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Demographic change in the world of work

Opportunities for an innovative approach to work – a german point of view
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Opportunities for an innovative approach to work

Booklet series:
Demography and Employment
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It is still common practice for human resources departments to begin preparing employees aged 50 or over for retirement – in fact, according to an IAB study, this age group is only represented among the workforces of around half of all enterprises. Human resource managers, works councils, and in many cases even employees themselves tend to back early retirement schemes under the pretext of providing younger job seekers with employment opportunities. And yet labour market experts are already beginning to paint quite a different picture of the future, wielding persuasive demographic data which shows that by pursuing such youth-centric personnel policies companies are steering straight for a demographic time bomb: while 23% of the active population is aged 50 or over today, this share is set to rise to 33% by the year 2015.

Most experts believe that far too little attention is being paid at the corporate level to the problems associated with these demographic developments. Companies need to be made aware of the likely impact of creeping structural change and require consultative support if they are to take effective pre-emptive action.

In this context, the Federal Ministry of Education and Research (BMBF) is funding the transfer project “Demographic Change: Public Relations and Marketing Strategy” (www.demotrans.de). This booklet, “Demographic change in the world of work – opportunities for an innovative approach to work”, outlines potential solutions which enterprises may adopt in order to respond in good time to these demographic developments.

Concise descriptions of the main results are presented under the following headings:

- The impact of demographic change on the world of work
- Balanced age structures and innovative ability of companies
- Ageing-appropriate work and personnel policy
- Employment and new fields of occupation for older employees

As well as focusing on issues which are of particular relevance to companies, this publication also looks at how these topics impact and interrelate with the broader social environment. Strategies, such as the youth-centric recruitment and personnel policies pursued by enterprises and employee representatives alike, may have quite ambiguous effects on the community as a whole, such as reducing the employment opportunities available to older job seekers and an excessively low employment rate among older people. This publication not only provides information and draws attention to the problems associated with demographic changes, it also emphasizes the need for action to be taken.
1 Introduction

1.1 The aim of this booklet

There is now a broad consensus that demographic change will have a massive impact at all levels of society. This is particularly true of the world of work. There is a growing awareness that, as the population becomes progressively older, workforces cannot be indefinitely rejuvenated. As the average age of the workforce increases, it is a moot point as to whether the innovative ability and competitiveness of German enterprises can be sustained and improved in the long term.

The booklet “Demographic change in the world of work – opportunities for an innovative approach to work” is the result of work undertaken in the framework of the transfer project “Demographic Change: Public Relations and Marketing Strategy”. This project focuses on possible ways in which working people, enterprises, and employer and trade union organisations might perceive, respond to, and manage the interactions between the processes of innovation and population ageing.

Following the completion of a phase of research (cf. Rothkirch 2000; Pack et al. 2000; Wolff et al. 2001) the Federal Ministry of Education and Research (BMBF) launched the transfer project “Demographic Change: Public Relations and Marketing Strategy” towards the end of 1999. The project aim is to heighten awareness of the issues and to elaborate ways of transforming the findings generated by scientific research, enterprises and industry-wide institutions into practical strategies for tackling and solving the problems posed by the process of demographic change.1

This booklet appears immediately following the conclusion of the 14 projects which make up the joint transfer project (cf. Buck, Schletz 2001; Projektverbund 2002). The booklet describes the opportunities and problems which demographic change offers and poses for the world of work. The aim is to present a synopsis of the most important findings of the research and transfer phase in the public arena. This publication should provide the project’s main target groups – companies, the labour force, employers’ and trade union organisations, employment services, regional and local industrial development agencies, social insurance institutions and the world of politics – with a guide to the many complex and multi-faceted aspects of this issue. The compact précis descriptions of the central results draw on the materials and models to emerge from the subprojects which are listed in the appendix. The main subject areas are outlined in Chapter 1.2.

1 These strategies were developed in the context of pilot projects and will be tested and implemented in 150 companies in the future as part of the Demography Initiative project funded by the BMBF. Pilot companies will be supported by the industrial and trade associations VDMA, ZVEI and ZV-SHK (refer also to www.demotrans.de).
1.2 A guide to this volume

In order to help you find your way around this booklet, the main contents of each chapter are described in brief in the following.

Chapter 2 outlines underlying demographic development trends and the major consequences these trends have for the labour market. This chapter describes the strategies adopted to deal with these problems to date, the unsustainable results of these strategies, and some of the most critical dilemmas posed in other areas of policy. This chapter focuses on the central projection scenarios vis-à-vis the probable development of the labour market and the action which needs to be taken both with regard to the labour market and in the world of work itself.

Chapter 3 presents the evidence which suggests that there is a growing awareness among business, industry and the wider public of the impact demographic changes are having on employment issues and that people are becoming sensitized to the associated problems. The perspective of businesses, and the view they take of ageing workforces in particular, is described by drawing on the results of the IAB firm panel for the craft trade sector. Key positions adopted by the partners in the national tripartite Alliance for Jobs are also outlined.

Confronted with a process of radical demographic transition, the challenge confronting companies is to create age structures which will enable them to sustain their innovative ability. Chapter 4 looks at the changes affecting the age structures of company workforces and the conditions which need to be met in order to promote inter-generational cooperation and knowledge transfer within companies. This chapter also discusses important approaches designed to ensure that companies are able to retain their innovative ability.

Chapter 5, “Ageing-appropriate work and personnel policy”, begins by taking a look at the challenges which demographic change represents for personnel management and a labour policy of the future. Concrete examples are then presented of ageing-appropriate job design and teamwork in mixed age groups. The chapter concludes with suggestions about how to stimulate companies and employees to engage in inter-generational training and lifelong learning, to structure their own lifecourses and occupational biographies as well as to maintain their good health and work performance. Demographic change underlines the need to develop and penalises the squandering of human resources.

Chapter 6 focuses on labour market policy for employees in the later phases of working life as well as on the creation of new fields of occupation for older employees. Special attention is paid to the employment inclinations and activities of women.

The booklet concludes in Chapter 7 by presenting the most important conclusions and unanswered questions which will need to be addressed in the future.

2 “Ageing-appropriate” work and personnel policy is relevant to a person’s entire career history, while “age-appropriate” work and personnel policy involves special actions for a particular age group.
Introduction

The Appendix details the institutions involved in the transfer project “Demographic Change: Public Relations and Marketing Strategy”, the relevant contacts, and their major areas of concern and available findings.

1.3 Demographic change in the world of work – what is at stake?

Catchphrases such as demographic change, imploding birth rates, ageing society, pensions in jeopardy, and so on have increasingly moved to the centre of public debate in Germany in recent years. Some of these shifts in the demographic indicators are only now becoming slowly apparent, others are already well established – overall, however, the unmistakable trends are still frequently underestimated. Alongside a general consensus on the substantial scale of these changes, the shifts in important determinants of demographic development have already triggered off more or less heated political controversy about the consequences of these upheavals for the future.

