

Working Paper

2004

**Are Older Workers Genuine Assets for the Economy?
Strategies and Possibilities for the Effective Use of their
Human Resource Potential**

Lucy Bangali, M.A.

Institute for Political Science

in Cooperation with

Research Institute for Work, Technology and Culture

(F.A.T.K.¹)

Eberhard Karls University Tuebingen

¹ The acronym F.A.T.K. stands for "Forschungsinstitut für Arbeit, Technik und Kultur e.V." and co-operates in its research work with the University of Tuebingen in Germany.

Content

1.	INTRODUCTION AND BACKGROUND:	3
2.	EMPLOYMENT PATTERNS AND LABOUR FORCE PARTICIPATION OF OLDER WORKERS IN GERMANY ACCORDING TO BRANCHES AND A COMPARISON WITH OTHER EU-OECD COUNTRIES:	7
2.1	THE NORDIC MODEL OF LABOUR MARKET PARTICIPATION OF OLDER WORKERS	12
2.1.1	<i>Iceland</i>	13
2.1.2	<i>Sweden</i>	13
2.1.2	<i>Sweden</i>	14
2.1.3	<i>Norway</i>	15
2.1.4	<i>Denmark</i>	15
2.2	EMPLOYMENT AND UNEMPLOYMENT RATE OF OLDER WORKERS IN THE LIGHT OF THE LABOUR MARKET REFORM IN GERMANY	16
2.3	ACCESS TO PENSION AND THE TREND TOWARDS EARLY RETIREMENT	19
3.	STRATEGIC POLICY APPROACH TOWARDS THE EMPLOYABILITY OF OLDER WORKERS	24
3.1	STRATEGY I: IMPROVE THE AWARENESS OF COMPANIES AND COMBAT AGE DISCRIMINATION WITHIN THE LABOUR MARKETS	25
3.2	STRATEGY II: ENHANCING ACCESS TO TRAINING FOR OLDER WORKERS	26
3.3.	STRATEGY III: SAFETY CONDITIONS AND HEALTH MANAGEMENT AT WORK	27
3.4	STRATEGY IV: FLEXIBLE FORMS OF WORK ORGANISATION AND AGE-RELATED DESIGN OF WORK AND CAREER-PATH	27
3.5.	STRATEGY V: EFFECTIVE LABOUR MARKET POLICIES	28
3.6.	STRATEGY VI: IMPLEMENTING THE MULTIPLIER-EFFECT THROUGH BEST-PRACTICE-EXAMPLES	28
4.	CONCLUSION	31
	BIBLIOGRAPHY	32

1. Introduction and Background:

This paper is written in the context of a project titled “The Potential of Older Workers in the State of Baden-Wuerttemberg in Germany: Facts and Recommendations for Companies, Training Institutions and Employees”² funded by the State Ministry of Economics in the framework of the European Social Funds – Target III. The main objective of the project is to compile data (which is available at different offices like the State Statistical Office, the State Labour Office as well as the State Public Insurance Corporation) on the population development in context to the challenges of the demographic change, employment situation, pension and qualification situation of older workers to be published as an “Atlas for Old Workers”. The atlas is meant to provide important and useful information for companies, training institutions, trade unions, policy makers, researchers, journalist and associations. At the same time, the project should compile a “Guide to Best-Practice”, construct a web page with information all around the employment and personnel development of older workers as well as organise various workshops and conferences, where tools and methods of companies already implementing the so-called best practices could be presented in order to raise the awareness of other companies in managing and employing an ageing workforce. In this framework, strategies and possibilities in employing, retaining and effectively using the human resource potential of older workers should be actively discussed among the target groups.

The paper poses the question, why the employability chances of older workers should be ensured. It assumes the view that older workers are presently facing serious problems on the labour market, regarding their recruitment, deployment and qualification. Due to rapid and dynamic changes on the global as well as domestic economic markets, within the organisations as well as in the society as a whole; companies will through these forces have to partly depend upon the human capital potential of older workers in the long run. If they do not take action now, the market will take care of it for them and by then it will be too late. Which virtually means that instead of waiting for the market and the situation to regulate itself, strategies, possibilities and solutions should be worked out to promote and improve the employment situation of older workers.

On the European level - according to a working paper from the Commission of the European Communities on 3rd March 2004 in Brussels – there is a pledge that “member states must take drastic action to enhance employability of older workers, which is seen as a core component of labour supply and a key factor for the sustainable development of the European Union.”³ The paper further emphasises that early retirement may appear a convenient way for companies, workers and trade unions to soften the negative impact of manpower reductions, but it results in a premature and permanent loss of human capital. Policies are therefore essential to maintain labour supply and secure employability even in periods

² The project which started off in January 2004 und runs till December 2005 is funded by the European Social Fund (ESF) - a main financial tool through which the European Union translates its strategic employment policy aims into action. The funds of the project were granted by the Ministry of Economics in the Federal State of Baden-Wuerttemberg.

³ Commission of European Communities, 3rd March 2004, p. 3

of overall sluggish employment growth. A preventive approach based on mobilising the full potential of people of all ages in a life-cycle perspective must be the overarching principle of policy measure. In line with the European Strategy and the Broad Economic Policy Guidelines, Member States need to develop and implement comprehensive active ageing strategies addressing the key factors for sustaining the employment of older workers.⁴ In the light of this, views, strategies and possibilities are discussed in this paper to enhance the effective use of the human resource potential of older workers.

Germany like many other industrialised countries is confronted with the aspect of demographic transition. Due to the low reproduction rate and despite the high life expectancy, the present population of 82.5 million inhabitants will approximately shrink by year 2050 between 67 and 81 million.⁵ In the light of this development, the demographic change is bound to influence the structure of the working population. According to Lesch⁶ - based on statistic figures from the Federal Statistical Office⁷ - the size and structure of the potential working force will decrease from 56 million in 2001 to 39 million in 2050. The number of 35- to 49-year-old workers, which presently comprise the largest age group will shrivel, while the number of 50- to 64-year-olds will substantially grow. With the predictability of these developments, it is not too clear and there is not much awareness as to how this will affect the labour market and the social systems. Germany is presently faced with the problem of financing its statutory pension scheme and is thereby confronted with the need to reform this pension system, which is essential in order to ensure its sustainability. The current controversial debate on the sustainable financing of this system as well as the acute employment situation of older workers on the labour market is regarded as a challenge which needs a rapid change.

Amidst these developments, the situation of older age workers on the German Labour Market is characterized by a high level of discrimination. The unemployment rate of the 50-65 age groups has remarkably risen amidst the mass unemployment presently facing the country. The falling rate of the employment of older age groups is caused on the one hand by the practice of early retirement⁸ which has been widespread among companies since the 1990s as a method of restructuring and reorganising. On the other hand, government provisions and subsidies – so called early retirement schemes – have also contributed towards this early withdrawal from active work-life. The actual retirement age remains 2 to 3 years below the statutory retirement, because these provisions continue to encourage people to exit the labour market earlier than normal.

On the labour market, older workers are confronted with prejudices from the perception, that older workers show lower productivity, flexibility, innovativeness and learning capability – the so-called “deficit model” – and their employment is related with high wages and protection against dismissal. Influenced by this, employers are ready to selectively lay off older workers, thereby trying to avoid labour

⁴ cf. Commission of European Communities (3rd March 2004): p. 3.

⁵ Statistisches Bundesamt (2003): S. 27.

⁶ Lesch, Hagen (2003): p. 1 – Paper presented at the 13th World Congress of the International Industrial Relations Association in Berlin, September 8-12.

⁷ Statistisches Bundesamt (2003): p. 35

⁸ cf. Naeyegele, Gerhard/ Walker, Alan (2002): p. 2.

market regulations which protect them. According to grounded research results, they do not get access to appropriate training measures, which are mainly reserved for younger workers who are, on the average better educated in especially the application of information and communication technologies.⁹ In this regard, older workers have less opportunity to upgrade or acquire new skills. As a consequence, they thereby reduce their ability to adapt to growing demands of new technologies, innovations and flexible working conditions as well as dealing with customers.¹⁰ Amidst the labour market discriminations and incentives to early retirement, companies are presently facing economic slow-down, so that older workers are normally the first group of employees to be laid-off, when it comes to company restructure and personnel reduction.

A relevant question at this juncture is the question of “age” and an adequate definition of an “older worker”. Is an employee’s age an issue to prevent his or her employability? What is the role and function of age in the modern society? “Age” functions in the sociological theory not only as a natural characteristic of human beings, but also as an integral aspect belonging to the structure of the society. Talcott Parsons¹¹ constructed a set of variables that can be used to analyse the various social systems. These are the “categorisation of modes of orientation in personality systems, the value patterns of culture, and the normative requirements in social systems”.¹² These became a way of describing and classifying different societies, and the values and norms of these societies. All of the norms, values, roles, institutions, subsystems and even the society as a whole can be classified and examined on the basis of these patterned variables. According to Talcott Parsons, “**age**” is a personal characteristic, used to assess qualities of other people or objects as well as to allocate status. He introduced two basic strategies human societies use to fill status positions within their social structures: “ascription” and “achievement”. The assessment according to qualities (**ascription**) stands in contrast to the assessment of people according to individual competencies (**achievement**), which actually dominates the modern society. It is a matter of fact today, that the “ascribed” features (to which age belongs according to Parsons’ classification) in the process of modernisation for the allocation of status is becoming more and more unimportant, while the “achieved” feature gains vital importance for the allocation into the class of society. Age definition on the labour market also fundamentally tends towards the “achieved” pattern variable of the structural functionalism, i.e. when the production and distribution of a society's goods and services are regulated by market forces, enormous pressure is exerted on employers to fill occupational positions on the basis of individual skills and not because of ascriptive attributes. However, missing skills ought and can be developed if they seem to be relevant for personnel competency.

⁹ cf. Krenn, Manfred/ Oehlke, Paul (November 2001): p. 4, see also Bangali, Lucy et al. (2003).

¹⁰ Ibid.

¹¹ One of the important sociological theorists of structural functionalism, who describes “age” as a structural category in the society. His definition of “age” is patterned according to Linton’s differentiation in “status” as the “ascribed” and “achieved”. In his last work on Action Theory entitled “Towards a General Theory of Action” the dichotomy “ascription” vs. “achievement” is taken out of the context of status and structural theory and introduced as one of the fundamental “pattern variables” “Ascription” and “achievement” are being marked as general modes in the process of action.

