aged 55-64. This requires reductions in unemployment and inactivity and progress is monitored through the employment rate. The Barcelona target is about delaying the age at which individuals withdraw from the labour force into inactivity and it is monitored by changes in the activity rate. As the latter is calculated only among those who are active, countries with low participation rates may have relatively high exit ages. This, for example, is the case in the Netherlands.

(2) The average exit age also takes the unemployed into account — presently amounting to 7% of the 55-64 year-old labour force in EU15.

(3) Generally, men exit the labour force at a later age than women. Yet, in Italy or Spain exit ages of men and women are broadly similar although the gender gaps in the participation of older workers are among the highest in the EU.

(4) The Stockholm target refers to those aged 55-64. The Barcelona target does not set any specific age threshold. When monitoring the average age of withdrawal from the labour force the age-span must be broader — and it has been defined as 50 to 70+ years. The age class 50-54 needs to be included because participation falls significantly from the age of 50. Those above 65 years in the labour force are also included. Arriving at an average exit age of 65 will imply that a substantial number of people continue to work into their late 60’s and early 70’s.\(^1\)

\(^1\) The average age of withdrawal from the labour force is to be distinguished from the calculation of the effective retirement age. The Labour Force Survey includes people receiving a pension as long as they are at work (e.g. part-time) or actively seeking a job.
Meeting the Stockholm target would imply securing employment for an additional 5 million older workers. As for the Barcelona goal, a simple simulation shows that about two thirds of those workers presently aged 46-55 years would have to remain in the labour force by 2010. In other words, 24-26 million of the 38.4 million people aged 46-55 in 2001 would need to be active in 2010, an equivalent increase of 7-9 million. In the comparable cohort of 1991 only half were still active at the age of 55-64 in 2001.

9. Assessment of progress towards the Stockholm and Barcelona targets

Every year progress is assessed in the Joint Employment Report. In 2000 this report highlighted that: “Most Member States have started to implement or are planning to introduce soon measures encouraging older people to stay longer in employment, by raising the retirement age or by introducing or strengthening disincentives to early retirement”.

After the adoption and monitoring of the Stockholm and Barcelona targets, the tone was much less optimistic. Thus, the 2002 Joint Report stated laconically:

“With regard to older workers it is evident that... the combination of low employment rate plus moderate employment rate growth... seriously questions the ability of the EU to reach the target set for this group.”

Clearly, the employment rates of older workers will have to improve much faster if targets are to be met by 2010. A number of Member States are presently taking steps to improve incentives in tax/benefit systems. The majority are still working towards the introduction of policy measures designed to improve employment opportunities and the employability of older workers. Such initiatives are hampered by the current slowdown in growth and the rise in unemployment. Yet, it is still quite conceivable that these changes in employment and pension policies will produce a significant increase in older workers’ employment, particularly if supported by the social partners. Indeed, the tone of the Joint Employment Report is by no means defeatist. It merely sounds a serious warning that much more needs to and indeed can be done.

In fact the rise in employment rates and the average exit age from 2002 to 2003 were quite encouraging. Employment rates rose 1.5 percentage points and the exit age by half a year. The forces at work were not at all clear but if a similar advance were to occur every year until 2010 the targets would not be out of reach.

10. Active ageing after enlargement

Yet, just as the Union could celebrate its first noteworthy advance on the Stockholm and Barcelona goals, the challenge would suddenly increase as an effect of enlargement. Quantitatively, the setback was fairly moderate but in many of the new Member States the barriers to active ageing are far more difficult to overcome.

Even if progress was somewhat disappointing in the EU15, it could at least be assumed that Member States in principle would have the capacity for implementing effective active ageing strategies. Presently, this is not necessarily so in most of the New Member States (NMS). As indicated in the table below five of these accounting for about 80% of new population perform very poorly on the active ageing indicators.
Only about a quarter of the older workers are employed here. In the biggest of the NMS the average exit age is more than 3 years below the figure for EU15. Moreover several of the NMS will be faced with a substantial ageing and shrinking of the workforce over the next two decades. Even more than the old Member States, most NMS — including the better performers — would need to launch the virtuous circle of active ageing practices in order to secure future labour supply and sustain their reformed pension systems. Yet, this may only be possible in the mid-term. Barriers to active ageing in the majority of NMS can be briefly listed as follows:

- The life expectancy, health status, workability and employability of older workers (55-64) are markedly lower than in EU15.
- Working time is higher, work quality lower and health & safety conditions substantially poorer.
- There is a long tradition that women retire in their mid-fifties and men around the age of 60, which has a negative effect on attitudes.
- In most NMS the level of social partner organization is low and social dialogue and social partner capacities are underdeveloped.
- Active labour market policies that can address the needs of older workers are not in place or about to emerge.
- The employment content of growth is not yet sufficient to create the surge in labour demand which could boost the employment opportunities of older workers.
- Older workers are particularly threatened by coming restructuring.

When prospects for reaching the Stockholm and Barcelona goals in the enlarged Union were assessed in the latest Joint Employment Report (2004), the text presented the following complicated picture:

“Although employment rates for older workers increased, the target of 50% is a considerable way off. Progress towards the 70% overall Lisbon target will critically depend upon even more rapid increases in the employment of older workers.”

The employment rate of older workers increased to over 40.2% in 2003, compared to 38.8% in 2002. The 50% target has only been reached by six Member States (CY, DK, EE, PT,
SE, and UK) and is within reach in a further two (FI and IE).

In the coming years, increases in the employment rate of older workers will partly be caused by a cohort effect, as those born in the post-war baby boom reach the age of 55, thereby increasing the size of the 55-64 age brackets (with more of the starting age).

However, between 2002 and 2003, this cohort effect for the EU as a whole was not particularly important. The employment rate increased for the whole 55-64 age group, regardless of the specific year when individuals were born and in fact the increase was particularly strong for those in their early 60s, especially for men. There was also a marked increase for women aged 55-56.

The average exit age from the labour market has increased by 0.6 for the EU25 between 2002 and 2003, from 60.4 to 61.0 (the corresponding increase for the EU15 was also 0.6 from 60.8 to 61.4\(^4\)). However, progress was mixed, with a decrease in the average exit age in several member states, including the NL, PT, EE, AT, SI and to a lesser extent FI, CZ, ES and SE. On the other side, progress was particularly strong in HU, IE, EL, CY, DK PL and IT. Furthermore, the exit age is still below or close to 59 in SI, SK, PL, BE, MT, AT.

Progress towards the 50% target will essentially depend on further progress in the Member States where the employment rate of older workers is still very low.

Without urgent and drastic measures to strengthen current trends, the EU targets for older workers are out of reach. The employment rate of older workers has increased since 1998, significantly so in FI, NL, HU, FR, DK, IE and LV. At the EU level it reached 40.2% in 2003, albeit with a large gender gap. Rates already exceed the 50% target in SE, DK, UK, EE, PT and CY, and are close in IE and FI. Rates are particularly low in SK, SI, PL, HU, LU, BE, AT, all below 31%.

The Barcelona exit age targets are more difficult to attain. Withdrawal from the labour market continues at an early age in many Member States, and the average exit age has only increased from 59.9 in 2001 to 61 years in 2003\(^7\) for the EU25. IE, LT, EL, SE, UK have reached an exit age of over 63 years but in SI, SK, PL, BE, AT and MT progress is slow and remains below or close to 59. The challenge is not only to ensure a higher share of and exit age for those aged 55-64 to stay in work; but also to enhance employability of those currently in their 40s and 50s.

11. Will there be a helping hand?

In the current decade, the combination of small cohorts of labour market entrants and the first large cohorts of baby-boomers becoming older workers will amount to a marked ageing of the labour force. In the second decade of the 21st century, when the baby-boomers begin to retire, and the labour force will also begin to shrink at an increasing rate. Thus, it seems safe to assume that demographics will produce a positive context for policies aimed at improving employment opportunities and at enabling and motivating older workers to seize them. If a sufficient labour supply is to be sustained in the face of the shrinking of the prime age labour force, older workers must again become well-represented among the active and employed in the EU.

Given the ageing context, it is important to ask, firstly, whether the demographically-determined trends in labour supply will create a market more conducive to the employment of older workers. In other words, will demand for older workers automatically increase and employment opportunities develop as younger workers become scarce and the competition for

\(^4\) Figure for 2003 provisional.
\(^7\) Figures for 2003 provisional.
them fiercer? Or will employers simply outbid each other for the young until it becomes
cheaper to resort to capital substitution — and thus continue to shun older workers? Obviously,
these scenarios are not mutually exclusive and possibly we will experience some of both.

One could furthermore ask if changes in attitudes and expectations will be self-reinforcing
once they get started? This is speculative of course, but it could be argued that the shock of
sudden ageing in combination with the cumulative effect of campaigns could have that effect.

What is already clear is that several EU15 Member States have experienced a structural
trend towards higher employment rates for older workers. Some of this trend is caught in the
figure below.

**Fig. 1: Share of the 55-64 age group in the overall annual employment growth, EU15 1997-2003**

![Figure 1](image1.png)

Source: Eurostat Spring LFS.

**12. Will better educated workers be more willing to adapt and able to work longer?**

Efforts to extend working lives have come up against barriers in the skill levels, attitudes
and expectations of past and present cohorts of older workers. A second crucial question to ask,
then, is whether structural developments in the characteristics of the labour force — such as
rising average levels of educational achievement — are likely to make it easier to reach the EU
goals. We can expect average education levels to grow with each successive cohort. Indeed, as
the proportion of low-skilled among people aged 55-64 drops significantly in this decade,
measures to enable and motivate future cohorts of older workers to remain in the labour market
may be markedly more successful than in the past.

Equally important, there are reasons to expect that the average workability and
employability will be improving with successive cohorts of older workers, particularly since
health and safety aspects of working conditions, health status and employability are positively
correlated with skill levels.

**Fig. 2: EU15 - 55-64 age group: distribution of the labour force per educational level
1996-2002 and Geo Labour Projection for 2020**

![Figure 2](image2.png)

13. Conclusions

Europe’s endeavours to develop better employment opportunities for older workers, and enable and motivate them to take advantage of these, will need multi-pronged approaches and integrated strategies. Likewise, there will be a need for the involvement and close co-operation of all stakeholders. The social partners must collaborate on devising better practices of age management while getting constructive support from government policies. Some experts argue that policy makers should expect the raising of the average exit age to be a slow and gradual process, which will require massive awareness-raising campaigns and co-ordinated efforts from all stakeholders. They also suggest authorities should formulate their success criteria accordingly. In that perspective current European results are possibly even encouraging.

Yet, the present ageing, and the forthcoming shrinking, of the workforce does not leave Member States much time to improve their practices on age management. If the time-schedule of EU targets seems ambitious and present assessments impatient, it is largely because these reflect the urgency of the changes that are needed.

Structural changes in the skill composition of cohorts of older workers and market forces are likely to lend a helping hand. But as always it will be the will to seize the opportunity which will determine the outcome. Returning to older workers their rightful share in the employed workforce will not be easy. Without determined and intense efforts from a partnership of policymakers and the social partners, the necessary change in age management will come too late and be too small. Then again there is no doubt Europe can succeed if everybody commits themselves. Even if targets may not be fully met within the deadline, major improvements in the employment and retirement patterns of older workers can certainly be achieved over the next decade.

REFERENCES

All public documents pertaining to the policy developments covered in this article can be consulted and downloaded at the homepages of the European Commission. The address for documents produced by DG Employment is: http://europa.eu.int/comm/employment_social/index_en.htm
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### Table 6: Progress towards the Barcelona target: average exit age from the labour market

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Notes: . data not yet available; p) provisional data; b) break in series; e) estimated value. Data based on overall activity rates (no adjustment by gender since data by sex lack reliability due to the low sample size) for LU, EE, CY, LV, LT and SI.
Why and How to Prolong Working Life: 
A Labour Market Perspective

by Paolo Sestito
Ministry of Labour and Social Policies, Rome

Abstract
Using the Italian case as a learning example, this short note will discuss the issues raised by the goal of working life prolongment. Firstly, it will be argued that such a goal is of paramount relevance vis-à-vis the increase in life expectancy as a way-out from the apparent trade-off between financial sustainability and social adequacy of pensions systems. The difficulties of fulfilling such a goal, taking account of the interactions between demand and supply factors and of the inheritance of past rules and habits, will then be discussed with reference to the Italian case.

Section 1 will summarize the rationale behind working life prolongment. Section 2 will introduce the more difficult issue of how to realize it, showing the differences existing between cohorts and contexts as differentiated by labour market environmental conditions, normative rules inherited by the history and different chances of adjusting to possibly new rules. The need to look at the interaction between demand and supply factors will be stressed. Using the Italian case as an example, the following four sections will provide detailed arguments relating to these supply and demand interactions.

1. Why prolong working life

The basic arithmetics of life expectancy lengthening are quite simple. Faced with it, any society whatsoever has either to allow more resources to be spent upon retired persons — maintaining both historical retirement patterns and unitary pensions benefits — or to trade-off actual retirement age increases with cuts in unitary benefits in order to limit such an increased burden.

Such a basic fact remains true, although the details of these arithmetical realities may differ according to the pension system under consideration and the timing of these hard choices may differ according to detailed demographic factors.

Re. the latter, it is clear that countries which are going to experience a swelling in the numbers of the elderly because of a previous baby boom — such as Italy in the next 20-30 years as a result of the baby-boom of the late 1950s and early 1960s and the subsequent fertility fall — have more problems than others, particularly if migratory inflows are subdued and incapable of alleviating that temporary bulge. However, migratory inflows may not prevent the longer term implications of life expectancy lengthening1. In addition, relinquishing fertility in order to acquire a more balanced population2 evolution may not avoid the basic fact that, for any given individual, the lengthened life expectancy implies a longer retirement to working years ratio (for given retirement patterns).

1 At least insofar as migrants acquire natives' demographic characteristics as far as life expectancy is concerned, social evolution is a gradual process and some actual 'exploitation' of their initially lower life expectancy may actually occur even if migrants rapidly acquire the same legal rights of the natives. However, such a 'solution' would be unfair and a signal of social and health policies' failure.

2 Besides fertility rises have only very gradual effects against the prospect of a swelling in the numbers of the elderly.
Similarly, differences arise according to the details of the pension system. A pay-as-you-go (PAYG) system would require an increased contributory and tax burden. Some leeway may come from the possibility of depleting reserve funds accumulated in the past or from accumulating deficit for some years when a temporary swelling of the numbers of the elderly actually appears. However, the longer term arithmetical realities remain untouched by these financial tinkering exercises. In addition, a system based upon the financial returns of accumulated savings would still require more savings being accumulated and invested, amounting to an increased contributory burden. What differs is the possibility of investing those resources abroad, at the given international rate of return, so that the resources currently consumed by the elderly may actually be the counterpart of a trade deficit rather than claims upon the GDP.

In such a framework, paralleling the lengthened life expectancy with prolonging the working life provides a way out from the above-stated dilemmas. There would be less need to increase the burden upon current youths (or to accumulate funds for the future) and unitary benefits would not need to be reduced too much. Basically, financial sustainability and social adequacy of pensions entitlements (during retirement) would both be preserved.

It is impossible to state an optimal rule linking retirement and life expectancy since the optimal response of a (hypothetical) individual having to plan consumption and work over the whole life cycle would depend upon many details, including health related considerations, the amount of uncertainty (associated to the lengthened life expectancy), the access to financial markets and so on. Broadly speaking, it is likely that the increase in life expectancy would be used both to postpone retirement (i.e. an increase in life-time labour supply) and to spread consumption over the lengthened expected life (i.e. saving more while working, the equivalent of a rise in contributions, and consuming less while retired, the equivalent of a cut in benefits). However, even an apparently simple rule maintaining a constant working to retirement years ratio cannot be taken for granted, though as already said an optimal response to an increase in life expectancy would include a postponement in retirement. Therefore, a well designed pensions system should include mechanisms leading towards that: avoiding perverse incentives to early retirement as well as providing explicit obligations to work longer (obligations quite natural to the extent that some mandatory aspects are present in the system as a whole\(^3\)).

Managing such a system over time, therefore, involves mechanisms designed to progressively shift the retirement patterns over time.

In the Italian case, the above-stated arguments are directly visible through the lenses of the Notional Defined Contribution (NDC) system gradually phased in in accordance with the reform of the mid 1990s. In such a system\(^4\), pension unitary benefits are a function of total life time contributions\(^5\) multiplied by a transformation coefficient which is a decreasing function of age at retirement. These transformation coefficients are themselves periodically adjusted\(^6\) in

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\(^3\) The mandatory aspects of a pension system are relevant also in the case of a system based upon the financial returns of individually accumulated savings. The need to accumulate funds and the investment in annuities from the returns accruing from them should be mandatory, the justification for this being the need to tackle the risk of imprudent behaviour. For very similar reasons, minimum age eligibility standards may also be fixed when the individual would bear the financial costs associated with early retirement using actuarial adjustment rules. In a defined benefit system, these minimum age eligibility standards may also be necessary in order to prevent individuals from exploiting the system because of the lack of actuarial adjustment rules. Note that the relevant issue refers to the rules governing benefits determination, i.e. whether the system is of a defined contribution (DC) or of a defined benefit (DB) type, regardless of its fully funded versus PAYG nature.

\(^4\) For a succinct description of its features, see Marano and Sestito (2005).

\(^5\) It would amount to a given percentage of total earnings and accumulated over time according to a notional rate of return which is a function of a moving average of nominal GDP growth rates.

\(^6\) It is envisaged that the adjustment would take place at ten-year intervals. The distinct steps implied by this are a source of inequities — as adjacent cohorts are treated in rather different ways — and inefficiencies — as retirement decisions may be affected by the anticipation of the distinct adjustments to come. Moreover, the adjustment itself, while being required by law, is not automatic, as a consensual procedure is envisaged for it and an explicit political endorsement has to be given, meaning that there is a risk that the adjustment could be either postponed or held back. Actually, a very important political test is going to take place in 2005, as the first of these adjustments should be made then.
order to take account of the actual changes in life expectancy\(^7\). Taking into account the likely evolution of these transformation coefficients, the NDC system would thus imply a declining trend in the replacement rate at given retirement patterns (see Figure 1). The only way-out from such a decline would be a sizable postponement of actual retirement, so that people would accumulate more contributions and so avoid the decline in the transformation coefficients applied to those accumulated contributions.

**Fig. 1: Rates of replacement for public services with and without the effects of demographic correction**

![Graph showing rates of replacement for public services with and without demographic correction.]

2. How to increase retirement age

The basic policy goal stated in the previous section is that of containing the decline in the work to retirement years ratio which would be implied by the rise in life expectancy (for given retirement and work patterns). At the aggregate level, such a ratio is affected not only by average individual retirement patterns of those who have a work history, but also by the employment rate of people far short of customary retirement age. In these respects, it is quite common to argue that increasing employment among groups under-represented in the labour market, such as youths, low-skill people and females, may do the job. The relevance of targeting employment of these groups is not to be overlooked. However, their contribution to the policy dilemmas raised by life expectancy lengthening is just a one-off contribution, very much along the same lines of what has already been said about migratory inflows. In the longer run, it is impossible to avoid tackling the issue of the employment of the elderly.

\(^7\) It is the average life expectancy which matters regardless of sex, and the risk of leaving survivors is also taken into account. The lack of differentiation gives an advantage to the healthier and the longer-living. This favours women and, to the extent that they are more long-living, the rich as well. The possible perverse distribution implications have not been well studied so far. However, it should be noted that the previous defined benefit system, besides giving an implied advantage to more long-lived people, also favoured those with steeper earnings careers, who are on average those with higher incomes. On the issue of longevity risk and benefits design, see Diamond (2005) and Fornero and Sestito (2005).
It is important to note that raising employment among relatively elderly people and postponing actual retirement are complementary but not coincident goals. Taking Italy as an example, one can notice that there are groups and contexts where the critical issue is the starting point (i.e. employment well before customarily retirement age, say at 50 years) and those where the critical issue is retirement behaviour (Figure 2). Shifting up retirement patterns among the few Southern females who were employed when 50 years old would have a very limited aggregate impact. Moreover, policies aimed at boosting employment of elderly people with a limited work history are likely to differ from the policies needed to contain early retirement among high work-seniority people.

Fig. 2: Employment rates according to age

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8 Such differences have gone unremarked in the European debate begun after they had been identified as policy targets in the 2001 Stockholm and 2002 Barcelona EU Summits respectively.
Simple life cycle considerations imply that participation in employment today is a good predictor of participation in employment tomorrow as people accumulate human capital and become attached to the labour market. So, it would be extremely difficult to increase employment among people who have a very limited work history just focusing upon their latest life cycle stage. In the Italian case, it is clear that increases in employment among elderly females must derive to a fair extent from a historical process in which newer cohorts become more and more attached to the labour market. Actually the underlying positive trend in the employment rate among elderly people (as, for instance, customarily measured by the employment rate among 55-64 year-olds) is driven by such a cohort effect. Similar considerations apply to males in the South. Focusing solely upon age-related policies would be unsafe as boosting up depressed labour market conditions prevailing across the board appears essential in order to affect elderly employment as well\(^9\). A different story applies to males in the Centre-North area of the country. Here the crucial issue appears to be retirement patterns, as shown by the steep decline in the employment rate.

Even when the focus is upon retirement patterns, the interaction between supply and demand factors, as affected by pensions rules and labour market policies, needs to be carefully considered. Retirement patterns are heavily affected by supply decisions and it is customary to analyze them through simple models focusing upon individuals' choices as affected by monetary incentives embedded in pension entitlement rules. These models provide impressive evidence of the importance of those economic incentives. Yet these models, at least in the empirical applications so far developed, are often imprecise because of the paucity of control variables capturing taste shifters (related to health and household factors as well as to true underlying preferences) and because of the difficulty of disentangling the effect of monetary incentives, when people may exercise their right to retire, from that of the pensions' access rights themselves. Strictly speaking, economic incentives matter only so long as people can retire. Whenever they cannot retire, because they lack the age, seniority and related requirements, economic incentives may not drive their choices. It is possible that they would like to retire, but they simply cannot do it. The fact that many people retire at the earliest possible age may imply either that they would have liked to retire even earlier (having being impeded from doing so by the prescribed requirements) or that there are social norms affecting individuals' choices. In both cases the relevance of economic incentives in explaining retirement behaviour is reduced. More importantly, the econometric identification of their role is made difficult because it is extremely difficult, in the data sets commonly employed, to identify precisely whether an individual has or has not fulfilled the retirement requirements.

Moreover those models often lack control variables capturing demand effects\(^{10}\) and because demand conditions do not act as a simple tide increasing or lowering wages available across the board to potential elderly employees, they do not adequately capture the interactions between demand and supply factors. From a policy perspective, understanding these interactions is crucial both because demand-side considerations may require ad hoc strategies on top of any redesign of the pension entitlement rules and because the effects of a given set of entitlement rules may differ across labour market contexts.

3. Demand and supply interactions: pension entitlement rules

In order to understand these interactions, it is useful to start from a brief analysis of the

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\(^9\) Actually retirement patterns seem rather moderate in the South also because people, of given age, have not accumulated enough seniority rights, which are essential for qualification for retirement before 65 years of age.

\(^{10}\) In principle, wage conditions should include demand side considerations. The fact that an individual has few employment opportunities should affect the market wage. However, in non competitive labour markets more complex channels may be considered.
supply-side effects of entitlement rules in the Italian case. The old (and still prevailing, as far as current retirees are concerned) defined benefit (DB) system had strong pro-retirement effects well before the 65-years-of-age threshold. Provided people met the age and seniority requirements needed in order to retire before the 65 years threshold\textsuperscript{11}, the overall generosity of pension entitlements (with a replacement rate of around two thirds of the previous wage) and the limited marginal gains arising from retirement postponement (as entitlements may rise only until 40 years of seniority have been attained) implied rather strong incentives to retire as soon as possible. Actually the latter effect mirrors in a way a standard (static) substitution effect, as little gain is derived from the additional work, while the former may be interpreted along the lines of a standard (static) income effect, as people may afford to retire because the pension entitlements they may get are relatively generous.

The actual story may be further complicated by the inclusion of other elements. For instance, one might notice that perverse incentives to retire may also derive from the possibility of cashing-in the trattamento di fine rapporto (TFR), a deferred wage cashed in when a worker-firm match is interrupted, which for employees often represents their most important accumulated wealth\textsuperscript{12}. Other non-monetary factors — such as the need to look after grandchildren and partners in a country with rather underdeveloped care services — may be added as well.

It is not our intention to weight the relative importance of these different elements. The crucial issue to be stressed here is that the supply factors very closely linked to pension entitlement rules strongly interact with demand side factors. The ‘substitution effect’ described above is particularly significant for workers for whom demand considerations would imply dismal wage prospects. A worker who has lost his or her job and who could only find an alternative job position by accepting a sizable wage cut would suffer a sizable pension’s benefits loss because pension entitlements are still to a large extent linked to the late years of his or her career. This may explain why many people retire when at risk of dismissal. Retirement is their own (supply-side) choice, but not simply a choice due to their laziness or to the lavishness of their pension benefits and the small increase in future pension they could get according to the system’s rules if they continued to work at the previous wage. The crucial factor is that they realize that the demand conditions they are facing would lead them not only to lower their current wage, but also to depress their future pension benefits.

A second important element to be noted is that insofar as such a framework remains valid — both in terms of pension entitlement rules as summarized by the replacement rates described above and by the fact that those entitlements are more affected by the late years of an individual’s career than by the previous years of that career — acting upon the age and seniority thresholds allowing access to a pension before 65 years of age (the seniority pensions’ route) remains the most effective policy lever for affecting retirement patterns.

It is the uplift in those thresholds which explains the trends depicted in Figure 3, particularly among males, as among females a positive cohort effect is also relevant. Most of the recent rises in the employment rate of elderly people has been actually experienced up to the 56-57 years of age, i.e. exactly up to the currently relevant age threshold for gaining access to seniority pensions (the pension route available before 65 years of age).

In this perspective, it is also quite understandable why the latest reform launched in 2004, while postponing till after 2008 any further action along these lines, has again used the same lever

\textsuperscript{11} For more details upon these age and seniority requirements and the changes introduced in the latest 2004 reform, see Marano and Sestito (2005).

\textsuperscript{12} In a country where households are faced with various difficulties in accessing the capital market, the TFR once cashed in is often used to cover the education of the sons and daughters of those around retirement age. Note that such a TFR effect arises also because of the difficulties the elderly have in finding an alternative job. In a more fluid labour market people might cash in the TFR and get a new job, instead of retiring.
Fig. 3: Change in the employment rate according to age over the 1998-2003 period

Females

Males
envisaging an (abrupt) increase in the age requirements for seniority pensions starting from 2008.

Incidentally it has to be noted that the gradually phased in NDC pension entitlements system would change the framework described above. In it, pension entitlements are going to be less generous (for given retirement patterns, see Figure 1 above) and would automatically provide for some marginal incentive to postpone retirement (at least up to 65 years of age; see section 1 for a brief description). Financial incentives to postpone retirement would have made less relevant as policy lever (for increasing the average effective age of retirement) the age and seniority thresholds intensively used so far. However, no guarantee would have been available of the actual impact of those financial incentives, as the strengthening of those financial incentives, produced by the reform of the mid-1990s, would have been coupled with a reduced hold of the traditional seniority thresholds. It is against such a picture that one has to interpret the renewed emphasis upon age and seniority thresholds directed even into the long-term future by the latest 2004 interventions, when entitlements will be computed according to the new NDC system. Needless to say, while understandable, the concrete 2004 interventions are not necessarily the most efficient ones. As argued by Marano and Sestito (2005), both the abruptness of the uplift in the age and seniority thresholds (with no restriction up to 2008 and a jump from 1 January 2008) and the loss of some flexibility features implicit in the NDC pension access rules may be considered as drawbacks of the interventions carried out. A more gradual (and immediately operative) intervention path, preserving the flexibility features provided for in the NDC system by the mid-1990s reform and obtaining an increase in the effective age of retirement by shifting up the retirement age window from the 57-65 years then established to one with a range more in line with the actual change in life expectancy could have improved both the equity and the efficiency of the interventions.

4. Demand and supply interactions: the human capital gap

Having noted the importance of supply and demand interactions, it is important to briefly describe what the demand conditions for elderly people are. The basic element to be considered is the large educational attainment gap of the cohorts currently in their fifties. This is mostly an historical fact, as mass scholarization in Italy is a relatively recent phenomenon. In 1991, the 55-64 years group had on average 5.7 years of completed schooling, compared to the 10 years of the 25-34 year-olds. Simply because of past historical trends, in 1999 the gap (involving the same age groups and different cohorts) had slightly reduced to a 6.8-10.9 difference and further reductions are likely in the years to come as in the same year people aged 45-54 had on average 9.1 years of completed schooling (and trends in current schooling participation have almost halted).