Typically those taking part in this debate seldom mean the same thing when wielding the above catchphrases, nor do they understand similar terms in the same way – and to some extent this lack of terminological clarity also explains why the debate is frequently as controversial as it is. It is not always entirely clear what is actually meant when those taking part in the debate bemoan the structural changes taking place in the composition of the population and the profound consequences these will have. Of course, terminological imprecision and the misunderstandings these give rise to are by no means unusual in the realm of public and academic debate – they can on occasion even have a vitalizing effect. The situation is more problematic, however, when unstated or inadequately formulated a priori assumptions are used to reach far-reaching conclusions at various levels in the fields of social, economic, and labour market policy or, going one step further, are even used to convey the impression that “there is no alternative” to the proposed actions and that further discussion is therefore superfluous.

Against this background this booklet aims to provide information about the important subfield of “demographic change and the world of work” which will enable its readers to arrive at a better understanding of the overall processes and forces driving the changes which are underway. The booklet draws on workable examples, some of which are already being implemented, to demonstrate that the rising average age of the labour force need not necessarily lead to the erosion of economic dynamism, a seeping away of innovation potential, shortages of qualified labour, or rising unemployment, provided that the necessary responses are taken in good time and on the required scale. The main chapter of this volume consequently focuses on the macro labour market policies, as well as and especially the company-based manpower policies, which are now required and also clarifies the parameters which need to be created in order for the model initiatives which have already been successfully implemented in individual firms to be introduced quickly and effectively, on a broader front.

Numerous factors, all of which are multifaceted in themselves, play a role in “demographic change”. The picture becomes even more complex owing to the almost impenetrable maze of
interactions which exist between each of the factors involved. As a first step the central terms of the debate are clarified and defined, and the basic interacting components of the issue described, in order to create a framework within which the findings presented in this booklet can be presented in a coherent and readily assimilable form (for a more detailed approach turn to e.g. Blien, Meyer 2000).

Initially it is important to clarify that this booklet does not tackle the whole gamut of demographic issues and the multifarious, far-reaching and to some extent dramatic implications associated with population trends. The immediate focus of this booklet is one – incontrovertibly important – aspect of this overall complex of issues, an aspect which may be subsumed under the general heading “demographic change and the future of work in Germany”. This was also the title of a 1994 research project initiated by the Federal Ministry of Education and Science.

In common with other “social issues”, the transformation of the age pyramid can only be sensibly discussed in relation to current political debate which at present reflects the interests of various groupings in the community (cf. Chapter 3.3) and the related conflicts between these groups in numerous different ways.

Recently increasing attention has been paid to the problems associated with the age pyramid. This is certainly a welcome development. Drawing attention to and increasing awareness of these issues was also one of the main objectives of the transfer project “Demographic Change: Public Relations and Marketing Strategy”. However, this heightening of awareness is also accompanied by numerous – unconscious or conscious, sometimes obvious, sometimes surreptitious – attempts to exploit these issues to further partisan interests which may, in themselves, be perfectly legitimate. “Piggy-back” or “free-rider” strategies of this type are not, of course, limited to this field alone. In this context, however, attempts to instrumentalize the issues tend to emerge when demands familiar from other fields of political concern are formulated and asserted under the guise or pretext of the apparent exigencies of substantial demographic change. Demands of this nature include, for example, calls for the extensive liberalization of existing employment protection regulations, the opening up of the labour market for immigrants, or revising the type of work the jobless are obliged to accept if they are not to forfeit benefits. Given the formidable challenges which are associated with “demographic change” and which will undoubtedly continue to present issues of major concern to society in general for a long time to come, it is particularly important to ensure at a relatively early stage in the debate that unhelpfully polarised positions and precipitate conclusions are avoided wherever possible. This volume aims to shed light on the key interrelating aspects of demographic

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3 No account is taken, for example, of the highly controversial issue of continuing world population growth and related problems such as physical survival, the global age structure, migratory pressures and the menacing ecological implications of these developments. A great deal of relevant and up-to-date work on the issue of global population growth may be found in various publications issued by the Bundesinstitut für Bevölkerungsforschung (Federal Institute for Population Research; www.bib-demographie.de), in the 2001 UN Ageing Report and, at the national level, in the work produced by the Enquete-Kommission Demographischer Wandel (Deutscher Bundestag 1994, 1998).
change, to present successful actionable solutions, and to lay the groundwork for the common activities which urgently need to be undertaken by all the interest groups involved. These parties not only include those involved in collective bargaining in the employment arena, but also “intermediaries” and public institutions.

In order to arrive at an initial, minimally adequate assessment of what might be considered a suitable – or, at least, plausible – response to demographic change it is first necessary to define what precisely is meant by the phrase “demographic change and world of work”.

**Demographic change in the world of work**

As we will “only” be considering the world of work, and the labour market in particular, it might be tempting to believe that study should be confined to people of working age. It is correct that the main focus is on the impact of demographic change on the labour force. Nonetheless, in order to assess this impact accurately it is essential to bear the population as a whole in mind: those people who have not yet reached working age but who, taking a medium-term view (15 years), form a reservoir of potential future employees, as well as the retired who will not only continue to draw benefits from the employment system, but whose exit from active employment can, in principle, be reversed⁴. In addition, if the projection period is to be extended further it is also necessary to consider the potential size of future generations.

The following factors all play a role in national demographic development and the relationship of this development to the world of work:

- Birth rates
- The timing of births
- The founding of families and household composition
- Age structure of the total population and of the labour force
- Labour force participation and employment rates among various groups of people
- Definition of the working age population (the long-standing definition of working age as starting at 15 and ending at 64 years of age remains unchanged)
- Normal and early retirement (mortality, invalidity, early retirement, unemployment, old-age part time employment)

These factors are compounded by the impact of international, permanent or temporary migration in both directions (immigration and emigration).

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⁴ Even if originally conceived of as a final withdrawal from work, there is no reason why people should not return to work again even after they have reached the official retirement age and particularly in the case of early retirement. Persistent demands for just such a prolongation of working lives (as well as the mobilisation of temporarily “inactive” workers, in particular women in the child-rearing phase) have recently been made from various political corners and proposed as an instrument for combating the forecast shortage of skilled labour.
Life expectancy trends on the other hand – derived from the average age reached by deceased age cohorts – only impact working population potential to the extent that people die before reaching retirement age. Mortality among the active labour force still had a marked effect until up to about 1900, but is no longer of any major significance. The development of current and future average life expectancy is of huge importance for social insurance schemes however – directly in the case of retirement insurance schemes, and indirectly for health insurers given the exponential rise in medical costs associated with very old age. These effects will in turn have a tangible impact in the field of gainful employment. The increase in the relative number of pensioners among the population as a whole, which is a frequent topic of discussion, and the increasing contribution burden borne by the active population may result in less employment being regarded as profitable and fewer jobs being offered on the labour market. It is also possible that, for the same reasons, potential members of the labour force opt out of the labour market altogether (or at least from the legal labour market).

Excluding external influences on the continued development of the active population, analysing demographic change and its impact on the world of work would appear to be a relatively simple matter. However, the picture changes immediately if the focus is broadened to include inward and outward migration to and from the area of study – and migration is quite clearly a significant factor. In contrast with other factors which only result in manifest changes after a long gestation period and compared with measures designed to influence labour force participation or rules governing early exit from the labour force, experience in recent decades has shown that migration can have much more immediate and far-reaching effects.