¹² Turner, Jonathan H. (1991): p. 58.

However, when do we refer to employees as “older workers” on the labour market and in the companies? There are actually no precise definitions of the term “older worker” in labour market research, because definitions tend to vary according to organisational branches and structures. There seems to be considerable variation in the concept of older workers as defined by age alone. The term "older worker" in our research projects extends from 45 to 64 years of age. Gerhard Naegele tries to outline three sets of definitions for the term “older worker” according to various research sectors¹³.

- When workers at age 40 are referred to as “older workers”, age is linked to “hard” working conditions in branches like metal and steel industries or building construction companies where manual labour belongs to the working situation.
- When workers at age 45 are referred to as “older workers”, age is linked to the possibility of climbing the career ladder within the company as well as easily acquiring another job on the labour market as an unemployed person.
- When workers at age 50+ are referred to as “older workers”, age is linked to beginning thoughts about retirement decisions, the decline in training opportunities, the dispelling of myths about the productivity of an aging work force or the need for older workers to stay on the job to mentor younger workers.¹⁴

The concept of “older worker” encompasses different ages depending on the branch of the organization as well as the needs of the worker. In my own understanding, age alone cannot be a defining characteristic of an older worker. Becoming an older worker is more situational than chronological which takes into consideration qualification, health, mobility and employment restrictions that occur at a particular calendar age. According to substantial evidence of research results, “older workers” are considered to suffer various forms of age discrimination because of the calendar age. At the same time there are other evidences which state that older workers are by no means less effective and innovative than younger employees.

Amidst this background, I would like to discuss certain problems facing older workers on the labour market as well as strategies and possibilities to ensure their sustainable employability.

¹³ cf. Naegele, Gerhard (1992): p. 9.

¹⁴ cf. Clemens, Wolfgang (2001): p.17.

2. Employment Patterns and Labour Force Participation of Older Workers in Germany according to Branches and a Comparison with other EU-OECD Countries

In this chapter, I would like to shortly reflect on theories and positions about the relevance of participation in work in the industrialised countries with a brief comparison of the employment situation of older workers in EU-OECD countries. I would also like to take a look at the Nordic model and elaborate on the present employment patterns on the German labour market in the light of several reforms that have taken place as well as the access of older workers to pensions, their employment and unemployment rates as well as their skills and qualifications.

According to Heilbroner¹⁵ - primarily based on Naschold and de Vroom - the participation in work is a prerequisite of civilization und citizenship in a society.¹⁶ In his view, the segregation from work implies the exclusion from rights, whereas the participation in labour is a matter of political emancipation.¹⁷ In this regard, the non-voluntary exit from the labour market means the loss of political influence and with it financial independence.

Another position expressed by sociological as well as philosophical traditions, regards work as a necessary means of self-expression, social contacts and prestige.¹⁸ According to Naschold and de Vroom¹⁹ there is an opposite theory in the debate which says that exit from labour market means escape from inhuman working conditions and work-related risks: exit means entry into the world of 'freedom'. This position presupposes a society that is able to combine the exit process with a relatively high level of welfare provision and citizenship.²⁰ Another position about the relevance of work participation comes from Kohli and Rein, who refer to the exit from labour as an expression of an "essential part of the societal process of individualization"²¹ In this regard, retirement is seen as part of the modern tri-partition of life course. Despite the fact that the process of increasing early exit in the last decades has irrefutably changed this modern life-time schedule, the basic tri-partition of life course is still firmly in place.²²

At the same time, the increasing unemployment of older age groups, the trend towards an ageing society as well as the problems of financing the social security systems and the future supply of labour has impact on work and brings up a justifiable question: why is it necessary to ensure the employment of older workforce and therewith effectively use their valuable human resource potential? There are various arguments and facts to help answer this question constructively. A logical analysis of the demographic situation in relation to the labour supply however is, that there will be fewer and fewer potential workers to support more and more older people in the society. That theoretically would mean, that there will be

¹⁵ Heilbroner, Robert (1985): p. 22ff.

¹⁶ Naschold, Frieder/ de Vroom, Bert (1994) : The Dialectics of Work and Welfare, p. 1, published in: Naschold, Frieder/ de Vroom, Bert (Eds.) (1994): Regulating Employment and Welfare.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Kohli, Martin/ Rein, Martin/ van Gunsteren, Ann-Marie and Herman (Eds) (1991): p 20.

²² Naschold, Frieder/ de Vroom, Bert (1994): The Dialectics of Work and Welfare, p.2, published in: Naschold, Frieder; de Vroom, Bert (Eds.) (1994): Regulating Employment and Welfare.

less working people paying pension contributions to finance the pension funds. This will undermine the sustainability of the pay-as-you-go financed social insurance arrangements such as the statutory pension system and the ultimate result will be that the contribution rates will increase.²³ In the light of these circumstances, it is essential to have as many people working as possible especially the older workers until the normal pension age of 65 is achieved.

But how can this so-called normal pension age be achieved amidst the present employment situation facing older workers in German companies? Although companies of all kinds in Germany are presently facing a constant struggle to fill positions of high skill level, there are mass lay-offs that many companies are also carrying out due to the present economic slowdown. In the light of this situation, the older workers are always the first to leave the companies because under normal circumstances they are difficult to get rid of due to laws and industrial agreements protecting older workers against dismissal. But once they have been laid-off, it is very difficult for them to find new jobs, since most companies and their human resources managers harbour prejudices against employing older workers for various reasons and prefer hiring younger workers. So the strategy that companies usually implement especially in times of economic difficulties – mostly as a pretext – is to get rid of especially the older workforce through early retirement schemes. However, what will the older workforce mean for organisations, when the economy starts to grow again and the demand on labour rises? It could be foreseen, that within the next few years, companies may have a difficult time finding enough workers, especially skilled workers, if they don't accept the need to recruit and retain older workers and to establish programs that train workers regardless of their age.²⁴

While it is necessary for older workers to remain in the labour market, steps could be taken to ensure real employment prospects. According to the Organisation for Economic Cooperation and Development (OECD), from 2005 on, labour force participation by those over 55 should have to increase by about 25%, if industrialised countries are to maintain current employment-to-population ratios.

But as of yet, Germany faces the situation in which many older people will drop out of the workforce due to the current economic slowdown, due to lack of skills; while many other highly skilled workers may retire early because of career burnout. Meanwhile, the generation that will replace them – the so called baby busters – is smaller than the boomer generation by far.

At this juncture, I would like to reflect on the employment pattern, unemployment problems facing older workers on the German labour market, as well as the access to old age pension in Germany.

The age structure of employees do differ according to economic branches and size of the companies. According to the German Federal Statistical Office (Statistisches Bundesamt), the employment rate in Germany in March 2004 declined according to the advancement in working age (see figure 1). At the age of 55-60 the employment rate dropped rapidly and just a minor percentage of the population aged 60-65

²³ Fehr, Hans (1999): p. 2 – Pension Reform during the Demographic Transition, University of Wuerzburg, October 1999.

²⁴ Goldberg, Beverly (2001): p.2 - Needed: Experienced Workers – A conversation with Beverly Goldberg, Harvard Business Review, Reprint F0107B, July-August 2001.

were employed. Which virtually shows the effects of the early retirement programmes still carried out in companies.

The highest proportion of the ageing workforce from 50-65 (including both male and female) according to branch and sector could be found in the service industry with a range in percentage from 41-43.3 % followed by the production industry with a range of 34.8 - 35.4 %.²⁵ According to Matthias Herfurth et al., medium sized enterprises with 50 to 999 workers are the ones that mostly employ older workers, while small sized enterprises are the ones with the lowest employment rate of older workers.²⁶ Older workers tend to seldom change companies or their jobs. A study states, that 34% of younger workers aged 15-20 changed companies, while only 3.7% of workers aged 60-64 could change their companies. That means that the mobility of older workers is clearly lower than that of younger workers due to their reduced chances of acquiring a new job because companies prefer to recruit younger workers.²⁷

In comparison to other European OECD countries, Germany occupies a relatively unsatisfactory lower middle zone in the employment rate of older workers. According to reliable OECD statistic data (OECD Employment Outlook 2003), the employment rate of older workers aged 55 to 64 are highest in Iceland with 87.2% followed by Norway with 68.4%, Sweden 68.3%, Switzerland 64.8% and Denmark 57.3%. Germany has an employment rate of only 38.4%.²⁸ The patterns of early labour force withdrawal of older workers are very diverse across OECD countries. The unemployment rate of older workers in the age group of 55-64 are highest in Poland, where transition from centrally-planned to market-based economies was accompanied by large reductions in participation among older workers, and in some EU countries especially Finland, France, Germany, Austria and Spain, where extensive use had been made of early retirement and other benefit schemes to encourage older workers to withdraw earlier from the labour market.²⁹ The employment rate in Germany according to the micro census of March 2004 is lowest among older and younger workers. This trend is confirmed in the employees subject to social insurance contribution in March 2004 (see figure 2).

²⁵ cf. Statistisches Bundesamt, Statistisches Jahrbuch 2003: p. 119 – data stands according to analysis from the Federal Labour Office (Bundesagentur für Arbeit) in February 2003.

²⁶ cf. Herfurth, Matthias et al. (2003): p.54.

²⁷ Ibid.

²⁸ OECD Employment Outlook (2003): p. 302.

²⁹ OECD Employment Outlook (2003): p. 302; see also chapter 2.3 on “Access to Pension and the Trend Towards Early Retirement”.