Incidentally it has to be noted that educational attainment matters in relation to retirement for at least two reasons. The first reason, and the one here specifically considered, is that human capital matters to employability. There is also a second reason more related to the role of age

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13 Under the reforms of the mid 1990s, the 35 years seniority threshold would have been lowered to just 5 years, albeit with the introduction of a different constraint resulting from the requirement that the pension benefits should be at least equal to 1.2, a minimum amount in the event of retirement before 65 years of age.

14 Another important element of the 2004 interventions, besides the attempt to boost the development of the second pillar by diverting TFR funds towards DC pension funds, is the provision of sizable incentives to postpone retirement for those who have obtained the right of access to a seniority pension. The incentives so provided are quite considerable, particularly for those on high incomes. However, postponement of retirement was feasible even before and the bigger gains achievable under the new incentive scheme do not necessarily go to those groups who had the lowest propensity to postpone retirement before. So it is likely that many people who will take part in the new scheme would have postponed retirement in any case, the deadweight loss (and the distribution implications) of the new scheme being as yet quite unstudied. In any case, the scheme as such exacerbates the inequity implied by the abruptness of the 2008 rise in the age requirements; some cohorts remain untouched by the restrictive measures enacted since 2008 getting in fact an additional opportunity to gain from the incentive scheme.
and seniority requirements previously discussed as more educated people had a later start in the labour market and are likely to have accumulated, for any given age, less seniority years. Actually, this element has contributed (and will contribute in the years to come) to the shifting up of the effective age of retirement15.

What about the future? May one assume that — whatever the aggregate effects of the reduced path of increase in educational attainment of newer and smaller cohorts16 — the future human capital gap of the elderly will be reduced? Discussing such an issue is beyond our aims in this short note. However, some prudence appears necessary.

One should consider that in the so-called knowledge-based economy of the future the risk of obsolescence of the skills acquired at school is increasing. The Italian economy would so suffer from the forthcoming elderly people bulge and in it the elderly would be clearly the ones most at risk. Actually, in order to characterize the human capital gap of the elderly one should also take into account the role of learning activities beyond initial education. To put it succinctly, the Italian case is one in which not much training takes place on average. Moreover, training participation is very much tilted in favour of the young and more educated people.

5. Demand and supply interactions: working conditions and business practices

The human capital gap described above should reduce the (relative) demand for the elderly by firms. Does it translate into lower wages or, in the case of given wages, in worse employment opportunities? In a rather institutionalized labour market like Italy, such a simple price-quantity decomposition does not appear directly visible. The role of market forces in shaping wages is indirect as business practices, fairness considerations and contractual arrangements through unions’ bargaining heavily affect the process.

While less relevant than in the past, explicit and formalized tenure rules often impact upon wages. From a firm’s perspective it is so often the case that high-tenured elderly workers appear as an unjustified burden, while elderly unemployed would get (on the external market) low wages which are unattractive, both in themselves and because of the associated future pension reductions (see section 3). All in all, it seems that wages have an age gradient which is quite sizable, probably also because of selectivity issues, as the least skilled and the most unlucky people tend to retire as soon as possible.

Less clear is the picture concerning non-wage working conditions. Do stress factors — assuming a normal decay of health, physical strength and capability to manage stressing situations — somehow induce many elderly people to retire (as soon as possible)? Would the presence of these factors induce an increase in disability and health related benefits’ claims as a reaction to possible toughening of pensions’ access rules?

Apparently, there is not much evidence of an age-related pattern in overall job satisfaction17. Elderly workers do not appear to be more dissatisfied than others. However, this might be due to selectivity as those more dissatisfied, because less motivated and/or with health problems and difficulties in adapting to work-place rules, may have exited relatively early.

15 An additional element is that youth unemployment has been particularly high since the mid 1970s, so that future cohorts of people faced with retirement choices will have accumulated less years of seniority after the completion of schooling.
16 The reduced path of increase in educational attainment and the reduced size of cohorts are possible sources of concern because they would imply a reduced increase in the aggregate supply of skills. Additional concerns may derive from quality considerations, related not to educational attainment per se but the actual content of schooling background as for instance evidenced by the disappointing results of the PISA exercise conducted under the auspices of the OECD in 2000 and 2003.
17 See on this Sestito (2002), chapter 7.
Here we are unable to quantify the relevance of these issues. Yet it has to be noted that so far little care has been given to the adaptation of the working place to the specific needs of elderly workers. This may be due to the escape route provided by seniority pensions relieving firms and workers (and unions) from the difficult task of agreeing upon possible solutions. To some extent, demographics were also operating in the same direction, as the abundance of younger workers made the difficult task of being attractive to the elderly less relevant to firms. More broadly, one can say that the small size of most Italian firms puts them at a disadvantage in putting into place flexible arrangements different from the widespread use of overtime, a practice which is not very elderly-friendly.

Speculatively, one has to stress the importance of rigidities in the organizational set-up as an obstacle to the diffusion of part-time. These difficulties have contributed to the fact that gradual retirement and part-time solutions are of little relevance to the elderly.

6. Demand and supply interactions: labour market rules and policies

In the previous sections we have shown how wage determination and the human capital gap interact in reducing elderly employment chances. More broadly, one can say that the traditional labour market regulatory framework has tended to exacerbate the insider-outsider dilemma among elderly people. In Italy the Employment Protection Legislation (EPL) for permanent workers still remains quite strong; this provides protection for the elderly when employed. When unemployed, however, not much help is provided in order to get people back to work. It was quite customary for the elderly to be expected to exit from the labour market taking advantage of the seniority pension route.

As is well known, the overall EPL index for Italy as constructed by the OECD has seen a sizable decline over the last 15 years. This was however entirely due to the flexibility gradually introduced at the fringes of the market, through the relaxing of temporary contracts rules. The point is that all this has mostly impacted on the youth market segment. This is so both because some temporary contracts were specifically targeted to the young (moreover the provision of a social security contributions rebate exacerbated the problems evidenced in the previous section) and because most of the employment services developed by private agencies have focused upon the most relevant (from their business perspective) youth segment.

On the other hand, reinsertion services focusing upon weak groups, including the elderly, are still quite underdeveloped in a framework in which the Public Employment Services (PES) have not developed any strong ‘activation’ attitude.

It is quite difficult to provide forecasts in this area. Broadly speaking, a more flexible labour market might make easier those labour market reinsertion opportunities which so far have been lacking resulting in people being pushed towards one pension-related exit route or another. However, maintaining a ‘flexibility at the fringes’ model may be problematic as the elderly are the least accustomed to take advantage of it.

More specifically, ambiguous trends appear in some cases. As for employment incentives, for instance, a new scheme specifically focusing upon reinsertion difficulties has been just introduced (the so-called contratti di inserimento — CIL — which target the elderly among others). However, the bulk of the expenditure still covers the young and the same law introducing the CIL has also widened the scope for the use of apprenticeship schemes, making them an almost universally available (low-cost) employment contract for the young. As for the employment services, focusing upon elderly people is likely to become — also for the demographic reasons stated above — a business case for the private employment agencies whose presence has recently become well established. However, the delays in the difficult transition towards an activation role on the part of the PES may still limit the capability of
labour market institutions to provide support for the elderly. Within the few good practices developed in the PES, the attention paid to the elderly is still very episodic.

REFERENCES
Why Is the Employment Rate of Older Swiss so High?
An Analysis of the Social Security System

by David Dorn and Alfonso Sousa-Poza
University of St. Gallen 1

Population ageing, better health of older persons, and lower birth rates will, in the near future, have a significant effect on the workings of labour markets in virtually all industrialized countries. There are three main reasons for this observation. First, these developments will inevitably change the age composition of the labour supply: the proportion of older workers in the labour market will increase. A second implication of the changing demographic structure is the negative effect that this development has on (primarily unfunded) public pension systems. Most pension funds in many industrialized countries are already confronted with severe financial difficulties, and innovative solutions for assuring future pensions are called for. Finally, the ongoing demographic change will, with the current retirement age, significantly reduce the labour supply. Furthermore, this reduction in labour supply cannot be compensated for by capital accumulation (e.g. Börsch-Supan, 2001).

The changing composition of the labour force, the financial problems of unfunded pension systems, and the reduction of the total labour supply will inevitably have two related consequences. The first is that there will be a certain amount of pressure to increase the official retirement age. Thus, for Switzerland, the OECD recommends that the official retirement age be gradually increased to 67 years of age for both men and women. The second consequence is that training of older workers, i.e. the upgrading of their job skills and the related increase in supply of vocational and on-the-job training, will gain importance (see OECD, 1998). In fact, and due to the changing composition of the labour force, this latter point is likely to gain in importance irrespective of whether or not the official retirement age is increased. According to the OECD, the training of adult workers will play an important role in assuring strong economic growth in the future.

Despite the need to increase the employment rate of older individuals, public policy in Switzerland (as in most European countries) has concentrated instead on propagating early retirement. There are a number of reasons for this emphasis on early retirement. First, overemployment in Switzerland is, in comparison to other European countries, remarkably high including among the older population (Sousa-Poza and Henneberger, 2002a).

This could be a result of the relatively long working hours or the high GDP per capita in Switzerland. Whatever the reason, such overemployment rates increased quite dramatically in the 1990s, which possibly gave rise to increased (partially involuntary) early retirement. A third potential reason is that actual retirement ages are high in comparison to other industrialized

1 Research Institute for Labour Economics and Labour Law, University of St. Gallen, Switzerland (corresponding author: A. Sousa-Poza, e-mail: alfonso.sousa-poza@unisg.ch). Republished from the Geneva Papers on Risk and Insurance Vol. 28, No. 4 (October 2003) 652-672. Extracts of this paper were presented at the conference “Work Beyond 60: Preparing for the Demographic Shock”, 6-7 March 2003 in Vienna, organized by The Geneva Association, The Club of Rome, and The Risk Institute. Extracts were also presented at the Bertelsmann Foundation conference "Strategien gegen den Fachkräftemangel" in Berlin, 2 July 2002, and at the Bertelsmann Foundation conference “Reformen zur Steigerung der Beschäftigungsfähigkeit älterer Arbeitskräfte” in Berlin, 26 October 2001. The authors would like to thank the participants as well as Jaap van Dam, Thomas Liebig, Fred Henneberger, and Geneviève Reday-Mulvey for their valuable comments and discussions. Alfonso Sousa-Poza would like to thank the Swiss National Science Foundation for financial assistance. The usual disclaimer applies.
countries. Some politicians have argued that aligning the actual retirement age with that of neighbouring countries should be feasible.

As opposed to other European countries, the trend to early retirement in Switzerland has only really come about in the past decade. However, the results are quite impressive: whereas in 1991 about 20% of all men aged between 62 and 64 and all women aged between 59 and 61 took early retirement, this value had increased to about 30% by the year 2000.

Thus, at the moment, almost every third worker takes into early retirement. Nevertheless, Switzerland still has a high employment rate of older workers: whereas over 70% of all individuals between the ages of 55 and 65 are employed in Switzerland, the corresponding figure for Germany is a mere 38%. The values for the other countries bordering Switzerland are even lower (Figure 1).

*Figure 1: Employment rate of individuals aged 55-64: average for the years 1996–2000*

It is generally accepted that the institutional framework plays a vital role in determining the employment rate of older workers. More specifically, the social security systems such as, for example, pension schemes, unemployment insurance, and invalidity insurance have in many countries evolved into institutions that strongly influence the retirement decision. This is primarily done by providing incentives for early retirement. Although other factors such as customs and economic conditions also influence the retirement decision, one can fairly say that the trend to early retirement in many European countries has primarily resulted from changes in the institutional framework.

The aim of this paper is to try to explain the high employment rate of older workers in Switzerland by taking a detailed look at the institutions that primarily (or potentially) could influence the retirement decision. The paper is structured as follows. Section 2 provides a general overview of the Swiss social security system. In section 3, the main systems that potentially could influence the retirement decision are discussed. These are old age insurance, the occupational benefit plan, invalidity insurance, and unemployment insurance. For each of these, the services, the funding, and the age-related aspects are discussed. Although the design of the Swiss social security system plays a decisive role in assuring the currently high employment rate of older workers, other reasons also exist. These are discussed in section 4. Section 5 concludes.
2. The social security system in Switzerland

2.1 Overview

In the past century, Switzerland has developed a comprehensive social security system. Ten social insurances provide financial aid to individuals who are not able to cover their basic living expenses due to a lack of labour income. Four of the ten provide for old age and invalidity (old age insurance, occupational benefit plan, invalidity insurance, and supplementary benefits plan), while three cover the risks of sickness and accidents (sickness insurance, accident insurance, and military insurance). The unemployment insurance and the income compensation plan compensate for a loss of income due to unemployment or military service, respectively. Finally, one federal social insurance provides family allowances1. Table 1 lists the ten types of social insurance in Switzerland indicating their year of introduction and their expenditures in 2001.

Total expenditure on all types of insurance amounted to approximately SFr 103 billion in 2001, which corresponds to approximately 25% of GDP. Old age insurance and the occupational benefit plan, both forming part of the Swiss old age provision system, accounted for 60% of the total social security expenses.

2.2 Development

The development of a federal social security system in Switzerland dates back to 1890, when in a constitutional amendment the Federation was given authority to introduce an insurance for sickness and accidents. After an initial proposal for an insurance covering both the risks of illnesses and accidents was rejected in a referendum in 1900, the proposal was split up into three components, namely military insurance (a sickness and accident insurance for men in military service), sickness insurance, and accident insurance. The military insurance was implemented in 1902. The sickness insurance and the accident insurance, both not yet compulsory, as had been initially planned, only followed in 1914 and 1918, respectively.

The great economic depression of the 1920s hindered further development of the Swiss social security system between the two world wars. During the two decades following World War II, however, significant progress in the development of a social state was achieved. As Tschudi (1989) points out, the adverse conditions of the war led to increased solidarity among the population and the need for additional social insurances had become apparent. At the same time, unprecedented economic growth facilitated the funding of new insurances. Among the milestones of this period was the introduction of the compulsory old age insurance in 1948, the unemployment insurance in 1952, and the invalidity insurance in 1960.

In 1974, a constitutional amendment laid the basis for a three-pillar system of old age provision, a Swiss development that has received some acclaim among international organizations2. It foresees a division of old age provision between public, occupational, and private insurance. The federal old age insurance, which forms the first pillar, was established in 1948. Its objective is to cover the basic living expenses of all retired persons in Switzerland. The second pillar constitutes the occupational benefit plans. Many companies had already established such plans prior to 1974 in order to guarantee their employees an old age pension income in excess of the small pensions provided by the federal insurance. In a law passed in 1985, the Federation set guidelines for occupational benefit plans and obliged employers to insure their employees in such a scheme. The third pillar covers individual savings and life insurances. As opposed to the first and second pillars, the third pillar is not compulsory. Savings in this pillar profit from attractive tax exemptions3.

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1 Due to the fact that these allowances are regulated at the cantonal level, diversity among cantons is large. As the implications of this insurance for the employment of older workers are minor, they will not be discussed in this paper.

2 The historical development of the Swiss multi-pillar system is discussed in Helbling (2000) and Hepp (1990).

3 For an elaborate discussion of the Swiss three-pillar concept see Sousa-Poza and van Dam (2001) and Queisser and Vittas (2000).
Table 1: Types of social insurance in Switzerland

<table>
<thead>
<tr>
<th>Social insurance</th>
<th>Year of introduction</th>
<th>Annual expenses in million CHF</th>
<th>% of total expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old age insurance</td>
<td>1948</td>
<td>29,081</td>
<td>28%</td>
</tr>
<tr>
<td>Occupational benefit plan</td>
<td>1985</td>
<td>32,900</td>
<td>32%</td>
</tr>
<tr>
<td>Invalidity insurance</td>
<td>1960</td>
<td>9,465</td>
<td>9%</td>
</tr>
<tr>
<td>Supplementary benefits to old age and invalidity insurances</td>
<td>1966</td>
<td>2,351</td>
<td>2%</td>
</tr>
<tr>
<td>Unemployment insurance</td>
<td>1952</td>
<td>3,415</td>
<td>3%</td>
</tr>
<tr>
<td>Sickness insurance</td>
<td>1914</td>
<td>14,204</td>
<td>14%</td>
</tr>
<tr>
<td>Accident insurance</td>
<td>1918</td>
<td>6,523</td>
<td>6%</td>
</tr>
<tr>
<td>Military insurance</td>
<td>1902</td>
<td>244</td>
<td>0%</td>
</tr>
<tr>
<td>Income compensation plan for military service</td>
<td>1953</td>
<td>694</td>
<td>1%</td>
</tr>
<tr>
<td>Family allowances</td>
<td>1953</td>
<td>4,359*</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>103,236</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Including family allowances paid directly by the cantons.

3. Social insurances influencing the employment rate of older Swiss

In the context of this study, we are primarily interested in those social insurances whose institutional design might encourage or discourage the employment of older people. We will therefore focus on old age insurance (section 3.1), occupational benefit plans (section 3.2), invalidity insurance (section 3.3), and unemployment insurance (section 3.4).

We do not ascribe to the remaining insurances any significant influence on the employment of older workers. The sickness and accident insurances only cover the expenses for medical treatment, but they do not substitute labour income as a means of financing the basic costs of living. Military insurance and the income compensation plan for military service have a limited importance as they are restricted to military personnel. Finally, family allowances are paid to parents with young children, thus not affecting older people.

Figure 2 shows the social insurances that will be discussed in more detail in the subsequent sections. The old age insurance and the occupational benefit plan form part of the three-pillar system of old age provision, as presented in section 2.2.

Figure 2: Social insurances possibly influencing the employment of older workers
They define the retirement age as that after which a person can receive an old age pension. Therefore, they have a crucial influence on the employment of older individuals. Before reaching retirement age, an invalidity pension or unemployment benefits can be used as a substitute for labour income. We will therefore also assess the institutional design of the invalidity insurance and the unemployment insurance.

3.1 Old age insurance

The compulsory old age insurance aims at covering the basic living expenses of all retired people in Switzerland.

3.1.1 Benefits

Old age insurance is compulsory for every person in Switzerland and optional for Swiss citizens living abroad. The insurance entitles them to receive an old age pension after reaching the legal retirement age, which is currently 63 years for women and 65 years for men.

Old age insurance law defines a minimum old age pension. It is worthwhile pointing out that, since 1975, the minimum pension has only been adjusted to inflation, i.e. no substantial increases have taken place. As of 2003, the Federal Social Insurance Office (2002b) has set the annual minimum pension to SFr 12,660, which, by Swiss standards, is very low. Especially for older people living alone, the minimum pension does not cover basic living expenses. These costs have been calculated to be SFr 16,880 by the Federal Social Insurance Office (2002c). In order to fulfil the constitutional assignment (namely ensuring that retirees have a pension that covers basic needs), the difference between the old age insurance pension and basic living expenses gets covered by an additional social insurance, the supplementary benefits plan.

The level of an individual pension is defined by the average annual work income of a person between the age of 21 and retirement age. For individuals who, due to child-care responsibilities or due to care of handicapped relatives, were non-employed for a certain period of time, every year spent on these activities is counted with a pro-forma income of three times the minimum pension. In practice, this applies nearly exclusively to women. If the average annual income during a person’s work life was larger than SFr 12,660, pensions are above the minimum level. There is, however, a cap limiting the maximum pension to twice the amount of the minimum pension, i.e. SFr 25,320. This maximum pension is being paid to people who had an average income of at least six times the minimum pension (SFr 75,960 or more). Thus, the Swiss public pension scheme is highly redistributive. This redistributive nature assures that the funding of the public (unfunded) system is not in as precarious a situation as in other countries.

While old age pensions are clearly the most important benefit of this insurance, it also provides pensions to widows and widowers, and to orphans. Furthermore, there are special payments to invalid older people.

3.1.2 Funding

Old age insurance is mainly funded by insured people and their employers in a pay-as-you-go (unfunded) system. Both employer and employee contribute 4.2% of the employee’s wage, i.e. 8.4% in total. Self-employed workers pay between 4.2% and 7.8% of their income depending on its level, while the contributions for unemployed persons are calculated in accordance to their financial wealth. Federal and cantonal contributions amount to about one-quarter of the old age
insurance’s total income. These contributions come mostly from taxes on alcohol and tobacco.

A comparison of the funding and the benefits of the first pillar reveals the redistributive nature of the system (see Figure 3). While there is no cap on old age insurance contributions, the benefits are limited to relatively modest pension payments.

Figure 3: Old age pensions in relation to annual salary before retirement

As in other countries, the funding of the first pillar is strongly affected by the demographic changes taking place in most industrialized countries. The Federal Social Insurance Office (2002d) predicts that the dependency ratio will have declined from 6.5 in 1948 to 4.0 in 2000, and will decrease to 2.5 in 2030.

3.1.3 Age-related aspects

With respect to the employment of older people, the legal retirement age, i.e. the age after which old age pensions are provided, is of crucial importance. When old age insurance was introduced in 1948, this retirement age was set at 65 years for both sexes. Men’s retirement age has remained unchanged since. Women’s retirement age, however, was lowered to 63 in 1956, and to 62 in 1964. With the aims of reducing the cost of insurance and of treating men and women more equally, the retirement age for women was once again raised in the last revision of the old age insurance law in 1997 where it was set at 63 years (as of 2001) and will be raised to 64 years by 2005. The Federal Government (2000a) even wants to go one step further and bring the retirement age for women back to 65 years by 2009. This proposed measure will, needless to say, have a positive effect on the employment of older women.

Besides raising the retirement age for women, a revision of old age insurance law in 1997 (the tenth revision) also introduced a flexibilization of the retirement age for both men and women. Old age insurance pensions can now be received up to two years before reaching the legal retirement age. However, the pension payments in this case will be reduced in an actuarial neutral manner. Since 1969, older people have also been able to choose to postpone their retirement by

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4 The dependency ratio is defined as persons aged between 20 and 63 divided by the number of individuals aged 64 or older.

5 This change is part of the 11th revision of the public pension scheme currently being debated in parliament. Although there has been some criticism of increasing women’s retirement age, observers are quite confident that this increase will be approved.
The early and the deferred claim of old age pensions have been used with different intensity. The statistics provided by the Federal Social Insurance Office (2002d) for the year 2002 show that, of all older people eligible for early or deferred retirement, some 25% of women and 8% of men chose to receive old age pensions one year prior to the legal retirement age (see also Widmer and Sousa-Poza, 2003). At the same time, only 0.5% of women and 1% of men opted for a deferment of their pensions.

The Federal Government (2000a) has even proposed a further flexibilization in its plan for the 11th revision of the law, which is currently being debated in parliament. It would allow individuals to draw old age pensions up to three years before reaching the legal retirement age. One of the most attractive suggestions of the current revision is that half a pension can be claimed if employment does not exceed a certain level. This can be done from the age of 59 up to the age of 70. Thus, should the 11th revision be passed as planned, then part-time employment in old age will be greatly facilitated.

As the Federal Government correctly states, the reduction of pension payments in case of early retirement is more painful for people having lower incomes, thus possibly preventing them from using that option. It is therefore proposed to financially facilitate early retirement for people with lower incomes by applying lower reduction factors in the calculation of their pensions. This is a problematic measure, as it creates a financial incentive for early retirement. The early retirement option will be financially more attractive than a retirement at the legal retirement age. At the same time, this costly flexibilization would almost negate the financial gain achieved by raising the retirement age for women to 65 years, as shown by the Federal Government (2000a). Considering the fact that, even without financial incentives, a strong trend toward early retirement emerged in the past decade (Figure 4), such measures should, in general, be avoided.

Figure 4: Trend to early retirement in the 1990s


Another change proposed by the Federal Government (2000a) that may (albeit marginally) discourage the employment of older individuals is the abolition of the preferred treatment of people working past the legal retirement age with regard to old age insurance contributions. Currently, these workers and their employers are both exempted from paying old age insurance contributions on the first SFr 18,990 of the worker’s annual income. The main advantage of the current exemption is that it does not impose additional costs on the employment of part-time workers: an important issue in trying to stimulate the demand for older workers. Furthermore,
pensions are only calculated based on the income prior to the legal retirement age, deferment does not lead to a higher pension (i.e. above the actuarial-neutral increase due to the deferment). Thus, one could at least question the fairness of introducing such contributions for workers who have passed the legal retirement age.

In conclusion, we can state that, at present, old age insurance does, in general, encourage the employment of older people until the legal retirement age. It is also important to note that the actual retirement age in Switzerland is very close to the official retirement age. This contrasts sharply with many other countries (such as Germany) where strong deviations between these two ages exist (see OECD, 2003).

According to a survey of 30 countries in the OECD (2003), only Iceland and Norway have higher official retirement ages for men than Switzerland. However, 19 countries have the same retirement age for men as Switzerland, i.e. 65 years. What is quite remarkable is that, in Switzerland, the effective and the official retirement ages are virtually identical, and, with regard to the effective retirement age, Switzerland ranks sixth among 30 countries (behind Iceland, Japan, Mexico, Portugal and South Korea). This is an indication that, at least in an international comparison, incentives for early retirement have been relatively low. As shown above, however, there are strong indications that this situation may change in the near future. The government’s plan for a revision of old age insurance law envisages a further flexibilization of the retirement age and a way to facilitate access to early retirement.

3.2 Occupational benefit plan

The occupational benefit plan law aims at ensuring that employees receive an old age income beyond the one guaranteed by the old age insurance in order to assure the accustomed standard of living in old age. This is the Swiss second pillar.

When the law was introduced in 1985, a large variety of schemes was already in place. These had been set up on a voluntary basis by private and public employers. Taking this situation into consideration, the law did not enforce a unification of the existing occupational benefit plans, but only defined minimum standards. Thus, occupational benefit plans are still managed in a very decentralized fashion and they enjoy a large autonomy with regard to their institutional design.

3.2.1 Benefits

The law demands that employers insure their employees aged 25 to 65 in an occupational benefit plan if their annual income exceeds the so-called co-ordination deduction of SFr 25,320. For self-employed workers, membership in an occupational benefit plan is optional. Widmer (1998) criticizes the requirement of a minimum salary in order to enter an occupational benefit plan. Although full-time workers in Switzerland normally have an annual income larger than SFr 25,320, many part-time workers might not reach that threshold. Most of these individuals are paid on an hourly basis (see also Flückiger and Ramirez 2000). Sousa-Poza (2003) shows that currently about 35% of all employed women earn less than the co-ordination deduction (Table 2). This proportion has remained constant throughout the past decade. Thus, a substantial fraction of employed women does not benefit from coverage in the second pillar. Men’s coverage in the second pillar is estimated at well over 80%.

According to Tschudi (1989), however, employees with a low income are already sufficiently provided for by old age insurance. This point is at least debatable, as the first pillar is by no means very generous. But ultimately it is primarily an equity issue. Nevertheless, the Federal Government (2000b) has opted against a change of the current regulation. The reason
Table 2: Earnings above the co-ordination deduction

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>No. of</td>
<td>% of</td>
<td>No. of</td>
</tr>
<tr>
<td></td>
<td>individuals</td>
<td>employed</td>
<td>individuals</td>
</tr>
<tr>
<td></td>
<td>(aged 20–60)</td>
<td>individuals</td>
<td>(aged 20–60)</td>
</tr>
<tr>
<td>All</td>
<td>2,083,000</td>
<td>75%</td>
<td>2,126,000</td>
</tr>
<tr>
<td>Men</td>
<td>1,323,000</td>
<td>84%</td>
<td>1,326,000</td>
</tr>
<tr>
<td>Women</td>
<td>760,000</td>
<td>63%</td>
<td>800,000</td>
</tr>
</tbody>
</table>

*Note: Self-employed individuals are excluded. Source: Sousa-Poza (2003).*
After retirement, insured individuals are entitled to draw a pension that depends on their annual salary prior to retirement. More specifically, occupational benefit plans insure the part of the annual salary between SFr 25,320 and SFr 75,960. This is the so-called “co-ordination earnings”. The calculation of the annual pension, which is based on the co-ordination earnings, is relatively complicated (see section 3.2.2). For an employee who had constant co-ordination earnings over the whole employment period between the age of 25 and 65, the pension would amount to roughly 63% of the co-ordination earnings. The maximum annual pension would thus be about SFr 32,000.

As Figure 3 shows, the combination of occupational benefit-plan pensions with old age insurance pensions results in a total old age pension that ranges between SFr 12,660 (the minimal old age insurance pension) and roughly SFr 57,500. The first and second pillars of the Swiss system for old age provision thus guarantee a pension that equals approximately 75% of the salary before retirement.

It has to be mentioned, however, that membership in an occupational benefit plan became mandatory with the introduction of the Occupational Benefit Plan Law in 1985. Individuals who started contributing in 1985 but retire before 2025 will only receive reduced pensions. In order to receive a full pension, 40 years of contributions are generally required. Thus, an employee who retires in 2003 will only receive about 45% of the full occupational benefit plan pension shown in Figure 5.

