

EXTENDING WORKING LIVES NATIONAL REPORT GERMANY

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INTRODUCTION

This paper is subdivided into two main chapters: (1) Extending working lives and (2) Lifelong Learning. The content follows the presentation at the kick-off meeting in London (April 23-25 2013, slides 7, 8, the commitments on slide 14, core project dimensions on slide 16, key actors on slide 20 and slides 21-42 showing and defining the core issues and slide 44 showing the main objective of extending working lives and raising employment rates aided by lifelong learning and sub-goals in slides 45-48. Aims and methods of task 1 on slide 50).

The main chapter (1) starts with a general assessment of older workers' labour market situation, since this is the initial situation. Subchapters here are lack of skilled labour as older workers' chance to find/retain employment, reemployment chances for older workers after job loss, hiring behaviour of companies as a crucial precondition of/barrier to employment, employers' views on older workers for the same reason, and, as a 'good practice' example, 'Perspective 50plus', a successful policy measure since the focus is on policy issues.

Chapter 1.2 (Active ageing in employment) defines active ageing and deals with employees' willingness to work until retirement age, since also (besides the role of employers mentioned above) employees play a crucial role (older worker orientation).

Chapter 1.3 (Working beyond retirement age) is included due to the inclusion of workers >65, while 65 has been the pensionable age in Germany in 2011, it will be 66 in 2023 and 67 in 2029 (with exceptions for those working for at least 45 years).

Healthy Ageing (ch. 1.4) is a precondition of extending working lives, and its absence in the form of disability is an issue to be dealt with. Here, also government action is crucial, and the focus should be on policy issues.

Chapter 1.5 deals with employability, workability and age management. Workability is strongly related to other issues, since it consists of health (healthy ageing), competence (lifelong learning) and motivation (willingness to work). All three factors are affected by various actors (policies, companies, health insurances, employees etc.). Workability is a precondition for employability, together with labour market circumstances, employer behavior, and is affected by corporate age management.

Social Innovation (chapter 1.6) is crucial for the forward looking dimension and the search for social innovative solutions.

Chapters 1.7 and 1.8 deal with the quality of work and quality of life, the former affecting the latter. The quality of work affects healthy ageing and workers' willingness to work.

Looking for good practice (ch. 1.9) can bring about ideas of measures at company level, which could be transferable to other companies, at least partially.

Life-course orientation (ch. 1.10) is crucial for workers' motivation (avoiding career plateaus and following cul-da-sacs), employability (regarding the necessity of further training) and ability to work (for example, caring for the old is an older-worker-specific obstacle to paid employment).

Solidarity between generations (ch. 1.1) should be considered in action plans for various stakeholders (policymakers, companies, trade unions).

Crucial policy issues are pension policies (ch. 1.2). Pension policies affect older workers' willingness to work. Their financing requirements pose economic constraints and necessities, while on the other hand older workers' circumstances matter. Subchapters here are the rising

legal retirement age in Germany, early retirement, unemployment as 'bridge' from employment to retirement and (abolished) partial retirement.

Chapter 1.13 deals with paid work after retirement (group >65) and its reasons.

Integrated approaches and measures are shown in ch. 1.14

Chapter 1.15 is about groups amongst older workers with low employment rates or low retirement ages: The ill/handicapped, women and migrants.

The last chapter of main chapter 1 is about self-entrepreneurship in later life, since various forms of employment have to be taken into account and since beginning self-employment can be an option for extending working lives.

The promotion of lifelong learning is important for extending working lives and a WP3 goal. Main chapter 2 begins with a general assessment of the lifelong learning situation (ch. 2.1).

Chapter 2.2 (very short) is about skill mismatch, which is an obstacle to employment and the main reason for the importance of lifelong learning in the context of employment.

Ch. 2.3 shows barriers for learning, which are numerous and result from employees' and employers' attitudes and payoff considerations and government (non-) action.

Timing/age of learning (ch. 2.4) is especially important in Germany, since here learning is very front-loaded in the life cycle, with negative implications on older workers' skill levels.

Ch. 2.5 (national policies) is very short and related to ch. 2.6 (social innovation), since many innovative ideas demand policy changes, such as a stronger recognition of informally acquired skills.

1. EXTENDING WORKING LIVES

1.1 GENERAL ASSESSMENT OF THE LABOUR MARKET/LIFELONG LEARNING SITUATION OF OLDER WORKERS

Although older workers' labour market participation has risen markedly since the 1990s, non-employment of the elderly is still a relevant matter (Romeu Gordo/Wolff 2011: 200), also because the rise started from a low level (Dietz/Walwei 2011: 6, see also BMAS 2013: 45, 54f.: "From catastrophic to bad" [expert 1]). For example, the employment rate of those aged between 60 rose from 10 to 24%. Nevertheless, elderly employed (and women) profited more strongly from the employment boom in Germany than young people whose chances to find their first job became even worse (Eichhorst et al. 2009: 4). Between 2001 and 2008, labour force participation rate (55-64) has risen from 43 to 59%, and the employment rate (LFP minus the unemployed) from 37 to 54%. In both cases, this has been the second highest rise in the EU after SK (Eichhorst et al. 2009: 15). The rise is also attributable to cohorts with high employment rates entering the 55-64 age group (Eichhorst 2006: 3, Zoike 2012: 64). Germany fulfils the Lisbon goal (Eichhorst et. al 2009: 15, see also Schulz 2009: 188f. for similar figures and stating that part-time employment has risen only weakly).

Still, the employment rate (55-65) is lower than in Northern Europe and the UK and higher than in Southern Europe and NL (Flüter-Hoffmann 2010: 200). Amongst 8 European countries, for 60-64-year olds in 2010 Germany ranked third in male labour force participation and female labour force participation (in both case rates were higher in UK and even more so in SE, FI not in the analysis, BMAS 2012: 41). In 2000, the rank was 5th (men) and 4th (women). The development is similar in the case of 55-59-year olds (BMAS 2012: 42).

The elderly employment rate depends on age-specific employment prospects and on the general employment rate. Putting the employment rate 15- 64 in relation to the employment rate 55-64 (Eurostat figures for 2008), with a low ratio of 1.3 in 2008 in Germany the age difference is at similar low levels as in social democratic welfare states and the UK and Ireland (Bauknecht 2013a: 156f.). In FR and BE and some CEE countries the ratio is markedly higher.

Mean retirement age rose from 62.3 years over 63.2 years (2005) to 63.5 years (2011, BMAS 2013: 53). Pension age is strongly positively correlated to employment in age group 55-59/20-59 (BMAS 2012: 18 based on Hairault et al. 2010, 11 countries, Germany slightly below average on both counts due to the inclusion of non-European countries (US, CD, JP)).

Lack of skilled labour

Important for the current situation in Germany, Frosch (2006: 23) states that employment chances of older workers improve due to lack of skilled labour only if younger and older workers are substitutable concerning their human capital, which she points out is doubted by some researchers. As an example, engineers suffer stronger from age-related negative re-employment effects than the median job searcher, possibly due to stronger loss of human capital caused by fast innovations, or employers' view that older workers are less innovative in sectors where innovation is highly important. Referring to Fitzenberger et al.'s (2003) estimations, Boockmann and Zwick state that substitution elasticities are U-shaped: Especially in the group with medium qualifications older and younger employees are considered different productive factors, whereas low-skilled, workers and academics can be substituted by employees from different age groups.

Unemployment/ reemployment

In 2010 unemployment of older workers exceeded prime age unemployment by more than one %point, with a high share of long-term unemployed (Duell/Vogler-Ludwig 2012: 3). The longer duration of unemployment amongst the elderly is caused by various factors but also by unemployment benefits being used as early retirement benefits (Eichhorst 2006: 4). Assemblyman 1¹ states over 60 re-employment chances are very small.

Entry rates (newly hired employees divided by number of employees) are age-dependent and drop with rising age and especially after the age of 58 due to the "58-rule" (Brussig 2009: 5, for this rule see below). The "58-rule" got abolished after 2007, causing a statistical effect showing a

¹ Assemblyman for fences and gates (58, migrant from Poland)

rise in the unemployment rate due to persons not counted as unemployed before (BMAS 2012: 26).

Older workers lose their jobs rarely but if, their re-employment chances are bleak. With ongoing unemployment, reemployment chances decline due to mainly three reasons: “Physical and mental debilitation, discouragement in job search” on the searchers’ side and “restrictive hiring standards” (Frosch 2006: 8 referring to McGregor 1978) on the company side. The latter is caused by companies interpreting long search periods as either signaling unmotivated search behaviour or low productivity (Frosch 2006: 8; obviously other companies were not willing to employ the candidate). In fact, elderly unemployed have the exit option of early retirement (Frosch 2006: 8), which could lower motivation to find new employment. Likewise, due to self selection those with long unemployment durations are less attractive for employers than the median unemployed (Frosch 2006: 8 referring to Steiner 2001). Also on the macro level, a generally improved employment situation reduces younger cohorts’ unemployment figures far more strongly than older cohorts’ (Dietz/Walwei 2011: 8).

Based on data from the German Employment office, also Frosch (2006: 4, 14) shows that for those between 35 and 49, re-employment chances are roughly similar. Beginning with the age of 50, chances decline with age. While this is uncontrolled for other factors (e.g., age groups are over- or underrepresented in sectors with different employment outlooks. Boockmann/Zwick 2004: 53 state that older workers are overrepresented in sectors with declining employment), multivariate analyses show that non-German nationality also reduces reemployment chances. This also applies to long lasting (all in all more than 5 and even 10 years) previous unemployment, possibly because employers consider this a negative sign (Frosch 2006: 17). Previous net salary is inverted U-shaped to re-employment chances, strongly rising over 1000 €, but slightly declining over 2000 € (Frosch 2006: 18). Possibly the drop in re-employment probabilities from high to very high earners is stronger amongst the old because in this age group those with previous very high earnings have sufficient financial assets and pension entitlement to sustain their standard of living without new employment (Frosch 2006: 19). Also, amongst the elderly in Germany employment status depends more strongly on educational attainment than in most other countries (Schulz 2009: 189). In contrast, Brussig (2009: 7) states that for the age group above 60 re-employment chances are independent of education, possibly caused by pension entitlements affecting labour supply as well as companies’ preferences for applicants who cannot retire anytime (Brussig 2009: 7). Altogether, many effects are stronger for the old than the young: This applies to the negative effects of non-German citizenship, lower education (education is slightly inverted U-shaped with academics not having the highest re-employment probabilities), (low) last salary and unemployment duration (Frosch 2006: 19, for stronger education effects amongst older workers see also Dietz/Walwei 2011: 9, Brussig 2009: 6).

Re-employment chances differ markedly between sectors, being bleak in the manufacturing sector, slightly better in construction and markedly higher in agriculture, mining and energy. This is caused by structural changes making older skills obsolete, but also by job stability (Frosch 2006: 18), so that high re-employment chances result from employees leaving their jobs often, voluntarily or not.

During the economic crisis, companies were reluctant to hire workers, which also contributed to bleak re-employment prospects of workers near the retirement age (Dietz/Walwei 2011: 8). Brussig (2009: 13) states that although the seniority principle of higher wages for higher earners as well as employment protection are considered to be reasons for companies not to hire older workers, too little is known about companies' decision process and recruitment strategies. Based on OECD (2005) findings, Eichhorst (2006: 9) states that seniority pay is not excessive in Germany but collective bargaining agreements prescribe higher earnings for those being in the company longer. In the 'normal' case of employees sticking to their company and vice versa, the correlation between age and service years leads to de facto seniority pay (Eichhorst 2006: 9f.). Resulting high wages lead to high reservation wages once older workers become unemployed, yet this also depends on unemployment benefits (Eichhorst 2006: 10). Even if jobseekers have not high reservation wages, employers have to regard the company's wage structure in order to prevent conflicts (Eichhorst 2006: 10), making older jobseekers too expensive.