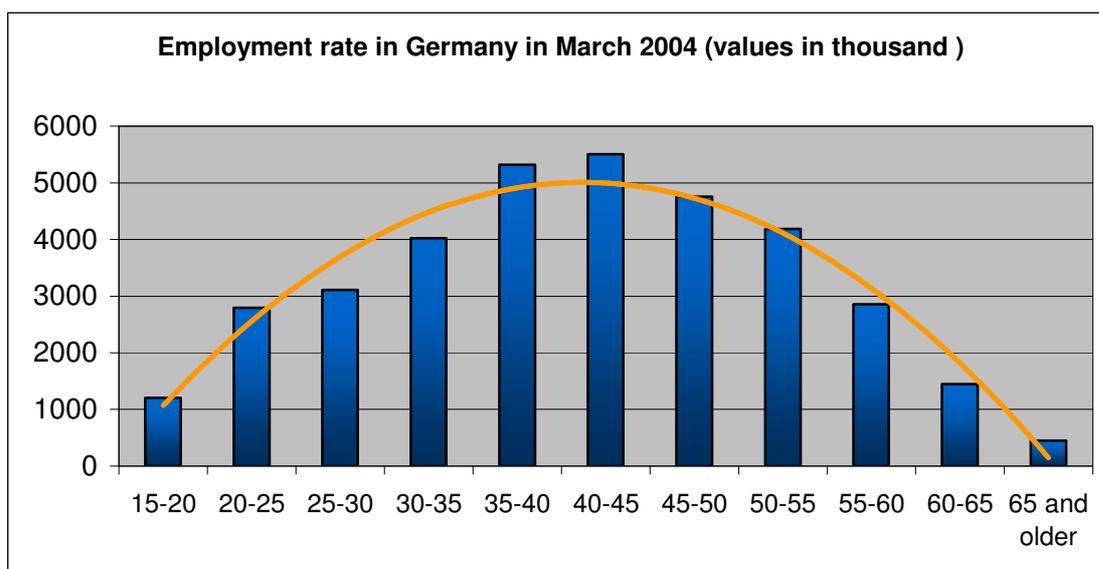


Figure 1: German employment rate according to micro census of March 2004³⁰

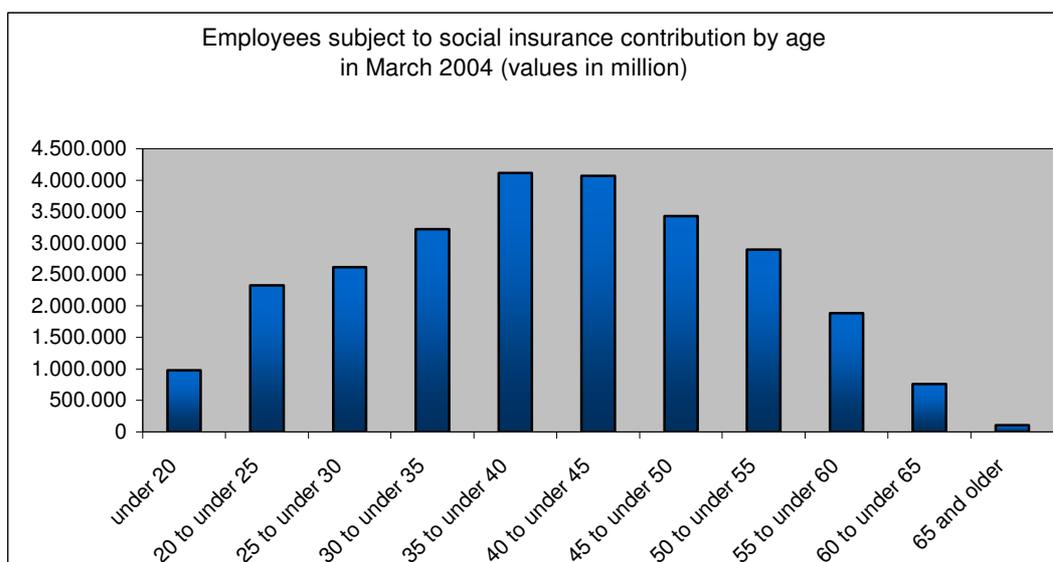


Figure 2: Employees subject to social insurance contribution in March 2004 according to age³¹

At the other end of the spectrum, the unemployment rate of those older workers outside the labour market in OECD countries like Iceland, Norway, Sweden and Switzerland is remarkably small compared to Germany, France, Italy or Belgium. In the light of this, labour force participation and unemployment remain unequally distributed across workforce groups in most OECD countries and older workers are predominantly the most vulnerable group of them all.³²

³⁰ Statistisches Bundesamt, Statistisches Jahrbuch (2004): p. 82.

³¹ Statistik der Bundesagentur für Arbeit (Statistics of the Federal Employment Office) (2004).

³² cf. OECD Employment Outlook (2003): Towards More and Better Jobs, p. 60 ff.

Employment and Labour Market Participation of Older Worker 55-64 in OECD Countries in 2003			
OECD Countries	Unemployment rate	Employment rate	Labour force participation
Austria	5.8	28.1	29.8
Belgium	3.5	25.8	26.7
Czech Republic	4.0	40.8	42.5
Denmark	4.7	57.3	60.1
Finland	8.1	47.8	52.0
France	7.9	34.2	37.2
Germany	10.6	38.4	43.0
Greece	3.6	39.2	40.7
Hungary	3.1	25.6	26.4
Iceland	1.4	87.2	88.4
Ireland	2.4	48.0	49.2
Italy	4.1	28.9	30.1
Japan	5.8	61.6	65.4
Luxembourg	0.2	27.9	27.9
Netherlands	2.3	41.8	42.7
Norway	1.8	68.4	69.7
Poland	10.5	27.9	31.2
Portugal	3.7	50.9	52.9
Spain	7.1	39.7	42.7
Sweden	4.7	68.3	71.7
Switzerland	2.0	64.8	66.1
United Kingdom	3.5	53.3	55.2

Table 1: Employment population ratios, activity and unemployment rates of age group 55-64
Source: OECD Employment Outlook 2003³³

Table 1 gives a brief overview about the employment situation of older people aged 55-64 in most OECD countries, which shows that Germany is one of the countries with high unemployment and lowest employment rate of older workers.

³³ cf. OECD Employment Outlook (2003): Towards More and Better Jobs, p. 302 ff.

Nonetheless, lack of training or occupational skills are factors common to a large proportion of those outside the labour market. In addition to specific age barriers in the employment sector regarding older workers, there is even a broader issue of insecure employment status of low-skilled older workers or older disabled workers. For this group of older workers, it is virtually impossible to secure a new job and in times of economic turbulence in firms, they are the first ones doomed to be laid-off. For groups of insecure employment status to return to employment, it must pay for them to actually accept a new job. Part of the problem lies in the fact that the market wage available to these groups is sometimes too low compared to the welfare benefits to encourage labour supply.

2.1 The Nordic Model of Labour Market Participation of Older Workers

The Nordic model represents a partnership between employers, trade unions and the government, whereby these social partners negotiate the terms of regulating the workplace among themselves, rather than the terms being imposed by law. Through collective bargaining, agreements are reached which apply industry-wide. Employers accept the trade unions' right to organise workers, while the trade unions accept that the employers have the right to manage and allocate work. The model assumes that both the trade unions and the employers organisations are representatives. From an international perspective, the level of organisation among employees is extremely high in the Nordic countries, between 50 and 80%. This is also the case among employers. The Nordic Model is supported by the state pursuing an active employment policy. It is based on keeping unemployment rates low and partly on improving the chances of unemployed workers in terms of finding a new job within a short time through the active provision of training.³⁴

The active Nordic labour market policy has three main objectives. Firstly to ensure the right of every individual to participate in the labour market, secondly to ensure that the companies get the labour force they need and thirdly that more people stay in work until they achieve the normal pension age. Unlike other European countries the rate of employment among older workers is high in the Nordic countries and there is simply no margin of reserve. I have chosen Iceland, Sweden, Norway and Denmark as case studies for the labour market participation of older workers.

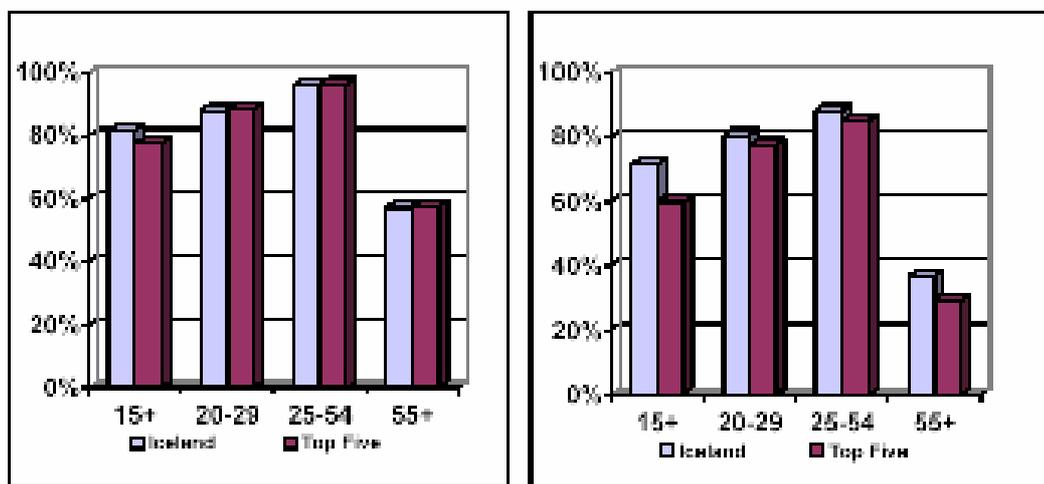
³⁴ Björn Lindah (1999): The Nordic Model: Europe – at the crossroads, in: The Nordic Labour Journal 1/1999, p. 10-12 – The author, a Swedish journalist, writes that the Nordic cooperation in the labour market and working environment sector has a long tradition and that Industrial Relation Policy is in principal the same in all the Nordic Countries and is often called the Nordic labour market model, where the central feature is based on a tripartite co-operation between social partners and governments.

2.1.1 Iceland

Iceland occupies a special position when it comes to active labour market programs. The employment rates for males aged 55-64 show that Iceland is the current world champion, with about 90 percent of that age-group still working. Around 84 % of the Icelandic population between the ages of 16 and 74 (162,700 persons) belong to the labour force.³⁵ It takes a unique position among the OECD countries as it excels at achieving high workforce participation. The figure below indicates that all age and gender sectors of Iceland's population are participating at levels virtually equivalent to the respective average of the Top-five OECD nations. The rates for the other Nordic countries are also comparatively high - around 70 percent in Norway and Sweden, for example. At the other end of the scale, in France, Germany and Belgium, the employment rate of older males is relatively low. Unlike many other OECD countries, Iceland will continue to enjoy higher labour supply growth than population growth over the present decade, making the current period a good opportunity to adopt policies to address its old-age dependency burden that will build in coming periods.³⁶

The general retirement age is 67-70. Iceland's pension system rests on three pillars: occupational pension funds, the pension paid by the social security system and private pension plans. Occupational pension funds have been compulsory for wage earners as well as the self-employed since 1972.