Figure 5: Old age pension income from old age insurance and mandatory occupational benefit plan

It should be stressed that the above figures for the occupational benefit plan represent only the legal minimal standards. The statistics provided by the Swiss Federal Statistical Office (2002) indicate that a large part of the occupational benefit plans have regulations that are more favourable for the employees. For instance, many occupational benefit plans foresee a lower co-ordination deduction than the law provides. The upper and lower limits for the insured part of the income are even abolished altogether for 31% of all insured individuals. Because of the above-minimum coverage provided by many occupational benefit plans and due to the fact that a large part of the labour force was already insured before 1985, the average annual pension from the second pillar paid in 2000 was already at a relatively high level of SFr 21,777.
Finally, it has to be mentioned that old age pensions are the most important, but not the only service of an occupational benefit plan. Like old age insurance, it also provides special pensions to widows, orphans, and handicapped older people.

3.2.2 Funding

Occupational benefit plans are exclusively funded by employers and employees. Contribution rates are defined by the funds themselves and thus a large degree of flexibility exists. Federal law requires only that the employers contribute at least the same amount as their employees. According to the Swiss Federal Statistical Office (2002), the total contributions by the employers indeed exceeded those of the employees by 60%.

As opposed to old age insurance, occupational benefit plans are not based on a current-income system. Instead, every employee has a personal occupational benefit plan account to which annual contributions and interest payments are made. The annual pension to be received after retirement equals 7.2% of this account’s balance at the time of retirement. It is calculated according to Equation 1:

Equation 1: Calculation of an annual occupational benefit plan pension for retirement age 65

\[ AP = 0.072 \sum_{j=1}^{40} (CEI_j a_j^*(1 + IR_{40-j})^{40-j}) \]

- **AP** Annual pension
- **CEI\_j** Co-ordinated earned income of year \( j \)
  (i.e. part of the income of year \( j \) between SFr 25,320 and SFr 75,960)
- **a\_j** Multiplicator depending on age
  \[ a_j = \begin{cases} 
    0.07 & \text{for } j = 1, 2, \ldots, 10 \quad (\text{ages 25–34}) \\
    0.10 & \text{for } j = 11, 12, \ldots, 20 \quad (\text{ages 35–44}) \\
    0.15 & \text{for } j = 11, 12, \ldots, 30 \quad (\text{ages 45–54}) \\
    0.18 & \text{for } j = 31, 32, \ldots, 40 \quad (\text{ages 55–65}) 
  \end{cases} \]
- **IR\_j** Yield for an investment over \( j \) years, must be 3.25 per cent p.a. or higher

The funding system of the occupational benefit plans clearly differs from the old age insurance. First, there is no intergenerational transfer. Second, there is also no transfer from high to low incomes. All contributions of an employee are added to a personal account and this account forms the basis for the future pension payments.

A strength of the different funding systems of the old age insurance and the occupational benefit plans is that a disadvantageous development of one of these insurances does not jeopardize the whole provision system. Thus, the growing number of retired people relative to the active workforce is a strong threat to the old age insurance, but does not strongly affect the occupational benefit plans. The prolonged life expectancy, however, is a problem to occupational benefit plans as well. Given the intended absence of intergenerational transfers, the sum of pensions paid to a generation must equal the total balance of their occupational benefit plan accounts. In order to reach that equilibrium, the conversion rate, which transforms personal accounts into annual pension payments, must be adapted due to the increased life expectancy. In fact, the current conversion rate of 7.2% is above the level that actuarial calculations would imply. In its proposal for a revision of the occupational benefit plan law, the Federal Government (2000b) thus recommends a conversion rate of 6.65% instead.
One important feature of an occupational benefit plan is the accumulation of capital. As opposed to the current-income system of old age insurance, contributions are not used to cover the current expenses but to pay future pensions. These funds are invested in personal occupational benefit plan accounts. According to the Federal Social Insurance Office (2002a), the funds deposited in occupational benefit plans totalled almost SFr 475 billion in 2000. These funds are invested in bonds, real estate, and equities. The federal law demands that an annual interest of at least 3.25% has to be added to each personal account, irrespective of the fund’s actual performance. This minimum yield has recently been the subject of heated political debate. Having been set at 4.0% in 1985, it has only recently been changed to the current rate (as of January 2003). Occupational benefit plans had called for this reduction, arguing that, due to low interest rates and bearish stock markets, it is currently not possible to generate a return on investment of 4.0% without taking inappropriate risks.

Some occupational benefit plans are already in a troublesome state, as their assets are smaller than the obligations arising from the sum of all personal accounts. However, this is probably less the result of the difficulty in finding reasonable investments with a yield of 4.0%, than the consequence of excessive stock market investments. Indeed, the law allows an investment of up to 50% of an occupational benefit plan’s total funds in equity. According to the Swiss Federal Statistical Office (2002), occupational benefit plans held equity investments of SFr 161 billion in 2000, accounting for one-third of their total portfolio.

In any case, it has now become very apparent that the financial risks can have a strong impact on the pensions that will be paid to individuals. A lowering of the minimum yield can reduce the expected pensions significantly. In the future, the legal minimum yield will be reconsidered every year by the Federal Social Insurance Office.

3.2.3 Age-related aspects

As with old age insurance, the age at which occupational benefit plan pensions can be drawn is legally set at 65 years for men, and 63 years for women. Women’s retirement age is also planned to be raised to 64 years by 2005 and to 65 years by 2009.

Once again, however, occupational benefit plans enjoy a considerable degree of discretion. According to the Swiss Federal Statistical Office (2002), occupational benefit plans that represented 16% of all insured men and 22% of all insured women had defined regulatory retirement ages that differed from the legal retirement ages in 2000. Usually, the retirement age had been raised for women and lowered for men in these cases.

Most employees are insured in an occupational benefit plan that foresees a flexible retirement age, as shown in Table 3. This flexibility primarily allows for early retirement. Early retirement is often possible up to five years prior to the legal retirement age. At the same time, however, only few occupational benefit plans offer the option of a deferred retirement.

| Table 3: Proportion of insured employees who have access to flexible retirement options |
|-----------------------------------------------|---------|---------|
| Flexible retirement age                        | 92.5%   | 90.6%   |
| Early retirement five years prior to age 62-65 | 79.7%   | 89.5%   |
| Retirement later than age 62-65                | 23.0%   | 10.9%   |

Source: Swiss Federal Statistical Office (2002). Note that the data are for the year 2002, when the women’s legal retirement age was still 62. This statistic does not include occupational benefit plans that specified a retirement age other than the legal retirement age.
Credit Suisse (2003) makes the criticism that some occupational benefit plans might abuse the possibility of early retirements for reasons of company strategy. Although an occupational benefit plan has to be legally independent from the company whose employees it insures, there are often strong personal and organizational links between the two legal entities. In this context, an occupational benefit plan might create financial incentives for early retirement if this suits the company. In doing so, an occupational benefit plan could very easily direct financial reserves (or yields above the legal minimum yield) to a specific age group (i.e. the age group currently going into retirement) rather than using these funds for all insured people.

A problematic feature of the occupational benefit plan law is the fact that contributions are age-dependent. More specifically, contribution rates increase with age, as shown in Table 4.

\[ \text{Table 4: Age-specific graduation of contributions to occupational benefit plans} \]

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 - 34</td>
<td>age 25 - 31</td>
<td>7.0%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>age 32 - 41</td>
<td>10.0%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>age 42 - 51</td>
<td>15.0%</td>
</tr>
<tr>
<td>55 - 65</td>
<td>age 52 - 62</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

As at least half of the contributions have to be paid by the employers, this regulation results in considerably higher wage costs for older employees, thus possibly discouraging their employment. The tendency in some firms to pay seniority-based wages increases the cost of labour even more.

On the other hand, as the employer pays large contributions to the occupational benefit plan on top of the normal salary, older workers have a strong incentive to remain employed. For those older employees who have not enjoyed the benefits of a second pillar throughout their whole working life, these age-dependent contributions may prove especially beneficial as they allow them to build-up a reasonably high balance on their personal accounts, despite having only contributed for a short period. However, with more and more employees having long contribution periods, this advantage is losing importance. It is thus disappointing that the Federal Government (2000) has no intention of equalizing the contribution rates across all age groups — a reform that has already been realized by a large fraction of the occupational benefit plans. According to the Swiss Federal Statistical Office (2002), 32% of all employees covered in the second pillar do not pay age-dependent contributions. In fact, and in order to compensate for the reduction of the conversion rate mentioned above, the government intends to increase the contribution rate, especially among workers aged 45 to 54. The new contribution rates for the four age groups in Table 4 would be 7%, 11%, 15%, and 18%, respectively.

Overall, it is difficult to judge the impact of occupational benefit plans on the employment of older people. Each occupational benefit plan has a substantial autonomy regarding the institutional design of such crucial issues as the regulation of early retirement. The fact that contributions increase with age is a problematic feature of the occupational benefit plan law as it might well discourage employers from employing older people.

3.3 Invalidity insurance

The invalidity insurance provides for the basic living expenses of persons who are not able
to work due to a disability. If possible, it helps them to reintegrate into the labour market.

3.3.1 Benefits

Coverage in the invalidity insurance scheme is compulsory for all individuals who live or work in Switzerland. They all have access to the services of the insurance in case of invalidity, irrespective of whether or not it is caused by an accident, physical or mental illness, or a congenital disability.

Disabled people are only allowed to draw an invalidity insurance pension when rehabilitation efforts have proven unsuccessful or inappropriate. Normally, this is possible at the earliest as of 12 months after the health problems occurred. Although the eligibility of individuals is re-assessed periodically, many pensions are paid until a person reaches the legal retirement age. Thereafter, an old age insurance pension replaces the invalidity insurance pension.

The calculation of an invalidity insurance pension is carried out in very much the same way as for an old age insurance pension. A full invalidity insurance pension thus guarantees an annual income between SFr 12,660 and SFr 25,320, depending on the average annual income before the disability. If a disability only partially prevents a person from working, the invalidity insurance can pay half- or quarter-pensions. Whether a person is eligible for a full pension or only for a reduced one does not depend on medical criteria. Instead, a grade of invalidity is calculated that expresses the income reduction due to the disability. For instance, if a disability forces a person to take on employment that pays 45% less than the work done before the disability, then this person has an invalidity grade of 45%. As shown in Table 5, only a quarter-pension will be paid in this case, whereas an invalidity grade of at least 67% would be needed to draw a full pension.

Besides providing individual benefits, the invalidity insurance also offers collective benefits. These are direct contributions to institutions that support the integration of invalid people. Examples are homes, workshops, or special schools for disabled individuals.

<table>
<thead>
<tr>
<th>Grade of invalidity</th>
<th>Pension type</th>
<th>Annual pension range (SFr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67–100%</td>
<td>Full pension</td>
<td>12,660–25,320</td>
</tr>
<tr>
<td>50–66%</td>
<td>Half pension</td>
<td>6,330–12,660</td>
</tr>
<tr>
<td>40–49%</td>
<td>Quarter pension</td>
<td>3,165–6,330</td>
</tr>
<tr>
<td>1–39%</td>
<td>No pension</td>
<td>–</td>
</tr>
</tbody>
</table>

3.3.2 Funding

The invalidity insurance is funded equally by the insured, their employers, and by the state (both federal and cantonal). Both employees and employers contribute 0.7% of the employee’s wage. Self-employed workers pay 1.4% of their salary and people without working income contribute according to their financial wealth. The federation covers 37.5% of the insurance’s expenses, and the cantons 12.5%.

The funding concept of the invalidity insurance is similar to that of the old age insurance. It is also based on a pay-as-you-go system, which can be severely affected by an ageing population — especially as the incident of invalidity is age-dependent. Table 6 shows that the probability of receiving an invalidity insurance service is clearly highest for
people aged 50 years and older.

While an ageing population leads to an increasing number of people drawing invalidity pensions, Table 6 also illustrates that, between 1992 and 2000, a dramatic increase in the number of beneficiaries arose in all age groups. In fact, the Federal Government (2001a) attributes only 22% of the insurance’s expense growth to demographic shifts.

Table 6: Percentage of persons receiving benefits from the invalidity insurance

<table>
<thead>
<tr>
<th></th>
<th>Age 0–9</th>
<th>Age 10–19</th>
<th>Age 20–29</th>
<th>Age 30–39</th>
<th>Age 40–49</th>
<th>Age 50–59</th>
<th>Age 60-61/64</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>6.2</td>
<td>6.9</td>
<td>2.4</td>
<td>2.8</td>
<td>4.4</td>
<td>8.8</td>
<td>17.5</td>
<td>5.4</td>
</tr>
<tr>
<td>2000</td>
<td>7.1</td>
<td>8.2</td>
<td>2.9</td>
<td>3.9</td>
<td>6.4</td>
<td>11.2</td>
<td>20.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Change</td>
<td>+15%</td>
<td>+19%</td>
<td>+21%</td>
<td>+39%</td>
<td>+45%</td>
<td>+27%</td>
<td>+17%</td>
<td>+31%</td>
</tr>
</tbody>
</table>


It is known that a large portion of this increase can be attributed to individuals with mental disabilities. While in 1985 already 24% of all people drawing an invalidity pension suffered from a mental illness, this proportion had increased to 36% by 1999. Psychiatric illnesses are now the most frequent reason for invalidity. Although (as the Federal Government acknowledges) the average workplace may be more demanding than in the past, a changing in understanding, perception and acceptance of mental illness in society may also explain this development.

The current financial situation of the invalidity insurance is worrisome. The statistics provided by the Federal Social Insurance Office (2002e) state a deficit of one billion Swiss francs for the year 2001, with total debts amounting to SFr 3.3 billion. In a revision of the invalidity insurance law, the Federal Government (2001a) wants to stabilize the finances of the insurance. According to this plan, the value added tax would be increased by 1%, and the tax income generated would be directed to the invalidity insurance. Moreover, a series of mostly administrative improvements should help to lower costs. The cantonal administrations that handle invalidity cases will be more closely supervised by the Federal Social Insurance Office, thus diminishing possible ‘generous practices’ in certain cantons.

3.3.3 Age-related aspects

Unlike old age insurance and the occupational benefit plan analyzed above, the invalidity insurance neither forms part of the system for old age provision nor does it define a retirement age. Still, the invalidity insurance plays a crucial part in the set of social insurances that influence the employment of older workers. As pointed out in sections 3.3.1 and 3.3.2, most invalidity pensions are drawn by older people and they are usually paid until the beneficiary reaches the legal retirement age. The invalidity insurance could thus potentially be used (or abused) to facilitate early retirement.

There is no evidence, however, that the invalidity insurance law is being used to promote early retirement. Nonetheless, some politicians have expressed the presumption that the law is being applied as an early retirement mechanism, especially for unemployed people.

The Federal Government (2001a) admits that there is a correlation between unemployment and invalidity. The expenses of the invalidity insurance have increased strongest in periods of low economic growth. However, this is not necessarily a result of unemployed people who
'simulate' a disability. It seems probable that some people with latent disabilities only apply for an invalidity insurance pension after they have lost a job and not succeeded in finding a new one. Moreover, invalidity might even be caused by unemployment itself, especially by bringing out mental illness.

We can conclude that the invalidity insurance does not appear to systematically promote early retirement. Given the fact that invalidity pensions only cover the basic living expenses, there is no financial incentive to apply for such a pension as long as a person does not fail to find a job.

3.4 Unemployment insurance

The unemployment insurance pays benefits to the unemployed and promotes their reintegration into the labour market.

3.4.1 Benefits

Although a first unemployment insurance law was passed in 1952, it was not until 1984 that the insurance became compulsory for all employees in Switzerland. Self-employed workers are still not insured.

An unemployed person living in Switzerland who has finished mandatory schooling and who has not yet reached the legal retirement age is entitled to receive unemployment benefits if this person has paid contributions to the unemployment insurance during at least one year within the preceding two years. Unemployment can be partial or full, where the former means that an unemployed person is only looking for a part-time job or a person with a part-time job wants to work full-time. As a condition for receiving unemployment benefits, the unemployed have to register at the local labour office. They must prove their continuing efforts to find a job and they are obliged to take a job that is deemed acceptable by the labour office.

An unemployed person receives either 70% or 80% of the last monthly wage. Currently, the maximum period for drawing unemployment benefits is 520 working days, i.e. two years. However, as of July 2003, a revised version of the law that was accepted in a referendum in 2002 will come into effect. It limits the number of daily payments to 400. Only people older than 55 years and people receiving invalidity or accident insurance pensions will still receive up to 520 daily payments. The Federal Government (2001b) justifies this reduction with the improved placement services provided by the local labour offices. Moreover, unemployed persons should be forced to be more flexible with regard to salary as well as to geographical and professional mobility.

In addition to providing daily financial benefits, unemployment insurance offers active labour market measures, which include a variety of activities that improve the ability of an unemployed person to reintegrate into the labour market. For instance, the insurance pays for further education and offers programmes for professional training. If an unemployed person finds a new job that first requires on-the-job training at a reduced salary, the insurance can make up the difference between this reduced salary and the expected salary after the training for up to six months. An unemployed person who plans a company venture is exempt from the obligation to look for a job for three months, and can even receive some financial support from the insurance. The consent of the local labour office is always the condition for participating in a labour-market-related measure.
3.4.2 Funding

Unemployment insurance is funded almost exclusively by the employees and the employers in a system of current-income funding. As of 2004, they will both contribute 1.0% of the first SFr 106,800 of the employee’s annual salary. The Federation and the cantons pay less than 10% of the insurance’s total expenses.

During the early 1990s, unemployment in Switzerland increased at an unprecedented rate. Between 1990 and 1993, the unemployment rate jumped from 0.5% to 4.5%. As a consequence, the expenses of the unemployment insurance multiplied by a factor of 12 within these three years, as shown by statistics of the Federal Social Insurance Office (2002a). In 1993, the wage deduction to be paid to the insurance had to be increased dramatically from 0.4% to 2.0% of wages. As a transitory measure to reduce the debt of the insurance, this percentage has even been increased to 3.0% for the period from 1995 to 2003, and a tax of 2.0% is levied on that part of the annual income between SFr 106,800 and SFr 267,000 until 2003.

As of 2004, contributions to the unemployment insurance will be reduced to 2.0% of the first SFr 106,800 of an employee’s salary and to 1.0% of the part of the annual income between SFr 106,800 and SFr 267,000. This should allow for a stable long-term funding of the insurance. To be better prepared for a possible future unemployment shock, the revised law foresees a quick adaptation of these contributions, if the reserves of the insurance should again begin to deteriorate.

3.4.3 Age-related aspects

The revised version of the unemployment insurance law has modified several age-specific regulations of the insurance. While the maximum number of daily unemployment benefit payments is being reduced from 520 to 400 for most unemployed people, those older than 55 years will still receive a maximum of 520 days’ payments. It is thereby taken into consideration that older people encounter more difficulties in finding a new job, as the Federal Government (2001b) explains.

However, the Federal Government will be given the power to increase the number of daily payments by 120 for unemployed people who are less than four years away from the legal retirement age. Before the revision of the law, this was only applicable to unemployed people less than two and a half years away from the official retirement age. The new regulation takes into account that finding a new job is especially difficult for older people who are already close to retirement.

A further age-relevant change introduced by the revised version of the unemployment insurance law is the abolition of an Article that explicitly allowed the Federal Government to set up early retirement plans for industries or regions that were especially badly affected by unemployment. The Federal Government (2001b) had hardly ever made use of this possibility. Instead, the government can now allow an extra 120 daily payments not only for people close to retirement, but also for a region with high unemployment.

The Federal Government has shown that it is not willing to use unemployment insurance as a means for promoting early retirement. Even when it had the direct competence to introduce early retirement plans, it hardly ever did so. Certainly, some unemployed older people might take advantage of the favourable treatment by unemployment insurance in order to bridge the gap between the last employment and retirement. However, the payment of unemployment benefits is always conditioned by ongoing job-search efforts and limited to a maximum period of two and a half years.
4. Other factors contributing to the high employment rate of older Swiss

One can argue that the Swiss social security system in general does not provide strong incentives for early retirement. This contrasts sharply with social security systems in other European countries that have used early retirement as a way to combat unemployment. Needless to say, the fact that the Swiss system has not developed such negative incentives is an attractive characteristic, which has contributed substantially to the high employment rate among older Swiss. Other reasons, however, must also be mentioned.

Low unemployment levels: Switzerland has for most of the past decades experienced very few problems with unemployment. Even during Switzerland’s worst recession since the 1930s, namely in the 1990s, unemployment levels peaked only at 5.2% (in 1997). It follows that Switzerland never had the pressures of other European countries to combat unemployment by stimulating early retirement.

Shortage of skilled labour: In a similar train of thought, Switzerland has continually faced a shortage of skilled labour in the past. The pool of older workers has thus served as a source of high-skilled labour. In this context it is also interesting to note that a substantially large degree of training among older workers takes place in Switzerland. In fact, the inclination to receive (employer-funded) training among individuals aged 50 to 60 years is as high as that of individuals aged 30 to 40 years (Sousa-Poza and Henneberger, 2002b).

Loose employment protection legislation: According to the OECD (1999), Switzerland has the lowest levels of employment protection legislation among continental European countries. One could argue that this allows for a certain amount of flexibility among employers for the employment of older workers.

5. Summary and conclusions

Switzerland has one of the highest employment rates of older workers among industrialized countries. One main reason for this favourable situation can be attributed to the characteristics of the Swiss social security system. The aim of this paper has been to discuss the Swiss social security system with special emphasis being placed on the age-dependent issues of the main social security systems, namely the public old age insurance, the occupational benefit plan, the invalidity insurance, and the unemployment insurance. In general (and especially in comparison to other European countries) these Swiss systems do not provide strong incentives for early retirement. This is in our opinion the main reason for the high employment rate of older workers in Switzerland. The current revision of the Swiss pension scheme aims at introducing more flexibility with regard to retirement age and retirement benefits. More specifically, it is the Swiss Federal Government’s intention to allow workers to retire at any time between the ages of 59 and 70. Early withdrawal or the deferment of pension benefits will be made possible. Also, individuals in this age category can choose to have a part of their pension paid out, thus improving the possibility of part-time employment. The attractiveness of the Swiss system will depend largely on the introduction of these flexibility measures. Other reasons for the high employment rates among older Swiss include the low levels of unemployment, the general shortage of skilled labour experienced in the past decades, and loose employment protection legislation.

Whether or not Switzerland will be able to maintain such relatively high employment rates among older workers remains to be seen, and will depend largely on the extent to which the trend towards early retirement can be reversed. This trend has come about in the past decade and can be primarily attributed to the severe recession that Switzerland faced in the 1990s. It has become very apparent that the attractive design of the Swiss social security system (i.e. the
fact that few incentives for early retirement exist) is primarily attributable to the very favourable labour-market conditions that Switzerland faced in the past. There are, however, a few indications that the extremely low unemployment levels experienced in the pre-1990s will no longer be achieved\(^6\). Reversing the trend toward early retirement will therefore imply that new strategies for integrating older people into the labour market are adopted. In this context, the issue of information, communication, and public debate on the value of employment in old age, both for society as well as for the individual, is of great importance (Reday-Mulvey, 2003). One can fairly say that such an open debate still needs to be launched in Switzerland.

REFERENCES


\(^6\)This is primarily due to the change in migration policy.


Employment of Older Workers in the Netherlands: Recent Reforms

by Geneviève Reday-Mulvey and Katalin Velladies

1. Introduction

Recent Dutch experience of employment for older workers differs significantly from that of other continental countries like France and Germany. In a nutshell, over the last 7 or 8 years, the Netherlands have been able to start reversing the early retirement trend and improving employment at end of career. As a result, the employment rate of 55-64-year-old Dutch workers increased from 30% in 1995 to 42% in 2002 (for men from 41% to 55% and for women from 18% to 29%), and the average age of exit from the labour force rose from around 60 years in 1995 to 62 years in 2002 (cf. EUROSTAT, 2004).

Broken down by age groups, the largest increase in labour force participation occurred among 55-59-year-olds. Beyond the age of 60, the participation rate decreases sharply, as fewer than two out of ten people aged 60-64 years are in work. By the time people reach the age of 65, hardly anyone has a paid job (5%). There are, however, large differences between older men and older women, regarding labour force participation. At the age of 55-59, some 72% of males work, whereas in the 60-64-year age group 27% of men still have a job. The corresponding figures for 55-59-year-old and 60-64-year-old females are 34% and 11%, respectively. Labour force statistics also show that, although older women have lower overall labour participation, their participation rates increase more quickly than those of men. Moreover, there is a clear generation effect in the likelihood of older women working. For younger generations it is far more acceptable and normal to have and remain in a paid job, not only after the birth of a child but also at higher ages (see European Employment Observatory Monthly Newsletter, No. 21).

The most important drivers of the increase in the labour force participation of older people in the Netherlands have been the following:

• Public and company measures reducing early exit and encouraging work at the age of 55-64;
• Promotion of part-time work for all workers at all ages;
• Shortage of qualified workers, already manifest in some areas such as education and health care. Recently, in these sectors, retired workers have returned to work with their level of (early) pension benefits not being reduced. In the health sector, for example, between 2001-2002, 25,000 workers were called back to work.
• Economic growth, the so-called ‘Dutch miracle’, which led to a high rate of employment growth. As labour supply did not keep up with labour demand, older workers were no longer seen as a threat for upwardly mobile youngsters, and employers were also less inclined to use exit routes for older workers (see van Dalen, H. and Henkens, K., 2002).

3 Netherlands Interdisciplinary Demographic Institute (NIDI), The Hague, the Netherlands.
2. Public measures to promote the extension of working life

Major reforms were initiated around 1995 and accelerated under the second Kok government (1998-2002). To keep the pension scheme affordable and meet the rising costs of care, the Dutch government set — among others — the target of achieving an annual rise of 0.75 of a percentage point in the net participation rate of people aged 55-64 years from 1999 onwards. Efforts have been concentrating primarily on people from the 1945-1960 birth cohorts, who are still largely active on the labour market. To keep these people in work and to prevent them leaving the labour market are the key objectives. Against this background, the basic principles of the government’s efforts are as follows:

- To make it easier and more attractive for people to stay in work longer;
- To avoid forced early retirement where possible;
- Voluntary early retirement must remain an option, but its costs are to be borne individually rather than collectively;
- To encourage reintegration into the labour market.

In 2000, the Dutch government set up the Taskforce ‘Older People and Employment’ with the main aim of keeping people of over 55 in the workforce. The Taskforce was mandated to (i) bridge the gap between policy and practice; (ii) promote changes in attitudes; (iii) foster good practice. The Taskforce started work in June 2001 and presented a final report with recommendations for policy-making in December 2003. A government statement about longer working lives followed in May 2004 (see van der Heiden-Aantjes, L., 2004).

2.1 Public measures to reduce early exit

Changes in the early retirement scheme

Started in 1995, reform of the early retirement scheme (VUT — Vervroegde Uittreding) — previously very generous for wage earners and costly for the state — has been achieved through collective bargaining, with the aim of having the system financed from individual funding. This is a far-reaching reform substituting private responsibility for solidarity (pay-as-you-go financing).

Although there are numerous branch schemes, one general rule is that the withdrawal of a full pension is possible from the age of 60 given a minimum contributory period of 35 years. As a consequence of the reforms, the replacement rate was decreased from 80% to 70% of the previous wage. In addition, favourable tax treatment for early retirement schemes began to be phased out in 2003. By and large, the transition from pay-as-you-go early retirement schemes to funded pension and pre-pension schemes discourages early exit from the labour market and encourages working until the age of 65 years (the statutory retirement age for both men and women in the Netherlands) or even longer. Thus, for example, those working until 70 years can benefit from pensions equal to 100% of the latest gross wage.

Changes in disability insurance

In the Netherlands, both early retirement and the disability scheme, which provided generous compensation, were popular with firms as ways of offloading unwanted workers. As a consequence of the widespread utilization of the disability scheme, in the Netherlands, e.g. in 1997, 9% of the active population was disabled compared to 5% in Germany and Denmark and 6% in the UK. The use of the disability scheme for other than strictly medical reasons (on labour market grounds) was legitimized and supported by the social partners and the government.

Under recent reforms, work ability and disability have been redefined. A direct and
objective relation now has to be established between a decrease in capacity and sickness or handicap. Incapacity for work is no longer linked either to the previous occupation or salary. Contrary to the past, a partly disabled worker over 55, who cannot find a job, is no longer entitled to full disability benefits. Active measures oblige those, who can still work part-time or in another job, to return to the labour market and accept the jobs they are offered.