In contrast to younger unemployed people, older unemployed have the possibility to permanently quit working. Wübbecke (2013: 61ff.) shows that the choice between the 'Facilitated Receipt of Benefits' ('erleichterter Leistungsbezug') under the '58-rule' is affected by various factors (n=1120, data from 2005/2006): According to *statements* from the unemployed, only 13% of West Germans and 9% of East Germans did not want to work anymore. Far more (45%/31%) said that their health status inhibits work. Nearly all (96%/94%) said that the employment agency was not able to give them a job or not willing to put them into a programme. And half (50%/50%) of respondents wanted to be autonomous, i.e. not do every job available and not taking part in programmes or applying for jobs continuously (2013: 68f.). Multivariately: Financial considerations matter for unwillingness to work, as well as long (>5 years) unemployment. Self-employment has strong negative effects on unwillingness, possibly due to a higher work ethic or lower pension entitlements (Wübbecke 2013: 72f.) while positive effects result from sufficient financial means (high pension entitlements, debt-free real estate). The opposite applies to handicapped people, which is highly plausible since their unwillingness to search for a job results from subjective incapability to work (very strong effects, 2013: 72). For eastern Germans and those being unemployed for a long time low government assistance is an important reason for unwillingness to search for a job (Wübbecke 2013: 72f.). Lastly, those with bad German language skills did use the 'Facilitated Receipt of Benefits' significantly less, possibly due to lacking understandable information (Wübbecke 2013: 72, 74).

Company/work council behavior

As of now, companies are less affected by the demographic changes than public discourse suggests. The high-birthrate age group is entering the 'over 50' group, legal retirement age will rise, and pressures to act will increase markedly in coming years (Buss/Kuhlmann 2013: 351). Possibly, some HR departments in companies are not able to deal with demographic challenges, since leeway to act is limited and they are in weak positions within companies (Buss/Kuhlmann 2013: 353). One crucial problem might be that due to the high importance of the *mittelstand* many employees in Germany work for companies not big enough to have a professional human resources department.

Work councils are aware of demographic challenges, yet treat the subject mostly reactively, and are mainly focused on human resource policy. In terms of demography oriented measures, for company management work councils are an important source of information concerning employees' views and preferences (Buss/Kuhlmann 2013: 355). From the description of Buss and Kuhlmann (2013: 355f.) one can conclude that human resource management departments (and often work councils) are mainly focused on classic hiring and firing policies, whereas leadership in relevant departments is merely peripherally concerned with long-term implications of demographic change. Age-appropriate working policy often results from cooperation between work councils and department leadership, coming about due to human resource departments' weakness (Buss/Kuhlmann 2013: 357). Basically and possibly resulting from low human resource professionalisation in small companies, company size is positively related to the share of measures for older workers, ranging from 10% in small companies (1-19 employees) to over 90% for companies with > 500 employees. Thus, measures such as special configurations of workplaces, age-mixed teams, inclusion of older workers in in-company further training and, on a very low level, special further training for older employees, are more probable in bigger companies (cf. BMAS 2012: 28). Yet 78% of older employees work in companies with less than 500 employees (BMAS 2013: 13 based on the IAB-Betriebspanel from 2011).

Although the potential of older employees (experience, social and communicative competence, mental stamina, reliability) is known to German human resource managers, this has not led to changing employment policies (Schmidt 2006: 5). A survey of German companies found that roughly half of them try to have as many old as young employees. Against the backdrop of their current age structures this implies that companies will try to hire younger workers. Companies consider this as their reaction to the demographic change (Kay et al. 2008: 91f.).

The share of older employees could be positively affected by company size (Boockmann/Zwick 2004: 57 refer to the state of research). Possibly this is caused by shop committees trying to avoid layoffs and to achieve staff reductions via the natural fluctuation with parallel recruitment stops. Further, shop committees demand (and push through) legal rules for the benefit of older employees such as layoff decisions according to social criteria and severance payments differentiated according to length of service (Boockmann/Zwick 2004: 57) which is de facto seniority severance payments.

A multivariate analysis shows that company age fosters the share of older workers, whereas for modern technical equipment the opposite applies. Company size has no significant effects (Boockmann/Zwick 2004: 59). In the health and social services sectors the share of older workers is significantly higher than in numerous other sectors (Boockmann/Zwick 2004: 60).

Views of employers on older workers

Empirical evidence shows that older workers are considered to be less resilient, less flexible in their versatility, less adaptable to technological and organisational change and unwilling to learn. On the other hand they are considered reliable, responsible and conscientious (Boockmann/Zwick 2004: 58). A study in the region of Baden-Württemberg shows similar results: Positive traits attributed to older employees are experience-based knowledge, psychic

resilience, work ethic, work discipline, loyalty and theoretical knowledge. Positive traits of the younger are their physical resilience, creativity, flexibility, learning aptitude and team spirit. In the mean older workers are rated worse, yet only slightly (Boockmann/Zwick 2004: 58, Rudinger 2012 states that human resource managers evaluate the capabilities of the old not worse than those of the young but are still reluctant to hire older applicants). A higher share of older employees fosters productivity. This applies primarily to those between 45 and 49, but also on those 50 and older (BMAS 2012b: 14 based on Göbel/Zwick 2010).

In the multivariate analysis the human resources managers' views on elderly workers affect the share of older workers only in companies with less than 100 employees (Boockmann/Zwick 2004: 61). The negative view is confirmed by another survey among 291 human resource managers in Germany: The willingness to hire the applicant declines with the applicant's age, although human resource managers do not consider older workers to be less efficient. The strengths and weaknesses human resources managers see in different age groups are similar to results above (Benz 2010: 286ff.).

"Perspective 50plus – employment pacts for older workers in the regions"

Besides incentive setting via pension/unemployment policies (below), measures such as "Perspektive 50plus-Beschäftigungspakte für ältere in den Regionen" ("Perspectives 50plus – employment pacts for older workers in the regions") try to improve older (long-term unemployed) workers' employment prospects. The third programme period lasts from 2011 to 2015 (the programme began in the end of 2005, cf. Knuth et al. 2013: 251). Employment pacts in regions include job centers, companies, chambers, trade unions, local governments, training institutions, as well as churches and social service providers. Amongst the activities are internships, application/communication trainings and wage subsidies. Especially small employers positively evaluated the pre-selection of candidates. Over time, the programme included more employment pacts and unemployed persons (from 74 000 in 2008 to nearly 200 000 in 2011, covering more than a third of older unemployed persons, cf. Knuth et al. 2013: 252). Generally, participants were unemployed for a long period, estimated their health status as bad (less than half felt capable of full-time employment) and about one third of men and half of women had no driving license. Further, half of women and more than half of men lived alone, possibly a sign of social isolation (which is also confirmed by statements from participants; Knuth et al. 2013: 254). A large part of the programme's expenses was on staff, so that individual consulting has been the main focus (Knuth et al. 2013: 254f.). Summing up the frequency of individual measures (e.g. 63% individual consulting, 52% aptitude assessment, 48% coaching etc., Knuth 2013: 254) to 287% shows that a huge mix of measures has been conducted per participant (Knuth et al. 2013: 255). Participants evaluate the programme positively (European Commission 2012: 29). For example, a majority (56%) of participants state that they get "really supported" to find work, far more than across all long-term unemployed (37% here, Knuth et al. 2013: 254). If found, new employment has been very stable (Knuth et al. 2013: 255). The authors (2013: 259) conclude that good consulting due to sufficient manpower is crucial for such programmes' success. Knuth et al. (2013: 259) evaluate the programme as being more successful and more efficient than regular support (Regelförderung). Yet it also cannot find employment for the majority of participants on the regular labour market.

1.2 ACTIVE AGEING IN EMPLOYMENT

Active ageing umbrellas “(...) various combinations of quality of life essentials such as continuous labour market participation, active contribution to domestic labour (caring, housework), active participation in community life and active leisure” (Futurage 2011: 12)

Active ageing “is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (World Health Organisation 2002, cited after European Commission 2012: 19). The European Commission (2012: 19) points out that participation is crucial and also related to employment and education. The United Nations (2012: 2) state that although the WHO definition sounds as if active ageing is oriented towards individuals, society is also affected by high labour market participation and low health care expenditures, for example. The UN’s (2012: 16) „Checklist” for Active Ageing provides a good overview (next page).

Willingness to work until retirement age

Three quarters of German employees 35-55 want to work until they reach the pensionable age (Flüter-Hoffmann 2010: 201 based on a TNS Infratest/Bertelsmann Stiftung- survey in 2006. Expert 2 states that also due to demographic change early retirement became less acceptable amongst employees, expert 1 states that willingness comes with ability and circumstances, expert 3 states that changing tasks due to job rotation/enrichment/enlargement/autonomy would foster motivation). At the same time, 60% want to freely choose the timing of their retirement when they are between 60 and 67 and are prepared to accept lower/higher pensions according to their retirement age (Flüter-Hoffmann 2010: 201). For respondents, the main preconditions for working

Table 1-1 Active ageing (source: UN 2012: 16, only work-related aspects [without social integration])

Main areas	Areas of implementation	Key elements
Labour market participation	Retirement regulation	*Using statutory retirement age instead of mandatory retirement *Finding gradual and flexible retirement solutions
	Labour market instruments	*Promoting education and training throughout the life course *Encouraging an age-friendly working environment *Improving images of older employees *Introducing anti-discrimination policies
Health	Health promotion and disease prevention	*Anti smoking/alcohol consumption, healthy diet, physical activity, reducing stress (transport, work etc.)
	Community long-term care services	*Network of out-patient health services, social services, day or night care centres for frail elderly that otherwise live with family

Until official retirement age are reconcilableness between work and private life (75%), tasks not impairing their health (72%), shorter hours after they reach a certain age (70%) and, to similar degrees, higher appreciation of their performance by superiors.

Duell and Vogler-Ludwig (2012: 2) trace the rising employment rate of elderly workers in Germany back to policy changes, “a stronger labour orientation of older workers and a noticeable change in recruitment policies of the employers”.

1.3 WORKING BEYOND RETIREMENT AGE

In a survey conducted by the Federal Institute for Population Research, 47% of employees between 55 and 65 stated “yes” or “yes, probably” when asked if they want to work after retirement (Grabka 2013: 330 referring to Büsch et al. 2010). Assemblyman 2² refers to a politician being 71 years old and states that with this job working beyond retirement age is no problem, but for others. Further, as a pensioners one gets retirement benefits, which should ideally be enough, and 400 € - jobs done by pensioners could also be done by others.

In 2011 (data: Mikrozensus) the labour force participation rate of those aged 65 or older was at 4.5%, whereas only a small minority (0.8 %points) of them was subject to social security contributions (Grabka 2013: 330). This is caused by widespread minor employment (58% of those working) and self-employment (20% above 65, 50% above 75 in contrast to 10% of those between 20 and 64).

Participation drops from 10% at the age of 65 to 5% at the age of seventy and 1% at 75 or older. The number of working men is double that of working women (Grabka 2013: 330). The number of weekly working hours is far lower at the age of 65 (22 hours in contrast to 38 hours, Grabka 2013: 331).

Working beyond retirement age can be motivated either by the willingness to furnish the own skills or the financial necessity to work. Amongst those near retirement age and willing to work beyond retirement age, 79% state that working keeps one fit, 63% want to pass on their knowledge and experience and 62% do not want to be at home all the time (Grabka 2013 referring to Büsch et al. 2010). Socio-Economic Panel Study (SOEP) data shows that before 2000 for years those aged 55 to 64 were less satisfied with work than those between 20 and 54. After 2000 satisfaction of older workers rose, first to the same level and in the late 2000s above the level of younger cohorts. Possibly this is caused by a lower share of older workers working due to financial necessity (Grabka 2013: 331).

For different groups different legal restrictions apply: Those in early retirement have a low earnings ceiling above which their pensions get cut, so that while they are below the official retirement age only employment with earnings not above € 400 is financially attractive. After official retirement age there are no pension cuts due to additional earnings. The sole exception are those receiving widow’s pension, being allowed only to earn € 740/660 (west/east, 2012).

² Assemblyman for fences and gates (60)

Generally, those above retirement age are advantaged since they (and their employers) do not have to pay pension or unemployment benefit contributions, and, following from this, their entitlements do not rise (Grabka 2013: 333).

Lastly, employers' motivation is crucial but despite a lack of skilled labour they are unwilling to further employ or hire older workers (Grabka 2013: 333 referring to Brussig/Knuth 2013). This should be dependent upon the substitutability of older and younger workers.