In the context of demographic development, migration and its effects are usually understood to mean international migration and this is at the core of current debates in Germany about easing the immigration laws to admit particular groups of foreign workers to the country and on enlargement of the EU into eastern Europe. If the effects of this type of migration on the population structure of Germany as a whole are also understood as constituting a form of “demographic change”, then it would be equally appropriate to take account of the effects migratory movements have on smaller geographical areas of study as well. This would be true, for example, of the effects of the substantial internal migration from one federal state to another which took place within post-war West Germany itself as well as the massive, predominantly east-west movement of people since German reunification. This perspective also applies – depending on the sectoral labour market considered – to smaller objects of study such

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5 If however the trend towards longer life expectancy results in the retirement age being raised and/or a redefinition of what constitutes the active population, this could have a renewed impact on the potential size of the labour force.
6 Changes in the birth rate only begin to impact the size of the working population after 15 years at the earliest.
7 These measures tend to have a medium-term impact and their potential is limited by the composition or “full utilization” of the relevant groups.
8 The “rural exodus” which took place in the nineteenth century could equally well be interpreted as constituting a major demographic change for the affected regions.
as migratory trends within federal states themselves or, on an even smaller scale, between regions. It is also extremely important to point out that while it is possible to provide a coherent description of the possible effects of demographic shifts at the respective “macro levels”, the actual causes of these changes are, as a rule, no longer discernible for individual companies. It is almost impossible, for example, for companies to tell whether certain vacant skilled job positions cannot be filled as a result of demographic upheaval, or merely because of special factors affecting the constellation of the local labour market, or owing to the specific position of the company in its particular field of recruitment. If, for example, a car mechanic master craftsman in Munich or Stuttgart who is completely unable to find qualified and motivated apprentices, hears about impending demographic change he will very probably tend to ascribe his recruitment problems to this phenomenon and not to the special characteristics of the local labour market. As will become apparent later, there is at present no general shortage of young labour and in the case described above there is a specific shortage of apprentices which has nothing to do with changes in the population equilibrium and everything to do with an exceptional structural crisis in the regional economy. There is however a danger that if this kind of individual perspective is generalized and shared by a large number of people inappropriate reactions may follow. It would, for example, be inappropriate to call immediately for green cards for apprentices without exploring alternative avenues: seeking to improve the firm’s position on the apprentice market, trying to tap the resources offered by sections of the working population with high levels of reserve labour available (older people, women, and foreigners living in Germany) or attempting to lure apprentices from regions in which there is a shortage of training opportunities, etc.

Shortages of qualified labour are by no means always due to demographic upheavals; demographic shifts can, however, have an exacerbating or ameliorating effect. At the same time it is also true that effective instruments for tackling local or regional structural discrepancies may make a contribution to coping with demographic shifts.

When the effects of demographic changes on the world of work are discussed in this text, these refer to the combined impact of all these factors: but above all to the consequences of plummeting birth rates, changes in the population of working age, the actual and possible labour force participation of specific groups of workers, early exit and, last but not least, the impact of internal migration (east, west) and immigration from a variety of other social systems (from the EU or India, for example).

9 There are of course fundamental differences: in the case of internal migration within the same political entities the consequences of both inward and outward migration are in all cases borne by the same social systems. It would therefore appear appropriate to weigh up the benefits against the costs of such movements. However, in those cases in which the countries of origin represent political systems which are entirely separate from Germany and with which no collective burden-sharing arrangements exist – and this is generally the case with regard to immigration into Germany from outside the EU – there is a danger that migration may take place which, while it is regarded positively by one of the parties involved, may in a broader context and under certain circumstances be viewed as highly problematic.
2 How will demographic change impact the labour market and the world of work?

2.1 Trends and projections

Development of the overall population in figures

The population of Germany grew in the period from 1950 to the turn of century from around 68 million – in both the former West Germany and the “five new eastern Länder” added following reunification – to around 82 million inhabitants. During this half a century the population has not only increased in size, however, but has also grown considerably older. Not only have average lifespans increased, the absolute and relative share of older age groups in the population as a whole has also risen.

In the wake of a “shift in demographic structure” at the end of the eighteenth and the beginning of the nineteenth centuries the fertility rate (the average number of births per woman) halved. This decline was reversed in the baby boom period extending from the mid-1950s to the end of the 1960s only to be followed by a second, enduring drop in birth rates, which first levelled out at a stable but low fertility rate in Germany as a whole, to be subsequently followed by a further dramatic decrease in the five new federal states in the east after 1990. Since the early 1970s the number of deaths has exceeded the number of births in Germany; population growth is now solely ascribable to positive net immigration.

Fewer births and “two-pronged ageing” – a larger proportion of the population is living longer and of these more and more are living into very old age – have resulted in the average age of the total population of Germany rising by around five years in the years from 1960 to 2000. The number of people aged 14 or younger has, for example, fallen by around 2.5 million while the number of over 65s has increased by about 5 million (cf. Rössel, Schäfer, Wahse 1999, page 16 ff.).

The labour supply

Of the additional 14 million people added to the population between 1950 and the turn of the century only around 9 million – owing to the effects of ageing and migration – were added to those aged between in 15 and 64 in the active labour force; in the period 1980 to 2020 Germany has in fact been, and will continue to be, able to draw on an extraordinarily large number of people of working age, both in absolute and relative terms – i.e., put more simply, a large available pool of manpower. Nevertheless it is important to point out that at this stage these figures tell us little about the number of people actually employed (or unemployed) – these figures (see below) can only be extrapolated from the balance of labour supply and demand (i.e. the number of jobs available). There has also been a substantial shift in the age structure of the population of working age itself such that the average age of the labour force has increased. These changes are not linear, however, as extremely different sizes of each age cohort – the underrepresented war-babies, the large number of baby-boomers – themselves age throughout each of the age groups (cf. Figure 1).
How will demographic change impact the labour market and the world of work?

The ageing process among 15 to 64-year-olds will be sustained in the foreseeable future and will very likely be combined with a decreasing overall population – this process is even predicted to accelerate markedly. Despite the lack of entirely reliable projections, all the available scenarios, such as the Federal Statistical Office's 9th coordinated population census, suggest that there will be a further sizeable increase in the share of the working population accounted for by people over 50 after 2010 coupled with a further slight decrease in the number of 20 to 30-year-olds (cf. Figure 2). However, Germany is not the only country to be affected by this ageing of the working population. The other member countries of the EU will also experience similar changes (cf. Coomans 2001).

It is not possible to time the drop in the number of 15 to 64-year-olds on the basis of natural demographic developments alone however. It is also necessary to make certain assumptions about the scale and composition of migratory trends. It is important to clarify that, contrary to popular opinion, it will not be possible in the long term to counterbalance the effects of ageing by immigration alone (cf. Unabhängige Kommission “Zuwanderung” 2001, page 67ff.).