One of the most recent large changes in the system was the introduction of the so-called “Gatekeeper Act” (Wet Poortwachter) on 1 April 2002. This Act obliges the employer and the employee to write a reintegration report at the end of the first year of sickness, stating what steps have been taken to facilitate return to work. Another change is that, as of 1 January 2004, employers have to pay employees with labour disabilities 70% of their last wage for two years instead of, as previously, for one year. Only after these two years, may the employee claim disability benefits.

As a result of these changes in the disability insurance system, the number of disability benefit recipients has been decreasing, notably since the beginning of 2003. In the fourth quarter of 2002, the number of disability benefit recipients reached its highest point with 993,000 claimants. By the end of June 2004, their number had decreased to 968,000. This means a reduction by 2.5% and the largest decrease in the number of disability benefit recipients since 1987 (see European Employment Observatory Monthly Newsletter, No. 21). Half the number of disability benefit recipients are men aged 55-64 years.

Changes in unemployment insurance

The unemployment insurance system has also constituted a door for early exit, in particular for workers in the 60-64 age group, and in some respects increasingly since the changes in disability insurance mentioned above. According to Delsen (2002), 30% of older inactive persons are unemployed.

One of the main recent changes in the unemployment insurance system is the 2002 legislation which sets up financial penalties for companies laying off workers over the age of 57.5 years. The maximum penalty can be as high as 30% of the unemployment benefit calculated until the age of 65. In addition, since January 2004, unemployed persons reaching the age of 57.5 years have been again obliged to register as job-seekers at public employment offices as well as accept suitable employment if such is offered them by the latter. This new regulation applies both to older people claiming unemployment benefit and to those receiving a social minimum benefit.

2.2 Public measures to encourage work at the age of 55-64

To supplement measures reducing early exit, a number of public measures have been recently taken to promote later employment. The most important are:

Legislation on part-time work

Dutch legislation facilitates part-time employment of workers at all ages. The 1996 Equal Treatment Working Hours Act (Wet verbod op Onderscheid naar Arbeidstduur) gives equal rights to part-time workers and other workers on flexible contracts prohibiting distinctions between employees on the basis of their working hours, unless there are objective reasons for doing so. The 1999 Flexibility and Security Act includes measures making it easier for employers to manage their companies flexibly while providing employees with job and income security. According to the 2000 Adjustment of Hours Act (Wet Aanpassing Arbeidstduur), having worked in an organization (employing at least 10 employees) for one year, employees have the legal right to change their contract and to work longer or shorter hours per week, unless the employer can prove this is a problem for the business.
As a consequence of the promotion of part-time work, the proportion of older workers employed part-time is remarkably higher in the Netherlands than in other Western European countries. According to the EU Labour Force Survey, in 2002, part-time work concerned 43% of 50-64-year-old Dutch workers, against 28% in the UK, 22% in Sweden and 19% in the 15 EU Member States (see EUROSTAT, 2004).

**Tax measures to promote the employment of older workers**

In 2001, a new measure was introduced to reduce social contributions for long-term unemployed persons aged 50 years and over. Previously, reductions in social contributions were granted only where unemployed persons aged 57.5 years and over were taken on.

In the framework of the 2002 tax plan, an additional employment incentive was introduced whereby employers can claim a discount on the disability insurance premium for employees aged 58 years and over. The incentive is designed to make it more attractive to retain or hire older workers.

There are also measures in favour of over-65-year-old workers who accept temporary work. For example, temporary work agencies do not have to pay any social contributions for this category of employees. Moreover, there are fiscal advantages for workers combining pensions and income from paid work.

**Legislation against age discrimination**

Already the government’s Integral Programme of Action Policy for the Elderly 1995-1998 proclaimed that age discrimination must be combated. Since 1999, the prohibition of discrimination includes recruitment, selection, work-related training, education and promotion. The most recent legislation against age discrimination (implementation of the EU directive), which came into force in May 2004, is even wider in scope. Thus, the Equal Treatment in Employment Bill bans all kinds of age distinction in employment and permits age discrimination only in cases where setting an age limit is objectively justified.

### 3. Company measures in favour of the extension of working life

**Development of a flexible transition between full-time work and full retirement**

One of the main obstacles to employment at higher ages used to be pension regulations, for example, the frequent rule that pension benefit was calculated on the basis of the last year’s or years’ salary. In most collective agreements, this regulation underwent a major change whereby pension benefits are now based on average wages throughout the work history. In 2002, almost 60% of Dutch wage earners had already moved over to a system providing pensions calculated on the entire career. This new method of calculation of pension benefits means that it is no longer a disadvantage to change from full-time to part-time employment at end of career. The transferability of rights from one firm to another has been increased as well. At the same time, the Dutch government has encouraged the social partners to debate and develop various formulas for reducing working time at end of career and introducing a transition between full-time work and full retirement. One of the formulas allows workers aged 55 and over to benefit from a partial (early) pension and earn income from part-time work (fourth pillar), including after reaching the statutory retirement age.

**Career planning and ergonomics**

In around 25% of collective agreements signed in 2001 (compared to 8% in 2000), career planning of older workers was an important clause. In this context, continuing training has become a crucial issue, not only for workers over 55. Since 1998 in the private sector and since
1999 also in the public sector, fiscal advantage has been granted to firms devoting funds to continuing training, especially for over-40-year-old employees. As a result, in the Netherlands, the percentage of employees aged 50 years and over who have been involved in training is above the EU average. At the same time, trade unions have also promoted the role of older workers as tutors in training younger staff.

In addition, a number of collective agreements include regulations to adapt working conditions to the changing abilities of workers aged 55 years and over (in the retail sector: 45 years and over). It is becoming more and more common to change jobs and to be assigned less demanding tasks or more frequently a less demanding and lower paid job at end of career. There are often special regulations enabling older employees to compensate the loss of earnings by maintaining the level of their pension benefits. More and more companies are now conscious also of the importance of preventative measures, such as function design and ergonomics.

**Staffing in a tight labour market**

According to the survey carried out by Remery et al. in May 2000 on a sample of around 1,050 Dutch companies and organizations with more than nine employees, the most widely implemented company measures to improve the employability of older workers are those aimed at accommodating older staff (Remery, C. et al., 2003). For example, 65% of surveyed employers implemented ergonomic measures. Additional leave and/or increased holiday entitlement for older employees is also common, i.e. available at 62% of firms. Older workers could take advantage of part-time early retirement and flexible working hours, respectively, at 51% and 47% of companies surveyed. Measures such as introducing age limits for irregular work and/or shift work, exemption from overtime for older workers, and reducing the workload for older staff are slightly less common, but are nevertheless implemented by more than one third of employers. Prolonged career interruptions and training programmes are granted for older workers by 12% and 21% of companies, respectively. Nevertheless, 46% of employers participating in the survey stated they were considering the implementation of training programmes for older workers in the near future. In addition, 44% of employers planned to introduce measures reducing the workload for older employees. Reducing older workers to a lower rank with loss of salary (demotion) was found among no more than 7% of respondents. Whilst 8% of firms involved in the survey have not implemented any of these measures yet, employers were found to implement an average of four of the measures mentioned.

4. **Outcome of the most recent negotiations between the government and the social partners: Social Accord November 2004**

In the autumn of 2004, Dutch employees went on strike to express their dissatisfaction with the government’s efforts to reform the social security system, and the trade unions jointly managed to organize the second largest post war demonstration in the Netherlands. (On 2 October, in Amsterdam alone, 200,000 demonstrators gathered. See European Employment Observatory Monthly Newsletter, No. 19). The government, realizing that it is hard to implement changes in the social security system without trade union support, started searching for ways to re-open the debate. On 5 November 2004, the government and the social partners finally managed to reach an agreement. The main items of the Social Accord are the following (cf. European Employment Observatory Monthly Newsletter, No. 20):

*Early retirement, pre-pension and life course arrangement*

The government’s decision to abolish the fiscal advantages of early retirement and pre-
pension arrangements as of 1 January 2006 remained unchanged. The life course arrangement will serve as an alternative whereby employees, if they wish, may build up a savings account. This means that employees can save up to 3 years of leave at 70% of their wages. Thus, employees who make full use of the life course arrangement can retire at the age of 62. Moreover, employees who have contributed to a pension fund for over 40 years will be able to lower their retirement age to 63 years, without making use of the life course arrangement. If these employees also make full use of the life course arrangement, they will be able to stop work at 60.

Disability benefit scheme

The regulations for the new disability benefit scheme have become less stringent, and are now more in line with the advice of the Social and Economic Council. The Disability Benefits Act (WAO) will still be replaced by the Act on Work and Income by Labour Capacity (WIA: *Wet werk en inkomen naar arbeidsvermogen*) on 1 January 2006. According to the earlier rules, the Regulation on Income Provision for Fully Disabled Persons would have only been available to people totally unable to work. The new agreement gives full income security to people who are totally unable to work as well as to people who have minor chances of recovery. This latter group will undergo an annual re-examination during the first five years of receipt of the disability benefit. The age limit for re-examination of current disability benefit recipients will be lowered from 55 to 50 years.

Unemployment benefit

The measures aim to abolish unemployment entitlements for people who have only worked for a short period of time. In addition, the plan to subtract employee’s dismissal compensation from their unemployment benefit will be put on hold.

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How to Reconcile Employees’ Interest with the Increasing Older Workers Employment Policies

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1. Employment rates in Europe

The European trade union movement supports the ambitious targets set by the European Council in Lisbon (2000) and Stockholm (2001): increase of the general employment rate to 70% and of the employment rate of older workers (55 to 64) to 50% by 2010. This increase is crucial in order to ensure the sustainability of the pension system, whatever be their design.

As to the general employment rate in Europe (25) we reached 62.9% in 2003. That means that we are still 7% below the threshold set in Lisbon. One of the reasons for this state of play is that economic growth in Europe is too low: 0.8% in 2003 as compared to 3.1% in the US. Employment growth in 2003 was almost static (0.2%) while the unemployment rate rose to 9.1% up from 8.8% in 2002. GDP growth for the enlarged EU is foreseen to rise to 2.0% in 2004 and to 2.4% in 2005.

For the European Trade Union Confederation (ETUC) a qualitative growth policy is a precondition reaching the targets set in Lisbon and Stockholm concerning employment in general and employment of older workers in particular. Also the sustainability of decent pensions — whatever be their design and type of financing — is dependent on a good economic performance by the European economy. Therefore the European Stability and Growth Pact needs urgent revision: it should ensure not only monetary stability but also economic growth.

As to the employment status of the over-55s it is also generally acknowledged that the employment rate in Europe in the 55-64 age group is unsatisfactory: with 40.2% in 2003 we are far away from the Stockholm target of 50% (by 2010). The situation at national level is quite different: Sweden realizes already 68.6% while Italy stands at 30.3%.

The average age of withdrawal from the labour market in Europe in 2003 was 60.4%. The Barcelona Council (2002) decided that by 2010 the average exit age should reach 65 years.

The ETUC has never accepted this situation as irreversible, in particular since the original social response (early withdrawal) to an economic problem (high youth unemployment) was subsequently diverted from its original objective, namely to create more employment opportunities for young workers. Indeed, very soon the social measure of early retirement was turned into a convenient tool for companies to get rid of older employees at a low cost at an ever earlier age.

Soon it became clear that this dumping of older workers also led to a waste of human, social and economic resources, depriving enterprises of valuable expertise and know-how and in fact of the ‘memory’ of the company. Numerous are the companies and even sectors who, soon after having laid off their older workers, were confronted with huge shortages of qualified workers.
and made great efforts to re-recruit the same people they had first excluded.

The ETUC cannot accept the systematic exclusion of older workers from the labour market but neither the European Commission’s radical stance on the general discouraging of early withdrawal from the labour market: for the ETUC early retirement scheme should remain available as instruments of last resort to alleviate painful industrial restructurings if no other jobs are available and also as an exit route for particular heavy or unhealthy jobs. In the whole discussion on activation of older workers the ETUC believes that before starting to discuss about the increase of the statutory retirement age as some governments and employers do, Europe should look for policies which allow and motivate men and women to remain active until they reach the normal statutory retirement age.

Can things be changed and the trend be reversed? The examples in several countries prove that reversing the trend is possible. The trend in the employment of older workers over the period 1998-2003 was most favourable in Finland (+13.4% points), Hungary (+11.6% p.), the Netherlands (+10.9% p.), France (+8.5% p.) and Denmark (+8.2% p.) as compared to +4.4% p. in EU 25. In Italy the performance was very weak (only +2.6% p.) and in Poland the trend was even negative: -5.2% p.

2. The way forward

The main policies used to maintain older workers in the labour market include:

- Removing incentives to early retirement and encouraging later retirement and flexible retirement;
- Legislation to counter age discrimination and awareness-raising campaigns among employers in view of changing attitudes;
- Guidance and training programmes regardless of age;
- Employment incentive schemes including active employment policies and special job offers for older workers.

Two other policy issues identified as being vital in an integrated approach to active strategies but rarely implemented are care infrastructures and working conditions. An in-depth analysis of these policy areas has taught that all the above-mentioned issues are of equal importance and that they are all multidimensional and complex in themselves. This makes the issue of active ageing even more challenging for policy makers.

3. Preliminary evidence of what maintains older workers in employment

When it comes to identifying what will induce people to work longer, evidence shows that a dynamic labour market (good jobs available) is a prerequisite to keep/get seniors in work. Economic growth and job creation are key words. However other factors also play a major role, such as the firm’s attitude towards older workers (older workers are considered less productive). This image persists even though several studies demonstrate that differences in productivity is greater within age groups than between age groups. The difference in productivity that has been found between age groups should not be exaggerated and in some cases productivity even increases with age (need of experience). It seems as if the firms that do use older workers are those which have no choice or those who deliberately choose them as a part of their strategy of diversity in human resources. Research evidence shows us that these are also firms that have improved the working conditions of the workers in general. No special efforts have been undertaken to maintain older workers, but rather an effort to maintain workers in general.
When it comes to the attitude of workers, it is of vital importance that, besides the collective agreements, the social security and taxation systems give the right incentives. Several studies have shown that countries with high employment rates for the over-55s are those with social security systems that make working worthwhile.

So apart from these three basic elements, what is needed for firms to find older workers more attractive and for older workers to continue in the labour market? Firms often complain about the high cost of older workers as well as the lack of up-to-date skills. Chassard (2003) proposes a possible trade-off between abolishing the link between promotion and seniority and promoting the employability of the workers. This implies changing the wage system, but most importantly it demands that lifelong learning becomes an integrated part of the professional experience as a way of either becoming highly specialized or enlarging the professional horizon. Unfortunately, lifelong learning is much spoken about and very little implemented in reality. The preventive approach is by far surpassed by the curative approach.

However, it is difficult to imagine the abolition of seniority-based wages or promotions in order for it to become completely skill based, without giving the employees the possibility of acquiring the needed skills, hence the need to increase the preventive aspect of lifelong learning and thereby employability.

This leads to the next main issue, namely, the debate on maintaining employment opportunities and promoting the mobility of older workers. Most current policies seem to concentrate on keeping older workers in employment, but it is vital that intra-firm as well as extra-firm mobility be debated. The issue is ambiguous as mobility may very well leave the worker better-off than if he/she had left the labour market; however it can also very well lead to a worse-off situation than in the former employment.

Working conditions stand out as being a core element in the promotion of active strategies for older workers. Firms need to adapt working conditions to the need of their entire work force, not only older workers. There is the curative aspect of working conditions that can be directly targeted towards older workers in order that they remain productive; however the best approach is to ensure that working conditions are adapted so as to ensure the work force are productive throughout their entire professional career.

However, all three aspects call for caution as they imply a certain degree of deregulation of the labour market. This cannot be envisaged without the necessary security for the employees and calls for trade unions to reflect on new ways to combine increased positive flexibility with security for the workers. This aspect is even more important as the discourse is often concerned with the core workers and forgets the situation of the outsiders, i.e. part-timers, tele-workers, home-workers, low-skilled and temporary workers, with a majority of these workers being women. Will they be able to benefit from training, better working conditions, new evaluation methods, or will they become even worse off in the process of increasing the employment rate of the over-55s?

Common to these issues is the importance of efficient public policies as well as negotiations between the social partners in order to promote the above aspects. A solid and comprehensive framework is needed together with a local negotiated implementation. Finland and the Netherlands stand out as good examples of successful policies that have turned the downward employment trend around. The policies/programmes being used have been carefully negotiated between social partners from conception to application.

4. Incentives and disincentives originating from the tax and social security system

One of the most voiced instruments to keep older workers in the labour market are the
incentives originating from the tax and social security system. Delsen (2003) reviews the very complex puzzle of incentives and disincentives and gives a good overview of the various systems and reforms that have taken place in the EU. The main focus is on changing the incentives for older workers on the supply side (benefits and contributions) rather than on the employers’ demand side (contributions). The EU Member States seem to use common instruments in order to achieve their goals of assuring the financial viability of the pension system and reversing the trend of earlier and earlier retirement: abolishing the mandatory retirement age, raising the pensionable age, introducing flexible and progressive retirement, increasing the required number of years of contribution, increasing the contribution rate and cutting benefits are the most common policies. However one also observes moves towards efficient social security systems with incentive-compatible contribution schemes, including defined contributions, privatization, and funding.

Notwithstanding these major reforms, little change has been observed as with regard to the retirement patterns. The effectiveness of these policies is questioned mainly for two reasons. Firstly, increasing the age at which the pension becomes available or reducing benefits may not have the desirable effect if other public or private pathways out of work are available (commuting vessels). Secondly, when increasing the contributions or/and decreasing the benefit entitlement that follows, the increase in the pension accrual rate might just not be large enough to induce the older worker to stay in the labour market.

Introducing a flexible pension age and introducing a favourable progressive retirement via part-time retirement regimes is a necessary but not sufficient condition to delay the effective retirement age. If other public and private early exit schemes (e.g. full-time early retirement) are not abolished or altered, one might not see any change; furthermore research shows that the change in incentives needs to be substantial in order to have an impact on the worker’s decision to retire or to combine work and pension.

More importantly all decisions taken in relation to employment will have an influence on the retirement decision, i.e. changes in contributions as a result of change in employment characteristics result in changes in the later benefit level. This implies that all reforms should be seen in the light of the working life perspective and not only in the light of the last years of work. Working time preferences of all individuals should be taken into account in all stages of life as this will have an impact on the later retirement decision.

Social security reforms have in general been ‘stick’ based, i.e. punishing early exit, and the results have been quite meagre. Maybe policy makers should start thinking of introducing ‘carrot’ reforms by better rewarding late exit from the labour market.

5. Training and employment policies

The importance accorded to the incentives from the social security system is justifiable; however creating the right incentives alone will never solve the problem of early retirement. Tight labour markets, training and employment policies as well as changing the mentalities of employers as well as employees (individuals and trade unions) are also of vital importance. Lafoucrière (2003) concentrates on training and employment policies that are aimed at older workers. While the European Employment Guidelines acknowledge the importance of lifelong learning and other active labour market policies in order to maintain older workers in the labour market, an in-depth analysis of the national action plans for employment shows a lack of coherent strategies mainly due to a lack of global understanding and truly targeted approaches although some member states do focus on measures taken with regard to anti-age discrimination legislation and initiatives (campaigns), age-neutral personnel and training policies and vocational in-house training as well as public employment programmes. Recent
studies seem to confirm that targeted labour market policies and programmes are effective in reversing the trend of early exit from the labour market. In particular training/retraining appears to be a central element in the retention of older workers on the labour market as well as facilitating the reintegration of long-term unemployed via an updating of their skills. However, it could also appear that training alone cannot change the face of the labour market as it stands currently. Job-creation schemes, personal guidance initiatives, anti-age discrimination policies and campaigns figure as vital factors if older workers are to be perceived as being an integral part of the labour force and not only a ‘reserve army’. Paradoxically the opposite can also be said to be true. When dealing with shortage and/or erosion of skills, the above-mentioned active labour market policies and programmes must nearly always be linked to vocational training programmes. These measures must complement each other in order to be successful.

Another crucial issue related to the policy measures mentioned above is where the responsibility lies and where the decisions come from. In this context state and industrial relations and traditions play a vital role. Examples from the different EU member States do tend to point to the fact that there is a need to establish formal government legislation providing for a global framework within which further actions can be taken. The combination between a high degree of regulation and industrial self-organization eased by government structures capable of devolving much to regional government, coupled with a demand-led system which provides for a high level of specialization and consultancy practices, involving different actors, appears to respond well to the issues concerned. Finland and Denmark, although having quite different systems, seem to point towards an efficient way for further development.

We insist on the fact that, despite much discussion around the principles of lifelong learning, there still persists a lack of global understanding of the issue. The tightening of the labour market seems to have induced better training processes, however a malfunctioning of the different systems in place can be largely detected. The concept of lifelong learning should crucially be understood as a preventive and lifelong process, where the national experiences show a general will to tackle the issues at the end of one’s career and hence introduce a curative aspect instead. Social partners, therefore, have an important role to play in altering mentalities and actively encouraging training practices to take place throughout an employee’s working life. Far from condemning the use of these obligatory patterns, which can indeed be useful in providing a formal framework, they should be accompanied by further financial contributions. More incentives/rewards are needed for lifelong training in order to make sure that workers never become ‘older workers’ but remain ‘employable’ throughout their career.

6. Working conditions

Another prerequisite to keep workers on the labour market for a longer time is working conditions. This subject includes two issues, namely working time as a way of adapting working conditions, and the ergonomic part of working conditions.

With regard to working time two aspects crop up: flexible working time and reduced working hours. It is assumed that more relevant working-time patterns help to promote higher labour market participation among older workers. Reduced working time seems to have many advantages linked to it. It limits the reduction in productivity that age might incur, the reduction of duration can offset the need to adapt the nature of the working conditions themselves and both workers and firms might be less reluctant to match as it better suits their preferences.

Jolivet (2003) identifies a wide range of already existing schemes in the EU member states which have the aim of reducing working-times. Some of the schemes are aimed at older workers in particular and others are aimed towards workers in general.
Access conditions and wage compensation of course play a major role in the success of the schemes, however just as important is the availability of good quality part-time jobs and how older workers are managed in general. Another critic or feature to be aware of is whether reduced working-time is available only in the internal labour market or whether the schemes are also available for older workers changing jobs or re-entering the labour market.

Turning towards the ergonomic aspect of working conditions, one should not forget that ageing is partly a product of work. In order to counterattack this, a multitude of factors needs to be involved. Three crucial elements can be identified: working conditions, the option of acquiring/developing skills and the characteristics of the career path.

The initiatives undertaken in the EU member states can be divided into two possible approaches. In the first, older workers are perceived as a special group for which special solutions need to be proposed: ‘soft’ jobs, and end-of-career routes within or outside the firm. This approach implies two risks. The first is that the number of people involved will be out of step with the number of posts available, and the second is that ‘sidelining’ these workers will cut them off from the activity of the firm. The second approach is an overall approach covering both working conditions and career pathways, and it involves adapting work organization and the management of mobility to suit the diversity of the workforce.

An analysis of the policies currently applied in the European Union member states clearly shows the need for a renewed look at the issue. Several recommendations can be made to policy-makers. The most important are: to cut with the conventional way of thinking of the end-of-career schemes as only for those in the internal labour market and start including those in the external labour market, to identify what makes some refrain from the offered schemes, make the schemes reversible, be clear about the aim of the working-time reduction (WTR), give serious support to introduce WTR, encourage discussions on working conditions in firms as well as at sector level, introduce curative as well as preventive dimensions in age management.

The main message is that one should not introduce short-sighted, inflexible measures. What is definitely needed in the current landscape is a more flexible approach to WTR as well as adapting working conditions.

7. Care infrastructures

The last issue dealt with in this paper is an issue often wrongly overlooked when discussing active ageing, namely provision of care for children, parents and spouses. This element might seem to be of less of a priority when discussing active ageing for men, however Pacolet and Hedeboew (2003) demonstrate its importance for women and hence also indirectly for men as couples tend to retire together. The significance of social spending on family/childcare for the female labour market participation in general has been demonstrated by several studies, however very little is known about the influence on older women’s labour market participation. Nevertheless the little evidence that exist points to the fact that grandmothers play a major role in the care for grandchildren. This implies that future grandmothers will be put in a dilemma as their parents will still be living and probably also needing care, hence the term of ‘sandwich’ generation. Figures show that even in countries with a well-developed system, i.e. formal care provided, the bulk of the care is provided by the household, family or neighbours, even though it is not a full-time job. This implies that formal care cannot work completely as a substitute for informal care although it can alleviate. This notwithstanding, the demand for care is bound to rise and this needs to be taken into consideration when discussing active ageing.

An important element is that a high employment rate amongst younger women seem to
produce higher employment rates among the older women as well. There appears to be a continuity in the rate of employment. This implies that child-care provision ensuring higher employment rates among the younger women will, over time, have a positive effect on the employment rate of the older workers and could support their remaining in employment for longer. In the worst scenario, assuring adequate formal care provision to substitute informal care, for children as well as the elderly, will prevent the employment rate from decreasing as the demand for care increases with the ageing population. Once again the less skilled are more likely to withdraw from the labour market to provide informal care, thereby contributing to their already fragile position as older worker. However, one should not lose sight of the fact that the decision to leave an employment to provide care is an individual choice, however it is also a social choice to provide care or not and hence this can influence the individual choice. The more formal care provided, the less pressure there is to leave the labour market, however the demand for care provision should be evaluated on a life-cycle basis as older women’s labour market participation will be strongly influenced by having participated at an earlier stage.

8. General conclusions

The research undertaken at the ETUI and published in Jepsen et al. (2002,2003) points to the fact that, although special measures are needed for the older workers, the main conclusion to be drawn is that for older workers to stay in the labour market, action should be taken on a lifelong basis. Many of the measures discussed in connection with active ageing (incentives from the social security system, WTR, training, working conditions, social infrastructure etc.) actually should apply to all workers. Applying the measures only to older workers will stigmatize and may not have the expected effect as they are not sufficient to keep older workers in the labour market. Actually most of the policies proposed for older workers would be appropriate for the entire work force.

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The Double Helix of Learning and Work

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Two major tendencies, having high visibility and causing intense debate, have marked social developments over the past three decades. The first of these has been the emergence of the concept and practices of lifelong learning. The traditional conception and organization of education as a continuous block, ten to eighteen years in duration, situated at the beginning of life and institutionalized around schools and universities, is being replaced by a more flexible scheme, whereby formal schooling, as well as non-formal and informal education, extends over increasingly long periods. The focus has gradually shifted to learning. Equally, work is no longer perceived as an activity consigned to the continuous block of adult life, devoted to contractual employment for thirty or forty years in productive enterprises, administrative institutions, or services. Work itself has been divided into categories similar to the formal, non-formal, and informal triad, according to the nature of remuneration (monetarized, monetized, or non-monetized, see Giarini and Liedtke, Wie wir arbeiten werden, Hoffman und Campe, Hamburg, 1998). It has also been extended to become ‘lifelong work’.

Common or related pressures emerge from the underlying pattern of these two parallel schemes in education and employment. They have emerged in the process of a dramatic expansion of knowledge, unprecedented innovations in technology, and an accelerated pace of change. The factors that seemed to be able to maintain lifelong stability, both in learning and in work, proved to be valid only for brief periods of time. Adaptation and updating have become imperative.

The Information and Communication Technology (ICT) revolution has emerged as the single most important factor that, at the beginning of the Twenty-First Century, is replacing the old clichés with new images. A reference to ‘a person who learns’ is no longer evocative of a child sitting behind a desk in a classroom and using notebooks and pencils, but a person of any age using a computer. A reference to an employed person is no longer evocative of somebody in a workshop or an office, but of somebody, of any age, using a computer.

The computer, this common device, that goes on changing the basic data of the two essential life processes of learning and work, warrants the following questions: What stable form will it give to both of them after the current transition period? How will humankind learn and work in the Twenty-First Century?

The first remark to be made is that both processes are undergoing unordered, quantum, and incoherent changes. After so many decades of debate on what was called permanent education, then continuing education and finally lifelong education, one might have expected that the concept would be crystallized and generalized. Given the circumstances of recurrent employment crises that have been analyzed ad nauseam, one might have expected more articulate measures than the resulting ill-assorted attempts to reduce work hours and to delay the age of retirement. The reasons for all these delays and hesitations lie in the fact that both learning and work have long been regulated by conservative laws and institutions, with deep roots in established traditions. School has always been one of the most conservative of

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1 This is an introduction to the book of the same title (by Mircea Malitza and Orio Giarini), published by UNESCO-CEPES, Bucharest, in 2003.
institutions, owing partly to the concern of given generations to hand down values and knowledge to the next generation. As far as work is concerned, it has been subject to evolving national legislation and international agreements reflecting the numerous changes in the relations between employers and employees. While the workers gained more rights, paid work still remained a fixed point of reference. In short, the two systems of learning and work are both characterized by rigidity and inflexibility. They are burdened with an abundance of detailed and often irrelevant regulations. They discourage innovation, and they are unfit to absorb and generalize creative experiments.