1.4 HEALTHY AGEING

"...the ability to be socially engaged, productive and to function independently both at a physical and cognitive level...there is little or no consensus on the definition" (Futurage 2011: 21). Healthy aging is "a lifelong process of optimizing opportunities for improving and preserving health and physical, social and mental wellness, independence, quality of life and enhancing successful life-course transitions" (Health Canada 2002, the definition of the Swedish National Institute of Public Health [2006] is only deviates by explicitly referring to older people and abstaining from using 'lifelong').

In terms of work, one may define healthy ageing as the ageing process being accompanied with sustained workability, and work being designed and organised unharmed to health; besides social class (Richter/Hurrelmann 2007: 3ff.) occupation also affects health (one assemblyman referred to his and others' occupation specific health problems). Expert 1: "Health has to be institutionalised, in the sense of rules, comparable to the rule that you attend work on time". Further, health has to be an issue in companies without fear of employers' reactions (expert 1).

Healthy ageing is cause and effect of active ageing (see also table 1 above). It is about longer and more healthy lives. In Western European comparison Germany ranks in the middle on both terms.

Besides private lifestyles (sport, for example, also enhances cognitive skills) and biological processes, working conditions during the lifetime are relevant for health status in later life (Zimmer et al. 2010: 713, employee 1³ mentions office equipment, workload, psychological stress, the possibility to change, the latter also as a precondition to cope later with necessary changes). Based on literature, Falkenstein and Wild-Wall (2009:13) state that demanding cognitive work has positive effects on fluid intelligence, whereas for older people the effect is stronger. If tasks are not cognitively demanding, rotation between different tasks can make them more demanding (Falkenstein/Wild-Wall 2009: 14), with positive effects on fluid intelligence. In reality, however, employees with weak performance get less variation in tasks, which in turn further weakens their capabilities (Falkenstein/Wild-Wall 2009: 14). Since shift work and night work negatively affect cognitive performance (Falkenstein/Wild-Wall 2009: 15 also state that four years after the end of shift-work cognitive skills are markedly higher), there is an additional negative effect on those already cognitively less skilled than others if they are overrepresented in night and shift work.

³ Employee (female) at health insurance (58)

With about 8% sickness-induced absence between 1975 and 2000 (companies' report; 5% according to health insurers. The difference is caused due to some short/minor illnesses not being reported to insurers), Germany is near the European average. Since 1995, sickness absence steadily declined. Most common causes for sickness-induced absences are diseases of the musculoskeletal system and connective tissue (24%), the respiratory system (13%) and injuries/intoxications (12%; Schneider/Beblo 2010: 14). Among older workers, cardiovascular and muscular diseases are more frequent, whereas respiratory diseases and injuries are more prevalent among the young. Further, women do not attend work due to health reasons more often than men (Schneider/Beblo 2010: 15 referring to figures from BKK, a company health insurance funds). Amongst these factors, sickness absence is also fostered by bad mental working circumstances like lack of cooperation in teams, frequent posting to other jobs, bad inclusion in networks and, partially resulting from this, low work satisfaction (Schneider/Beblo 2010: 23 referring to Ortlieb 2003). Workers' willingness to demand for medical rehab is positively affected by their subjective job security (Schneider/Beblo 2010: 26 based on Augurzky et al. 2010), contributing to workability inequality.

Earlier hopes that tertiarisation will reduce work-induced health burdens have proven to be too optimistic. 85% of women working in the service sector are in jobs with low work autonomy and high psychic and physical pressure. Older employees are not sick more often, but if they are, longer: Average absence in the case of sickness as at 10 days for those between 30 and 35, and at 23 days for those between 60 and 65 (Zimmer et al. 2010: 713ff., for the latter number referring to the Federal Ministry of Labour and Social Affairs, see also Schneider/Beblo 2010: 15, 25, Zoike 2012: 66). Women are affected by psychic diseases more often (60% more often in 2010 according to Zoike 2012: 63), which is caused by their overrepresentation in low-status service jobs (Zimmer et al. 2010: 714f.). Sickness-induced absenteeism belongs to the main reasons for employers not to employ older workers (Schmidt 2006: 4). In some sectors (construction, transportation, assembler, metalworker) sickness-induced absence is more frequent (Zoike 2012: 66).

Meanwhile, employees complain about mental strains more than about physical strains (Schneider/Beblo 2010: 17). Frequency of accidents and disability rents due to occupational accidents decreased over time. Contrasting, the share of mental diseases and rents paid because of these diseases rose steadily since 1990. In 2010 12% of sickness-induced absence has been caused by mental illnesses – a small share, but nearly fourfold the 2.5% in 1980 (Zoike 2012: 63). Mental illnesses are primarily depressions, neurotic disorders and disorders caused by substance abuse (mostly alcoholism, possibly in coming years also due to performance-enhancing substances taking due to job demands, SZ 08-23-2013), now being joined by burnout ("physiological and psychic exhaustion", Zoike 2012: 70, translated). Mental illnesses are caused by numerous factors, workplace-related are job insecurity, higher psychic demands, time pressure, too high or low job demands, lack of recognition and conflicts with co-workers or superiors (Zoike 2012: 70f.). The frequency of mental illnesses rises with age, more than 10% of men and roughly 20% of women older than 55 years took in psychotropic drugs prescribed by doctors, twice (men) or thrice (women) as much as 25-34-year-olds (Zoike 2012: 72). Average retirement age due to mental diseases is very low, at about 50 for men and women. On the other hand, a study shows that 80% of men and 90% of women think their work keeps them healthy;

full agreement to the statement rises with age (Schneider/Beblo 2010: 18; with reference to Gash et al. 2006 Schneider and Beblo 2010: 28 state that for men transitions from unemployment to employment positively affect health.

Government/insurance action

The Occupational Safety and Health Act from 1996 obliges employers to keep employees healthy (Schneider/Beblo 1996: 7). Written is it in Germany's Social Code VII and implemented by the "National Occupational Safety Conference" (NAK) and it is supported by federal and regional governments as well as accident insurances. For 2008-2012, number and severity of accidents should be reduced; this also applies to musculoskeletal stress, disorders and skin diseases. In order to achieve this, work arrangement, logistics, transport and traffic should be arranged better. Further, health services are targeted and stress or lack of movement, emphasising workplace design and mental burdens. Additionally, skin hazards are an important issue (Beblo/Schneider 2010: 7).

In the dual structure of occupational safety and health, accident insurance funds are responsible to monitor, counsel, and inform, and on the other side governmental institutions are responsible for the introduction of laws, for research and for monitoring and reporting (Schneider/Beblo 2010: 8).

Physical health risks and working hours belong to the area of occupational safety. To identify and prevent risks, for example risk assessment is mandatory or provided. For specific working places or occupational categories there are time limits on exposure, which should contribute to workers' health and workability. Yet, psychosocial burdens interact and possibly cumulate with physical burdens (Siegrist/Dragano 2007: 21). German occupational safety standards are high in international comparison. Considering back therapy training, lifting training, relaxation training, technical aids, appropriate seats, avoiding long periods of standing, software design for display work stations, appropriate lighting, protective clothing, appropriate room temperature and room climate, in small/medium sized companies measures are often not put into practice consequently (Siegrist/Dragano 2007: 22f.). In the case of working organisation, repetitive work and work on tiny parts without obvious relation to the whole negatively affects health; for teams consisting of different age groups and job rotation the opposite applies. Jobs with the highest burdens are in transport and traffic, the building sector, jobs with assembly operation, caring professions (for the sick/old) and jobs with changing shifts and night shifts (Siegrist/Dragano 2007: 23f.). Measures to reduce health risks may include horizontal promotion, reduced work in the old activity with some new (less burdensome) tasks, e.g. changing from assembly work to logistics or from fixed jobs to floater activities, from driving to selling activities etc., allowing for flexibility in working hours. For the latter case, there are numerous models tested, even in companies with previous very rigid working time arrangements (Siegrist/Dragano 2007: 24). Siegrist and Dragano (2007: 24) refer to a study among Finnish public sector employees showing that work stress resulted in sickness-induced absence primarily if employees did have no autonomy over their working hours. In Germany, working time arrangement is comparatively inflexible, especially for older employees (Siegrist/Dragano 2007: 25). Further, managerial

behaviour affects employee health (Siegrist/Dragano 2007: 25), so that e.g. superiors showing appreciation for their employees' work can contribute to health and workability.

Stress is an important factor amongst work-related health risks (and becomes even more so). In 2004 a European agreement on work-related stress has been signed between trade unions and employer associations, agreeing that work-related stress is to be reduced by employers and employees and that this reduction improves health and safety at work. The survey ESENER (Enterprise survey on new and emerging risks) shows that 84% of trade union activists and 79% of employers consider stress a crucial problem (European figures). Yet practical measures are far less widespread, and with less than 20% in the use of systemic procedures Germany ranks below average (Kohte 2012: 77). Kohte (2012: 83) states that in Germany work-related stress is "psychiatrised", i.e. that those affected are labeled as nutcases, although stress has physiological consequences. Further, new stress-related burdens due to the blurring of the burdens between work and spare time due new communication media occur (Kohte 2012: 83; the Federal Ministry of Labour decided that outside of emergency situations its employees are not obliged to read work-related emails or answer phone calls outside of working times. VW, Telekom, Eon, BMW and Puma have similar regulations [SZ 08-30-2013]).

Also in the case of collective agreements Germany lagged behind in a report published in 2011, and legal regulations have not been modernised (Kohte 2012: 78). In a 'regulation ranking' Germany ranked at the bottom together with BG, EE and CZ (Kohte 2012: 78). In contrast, for example in NL policies for designing working conditions have been integrated in occupational safety law. For example, since 1998 employers are obliged to organise work in a way that employees' safety and health are not negatively affected, and working places, working processes and work equipment have to adapted to employees' individual characteristics (Kohte 2012: 81). Monotonous work and work without employees' control over work pace should be avoided and if this is not the case, workers should rotate frequently to other tasks.

Within companies, health promotion and sickness prevention is an – or the most – important factor resulting from growing awareness of demographic change, often with assistance from health insurances (Buss/Kuhlmann 2013: 357). Employee 1 states that health insurances can offer things beyond back training, healthy lunches or stress management, a sickness prevention of circumstances and behaviour, including a 150-items questionnaire, but employers mostly do not want that: "They want the simple version, the back training, so that they can give their employees the feeling 'I do something for you' ...also the pension funds can do things besides the re-training into different jobs...like a seat for the lorry. I think there is a lack of awareness. The pension funds acts only if there is an application, but somebody has to write the application, and the doctors don't know this and the insured don't know this and employers mostly not, too" (Employee 1).

1.5 EMPLOYABILITY/WORKABILITY AND AGE MANAGEMENT

Employability

“...is a set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations” (Scottish Funding Council 2004). It can be enhanced by corporate age management (Naegele 2012).

Workability

Work ability consists of health, competence and motivation (Kistler 2008: 39) and is employees’ and employers’ responsibility (Kistler 2008: 40 in publication of the Hans-Böckler-Stiftung, a foundation of the Confederation of German Trade Unions). Work ability refers to a worker’s ability “to do his or her work with respect to the work demands, health and mental resources” (Ilmarinen/Tuomi 2004); it is “the most important asset of employees in worklife” (Ilmarinen 2005: 132, also pointing to enterprises’ obligation to contribute to work ability, if only out of sheer self-interest) and a task of permanent readjustment of personal resources and work demands (Ilmarinen 2005: 133). Work ability is defined differently from the points of view of occupational health, social insurance or rehab. From the point of view of occupational health and well-being, work ability is

“built on the balance between a person’s resources and work demands. A person’s resources consist of health and ability, education and competence, and values and attitudes...work, on the other hand, covers the work environment and community, as well as the actual contents, demands, and organization of work” (Ilmarinen 2005: 132)

Illustrating work ability as a multi-storey building, Ilmarinen (2005: 132f.) states that primarily health is the ground floor sustaining other floors on which several crucial things are located: Professional knowledge/competence (2nd floor), values/attitudes/motivation (3rd floor), work/work organisation/management and demands on the employee (4th floor, the heaviest: Supervisors and management have leeway to change circumstances here).