Labor Force Participation Rates: Iceland v Top Five OECD Country Composite
Males Females



Source: OECD, Corporate Data (Employment) database on labor statistics, current through 2002

Figure 3: Icelandic Labour Force Participation versus The Top Five OECD Country Composite³⁷

³⁵ Berit, Kvam (2002): The spirit of Iceland, in: Nordic Labour Journal, October , Vol. 7, The demographic challenge – everyone is needed, p.15-17.

³⁶ Demographic History of Iceland's Population Structure: <http://www.watsonwyatt.com/news/featured/wef/iceland.pdf> [Download April 2004].

³⁷ OECD Employment Outlook (2002).

2.1.2 Sweden

The core of the 'Swedish measure' is an institutional environment where especially unemployed older workers can potentially choose among a wide array of options, each one aimed at improving their labour market opportunities in a different way. Some types of programmes provide direct incentives to move back into employment by either facilitating individuals' job search, providing wage subsidies or fostering the acquisition of work contacts and references. Other measures provide incentives to improve individual productivity and skills through formal training or work experience, thus expanding the range of work possibilities and making the working option more attractive. Quite a number of Swedish older workers take up part-time work to remain actively on the labour market. The Swedish measure regarding older workers is mainly bent on "The Active Guarantee Programme" introduced in 2000. The share of cost for the active labour market policy compared to the total labour policy cost is higher in Sweden than in other countries. What is of special interest here is, to what extent older workers are actively placed in such programs, which are of vital importance for the older workers and maybe of explanation for the relatively high employment rate among older workers in Sweden. The success of this program is that 35-40% of those unemployed older workers who take part virtually end up getting jobs. The idea of this active guarantee, was to try to break the various circles many older workers end up in. An individual plan is drawn up with older jobseekers, who are entitled to apply for all available programmes. It may involve practical experiences, training or quite simply learning how to look for jobs. Those eligible for the "Activity Guarantee Programme" belong to a small group of 10-15 people who receive considerably more help than people unemployed for a shorter time. Whereas a supervisor is quite often responsible for 250 people, those working in the Activity Guarantee Programme only deal with one fifth of this number. All the available programmes are centralised under one roof and the individual action plan serves as a basis for all activities. Taking part in the Activity Programme is a full-time job. This group is put under pressure in terms of geographical mobility and mobility between occupations and this pressure becomes greater after 100 days.³⁸ An important aspect of the Activity Guarantee is the focus on the finding of a new job through the commitment and active participation of the municipality or area to find a new solution. This network system, where private or public services can act as a step to the path of the ordinary labour market is being subsidised by the state.

³⁸ Nordic Labour Journal (2004), Vol. 9, The Labour Market, The Working Environment and Related Issues: Prepared for the Future, p. 14-15.

2.1.3 Norway

The core of this measure is that Norway is making a conscious effort to encourage older people to stay longer in work, thereby discouraging early retirement. The focus on older workers is a tripartite co-operation between the trade unions, employers and the government. There is a broad agreement that aims at keeping older workers longer at work. In this regard, the Norwegian government reduced employers' contributions (Arbeidsgiveravgiften) to employees over 62 from 14.1% to 10.1% on 1st July 2002.

This is seen as a positive step which is buttressed by active campaigns to fight prejudices older workers have about themselves and those prejudices companies have about their older workforce. This effort is basically geared towards the latent prejudice that older workers are neither flexible nor capable of keeping up with development in their working environment.

2.1.4 Denmark

The efforts made to find employment for older workers in Denmark are based on local networks mainly organised by the unemployed themselves, since they are the ones who need to achieve results. Added to this, efforts are made to keep older workers longer employed.³⁹ According to Jakobsen, no matter how much experience and expertise older people have, they soon realise that they have to work very hard if they are to succeed in returning to or even remaining on the active labour market. The philosophy behind the "Senior Job Networks" model is based on recognition of the fact that there are 24 such networks, which are all organised by the senior citizens themselves. The government budget allocated DKK 6.8 million to senior citizens' own job-seeking initiatives for 2003 and DKK 6.1 million for 2004. All the networks with more than 25 members are eligible for annual operating grants of DKK 200,000, subject to the condition that they are non-profit-making and members must be older than 49.⁴⁰ The network takes up direct and active contacts with successful companies mostly of small and medium-size, who from experience have the most favourable attitudes towards older workers. The senior citizens employment programmes are organised slightly differently in different parts of Denmark. The regional employment services do not normally have special counsellors for senior citizens, who are divided into age groups like everyone else, i.e. normally 50-55 and 56-60. But the employment services do use private consultancies that specialise in providing services for senior citizens.⁴¹ Another context of the Danish measure is the active flexible working arrangements implemented in the municipalities and companies. The flexible working arrangements are forms of employment, where a person who can no longer work full time, either because of illness, workforce threat of redundancy due to financial crisis, collapse of market, technological "revolution" in processes or products or some other reasons, can reduce their working hours. The flexible working arrangements are subsidised by the state and are intended for people not

³⁹ Jakobsen, Anders (2002): Senior citizens must rely mainly on their own efforts, p. 13-14, in: Nordic Labour Journal 2002 – October, Vol. 7, The demographic challenge – everyone is needed.

⁴⁰ Ibid.

⁴¹ Ibid.

receiving state benefits. This helps older workers to remain in job with reduced working time rather being laid-off in times of problems. This reform has been formalised in agreements between the social partners in Denmark.

2.2 Employment and Unemployment Rate of Older Workers in the Light of the Labour Market Reform in Germany

During the nineties, the German Labour market underwent drastic changes, where it had to integrate workers from the former German Democratic Republic (GDR).⁴² Since the late nineties unemployment rates started to rise remarkably, whereas the older age groups were and are still the most affected group. There is presently a high and persistent level of structural unemployment in both West and East Germany. Wage policy is dominated by collective bargaining agreements between trade unions and employers' organisations. The high level of unemployment exerts a rather limited impact on the wage setting. Incentives to take up low-wage jobs are considered weak and once older workers are unemployed they have a greater risk of being unemployed for a longer period of time. High contribution rates to the social security system are considered to be one of the main reasons for the low level of employment of people with low earning potential. After a period of experimentation with subsidised social security contributions in a few regional labour markets, the government decided to implement the so called Mainzer Model⁴³ on a nationwide scale till the end of 2006, which has in the view of the government been relatively effective. With the Mainzer Model, it is hoped that employment in the low-wage sector will not only become financially more attractive for the unemployed, but there will also be additional incentives for employers to recruit marginal workers.

In keeping with goals of the European Employment Strategy, older workers are an explicit target group of the Act of Modern Services on the Labour Market (Hartz Bills). The Hartz Bills are a set of models aimed at implementing labour market reforms and have taken first steps to modernise the German labour market by emphasising the need to increase the active individual participation rate of the most affected unemployed groups, to which the older age groups belong. Since the passing of the Hartz Acts I and II in January 2003, job seekers of 50-years and above, who take up new jobs receive an income subsidy when their new salary is lower than what they were previously earning. At the same time the conditions for fixed-term employment contracts for over-52s had been eased.⁴⁴ On the supply side, the so-called wage safeguard for older workers consists of two elements. "On the one hand, there is a grant of 50% of the "net-difference" between wages earned before and after unemployment phase. The wage supplement is tax-free and not subjected to social contributions. In addition, the reduction in old-age security resulting

⁴² Ecoweek: BGI Economic Research OECD (2004): p. 2.

⁴³ The Mainzer Model aims at making regular employment covered by the social security system more attractive for the unemployed. It also introduces an income dependent child allowance. Furthermore, it is also possible to combine the employee subsidy of social security contributions with a wage subsidy to employers with a subsidy rate of at most 30% for an initial employment period of up to six month.

⁴⁴ Ecoweek: BGI Economic Research OECD (2004): p. 2.

from the lower wage level is partially off-set by increasing coverage in the statutory pension insurance. The insurance contributions are boosted to 90% of those paid in the previous job. The benefit of the wage safeguards are granted exclusively to older jobless persons, who have a (residual) claim to at least 180 days of unemployment benefit or, in the case of workers threatened by unemployment, have a corresponding potential claim.”⁴⁵

On the demand side of it, employers are given the incentives to hire older workers. Employers who hire jobless persons who have reached the age of 55 are exempted from paying their share (3.5%) of unemployment insurance. The measure to provide more flexibility in employing older workers have also been extended to cover the field of labour law, which is aimed at improving older jobless persons’ chances of reintegration into the labour market. To at least help skilled job seekers find a new position, mandatory welfare contributions levied on low wages, which are less than 800 EUR per month, have been lowered. Thus, in order to increase the capacity of the German economy and create jobs, the government has launched a reform of the social welfare system in order to lower welfare contributions that weigh on wages and thereby increase the cost of labour. The maximum period for receipt of unemployment benefits was previously set at 12 months for unemployed persons up to the age of 44 years, 18 months for those aged 44-47 years, 22 months for those aged 47-52, 26 months for those aged 52-57, and 32 months for those over 57.

With the intention of reducing benefit payments and making early retirements more difficult, the periods of receiving benefit are now to be reduced, especially for older people, as set out in table 2 below.

Minimum period of compulsory insurance payments	Period of receipt for unemployed people aged under 55	Period of receipt for unemployed people aged over 55
12 months	6 months	6 months
18 months	9 months	9 months
24 months	12 months	12 months
30 months	12 months	15 months
36 months	12 months	18 months

Table 2: Entitlement to receipt of unemployment benefits according to the new reform

⁴⁵ OECD Employment Outlook (2003).