The second remark refers to the fact that both systems are dominated by an ossified vocation and a single training formula. The resulting product is the ‘one-dimensional man’ (Marcuse, in Maclntyre, 1970) who follows only one pre-established track in life. The school diploma contains, like a passport, indications regarding the nature and degree of a person’s educational training. This information automatically assigns him or her to the practice of a well-delimited profession in the sphere of work. The person is ineluctably condemned to seek employment only in the various branches of that profession. Advancement is possible only within that same profession, and his or her career ends abruptly at the age of retirement. This scenario remains almost constant, despite the impressive increase in average life expectancy. A Procrustean bed forces everyone to adjust to an immutable pattern and to sacrifice any ability that may go beyond the imposed limits.

The divorce between the professional certificate and the chosen profession becomes evident when people change directions at the critical point of passing from school to work. Engineers who learn and practice business management, medical school graduates who become researchers in biology, scholars in the humanities who switch to the software industry, computer scientists who become financiers, farmers who turn into ecologists — the examples are numberless. And what about the masses of people who become unemployed for the simple reason that their training has been made inadequate and obsolete by the advent of new technologies or more complex qualification requirements?

It is now obvious that the articulation between the two systems of learning and work does not operate properly. The costs are high. Young people have to re-enrol in totally different departments thus, practically speaking, losing four to five years of their lives. Adults are forced to start all over again, in mid-career. The cohorts of people who have become marginalized are expanding, and society is confronted with the problem of underprivileged categories and increasing poverty.

The third remark follows from the previous one. Learning and work have always been treated as separate entities. No precedent indicates that they should be studied together. Vague attempts to pair them can be detected in such phrases as ‘school and life’, ‘school and society’, ‘school for work’, ‘the school of work’, but, basically, the simultaneous analysis of the two related and inseparable systems has not been subject to consistent and systematic research. When such an analysis is eventually undertaken, it clearly benefits from a unity of method, purpose, and logical reasoning. It reveals that the diseases of the two systems have common roots, that their weaknesses are just different symptoms of the same ailment and that, consequently, the remedies have to be sought in a single therapeutic effort.

Herein lies the purpose of this work. We relied on the previous experience of our reports to The Club of Rome, one devoted to the reform of education and the other to the future of work. This time we engaged in a study that was aimed simultaneously at the educational and employment systems from the perspective of the Twenty-First Century and its knowledge potential and productive activities.

The symbol of the double helix is appropriate. It is deliberately chosen to emphasize the degree of interaction between the two spheres. Since the suggested solutions are based on a
combination of mobile and transferable units, the symbolic value of the double helix is even more eloquent.

Yet, it is necessary for us to indicate where the metaphor ceases to be useful. Unlike the genetic helix, which is an almost immutable given, the double helix of learning and practice is under permanent construction and can be re-oriented at least every one or two years. Still, it is no less true that the double helix of learning and work maps out the original, almost unique and unrepeatable road through life of an individual, with its innumerable creative ramifications.

A personal history would perhaps better enlighten the reader. John is the son of a sailor, born and bred on the coast of the Atlantic. The call of the sea runs in the family; so, at the age of 16, after having received his basic education from age 6 to 14, followed by two years of vocational schooling, he joins the crew of a fishing ship. He spends two years at sea and becomes familiar with all sorts of mechanical devices and with the art of sailing.

At the age of 18, he returns to school to finish his secondary education, then he attends a short college on fishery. After three years, he gets a job at an aqua-culture farm, where he spends another three years. He is 24 when he enrols in a second college of marine biology for the next two years. Between the ages of 26 and 30, he works for a marine ecology observation centre and afterwards completes his postgraduate studies at a university. Advanced training enables him to work for five years in a research institute, and the acquired experience earns him two years of doctoral studies. At the age of 40 he starts teaching at a college, where the curriculum suggests one year of training in the fishery business. For the next five years, he works as a consultant for a company of marine products. He quits this moneymaking job to open a consultancy firm, a small family business. He is now 54, and his passionate interest in ichthyology prompts him to take a year off for the study of museography. So, he becomes the director of a great aquarium between ages 55 and 60. Following insistent requests from a distant country on another continent, he founds a similar institution there and directs it for two years. The realities of the host country incite him to study the economics of developing countries for one year. He then becomes a consultant for the government on sustainable development. At the age of 65, he spends two more years as an associate professor at the central university of that country. After that, he returns home to work for another year, as a volunteer, for an NGO concerned with the specific issues of the developing countries. Between ages 71 and 76, he presides a foundation devoted to the same issues. After 60 years of active life, he becomes the chairman of a department at the Academy of Oceanography. It is hard to keep track of him now, since he is constantly invited to international conferences or is away on lecture tours.

What does this scenario reveal? It shows how John’s character has changed the nature of his activities over the past twenty years. Does it seem amazing? Not if one takes into account the fact that he has been constantly weaving a coherent ellipse. All his steps in learning (seven in all, covering twelve years) have been linked to his interest in biology and further enhanced through courses in the fishery business, museum science, economics, sustainable development, and environmental studies. His work steps (thirteen in all, totalling forty-eight years) have alternated with training for activities that have kept in line with his basic interests. Similar cases can be encountered all around us. They may not be frequent enough to be considered emblematic. But statistical data keeps providing conclusive evidence of the growing pace of labour force mobility.

What is new about John’s case? It seems that the length of his studies (ten years of compulsory education plus another twelve) does not exceed by much the lapse of time required nowadays for the education of a Doctor of Sciences. The new and essential advantage of John’s trajectory is that his education spanned his entire life and could be re-oriented towards other attractive and useful goals related to his single fundamental interest and vocation.
The length of John’s periods of employment also points to an absolute novelty. His experience indicates a trend toward a generalized sixty-year active life at the scale of the whole society. The average active life increases by twenty years. Thus, demographic trends and the leap from 55 to 75 years of life expectancy eventually come to terms with the organization of the social fabric itself. The extension of the lives of humans is no longer perceived as a drain on national budgets, and the spectre of an ‘ageing society’ no longer looks so frightening.

Transition from learning to work and vice-versa is not an absolute must. One job can be followed by another. This scenario indicates that a succession of jobs can amount to transition from paid work in a company to a private lucrative business, to volunteer work, to the establishment of a non-profit foundation or a consultancy, which can also mean setting up an individual practice, working for a larger firm, or serving in an international organization.

The book *The Double Helix of Learning and Work* has five chapters. Chapter 1 begins with a Cartesian statement: I learn, therefore I change.

In the early days of organized education, the system evidently resisted change: young people were trained to preserve and continue what their parents had started. Modern times produced the idea that education had to develop an ability to adjust to new conditions. But over the past two decades, adjustment has meant just trying to catch up with societal developments that have been changing ever more rapidly in the meantime. Education now has to face a new challenge — that of anticipating change.

The reason why educational reform has been lagging behind becomes clear once one takes a closer look at the other major requirements stemming from the current accelerated pace of history: continuing education or lifelong learning and interdisciplinarity. It lies in the rigid classification of human knowledge, with fixed boundaries between disciplines. Knowledge is still being stored and distributed in large blocks that seem to be cast in concrete. Teachers, disciplines, curricula, examinations, certificates are all operating within a stationary scheme, which is unable to overcome centuries-old inertia. Under the pressure of new information, the rigid pattern of disciplines is cracking, and the limits are becoming blurred here and there. How will the new century handle this emerging trend?

Chapter 2 is devoted to an innovation that may lead to a real anti-disciplinary revolution in the sphere of knowledge. If only knowledge could be liberated from the tyranny of the disciplines, the latter might freely follow their natural inclination to engage in combinatorial and analogical play, thus generating new knowledge. The demolition of disciplines will make room for new entities of knowledge called modules which will comprise coherent information and validation methods. The modules will be defined through their valences with the preliminary modules and with those that may follow.

No single human mind can contain all knowledge modules or draw a map of their disposition since there are tens and hundreds of thousand of them. But a computer programme can. It is the computer that will offer a display of modules to those who are interested in setting up personal learning itineraries.

The potential consequences are enormous. All the classical terms to which we have grown accustomed are going to change their meaning: university, school, classroom, teacher, subject, discipline, chair, certificate or diploma, etc. Even the structure of the compulsory ten-year primary and secondary school will change. The teacher will do little teaching, instead he or she will supervise, monitor, clarify, and he or she will also assist the pupils’ choice of modules. A school’s profile will be mainly given by the nature of its laboratories and experimental technology workshops in biology, physics, chemistry, natural or agricultural sciences, etc.

The focus on experimentation is expected to have pride of place in the new century, after a long pre-eminence of theoretical knowledge. The exercise of trying out new paths is a
dimension of learning that cannot be replicated by the computer. This same exercise is also responsible for the acquisition of most practical skills.

Another evocation of Descartes opens Chapter 3, ‘I work, therefore I am’. The entire history of work speaks of its dependency on the existence of tools. The latest revolution in the sphere of tools, which was brought about by the new information and communication technologies, has produced an impact comparable in magnitude to that of a major earthquake. Still, the consequences of this revolution on work patterns are not mere effects of a single cause. Society changes under the influence of other factors as well. The service economy has become a fact of life. A shift in social values has occurred, with special emphasis on universal rights. Diversity is being cherished; flexibility has become a fundamental virtue. The computer, a tool that enhances the intellect and not the muscles, has facilitated the process. It has been present at all the turning points of the process of change, easing its spread and increasing its speed. For this reason, the debate on the future of the education-work tandem should start with the advent of the computer and its applications.

Chapter 4 focuses on this most important and topical effect produced by the current technological revolution. Human intellect, assisted by the computer, has become the most precious ingredient for material production in the service economy. The event has been announced under resounding titles: ‘the de-materialization of production’, ‘the knowledge economy’, or ‘innovation as a decisive factor’. The operation of that system requires an ever-ascending degree of qualification. Education is finally placed in a leading position, at the core of social practice. An increasing majority of jobs now require better education and training. This requirement is not simply a theoretical desideratum. The process of globalization, with its growing competition in integrated world markets, makes superior qualifications a condition for survival, and innovation a measure of success.

It has been said that all an individual needs in order to become anchored to global civilization is a computer and a modem. A single tool enables humankind to perform the two activities of the helix, learning and work, in real time and regardless of distance. Current plans for the modernization of united Europe, for instance, include distance work and other components of the information society. The progress of privatization and the predominance of services cause further differentiation in the remuneration of jobs. Part-time, occasional, and voluntary activities illustrate the emergence of an active and strong civil society.

The corresponding revolution in the twin fields of labour and knowledge entails the institutionalization of the different types of work and learning that are likely to prove both necessary and viable. In conclusion, we describe a person’s itinerary through life as a continuum of sequences devoted to learning and work and invite further meditation and discussion on the merits of an institutionalized approach to the concept of the double helix.

Why not merge the ministries of education and labour into one ministry, given that their activities are now organically intertwined? Why not have a single social security budget covering the years of learning and work and relying on a comprehensive system of individual credits? Why should we worry about unemployment instead of assisting the development of personal itineraries according to which individual effort and a caring society could each have a fair share in supporting the two fundamental activities of education and work? In a double helix approach, unemployment ceases to be the obsession of young people and the bane of adults. The governments, together with the business community and civil society, acquire a powerful tool to handle the social security problems in a sensible and effective manner.

We hope that this paper will inspire further research projects in the vast field of lifelong learning and/or work with the aim of developing a new vision of global issues and of exploring solutions that will give substance to life in the Twenty-First Century.
Basic Factors of Needed Welfare Policy Supporting the Counter-Ageing Society in the Czech Republic

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Abstract
1. Demographic trends
2. Impact of population ageing on public spending
3. Employment perspectives and problems
4. Welfare system and competitiveness

The Czech economy faces increasingly tough international competition. The economy must bounce back. Our social security systems must stay functional and economically viable in an ageing society without placing impossible burdens on the next generation. The labour market must be made more flexible and obstacles to employment must be removed. Non-wage labour costs must remain at acceptable levels for both business and employees.

Action has to be taken as the basis for ensuring that our social security systems remain sustainable for boosting the economy and for creating the potential for the accelerating of future economic growth. The aim is to modernize the welfare system or social-market economic system.

1. Demographic trends

The demographic position of the Czech Republic is expected to change dramatically over the next few decades. A demographic projection of the Czech Statistical Office (2003) highlights negative trends of an ageing population, i.e. reduction of the share of the young generation due to the past and present low birth rates and a growing number of seniors thanks to the extending average life expectancy.

From the static point of view, the current demographic situation is obviously the most favourable over the entire course of history backed up with demographic data. Under a new projection, the reaching of record level of the share of population in the age group 20-59 has been postponed to 2005 (see Table 1). This category includes numerically strong age groups born immediately after World War II as well as strong generations of the seventies and eighties. On the other hand, the numbers of young people are falling and numbers of 60-plus seniors are increasing.
Table 1 - Age distribution of the population in the Czech Republic (in per cent of total)

<table>
<thead>
<tr>
<th>Age groups</th>
<th>1998</th>
<th>2003(^a)</th>
<th>2005(^b)</th>
<th>2010(^b)</th>
<th>2030(^b)</th>
<th>2050(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>24.1</td>
<td>21.7</td>
<td>20.9</td>
<td>19.2</td>
<td>17.3</td>
<td>16.7</td>
</tr>
<tr>
<td>20-59</td>
<td>57.7</td>
<td>59.0</td>
<td>59.1</td>
<td>58.1</td>
<td>53.2</td>
<td>44.6</td>
</tr>
<tr>
<td>60+</td>
<td>18.7</td>
<td>19.3</td>
<td>20.0</td>
<td>22.7</td>
<td>29.5</td>
<td>38.7</td>
</tr>
</tbody>
</table>

\(^a\) Estimate  
\(^b\) Medium variant of projection: 2005-2050

Sources: 

From the dynamic point of view, we witness a beginning of population-ageing process, which will escalate at the end of this decade. The share of young-age categories will go on reducing. This results from the past and present extremely low birth rates related not only to a change in lifestyle but also to a very poor availability of housing for young families. On the other hand, the number and share of seniors in the population will grow thanks to the extending average life expectancy. Unfavourable development can be partly mediated but not solved by international migration with the Czech Republic becoming a target country. Demographic development represents a risk for the economy’s development in the medium and long run.

The population profile over time depends on assumptions about fertility, mortality and net immigration flows. In 2002, the Czech Republic reported a fertility rate of 1.17, the lowest among the OECD countries. Fertility is assumed to increase from 1.17 to 1.62 by 2050. Fertility rates lower than 2.0 imply a long-run decline in the total population\(^3\).

Life expectancy at birth, reflecting mortality over the whole lifespan of a particular cohort, is expected to increase for both males and females, but the increase is smaller for women than for men. Life expectancy for males is assumed to rise from 72.1 to 78.9 years and for females from 78.5 to 84.5 years.

Net immigration is difficult to predict, since it depends on the economic situation of the country, the situation on the labour market and immigration policy. The projection medium variant is based on the assumption of an active migration balance. Net immigration will add roughly 25,000 persons to the Czech population yearly during the entire period of medium variant of projection.

The assumptions and results of the demographic projection are summarized in Table 2.

The projection results in a gradual decline in the population from 10.2 million in 2004 to 9.4 million in 2050. In the medium and long term, the Czech Republic will face the effects of an ageing population. The age profile of the population is deteriorating and generating serious concerns from the point of view of the labour market and fiscal perspectives. By the end of the projection period, the share of the elderly (defined as those over 65) in the total population will more than double from 13.9% in 2002 to 31.3%. The share of the working-age population (15-64) will drop from 70.5% to 56.3% (or from 57.7% to 44.6% of age group 20-59) and the share of the young population (0-19) will shrink from 21.7% to 16.7% in the period 2003-2050. The average age of the population will be almost 10 years higher (39 vis-à-vis 49).
Table 2 - Basic features of demographic development in the Czech Republic to 2050\textsuperscript{a}

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>2002</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate</td>
<td>1.17</td>
<td>1.30</td>
<td>1.45</td>
<td>1.60</td>
<td>1.61</td>
<td>1.62</td>
</tr>
<tr>
<td>Life expectancy of men (years)</td>
<td>72.1</td>
<td>73.1</td>
<td>74.5</td>
<td>76.0</td>
<td>77.5</td>
<td>78.9</td>
</tr>
<tr>
<td>Life expectancy of women (years)</td>
<td>78.5</td>
<td>79.4</td>
<td>80.7</td>
<td>81.9</td>
<td>83.2</td>
<td>84.5</td>
</tr>
</tbody>
</table>

Results

<table>
<thead>
<tr>
<th>Population (thousands)</th>
<th>10203</th>
<th>10283</th>
<th>10283</th>
<th>10102</th>
<th>9795</th>
<th>9438</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of population (years)</td>
<td>39.3</td>
<td>41.2</td>
<td>43.6</td>
<td>45.9</td>
<td>47.6</td>
<td>48.8</td>
</tr>
<tr>
<td>Share of working-age population, in per cent\textsuperscript{b}</td>
<td>70.5</td>
<td>70.9</td>
<td>66.0</td>
<td>64.5</td>
<td>60.9</td>
<td>56.3</td>
</tr>
<tr>
<td>Old age index\textsuperscript{c}</td>
<td>89</td>
<td>114</td>
<td>148</td>
<td>181</td>
<td>220</td>
<td>252</td>
</tr>
<tr>
<td>Old-age share in total population, in per cent\textsuperscript{d}</td>
<td>13.9</td>
<td>15.5</td>
<td>20.3</td>
<td>22.9</td>
<td>26.9</td>
<td>31.3</td>
</tr>
<tr>
<td>Old-age dependency ratio\textsuperscript{e}</td>
<td>19.7</td>
<td>21.9</td>
<td>30.8</td>
<td>35.4</td>
<td>44.2</td>
<td>55.7</td>
</tr>
<tr>
<td>Index of economic dependency\textsuperscript{f}</td>
<td>A 42</td>
<td>41</td>
<td>52</td>
<td>55</td>
<td>64</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>B 56</td>
<td>53</td>
<td>63</td>
<td>67</td>
<td>77</td>
<td>92</td>
</tr>
<tr>
<td>Share of pensions claim people in total population, in per cent\textsuperscript{g}</td>
<td>A 20.1</td>
<td>22.1</td>
<td>25.9</td>
<td>28.8</td>
<td>34.7</td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>B 20.1</td>
<td>21.0</td>
<td>24.1</td>
<td>26.7</td>
<td>32.2</td>
<td>35.7</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Medium variant of projection: 2010-2050
\textsuperscript{b} Population of 15-65 years in total population
\textsuperscript{c} Old-age index: Number of 65+ people in relation to 0-14-years-old children
\textsuperscript{d} People 65+ old
\textsuperscript{e} Share of people 65+ years-old in working-age population (15-64 years old)
\textsuperscript{f} A: Number of people 65+ and 0-14 years-old to 100 people 15-64 years-old
B: Number of people 65+ and 0-14 years-old to 100 people 20-64 years-old
\textsuperscript{g} According to Act No. 155/1995 (A) and No. 425/2003 (B)


The old-age dependency ratio — defined as the elderly population 65+ in working age population (15-64) — will rise steeply from 19.7 to 55.7 during 2002-2050. Both indices of economic dependency will also rise very steeply: in the case of A from 42 to 78 and in the case of B from 56 to 92. See figures in Table 2.

The most important budgetary impact of an ageing population will be the rising share of pensions claim people in the total population: from 20.1% to 38.0% (A) or 35.7% (B).

Development in the Czech Republic after 1997 has been characterized by a growing pension account deficit and a sharp rise in the number of old-age pensioners especially in the early retirement category. At the same time, unfavourable consequences of a rise in the number of seniors are covered adequately by the Act on extending the age of retirement.

To mediate this unfavourable situation, the government adopted parametric reform measures. Since 2001, preferential treatment of early retirements and disadvantaged treatment of delayed retirements have been eliminated.

Due to population ageing, enormous pressure on the pension account deficit will continue in the future in the traditional pay-as-you-go system. That’s why further parametric reforms have been adopted under public finance reform — further restriction of early retirement, indexation of pensions only to the extent set by the law, further increasing of minimum pension age after 2007, etc.

In the long run, maintaining the constant ratio of average pension to average wage (requiring a regular indexation at the level of average wage growth) is considered unsustainable in fiscal terms. Within this horizon the situation will need a system solution in spite of the positive results of parametric reforms.
2. Impact of population ageing on public spending

Given the current demographic structure in the Czech Republic, the country belongs to the group of EU countries with a rather young population. In the period up to 2050, however, this is expected to change radically as the demographic projections suggest a rise in life expectancy which will lead to a rapid worsening of the old-age dependency ratio (almost tripling from 19.7 in 2002 to 55.7 in 2050) and to a consequent increase in age-related expenditures.

Improving the prospects for long-term sustainability of public finances is one of the objectives of the public finance reform. Its first stage included mainly parametric measures to reduce the size of the long-term fiscal imbalances (see Box). Inter alia, this consisted of increasing the retirement age, phasing out one of the two early retirement schemes, alignment of effective pension contributions of the self-employed with those of employees and reallocating a proportion of the state employment policy contributions to the pension system. In addition, several reform measures targeted the labour market and the social care (reduction in sickness benefits), which should, in addition to the planned advancement in the education system, lead to higher productivity growth in the future and indirectly to improved sustainability of public finances. The second stage aims at a thorough reform of the pension and health care systems. However, apart from a few short-term stabilizing measures related to the latter, the most important steps of the reform process do not seem to be planned before the end of the convergence programme period, thus further delaying steps towards the containment of the budgetary risks related to population ageing.

The convergence programme foresees overall age-related expenditures to increase by 9.4 percentage points of GDP, from 20.2% of GDP in 2005 to 29.6% of GDP in 2050. Particularly high increases are projected in pension and health care expenditures (6.8 percentage points of GDP and 3.1 percentage points, respectively), while education expenditures are expected to decrease marginally, reflecting the strategic efforts of increasing the number of students at the tertiary level towards the OECD average. Especially significant, however, are the projected dynamics in pension and health care expenditures in the period 2020-2050, as the rapid increases in the two categories over this period reflect the full impact of ageing taking place (see figures in Table 3).

<table>
<thead>
<tr>
<th>% of GDP</th>
<th>2003</th>
<th>2005</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure</td>
<td>59.0</td>
<td>50.3</td>
<td>47.8</td>
<td>48.5</td>
<td>50.3</td>
<td>54.1</td>
</tr>
<tr>
<td>Old age pensions</td>
<td>6.4</td>
<td>6.5</td>
<td>6.3</td>
<td>6.5</td>
<td>7.4</td>
<td>9.9</td>
</tr>
<tr>
<td>Health care (including care for the elderly)</td>
<td>6.3</td>
<td>6.4</td>
<td>6.5</td>
<td>7.0</td>
<td>7.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Interest payments</td>
<td>1.3</td>
<td>1.3</td>
<td>1.7</td>
<td>2.5</td>
<td>4.0</td>
<td>7.8</td>
</tr>
<tr>
<td>Total revenues</td>
<td>47.4</td>
<td>46.9</td>
<td>46.6</td>
<td>46.6</td>
<td>46.6</td>
<td>46.6</td>
</tr>
<tr>
<td>Of which: from pension contributions</td>
<td>8.3</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**Assumptions**

- Participation rate males (aged 20-64) 84.8 84.7 84.9 85.7 84.5 83.6
- Participation rate females (aged 20-64) 67.6 67.6 68.1 71.5 72.3 73.9
- Total participation rate (aged 20-64) 76.2 76.1 76.5 78.6 78.4 78.8
- Unemployment rate 7.8 8.7 7.9 6.5 6.5 6.5

The two stages of the public finance reform in the Czech Republic

1. First stage

Many fiscal consolidation measures covering the period 2004-2006 were agreed in 2003. They resulted in a series of measures and laws which have already been adopted by the Parliament. The focus of the measures was expenditure savings which deliver about three-quarters of the total consolidation, with the remainder on increased revenues.

a) Expenditure side

The three major expenditure-side measures include a reduction in sickness benefits and in social assistance, a cut in the wage bill of central government administration and a reduction in discretionary spending of individual ministries. Some additional savings come from parametric changes in the pension system, including reductions in early-retirement pensions, minimal indexation of pension benefits and a further increase of the statutory retirement age.

b) Revenue side

There is a shift in the structure of budget revenues — decreases in corporate income tax should be more than offset by an increase in VAT and in excise duties. Higher VAT revenues are expected to result from a broadening of the tax base (a lower limit for obligatory VAT registration) and the application of the standard (22%) rather than the reduced (5%) VAT rate to some goods and services. The corporate income tax rate will be reduced in 3 steps from current 31% in 2003 to 24% in 2006. There are additional measures which aim at increasing tax revenues (for instance, a modernization of the tax and customs administration and an increase in the base for levying social contributions by self-employed persons to 50% of the difference between revenues and costs).

2. Second stage

In late 2003 it was decided that further measures would be taken, focusing on combating tax evasion and promoting economic growth. As of then, measures decided in 2003 are referred to as ‘the first stage’ of the public finance reform and measures decided in early 2004 as ‘the second stage’. A part of the second stage of the public finance reform was adopted in May 2004 (a decrease of the standard VAT rate from 22% to 19% and a further shift of goods and services from the reduced VAT rate (5%) to the standard one). The growth-stimulating measures were prepared by the government to be adopted as of January 2005. They are likely to decrease tax revenues.

In addition, the second stage of the public finance reform aims at improving the long-term sustainability of public finances, in particular through a reform of the pension and healthcare system. So far, no concrete decisions have been taken.

The risk to long-term sustainability of public finances increases if the objectives set in the convergence programme fail to be achieved. Negative dynamics in the government debt-to-GDP ratio during the recent years have resulted mainly from high general government imbalances and the assumption of considerable contingent liabilities. The stabilization of the government debt-to-GDP ratio is conditional on the planned budgetary consolidation.

The Czech Republic faces serious risks of budgetary imbalances in meeting the cost of an ageing population. In particular, unfavourable demographic developments will result in high increases of pension and healthcare expenditures. Policy measures outlined in the programme aiming at containing these risks include mainly parametric changes of the pension and healthcare systems, which may be insufficient to secure the long-term sustainability of public finances. In a situation of rapidly increasing government debt, achieving and maintaining primary surplus is essential to ensure long-term sustainability. Furthermore, the budgetary strategy based on a gradual consolidation over the programme period needs to be complemented by measures that address directly the expected surge in age-related expenditures, including a comprehensive reform of pension and healthcare systems.

3. Employment perspectives and problems

Labour market (and also macroeconomic indicators) will be affected by the changing age profile of the population.

The labour market development will depend to a large extend on the decreasing participation rate (from 70.5% to 56.3% — see figures in Table 2).

Raising employment rates is a key to ensuring sustainable public finances and higher potential growth rates.

The Czech Republic is approaching total the employment targets of the Lisbon strategy (see figures in Table 4).

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Males</th>
<th>Females</th>
<th>Older workers total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>64.7</td>
<td>73.1</td>
<td>56.3</td>
<td>42.3</td>
</tr>
<tr>
<td>EU – 25</td>
<td>62.9</td>
<td>70.8</td>
<td>55.0</td>
<td>40.2</td>
</tr>
<tr>
<td>EU – 15</td>
<td>64.3</td>
<td>72.5</td>
<td>56.0</td>
<td>41.7</td>
</tr>
<tr>
<td>Lisbon target</td>
<td>2005-2010</td>
<td>67-70</td>
<td>57-60</td>
<td>50</td>
</tr>
</tbody>
</table>

*The employment rate is calculated by dividing the number of people aged 55-64 in employment by the total population of the same age group.

5 The employment rate is calculated by dividing the number of people aged 15-64 in employment by the total population of the same age group.


For strengthening the adjustment mechanisms of the labour market in the expected trend of ageing population, the ministry of Labour and Social Affairs CR has identified the following as the key labour market issues:

- Limited offer of vacant jobs across most of the Czech territory, with the most critical gaps existing within the Moravian-Silesian and Ústí regions that have been most seriously hit by the restructuring and scale-downs of the current core industries;
- Skills mismatch of the released labour force offer and demand (the structural unemployment);
- Monitoring and evaluation of progress and results; and
- Reinforcing the roles of the other labour market actors and cooperation with them (social
partners, regional and local partners and non-profit organizations).

From the labour market situation and the Czech membership to the EU a necessity follows to write the mid-term objectives and long-term conception of the national employment policy that shall:

- Recognize the principles and aims of the European Employment Strategy as expressed in the new generation of the Broad Employment Policy Guidelines, as well as the Lisbon process objectives;
- Set the national concept of the substantive and time scales to achieve the Lisbon process objective, while reflecting the Czech labour market situation and needs, until 2010;
- Set the Government goals relating to the unemployment solution over its term of office, as its mid-term objective.