Across professions, the shares of those receiving disability pensions and the shares of those not expecting to be able to work until legal retirement age are strongly correlated, from low shares among engineers and natural scientists to high shares amongst those working in construction, whereas the expectation is strongly affected by the quality of work. As measured by the Confederation of German Trade Unions (Kistler 2008: 44f), the quality of work affects the share of employees forced to retire prematurely due to health reasons. The most strong determinants of the expectation that working until legal retirement age is not possible are physically demanding work (by far the most important factor), time pressure, the need to hide emotions, one-sided physical burdens, and noise (Kistler 2008: 46). The jobs with employees with pessimistic workability outlooks are the jobs where a high number of employees become invalid (Brussig 2010a: 2). Between the ages of 57 and 63, employees in some jobs quit (for example, miners, track labourers, unskilled labourers) and some do not (doctors, pharmacists, judges, professors; Brussig 2010a: 8). Work ability (and quality of life) can be improved through participation (Ilmarinen 2005: 101). Resulting from his profession, assemblyman 1 states: “Retirement with 67? How many years do I have after this (...) all bones are damaged from the machines”. Assemblyman 2: “So based on all I’ve heard, those over 60 are exhausted. It’s only the job (...) bricklayers have damaged knee, we have damaged backs, and floor tilers have their

arms damaged (...) they say 'working until 67'. So they should work outside for one year, or just one day in winter". Expert 1 suggests that in these jobs health problems are foreseeable, so that at the age of 40 or 45 career planning is crucial. Expert 4 refers to France, where due to the programme "15 45" employees either 45 years old or working for 15 years can get midlife career consulting. Government started this and companies contribute money to this.

Based on a research association "Demografischer Wandel und die Zukunft der Erwerbsarbeit am Standort Deutschland" ("demographic change and the future of gainful work at the business location Germany" with involvement of the Federal Ministry of Education and Research) two main findings emerge: Firstly, one-sided physical and psychological loads on employees and too low skill requirements lead to premature decline of work ability. Also this is known in most companies, but yet in most cases human resource departments do not develop concepts for employees' career paths which also provide alternatives. Further, young employees themselves do not recognise that the duration of their current tasks is limited. The second problem is specialisation cul-de-sacs and age-related task deployment, where old products and processes are in the responsibility of the old, and new ones in the responsibility of the young. Possibly against the backdrop of cost pressures, long-term considerations are considered less important than short-term gains (Koller/Plath 2000: 116).

One third of women working in nonprofit or public organisations have a modest or low work ability score (Zimmer et al. 2010: 726 also referring to sector-specific burdens due to noise, chemicals, extreme temperatures and disrespectful treatment in various sectors. This and following results are based on a survey conducted in 2007 with 1700 women born between 1947 and 1964, i.e. those who due to the raising of the retirement age may retire with 65 years and 1 month [born in 1947] and with a stepwise rise, with 67 years [born in 1964]). 42% state that preconditions to do their current job until they reach the official retirement age are 'negative' or 'very negative'. In respondents' view, primarily health reasons pose an obstacle, whereas qualifications are mostly not seen as a problem (Zimmer et al. 2010: 726). Analyses show the most important negative effects on work ability score: Pressure from colleagues, heavy/one-sided strains, negative environment influences, time pressure, pressure from superiors, high concentration, disrespectful treatment (Zimmer et al. 2010: 727). Asked who is responsible for their work ability, respondents state they are responsible themselves (80%), their employer is responsible (more than half of respondents). Shop committees and trade unions are not considered responsible, although 60% of respondents work in company with a shop committee (Zimmer et al. 2010: 728). According to respondents, crucial preconditions to be able to work until the new retirement age are reductions of burdens at work (54%), compatibility of job and familial/private obligations (46%), higher appreciation of accomplishments (37%), qualification measures (36%), changes in working hours (35%), changes in workplace design (27%). Respondents expect employers to implement health enhancing measures (68%), to inform about further training possibilities (66%), to grant paid leave for further training (65%), to offer challenging tasks (65%), to allow for flexible working times for better compatibility of work and family (59%), to offer individual consulting or individual talks (57%; Zimmer et al. 2010: 729)

Especially in the sectors of construction, nutrition and health, numerous employees do not believe that they will be able to work until they reach the official retirement age. Engineers, technicians and natural scientists are far more optimistic (Brussig 2010a: 2 referring to Kistler et al. 2009).

Age management

“(…) measures that combat age barriers and/or promote age diversity.” (Walker 1999).

Age management “must take into consideration the effects of ageing that are related to all working aged people at one point in the course of life (...) employers should create circumstances and practices in which workers can control their careers and ageing” (Ilmarinen 2005: 91, the second part refers to Linkola 2002), whereas inter-personal differences in the ageing process are to be regarded (Ilmarinen 2005: 87, also summarising 2005: 91 the reasons for new management approaches based on Sydänmaanlakka 2004). Ilmarinen (2005: 92) suggests that management and supervisors should be made aware of age management’s importance and “treat different aged workers equally”, staff should be informed and “good practices for age management should be studied, reported, evaluated and developed” (Ilmarinen 2005: 92). Age management implies knowledge about age structures, fair attitudes, management understanding individuality and diversity, good strategy, good work ability, motivation and willingness to work, competence, good work/work environment organisation (Ilmarinen 2005: 236, explaining this in more detail). A practical model (Ilmarinen 2005: 245 based on the Finnish Institute of Occupational Health 2003) should identify needs and targets and their priority, survey the current situation, create plans for targets, set schedules, evaluate success, agree who is responsible, implement and monitor the development, and create a follow-up.

In Germany, the implementation of age-management strategies on company level improved, starting from non-action in the 1990s (European Commission 2012: 26, Duell/Vogler-Ludwig 2012: 7).

1.6 SOCIAL INNOVATION

“Social innovation” is partially used as a catch-all term “for quite different issues, subject areas problems, hopes for solutions” (Howaldt/Schwarz 2010: 87, my translation from original German). In contrast, expert 2: “Measures do not have to be innovative, if they work. Some things are incredibly innovative, but they do not spread, and sometimes a good copy is perfect, since then you have something which is working somewhere else”. Likewise expert 1: “We have not lack of knowledge but lack of action. We should say: ‘Ok, we do this. There are also various other models, they are good too, but we do this as a standard model and implement this’”.

A short definition of ‘social innovation’ is the “deliberate, the intentional alteration of existing social practices in different fields of action – that is to say, the deviation from former routines of action and behaviour” (Schwarz 2010: 23f. in sfs 2010; translated). Other definitions also include social innovations addressing yet unmet social needs (Mulgan et al. 2007, Murray et al. 2010), “creating new social relationships or collaborations” (Murray et al. 2010) and

substantiate the new ideas social innovations refer to with “products, services and models” (Murray et al. 2010). Referring to Crozier and Friedberg (1993) Howaldt and Schwarz (2010: 89ff.) state that social innovations refer to new social practices. Especially against the backdrop of societies becoming ever more differentiated social innovations are important at the border regions between societies’ partial rationalities. Social innovations can also be proactive, pointed towards anticipated developments, and mention demographic changes as an example. Importantly, Howaldt and Schwarz state that technical inventions become innovations only if they are disseminated to some degree, and that social inventions can only be termed innovations “when introduced into a new setting” (Conger 2003, cited after Howaldt and Schwartz 2010: 93). Chances for dissemination are greater where current institutions do either not act or at least not satisfactorily (Howaldt/Schwartz 2010: 93). Slightly higher standards on social innovation are included in the definition provided by Heinze and Naegele (2012): Additional to things mentioned above, the dichotomisation of technical and social innovations should be overcome, approaches should be interdisciplinary and measures should be sustainable.

1.7 QUALITY OF WORK

...may be defined as “employee satisfaction with a variety of needs through resources, activities, and outcomes (...) in the workplace” (Sirgy et al. 2001). This is a subjective definition, an objective one is “the working conditions and earnings conditions at large” (Fuchs 2012: 417; translated).

The quality of work is affected by numerous circumstances. Ilmarinen (2005: 267ff.): Physical work environment: Noise, vibration, impurities in the ambient air, poor work postures, handling of heavy loads, repetitive work. Mental demands: Computer use, tight schedules, complex tasks, learning new things at work, regulating one’s work, taking breaks, order of worktasks (able to choose the order), able to regulation of work methods, regulate workplace and amount of work...job requirement in relation to skills (skills match the demand), supervisory work. Working hours: over-40-hour-workweeks, irregular day work (e.g., working on weekends), shift work (in Germany, employees between 50 and 64 work less frequently in the evening/nights/weekend or in changing shifts than younger employees, cf. BMAS 2013: 18f. based on Mikrozensus 2011 data).

The Federal Ministry of Family Affairs, Senior Citizens, Women and Youth has the programme “Wirtschaftsfaktor Alter” (‘Economic Factor Old Age’), trying to enhance older people’s well-being, their labour market participation and generally economic growth. Older people should be seen more as buyers and producers. In this project, tools for companies are being developed, a study on the topic “work satisfaction of older employees in correlation with images of old age and age management in companies” is conducted, another one is titled “managing transition: An expertise on motivation and preferences of older workers with reference to shaping retirement” (United Nations 2012: 7 and <http://www.wirtschaftsfaktor-alter.de/wa/ueber-die-initiative/kurzueberblick.html>).

The “DGB-Index Gute Arbeit“ (good work) from the Confederation of German Trade Unions is based on employees’ views (Hexel undated:1). There are 15 dimensions:

Qualification/development opportunities, creativity, promotion opportunities, possibilities for influencing/shaping work, information flows, management quality, workplace culture, relations with colleagues/social climate, meaningful work, hours of work, work intensity, physical demands, emotional demands, income, career outlook/job security. Income is included in the 31 questions (Hexel undated:2f.). Respondents are asked to which degree something (for example, noise) occurs and if, to which degree this is felt as burdensome (Hexel undated: 3). Leaving aside which share of workers has good, medium or bad work (this depends on methodological decisions, question wording etc.), Hexel (undated: 5) states that work is worse without worker representatives. Further, the standard questionnaire can be modified in order to take company-or-department specific points of interest into account and result in immediate action (Hexel undated: 6f.). This action, in turn, should enhance workers' workability.

Workplace innovation, an example or sub-aspect of social innovation, "focuses on how to improve aspects of work organisation and introduce modern management techniques that involve workers" (EC 2013: 44), in our case older workers. EC (2013: 44) suggests flatter hierarchies and space for creativity as being more productive, and probably they offer a high quality of work.

1.8 QUALITY OF LIFE

...can be defined as "Individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHO 2002). As being obvious from the definition, the quality of work – affecting perceptions of the position in life as well as expectations and concerns – affects the quality of life (s.a. Fuchs 2012: 417).

1.9 GOOD PRACTICE

" (...) in age management is defined as those measures that combat age barriers and/or promote age diversity (...) it is not a once-and-for-all achievement but rather comprises a range of possible interventions, both minor and major (...) Good practice in age management is the most important precondition for a substantial increase in the labour force participation of older workers; its benefits can be felt all round – for public authorities, for employees and for the organisation" (Naegele/Walker 2006: 3). Good age management practice has numerous dimensions: Job recruitment, learning/training/lifelong learning, career development, flexible working times, health protection and promotion and workplace design, redeployment, employment exit and transition to retirement, and comprehensive approaches (Naegele/Walker 2006: 7). Further,

"For organisations with little or no experience in age management the main point is to get started in the implementation of good practice, however small-scale that may be, and then to try to build that into a more comprehensive strategy. Most organisations do not

start such initiatives and many of those that do fail to sustain them” (Naegele/Walker 2012).

This is very important in Germany due to its *mittelstand*-dominated economy and resulting low professionalisation of human resources departments.

Following, a few German examples will be shown:

MicroTEC (<50 employees) targeted recruiting on engineers and foremen >54 years in order to have age-mixed teams. Similarly, *Dornseif* (<50 employees) tries to achieve age-mixed teams since 2010. Further, a demography commissioner speaks with the staff to get to know age-specific needs. Every working place get risk assessed and optimised. In 2013 the company wants to start a research project with the local university to prevent career interruptions (Antidiskriminierungsstelle 2012: 8ff.).

In the construction sector, physical demands on employees are high, also due to night and weekend shifts. Based on employee surveys, *Hering Bau* developed a human resources strategy: Learning gets promoted, especially for the old in order to enable them to fulfill project management tasks. Superiors get trained towards a considerate leadership style and concerning the importance of age diversity. On construction sites teams consisting of employees of different ages allow employees to work according to their individual capability (Antidiskriminierungsstelle 2012: 14f.).