Currently discussion focuses on two strategies in particular for boosting the labour supply. On the one hand, it is argued that steps should be taken to encourage more manpower immigration to Germany and, on the other, there are calls for the labour force participation of the resident population of working age to be increased. Which of these two approaches should be given priority is a matter of acrimonious political dispute. The “pros and cons” of each of these approaches are therefore weighed up and subject to critical evaluation in the following.
How will demographic change impact the labour market and the world of work?

Immigration

Public discussion in recent years has frequently drawn together strands from two different debates: concern about what is widely assumed to be a shortage of skilled labour and controversies regarding the inward migration of labour resources\textsuperscript{10} – both of these issues are currently crystallised in the debate centring on the new German Immigration Act. However, given the way in which demand for skilled workers has developed in the past, is developing today and is likely to continue to develop in the foreseeable future, it is not the case that there is an inescapable need for massive immigration from outside Germany.

Recurring expressions of unease about the lack of qualified manpower – despite continuing mass unemployment – are not primarily related to the phenomenon of demographic change, as will be shown in the following.

- In actual fact complaints about shortages of skilled workers are an expression of procyclical behaviour in terms of demand for training and education and also reflect the extremely limited supply of training and education opportunities over the last two decades. The human resource consequences for our society are indeed alarming and are likely to become even more critical as the process of demographic change brings about a further massive reduction in the size of future generations of workers (cf. e.g.: Klemm 2001; OECD 2001).

\textsuperscript{10} The debate about allowing entry to the country for humanitarian reasons is an entirely different issue.

Fig. 2: Population structure of 20 to 64-year-olds in Germany. Variant 2 of the 9\textsuperscript{th} coordinated population census; long-term annual net immigration 200,000. Source: Statistisches Bundesamt 2000, page 17
How will demographic change impact the labour market and the world of work?

• Secondly, while it is true that, for whatever reason, in federal states such as Baden-Württemberg or Rhineland-Palatinate the number of job vacancies which companies are apparently unable to fill are equal to around 2% of the total number of jobs, the comparable figure for federal states such as Berlin and Saxony is a mere 1%. During the relative economic upturn during the first half of the year 2000, the IAB firm panel registered 579,000 unfilled vacancies of which 115,000 were advertised for unskilled and semi-skilled staff (cf. Schäfer, Wahse 2001). In contrast, rates of registered unemployment averaged 3.89 million throughout 2000. It is however essential to bear in mind that no only do these figures indisputably encompass a natural rate of unemployment\(^\text{11}\) which remains intractable even during phases of full employment or when there is a high demand for labour, but that there will always be a minimum reservoir of unfillable job vacancies. Neither of these factors can be quantified once and for all, although it would appear that the discrepancy between actual unemployment figures and the assumed residual values is much greater than is the case for job vacancies\(^\text{12}\).

• Thirdly, it is important to bear in mind that (cf. section 1.3) immigration is not without its costs either: neither (especially) for the countries of origin who are bled of their own human resources in the process, nor (assuming that such immigration is not time-limited in nature) for the host countries. The lessons of the past have already taught us that it is both illusory and inhumane to regard immigration as a free lunch. It would in any case be indefensible to again pass the costs of integrating economic migrants on to immigrants themselves (wrenching people from their accustomed ways of life, marginalizing them socially in the host country, etc.) or to expect such costs to be borne by the community at large or paid for by the public purse. Companies recruiting employees from abroad must be expected to bear the costs, especially as the incongruity between the economic benefits which such migrant labour offers firms and the shifting of the integration costs on to the general public – while rational enough in business management terms – leads to distortions and inefficiencies at the macro level of society\(^\text{13}\). In this respect we concur fully with the findings of the “Independent Immigration Commission” (Unabhängige Kommission “Zuwanderung” 2001, page 52): “Immigration is no substitute for the primary task of sustaining the innovative ability of ageing workforces”.

Enlisting greater participation of the resident population in the workforce

The number and structure of persons active on the labour market, the labour supply, also reflects a behavioural component – not all 15 to 64-year-olds are currently part of the available labour supply (those incapacitated for work, people who have taken early retirement, those still

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\(11\) These people mainly consist of transitional job seekers.

\(12\) The number of vacancies could almost certainly only be nudged towards zero if there was a surplus supply of relevantly qualified manpower and if, at the same time, considerable pressure were to be put on people to accept jobs which do not offer customary pay and working conditions and which might also require people to demonstrate an unreasonable degree of mobility.

\(13\) The readiness of companies to pay for integration costs would also seriously and sustainedly underline the true gravity of the alleged shortage of qualified employees.
How will demographic change impact the labour market and the world of work?

in the education system, people who are not available for work owing to family or other commitments. Comparisons with other EU countries suggest that it would only be realistic to bring about a significant boost in group-specific labour force participation among women, younger people and, especially, older potential workers (cf. Coomans 2001; Sing 2002; Rubery, Smith 1999). It is only possible to encourage more younger people to participate actively in the labour market however by drawing this group away from the education system – an aim which potentially conflicts with the second objective of bringing about a qualitative improvement in the stock of human capital in the population.

All the labour market projections confirm the results of the representative surveys and scientific studies and assume that the female participation rate (62% in western Germany in the year 2000) will continue to increase (cf. Chapter 6.2). This factor, and especially an increase in the labour force participation of older workers, also corresponds with decisions which have been taken at the political level. In 2000 in Lisbon, for example, the European Council 2000 set a target overall employment rate (the share of the population of working age actually engaged in gainful employment) of 70 percent by the year 2010 (the target rate for women is 60%). The Stockholm Council set a concrete target of increasing the average employment rate among women and men aged 55 to 64 to 50% by 2010. The Council's joint report also called on Germany to adopt, amongst other actions, effective lifelong learning policies which would significantly increase the number of older people (55–64) in the workforce (currently around 37.8%) and to “eliminate negative factors and hurdles which may hamper members of all age groups, but older workers in particular, from entering the labour market” (Amtsblatt der Europäischen Gemeinschaften L22/30 dated January 21, 2001). As in the OECD’s publications (2000, page 25 ff.) the relevant EU documents correctly point out that the actions needed in order to ensure the employability and ability to pursue gainful employment of all groups up to the statutory retirement age not only affect older workers but all age groups.

Taking account of the various factors influencing the labour supply, most of the available and relevant studies assume that realistically (i.e. presupposing net immigration on the same scale as the past) the size of the potential workforce is unlikely to begin to sink significantly below its current size before the year 2015 – in fact the effects of such a reduction are only likely to begin to be felt after 2020. The foreseeable demographic trends do not give sustenance to scenarios which particular interest groups occasionally paint of an earlier or imminent drying up of the labour supply or even of a shortage today of workers right across the board. Neither do the demographic projections support the wishful thinking, often clothed with unshakeable certainty, that demographic change itself will practically provide an automatic answer to the problem of mass unemployment in Germany in the near future.