In accordance with a decision by the European Council, the Ministry of Labour and Social Affairs CR prepared the National Action Plan of Employment (2003) oriented to four pillars: improving employability, developing entrepreneurship and job creation, encouraging adaptability of business and their employees, strengthening equal opportunities policies for women and men5.

The National Action Plan of Employment has similar features to those of the European Employment Strategy11 and is closely linked to the Lisbon objectives12.

The emphasis of the employment policy will need to shift towards promoting improved employability as a prerequisite to ‘an efficient cleanup’ of the labour market, while at the same time reducing high levels of long-term unemployment and focusing on prevention of social exclusion. The fundamental requirement for the employment policy during the forthcoming period will be to seek politically acceptable solutions of consequences of the structural changes. The size of the envisaged drop in employment that will translate into the growth of unemployment will, to a considerable degree, depend on the steps adopted.

4. Welfare system and competitiveness

The Czech Republic like other EU member states is confronted with an ageing of its population which is hurting its competitiveness.

These demographic forces explain why two-thirds of the budgets of the Czech Republic and other European nations are broadly directed to expenditures on education, health and pensions. When the population gets older, the objective of just maintaining the same level of benefits in health or retirement plans actually means an increase in the state’s expenses.

Adolf Wagner, a leading German economist of the 19th century, and advisor to Bismarck in establishing the German social system, already underlined long ago that the more a country becomes wealthy, the more its social expenses increase and are difficult to reduce13.

This so-called “Wagner’s Law” is killing competitiveness. With growth under 3%, the Czech economy and the economies of other European nations simply cannot afford to maintain their welfare systems at current levels. Reforms prove almost impossible to enforce or, at best, are adopted too slowly.

REFERENCES
A project of Gradual Retirement in Croatia

by Vladimir Miletic
Metrokon, Zagreb

1. Older workers and unemployed under strain

The situation in the Croatian economy is characterized by a GDP per capita of around 5000 to 6000 USD, modest economic growth of 4% per year, a large number (over one million) of retired people and an unemployment rate around 20%. In this environment the most vulnerable groups would appear to be the unemployed and retirees with low pensions. The government as well as many independent institutions and economists are proposing different plans and ideas, which would help speed up economic growth and improve living standards in the country. One such idea is the project of gradual retirement.

2. ‘Gradual retirement’ project

A group of independent experts, economists and lawyers, coordinated by Royal, a pension insurance company in Zagreb, Croatia, has been working for two years on the project of ‘Gradual Retirement instead of Early Retirement’. This project is inspired by the philosophy of the fourth pillar and tries to implement its ideas in the Croatian environment.

This project has taken into account all the circumstances mentioned above. The project aims to address the two most vulnerable groups of Croatian citizens. The basic idea, therefore was to diminish the number of people retiring early, with consequent lower pensions, and to open up possibilities for employing younger participants in the labour market.

The idea of promoting longer working life is quite new for the Croatian society, so the project would start with two smaller but significant groups within the population:

• firstly, employees who became entitled, or in some cases, forced to retire early, with pensions up to 20% less than full pensions, and
• secondly, employees who will soon become redundant, and thus unemployed.

The project offers employees who become entitled to take early retirement the following option: instead of going into early retirement, they should be encouraged to stay in service and work half the regular working hours, e.g. 20 instead of 40 hours a week. The term for this form of employment is ‘part-time work’.

The second group is made up of employees who will be redundant, and consequently unemployed, but need less than five years to meet the conditions for early retirement. As unemployed they have the right to the unemployment allowance and some additional help to cover overhead costs and some medical and similar costs. The project is trying to persuade employers, employees and the state alike to retain these people at work, always in the above-mentioned form, i.e. that they would work half the regular working hours, e.g. 20 instead of 40 hours a week. The term for this part of the project is ‘shortened working time’.

This project is not possible under the current provisions of the Croatian employment law. Therefore it is proposed that the legal changes, which would make this flexible part-time
work possible, be introduced into the Croatian employment law. In the so called ‘part-time work’ the qualifying period for an employee would be calculated according to the working hours he/she effectively puts in this plan. According to the plan, an employee would be credited with a six-months period of contribution for one calendar year of work. On the other hand, in the ‘shortened working time’ part of the scheme an employee would be credited with a contribution period as if he/she had worked full time. The reason being that the second group is generally much younger and could lose much more from the qualifying period of contribution.

3. Incentives, partial pension

According to the project, employees will earn half of the regular salary for half working hours. As an incentive the state would add a certain amount to the salary. This amount would not exceed the unemployment allowance, which is now 1,000 HRK monthly, about 133 EUR. This amount should be tax-exempted.

As an additional incentive for the employees, this project provides a purchased partial pension. For every year in the project, every employee would be entitled to a partial pension in the amount of 2% of the average gross salary in Croatia in the previous year. At present this would be roughly 100 HRK. For five years, which is the maximum period provided for in the project, an employee could augment his/her basic state pension by roughly 500 HRK, about 67 EUR. This might seem very low by European standards, but we must bear in mind that the average pension in Croatia is still less than 2,000 HRK (267 EUR). So the partial pension would not be insignificant for many members of the plan. The contribution for the partial pension would be paid by the state to the insurer operating the plan. The partial pension would be a lifelong monthly benefit, adjusted like a state pension and would include the entitlement to a survivor’s pension after the death of the pension beneficiary. Like the basic state pension, the partial pension is subject to taxation, payable by the Croatian Pension Insurance Institute (CPII).

The monthly payments (up to 1,000 HRK) would be channelled from the state agencies for employment and development to commercial life insurers (there are more than 10 in the country) which could operate the scheme. At the end of the year, by mutual agreement, the state agencies would also pay to the insurers the contributions for the partial pensions for all employees who were working the full year and consequently were beneficiaries of the scheme.

The project requires some expenditure for the state to provide the incentives for the scheme, but at the same time the state saves substantial sums on early pensions and unemployment allowances. The most important thing, however, is that older workers will remain at work and will be active and not passive members of the community. In many cases, employers could benefit from the knowledge and experience of older workers.

4. Possibilities for new employment, lifelong learning

As a possible and desirable outcome, two older workers would now work 40 hours a week between them, leaving one free working place for a new, young employee, who could at the same time get practical experience working together with older workers.

These basic changes in the employment law would be accompanied by additional regulations promoting the vocational education of older workers. Some experts from the European Commission are already active in Croatia to evaluate education programmes
which will be funded by the EU.

5. Conclusions

The authors of the project are currently trying to present it to the Government and the Union of employers. First reactions are mixed, which is not very surprising. On the other hand, trade unions reacted favourably to the project. This project requires changes in some laws, but most of all we need changes in attitude, mentality and culture.
Private Health Insurance in OECD Countries: 
A Policy Brief

1. Introduction

Health spending in OECD countries averages more than 8% of gross domestic product (GDP) and the share is rising. Overall, some three quarters of that spending is publicly financed. Private health insurance accounts, on average, for only a quarter of private-sector financing, although there is great cross-country variation. In a third of the OECD member countries at least 30% of the population has private health insurance, while market size is negligible in nearly as many countries. Private health insurance also plays a variety of roles, ranging from primary coverage for particular population groups to a supporting role for public systems.

Policy attitudes towards private health insurance also vary. Some governments do not see private health insurance as an important or desirable component of their health systems. Others consider it to be a pillar of the health system. Governments look to private health insurance to supplement public financing, or in some cases to replace it, for a variety of reasons. It may simply be a matter of finding an alternative source of financing to increase the capacity of the health system, or a means to achieve other health policy goals, such as greater individual responsibility for health-care funding.

Private health insurance can help governments attain health system performance goals, but can also put them at risk. The effect depends, in part, on the role of private health insurance, in terms of market size and function with respect to public systems. In countries where private health insurance plays a prominent role, it can be credited with injecting resources into health systems and helping to make them more responsive. However, it has also given rise to considerable equity and cost control challenges in most of those same countries.

This Policy Brief looks at trends in private health insurance in OECD countries and at the opportunities and challenges created by these markets. It also depicts useful practices that can help policy makers employ private resources to help them achieve health policy goals.

2. What is the role of private health insurance in OECD countries?

In the United States, the Netherlands and Germany, private health insurance is a source of primary coverage for population groups without access to public health cover. Under the US system, in which public coverage through Medicare and Medicaid is restricted to the elderly, disabled and certain poor groups, 72% of the population has some form of private health insurance. In the Netherlands, nearly a third of the population — those in the upper-income bracket — is excluded from publicly funded insurance; almost all of those excluded buy private primary coverage. Germany, on the other hand, is the only OECD country allowing

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1 OECD’s study on private health insurance. The main authors of the team who worked on the study are Francesca Colombo and Nicole Tapay.
individuals above an income threshold to opt out of social health insurance.

In Australia, Ireland, New Zealand and the United Kingdom, where privately funded providers operate in parallel to the public delivery system, private health insurance duplicates existing public universal coverage, offering a private alternative. Nearly half of the Australian and Irish populations purchase a private health insurance policy, making these the largest duplicate markets across the OECD.

Private health insurance also complements financing from public programmes in many OECD countries by covering cost-sharing under those arrangements.

Table 1: Population covered by private health insurance and by public coverage systems, 2000

<table>
<thead>
<tr>
<th>Country</th>
<th>Private health insurance (% of total health expenditure)</th>
<th>Population covered by PHI (%)</th>
<th>Types of private coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>7.3</td>
<td>44.9</td>
<td>Duplicate, Complementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40.3</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Austria</td>
<td>7.2</td>
<td>0.1</td>
<td>Primary (principal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31.8</td>
<td>Complementary, Supplementary</td>
</tr>
<tr>
<td>Belgium</td>
<td>n.a.</td>
<td>57.5</td>
<td>Primary (principal), Complementary, Supplementary</td>
</tr>
<tr>
<td>Canada</td>
<td>11.4</td>
<td>65.0 (e)</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0 (e)</td>
<td>negligible</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.6</td>
<td>26 (1998)</td>
<td>Complementary, Supplementary</td>
</tr>
<tr>
<td>Finland</td>
<td>2.6</td>
<td>10</td>
<td>Duplicate, Complementary, Supplementary</td>
</tr>
<tr>
<td>France</td>
<td>12.7</td>
<td>92</td>
<td>Duplicate, Complementary, Supplementary</td>
</tr>
<tr>
<td>Germany</td>
<td>12.6</td>
<td>18.2 of which:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.1</td>
<td>Primary (supplementary)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.1</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Greece</td>
<td>n.a.</td>
<td>10</td>
<td>Duplicate, Supplementary</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.2</td>
<td>negligible</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Iceland</td>
<td>0 (e)</td>
<td>negligible</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Ireland</td>
<td>7.6</td>
<td>43.8</td>
<td>Duplicate, Complementary, Supplementary</td>
</tr>
<tr>
<td>Italy</td>
<td>0.9</td>
<td>15.6 (1999)</td>
<td>Duplicate, Complementary, Supplementary</td>
</tr>
<tr>
<td>Japan</td>
<td>0.3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Korea</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Supplementary</td>
</tr>
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<td>Luxembourg</td>
<td>1.6</td>
<td>2.4</td>
<td>Complementary, Supplementary</td>
</tr>
<tr>
<td>Mexico</td>
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<td>New Zealand</td>
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<tr>
<td>Netherlands</td>
<td>15.2</td>
<td>92 of which:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28.0</td>
<td>Primary (principal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64</td>
<td>Supplementary</td>
</tr>
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<td>Norway</td>
<td>0 (e)</td>
<td>negligible</td>
<td>n.a.</td>
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<tr>
<td>Poland</td>
<td>n.a.</td>
<td>negligible</td>
<td>Supplementary</td>
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<td>Portugal</td>
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<td>14.8</td>
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<tr>
<td>Slovak Republic</td>
<td>0 (e)</td>
<td>negligible</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Spain</td>
<td>3.9</td>
<td>13 of which:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.7</td>
<td>Primary (supplementary, principal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.3</td>
<td>Duplicate, Supplementary</td>
</tr>
<tr>
<td>Sweden</td>
<td>n.a.</td>
<td>negligible</td>
<td>Complementary, Supplementary</td>
</tr>
<tr>
<td>Switzerland</td>
<td>10.5</td>
<td>80</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.7 (1994)</td>
<td>&lt;2</td>
<td>Complementary, Supplementary</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.3 (1996)</td>
<td>10.0</td>
<td>Duplicate, Supplementary</td>
</tr>
<tr>
<td>United States</td>
<td>35.1</td>
<td>71.9</td>
<td>Primary (principal), Complementary, Supplementary</td>
</tr>
</tbody>
</table>

Notes: Negligible indicates a proportion covered of less than 1%; n.a. indicates not available; (e) estimated.
This type of coverage predominates in France, where complementary insurance reaches over 90% of the population. In the United States, individuals eligible for Medicare can buy policies covering co-payments or other service gaps in the public programme.

Finally, in many OECD countries private health insurance supplements public systems by financing goods and services that are excluded from public coverage.

Private health insurance is purchased by 65% of the population in Canada, where the supplementary role is the sole permitted function of private health insurance in most provinces, while in the Netherlands nearly all of the population with social health insurance purchases supplementary insurance. In Switzerland, 80% of the population supplements basic mandatory health coverage with a voluntary private health insurance policy.

### 3. Types of private health insurance

Private health insurance is used at different levels, and for different reasons, in individual OECD countries. In some countries it is the primary source of health coverage for at least part of the population; in others it duplicates the public system, offering a private alternative; and finally it acts as a complement or supplement to public programmes.

The variety of roles and market sizes of private health insurance in OECD countries (see Table 1) arises from several factors. Many countries with large markets have a tradition of private health financing and insurance markets. Statutory health coverage and delivery systems affect which services, providers and population groups private health insurance covers, and government attitudes towards private health insurance markets shape their structure and dimension. The presence of employer-based private health insurance often contributes to explain high levels of private coverage (as in the United States, Canada, and France). Consumer desire to obtain more and faster care, or the level of satisfaction with publicly funded services also influences demand for private health insurance.

### 4. Does private health insurance improve access to care and coverage?

The contribution of private health insurance to improving access to health coverage and health care has varied depending on how large a private market has developed and how broad a pool of risks it covers.

For example, public health insurance markets have not developed enough to provide significant financial protection in Korea, Mexico, Greece or Turkey, despite large gaps in the population or services covered by public systems. This could be the result of several factors, ranging from lack of a history of health insurance markets to premium affordability considerations. Even where private markets have developed, access to coverage remains a key challenge. Where private health insurance is under little or light regulation, higher-risk individuals have often faced difficulty in obtaining policies at an affordable price. Several OECD countries have introduced measures to promote availability and affordability of insurance, which apply either to the entire private health insurance market or to that part of it servicing high-risk groups. Clearly, when public coverage is not comprehensive or universal, private health insurance has enhanced access to care. But such access is often inequitable, largely because private health insurance is typically purchased by high-income groups. In duplicate systems, for example, private health insurance provides a level of care, choice and speed of access above that offered by public systems to those who can afford to pay for it. Privately insured patients may benefit, in particular, by obtaining shorter waiting times for
elective surgery. But there is no clear evidence that waiting times are also reduced in the public sector, the only choice for those on lower incomes.

There are also equity issues arising from the fact that in some countries the private health-care sector pays providers more than they could earn in the public system. While this encourages high service volumes and productivity in the private sector, the quality and quantity of publicly financed services might suffer as a consequence, especially when providers’ responsibility and obligations to public patients are not clearly defined and monitored. To avoid such problems, policy makers in some systems have introduced regulations limiting the possibility for privately insured persons to enjoy a superior level of care and choice, as in the case of the Netherlands. This minimizes the risk of creating two levels of health care according to insurance status and, therefore, ability to pay.

5. Does private health insurance create more choice and responsiveness?

Private health insurance has enhanced consumer choice and the responsiveness of health systems in many OECD countries. First, the opportunity to buy private health insurance in itself offers consumers an additional level of choice with respect to financing health-care services and providers on an out-of-pocket basis. Second, private health insurance has improved individuals’ choice over health providers and timing of care in most countries with duplicate markets — although the scope of this added choice depends upon the freedom of choice already existing within public systems. Third, most private health insurance markets offer a wide array of products to consumers, allowing them to tailor their risk and product preferences.

Clearly, for consumers to exercise meaningful choice, insurers’ marketing and product information materials need to be clear and enable comparisons across the market. Consumers have complained about the quality of product information at the point of sale in some countries. Governments or private organizations have intervened by disseminating comparative information on the quality, features and cost of health plans in some countries, such as the United States and Switzerland.

But an abundance of product choices can make it harder for higher-risk patients to find coverage, to the extent it results in segregation of the market by risk level. To avoid the problem of vulnerable groups being priced out of the private health insurance market, as has occurred in some OECD countries, some policy makers have limited the scope for insurers’ flexibility and innovation. For example, they have regulated the minimum benefits that insurers must cover, required insurance products to be standardized, or limited the extent to which insurers can refuse cover and rate premiums on the basis of individual risk.

6. Does private health insurance promote high-quality care?

Private health insurance has had only a minimal impact on the quality of care in most OECD countries, since private insurers have not usually engaged in significant efforts to influence the quality of the services they finance. The lack of effort is due to a combination of factors, ranging from lack of regulatory and financial incentives for insurers, to a desire not to restrict individual choice, as well as resistance from health-care providers to the introduction of a new source of influence on decisions over appropriateness of care. The United States has been the only OECD country where some private insurers, known as managed care plans, have been substantially involved in efforts to influence some aspects of care delivery. Despite indications of some effectiveness, the overall evidence of the impact on quality of care is mixed: such plans do not appear to have fundamentally changed clinical processes. Payment
incentives that do not consistently reward plans’ or employers’ efforts to improve quality and inadequate quality-measurement and reporting systems, explain the still small and non-systematic impact of private health insurance on quality improvements in the United States.

7. Has private health insurance helped to relieve cost pressures?

Policy makers often look to private health insurance markets as an alternative or additional source of funding for publicly financed health systems, especially when these budgets are stretched to capacity. Yet health systems in OECD countries continue to be predominantly financed from public sources, which account, on average, for 72% of total health expenditure, compared to 6.3% for private health insurance and 19% for out-of-pocket payments. Only in the United States does private health insurance exceed a third of total health expenditure, at 35%, while it goes above 10% only in the Netherlands, Canada, France, Germany and Switzerland (Figure 1). Whatever the role played in a health system, private health insurance has added to total health expenditure. Most OECD countries apply less government control over private sector activities and prices, compared to public programmes and providers. Private insurers tend to have less bargaining power over the price and quantity of care as compared with public systems, particularly single-payer ones. Countries that have multiple sources of primary coverage, including those with significant private health insurance market size, tend to be those with the highest total health spending levels per capita, such as the United States, Switzerland, Germany and France.

8. Has private health insurance shifted cost from public systems?

There are a number of reasons why private health insurance has not significantly reduced public financing burdens. For one thing, people with private insurance often continue to rely upon publicly financed hospital services in duplicate markets. Privately financed hospitals have often focused on a limited range of elective services, leaving the responsibility for more expensive services or populations to public programmes.

Second, in OECD countries that have restricted eligibility for public insurance to lower-income and vulnerable groups, leaving the rest to buy primary private health insurance (the United States, the Netherlands, Germany), public spending on health as a percentage of GDP is not lower than that of many countries that provide universal public coverage (Figure 2). This can be partly explained by the concentration of healthcare cost among a small fraction of the population that is generally publicly insured — such as the elderly, chronically ill, and long-term disabled. Third, de-listing of services from public coverage, another strategy to shift cost onto the private sector, has generally remained confined to less expensive services, which may be paid for out-of-pocket or through supplementary private health insurance policies.

In some cases, private health insurance has actually added to public expenditure on health or public costs generally. Where private health insurance covers cost sharing on public coverage systems, as in France, the resulting increases in use of services raise the cost of publicly financed health systems. In addition, countries that grant significant public subsidies to private health insurance, as Australia and the United States do, have seen a reduction in government revenue or an increase in public cost.

9. Does private health insurance make health systems more efficient?

While private health insurance is often viewed as a tool to enhance efficiency, the evidence
Fig. 1: Health expenditure by source of health financing, 2000 (%)

Source: OECD Health Data 2003, 2nd edition
Note: Countries are ranked by decreasing size of PHI
shows it has made only a small contribution so far. Several reasons explain this performance. Insurers need to sustain high administrative costs in order to attract and retain clients, provide them with a diversity of insurance plans, and negotiate multiple contractual relationships with providers. Furthermore, in several OECD countries, insurers have had few incentives to manage care cost-effectively, due to a combination of desire not to restrict individual choice, providers’ resistance, and the cost of implementing such action.

Difficulties in extracting efficiency improvements from private health insurance markets can also come from the way in which insurers compete. In several OECD countries, insurers are confronted with limited competitive pressures as there is little consumer mobility across insurers. It is attractive for insurers to employ cost-shifting and selection of risk as a means of insurer competition and protection against adverse selection, rather then improving the cost-effectiveness of care provided to clients. Finally, the lack of ‘vibrant’ price and quality competition among providers inhibits market forces in insurance markets, for example if providers exercise dominant market power, leading them to demand high prices for health services and shielding them from insurers’ pressure to improve quality or cost-effectiveness of care.

10. How can policy makers use private health insurance to improve performance?

A system based on competing primary insurers can improve responsiveness and consumer choice, but at increased cost. Where private health insurance is the primary source of coverage for certain population groups, it may be particularly challenging to assure adequate access to coverage for vulnerable populations. Regulations to address market failures and promote equity have costs, in terms of government resources and diminished insurer flexibility to innovate.

Duplicate private health insurance markets can serve as a lever to improve systems’ responsiveness when policy makers consider it appropriate to ration public health expenditure according to individuals’ willingness to pay. Yet this generally results in differences in access to care and coverage according to insurance status. The degree of differential access that occurs, and the extent to which these access variations are considered equity challenges vary by country. In addition, duplicate private health insurance has not significantly reduced public health expenditure.

In the presence of significant cost sharing within public systems, complementary private health insurance helps ensure access to needed care. However, full private coverage of such cost sharing encourages insured individuals and providers to increase utilization. Unless some cost sharing is retained to encourage individual cost awareness, private health insurance hinders efforts to control public systems’ outlays.

Finally, supplementary coverage provides individuals with an opportunity to buy financial protection against risks associated with services not covered by public programmes. Removing public sector coverage of some health services helps reduce public expenditure. However when utilization of supplementary services is linked to publicly financed services, this increases public costs. As private health insurance markets generally have less comprehensive reach than does public coverage, decisions to de-list services need also to weigh the desired reductions in public sector cost against the equity implications of lack of public coverage.

Policy makers have a number of tools at their disposal to address these challenges.

• Access-related standards help to promote insurance coverage for high-risk persons and may be particularly useful in primary private health insurance markets. The need for these interventions often depends on the comprehensiveness of the benefits they apply to, and the
extent to which the costs of any high-risk coverage are cross-subsidized by other private insurees or by other financing sources. If publicly funded systems provide adequate access to needed health services, policy makers may question the need for such interventions in their markets.

- Although private health insurance can create disparities in access to health care between those with and those without private cover, policy makers can intervene by regulating the roles that private insurance is allowed to have; regulating price differentials between publicly and privately financed medical practice; specifying providers’ obligation to public patients and monitoring compliance with those obligations.
- Maintaining at least some modest cost sharing in public systems that cannot be insured against helps to minimize undesired cost consequences of complementary private health insurance.
- Policy makers can maximize effective choice within private health insurance markets by fostering readily understood comparative information and product disclosure requirements. Some limits on benefit packages may be appropriate, particularly if products are sold to vulnerable population groups. Yet, benefit standardization reduces the insurers’ ability to innovate and tailor products to individuals’ demands.
- Policy makers can maximize cost shifting between the public and private sector by encouraging private insurees not to rely on public systems for privately covered services. They also need to assess whether subsidies towards private markets are self-financing and appropriate by weighing carefully their costs and benefits. Applying cost-control measures within the overall health system, including the private sector, improves the ability to control cost within private markets.
- Incentives or regulatory requirements might facilitate efforts to improve cost-effectiveness of care. Examples include removing insurers’ obligations to contract with all providers, or providing incentives for insurers to be involved in preventative care or care management. Improved consumer information could facilitate effective competition among insurers. Systems to compensate insurers with a worse risk structure can help reduce insurers’ incentives to select good risks, thus promoting equitable risk pooling. However, they can also reduce or remove incentives for insurers’ efficiency.

FOR MORE INFORMATION
For more information on the OECD’s work on private health insurance, contact Francesca Colombo, francesca.colombo@oecd.org, tel. (+33) 1 45249360.
More information on private health insurance is available at: www.oecd.org/health, by clicking on ‘OECD Health Project’ and then on ‘OECD Study on Private Health Insurance’.
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REFERENCES


The Role of Management in Healthcare Reform Process in Slovenia

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Abstract
One of the most important levers for making the healthcare system in Slovenia more efficient through the implementation of an urgent reform process in the near future is to use a services management approach — management as in a planning, organization, information and controlling system and a decision-making process in the proper choice of leadership for healthcare institutions. The different political options in Slovenia could change the orientations and the solutions concerning relations between public and private sector healthcare. The question of efficient leadership in healthcare institutions remains. Business and managerial functions are basic tools for harmonizing and for overcoming the problems among medical and business sectors in healthcare institutions such as hospitals and clinics.

Keywords: healthcare system, reform process, management.

1. Presentation of some basic problems

Citizens want to have access to a healthcare service whenever and wherever it is needed. Asked what the main weaknesses of Slovenian healthcare are, Slovenes put waiting times on top of the list (MZ, 2000). Bad organization of services comes second, and bad quality third. Slovenes are sensitive to the perceived differences in accessibility and want to know whether accessibility is truly determined solely by different health needs. They want higher quality healthcare services and access to information about good practices, positive models, problems and bottlenecks. They expect more sensitivity on the part of medical staff and greater involvement in decision-making about issues concerning their health and life.

Health workers have their expectations as well. It would be unjust to claim that these expectations solely concern their income. They wish to help their patients. They do not want to bear a responsibility that is not theirs, and they do not want to wonder in fear whether or not their patients will survive until the future date of an operation. They would like to offer citizens the best medical care that science and technology can provide. They want a stimulating working environment, opportunities for personal professional development and participation in decision-making while maintaining the autonomy of their profession. They want fair competition in their profession, and they want us to find a systematic way to eliminate the levelling of wages and to reward the quantity and quality of the work performed. They expect outdated hierarchies to be supplemented by teamwork.

The state is aware that it must be a good steward of the healthcare system, which was entrusted to the state by its real owners — the citizens. Stewardship means commitment and responsibility to the needs of citizens being met in the most efficient and high-quality manner. The aim of the state is better health for all citizens and a stable healthcare system.
The state is aware that health must be preserved and strengthened not only as a fundamental human right, but also as support for the development of human potential.

Slovenia is distinctive among the transitional economies to the extent that it largely retained its basic values concerning health care in the first decade of its independence — that it did not allow money rather than health needs to open the door to the healthcare system. Its Constitution states that the right to social security includes a guarantee of access to health services for all without distinction in relation to personal circumstances including wealth. However, with the reform of the health system in 1993, we withdrew from some values, especially in terms of solidarity in healthcare financing. Some other values, which we would otherwise wish to strengthen, have not yet reached the levels of a just, social and effective state.

Administration and management of public healthcare institutions will more closely approximate those in public enterprises. Councils of healthcare institutions will be transformed into supervisory councils. In addition to supervision, they will also have a guiding role in strategy preparation. A management body will be established, whose members will be individually and collectively responsible to the supervisory council. Management on all levels will be evaluated on the basis of professional and financial results. Public healthcare institutions will be responsible for the overall treatment of patients from entry into the system because of a specific problem to the completion of treatment.

2. State stewardship of the healthcare system

Because of their close ties with people, their needs and expectations, healthcare systems are in most cases public systems. Health is the most important ingredient of national and individual well-being. In a way, it is ‘owned’ by individuals, as are the resources (financial as well as material and informational) intended for health. As people have difficulty in managing these resources individually, they have entrusted the state with the stewardship of the entire healthcare system. As stated above, stewardship of the healthcare system means commitment and the responsibility to the needs of citizens being met in the most efficient and high-quality manner. Primary responsibility for this stewardship, of course, lies with the Ministry of Health.

Growing demands for increased efficiency, quality and responsibility for the economic management of resources in the public sector in the last decade have, in European countries, given rise to a transfer of entrepreneurial methods, tools and activities into the public and non-profit sectors. Where the state used to participate in direct management of healthcare institutions, it withdrew from that form of management and retained only a regulative role — that of steering and directing the healthcare system. In the new spirit of stewardship, the state retained and strengthened its obligation to steer the healthcare system with the highest regard for ethics, quality and effectiveness. In this sense, state regulation can be understood as a kind of compromise between the rigid system of direct control and management of institutions by the state on the one hand, and the system of market competitiveness on the other.