Hesse, a producer of varnish and similar products offers a wide range of health measures: Back training, height-adjustable desks, ergonomic chairs, lifting assistances and smooth-running pallet trucks. Health measures are not restricted to older employees (BMFSFJ 2011: 4).

Dekabank considers the occupational life cycle of its employees: Career choice, education, career steps, family phases with child/elderly care, end of the career in the company. There are six areas of human resource management: Recruiting and commitment management, work conditions, knowledge transfer, qualification of employees and top management, health promotion/work-life balance, attractive retirement models (Flüter-Hoffmann 2010: 209f.). The results are: Low absenteeism, low fluctuation and high employee commitment (Flüter-Hoffmann 2006; 2010: 209).

Deutsche Lufthansa has a “life event related human resources management” (translated from original German cited in Flüter-Hoffmann 2010: 210, s.a. Armutat/Rühl 2009: 29ff.). The four fields of action are role in the company, employability, workability, human resources management. They are related to life events: Entering the company, qualification, career development, processes of change, decisive private events, engagement outside of the company and leaving the company. As in the case of DekaBank, this results in a matrix of human resource instruments (Flüter-Hoffmann 2010: 210). A special model at Lufthansa are horizontal career paths, resulting from the high number of employees and the low number of top management personnel: Rotation, qualification and vertical development. Further, Lufthansa offers part-time work, job-sharing and telecommuting, as well as individualised care solutions if employees have care obligations. Health care is not restricted to the classic areas of ergonomics and nutrition;

Lufthansa offers counseling if employees face personal challenges and crises. In the context of lifelong learning, e-learning is promoted (AARP 2010: 10).

ABB's programme "Generations- Voneinander lernen, miteinander wachsen" ("Generations - Learning from each other, growing with each other", translated) is centred on employees and their tasks and aims at a life cycle oriented career and competence development for employees in all ages, so as to combine experience with new knowledge in mixed-age teams (Flüter-Hoffmann 2010: 211).

Henkel offers various health measures, including yearly skin cancer checks (AARP 2010: 11; the company's is focused on chemical products). Further, the company offers part-time retirement while continuing to pay full social contributions (AARP 2010: 11) and individual sabbatical options.

Bundesagentur für Arbeit's (German Federal Employment Agency) human resources management is based on four life cycles: (1) school/studies/apprenticeship (2) career start/parenthood ('rush hour of life') (3) second career phase/occupational development (horizontal/vertical), job comeback after family phase/care for relatives (4) active retirement, whereas this is supposed to be accompanied by lifelong learning and age-independent HR management (Behrens 2011: 7). In (3) applicants over 50 years of age get recruited. Opportunities for development are age-independent. Individual development potentials are analysed and promoted, employees with care obligations get help. Seminars are offered, such as 'in the middle of life' and 'preparation for retirement'. Part-time work/telework is possible (Behrens 2011: 13). For health, there are back therapy training, nutrition advice, movement training and stress management. Analyses conducted by the Bundesagentur show that work-life-balance-conflicts lead to low job satisfaction, lower commitment, lower loyalty and lower team engagement. The holistic health management covers reintegration management, leadership and cooperation, work life balance, work and process organisation, value orientation, addictive substances, absenteeism, occupational safety, health behavior and prevention, motivation (Behrens 2011: 16). For the introduction in 2006 the Bundesagentur signed an agreement with the main staff council for organisational as well as substantial questions. For local implementation task forces have been implemented. Executive personnel are role models and crucial for communication. The Bundesagentur offers several courses for executive personnel, such as "expecting achievement, promoting health" (translated). An information platform allows for the exchange of 'best practices', so that all departments can benefit.

The reintegration management after long sickness breaks is planned to be expanded to include disability management, since the age structure implies that long-term sicknesses will be more prevalent. Further, sometimes retired staff members are re-employed for projects if they have specific skills (AARP 2010: 9).

Hansgrohe considers crucial for workability: (1) Company culture/philosophy, (2) leadership, (3) work organisation, (4) staff development and (5) health management. These fields of action were defined based on an employee survey and various workshops with employees, conducted in cooperation with a local college. One result is that leadership behaviour is highly important for motivation, work-life balance, occupational security and solidarity. A student working on his

diploma thesis developed a concept for job rotation. Job rotation belongs to the staff development strategy "Fit in production"; the main goal is skill development. Another goal is to decrease the 'push mentality' where change and improvement are implemented top-down in favour of a 'pull mentality' with employees' being the main drivers (Egenter/Schoof 2010: 162ff.). In order to achieve solidarity, there a hiking day, a chartered train to a trade show for bathroom equipment, a day for children, an employee triathlon, various running events, evening 'chimney' talks between employees and corporate management (Egenter/Schoof 2010: 165). If employees are overworked, numerous measures are offered in the areas of nutrition, sports, relaxation and, mainly, ergonomics (primarily ergonomic measures are considered very important by older employees, cf. BMFSFJ 2011: 4). Production lines and working places are designed according to ergonomic standards. This happens with employee participation in order to ensure that, for example, lifting assistance and vertically adjustable desks really get used. White collar staff gets trained for computer-job ergonomics. Further, in a wellness center employees can work out based on personalised training plans designed by health management. Outdoor running training takes place and a yearly health week in cooperation with local sports clubs. In the future, work ability and health will be discussed in 'qualitative staff planning talks' with corporate management, human resource employees and employees of staff development (Egenter/Schoof 2010: 165f.). Every year there is a 'welcome meeting' for employees who became 50 years of age recently. They get asked about what they consider important, how they see their future tasks, which burdens they have in their work and which ideas for improvement they have. Issues important to older employees are flexible breaks during work (more short pauses instead of one long pause), the possibility of sabbaticals, annual working time in order to make job and familial/personal life more compatible and the possibility to convert financial premiums into time off. Employees also want to telework more strongly, which has to be agreed individually with superiors (Egenter/Schoof 2010: 166ff.). The welcome meetings' topics, for example, were "alternative organisation of working time" in 2007 and "further training for older employees" in 2008. Yet, sometimes employees consider this special treatment strange (Egenter/Schoof 2010: 168).

At *Leuna* about half of the staff consisting of chemists, engineers and executives is aged 50 and older. The labour agreement "Zukunftssicherung" is supposed to serve as a basis for a demography-oriented personnel policy including the lifecycle-oriented organisation of working time, measures for the compatibility of family and work, corporate health management, qualification, further education as well as corporate pension plans. To finance these measures, a corporate fund was established. The measure "lifecycle-oriented organisation of working time" which started at the beginning of 2013 considers three aspects. Concerning age-appropriate work, "part-time with wage adjustment", "modified free time for the elderly" and models of age-appropriate working hours were introduced. Further, negotiated time for nursing care and parental leave were implemented as well as "discharge times" for certain groups of employees which contain for example, additional free shifts for the burdened. To promote the health of their staff, *Leuna* also offers a broad variety of company sports activities (back exercises, football, swimming etc.) as well as several prevention courses (e.g. nutritional advice, cardiovascular training) and an annual 'health week'. Additional health service such as

preventive check-ups and regular information on current health issues is provided by an internal medical service.

In 2007, *Audi* started its programme “Silver Line” whose main content is the involvement of mainly older employees in the handcrafted production of the model R8. Process steps were created in an age-friendly way (complex without one-sided strains). At *BMW*, “Heute für morgen” (today for tomorrow) is an holistic programme launched in 2004 including health management, qualification, working environment, need-based retirement models as well as communication and change management. The measures implemented aim at the whole personnel’s work ability. *Daimler* has two human resource projects: “Aging workforce”, implemented in 2007, is supposed to promote the capability and save know-how amongst all members of the staff. The second initiative “Space Cowboys – Daimler Senior Experts” (since 2013) should save the know-how of employees beyond their period of employment. For this purpose, retired employees have the possibility to return to the company for a limited time in order to temporarily support the core workers (e.g. during projects, coaching, product introduction) with their knowledge, capabilities and experience.

,Best practice’ collective agreements exist in the chemical industry and the metal industry: “The issue ‘demography’ has been part of collective bargaining, and not just more money, less holiday etc....this is rather innovative, this exists in no other country” (expert 2).

1.10 LIFE-COURSE ORIENTATION

“...is (to) give a somewhat reasonable portrayal of the aging process” (Murphy et al. 2010).

Although German life courses heterogenise, the basic three-part structure (education, employment, retirement) is still predominant (Naegele 2008, Saariselkä presentation), but possibly outdated and becoming less prevalent since relevant background conditions (high growth rates, low unemployment, welfare state expansion are not existing today (Kohli 2007, cited after Naegele 2008, Saariselkä presentation, also stated by expert 3, suggesting parallel learning, working and free time).

The point of view must (and probably will) change from employees adjusting to work to work adjusting to employees so that they will be able to work longer (Ilmarinen 2005: 101).

Life-cycle⁴ oriented human resources management is a “holistic strategy, including all life phases of employees from recruitment over commitment to retirement” (Flüter-Hoffmann/Sporket 2013: 212, translated). This triple-r-concept (recruitment, retention, retirement) can lead to a more diverse staff in various respects (Flüter-Hoffmann/Sporket 2013: 212). In employees’ individual life situations their needs and potentials get analysed and human resource instruments are offered for optimal motivation and work satisfaction (Flüter-Hoffmann/Sporket 2013: 213).

⁴ Ilmarinen (2005: 102) states that “life cycle refers to biological aspects, lifespan to psychological aspects, and life course to the sociological approach to life”. Yet it is not clear of these terms are used as proposed here.

The theory of tasks; a person has to get used to new tasks and new situations, which leads to the need to get used to further new tasks and situations. Here, (in contrast to deficit oriented theories) staff development regards qualitative changes of ageing, staff development and is life cycle oriented (Fußgänger 2009: 74). Crucial life cycles are (1) Biological-social (identity) (2) Familial (family) (3) Job-related (working life) (4) Company-related (company), (5) Position-related (job position) (Fußgänger 2009 referring to Graf 2002). After initial vertical movement, employees reach a plateau where further promotion is improbable. They remain on their position for too long and their tasks provide no further learning or challenge. At this stage, staff development measures should prevent declining performance and demotivation (Fußgänger 2009: 78f.). The position-related life cycle: Firstly, the employee gets introduced. After a while, the employee knows his position and a first routine begins; this is called the growth phase. Here, the employee still learns new things and gets more professional. The employee should be in this phase as long as possible. In the following phase of ripeness, there are nearly no new challenges. Graf (2002) suggests Job Enlargement or Job Enrichment here, believed to raise the development potential in this position to get back into the growth phase. The last phase is the phase of saturation, where due to mental overload or underload the employee gets disenfranchised from his job and employer (Fußgänger 2009: 80). Because the Baby Boomer generation is in a certain age, possibilities for vertical promotion are scarce. Therefore, the number of employees without further promotion prospects is relatively high, because a large number of employees is at a career bottleneck. According to Holz (2007: 166) most companies still think that a typical career is promotion until about 40 and then a career plateau until retirement. Fußgänger (2009: 81) suggests that companies rethink this concept, also against the backdrop of Morschhäuser (200: 289) stating that the best way for active ageing in employment is the career, so that career perspectives should be there in the whole working career (Fußgänger 2009: 81).

Some companies regard their employees' needs concerning: Their occupational life cycle from career choice to retirement; their operational life-cycle from joining until leaving the company and their career in the company; their position-related life-cycle from accession of a certain position to change of position or leaving the company; the familial life cycle: family foundation, child-rearing, care for relatives; the biosocial life cycle: promotion of different potentials at different ages. With age structure analyses, the workability index or appraisal interviews companies can assess their employees' workability and compare this to present and future need (Flüter-Hoffmann 2010: 203f.).

Measures to raise flexibility are widespread in Germany. Widespread measures are (in 2006, %age of companies): Individually agreed working times (73%), flexible day- and week working times (67%), trust-based working hours (51%), flexible year- and life working times (32%), telework (19%), job-sharing (14%), sabbaticals (12%). (Flüter-Hoffmann 2010: 207 and 2007).

In the case of trust-based working hours the concept ROWE (results only work environment) offers maximum freedom. Employees are free to choose when and where to work, merely goals are discussed with superiors. The University of Minnesota found out that employees' work-life balance as well as the company's productivity improved where implemented (Flüter-Hoffmann 2010: 207).