However, these qualifications need to be differentiated in several respects:

- Although the labour supply will not contract as rapidly as many fear, the working population will become significantly older. Figure 3 demonstrates this development in the form of a simple visualization of the age structure of the population in Germany – independent of any forecast assumptions and uncertainties.
  The large “pre-war generations” have now almost all passed the average age of retirement.
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These are followed by several underrepresented cohorts from the last war and the immediate post-war years. A large part of the demographic let up in pressure on the labour market is due to the combined effect of these two groups – the first are leaving the active population, the (few members of the) second are now reaching age 55 – the impact of the over 55-year-olds in recent years has been particularly significant.

Over the next two decades the “baby-boomers”, the population bulge of 30 to 50-year-olds, will inevitably turn into a group of “older” workers. This “peak” left to the centre of Figure 3 represents a much larger volume of job seekers than is the case among the pre-war generations, however; the members of the latter age group have experienced intractable job problems and have only partially managed to remain integrated in the employment system. Figure 3 shows that, apart from certain “echo effects” and excluding the drop in the number of under 10-year-olds which reflects a renewed major fall in the birth rate in what was formerly East Germany, the various age groups encompassing those aged approximately 25 or less have remained relatively constant.

- This brings us to a second differentiation which needs to be made but which can only be touched on briefly here. While it is true that all the regions of Germany are ageing, this development is very uneven and has an array of different consequences for the size of the working population. The European Commission’s mean projection for Germany in the period 2000–2010 (Europäische Kommission 2001a) thus predicts growth of 4.6 in the working population (EU average: 4.3 %).

Fig. 3: Age structure of the population in Germany at the turn of the century (December 31, 1999).
Source: INIFES based on Statistisches Bundesamt 2001, page 60
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The figures for the German regions, however, range between +12.6 percent for Lüneburg and –3.4 percent in Mecklenburg-Vorpommern. In the period 2010–2025 the figures are predicted to drop by –6.6 percent in Germany and an average of –4.4 percent across the EU. The largest decrease in this period will again take place in Mecklenburg-Vorpommern (–21.0 %) while, in contrast, the working population of the town of Detmold is even predicted to grow further (+1.2 %).  

The differing impact of demographic changes in specific regions do not, however, only become apparent over the long term. The imploding birth rate in the new federal states of former East Germany revealed by Figure 3, for example, will thus have a transforming impact on the situation in the training market in eastern Germany in the very near future. While there is currently a large surplus of applicant trainees which can only be cushioned by the supply of inter-company training positions and by would-be apprentices moving to the territory of the former West Germany, in only a few years time there will be around half as many applicants for each training position on offer in eastern Germany.

The specific regional developments briefly outlined here mean that – although there will not be a general shortage of labour across the board in the foreseeable future – mismatches between labour supply and demand are likely to be encountered on various sectoral labour markets: there will be more and more regional, occupational and qualification discrepancies. This does not however provide support for the commonly aired argument that there is an impending absolute shortage of labour which is already apparent in numerous trades, professions and industries. The fact that the IAB firm panel representative survey of almost 14,000 companies revealed that of the 580,000 unfillable vacancies available in the first half of 2000, 65,000 were advertised for applicants with a university or polytechnic degree is indisputable evidence that there is a serious problem (cf. Schäfer, Wahse 2001, page 45 ff.). Account must however be taken of the fact that there do exist massive differences from region to region and from industry to industry. The sheer scale of the figures also suggest that it may be more appropriate to refer to a high demand for qualified labour rather than a shortage of suitable applicants, and this in fact is the way the situation is portrayed by the Bundesanstalt für Arbeit. The exaggerated laments of many employer organisations and professional associations obscure the real problems which, in the final analysis, are related to the fact that it has so far proved impossible, in sufficient numbers, to bring either the available jobs to the unemployed or to attract the available workers to the jobs on offer (cf. Europäische Commission 2001a).

14 The population of employable age will age everywhere however. According to the calculations of the Bundesinstitut für Bevölkerungsforschung the average age of the population of Saxony-Anhalt, for example, has shifted to the extent that this federal state, which on December 31, 1989 still reported the fifth youngest population (average age: 36.2 years) in the whole of Germany, had fallen back to rank 12 on this scale by December 31, 1998. By the year 2050 the state of Saxony-Anhalt (with an average age by then of 50 years) will still rank as the state with the 12th youngest population. The State of Bavaria, in contrast, had the 8th youngest population in 1989 with an average age of 37.6 years – but by the end of 1998 had one of the youngest populations in the whole country (3rd youngest); by the year 2050, however, Bavaria is expected to have one of the country’s oldest populations ahead of Brandenburg, Hamburg and Hessen and an average age of 50.6 years (cf. Roloff 2000, page 8, 190).
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Labour demand and the labour market

Despite anticipated regional, qualification and occupational supply-demand discrepancies, the labour supply projections outlined here do not, in themselves, allow reliable statements to be made about the state of the labour market in the future as – consciously or unconsciously – they only take one side of the coin, the supply side of the labour market, into account. It is important to bear in mind that the “demographic time bomb” debate which conjures up the spectre of an impending shortage of skilled labour throughout the labour market is taking place at a time in which an entirely different debate is focusing on a society in which (paid) work is marginalized and in a period in which, apart from a brief cyclical respite in 1999 and 2000, the annual volume of work performed is in slow decline despite an increase in the number of people in employment.

Predictions of future labour market equilibrium also depend on long-term economic development projections and, in particular, forecasts regarding future demand for labour – and these variables are even more unpredictable than the associated labour supply projections. Even the most optimistic long-term labour market forecasts cited in the second intermediary report produced by the Enquete-Kommission Demographischer Wandel predict around 1.5 million registered unemployed in the year 2040; the most pessimistic forecasts predict between 3 and 4 million (cf. Deutscher Bundestag 1998, page 237f.). It remains to be seen whether these scenarios take sufficient account of future labour-saving boosts to productivity.

Surplus labour even after 2015

The latest available projections do not anticipate labour markets clearing in the future either; the most they predict is gaps in the market for specific qualifications and occupations. The labour force is expected to continue to be in surplus by almost 3 million in western and 2 million in eastern Germany even in the year 2015 (cf. Munz, Ochel 2001, page 102f.). The “increase in participation rates among women (may) largely compensate initially for the demographically-determined need for immigration, … however, after 2020 it will only be possible to minimize the long-term process of labour force contraction by means of immigration.” (Zimmermann et al. 2001, page V). The focus, however, must be on increasing employment rates among (older) women (and men) in the medium and long term (cf. section 6).

Very few research results are available on the effects of a dwindling (and ageing) population on the demand for labour and on the labour market itself. It is of course plausible that an ageing population may generate significant growth in demand for (labour-intensive) personal services; whether the shrinking number of households (which is in any case lower than the figures for the population itself) will in fact induce demand for goods which may compensate for the otherwise to be expected slump in demand on the markets for goods and labour is a common but nonetheless unproven assumption (refer in this context to Rürup, Klopfleisch 1999).
If the main factor in the future is likely to be the ageing of the working population rather than a shortage of labour the issue is what potential solution strategies are available. Given that demographic change, and specifically the ageing of the working population, is not a phenomenon which has only recently begun to become apparent but which, as has been shown in brief, has been discernible for several decades, we should first take a look at the strategies devised to manage this problem to date, their effects and effectiveness.