3. Elements of the healthcare system

Elements of the healthcare system are:

- healthcare users — in the system, they are either direct payers for healthcare services and products or indirect payers — as insurees with compulsory and voluntary health insurance;
- healthcare benefits — services and products intended for meeting the needs of healthcare;
• healthcare organizations — providers of healthcare goods; and
• the state — in the healthcare system, the state acts in the best interests of the society either by being directly involved in the management of healthcare organizations and compulsory health insurance organizations or by regulating the performance and effect of those organizations with appropriate measures.

Healthcare organizations comprise healthcare providers and health insurance organizations. The latter can be either compulsory or voluntary health insurance organizations. Healthcare organizations are part of the Slovenian public sector, and thus the Slovenian healthcare system is becoming an integral part of this sector.

4. Healthcare organizations

Healthcare organizations comprise healthcare providers and health insurance companies. Healthcare providers are mostly public organizations as they provide mostly public healthcare. Public organizations can be either public institutes, in which the state directly brings public interests to bear through management and financing, or public companies owned by the state. Public companies are governed by general laws relating to undertakings supplemented by specific public company acts; public institutes are established on the basis of specific laws which are not part of general laws relating to such undertakings. In Slovenia, public healthcare providers are, in accordance with the law, at the moment organized as public institutes. In addition to public institutes and public companies healthcare can also be furnished by private providers (in Slovenia this is already the case in primary healthcare) and private companies (a number of such companies have already been established in Slovenia).

Healthcare providers can combine the supply of public and private goods and services, and finance their activities from compulsory health insurance funds and revenues from the market, i.e. voluntary health insurance funds.

Together with individuals, who are primary in the market of healthcare services and products, compulsory and voluntary health insurance companies are the so-called 'payers' of healthcare.

5. Financing of healthcare organizations

Financing of healthcare is carried out in two fundamental ways. Private healthcare is financed through the market; sources for this kind of financing are incomes of individuals and voluntary health insurance funds. Public healthcare is financed through compulsory health insurance. With compulsory health insurance, the state must ensure healthcare finances such that the scope of supply of healthcare meets the demands of the entire society and not only the needs of the total number of individuals who appear in the healthcare goods market at any given moment. The state must determine social needs on the basis of its capacity and traditional and cultural standards. It must also ensure an adequate level of equality and fairness regarding access to healthcare. With proper planning, the state must not only ensure the amount of financial resources for healthcare that is in the public interest, but also determine the needs for particular healthcare services and products, and adequately allocate the resources among healthcare providers. The state carries out this task through compulsory health insurance companies.
6. Role of the state in administration and regulation of the healthcare system

In the healthcare system the state acts in the public interest, as healthcare is a matter of public concern; consequently, determining what is in the public interest cannot be left to the market. This is why the state must ensure that the following values are preserved and strengthened:

- equality and fairness — to provide equitable and need-based access to healthcare for the whole population, including poor, elderly, disabled and other vulnerable groups;
- social cohesion — to provide universal healthcare through a health insurance system or a national healthcare scheme;
- economic efficiency — to contain aggregate health expenditures within financially sustainable boundaries;
- health and safety — to protect workers, to ensure water safety, to monitor food hygiene, etc.;
- informed and educated citizens — to educate citizens about healthcare services, medicines and healthy life-styles;
- individual choice — to ensure a choice of provider and insurance company as far as possible within the limits of other objectives.

7. Conflicts of interest in healthcare system

7.1. Interests of citizens — The available resources

More than any other system, the healthcare system is characterized by a split between two basic interests: the desire of citizens for the largest possible scope and highest possible quality of health benefits, and the desire of the state for stable public finances when it shapes the public system on the demand side. From the state, which must establish an equilibrium between both interests, this split is transferred to the management of healthcare organizations; in its own environment, the management is under continuous pressure for increased spending on the part of health workers, producers and suppliers of medicines and equipment, and recently better informed users.

7.2. Interest of the society — Interest of the institutes

Management in healthcare organizations is characterized by low sensitivity to national priorities. Managers are willing to take risks for their own institutes, but are simply not interested in what is happening to other entities in the healthcare system. Furthermore, in the interest of their institutes, they are willing to make decisions which are harmful to the system as a whole, ignoring the interests of competitors. From the point of view of market behaviour, such steps (if they remain within the law) are acceptable and even laudable; however, from the point of view of the public system in which every entity has to protect public interests as well as its own, they are totally unacceptable.

7.3. Interest of a physician in a particular patient – Interests of future patients

Physicians, who actually decide upon the utilization of the majority of healthcare funds, always bear in mind the interests of the patients they treat. They try to provide the patients with everything that the profession and the healthcare system have at their
disposal. In so doing, they often ignore the fact that more patients will seek treatment in the future and, due to the limited amount of resources available, will not receive the same scope of services and attention as current patients. Many people agree that physicians should demonstrate equal loyalty to their current and future patients.

7.4. Problems related to the demarcation between market interests and social interests in healthcare

Many states have difficulty defining the benefits package available to their citizens within the framework of public healthcare resources. To supplement the model, they are introducing complementary insurance for services not included in the above-mentioned benefits package. Regulation of the right of individuals to the healthcare financed from public resources is one of the greatest challenges for all healthcare systems. The task is also related to the classification of healthcare services by priorities. Determining the right of individuals to goods and services financed from public resources, means that healthcare benefits available in the market are also indirectly determined. Patients can only obtain these benefits by paying the market price. The scope of benefits, which are not included in the benefits package financed from public resources, but are covered by voluntary insurance or directly paid for, is usually rather limited in developed countries. In most EU countries the percentage of these benefits expressed monetarily is between 10 and 25%.

In Slovenia, there is practically no boundary between the benefits package financed from public resources and the benefits covered by voluntary insurance. Healthcare legislation since 1992 determined co-payments for almost all benefits covered by compulsory insurance and thus forced citizens to obtain ‘voluntary’ complementary insurance coverage. The system where almost all public benefits are financed from public and private resources is a rarity. It not only means that public resources do not guarantee the basic benefits package, but also that no proper market can be developed for the remaining benefits because they are simply too scarce.

7.5. Competition between healthcare organizations

In the healthcare system, the issue of competition is raised in four areas: in the relationship between healthcare providers and buyers — the users of their goods and services —, in the relationship between healthcare providers themselves, in the relationship between healthcare providers and suppliers, and in the relationship between healthcare providers and health insurance companies.

7.5.1. Relationship between providers and users

To a considerable extent, healthcare operates under monopoly conditions, which are usually unfavourable for users as they have no competitive place to go, but are forced to satisfy their needs in public-sector institutions. The monopoly relates not only to the programme defined by the state and payers, but also to the medical profession when deciding what is useful for an individual. Users are not sufficiently informed, and so they do not dictate demand and supply.

It often happens that healthcare providers ‘recommend’ to users those services which are more profitable and which do not necessarily add value to their health. A health worker, being an employee in the public sector, which guarantees a stable position and wage regardless of the
quantity or quality of the work done, does not have to be kind and helpful. As a consequence of high demand, a healthcare institute can realize the entire programme even if individual users should choose another provider. The situation is quite different with private providers who have to make a greater effort to please their users.

7.5.2. Relationship between providers

Analyses show that private providers tend to perform more profitable services; for services that do not guarantee the desired profit, they simply refer patients to public healthcare institutes. They often choose to provide a profitable examination, which increases the number of patients seeking treatment in public institutes, which in turn increases the pressure on, and dissatisfaction with, the public system. The public system must also be willing to accommodate patients with complications that arise during treatment in private clinics, as the latter usually do not have the appropriate capacity for such cases.

7.5.3. Relationship between providers and suppliers

The relationship between providers and suppliers should be based on harsh negotiation on prices in order to reduce the costs for institutes. This is true of private institutes, while in the public system reducing costs is often not a priority. In the foreground are the particular interests of providers ranging from minor favours for physicians prescribing the medicines of particular producers to major bribes for those members of managerial staff who purchase large quantities of equipment, material and medicines.

7.6. Relationship between administrative and managerial functions

One of the greatest organizational weaknesses of all public institutes is the poorly defined relationship between administrative and managerial functions. According to the Institutes Act and Healthcare Act, the managing body of an institute is the council. The council of an institute is composed of representatives of the founder (Republic of Slovenia or communities), employees of the institute, insurees and other users. The council of a public healthcare institute providing services at the secondary level is also composed of members of a community or a town in the territory, where the services are provided.

Because of the high number of employees and consequently quite even representation of organizational units and professional groups, many councils have a membership that is too large and so are inoperative. As representatives of the founder are appointed by the Government of the Republic of Slovenia, the criteria that govern the selection are often other than professional; for instance, the factor determining nomination can be membership in a particular political party.

7.7. Functions of councils

Despite the fact that councils of public healthcare institutes were largely re-organized so that the founder now appoints the majority of members and thus has control over the management, councils frequently do not fulfil their monitoring role, or do it ineffectively. There is no uniform system in place that would include indicators for measuring the efficiency of administration and management of public institutes from the point of view of efficient utilization of public resources in relation to outcomes.
8. The importance of vision, strategic objectives, managerial knowledge and participative leadership styles

In successful organizations, management puts greater emphasis on the mission and vision of the organization. With a few exceptions, the managements of healthcare institutes have not developed strategic management. Core systems of healthcare institutes are mainly oriented toward production and services, and only partly take into consideration the elements of financial objectives directed at short-term financial outcomes. Policies of healthcare institutes are also short-term oriented. Quantitative methods, behavioural science and human resource management are not used as the basis for target and strategy setting. Strategic decision-making is poorly developed and is based on defensive strategies in relation to the external environment of institutes instead of on growth strategies. Healthcare organizations and their management do not actively influence the environment; on the contrary, very often the environment exerts a strong influence on the organizations and their management1.

9. Management in healthcare is still not based on modern know-how

It is characteristic of Slovenian healthcare that after the social changes in the early nineties management did not adapt to the new demands and challenges and did not evolve with the same dynamics as management in economic sectors where business and organizational science flourished. Health workers for a long time considered healthcare management unnecessary. Furthermore, there was also the belief that only a doctor can be a successful director of a healthcare institute, without the need for any managerial knowledge or experience. For a long time there seemed to be no need for social or behavioural science know-how. Information science and knowledge were introduced only to support the basic activity, and not as a comprehensive function of the entire business process and integral part of managerial knowledge2. Consequently, public resources in healthcare are often used irrationally, the organization is frequently inflexible, leadership is autocratic instead of knowledge-based, and the needs of providers are given priority over the needs of users. The necessary changes are most strongly opposed by executive staff. There is no effective supervision over the management in healthcare institutes as yet. In accordance with national law in the sphere of public finances, supervision should be carried out by the founder and the councils of healthcare institutes.

Human resource management in healthcare institutes is still in its early stages. Leadership is autocratic and bureaucratic rather than consultative or participative.

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1 A survey about modernization of operations and introduction of IT, which was carried out in 2000 among the key managers of one of Slovenia’s biggest hospitals, confirms the above claims. More than half (56%) of respondents stated that the hospital did not have a written vision of development, a fifth did not know whether it did or not, and a quarter (26%) claimed that it did. Half of the respondents believed that the hospital had a mission statement, 29% were of the opposite view, and the rest did not know. Opinions as to the existence of the list of business objectives varied. Only 36% believed that the list existed, and 28% believed that it did not. 28% did not know whether or not it existed, and the rest believed it partly existed.

2 A survey, which was carried out in 2000 among managers in Slovenian healthcare, confirms the above claims. Respondents did put managerial and leadership skills in the first place; however, head nurses, technical executives and heads of financial services seemed more convinced that their skills were more important than those of the directors of healthcare institutes. The managers questioned quite evenly evaluated the need for particular skills; in the first place were organizational skills, and in the last two ethical behaviour and creation of a supportive atmosphere. Technical executives were the only ones who put ethical behaviour in the first place. Head nurses gave highest priority to communication and organizational skills, and directors to organizational skills and incentives for stimulating creativity.

Judging by the responses, health workers have considerable interest in additional leadership skills, but not in all areas and depending on their position. Most executives are primarily interested in better containment of costs, cost-effective organization, criteria for evaluation efficiency, standards in healthcare institutes, economics, finances and interpersonal communication.

All the areas where additional skills are desired are related to financial efficiency, which is probably the result of increased financial pressures. Least interest was expressed in protecting the rights of patients, control over sanctions, choice and purchase of equipment, control over the use of medicines, role of the supervisory board, trade union and local community.

Less importance was ascribed to incentives, team work, stress reduction, strategy and resource allocation, i.e. the areas which are more vital for good performance than 'repressive' measures such as rationalization, down-sizing and sanctioning, which were deemed most important.
10. The importance of managerial information technology

From the point of view of their usefulness, many information technology projects in healthcare are ineffectual. Responsibility for inefficient planning, development and use of information technology lies with the managers. The available data show that they are not aware of their needs in this sphere, or are not informed of the possibilities and opportunities that modern information technology provides. Initiators of IT projects are often IT professionals, because the projects are mainly directed at increased efficiency. Instead of seizing the opportunity for a radical change to increase efficiency and establish true ‘e-business’, managers introduce information technology into existing business systems, which are often not the smartest choice.

11. Organizational structure

The organization of public institutes in Slovenia follows the bureaucratic paradigm. Strictly determined rules must be followed, so primary emphasis is on hierarchic control over the employees. The main rule is not to make mistakes.

One of the main weaknesses of healthcare management is definitely the organizational structure. Technical division of tasks (technical structure) is not process-oriented: in healthcare institutes tasks are mostly assigned according to business functions and according to technologies and the nature of assignment. This kind of division enables specialization of the staff for particular tasks, which is good for professional training. But it has numerous disadvantages such as lessened importance of the common goal of the organization (institute), hindered formation of managerial staff due to excessive specialization, attachment of employees to their particular jobs instead of attainment of common objectives, and hindered communication between organizational units.

12. Proposal

The primary objective of reforming the administration and regulation of the healthcare system is to create incentives for service providers to make their organization and management more efficient. The vision is of a modern user-friendly healthcare system that will retain the positive traditional and cultural features of the previous system and secure a high level of equality of access to healthcare benefits and health by means of an efficient healthcare system founded on the best examples of good healthcare practice in the world.

This will be strategically achieved by giving a greater role to the modern regulation rather than administration of healthcare organizations, recognizing the part that private ownership and private funding can play within healthcare and in developing competition, which will force public institutes and companies to adopt standard and efficient forms of organization and management.

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3 A 2001 survey of the Institute for Business Information Technology, which included managers in healthcare, showed that only 14% of them realized the importance of information technology in modernization of operations and information-supported decision-making. Only 7% of respondents expressed a need (and a desire) for additional skills in this area.

4 According to the above-mentioned survey, one of the main obstacles to modernization of operations is “routine practice and work methods”. The second and third obstacles are “existing organizational culture” and “coordination and communication between organizational units”. A substantial obstacle is that “organization units do not feel the need for active participation”.

Main problems:
- business culture (relationships between employees at different levels of hierarchy, doctors not observing working hours, personal interests and personal affirmation, etc.),
- organization (unclear accountability, loose classification of services, poor organizational boundaries, etc.),
- work process (poorly defined procedures, dispersed locations, stocks of medicines, etc.),
- lack of leadership skills, and
- relationship between entrepreneurial and medical professions.
Areas of standardization for service providers are efficiency and effectiveness indicators for healthcare management. These indicators are being prepared within the Ministry of Health’s healthcare system management project, which was finished in 2004. The indicators will enable direct comparisons between healthcare institutes, determine their level of efficiency and effectiveness and with that management performance. These standards will assist healthcare institute councils in their administrative role, and assist the founders when making decisions within their function as the general meeting point.

The next area to be standardized, which incorporates the preceding pair while being a precondition, or necessary tool, for their implementation, is the creation and regulation of IT standards. The purpose of standardizing healthcare IT is to create a standard healthcare information system, and to operate and maintain it. The emphasis in the field of data will be on preparing a national data dictionary with definitions and descriptions of all the terms used in the standardized healthcare information system. In such an information-based environment there will also be the need to publish recommendations on the software and hardware requirements.

The changes to be ushered in by the reform will more clearly define the powers and responsibilities of participants involved in administrating or managing the healthcare system at every level. By analogy with companies, the principle of a management board, consisting of one member or more, will be applied at the management level. Larger service providers will have separate business and medical management. Members of the management board will have to have management qualifications and experience. The supervisory council will appoint the management board, whose members will be individually and jointly responsible to the supervisory council for achieving objectives and performing their functions. Instead of conflicts between the functions of the medical and business management being resolved within the management board to the detriment of one function or the other, they will be resolved by the supervisory council. The main functions of the management board in public healthcare providers of course must be planning, organizing, managing and supervision.

The development of the managerial function will be based on the efficient use of resources (financial, human, material and information), on standardizing and developing healthcare management quality and efficiency indicators, introducing the concept of best management practice to the strategic and operational levels and introducing effective tools such as business planning models, organizational efficiency models, management efficiency models and management information systems. There will be an emphasis on result-oriented management meaning that results will be an essential element for assessing healthcare managers. The Ministry of Health will apply a range of management performance indicators such as economy indicators (cost/investment ratio), efficiency (investment/results ratio) and effectiveness in achieving set objectives, quality of services, human resource management and rationalizing processes.

As the predominant current organizational form for public healthcare institutes is an extremely linear structure based on a strict hierarchy, the reform has to bring in organizational forms based on more efficient organization and employee participation — primarily by means of incentives for senior management. The management board will have to assume more responsibility for implementing the basic tasks of healthcare providers, attaining objectives set by the founder, the more efficient use of resources and above all achieving customer satisfaction. Middle management (heads of departments, units and processes) will have to be included in achieving an institute’s financial and other objectives. The powers and responsibilities of middle management will be determined according to the same principles as those for the most senior management ranks, as will the assessment of their results. Priority will also be given at the middle management level to employees with management qualifications.

One of the more common methods of solving the problems described above that are
encountered in modern health services is to make the transition to a process-based organization. The advantage of process-based organization over traditional organizational functions is demonstrated in the transfer of full supervision and responsibility for process implementation to the management of a business process, known as a profit centre, which is responsible for business performance.

A ‘process’ in healthcare is the entire procedure of treating the patient from first entry to the system to the conclusion of treatment.

In some sectors the basic process-based organization can be supplemented by a project-based organization. The ability to efficiently implement projects using project management skills will be crucial in implementing the institutional changes envisaged by the reform. A project-based organization differs from a process-based organization in that it focuses on implementing complex, one-off tasks. Special attention will be paid to linking up different service providers and attaining clearly set objectives within limited budgets and set deadlines. Project management studies will be part of management training at every level.

Work is already underway within the reform of healthcare management on the formulation of a postgraduate education programme. Three priority areas, or healthcare management levels, have already been formulated. The first is the umbrella or state level — strategic level management. This includes: the Ministry of Health, HIIS, Institute of Public Health, the University Medical Centre Ljubljana and other large hospitals, national institutes and tertiary institutions. The next level covers managers of individual healthcare services, directors of small hospitals and clinics and health centre directors. This is a primary decision-making level and is crucial to individual institutions. Finally there is the third level — middle management — which includes section heads, owners or administrators of private health institutions or private practitioners. Alongside these three levels there is an additional parallel group, covering people involved in defining the network of public healthcare services and planning at the primary healthcare level. These are officials working in social service departments of urban and other municipalities.

13. Conclusion

The basic political, economic and social question of healthcare reform in Slovenia is at the moment and will be in future the question of the relationship between public and private sectors and their part in national healthcare, based on the definition of ‘social state’. Irrespective of these basic national questions, the organization, information, controlling systems and leadership as managerial functions in the healthcare system and process define and will define the realization of the basic functional principles of legality, transparency and effectiveness of the healthcare system on macro and micro levels. All three principles in public and private healthcare sectors governed by state healthcare policy can be realized only through the implementation of effective healthcare management and through effective use of business and managerial functions.

REFERENCES:


THURSDAY, OCTOBER 21 - GIOVEDÌ 21 OTTOBRE

Morning Session

8.45 Welcome/Opening Remarks - Note di apertura
Mr. Patrick Liedtke, Secretary General of The Geneva Association
Prof. Orio Giarini, Director of The Risk Institute, Trieste - Geneva

9.00 Special address - Comunicazione introduttiva
Dr. Sergio Balbinot, CEO, Assicurazioni Generali, ‘Health and Ageing - Salute e allungamento del ciclo di vita’
Chair: Mr. Patrick Liedtke, Secretary General and Managing Director, The Geneva Association

9.15 Session 1: The Biological Limits: Extending the Life Cycle, How Far — Conditions and Consequences;
I limiti biologici - condizioni, limiti e conseguenze dell’estensione del ciclo di vita
Prof. Jean-Marie Robine, Network on Health Expectancy, Montpellier, ‘Limits of Human Longevity: Empirical Evidence’
Prof. Vincenzo Marigliano, University of Rome La Sapienza, ‘Longevity: A Right to Conquer’
Prof. Giorgio Stanta, University of Trieste, ‘Extending Life — Disease Pattern Shift’
11.15 Session 2: Science, Technology and Medical Advances

Scienza, tecnologia e progressi della medicina

Dr. Nicola Pangher, Director of Research and Development, Member of the Board, ITALTBS, Area Science Park, Trieste, ‘Technology Supporting Wellness Management’

Dr. Carlos Cunha de Eça, Medical Director, Médis, Lisbon, ‘Saude 24: A Public-Private Partnership’


Afternoon Session

Chair: Prof. Wolf-Ruediger Heilmann, Member of the Board, GE Frankona Rueckversicherungs AG

14.30 Special Welcome Address - Comunicazione di benvenuto

Mr. Antoine Bernheim, President, Assicurazioni Generali

Session 3: Redefining Health and Disability - La redifinizione di salute e invalidità

Dr. Matilde Leonardi, Italian National Neurological Institute C. Besta, Milan, ‘From Health and Disability to Policy Development with the ICF Classification of the WHO’

Dr. Rafael Lindqvist, Umeå University, Sweden, ‘Health and Disability – The Swedish Model’

Dr. Angelo Carenzi, Director CEFASS (European Centre for Health and Social Affairs Education), Milan, ‘Health and Disability — The Italian Case’

16.30 Session 4: Assessing the Cost of Health and Its Financing

Costi e finanziamento della salute


Dr. Jonas Schreyögg, Technical University of Berlin, ‘Funding Health Care with Medical Savings Accounts — An International Perspective’

Dr. Francesca Colombo, OECD, Paris, ‘Private Health Insurance Experiences in OECD Countries’

FRIDAY, OCTOBER 22 – VENERDÌ 22 OTTOBRE

WORK AND AGEING (The Strategy of the Four Pillars)

Lavoro e invecchiamento (la strategia dei Quattro Pilastri)

Morning Session

9.00 Session 5: Extending Working Lives: Public Policies

Politiche per l’estensione della vita attiva

Chair: Geneviève Reday-Mulvey, Head of the Four Pillars Research Programme, The Geneva Association

Introduction to ‘Work Beyond 60, Employment Strategies for an Extended Life Cycle’
Prof. Raimondo Cagiano and Dr. Benedetta Cassani, University of Rome *La Sapienza*, ‘The Demographic Situation Now and in the Next 10 to 20 Years’


11.00 Session 6: Extending Working Lives: Company Policies  
*Politiche industriali in materia di estensione della vita attiva*

Chair: Dr. Werner Moertel, Member of the Board, Assicurazioni Generali, Vienna

Dr. Samantha Mercer, Employers Forum on Age, London, ‘Flexible Retirement in British Companies’

Prof. Wolfgang Gallenberger, BGAG Institute for Work and Health, Dresden, ‘Is Ageing a Cause for Absenteeism in Continuing Education?’

Martin Hutsebaut, European Trade Union Institute, Brussels, ‘How to Reconcile Employees’ Interests with the Increasing Older Workers’ Employment Policies’

Maria-Luisa Mirabile, IRES, Rome, ‘The Italian Attitude of Social Partners’

Afternoon Session

14.30 Session 7: Strategies for Education and Employment in the Extended Life Cycle  
*Strategie di formazione e attività produttive nell’allungamento del ciclo di vita*

Chair: Prof. Ivo Šlaus, Member of the Croatian Parliament and of The Club of Rome

Dr. Elena Gheorgiu, University of Bucharest. Presentation of the book ‘The Double Helix of Learning and Work’ (by Mircea Malitza and Orio Giarini) published by UNESCO-CEPES (Bucharest, 2003).

Geneviève Reday-Mulvey, Geneva Association, ‘Recent Developments on Learning and Work’

Prof. Ermanno Pitacco, University of Trieste and MIB (Management in International Business) School, Trieste, ‘Continuing Professional Development (CPD)’

15.45 Session 8: Italian Perspectives of the Four Pillars – Ongoing Reforms  
*Prospettive in Italia per la strategia dei quattro pilastri: riforme in corso*

Chair: Prof. Lucia Vitali, University of Rome *La Sapienza*

Panel:
- Dr. Paolo Sestito, Advisor, Ministry of Labour, Rome
- Dr. Dario Focarelli, Chief Economist, ANIA, Rome
- Prof. Federica Seganti, COVIP (Italian Control Agency on Pensions Funds Commissioner, Rome
- Dr. Angelo Scarioni, President, Macros, Milan

20.00 Special Session HOSTED BY LLOYD ADRIATICO

Prof. Katepalli R. Sreenivasan, Director, ICTP (The Abdus Salam International Centre for Theoretical Physics), Trieste, ‘Scientific and Technological Research in Trieste as a Center for the Mobility of Knowledge’
SATURDAY, OCTOBER 23 – SABATO 23 OTTOBRE

Session organized at Duino Castle* - Sessione speciale organizzata al Castello di Duino
With the support of / con il supporto e sponsorizzazione di: The Club of Rome, CEI (Central European Initiative) and The Risk Institute

Morning Session

Welcome by Mr. Giorgio Ret, Mayor of Duino-Aurisina
Statement by Mr. Franco Jacop, Councillor for International Relations of the Government of the Autonomous Region Friuli Venezia Giulia
Statement by Ambassador Harald Kreid, Director General, Central European Initiative, Trieste

9.00 Session 9: The Building of the European Welfare Policy: The Impact and Contributions of the New and Future Member States
\(\text{Verso una politica europea del Welfare: impatto e contributi dei nuovi e futuri Stati Membri}\)
Introduction: Mr. Patrick Liedtke, Member of the Executive Committee of The Club of Rome
Chair: Prof. Orio Giarini, Honorary Member of The Club of Rome

Dr. Maciej Duszczyk, Deputy Head, Department of Economics and Social Analyses, Ministry of European Affairs, Warsaw, ‘Development of Social Policy after Enlargement’

Dr. Andrei Doubinine, Director General, Ingosstrakh LMT, Moscow, ‘A View From Russia’

Prof. Eva Ehrlich, Research Director, Institute for World Economics, Hungarian Academy of Sciences, Budapest, ‘The Economic Outlook for Hungary’

Dr. Karel Zeman, Director, Institute of Integration of the Czech Republic in the European and World Economy, Prague, ‘Basic Factors of Needed Welfare Policy Transformation in the Czech Republic’

Prof. Ivo Šlaus, former Member of the Croatian Parliament and member of The Club of Rome, Zagreb, ‘Jobs-Led Development Incorporating Svecchiamento as an Asset?’

Dr. Miroslav Končina, Counsellor, Ministry of Economy, Ljubljana, ‘The Management of Health Reforms in Slovenia’

11.30 Session 10: Future Projects on Health, Work, Retirement and Education
\(\text{Progetti futuri sulla salute, il lavoro, il pensionamento e l’istruzione}\)
Welcome by HSH Prince Charles von Thurn und Taxis
Chair: Dr. Thomas Schauer, European coordinator, The Club of Rome, Vienna

Brainstorming sessions with Members of the Club of Rome from major Academies of Science in Eastern Europe and other institutions: Dr. Medea Abashidze, Academy of Sciences, Tblisi, Georgia; Dr. Lidiya Kavunenko, National Academy of Sciences, Kiev, Ukraine; Prof. Ivo Šlaus, Zagreb, Croatia; Prof. Aleksander Zidansek, J. Stefan Institute, Ljubljana, Slovenia; and Professor Emeritus Eleonora Barbieri Masini, Gregorian University, Rome.

Presentation by Prof. Giorgio Stanta (University of Trieste), Dr. Nicola Pangher (ITALTBS, Area Science Park, Trieste) and Prof. Orio Giarini (The Risk Institute, Trieste - Geneva) of a project for a Regional Center for the Study of the (Counter-)Ageing Society.