In contrast to UK, FR and IT, life-working time arrangements are not widespread; this also applies to mentoring programmes and internal career consulting. In contrast, individual career programmes are more widespread than in the other three countries. Further, medical check-ups are conducted in most (87%) of responding German companies, far more than in other countries; this also applies to healthy food (45%), medical consulting (38%), sport programmes (26%) and relax programmes (15%) (Flüter-Hoffmann 2010: 208f. based on a survey of 500 companies in each country).

The Federal Administration has guidelines for life phase oriented HR management. If an employee is supposed to be transferred to a different location and family obligations reduce his/her mobility (expert 2 states that older workers' lower mobility lowers their re-employment chances), cooperation with the HR department could solve the problem. If employees have care obligations, telecommuting can help (BMI/BA 2013: 8). Employee 1 suggests that somebody could be responsible for information if someone has a problem to combine work and family, "just to organise help, e.g. care, etc."

1.11 SOLIDARITY BETWEEN GENERATIONS

"...refers to the mutual support and cooperation between different age groups in order to achieve a society where people of all ages have a role to play in line with their needs and capacities, and can benefit from their community's economic and social progress on an equal basis" (AGE 2012). This is how assemblyman 1 also understands solidarity: "not that some get more and others less...young people have more physical power, but less in their head, and we, the older ones, consult the younger ones...here, the young ones do the physical hard work", whereas assemblyman 2 point out that it is only occasionally possible to divide work this way: "...as now again, people are missing, then everybody has to go outside. Big corporations, they can compensate in such situations, but in small companies...the division of tasks is health dependent. I have problems with a 80 pounds cement bag. Then I say: Can you carry it, I'll do the small things to be done. But that is not always possible...we have a building site with big heavy gates, there I have to work as the others...due to my age I'm exhausted sooner...in some companies there are these 'light-jobs' without heavy physical works, like in the warehouse or as forklift driver, for the same pay". Concerning solidarity between generations, Employee 1 considers it important that there are age-mixed teams for the transfers of experience and, the other way round, the transfer of new energy, or technical skills.

"The relation between youth unemployment and extending working lives has to be taken up" (Zaidi). The question is how a generational contract might look like in crisis-hit countries (Naegele 2013, London presentation). On the other hand, one might argue that the lump-of-labour assumption is a fallacy (a theoretical model provided by Fisher/Keuschnigg 2011: 4ff. even suggests that early retirement raises youth unemployment). Assemblyman 2, for example, thinks that higher retirement ages (such as 67) prevent the hiring of young workers.

1.12 PENSION/RETIREMENT POLICIES

In the last couple of years, labour market policies as well as pension policies were directed towards higher employment rates amongst the elderly. Concerning the latter, women's retirement age has been raised to men's, unemployment benefit duration for the elderly has been shortened and basic income support and unemployment benefits for the long-term unemployed have been combined into one scheme and the "58-rule" has not been prolonged (Dietz/Walwei 2011: 10). The "58-rule" meant that those 58 years old or older can get unemployment benefits without being available for the labour market. Many unemployed used this rule because they did not expect to find a job and the Job Centres suggested to do so (Brussig 2009: 5).

Retirement at 67

Retirement policies can affect retirement decisions (European Commission 2012: 9). The European Commission (2012: 9f.) states that after introduction of retirement age 67 stepwise until 2029 Germany discusses raising retirement age further to 69 (retirement before the age of 67 will be punished by a 3.6% pension cut per year, European Commission 2012: 14). This could be justified by increasing further life expectancy: The new retirement age of 67 divides the increase in further life expectancy between the last cohort with retirement at 65 and the first cohort with retirement roughly (expected to be 3.1 years) in a 2:1 relation between work and retirement. Against the backdrop of further rising of life expectancy, depending on lower (Statistisches Bundesamt) or higher (Max-Planck-Institut for Demographic Research) estimate, carrying on the 2:1 - division implies that those born in 1985 or 1990 should retire at the age of 69 (Bauknecht 2013b). Considering individual deviations in further life expectancy, assemblyman 1 states: "I say: Retirement with 60 for all. Everybody should benefit from his retirement". Concerning further life expectancy, Assemblyman 2 states: "It depends on what you do physically. Sitting in the office, no physical harm no problem. Outside, I have to work hard, and everything gets damaged there (...later) 55 or 60 would be the perfect retirement age for me...coal mining is the forerunner here, they retire with 45 or 50. 50 or 55 for those with physical work...others can work longer, if they want...but nevertheless: Not after 65."

Companies reacted to bust cycles, sectoral structure crises, rationalisation pressures and product/process innovations with staff reductions with various forms of early retirement. Company calculus has been supported with early retirement possibilities provided by government, with negative macroeconomic effects (Funk/Seyda 2006: 27). Most unemployed aged 55 or older were classified as „mainly not available“ (Funk/Seyda 2006: 27 referring to Bundesrechnungshof 2002: 4), which also contributed to long unemployment duration.

Early retirement

Various possibilities for early retirement have been abolished in recent years, especially in the pension reforms of 1992 and 1999, coming into effect in 1997 and 2004. As a result, early retirement leads to lower pensions, but not in a degree to be actuarially fair. Further, minimum age for retirement due to unemployment has been raised from 60 to 63 years (Eichhorst 2006: 10).).

The Integration Supplement (Eingliederungszuschuss, EGZ) is a hiring subsidy (from 1998 on) for the employer of limited duration, paid for the employment of older workers with bleak employment prospects. The EGZ “is paid to the employer as a %age of standardized labor costs defined as the gross wage rate (as laid down in collective agreements) plus a lump-sum allowance from employer contributions to social security. If the employment relationship is terminated before a minimum period after the expiration of the subsidy, the employer is legally obliged to refund parts of the subsidy, although local employment agencies often refrain from enforcing this requirement” (Boockmann et al. 2007: 6). Boockmann et al. (2007: 12ff.) conclude that (due to deadweight effects)

“absence of any effects of the subsidy program on exits from unemployment in most groups of the population ... employers reduced unsubsidized hiring by almost the same amount as they received subsidies ... positive effects are found for East German women ...”

Early retirement via disability schemes has been made more difficult some years ago. With about 4% of the population between 20 and 64 (a long-term stable figure) Germany is amongst the countries with low disability benefit rate, and employment of the disabled was at about 50% in the late 2000s, which is high in international comparison (Duell/Vogler-Ludwig 2012: 4).

Besides lower pensions coming with early retirement, the generally lower pension level makes early retirement less attractive (Eichhorst 2006: 11, s.a. Funk/Seyda 2006: 16). Assemblyman 1 states: “ ...less and less. Some years ago they told me it’s 1300 €, now it’s 1150 €. Say, 1100€, then you’re a welfare case, if you have to pay for two. Govt has to consider who has damaged his bones...it should matter for how many years somebody worked, not where. Those with many years of work should get their pensions...those with less years should get less”. Assemblyman 2: “So when I see how much I earn and how much pension I’ll get – if I even can work until 65 – that’s hard. Something different has to happen, like ‘you have earned this and that in your life and accordingly this is your pension’”.

Unemployment as early retirement

The unemployment scheme was used as early retirement scheme, but generosity in the unemployment scheme declined (European Commission 2012: 15). The European Commission (2012: 17) traces the rise in actual retirement age between 2006 and 2009 back to policy changes, yet recruitment of those between 50 and 60 did not increase, merely of those between 60 and 64.

Declining unemployment benefits schemes reduce elderly jobseekers’ reservation wage, which is an important obstacle to elderly’s re-employment (Dietz/Walwei 2011: 10, Duell/Vogler-Ludwig 2012: 4 state that reduced generosity reduced incentives to use unemployment as early retirement scheme).

Some more recent developments thwart these measures. Raising the duration of long-term unemployment benefits for the elderly, the possible neglect of parts of the elderly in unemployment figures and the obligation of jobless who are able to work to retire prematurely counteract previous endeavours to raise elderly employment (Dietz/Walwei 2011: 11, also

referring to the statement of the Institute for Employment Research). Also stronger employment protection for older employees or restitution obligations for companies when laying off older workers (both being demanded by some political parties) may do more harm than good, since such measures reduce companies' incentives to hire older workers. Protecting and supporting older workers more than younger ones gives the wrong impression to companies that older workers are in need of special protection, i.e. not competitive (Dietz/Walwei 2011: 11. This also applies to help for the unemployed, 2011: 13).

Based on above-mentioned strong negative age effects on re-employment chances for engineers and similar occupations (against the backdrop of general lack of skilled labour in their sectors), Frosch (2006: 24, see also Ditz/Walwei 2011: 9) emphasises that in order to raise re-employment chances of older jobseekers, their skills should not become obsolete. Therefore, lifelong learning is crucial since a lack of skilled labour does only translate into better employment chances for older workers if their skills allow them to substitute for the lack of younger workers. Employers need workers with state-of-the-art skills, which older workers often do not have (Boockmann/Zwick 2004: 53).

Partial retirement

Implemented in 1996, partial or semi- retirement has been abolished in 2007 (Duell/Vogler-Ludwig 2012: 5). The abolishment could foster employment of the elderly (Büsch et al. 2010: 906). Partial retirement has been used mainly by employees without physically demanding jobs, and in most cases in the block model (Dietz/Walwei 2011: 10), i.e. employees did not work for 6 years half their weekly hours but for 3 years full-time and retired then. Further, the partial retirement did not improve the employment situation (Dietz/Walwei 2011: 10). Schulz (2009: 188), for example, ascribes rising employment rates of the elderly as depicted above to these policy measures. Assemblyman 1 to partial retirement: "Where do I get the money from. I have a certain standard of living I want to sustain. So I have to work fulltime". Referring to a study by the Bertelsmann Foundation, expert 4 states that the most important thing for older workers is appreciation, but the second most important is the possibility to flexibly shape their labour market exit.

1.13 PAID WORK AFTER RETIREMENT/UNDECLARED EMPLOYMENT (DURING WORK/AFTER RETIREMENT)

'Bridge employment' is employment between full-time work and complete retirement (for example, part-time work or self-employment). 'Silver workers' are working retirees between 60 and 85. There are various forms: Partial retirement before legal retirement age, further employment after legal retirement age (in the same job or a different job) or complete retirement (Büsch et al. 2010: 905f.).

Depending on how the attained socio economic status gets evaluated, retirement can be considered as liberation or loss, while the latter is more often the case with higher job positions, since power and influence decline (Büsch et al. 2010: 907). Büsch et al. (2010: 907) also refer to

people's longing for a mix of continuity and change in their life (continuity theory of age). This could motivate workers to choose part-time work instead of complete retirement.

Büsch et al. (2010: 908ff., age 55-64, n=1500, DE) show that working motivation is positively affected by the subjective meaningfulness of the work done, positive feedback in the job (more important to women) and leadership by management (more important to men). Generally, working motivation of male employees is dependent on age in a slightly inverted U-shaped manner. Paid work after retirement is also dependent on employers or customers (in the case of self-employment) considering the person in question to be able to perform well. Here, subjective meaningfulness, requirement and positive feedback have positive effects (Büsch et al. 2010: 921f.), whereas at least in the case of the latter two factors the direction of causality could be the other way round. Company size negatively affects performance capability (Büsch et al. 2010: 922).

Employment rate in the age group between 65 and 69 rose steadily between 1991 and 2007, albeit on a low level. The share of those working without getting pensions declined markedly, suggesting that in the early 1990s a small minority did not have pension entitlement (Brussig 2010b: 8).

1.14 INTEGRATED APPROACHES & MEASURES / MIX OF MEASURES

The *Bundesagentur für Arbeit* has an integrated approach of human resources management. Concepts and instruments are interlocked so that processes from recruitment over staff development to performance management are directed with synergy effects (Behrens 2011: 1). "Demography-oriented HR policy...that's a package of measures...staff development, compensation, recruitment, further training, age-mixed teams, reducing barriers for further training" (expert 2).

1.15 CROSS-CUTTING ISSUES – TAKE SPECIAL NOTICE OF DISADVANTAGED GROUPS

At *Hansgrohe* (see also above), language qualification is offered in order to raise employability, since it is crucial that employees understand their superiors (Egenter/Schoof 2010: 166).