Apart from the recently passed reforms, which are aimed at boosting supply and demand with respect to jobs - in particular the partial exemption of welfare contributions for some jobs (the so called mini-jobs) or incentives offered to set up a one-person company (so-called Ich-Ags) – other measures have resulted to changes in how unemployment figures could be compiled. In this regard, for example, since January 2004, job seekers in vocational training courses are no longer to be booked as unemployed: this measurement played a significant role in reducing the unemployment rate from 10.4% in December 2003 to 10.2% in January 2004.

However, the government regards the new legislation as a major instrument to support an economic upswing, which will lead to more employment. Quite to the contrary, the German Employers' Confederation (BDA) doubts that the loosening of the statutory protection against dismissal will have any positive effect on employment especially for older workers. It remains to be seen, whether the changes in unemployment benefits will statistically decrease the unemployment figures or even lead to more employment.⁴⁶ Political parties are also urging firms to rethink and employ as well as retain older workers amidst the low labour force participation of this group. This opinion is also been shared by the Trade Unions, who appeal to the Chamber of Industry and Commerce as well as the Chamber of Trade to be more aware of this problem and try to take action in combating it.⁴⁷

At a joint conference held in September 2003 the results of a project entitled “Proage – Facing the Challenge of Demographic Change” was presented by international project partners, composed of the Confederation of German Employers' Association (BDA), the Bertelsmann Foundation, the Irish Business and Employers' Confederation (IBEC), the Danish Employers' Confederation (DA) and the General Employers' Association Netherlands (AWVN). The study examined and at the same time compared the employment prospects of older workers in these countries.

The results of the study show that in Germany only 38.4% (also see table 3) of inhabitants aged between 55 and 64 were in employment in 2002⁴⁸ compared to almost 50% in some 30 years ago. This is regarded a considerably lower figure than the average for the same age group in other countries in the Organisation for Economic Cooperation and Development, which stood at 48% in 2001. In both Switzerland and Sweden, the employment rate of older workers stood at about 67% in 2001.⁴⁹ The results of this research emphasises the fact that in Germany little use is made of the economic potential of the large proportion of older workers on the labour market. According to the study, developments in other countries prove that, it is possible to achieve a higher employment rate among older age groups. Countries like Netherlands and Finland are also currently pursuing policies in order to catch-up, while countries like Belgium and Italy are also presently struggling with structural problems of their labour markets. Countries whose labour market had proven to have good yield have in the past pursued stronger reform policies in order to

⁴⁶ Comments from Heiner Dribbusch from the Institute of Economic and Social Research, WSI Duesseldorf in: <http://www.eiro.eurofound.eu.int/2004/01/feature/de0401205f.html>.

⁴⁷ See article from Peter Thelen in: *Handelblatt*, Issue of Wednesday, 14th April 2004: p. 4.

⁴⁸ cf. OECD Employment Outlook (2003) – see table 3.

⁴⁹ Comments from Lothar Funk from the Institute for Business Research – IW in Cologne to an article in eironline “New study examines employment prospects of older workers”, <http://www.eiro.eurofound.eu.int/2003/10/feature/de0310106f.html>.

encourage the employment of older workforce and at the same time implement policies to retrain and retain them.⁵⁰

According to the conditional phrase of Lothar Funk (Cologne Institute for Business Research, IW), if the potential of older people is to be fully utilised, there must also be a change in the personnel policies of the individual companies in order to support the economic growth especially in areas of personnel shortage like the engineering sector⁵¹, to finance the social security systems as well as to combat the challenges of the future demographic change. Companies who want to remain competitive on the market and at the same time compete in recruiting qualified workers should have to invest much more in the human resources development and at that same refrain from prejudices against older workers.

2.3 Access to Pension and the Trend Towards Early Retirement

In this block, I would like to take a brief view of the access to old age pension in Germany in comparison with other OECD countries and how this would have effect on the sustainability of social security systems as well as the supply and demand on the labour market in light of the demographic change and the utility of the human resource potential of older workers. According to an International Labour Organisation (ILO) employment report from Auer and Fortuny in 2002 there had been a trend in most OECD countries since the mid-90s, that labour force participation rates of older workers above 55 have declined markedly. This decline has been more marked in Europe and in the United States than in Japan. Although labour force participation rates of older people vary according to gender, education and the state of economic development of the countries, however, the decline in rates of older workers has been highly associated with the trend towards earlier retirement, influenced by increasing national per capita income. Longer education, shorter working lives and longer retirement periods are all consequences of increased wealth.⁵² The growth of the modern market economies in industrial countries has closely been linked to the development of various systems of social security, which are designed to insure against specific risks – for both employers and employees – from the coordination of the factors of production by the market. An integral element of such systems is the provision of transfer payment, or pensions, which are linked to specific age limit and which compensate for the risks of invalidity and old age.⁵³ However, the systems developed by individual countries to provide security in old age and age-limit structures differ markedly from one another.

The Federal Republic of Germany is characterised by an early retirement trend similar to other continental European countries like France or the Netherlands, where the employment of older workers is not characterised by **integration** like in Sweden, or **reinstatement** and “**shukko**” like in Japan or by a **second**

⁵⁰ Confederation of German Employers' Association (BDA) (2000): Increasing the employment rate of older workers - <http://www.proage-online.de/>.

⁵¹ According to results of a newly published study by the Centre for European Economy in Mannheim (Zentrum für Europäische Wirtschaft –ZEW) there is still a shortage of personnel in the engineering sector in Germany.

⁵² Auer, Peter/ Mariàngels Fortuny (2000): EMPLOYMENT PAPER, 2000/2, Ageing of the Labour Force in OECD Countries: Economic and Social Consequences, p. 10.

⁵³ Naschold, Frieder et al (1994): Germany: The Concerted Transition from Work to Welfare, p. 117f, published in: Naschold, Frieder/ de Vroom, Bert (Eds.): Regulating Employment and Welfare.

career like in the USA; but by a clear trend towards early retirement, usually implying the transition from full-time paid job to full-time retirement.⁵⁴ According to Berkel, Barbara et al., the main feature of the German old age pension is regarded as “flexible retirement”⁵⁵ from the age of 63 for workers with long service history and at the age of 60 for women, unemployed and workers who cannot be employed because of health or labour market reasons.⁵⁶ “Labour force exit before the age of 60 is frequent: about 45% of all men are referred to as “retired” at the age of 59. Only about half of them because of disability; the other 50% make use of the many official and unofficial pre-retirement schemes, i.e. unemployment compensation and combination of the severance pay.⁵⁷ According to Börsch-Supan et al., it is interesting to note, that male labour force participation in Germany declined from 1970 to 1990 for all ages above 50, and increasingly so for older persons, because exit from the labour market through early retirement had been excessively been put into use.⁵⁸

In this regard, Naschold et al. has come to a grounded conclusion, that the system of security in old age with its retirement limit is no longer merely regarded to confront classic problems of providing security against risks of invalidity, and socially defined age limit to working life, which are necessary in order to stabilise internal markets. The access to retirement in its context has increasingly taken a flexible form “resulting from the state pension policies, wherein such ‘classical’ functions of labour market withdrawal in old age are now being over-determined by additional ‘motives’: on the one hand by firms’ augmented requirement rising in the context of both historical transition from taylorist regime of production with its intensive use of labour power to a flexible, integrative production regime and of the effects of the cyclical fall in demand and structural crisis; on the other hand, by changes in the interests articulated by employees, for whom earlier retirement no longer represents merely the end of a career of physical and mental wear and tear, but starts a separate phase of life.”⁵⁹ According to Naschold et al., in Germany, the transition from paid employment to retirement is characterised by a multiplicity of direct and indirect pathways. The direct pathways are regarded as those which lead directly from the active paid work into a regular retirement, while the indirect pathways are regarded as those which involve an intermediate status, which is usually via unemployment.

The three distinct entry criteria which comprise the basis of the German system of social security are as follows:

⁵⁴ Naschold, Frieder et al (1994): Germany: The Concerted Transition from Work to Welfare, p. 117f, published in: Naschold, Frieder/ de Vroom, Bert (Eds.): Regulating Employment and Welfare.

⁵⁵ Berkel, Barbara and Börsch-Supan, Axel, p. 5 (2003).

⁵⁶ For a comprehensive illustration of retirement entry see also Naschold, Frieder et. al. (1994)

⁵⁷ Berkel, Barbara/ Börsch-Supan, Axel (2003): p. 5.

⁵⁸ Börsch-Supan, Axel/ Schnabel Reinhold (1997): Social Security and Retirement in Germany – Working Paper 6153, p. 5.

⁵⁹ Naschold, Frieder et al (1994): Germany: The Concerted Transition from Work to Welfare, p. 117f, published in: Naschold, Frieder/ de Vroom, Bert (Eds.): Regulating Employment and Welfare.

Pathway I	Pathway II	Pathway III
Retirement due to partial or total disability, the former preventing employment in a workers' existing occupation (Berufsunfähigkeit), the latter preventing paid employment in general for health reason, which are independent of age; and early retirement at 60 for health reasons (for severely handicapped). ⁶⁰	Retirement linked to the state of demand for labour market: the so-called "59er provision" offering retirement via unemployment at 57.4 years of age (unemployment benefit followed by a pension and at 60 entitlement to an "unemployment-pension" (Arbeitslosenaltersruhegeld)); during the 1980s a number of specific retirement provisions, offering an indirect path into retirement from age 57 (Vorruhestandsregelung).	Age and group-specific retirement: for women a pension at age 60 (Frauenaltersruhegeld) and full pension at 63 (flexible retirement age/ flexible Altersgrenze) and at 65. ⁶¹

Table 3: Pathways into Retirement - According to Naschold, Frieder et. al. (1994)

The dominant mode of regulation of the state pension insurance system in Germany since two decades now has led to more pronounced trends towards early retirement and more falling participation rates among older people than in other developed market economies. Although the trends to early retirement can also be observed in comparable market economies like Britain, USA, Japan, Sweden and Netherlands, the structures of the labour market exit by older workers vary considerably.

Germany is one of those countries who take the lead in the international field in trends towards early retirement, whereas the participation of older workers are highest in the US, Japan and the Nordic countries.

In 2003 Herfurth, Kohli and Zimmermann have drawn another German access pathway to retirement. The changes and reforms from 1972 up to 1992 of the pension systems brought about a clear reduction of the pension access age. For example, the exit age for men came down from 62.2 years to 58.4 and women from 61.6 to 59.5. Since this time the access age to pension has been oscillating between 59 and 60 for men and up to 61 for women.