* The castle of Duino, with its geographic position in the centre of the new Europe, has always had an international vocation in the cultural, art and science world. Duino has hosted numerous personalities such as Liszt, Rilke, Strauss, Ionesco, Nobel Prize Abdus Salam, Karl Popper and many others. Today the castle is open to the public and has become the centre of many congresses, exhibitions of high level and cultural moments such as the Festival of Chamber Music with members of the Wiener Philharmoniker which takes place every year at beginning of July. History, tradition and future are its motto.
The subject of lifespan lengthening is closely linked to the steady development of science in all of its forms and the consequent progress which increases life expectancy every year, in ever better physical and mental conditions.

While on the one hand population ageing is feared, this conference proposes to see the phenomenon in terms of counter-ageing. This phenomenon requires an ever greater opportunity for the active participation of the elderly in society.

To this end education systems need to be adapted so as to come into play at an ever greater age and they must be capable of providing new turning points in the various phases of the human life cycle.

Without a doubt this development impacts naturally on welfare systems (retirement, health) which require a great effort to be made economically sustainable and socially acceptable.

The classes of those who today are 30 or 40 years old are now in the front line to prepare for their future and their future ‘counter-ageing’.

The current phenomenon does not relate only to the industrially developed countries, but within one, two or three decades it will concern the majority of the countries of the world. We are therefore facing a phenomenon which with time will eliminate the so called ‘advantages’ of the young countries, which will also need our experiences.

The conference in Trieste and Duino brings into the limelight the potential of the Region in this area:

• A population structure which increasingly foreshadows whatever happens in the world;
• A capacity for notably broad and high-quality research and organization in all the subjects relating to this problem;
• A point of contact and possible synthesis with the countries of eastern Europe as they move towards integration, with a view to the slow but necessary process of setting up the European Welfare system.

This is an opportunity to add new topics and to overhaul the strategic actions resulting from the effects of social policies, reconsidering the subject of ageing, not as an expense and ‘burden’ for society but above all as a resource.

On the political level it is necessary to transform the implications of these thoughts into urgent reforms of the welfare systems, rethinking the employment model of the elderly.

In this context the new challenges which await us, in determining tomorrow’s demographic policies cannot do without that great heritage of experience, competences and knowledge belonging to the third and fourth age and which fundamentally results in making society of the third millennium more solid and competitive.
In 1972 Fabio Padoa, Managing Director of Assicurazioni Generali, Trieste, proposed the idea of setting up a centre to assess the impact, the costs and the measures needed in the face of the growth of vulnerability and economic and social risks in every aspect of human activity, on society and on the contemporary economy. It was the same year in which The Club of Rome, with its report on this growth, inaugurated the new concerns re. environmental and ecological risks. It was becoming ever more clear that in the new world it was necessary to do better with respect to natural and man-made disasters, to prevent and to master the risks linked to new technologies of whatever kind, as well as to the growing problem of social risks (the crisis in the traditional welfare state). All of this while faced with the increase in length and quality of life (still widely insufficient) in the majority of the countries of the world.

In Paris in 1973, always roused by Fabio Padoa, an initial group of 12 presidents of the main European insurance companies founded an association which, in the interest of brevity subsequently adopted the name “Geneva Association”, of which Raymond Barre, future Prime Minister of France, was the first President. This office is now held by Henri de Castries, President of the AXA group.

In the meantime the membership has grown to 80 and includes the overwhelming majority of the Presidents and CEOs of the main insurance companies and groups in five continents, including two in China, about ten in the United States, and others representing Latin America and South Africa.

All the members are such in their private capacity: it is about contributing to the understanding of the major problems concerning risks and vulnerability in contemporary society, underlining the key role of risk management in every circumstance.

Today, therefore, The Geneva Association is the most prestigious world centre for the promotion of research, the study of the causes and possible solutions in a whole series of circumstances which make it obligatory to tackle risks and uncertainties which are at the epicentre of every day life.

List of Publications

Associated Organizations
ASEC – Applied Services Economic Centre; WFSC – World Fire Statistics Centre; Risk Institute; EGRIÈ (European Association of Risk and Insurance Economists)

Research Programmes

President: Henri de Castries, President and C.E.O., AXA Group, Paris
Secretary General: Patrick Liedtke, Geneva
Address: 53 route de Malagnou, 1208 Geneva
For information: www.genevaassociation.org
On the basis of a voluntary network, partly supported by The Geneva Association, The Risk Institute was established in order to extend the studies on the issues of risk, vulnerability and uncertainties to the broader cultural, economic, social and political levels of modern society.

The starting point defining the programme of action was an informal meeting held in Paris in 1986. Among the participants were Raymond Barre, Fabio Padoa, Richard Pian, Edward Ploman, Alvin and Heidi Toffler and Orio Giarini.

A first report, by Orio Giarini and Walter Stahel, was published in 1989, reprinted in 1991 and revised in 1993, with the title *The Limits to Certainty — Managing Risks in the Modern Service Economy* (Kluwer Academic Publishers, Dordrecht, the Netherlands), with an introduction by Nobel Laureate Ilya Prigogine. It was also published in French, Italian, Romanian and Japanese. A fully new German version was published in 2000 with the title *Die Peformance Gesellschaft* (Metropolis-Verlag, Marburg).

The book stresses the point that uncertainty is not just simply the result of inadequate or insufficient information. Every action extending into the future is by definition uncertain to various degrees. Every ‘perfect system’ (or ideology) is a utopia, often a dangerous one: the total elimination of uncertainty in human societies implies the elimination of freedom. Learning and life are about the ability and capacity to cope, manage, face, contain and take advantage of risk and uncertainty.

In 2002, The Risk Institute published with Economica (Paris) the book *Itinéraire vers la retraite à 80 ans*. Ever since the The Risk Insitute has been mainly concerned with a research programme on social and economic issues deriving from extending human life expectancy (usually and wrongly defined as the ‘ageing’ society), which is considered the most relevant social phenomenon of our times. The Risk Institute has then contributed to the organization of the conference on “Health, Ageing and Work” held in Trieste and Duino on 21-23 October 2004. On this basis, it has taken the initiative to publish these EUROPEAN PAPERS ON THE THE NEW WELFARE — The Counter-Ageing Society, in two versions (one in English and one in Italian), with the support of various institutions.

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The conference in Trieste and Duino discusses a very important subject: the future of the welfare state in Europe.

This issue will most probably become a very important one in the agenda concerning the process of integration of the Eastern European countries into the European Union, considering the social and economic implications.

In fact, the CEI is now celebrating its fifteenth anniversary. On 11 November 1989, only two days after the fall of the Berlin Wall, an agreement was signed in Budapest by Italy, Austria, Hungary and former Yugoslavia, establishing a platform for mutual political, economic, scientific and cultural co-operation, called Quadrilateral Co-operation. After the extension of its initial membership to other countries of Central, Eastern and South-Eastern Europe, the co-operation initiative has changed name (to Pentagonal and Hexagonal Initiative, it was then renamed Central European Initiative in 1992) and has strengthened its structures. Nevertheless, during all these years it has not altered its initial objective: to support and encourage various forms of co-operation between and among the countries of the region which go beyond and across the EU borders in order to prevent new divisions in Europe.

These fifteen years have been characterized by dramatic events. Dissolution and transformation were the hallmark of what happened in Central and Eastern Europe. Exacerbated by ethnic conflict, these years proved to be difficult for many governments in the region and for many of the citizens of the respective countries. Today, the time of dissolution and re-orientation is hopefully approaching its end. The region is rapidly advancing on a path of democratization and economic progress. Today, with its seventeen Member States, the CEI can look back at an impressive record, having accompanied from the outset the process of transition to pluralistic democracies and market economies of most of its Member States. However, as underlined on many occasions and emphasized in various CEI's documents, the political and economic consolidation of the region is an arduous and painstaking process. In this context, the organization is already strengthening its project-oriented activities in support of institutional capacities and economic growth.

The CEI today enjoys the unflinching support of its Member Governments, repeatedly confirmed in the Final Documents adopted at its Summit Meetings of Heads of Government and at its annual Meeting of Ministers for Foreign Affairs. This demonstrates that the mandate of the CEI is still valid and that it will have an important role to play in the coming years.

For information: www.ceinet.org
The Club of Rome was founded in March 1968, following a conference organized at the Accademia dei Lincei in Rome. Aurelio Peccei and Alexander King were the ‘founding fathers’. Ever since, active membership is limited to 100 personalities, distributed in the five continents.

The main goal was to understand the growing world interdependence and stimulate understanding of the new *problematique*: the complex problems of our times.

The Club became world-known when, in 1972, it commissioned a study to the MIT in Boston, which put forward the issue of *The Limits to Growth*. Several million copies of this report were sold around the world, and it became a basic reference and stimulus to consider the ecological issues as an important element of economic (now called sustainable) development.

Ever since the Club has published reports on important societal issues such as *No Limits to Learning, Wealth and Welfare in the New Service Economy, In Search of a Common Ground for Peace* and *The Information Society*.

President: HRH Prince El Hassan bin Talal, Amman; Honorary President: Ricardo Diez-Hochleitner, Madrid; Vice-President: Eberhard von Koerber, Zurich.

In a recent press release, the President has written: “These days, it seems as tough world history is being determined by exceptions rather then rules. In the wake of the horrific bombings of the World Trade Centre and the Pentagon on September 11, 2001, we have all had to re-examine our own values and the values of other cultures. We stand today at the crossroads of our very existence. The choice appears stark; move further away from one another, basing our sense of self and self-interest upon the idea of a threatening ‘other’; or move closer together as unique individuals sharing common values that allow us to unite as one human family”.

*For information: www.clubofrome.org*

*European Coordination Center:*
*Thomas Schauer, Vienna: Thomas.Schauer@clubofrome.at*
THE HOUSE OF EUROPE OF TRIESTE

Founded in 1991, The House of Europe of Trieste is an Association which in its actions draws its inspiration from the principles of European integration common to the other Houses of which there are hundreds spread throughout more than thirty European countries and recognized since as a consultative body to the European Union. In Italy the Association is a member of the Italian Federation of Houses of Europe (FICE).

It is not linked to any political party nor to any specific faith. The aims of its members are solely of general interest and they do not seek pecuniary gain.

In pursuing its statutory aims the Association works together with local, national and international institutions, dedicated to the popularization of the European Union and in this way creates opportunities for cooperation and for the exchange of information and experiences. The activities of The House of Europe of Trieste are focused chiefly on the young, promoting the European ideals, informing and educating concerning the organization and activities of the Union’s institutions and organizing initiatives designed to improve knowledge about current topics of interest to European citizens.

The Association’s initiatives are sponsored by the Autonomous Region of Friuli Venezia Giulia and by many local organizations.

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First General Assembly of the World Academy of Art and Science in South East Europe


It is very appropriate that the assembly is held in South East Europe, since this region from Trieste to Istanbul, including the Adriatic, Ionian, Aegean and Black seas, is a cradle of science and democracy. It is desirable that the General Assembly is followed by a continuous activity, and the establishment of a South East European Division of the World Academy (SEED) including all fellows from Trieste to Istanbul would certainly ensure such a continuation. One of the major tasks of SEED is to build a knowledge-based society in SEE. The research and academic structures in most SEE countries are rather weak: out of 500 leading world universities, there is not one from SEE, and the number of world leading scientists in SEE is rather modest. Nevertheless, there are prominent centres of excellence in SEE and particularly very strong scientific centres in Trieste, which is also a seat of the InterAcademy Panel on International Issues (IAP) and the Academy of Sciences for the Developing World (TWAS). Building a knowledge-based society requires creating a vibrant creative and innovative entrepreneurial climate, emphasizing freedom and unity of knowledge and intertwining knowledge and governance. It is a tall order and we endeavour to achieve it since it is the best way — the only way — for sustainable development and security.

For information, please write to Dr. Ivo Šlaus, slaus@irb.hr.
Regional Activator Intertwining Knowledge and Governance (KNOWGONET)

The Inter-University Centre Dubrovnik (IUC) in Croatia, an association of 180 universities, academies and research institutes throughout the world, initiated the establishment of the Regional Activator Intertwining Knowledge and Governance (KNOWGONET). KNOWGONET would have from the start a European and international dimension and significant scientific and scholarly credentials, since it is imbedded in the European and international system including members of all European academies in SEE countries, the Regional division of the World Academy of Art and Science (WAAS) for SEE (SEED) and it is based on centres of excellence of the existing scientific and scholarly institutions. Through the memberships in European academies, WAAS, The Club of Rome and Pugwash, and through its multiple connections, KNOWGONET would have political weight and be able to provide a socio-political impact. The goal of KNOWGONET is to assemble prominent socially active persons and their young collaborators acting in a network. KNOWGONET is a think-tank and a political pressure task group through its international nature and links.

This network includes, besides IUC, other institutions from the region of SE Europe: Forum Bled, Slovenia; Black Sea University (BSU), Romania; as well as centres of excellence in R. Boškovic Institute (RBI), Croatia; J. Stefan Institute (IJS), Slovenia; Macedonian Academy of Sciences and Arts (MANU); FYRO Macedonia; Institute Ivo Pilar, Croatia; Academy of Sciences and Arts, Bosnia and Herzegovina (ANUBiH); European Papers, and The Risk Institute, Italy; Vinca Institute for Nuclear Sciences, Serbia and Montenegro; Bulgarian Academy of Sciences and Arts; and Biopolitics International Organization, Greece. KNOWGONET addresses the problem of presently insufficient and inadequate use of existing ‘islands of knowledge’ and their neglected role in governance, and contributes to develop a knowledge base by reinforcing the research capacity in the region and their intertwining with governance which will bridge the existing gap between them, and enhance the role of knowledge in solving social, economic, and political problems.

SEE countries are faced with many problems that require knowledge and governance intertwining. The most notable is weak or nonexistent industry-governance-knowledge interaction, hence a difficulty in developing industry based on science and business based on information and communication technologies, low employment, poverty, low percentage of population with higher education, large student drop-out rate and long time to complete higher education, large percentage of retirees vs. employed persons, large percentage of pensions in the GDP, low fertility rate, inflexibility, low export and low competitiveness.

KNOWGONET is a collective learning network that intertwines knowledge and governance, it strengthens the triple helix: research - society - economy and, therefore, contributes to establishing a knowledge-based economy and knowledge society and sustainable development. The developed capacity will serve for solving numerous other problems, e.g. healthcare and environmental issues. KNOWGONET is an institutional clearing house to foster new ideas in knowledge and governance. Its aim is also to breed a creative, interdisciplinary and socially engaged young generation, with a freedom to doubt, to undertake risks and to practice synergy. The network will be engaged in activities that will intermingle this young generation with the most inspiring senior leaders. KNOWGONET combines development of human resources with building climate for generating ideas, and it is a tool for actions and attempts to be a unique structure assuring that knowledge is implemented and that it has an impact on governance.

Dr. Krunoslav Pisk (e-mail: pisk@irb.hr) and Dr. Jasminka Lažnjak (e-mail: jlaznjak@rgn.hr).
The CEI University Network is a network of universities belonging to all CEI Member States. It aims at facilitating co-operation among the universities and other institutions of higher learning in the CEI region by providing support to mobility at academic level.

The idea to create a CEI University was launched on the occasion of the CEI Summit Meeting of the Heads of Government of the CEI Member States, which took place in Trieste in 2001. With the approval of its Founding Charter at the CEI Summit held in Warsaw in 2003 and the allocation of financial resources by Italy, the CEI University Network became operational in 2004.

As defined in its Founding Charter, the CEI University Network functions through the following organs: the Secretary General, the Executive Board, the Advisory Board and the General Assembly.

The Co-ordinating Universities — one for each CEI Member State — are members of the Executive Board. The Advisory Board is composed of the members of the CEI Working Group on Education. In principle, all universities of CEI Member States may become Participating Universities as long as they are active by submitting an Application for Funding a CEI University Network Joint Programme. The CEI University Network, headed by the Rector of the University of Trieste in his capacity as Secretary General, is serviced by a unit of the CEI Executive Secretariat, i.e. the Secretariat of the CEI University Network, based in Trieste at the CEI-ES Headquarters.

Mobility is promoted through the implementation of joint programmes such as PhD and master’s courses. Summer schools, seminars and workshops may also be supported provided that they envisage a teaching element, a minimum duration of one week and an award certificate. A Joint Programme should involve at least two universities from different CEI Member States and fall within one of the following areas of cooperation: Economics, Public Administration, and Communication (including Information Technology, Transport and Infrastructure). The teaching language is English. Priority is given to the participation of CEI countries ‘in special need’ — Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Macedonia, Moldova, Romania, Serbia and Montenegro and Ukraine — and to mobility through “Split Joint Programmes” — courses held in more than one university. The CEI contribution is used to cover teaching grants and scholarship awards.

In 2004, the following Joint Programmes (JPs) were implemented within the CEI University Network: Master’s in Cartography and Geographical Information Systems, Master’s in e-Business, Seminar on Geodynamical Model of Central Europe for Safe Development of Ground Transportation Systems, and Summer School of Classics promoted by the University of Trieste; Master’s in Eastern European Studies, promoted by the University of Bologna; Alpen Adria Summer University, promoted by the University of Vienna; and Master’s in European Governance, promoted by the University of Udine.

In summary, the activities carried out in 2004 involved more than 200 students and teachers as well as 24 universities and 11 institutions of higher education in 14 CEI Member States.

Among the joint programmes already approved at the beginning of 2005, the...
following deserve mentioning:

• “Masters for the Balkans 2005”, including three Master’s courses (Master in Transport, Logistics and Economic Integration with the Balkan Area; Master in Geographic Information for Spatial and Economic Decisions; and Master in Technological Transfer and Industrial Product Development Systems), promoted by the University of Trieste. The programme is financially supported by the funds provided in the framework of the Italian Law 84/01 in the form of scholarships for students coming from the Balkan region. The CEI contribution is complementary and aims at supporting the participation of teachers and students from the extra-Balkans countries.

• Ph.D. on “Transborder Polices for the Daily Life”, promoted by the International University Institute for European Studies (IUIES) which is composed of the universities of Trieste, Udine, Klagenfurt, Eötvös Lorand of Budapest, Babes-Bolyai of Cluj-Napoca, Comenius of Bratislava, Jagiellonian of Krakow, MGIMO of Moscow, Polytechnic of Nova Gorica and by the Institute of International Sociology of Gorizia (ISIG), premises of its Head Office.

For more information: cei-es@cei-es.org, www.ceinet.org. CEI Secretariat, Via Genova 9, 34121 Trieste, Italy, tel. (+39) 040 7786777, fax (+39) 040 360640.

Additional News and Information

• The Newsletter on THE FOUR PILLARS is published by The Geneva Association twice a year. For over 15 years it has promoted analysis and research to find a better equilibrium between state pensions (based on the pay-as-you-go system, a kind of negative income tax), the capitalized pension funds related to the working activity, the individual private savings of any sort and finally the extended working ‘productive’ life cycle (including full-time work, part-time work and voluntary and/or partially remunerated activities). For information and (free) subscriptions write to: Genevieve_Reday@Genevaassociation.org.

• The GENEVA PAPERS ON RISK AND INSURANCE — ISSUES AND PRACTICE (Palgrave - Macmillan) devoted special issues on the Four Pillars every year or other year. For information and subscriptions write to Stephanie_Achard@Genevaassociation.org.

• The Newsletter of HEALTH AND AGEING is also published by The Geneva Association, twice a year. For information and (free) subscriptions write to Christophe_Courbage@Genevaassociation.org.

This programme also provides the background for special issues of THE GENEVA PAPERS (the latest issue, on Health and Ageing, was published in October 2004).

• First WORLD AGEING & GENERATIONS CONGRESS (September 29 – October 1st, 2005) at the University of St. Gallen, Switzerland, organized by VIVA 50plus. Mr Marcel F. Bischof is the Executive Chairman of VIVA 50plus; Prof. Alfonso Sousa-Poza is its Programme and Academic Director. Special topic of the congress is AGEING AND REAL ESTATE MARKET. For information please see www.viva50plus.org.
AGE (the European Older People’s Platform) aims to voice and promote the interests of older people in the European Union and to raise awareness of the issues that truly concern older people. AGE is supported by the anti-discrimination, fundamental social rights and civil society programme of the European Commission. Anne-Sophie Parent is the Director of AGE. Contact 111 rue Froissart, 1040 Bruxelles, Belgium; tel. (+32) 2 2801470; fax. (+32) 2 2801522; info@age-platform.org; www.age-platform.org; catherne.daurele@age-platform.org.

AGE also publishes the bulletin CoverAGE, with various information and comments such as:

• The work programme 2005 of the European Commission on Demographic Changes and the Communications of the anti-discrimination unit of the European Commission.

• The SILVER ECONOMY CONFERENCE: in 2005 it brought together 600 participants from all over Europe (including 10 European Regions), providing detailed overview of ongoing activities, innovative projects and practical examples of the silver economy. The second “SILVER ECONOMY IN EUROPE 2006” conference will take place in Maastricht and shall be organized byt the province of Limburg. For more information on the conference please see: http://www.silvereconomy-europe.org/index_en.htm.

• The Conference on Ageing, in Copenhagen, 30 May - 2 June 2006, organized by the International Federation of Ageing. For further information, see www.global-ageing.dk or contact ifa2006@ics.dk.

• The AARP (American Association of Retired Persons, the greatest American advocacy group with several millions members) has a GLOBAL AGING PROGRAM. Visit http://www.aarp.org.

• NPOE, the Nederlands Platform Older People and Europe, is looking for partners to establish cooperation between national networks for knowledge exchange practices related to the issue of older workers. Dutch project partners, apart from NPOE, are: the Odysse Group (training and consultancy for older workers and pre-retirement); LBL (expertise centre on issues related to age discrimination); PSW (development and consultancy agency on the labour market); Mattern Consult (coaching/consultancy for employers). AGE will participate in the project for information dissemination tasks.

• Background of the dutch project outline ‘Network Ageing Workforces’: in the Netherlands, the necessity for older workers to remain active in the labour market has been stimulated first by the Task Force Older People and Employment Office (2002-2003) and currently by the Direction Group ‘Grey Works’. One can observe that although the policy aims to engage older workers longer and is shared at national level and by responsible management of larger companies (mainly multinational enterprises), there is still much hesitation concerning its practical implementation. A number of Dutch organizations would like to take the initiative to learn from one other in a so-called ‘knowledge circle’. NPOE is looking for transnational project partners that are able to share their experiences and best practices on how knowledge on this topic is managed and exchanged in their countries. Contact: www.npoe.nl; jzwart@npoe.nl (Mrs Joke Zwart, NPOE, Postbus 222, 3500 AE Utrecht, The Netherlands).

• CEEUN — Central Eastern European University Network. Coordinator: Prof. Giorgio Dominese, University of Udine, Faculty of Economics / OSSFI, via Tomadini 30, I-33100 Udine, Italy, and Ca’ Foscari University, Dept. of Economic Sciences / ITDO, 873 San Giobbe, I - 30121 Venice, Italy. Email: CEEUN@ceeun.org and www.springer.at/tsr (for the Transition Studies Review).
Abstracts from the Four Pillars Bulletin of The Geneva Association, March 2005


‘This is the best book out there for surveying the variety of mixed public-private systems that have been sweeping the social security world during the last two decades. Separate chapters written by experts from each country explain what is happening in OECD countries, Latin America and the transitional economies, placing the recent multi-pillar reform into the context of each country’s history and political structure. Cross-cutting chapters by Rein and Schmähl pull it all together. This enables us to view both the commonalities and differences across countries, and to evaluate how path dependencies operate through time. I recommend it as a valuable reference source.’ Estelle James, The Urban Institute, US.


Old-Age Income Support in the 21st Century: An International Perspective on Pension Systems and Reform, R. Holzmann, R. Hinz and Bank staff. Washington DC: World Bank, 2005 (see also Changes in Work and Retirement, section 2). The Bank is a major player in pension reform world-wide. During the period 1984-2004 it has made 203 loans in 68 countries, and the Bank has been involved in many more countries with technical assistance or ad hoc advice. The main changes to the Bank’s perspective concern the enhanced focus on basic income provision for all vulnerable elderly as well as the enhanced role for market-based, consumption-smoothing instruments for individuals both within and outside mandated pension schemes. The Bank increasingly recognizes the importance of initial conditions and the extent to which conditions in a particular country necessitate a tailored or tactically sequenced implementation of the multi-pillar model. This policy report was written to clarify and update the World Bank’s perspective on pension reform, incorporating the lessons learned from recent experience and research that has advanced the understanding of how best to proceed in the future. It has been developed as a policy note, not as a research paper. As such, it is intended to conceptualize and explain current policy thinking within the Bank rather than to announce a new policy approach. This report provides a guide to the criteria and standards that the World Bank will apply in deciding when and where to provide financial and technical support for pension reforms. The report has two main parts. Part 1 presents the framework for the Bank’s thinking on pension reform, including its origins and scope, and the structure of Bank lending in this area. Part 2 highlights key issues pertaining to design and implementation.
The Madrid International Plan of Action on Ageing: From Conception to Implementation, A. Sidorenko & A. Walker (2004) in Ageing & Society, 24(2), 147-165. ISSN 0144-686X. The Madrid International Plan of Action on Ageing sets the context for global policies on ageing for the current century. A model is presented as a potential template for use in evaluating the impact of the Plan and, especially, its effectiveness in improving the conditions of older people’s lives. A systematic process of monitoring and evaluation is required if the Plan is not to suffer the fate of being regarded as yet another worthy ‘wish list’.

Ageing and Employment Policies - Norway, OECD. Paris: OECD, 2004, (www: Source OECD@oecd.org). This report on Norway is part of a series of around 20 OECD country reports that are intended to analyse the main barriers to employment for older workers, an assessment of the adequacy and effectiveness of existing measures to overcome these barriers and a set of policy recommendations for further action by the public authorities and social partners.

Live Long and Prosper, S. Vernon. New York: John Wiley & Sons, Jan. 2005. Watson Wyatt vice-president S. Vernon calls for working part-time in our late 60s, 70s or even longer, but doing work that is interesting and fulfilling. The book, based on hundreds of interviews and the latest Watson Wyatt research on phased retirement, demographics and financial models, also calls for taking care of our health and adopting financial strategies.

Conference Annoucement

on

LONGEVITY — A MEDICAL AND ACTUARIAL CHALLENGE

Third Geneva Association Conference on Health and Ageing

Munich — 24 november 2005

hosted and co-organised by

GE Frankona Rückversicherungs-AG

This conference will deal with the medical and actuarial challenges that longevity raises for insurance activities. This has of course wide-ranging impact on our economic and social system in general.

Participants will come from reinsurance companies, universities and related institutions. The conference will only comprise a limited number of participants to guarantee an active exchange of opinions and animated discussions. Should you want to contribute to or simply participate in this conference, please contact the general secretariat of The Geneva Association (secretariat@genevaassociation.org).
L'economia delle pensioni e i quattro pilastri: una sfida senza fine
Il privilegio di lavorare dopo i 60 anni
Strategie della welfare society nell’Europa allargata: la prospettiva delle assicurazioni
Il welfare tra 20 anni: un tentativo di previsione / Sviluppo della politica sociale dopo l’allargamento
Una “nuova” teoria generale dell’invecchiamento demografico
Invecchiamento e svecchiamento demografico: ricadute sociali
Longevità: un diritto da conquistare
Uno sviluppo guidato dall’occupazione può considerare lo svecchiamento una risorsa?
L’invecchiamento attivo: una politica centrale e prioritaria per l’Unione europea
Come conciliare gli interessi dei dipendenti con le politiche dell’occupazione rivolte a lavoratori sempre più anziani
Prospettive sul quarto pilastro in Italia alla luce della riforma delle pensioni
La riforma della previdenza complementare in Italia ed il ruolo dei fondi pensione
Dopo la riforma previdenziale, quale prospettiva per il quarto pilastro?
L’invecchiamento della forza lavoro: strategie aziendali e politiche pubbliche in Germania
Gestire l’invecchiamento della forza lavoro: l’interazione tra politiche pubbliche e linee di condotta aziendali. Il caso del Giappone
La doppia elica della formazione e del lavoro
Le assicurazioni sanitarie private nei Paesi OCSE
Invecchiamento, disabilità e classificazione internazionale del funzionamento, della disabilità e della salute (ICF) dell’OMS
Salute e disabilità: il caso italiano
Scenari per il trattamento del cancro: impatto sulle assicurazioni
Sviluppo demografico e rischio morale: l’assicurazione sanitaria con conti di risparmio sanitari
While the reasons for working beyond sixty have become obvious, the how and for whom questions are the real topic of this new study by one of the best European specialists in the area. Work after sixty – if it is to be feasible and widespread – has to be on a part-time basis to meet the wishes and needs of workers and companies. This book provides an in-depth analysis of the growing importance of working beyond sixty and a comparative discussion of new policies in several EU Member States (Finland, Denmark, the United Kingdom, the Netherlands, Germany, France, Italy and others) as well as of best company practices.


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