Older chronically ill / handicapped

Assemblyman 1: "No employer wants to...but they should hire such people, for example for cleaning...they should not do physical hard work, it is enough for them doing light work".
Assemblyman 2: "The 'integration office' helping to change workplaces to be suited for the handicapped...rearrange a workbench or a forklift". Employee 1 states that in her company those sick for more than 6 weeks get contacted by responsible colleagues and then the company tries to change circumstances. She says the problem is to convince sick colleagues they are really cared for. Concerning the integration office, she states that: "Most people don't know that the pension funds pay too. If the warehouse worker needs a forklift driving license to do a different

job and the reasons for the different job is sickness, the pension funds would pay for the forklift driving license”

Older Women

Their employment rate is affected by their cohort's employment rate in young age (Dietz/Walwei 2011: 10). Career interruptions due to motherhood are very long in Germany, also fostered by tax incentives, lack of childcare facilities, financial assistance for parents of children not in nurseries...”in Finland the Kindergarten is open 24 hours, a big advantage. In Germany they close at 6 pm, and being on a business trip or being late, you cannot do that” (expert 1). Further, on average women are younger than their partners, and with the male/main breadwinner and his retirement the question arises what to do what the time, which caused women's early exit (expert 1).

Gender and age disadvantages cumulate. Women have in their careers less opportunities for development and promotion, lower incomes and problems to combine job and care for children or the old (Zimmer et al. 2010: 712f.). Roughly 60 % of women in the survey would prefer more flexible working times; possibly the current incompatibility is a cause of the high number of part-time workers among women (50 % of women state this as main reason; Zimmer et al. 2010: 730). Those caring for at least one parent do so for 15 hours per week on average (Zimmer et al. 2010: 730).

Caring demand rises with age, especially after the age of 80 (Keck/Saraceno 2009: 4), which is relevant for the age in which paid work is hampered due to caring obligations. In 2007, more than two thirds of those in need of care were cared for at home (Zimmer et al. 2010: 718 based on Statistisches Bundesamt 2008). Besides ambulant care (primarily female, s.a. Keck/Saraceno 2009: 9: More frequent and more intense than men's caring activities), relative care for the old. In future, care demand will rise, while the number of family members will decline, especially after 2030 when the numerous baby boomers are dependent on care from less numerous following generations (Keck/Saraceno 2009: 5). Care by family members is crucial for two reasons: Firstly, the majority of Germans prefer to care for their parents instead of using residential care. Further, financial help from government is insufficient to allow for complete externalisation of care (Keck/Saraceno 2009: 5).

Since 2008 the *Pflegeerweiterungsgesetz* allows employees to take unpaid leave, either of ten days per year or a “caring leave” for a maximum of six months (Keck/Saraceno 2009: 7, public servants can get leave for more than a year but are not guaranteed to return to the same job). Though, as in other cases, special protection can deter employers to hire members of risk groups (here, older women).

Older Immigrants

Assemblyman 1 immigrated from Poland many years ago and does not think to have experienced disadvantages due to this nationality. Expert 2 states that the group with the lowest rates of professional qualifications are female immigrants, due to their bad language skills and because of child-rearing at young ages: “The Institute for Interdisciplinary Human Factors

Science estimates that 70% are not capable for vocational training or school due to bad language skills or cognitive skills". Expert 1 states that migrants have higher probabilities of getting squeezed out of employment, partially due to lower qualifications, worse health and worse language skills.

1.16 SELF-ENTREPRENEURSHIP/INDEPENDENT (FREELANCERSHIP) WORK IN LATER LIFE

Age affects the decision for self-employment in an inverted U-shaped manner (Werner/Faulenbach 2008: 2), so that those aged over 50 have a 13.1 %age points lower probability to be planning to start their own business (Werner/Faulenbach 2008: 32).

Older people have more work experience and a bigger network and more financial reserves, all of which should foster self-employment (access to capital are believed to be highly important factors for starting an own business, Werner/Faulenbach 2008: 11). On the other hand, the pay-off period is shorter, risk aversion is higher and physical strength is lower (Werner/Faulenbach 2008: 3, 12). Comparing older and younger people considering starting an own business, older ones are less afraid to fail, more profit oriented and more motivated by the view that they have not gotten in life what they should. Further, impeding joblessness is an important motivating factor for older potential self-employed. Older people interested in self-employment are more pushed into self-employment and less pulled than younger ones ('necessity entrepreneurs', Werner/Faulenbach 2008: 26 referring to Wagner 2005). There are also sectoral differences: Whereas younger more often plan to start firms in industry, construction and gastronomy, older ones plan their businesses more in consulting, finance, personnel services providers, training and further education (Werner/Faulenbach 2008: 21, 24).

Multivariate analyses (n = 508) show that women are less likely to start their own business. This may be caused by psychological factors, but also be due to the business sectors women are overrepresented in (Werner/Faulenbach 2008: 30 based on Engel et al. 2007). Unemployment is not a driving factor of self-employment amongst the old, this is only the case amongst the young (Werner/Faulenbach 2008: 38, 48). Werner/Faulenbach (2008: 53f.) conclude that older people would start businesses more often if their doubts could be eliminated, possibly via elderly-specific consulting. Additionally, the authors (2008: 54) see institutional obstacles, for example the longer (24 months) earnings-related unemployment benefit I and the new '63-rule' limiting pension cuts due to early retirement. Concerning self-employment, Assemblyman 1 refers to health reasons. Assemblyman 2: "Never again doing what I do here...easy job, if at all, like installing light bulbs".

2. LIFELONG LEARNING (LLL)

Lifelong learning refers to „all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective" (COM 2011). Lifelong learning also become more important because knowledge antiquates faster (expert 2): "4 areas of learning: School, job, social, and

personal...learning to learn, learning to do, learning to be and learning to live together” (expert 3, the second part untranslated).

2.1 GENERAL ASSESSMENT OF THE LIFELONG LEARNING SITUATION OF OLDER LEARNERS/OLDER WORKERS

In Germany, the first apprenticeship (after school) is long and far more important than in some other countries (as the US, UK and partially Sweden). It qualifies for sophisticated tasks and for individual self-learning processes. This may be the cause why further training (on the job or in courses) is less prevalent in Germany than in other countries (Hillmert/Strauß 2008: 13, see also European Commission 2012: 53). The share of companies supporting further training rose further between 2002 and 2007, but not the share of employees, this was still at 20 %, but since about 1980 there is a long-term rise (in the first half year of the survey year; Kistler 2008: 60). Between 2007 and 2010, further training participation of older workers rose strongly, especially in the subgroup between 60 and 64 (BMAS 2013: 51). In the age group between 55 and 64, in a European comparison Germany ranks middle in formal in informal further education (Duell/Vogler-Ludwig 2012: 6).

Short-term training can improve specific knowledge (language, software, application writing, job interview training). It can last up to 8 weeks and is shown in most studies to improve labour market performance (Romeu Gordo/Wolff 2011: 203).

Based on the “Integrated Employment Biographies” provided by the German Federal Employment Agency (data collection: August 2005, subsample 50-62), Romeu Gordo and Wolff (2011: 204ff.) show (by propensity score matching in order to isolate treatment effects): Higher education fosters in-firm training participation, prior training participation has positive effects on classroom training. Own past unemployed reduces the probability of in-firm training, whereas for partner’s prior unemployment the opposite applies. Positive effects on employment are far higher in the case of in-firm training than for classroom training: “Classroom training keeps many participants busy without creating much of an employment perspective” (Romeu Gordo/Wolff 2011: 214), whereas in-firm training provides employees and employers valuable insights (without costs to employers). Romeu Gordo and Wolff explain the strong effect of in-firm training as resulting from direct contact to the firm due to the training, but have to admit that possibly those getting in-firm training could differ from those with classroom training in some aspects not hold constant due to propensity score matching, resulting in an overestimation of in-firm training’s positive effects (2011: 215).

Singer and Toomet (2012: 3) analyse WeGebAU, a programme similar to the British “Train to Gain” programme. The training voucher programme, introduced in the federal state of North Rhine-Westphalia, allowed SMEs to reduce direct training costs by half (firstly it was open to unemployed persons as well, from 2007 it has been targeted on low-skilled employed persons

probable to become unemployed). Based on Görlitz (2010), Singer and Toomet (2012: 3) state that training increase by 4-6%age points could be caused by the programme. The programme is targeted on workers 45 years or older. Since treatment is not allocated randomly, propensity score matching should give a clue about real and spurious effects. Generally, participation *reduced* the probability to be still employed 1.5 years after participation, but increased job-to-job mobility. "...our results offer a mixed view about the efficiency of WeGebAU subsidized training. Trainees leave employment with a probability of about 1-2 %age points higher than the one for non-trainees while they do not seem to work less during the following one-and-a-half-year. The effect on earnings in neither economically nor statistically significant. Our impact estimates are dwarfed by those of somewhat similar programs in the US...our results are rather in line with various European studies" (Singer/Toomet 2012: 26). On the other hand, the authors (2012: 27) state that the negative impact on employment stability could also be positive due to better job sorting (training enabling/motivating employees to search better jobs. Further, the negative effect can be found only in the case of short training of less than 8 days.

For older female workers, Zimmer et al (2010: 727) show that roughly half of respondents took part in vocational training in the past 2 years, albeit there is a large gap between services (59%) and manufacturing (17%). Participation probability is status (+) dependent. Female employees older than 55 took place in vocational training to a far less degree than younger women (the same applies to all employees, i.e. male and female, cf. Hillmert/Strauß 2008: 15). 60% of women in vocational training state that it helped them do their work. Nearly 40% see positive effects on their employability; 37% got more responsibility. Roughly 20%, however, state that after the training nothing changed. Nearly 40% of respondents state they invested privately in further training (Zimmer et al. 2010: 727f.).

Those in atypical employment take part in further training to lesser degrees (48%) than those in normal employment (64%) (Frick et al. 2013: 7). Amongst atypical workers those in minor employment (23%) have the lowest ratio, those lent from temporary employment agency have also a low ratio (27%), whereas those working part-time (49%) and those with fixed-term contracts (48%) have higher ratios. Amongst those atypically employed, women take part in further training more often than men (Frick et al. 2013: 8, also stating that this finding is reported against the backdrop of a different study [from the Hans-Böckler Foundation] showing that women are offered further training less frequent from the employer than men, also expert 3 stated the general finding). Those atypically employed would like to participate more in further training but know that their chances are low. There are less satisfied with their situation concerning further training (Frick et al. 2013: 15). Those with very low earnings (less than € 700 per month, Frick et al. 2013: 9) have a lower probability to take part in further training than the unemployed (Frick et al. 2013: 11). Basically, low-skilled employees take part in further training less frequent than higher skilled employees (Frick et al. 2013: 12). Further, non-citizens amongst those atypically employed and those normally employed take part in further training less than natives (Frick et al. 2013: 13). The authors (2013: 18, also stated by expert 3) suggest adaptive forms of learning for those with low qualifications in order to give them early success, against the backdrop of their mostly unpleasant learning biographies. Further, educational guidance is crucial, especially where people live and work, since otherwise they do not find guidance. Lastly, informal training and competencies learned there should be appreciated. The

EU demands from its members that they implement a system to recognised all competencies. "Lernen im Job" (learning on the job) is a good example. Temporary employment agencies, companies and chambers recognize competencies which can, combined, even lead to whole professional titles (Frick et al. 2013: 19). This against the backdrop that it is estimated that merely 30% of learning takes place in educational institutions (Baumgartner 2008: 506).

2.2 SKILL MISMATCH

„...is a complex phenomenon affecting citizens, enterprises, economies and societies. It refers not only to skill gaps and shortages, but also to skills exceeding job requirements“ (CEDEFOP 2010) Inadequate qualification is often a reason for manpower reduction as well as an obstacle for re-employment (Funk/Seyda 2006: 27).

2.3 BARRIERS FOR LEARNING

“In Germany, we have legendarily low investments in education...policy has to change that” (expert 3)

There are several relevant preconditions for further training: Cultural background, life circumstances, a learnability-fostering life and primarily educational background.