⁶⁰ Naschold, Frieder et al (1994): Germany: The Concerted Transition from Work to Welfare, p. 117f, published in: Naschold, Frieder/ de Vroom, Bert (Eds.): Regulating Employment and Welfare.

⁶¹ The various pathways into retirement, often involving other state transfer benefits like sick pay, social security, compensation for industrial accidents, unemployment benefit etc. and the various modi by which state benefits are topped up under collectively negotiated provisions at branch or firm level are further discussed in Kohli/ Jacobs/ Rein (1991).

Access age for pension	58	59	60	61	62	63	64	65	66	67
3 yrs. of employment, 5 yrs. waiting period	pension due to diminished ability to work								old age pension	
8 yrs. of employment in the last 10 yrs, 15 yrs. of waiting period	unemployment		old age pension after unemployment and partial retirement							
8 yrs. of employment for the last ten yrs. and 15 yrs of waiting time	partial retirement		old age retirement after unemployment and partial retirement							
At the age of 40, 10 yrs of compulsory contribution and 15 yrs. of waiting time	old age pension for women									
35 yrs. of waiting time and disability of at least 50%	old age pension for severely handicapped									
35 yrs. of waiting time	Old age pension for longtime insured workers									
5 yrs. of waiting time										old age pension

Table 4: Access path and pre-requisite to old age pension according to age⁶²

However, the pension reforms of 1992 and 1999 as well as the proposals discussed by the “Commission for Sustainability in Financing the German Social Security System” referred to in short as the “Rürup Commission” have tried to counter-steer the trends towards early retirement. The present public and controversial debate amidst the pension reform has a characteristic in itself, which justifies a question leading to analytical explanations: What causal factors lie behind these national trends, how is their dynamic, their continuities and discontinuities to be explained? The paper will briefly reflect on factors underlying the causal trends as well as the urgency of the discontinuity of this trends. The general trends of early retirement in Germany is regarded as the behaviour of firms as “economic subjects”, which are to a large extent being supported by political policies of regulation.⁶³ Workforce age structures and firms retirement policies are basically determined by company-level personnel policy, i.e. the strategies adopted to recruit, deploy, use and retire labour.

There are perspectives which show that human resource options depend decidedly on the strategic positioning of personnel functions within the company’s organisational structures.⁶⁴

“Human resource development itself is a functioning of many factors: the structural forms of the horizontal and vertical division of labour within the firms’ organisation, the decentralisation of decision-making responsibilities on personnel matters, the way in which it is embedded in the valorisation process

⁶² cf. Herfurth, Matthias/ Kohli, Martin/ Zimmermann, Klaus F. (eds.) (2003): p. 44.

⁶³ cf. Naschold, Frieder et. al. (eds.) (1994): p. 130.

⁶⁴ Womack, James P. et. al. (1990).

with actual production and openness of working structures for new ideas etc. Such organisational and human resource characteristics have far-reaching consequences for maintaining and developing the labour power of older workers, and thus for the productivity and externalisation risks.”⁶⁵

Naschold et al. identifies three various characteristics of production process regimes and human resource management strategies which are either conducive for long-term (till normal retirement age) employment of older workers or do externalise older workers as a strategy towards today’s competitive conditions.

- **Taylorist production regime**, whose organisational structure is based on extreme division of labour, polarisation of personnel usage, intensive production with high performance requirement and low skill requirement. The age selective risks entail high labour turnover rates, falling productivity and skill level at old age and the risks of extreme externalisation for older workers.
- **Diversified quality production**, where the working structures are relatively co-operative and innovative with high level skill, moderate work intensity and a relatively stable work force and low labour turnover. There is low risk of falling productivity and quasi-long-term employment with a low risk of externalisation at old age.
- **Innovation-oriented and market-expansion strategy**, where there are continuous improvement of working structures and continual development of skills through job rotation. The polyvalent use of labour brings with it considerable risks of falling productivity in old age and there is a stable core workforce and a flexible peripheral workforce. The age selective risks for older workers entail serious risks of falling productivity but long-life employment and a low risk of externalisation for a core workforce and differentiation among peripheral work groups.⁶⁶

According to various authors⁶⁷, irrespective of industry and production regimes, companies do not view older workers as a vital human resource, but rather as a “flexibility potential” in order to realise their strategies of personnel adjustment. This potential is used in such a way that adjustment problems are dealt with by externalising older workers. Externalisation refers to a specific corporate problem-solving strategy by which problems are primarily solved through labour market exits (firm-exits) rather than through internal changes in products, production structures, organisational structures, training processes and workplace health promotion. According to a regional study in Baden-Wuerttemberg (southern region of Germany)⁶⁸, except for certain limited efforts to develop age-specific structures, very little firms have systematic policies which aim at integrating older workers through redeployment, creation of new age-specific jobs or production diversification.

According to Börsch-Supan et al. “early retirement imposes additional pressure on the old age dependency ration - i.e. the number of people of working age relative to the number of people of retirement age – and thus on the financing of the German pension system, the reform discussion has

⁶⁵ cf. Naschold, Frieder et. al. (eds.) (1994): p. 131ff.

⁶⁶ cf. Naschold, Frieder et. al. (eds.) (1994): p. 131ff.

⁶⁷ cf. Jacobs, Klaus/ Kohli, Martin/ Rein, Martin (1987); Jacobs, Klaus/ Kohli, Martin (1990); Jacobs, Klaus/ Kohli, Martin/ Rein, Martin (1991).

⁶⁸ cf. Bangali, Lucy et. al. (2003).

shifted once again to the pivotal retirement age, currently 65, and the earliest possible qualifying age for specific forms of retirement pension, currently 60. Bearing the increasing life expectancy in mind, raising the age retirement would appear to be an obvious reform option. This alternative is particularly attractive from the financial point of view, as an increase in the age of retirement would boost the number of contributors to the system whilst simultaneously reducing the number of beneficiaries.”⁶⁹ But on the other, the labour market participation of older workers in its pending situation, it would be urgently thoughtful and logical to retain, reactivate, reintegrate and develop the human resource potential of older workers, instead of instantaneously increasing the pension age to 67. This will by all means also maintain a sustainable financing of the pension system. Using the potential of older workers efficiently will by no means cause ill health or reduction of productivity output and performance. According to Cutler and Sheiner⁷⁰, there are no signs that an increase in age is likely to be prevented by deteriorating health. On the contrary, age-specific rates of illness have dropped even faster than mortality rates.

3. Strategic Policy Approach Towards the Employability of Older Workers

The situation for older workers needs to be urgently reviewed in the context of the changing nature of the labour market. What strategic measures can be taken to ensure their employability? In the light of this, I would like to discuss several possibilities to enhance this position. In this case, I would like to define the “employability” concept from three perspectives i.e. from the angle of the older employees, employers and the policy makers. On the one hand, I would describe “individual employability” as the abilities and skills of older workers, under the consideration of their labour market situation, to manage their own careers, continue to learn throughout their career, gain initial employment, maintain employment and obtain new employment if required.

On the other hand, companies also need to adjust to the concept of employability. To enhance this so called “organisational employability”, companies must learn to no longer regard workers as their "personal assets" but to more strongly regard them as contracting partners and thereby actively support the qualification and further training as well as the positive development of all workers irrespective of age. In order to remain competitive on the market and have access to competent and efficient personnel, they must implement organisational innovativeness and flexibility in their personnel management and development.⁷¹

Combating the present problem of older workers in both the interest of the older workers themselves, the companies as well as the social security system with a reorientation towards foresight and sustainability, concrete measures should be undertaken to increase the awareness of companies about the employability of older workers. The continued employment of older workers would be a welcome change in the companies. Their continued presence in the workforce would help ease the growing relative scarcity of

⁶⁹ Berkel, Barbara/ Börsch-Supan, Axel (2003): p. 1.

⁷⁰ Cutler/ Sheiner (1998).

⁷¹ cf. Bangali/ Fuchs/ Hildenbrand (December 2003): p.14.

knowledge and other skilled workers that will otherwise acutely develop in the next decade. We should consider how to tap and retain this pool of available workers.

3.1 Strategy I: Improve the Awareness of Companies and Combat Age Discrimination within the Labour Markets

According to several studies and surveys there is no doubt that the economy in the long run will have to largely depend on the human capital potential of the older workers. This relates to the fact that economic constraints are better matched in the long run by age-related work and employment policies, which demand a change of attitudes, behaviour and routines of decision-makers throughout the whole organisation, based on evidence of the benefits for all parties. This comprises a change of paradigm from sceptical personnel policies towards older workers to preventive and sustainable policies aimed at an innovative design of work, technology and organisation, which promotes individual and organisational development.⁷² Increasing low employment rate of older workers has become a key issue in Germany, where the government, political parties, trade unions and employer associations are trying to cope with the challenges by developing appropriate policies for active measures such as combating age discrimination, promoting life-long training and flexible work arrangements to allow older workers to remain and actively participate in working life, and accentuating the need to integrate “age elements” into human resource management. However, several approaches and policies are mainly focused towards the readjustment of retirement and pension schemes. In my opinion, necessary adjustments regarding the interrelation between ageing, labour market and employment policies - although some of these policies are newly introduced and have to prove their effectiveness in the near future - as well as inner firm practices of qualification and health care should be actively taken into account.

According to results of an empirical survey carried out in the Federal State of Baden-Wuerttemberg in December 2003⁷³, a majority of the companies who took part in the survey made the statement that “wage setting and employment protection of older workers counts as one of the depending reasons, why older workers are either not recruited or retained.” At the same time, some economists argue, that trade union wage setting policies are pricing older workers out of the labour market. The assertion is that wages tend to rise with age creating a serious obstacle in the retention or hiring of older workers, and older workers are actually more expensive for companies than younger workers, due to higher remuneration, fringe benefits and social contributions. However, whilst it is true that wages and fringe benefits rises with age, there is no evidence that the performance and accelerating know-how and experience of older workers do not compensate for the higher costs.⁷⁴

According to the above stated survey, workers above 50 years are encountering enormous problems regarding job promotion, the provision of further training as well as applying for jobs on offer. If age

⁷² cf. Krenn, Manfred/ Oehlke, Paul (2001): p. 6.