2.2 Strategies adopted in response to demographic change

Increase in the number of older workers

The most frequently adopted method for managing the problem of demographic changes to date is also (fortunately) the most normal approach: the ageing of the population and the (less dramatic) ageing of the population of employable age in recent decades has – almost unnoticed – already resulted in significant ageing of company workforces: the average age of the population in western Germany rose from 35.6 to 40.1 years in the period 1960 to 1996, that of the population of working age rose from 38.9 to 39.8 years, and the age of the gainfully employed population from 37.2 to 39.5 years. The average age of the population in eastern Germany rose between 1969 and 1996 from 36.8 to 40.3 years, that of the gainfully employed population from 38.9 years in 1969 to 39.4 in 1989 which then fell again as a result of the temporarily rejuvenating impact of externalising practices\textsuperscript{15} to 38.8 years in 1996 (cf. Rössel, Schäfer, Wahse 1999, page 80). The average age of the gainfully employed population is not directly linked to the average age of the population as a whole:

1. If the average age of the population rises as a result of an increase in post-retirement life expectancy, this does not have a direct influence on the age of the gainfully employed population. In other words, all things remaining equal (an unchanged definition of who is considered to be gainfully employed), rising life expectancy will not have any influence on the average age of the gainfully employed population.

2. If workers’ entry into the labour market is delayed, this will increase the average age of the gainfully employed population, even if the age structure remains unchanged in all other respects.

3. If people are retired from work before they reach 65, this will have the effect of reducing the average age of the gainfully employed population, even if the age structure remains unchanged in all other respects.

The fact that the average age of the gainfully employed population has risen in the past is therefore largely due to the demographic shift in the structure of the working population and people’s later entry into working life. Migration has also of course exercised an influence.

\textsuperscript{15} Owing to job release and early retirement rules in the new federal states of former East Germany this had led to “squashed age pyramids” in companies, however, which are now being exacerbated as the workforce ages collectively.
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Focusing on the period between 1993 and 1998, during which there was a marked decrease in both the total number of active workers as well as the total number of wage and salary earners, it is important to note that the corresponding figures for the subgroup consisting of those in gainful employment aged 55 or older bucked this trend and in fact increased significantly (cf. Table 1 and Figure 3).

There has been a shift in age composition without, as many had feared, this having a detrimental impact on the innovative potency or competitiveness of the economy (cf. Bisping, Böhme 1999). This reality, and the important models offered by companies which have successfully taken on older workers, cannot be stressed enough.

Although “best practice examples” such as the sensitization campaigns promoted by Federal Ministry of Education and Research joint projects or by the Bundesanstalt für Arbeit (2001a) are undoubtedly important, given the ageing of both the general population and of people of working age, it is only natural that workforces should also grow older – and fortunately this is a mass phenomenon. The reasons for the especially strong increase during the difficult economic climate of the last decade as well lie in the overrepresentation of the pre-war generations, as shown in Figure 3.

This aspect is usually neglected in the relevant publications which typically focus exclusively on labour force participation and employment rates (or merely on older workers who have taken early retirement and the unemployed).

### Increase in underemployment among older workers

At the same time, the slower increase in the average age of the labour force compared with that of the population of working age outlined above clearly demonstrates that not all older people of working age are able to find work. This is also the reason for the low labour force participation rates and the complaint issuing from the European Commission, and which the

<table>
<thead>
<tr>
<th></th>
<th>Total gainfully employed population</th>
<th>Gainfully employed population 55+</th>
<th>Total waged and salaried workers</th>
<th>Waged and salaried workers 55+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>36,380</td>
<td>3,875</td>
<td>32,722</td>
<td>3,012</td>
</tr>
<tr>
<td>1998</td>
<td>35,860</td>
<td>4,705</td>
<td>31,878</td>
<td>3,697</td>
</tr>
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</table>

Table 1: The size of the older gainfully employed population has risen in the past. Development of employment among older workers throughout Germany as a whole, 1993 and 1998 (all figures in 1000s).
Source: INIFES, own calculations based on microcensus
Alliance for Jobs, Training and Competitiveness recently termed a “paradigm shift in policies aimed at older employees” (cf. Steinmeier 2001).

Labour force participation and employment rates among 55 to 64-year-olds in Germany (based on the methodological definition adopted by Eurostat) more or less mirror the EU average which of course represents a broad range of differing national labour market situations, economic structures and social policy systems (cf. Figure 4). A comparison of the figures for 1995 and 2000, however, reveals that, in contrast to most other member states (and the aims formulated at the Stockholm summit), neither of these two rates have increased and that the employment rate for older workers has even fallen slightly.

Fig. 4: Labour force participation and employment rates 1995 and 2000 among 55 to 64-year-olds. All figures in percent.
Source: INIFES, graph based on Europäische Kommission 2001b
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While it is true that, as table 1 demonstrates, a large share of the 55–64-year old age group, which for demographic reasons has grown in size, have remained in gainful employment, it is also the case that an increasing number of people in this group have been shed and the burden laid at the door of the social insurance systems in the form of unemployment followed by early retirement (the latter solution frequently being financed by the Bundesanstalt für Arbeit).

In other words, to date, companies have successfully managed – as part of a broad national consensus and in an ostensibly socially acceptable manner – to divest themselves of some of their older employees by exploiting early retirement schemes. Demanning in the context of restructuring and rationalisation has also been achieved by dispensing with older employees in the framework of “pre-retirement rules” – including in some cases a planned phase of transitional unemployment. This practice is legitimised by stereotypical attitudes such as the implied decline in work performance among older workers (the “deficit model”) and the argument that laying off older workers releases jobs for younger people. This certainly encouraged many older workers to leave their jobs – however, the associated employment policy hopes have not come to fruition. In addition, the use made of pre-retirement has not always been entirely voluntary on the part of employees, but has often been a tool used by personnel departments – as well as colleagues – to exercise more or less gentle but firm pressure on workers to leave. Nonetheless, pre-retirement is now a significant part of the future employment planning of many older workers: something akin to a (negative) workplace culture of early retirement appears to have taken root. To what extent the changes in pension law, which more or less quash the financial incentives (actuarial deductions) for entering early retirement, will alter this behaviour remains to be seen (cf. Koller 2001).

While the externalisation practices widely adopted by firms are now not only socially tolerated but even regarded positively in many respects, their impact in the world of work has been catastrophic: the pressure – and the incentives to integrate older people in internal training actions – to design jobs and “careers” in such a way that they remain performable right up to retirement age is no longer there; on the contrary, the willingness of employees to work even harder and to accept even greater stress during their middle years of employment has even increased – “go for it till you’re 55 and then enjoy early retirement” seems to be watchword (Behrens 2001). The unsustainability of this practice is now plain for all to see. Nonetheless, early retirement has turned into a petrified pattern of expected social behaviour over the decades and customs do not lose their validity simply because it has become clear that the conditions which originally appeared to rationalise such behaviour have changed.