(Ehlers 2010: 611) subsumes barriers in health, familial obligations, gender-specific factors and conceptions and norms of age. The decline of fluid intelligence can be moderated with frequent cognitive training (Schmidt 2006: 2f.; expert 3 states that fluid intelligence is unimportant for most tasks and is no crucial obstacle to learning). Based on Alferoff (1999), Schmidt (2006: 5) states that older workers try to stay flexible, despite being often excluded from further training. On the other hand, those older than 50 are often afraid of further training, i.e. that challenges or course pace is too high, or they simply think they are too old for further training, that benefits are too low or that they have learned enough (Ehlers 2010: 612 based on Barz/Trippelt 2004). A factor analysis (all age groups) of reasons not to participate in further training results in 4 relevant factors, i.e. reasons co-occurring and co-not-occurring: (1) Fear (courses too fast, fear of exam), (2) No utility (personal, in the job, too old), (3) dislike of learning, (4) negative learning experiences (Trippelt/Reich 2004: 293), so that conceptions of own age as reason not to participate in further training co-occur with utility considerations. Assemblyman 2 states: I'd like to participate in further training, but in my case that does not pay off. I'm getting 60 and then it's over, possibly at 65 or sooner. I have been to further training, but the younger ones would benefit more". In contrast, expert 2: "It always pays off". Expert 3: "They stay until 64,65, soon 67. Giving them training until 58 yet get pay-off. Stopping training with 50, you have negative pay-off, also due to demotivation". Further, expert 3 states that due to them leaving companies for other companies, younger workers partially have low pay-off for the company. Concerning conception of age, expert 3 states that if the superior thinks older workers are incapable to learn and workers themselves think they would be able to learn, this leads to conflict, dissatisfaction and less engagement: "You can't teach an old dog new tricks' has to be substituted by 'no one is born a master'" (expert 3).

Workers' motivation also depends on how important work is for them and on their general work ethic. Recent research shows that older employees' attitude towards further training is rather instrumental and oriented towards short-term adaption of skills to tasks (Schmidt 2006: 6). Employee 1 states: "For me, further training is important to do my job... as I like". Willingness could also be fostered by group settings, possibly with other learners in a similar age, which makes also the application of age-fitted learning methods more easy, for example more practical and less teacher-centred learning (expert 3). Training participation could be attached to short-term benefits like higher pay, mobility advantages, interesting tasks or something like going to an exhibition, "or a seminar of a supplier, which is further training and reward" (expert 3).

Based on data from 1979-2003, Schmidt (2006: 7) shows that older employees are underrepresented in further training, whereas the gap narrowed as time passed. Age effects as well as cohort effects are relevant. Age effects are, for example, closeness to retirement, and partially decline of cognitive and physical performance. A cohort effect is, for example, higher educational attainment of the younger employees (born after 1950). Thirdly, contemporary historical factors are relevant for periodic ups and downs, for example increasing governmental efforts to raise workers' training participation or increasing awareness of education's relevance due to PISA results (Schmidt 2006: 8). Rudimentary analyses suggest that all three factors are relevant (cf. Eckert/Schmidt 2006: 8). Generally, the size of the gap between older and younger workers is negatively correlated to general educational participation (Schmidt 2006: 8).

According to survey data, nearly half of older participants in further training participate due to personal initiative, whereas this share is slightly lower amongst workers younger than 50 (Schmidt 2006: 10). This applies even more to female participants (Schmid 2006: 10). Training participation due to orders from superiors is more prevalent amongst younger learners; this gap widened since the early 1990s (Schmid 2006: 10). Amongst older workers, employment status, formal education and gender are relevant for participation in further training (Schmid 2006: 12). Often, older employees do not believe that further training can improve their occupational situation (Schmid 2006: 12). Besides lower motivation on the employees' side (s.a. expert 2), lacking requests from superiors also causes old workers' low participation (Schmid 2006: 12). Older women face a double disadvantage, since common concepts of further training see young male workers as prime target group (Schmidt 2006: 13 based on the IAB-Betriebspanel after Bellmann/Leber 2004). Amongst the higher educated, age differences in training participation are virtually absent (Schmidt 2006: 13).

Lifelong learning needs a broad and flexible offering of institutions, and that the single person is able to decide based on available information. There are numerous preconditions: Motivation, interest, the ability to gather information, to decide, time-planning, and continuous work at the issue. Basically, the view that learning is part of life is crucial (Gieseke 2003: 8).

Empirical studies show that even bleak job prospects do not lead to rejection of further training; moreover, learning can be rediscovered (Gieseke 2003: 6).

A factor contributing to the underrepresentation of the low-skilled is that higher cognitive abilities lead to a lower discount rate (placing low value on far future benefits), so that those with low abilities are less motivated by far further gains, reducing their training motivation

(Antoni 2011: 8). Further, based on previous literature Antoni (2011: 8f.) points out that some jobs in some segments offer (well-paid) stable employment, others not. If not, these employments can be expected to be short-termed on average, so that pay-off time is short. Employers anticipate that and are unwilling to pay for training for employees probably leaving the company soon (voluntarily or involuntarily). Further, those with low qualifications have low earnings so that they have less financial resources to privately invest in further training. Antoni (2011: 11) shows that (multivariately) formal education is positively related, as well as parental schooling (whereas own schooling and parental schooling are highly correlated, cf. Antoni 2011: 11). On-the-job training is positively affected by weekly working time, job requirement and company size (Antoni 2011: 14, for the latter it is only probability, not frequency. See also Duell/Vogler-Ludwig 2012: 6 for positive company size effects and the need for more training for older employees in SMEs). Further, literacy skills and cultural capital increase the probability of on-the-job-training. Cognitive skills foster the frequency of training, but not training probability (Antoni 2011: 20). Another possible factor leading to the underrepresentation of low-skilled workers is their fear that they would concede that they are incapable for some tasks if they demand further training, and this fear is more crucial in low-skilled jobs since these jobs are more insecure (expert 1). Expert 1 suggests that – if this is agreed with employees’ representatives – superiors can demand further training participation if this has not been done for a long time, which is practicable especially where further training participation is usual. Expert 4 suggests that at least in big companies agreements are made on how many hours of further training for each employee is to be conducted, in order to help those normally excluded.

72% of HR managers think it worthwhile to train older employees to the same degree as younger employees, whereas only 14% of companies offer these measures (BMFSFJ 2011). Since years now the company panel of the Institute for Employment Research shows that merely 7% of German companies with employees older than 50 include them in further training (Dietz/Walwei 2011: 12).

In a different study based on Berichtssystem Weiterbildung data from 2000 (n = about 2500, conducted for the Federal Ministry of Education and Research), it can be seen that a 50 -year-old employee has a 38% smaller chance of participation in further training than a 25 -year-old employee (Lois 2007: 16). This refers not only to further training aimed at promotion, but also to further training for induction into new tasks. Merely in the case of the adaptation of skill through training there is no age effect (Lois 2007: 16, albeit there is a positive yet insignificant effect, which is for various reasons not the same as no effect since the relevance of significance levels is debatable). For those who were over 60 in the year 1999, 94 % of advancement further training (aiming at job promotion) took place before they were 40 years old (Lois 2007: 7).

Though participation in further training declines with age, possibly short pay-off periods cannot explain for this. Given that the pay-off period is planned to be roughly 3 to 5 years, further training pays off before retirement even for older workers (Lois 2007: 11 based on Simpson/Greller/Stroh 2001), albeit this also depends on how fast skills learnt in the training become obsolete (Lois 2007: 11 referring to Behringer 1999: 44ff.). A

Older workers are excluded from on-the-job training due to employers' expectation that the pay-off period is too short (Frosch 2006: 7 referring to Börsch-Supan et al. 2005, see also Boockmann/Zwick 2004: 54). Age-specific methods of further training are scarce, and lower participation of older workers in further training takes place against the backdrop of generally low emphasis on further training in Germany, so that somehow already in younger years workers only seldom participate in further training, reducing their learning ability when they are older (Dietz/Walwei 2011: 12).

Within companies, new products and new production techniques are mostly assigned to younger employees, so that older workers are not integrated in innovation processes (Boockmann/Zwick 2004: 54 based on Wagner 2000). If new products or production techniques replace older ones, older workers' skills become obsolete whereas younger workers skills are in demand.

2.4 TIMING/AGE OF LEARNING

Timing of learning will change in Germany, since extension of working lives cannot be realised without rising further training (Walter et al. 2013: 88). Besides proposing that the model learning-working-free time (retirement) should be changed to parallel activities, expert 3 suggests that getting enough experience for becoming a good worker takes 5-10, and afterwards there are 10-15 years of good pay-off. In this period, free resources (possibly time due to efficient work) should be used for training, since otherwise after this 10-15 years it gets monotonous and dissatisfying".

2.5 NATIONAL POLICIES

The Federal Employment Agency covers the costs for employees of SMEs for a maximum of four years provided they pay their wages during this time (Hillmert/Strauß 2008: 3). The Bundesagentur für Arbeit covers costs of many forms of further training (expert 3).

2.6 SOCIAL INNOVATION

Expert 3 defines innovative as "new in the sense of never been there before or never in this context, and it has to be useful (sustainable is defined as not being a lighthouse project, but with further implementation and ongoing benefits. Effectiveness presupposes an evaluation, and transferable as a construction kit with core elements and optional elements depending on the situation, expert 3).

In order to advance older employees, Dietz and Walwei (2011: 12) demand that government provides the infrastructure or financial support of local networks for independent quality advice or quality planning. Workers as well as companies could use these networks and the networks could give impulses for higher participation in further training by older employees. Expert 3, based on the current work done by the Bertelsmann Foundation, proposes that it will be easier to

get degrees for competences acquired informally (the C of the ABC of further training, besides A for adaptive forms of learning and B for educational consulting [Bildungsberatung]). Further, the Bertelsmann Foundation is working on a 'competence map' with all competences for all jobs, so it can be seen which competencies one needs to do a different job, also for a possible official competence recognition independent of formal or informal competence acquisition (expert 3).

In the autumn of 2001, the Association of Germany Employers together with the Bertelsmann Foundation and employer associations from Denmark, the Netherlands and Ireland started the initiative "Proage" (www-proage-online.de).

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MOPACT is a four year project funded by the European Commission under the Seventh Framework Programme to provide the research and practical evidence upon which Europe can begin to make longevity an asset for social and economic development.



To achieve this aim, MOPACT concentrates the highest possible quality of scientific analyses into the development of innovative policies and approaches that can assist public authorities and other key actors, at all levels in Europe.

MOPACT starts from the conviction that Europe requires a new paradigm of ageing if it is to respond successfully to the challenges of demographic change. Ageing is currently understood as a time of decline, frailty and dependence and policy responses to it still reflect the historical era when retirement took place for a majority at state pension ages and post-retirement years were relatively short. Changes in the labour market and social behaviour coupled with a remarkable extension in longevity have transformed the experience of later life. The boundaries of frailty are being pushed back and, for a growing number of older Europeans, 70 is the new 50.

- A multi-disciplinary team will target the key challenges of ageing:
- The continuing longevity revolution
- A shrinking and ageing labour force
- The fiscal sustainability of pensions, welfare systems and health care
- The structural lag between changes in society and subsequent changes in societal institutions and attitudes
- The rising need for long-term care
- Changing social and political roles

MOPACT brings together 29 partners from 13 countries across Europe in a unique collaboration of leading researchers to address the grand challenge of ageing.

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The MOPACT project aims:

- To conduct the most comprehensive review to date of the social and economic challenges of ageing
- To collect and analyse social innovations and policy initiatives
- To map the steps required to realise active ageing in Europe and to propose innovative ways of doing so
- To involve key end-users and stakeholders, such as policy-makers, practitioners, product producers, designers and older people in all project activities
- To undertake the wide and effective knowledge transfer and dissemination of the work of MOPACT

MOPACT's core theme is focused on realising active and healthy ageing as an asset. This will be supported by eight scientific themes:

- **Economic consequences of ageing:**
Understanding and alleviating the economic effects of population ageing
- **Extending working lives:**
Raising the employment of older workers, aided by lifelong learning
- **Pension systems, savings and financial education:**
Ensuring pension adequacy and pension system sustainability
- **Health and well-being:**
Driving healthy life expectancy and the social engagement of older people
- **Biogerontology:**
Delaying the onset of frailty, dependence and age related diseases
- **Built and technological environment:** Shaping housing, mobility, transport and ICT to support an ageing population
- **Social support and long term care:**
Matching supply and demand for long-term care and social support
- **Enhancing active citizenship:**
Enhancing the political participation of senior citizens and improving the capacity for adapting to societal change