⁷³ cf. Bangali, Lucy/ Fuchs, Gerhard/ Hildenbrand, Marcus (2003).

⁷⁴ cf. TUAC (Trade Union Advisory Committee to the OECD), Discussion Paper May 6th 2003 in Paris: p.3.

discrimination could be successfully combated or even reduced to its minimum in the companies, effective use could be made of the human resources available. This would help to build and maintain a broadly skilled and motivated workforce, and at the same time provide solutions both to the challenges of competition and the requirements of customers based on the broad experience and expertise of older workers. However, there is no evidence indicating that the attitudes of employers towards older workers are changing substantially. Which leaves us with the choice of active campaigns to raise the awareness of companies that longer and active participation of older workers in the labour market could bring gain and thereby help relieve the pension funds. This particularly means that companies must be convinced to engage in pro-active and foresight policies of changes in work organisation, working time, training and health care in order to enable older workers to remain in productive work.

3.2 Strategy II: Enhancing Access to Training for Older Workers

According to OECD's International Adult Literacy Survey (IALS), there is no empirical evidence stating that older workers are more or less productive than other age groups. In the light of this, the productivity potential of older workers is not impaired by age, but by skills. The analysis suggests that literacy skills measured in this survey are a key determinant of worker's productivity and that these skills improve with practice and do deteriorate if not used.⁷⁵ Several labour force and personnel development surveys come to the evidence, that the key factor constraining training activities of older workers is the lack of opportunities provided by employers rather than disinterest among older workers. These studies also prove, that older workers receive less training in companies than other age groups and that the participation of workers in company education and training declines according to their increase in age.⁷⁶ Training is an essential weapon of employees to update, and strengthen their skills for the labour market. If training and professional development are being denied to especially older workers, there are serious implications for employers, trade unions and the workplace in general. Given insufficient access to training, older workers are likely to show low performance, be given poorer appraisals, receive more ordinary jobs and assignments, and consequently suffer a loss in productivity. In this regard, there should be a reverse in the attitude of the companies to integrate older workers more into company educational and training processes. Lifelong learning can help the adaptation of workers' skills and competencies to the demands of the labour market and thereby help improve the attachment of older workers to the labour market. Adapting skills will be more fruitful than acquiring completely new ones given the relatively shorter time to regain cost. In this regard, it is clear that effective implementation of lifelong learning can help to facilitate the adjustment of workers' skills and competencies.⁷⁷ Companies, with the help of low-

⁷⁵ Source of this quotation is the working paper Commission of European Communities in Brussels on 3.3.2004 with the topic "Increasing the Employment of older Workers and Delaying the Exit from the Labour Market", p. 10.

⁷⁶ cf. Bangali, Lucy/ Fuchs, Gerhard/ Hildenbrand, Marcus (June 2003 and December 2003): Beschäftigungsfähigkeit älterer Fachkräfte in Baden-Württemberg.

⁷⁷ cf. TUAC Discussion Paper on Approaches.

cost pedagogical age-based and age-mixed training concepts could implement innovative didactic measures and methods to achieve employee-friendly and effective training processes.

3.3. Strategy III: Safety conditions and health management at work

The health of a worker plays a vital role in their labour force participation. Health plays an important role in the retirement decision-taking, because many older workers who voluntarily decide to go into early pension mostly make their decisions because of health problems. That means, that maintaining and improving health becomes more and more important as the population ages. The strategy implies that prevention is generally better than cure. Absenteeism due to frequent illness does not only reduce the productivity of the worker, but therewith that of the company. Workplace that promote exercises, ergonomic facilities and health programs in order to provide basic health confidence assessments alerting the workers of potential health risks, are more likely to get more benefits that accrue from having an older worker.

3.4 Strategy IV: Flexible forms of work organisation and age-related design of work and career-path

Flexible forms of working time and work organisation can assist workers in avoiding periods of involuntary unemployment and thereby foster job retention especially for older workers on the labour market. The more flexible the labour market the more easily companies can employ workers in areas of growth in the economy. This enhances job creation, innovation, deployment of new technologies and productivity growth. Older workers who approach the age of retirement may wish to reduce the number of working hours they work or to combine paid work with voluntary work in areas of their interest. Through flexible work organisation there is the possibility for older workers to gradually withdraw from stressful job areas to take up other assignments e.g. guidance and counselling of younger trainees within the company. Within this process of job-rotation , age diversity takes place and older workers pass on their acquired experience to the younger generation. The organisation benefits from this process because knowledge management within the organisation takes its natural cyclical turn. Between 2001 and 2002, strong increases in the employment rates of older workers were associated in most EU countries with the positive trend in the share of part-time workers⁷⁸ (see the Nordic Models). If companies are flexible enough to accommodate these measures, they will find it easier to retain older workers, who will in turn remain active on the labour market till the normal age of retirement.

⁷⁸ Commission of the European Communities, Brussels, 3.3.2004 COM (2004) 146 final: p. 10.

3.5. Strategy V: Effective labour market policies

This strategy in the first instance actually addresses policy makers to implement concrete policies for an effective and active labour market participation of older workers, who are the most endangered group on the market. This virtually calls for strengthened policies to prevent unemployment and help those older workers having lost their jobs to remain in the labour market and find another job. Concrete approaches at regional and local levels to meet individual needs, through guidance services, specific training and retraining as well as creating valuable network systems.⁷⁹ Policy frameworks could at this junction refrain from creating further incentives for workers to retire early. Similarly, companies need to develop strategic employment policies and become more flexible in their attitudes towards working hours and balancing work and family responsibilities at all stages of work life.

3.6. Strategy VI: Implementing the Multiplier-Effect through Best-Practice-Examples

The multiplier-effect addresses three paths: firstly, the **rethinking path**, secondly, the **proactive and foresight path** and thirdly, **the sustainable path**. What does the multiplier effect relay and what is meant by Best-Practice-Example? Multipliers are those employers, employees, trade unions, training institutions, policy makers etc. who have gained awareness of the problems facing older workers on the labour market and who have implemented or tried to implement strategies and solutions to combat these problems. Employer-multipliers and training institutions are in the most promising position to positively influence other companies regarding the awareness and utility of the valuable potentials of older workers.

In this regard, best-practice “should be regarded not as a once-and-for-all achievement, but as a range of possible interventions, from minor to major, that contribute to promoting the interests of both the older workers and the organisations. These interventions do not necessarily imply large financial outlays; on the contrary, many important changes can be implemented at low cost. Best practice should be “fit for purpose”, that is cost-effective and appropriate. It must be monitored and evaluated to ensure that it is achieving its goals.”⁸⁰ According to Walker, the realization of best practice in combating age barriers does not necessarily demand a particular initiative on older workers, but there may be general human resource policies that are of special benefit to older workers.⁸¹

At this junction, I would like to emphasise that companies, especially personnel managers and developers should follow the rethinking path and with the help of innovative training institutions together with trade unions, policy makers and researchers try to find solutions and possibilities to address the proactive and

⁷⁹ Commission of the European Communities, Brussels, 3.3.2004 COM (2004) 146 final: p. 10.

⁸⁰ Walker, Alan (1998): *Managing an Ageing Workforce. A Guide to Good Practice*, p. 3.

The Guide has been written by Prof. Alan Walker of the University of Sheffield, the lead researcher on the Combating Age Barrier in Employment Project. The European Foundation for the Improvement of Living and Working Conditions is an autonomous body of the European Union, created to assist the future policy on the social and work-related matters. Further information can be found at the Foundation's website at <http://www.eurofound.ie>

⁸¹ Ibid.

foresight path as well as the sustainable path. In this regard I have listed some concrete and existing best practice examples which can be grouped into five main dimensions (also see the different strategies I - VI):

- Personnel recruitment
- Training and development
- Flexible working organisation
- Ergonomic workplace design
- Change of attitudes within the organisation

Personnel Recruitment: The meaning of best practice in this regard, is that older workers have equal or specific chances to accessible jobs and that potential applicants are not discriminated against directly or indirectly. Age discriminations against older workers can be found mostly in job-adverts, where a particular age group is directly addressed. In the majority of these advertisements older applicants are systematically discouraged in applying for these jobs. The absence of age limit in adverts would be a very low cost and effective way of encouraging potential older applicants. A German medium-sized engineering firm in the State of Baden-Wuerttemberg, who had problems in recruiting specialised personnel, consciously made a job-advert, directly addressing older engineers. Through this, the firm could get hold of useful know-how, experience and a valuable potential of older engineers as well as constructing engineers, who are difficult to find. The firm set out a mixed-age groups of old and young and virtually forced the recruited older workers to actively participate in training. The rethinking path was implemented in this case, where the firm tried to break down age barrier in her recruitment and personnel development strategies.

Training and development: Best practice in this area means that older workers are not neglected in training and career development. Ensuring that opportunities for learning are offered throughout working life, thereby specifically implementing training methods that are suitable for older workers, which are designed according to their learning history and capability. Long-life learning is very important in this regard and could be actively implemented in the personnel development of the organisation in order to activate and motivate older workers to learn. A German metal-processing company that produces lifts (elevators) introduced practice-based IT- training courses for older worker in field service of repair and maintenance. The courses were specifically designed for older workers with a close interplay between existing experience and the new technical skills to be acquired. Older workers are more interested in training concepts that are instantaneously related to their practical experiences.

Flexible working organisation: Best practice in this field means giving older workers greater flexibility in their working hours or in timing the nature of their retirement. According to Walker, such flexibility may be an important method of retaining this group in employment and thereby utilising their potential

know-how and experience.⁸² “A medium-sized Belgian finance company (Fidisco NV) enables its employees to adopt very flexible working hours. It allows older staff (men over 60 and women over 55) to work two hours less per week without loss of earnings. It is possible to convert this reduction in working hours into extra holidays. A medium-sized construction company in France abolished early retirement in 1993 and replaced it with phased-early-retirement as part of an apprenticeship scheme. The objective is to make the transition from work to retirement smoother, to facilitate recruitment and use the oldest staff to train the youngest.”⁸³ These best practices implement the foresight and sustainable paths.