Early retirement

Figure 5 shows – for pre-unification West Germany – to what extent the average retirement age of blue and white collar workers among cohorts born in the years between 1904 and 1927 claiming pensions on the basis of partial disability has fallen; this retirement age also remains at a fairly stable low age for cohorts born in the period 1928–1935. The retirement age of male recipients of pensions to cover loss of earning capacity was 52.6 in former West Germany in 2000, in eastern Germany the corresponding – generally rising – retirement age was 50.4
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The average age of retirement and initial receipt of “normal” old-age pensions has also fallen for the 1904 to 1917 birth cohorts; the retirement age for the 1918 to 1935 cohorts has stagnated at a relatively young pensionable age. In the year 2000, the average age at which pensions began to be drawn was 62.4 for men in western Germany and 61.2 in eastern Germany (women: in the west: 62.8; in the east: 60.5 years).

Fig. 5: Development of the average retirement age and receipt of old-age and partial disability pensions from the retirement insurance. Birth cohorts 1904-1935 in former West Germany.
Source: INIFES, graph based on figures provided by the Verband Deutscher Rentenversicherungsträger 2001, pages 116-117

(women: in the west: 50.5; in the east: 49.4 years). These figures primarily relate to health policy issues, however, and in particular to occupational health and prevention tasks within companies themselves.
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The significance of old-age and partial disability pensions differs markedly with regard to the issue of older workers and the labour market. A further increase in the statutory retirement age (in addition to the changes brought about by the reforms in recent decades with their actuarial deductions and increases) would – bearing the employment situation and the mountain of baby-boomers who will be approaching retirement age over the next twenty years – be inadvisable.

Figure 6 illustrates a different problem: The proportion of workers entering retirement among the generations born in the years 1904 to 1935 and drawing old-age pensions as a result of unemployment has increased enormously. In the year 2000, 27.7 percent of all new pensioners among west German men qualified for old-age pensions via transitional unemployment insurance. The corresponding figure for eastern Germany was even 55.9 percent (cf. Koller 2001, page 9ff.).

Having dealt with the (inadequate) increase in the number of older workers in employment and the (premature) enforced early retirement of older workers, we now therefore turn to a third method of tackling the problems associated with demographically-determined changes in the age structure of the working population.

Unemployment among older workers

1.11 million of the total number of 3.74 million registered unemployed at the end of September 2001 were between 50 and 64 years of age; 0.67 million of these were aged 55 or older. 40.4 percent of unemployed people aged between 55 and 60 had been unemployed for over two years – almost 60 percent of this group had been unemployed for at least one year (cf. Bundesanstalt für Arbeit 2001b, Übersicht I).

It is true that the proportion of older workers, in particular those aged 55 to 60, making up the unemployment figure and for the latter age group even their absolute number (from 1997–2001 by an impressive 305,000) has markedly fallen over the last 2 to 3 years. An analysis of changes in age group-specific unemployment rates for western Germany over the last decade also reveals that the position of older workers has improved in recent years (cf. Figure 7). This is not only due to the greater efforts to get older workers into jobs made by the employment ser-

16 “Discussions generally draw on the average age of retirement and receipt of both types of pension, however, and frequently implicitly suggest that these reflect the official age of retirement – e.g. in those cases when attention is drawn to the fact that the retirement age for men is under 60 years and this argument is used to call for an even higher increase in the statutory retirement age. An increase in the statutory retirement age would have no effect on the number of partial disability pensions received – and it is these pensions which largely determine the low overall average age of retirement” (Koller 2001, page 9). In fact over 38 percent of west German men retired at the age of 65 (or 63 in the case of those enjoying long-term pension insurance cover) in 2000.

17 Owing to the different pre-retirement rules, etc. applying in eastern Germany, it would not be appropriate to analyse these figures as part of the time series.
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Fig. 6: Age at which insurance-based pensions began to be drawn by the generations born in the years 1904 to 1935 broken down according to type of pension in former West Germany. Proportions in percent. Source: INIFES, graph based on figures provided by the Verband Deutscher Rentenversicherungsträger (2001)

vices and the increased use made of instruments which massage the job figures (e.g. old-age part time employment), but also, and mainly, to the special demographic effects revealed in Figure 4 and which largely reflect the underrepresented generations born in the years around 1945. There are also numerous indications (cf. the curve for 45 to 50-year-olds in Figure 7) that, as the demographic ageing process affects larger and larger swathes of the population of working age, this problem is beginning to affect the next-younger age group. Bearing factors relating to unemployment rates such as these in mind, it is important to remember that retirement from the job market in the form of early retirement or for other reasons impacts
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Unemployment rates (on both sides of the equation, i.e. the denominator and, in effect, the numerator) – in other words, employment among older workers must always be seen in the context of both unemployment rates and the numbers of people entering retirement.

The model figures for unemployment among women aged 55 to 59 shown in Figure 8, broken down according to labour office district, also need to be interpreted in this context. The map shows, using one important subgroup as an example (cf. Clemens 2001, page 61) that – despite the distortions arising from different retirement behaviour in various regions already referred to – that there are dramatic regional differences in unemployment rates among older workers. While unemployment among older workers correlates with total unemployment rates in the labour office districts, there are plenty of examples of relatively lower rates of unemployment among older workers in districts in which the overall job situation is very poor and vice versa. This also suggests that the problem of unemployment among older workers can only be tackled with special, group-specific actions and will only be successful on a large scale if it is also possible to boost the general demand for labour.

Fig. 7: Development of age-specific unemployment rates in western Germany 1991-2001 and 1997-2001
Source: INIFES, figures based on Bundesanstalt für Arbeit (structural analysis), various years

unemployment rates (on both sides of the equation, i.e. the denominator and, in effect, the numerator) – in other words, employment among older workers must always be seen in the context of both unemployment rates and the numbers of people entering retirement.
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Fig. 8: Age-specific unemployment rates among 55 to 59-year-old women in 2000; all figures in percent. Source: INIFES, graph based on figures provided by the Landesarbeitsamt Bayern, 2001
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Regardless of such specific regional phenomena – which reflect both structural differences in the labour markets within individual federal states and labour office districts and the different ”policies“ adopted with regard to older workers (see below Chapter 6) – it is important to point out the special problems confronted by older workers on the labour market. Older workers are particularly severely hit by long-term unemployment in all regions (cf. Figure 9): and “older people” (and 50-year-olds are already frequently assigned to this group) who lose their jobs have a very poor chance of finding their way back into paid employment. It is not surprising therefore that those affected quickly grasp the opportunity offered by so-called ”pre-retirement“ and also take mental leave from the labour market” (Brixy et al. 2002, page 3).

Older workers are less likely to be laid off – thanks to (in detail de jure and de facto highly differentiated) dismissal protection regulations; but once they have become unemployed, the cards are heavily stacked against them as far as new job opportunities are concerned. This is particularly the case if additional factors such as health problems, (severe) disability or low qualifications inhibit their recruitment even further.