Ergonomic and workplace design: This best practice may take the form of preventive measures, in order to prevent burn-out and physical decline. There are various forms in which work inclined illnesses or disabilities can be prevented through improved work design. This could be in the form of reducing heavy lifting or violent twisting movements, the provision of sufficient lighting and seating. “A medium-sized Dutch construction company (Hazenberg Construction) tries to anticipate potential problems of ageing work through job adaptation and social-medical supervision. This includes periodic health-checks, company doctor advise of both employer and employee on sensible combination of load and capacity. Forms of adaptations are e.g. switching from carpentry work to supervisory positions; mentoring of younger less experienced operational staff in less arduous renovation projects; putting a younger employee to work with older ones, with the heavy work being carried out by the younger person and the older worker providing training and adjustment in the place of working.”⁸⁴

Change of attitudes within the organisation: The introduction of all the above named best practice examples wholly and solely rests on the commitment of the main personnel managers and developers. Walker in his research project gives us another guiding example in this regard. “A major Swedish car manufacturer (Volvo Penta) has responded to the ageing of its workforce by introducing a programme to change the attitudes of employees towards internal mobility. The initiative includes the allocation of money to individuals for personnel development programmes.”⁸⁵ A medium-sized German company in Baden-Wuerttemberg (Buerkert GmbH) implemented a mixed-age staff strategy (diversity model) in the personnel policy. The same policy was also implemented by a medium-sized handicraft company (ELBO GmbH) in the region of Stuttgart – Baden-Wuerttemberg, where the structure of the personnel is age wise well balanced. According to the personnel manager, team work of both younger and older employees play an important role in sustaining the staff structure.

⁸² Walker, Alan (1998): p. 5.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Ibid.

4. Conclusion

In this paper, I have discussed the background of the problems facing older workers and have tried to analyse the present situation on the labour market. I have also come to the conclusion that although there are quite a lot of publications and research work on this theme in Germany, their results still need to be transferred into the companies, institutions and organisations. In my opinion, research work should also be geared towards developing, analysing, advising and urging companies to especially implement human resource evaluating systems in regard to dealing with an ageing workforce. This system could ensure periodic self-evaluation and assessment of impact and feedback of the company's personnel policies and thereby promote accurate and just-in-time decision-making of managers at the background of the demographic change; which will in turn guide companies to take proactive actions where necessary. There should still be more emphasis placed on educating and raising the awareness of companies and relevant actors in implementing concrete age-related personnel policies in their day-to-day management.

Bibliography

Auer, Peter/ Fortuny, Mariàngels (2000): EMPLOYMENT PAPER 2000/2, Ageing of the Labour Force in OECD Countries: Economic and Social, Geneva.

Bangali, Lucy/ Fuchs Gerhard/ Hildenbrand, Markus/ Luib, Bernd (Juni 2003): Beschäftigungsfähigkeit älterer Fachkräfte in Baden-Württemberg. Zwischenergebnisse einer qualitativen Untersuchung der Qualifikationsbedarfe in Industrie und Handwerk der Metall- und Elektrobranche. Arbeitsbericht Nr. 240, TA-Akademie in Stuttgart.

Bangali, Lucy/ Fuchs Gerhard/ Hildenbrand, Markus (December 2003): Beschäftigungsfähigkeit älterer Fachkräfte in Baden-Württemberg - Abschlussbericht einer empirischen Untersuchung der Qualifikationsbedarfe in Industrie und Handwerk der Metall- und Elektrobranche. Arbeitsbericht der TA-Akademie in Stuttgart.

Berkel, Barbara/ Börsch-Supan, Axel (2003): Pension Reform in Germany: The Impact on Retirement Decisions, National Bureau of Economic Research (NBER), Working Paper 9913, Cambridge.

Bertelsmann-Stiftung (2004): International Reform Monitor – Social Policy, Labour Market Policy and Industrial Relations. Today's Survey Februar 2004, Gütersloh.

Börsch-Supan, Axel/ Schnabel Reinhold (1997): Social Security and Retirement in Germany, National Bureau of Economic Research (NBER), Working Paper 6153, Cambridge.

Bundesvereinigung der Deutschen Arbeitgeberverbände (2002): Ältere Mitarbeiter im Betrieb – Ein Leitfaden für Unternehmen, Berlin.

Confederation of German Employers' Association (BDA) (2000): Increasing the employment rate of older workers - <http://www.proage-online.de/>, Berlin.

Commission of the European Communities (March 2004): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Region – Increasing the Employment of Older Workers and Delaying the Exit from the Labour Market. Brussels, 3.3.2004 COM(2004) 146 final.

Clemens, Wolfgang (2001): Ältere Arbeitnehmer im sozialen Wandel: Von der verschmähten zur gefragten Humanressource?, Leske + Budrich, Opladen.

Cutler, D./ Sheiner, L.M. (1998): Demographics and Medical Care Spending: Standard and Non-Standard Effects, NBER Working Papers 6866, Cambridge.

Dribbusch, Heiner (2004): Institute of Economic and Social Research, WSI Duesseldorf. Commentary on Country Germany: "Laws on protection against dismissal and unemployment benefit amended", in: European Industrial Relations Observatory: <http://www.eiro.eurofound.eu.int/2004/01/feature/de0401205f.html>, Brussels.

Ecoweek: BGI Economic Research OECD, 26th January 2004: BNP-PARIBAS – Monthly Economic and Market Monitor. Philippe d'Arvisenet (Chief Editor), Paris.

Funk, Lothar (2003): Institute for Business Research – WI in Cologne. Commentary on Country Germany: "New study examines employment prospects of older workers", in: European Industrial Relations Observatory: <http://www.eiro.eurofound.eu.int/2003/10/feature/de0310106f.html>, Brussels.

Goldberg, Beverly (2001): Needed: Experienced Workers – A conversation with Beverly Goldberg, Harvard Business Review, Reprint F0107B, July-August 2001, Boston.

Heilbroner, Robert (1985): The Act of Work, Library of Congress, Washington.

Herfurth, Matthias/ Kohli, Martin/ Zimmermann, Klaus F. (eds.) (2003): Arbeit in einer alternden Gesellschaft: Problembereiche und Entwicklungstendenzen der Erwerbsbeteiligung Älterer, Köln.

Jacobs, Klaus/ Kohli, Martin/ Rein, Martin (1987): Testing the Industry-mix Hypothesis, Discussion Paper, Wissenschaftszentrum Berlin für Sozialforschung.

Jacobs, Klaus/ Kohli, Martin (1990): Der Trend zum frühen Ruhestand – Die Entwicklung der Erwerbsbeteiligung in Internationalen Vergleich, in: WSI-Mitteilungen 43 (8), S. 498-509.

Kohli, Martin et al. (eds) (1991): Time for Retirement: Comparative Studies of Early Exit from the Labour Force, Cambridge University Press, Cambridge, N.Y..

Koller, Barbara/ Bach, Hans-Uwe/ Brixy, Udo (2003): Ältere ab 55 Jahren - Erwerbstätigkeit, Arbeitslosigkeit und Leistungen der Bundesanstalt für Arbeit, Nürnberg: S. 31; 645 KB Reihe/ Serie: IAB-Werkstattbericht Nr. 05/2003.

Krenn, Manfred/ Oehlke, Paul (2001): Integration of an Ageing Workforce. Thematic Paper to DG Employment and Social Affairs by The European Work Organisation Network EWON.

Lesch, Hagen (2003): Ageing Societies and Challenges for Collective Bargaining Policy. Paper presented at the 13th World Congress of the International Industrial Relations Association, September 8-12, Berlin.

Naegele, Gerhard/ Walker, Alan (2002): Ageing and Social Policy: Britain and Germany Compared. Anglo-German Foundation for Study of Industrial Society, London.

Naschold, Frieder/ de Vroom, Bert (Eds.) (1994): Regulating Employment and Welfare – Company and National Policies of Labour Force Participation at the End of Worklife in Industrial Countries, Berlin/ New York.

Naegele, Gerhard (1992): Zwischen Arbeit und Rente. Gesellschaftliche Chancen and Risiken älterer Arbeitnehmer, Augsburg.

Nordic Labour Journal (2002): The Demographic Challenge – Everyone is Needed, October, Volume 7, St. Olavs Plass, Oslo.

Nordic Labour Journal (2004): The Labour Market, The Working Environment and Related Issues: Prepared for the Future, March, Volume 9, St. Olavs Plass, Oslo.

OECD Employment Outlook (2003): Towards More and Better Jobs. Contributions from Quintini, Glenda/ Swaim, Paul/ Saint-Martin, Anna/ Grubb, David/ Miyumota, Koji/ Bassanini, Andrea/ OK, Woosook/ Torries, Raymond, Paris Cedex.

OECD Outlook (2002): Science, Technology and Industry, Paris Cedex.

Thelen, Peter (2004): Parteien fordern Unternehmen zur Einstellung von Älteren auf – freiwillige Selbstverpflichtung der Wortschaft gefördert – Zustimmung bei Gewerkschaften, in: Handelsblatt, Issue of Wednesday 14.4.2004 – Nr. 72, p. 4.

TUAC – Trade Union Advisory Committee to the OECD (2003): Approaches to Improve the Prospects of Older Workers in the Labour Market, TUAC Discussion Paper on 6th May 2003, Paris.

Turner, Jonathan H., (1991): The Structure of Sociological Theory, fifth edition, Belmont, Ca., Wadsworth, HM24 T84.

Sianesi, Barbara (2003): Differential Effects of Swedish Active Labour Market Programs for Unemployed Adults in 1990s, Revised Version in November 2003, London.

Statistisches Bundesamt (2003): Bevölkerung Deutschland bis 2050, 10. Koordinierte Bevölkerungsvorausberechnung, Wiesbaden.

Statistisches Bundesamt (2005): Statistisches Jahrbuch 2005 für die Bundesrepublik Deutschland, Wiesbaden

Bundesagentur für Arbeit (2004): Statistik der Bundesagentur für Arbeit - Sozialversicherungspflichtig Beschäftigte nach Altersgruppen in der Bundesrepublik Deutschland, Nürnberg.

Walker, Alan (1998): Managing an Ageing Workforce. A Guide to Good Practice. A project sponsored by the European Foundation for the Improvement of Living and Working Conditions. Project No. 0151
Dublin, Ireland.

Womack, James P. et al. (1990): The Machine that Changes the World, New York.