Those with lower qualifications have had, and no doubt will continue to have in the future, fewer opportunities of re-entering the labour market. According to definitions and figures provided by Eurostat, for example, the employment rate in Germany in 2000 among those with lower educational qualifications – and particularly among women – was around half of that for

![Fig. 9: Unemployed according to age and length of unemployment in Germany (end of September 2001).](image)

Source: INIFES, graph based on figures from the Bundesanstalt für Arbeit (structural analysis 2001b)
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those with higher educational qualifications; while this straddle effect is similar on average throughout the EU. On the other hand, the unemployment rate among the low-skilled is almost three times as high as among the highly skilled (cf. Europäische Kommission 2001b, page 24). However, it is important not – as is often the case – to lose sight of the fact that, initially, a higher level of qualification only enables the unemployed worker to jump up the job-seeker queue, i.e. to improve his or her prospects on the labour market. Whether better qualifications will actually be sufficient in themselves for job seekers to actually find work does not depend primarily on the labour supply, but on the demand for labour. Or from the other perspective: higher qualifications are not a sufficient condition for a job as long as aggregate demand for labour is lower than the number of job seekers on the market.

The employment system has so far attempted to manage the combination of ageing and demand for higher qualifications – both representing basic trends which will continue to apply in the future (cf. OECD 1999; United Nations 2001, page 1 ff.) – by externalising older workers (and especially, but not exclusively, less well qualified older workers) before they reach retirement age and, to the extent that workers are taken on at all, by recruiting younger, better and more recently qualified staff able to offer the latest know-how. From a business management point of view, this practice has made economic sense for large enterprises in particular: the training of young people has been largely financed by private households and public funds (as well as the craft trade sector, which has financed far more trainees that actually required to meet its own needs); redundancies among older workers has mainly been financed by social insurance. The externalisation of older workers has thus been sold as a socially acceptable form of trimming workforces in the context of restructuring and surplus capacities18 and has thus, on the whole, met with broad social approval. The fact that by no means all older workers have said goodbye to their jobs and accepted a golden handshake entirely willingly has been largely ignored (cf. e.g. Emnid 1996). Not only that, in the meanwhile considerable doubts are now being expressed in business and industry about whether the intended switch from “old and less innovative” to “young and creative” really has had the intended effect – more and more companies are voicing concern about the difficulty of replacing the skills of older employees, particularly their undocumented but extremely important experience.

There can be no doubt at all that this strategy is unsustainable in the long term and the signs are that this fact is slowly being recognised. Even if we are not confronted by a looming shortage of labour, the large supply of new entrants to the employment market will soon dry up. It also seems likely that, given the spending cuts which have impacted the education system over the last two decades, we are threatened by a human capital gap – in fact this dearth may already have started to take effect (cf. OECD 2001; BMBF 2001) as “the expansion of the past has given way to stagnation throughout the school and professional training system” (Reinberg, Hummel 2001, page 1). One alarming sign of this human capital gap is the tailoff in

18 In this respect it is hardly surprising that a certain proportion of the unemployed demonstrate very little commitment to finding jobs on the labour market.
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the number of young people completing tertiary education in Germany – an area in which the country previously led the way (cf. BMBF 2001, figure A-2). The proportion of young people in Germany leaving the education system with at least a secondary level II qualification is not as impressive as the corresponding figures for older people (cf. ibid, Figure A-3). This also makes it more difficult to continue the common practice of deploying employees in posts which are below their actual level of qualification (cf. Büchel 1998) – a practice which is wasteful for society as a whole, but profitable in business management terms, and which has only become possible with the advent of modern forms of work organisation (e.g. flat hierarchies).

Conclusion

Drawing these threads briefly together, we may come to the following conclusions:

• Neither in the short nor medium-term future may we expect to be confronted by a broad-based shortage of labour. On the other hand, discrepancies between supply and demand are very likely to occur in particular regions and occupations.
• Based on realistic assumptions, immigration can and will only be able to delay or cushion the drop in the size of the population; it will not, however, be able to stop the rise in the average age of workforces. Its main contribution may be to help iron out some of the short-term discrepancies in the supply and demand for specific qualifications during the period needed to prepare the other potential solution: providing vocational and further training to the existing working population. But neither immigration nor internal migration in response to regional imbalances represent a cost-free strategy. Ensuring that some of the integration costs involved are borne by businesses would be an appropriate market tool for controlling such migration.
• In the future, too, we may expect that those companies with plenty of internal scope for manoeuvre and a stronger position on the labour market will continue to “solve” the problem of the (over)ageing of their workforces by externalising employees, and will in the process exacerbate the situation of other, mainly smaller companies – even if this strategy is likely to prove more problematic in the future than it has been in the past. Unemployment in general, and that of older people in particular, will not disappear as a result.
• The working population has already aged in the past – if not as fast and markedly as it will do over the coming decades. However, in the past this process was accompanied – without this being recognised publicly on an appreciable scale – by an enormous improvement in the skills, qualifications and experience wielded by employees. It is therefore not surprising that the employment system was able to absorb much of this ageing. At the same time, owing to the slack in demand for labour, a large share of older workers were shunted into unemployment or early retirement – there are very good reasons for doubting whether, under the circumstances, this was really the best solution.
• One thing is indisputable however: bearing in mind the imminent massive increase in the share of older workers among the labour force, this coping strategy will not be sustainable in the future. The social insurance costs involved clearly limit the practicability of this approach. At the same time it is important to bear in mind that general unemployment as well as the premature externalisation of older workers places a heavy burden on the economy as a whole.
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and is the source of high individual and social costs. Not only that, this strategy is tantamount to a huge squandering of human resources, and a gigantic waste.

- Under prevailing and foreseeable conditions pressure will increase on employees and companies alike to take action of some sort involving abandoning established patterns of behaviour of foreshortened employment careers (Kistler, Schönwälder 2001; Kistler, Mendius, Miethe 2002). However, the requisite “change in culture” will not happen overnight. Not only must the required and appropriate inner-company framework conditions be created (cf. Chapters 4 and 5), nothing less than a change of consciousness is required. The desire to flee from what are frequently problematic work situations¹⁹, an attitude which is still very widespread, must be superseded by career planning in which switching back and forth between phases of meaningful work and phases of (further) education and training form an integral part of working lives which extend over longer periods of time than is the case today.

¹⁹ The desire to take early retirement is deeply rooted in many employees’ plans for the future.
3 Growing corporate and public awareness

3.1 The perspective in business and industry

Against the backdrop of a growing population and an unemployment problem which has seen registered joblessness increase incrementally over the last three decades to reach around four million, very little attention has to date been paid to the long and drawn-out process of demographic change. While the problems which demographic changes pose for the financial health of social protection systems has now attracted considerable public attention – and that despite the, in historical terms, present positive relationship between the number of over 65-year-olds plus under 21-year-olds and the population of working age (cf. Deutscher Bundestag 1998, page 119 f.) – these problems tend to be associated with phenomena such as higher life expectancy and early retirement. Much less attention has been paid to the consequences which demographic change will have for the labour market and the world of work.

At the present time, businesses – regarded for the time being rather generally as the key players in terms of the employment of the ageing population of employable age – and other stakeholders currently tend to regard factors such as (over)ageing and demographic change as of comparatively minor importance.

A mere three to four percent of all the personnel managers interviewed in the recent IAB firm survey regard the ageing of workforces as being an important human resources problem in the next few years20. This problem is thus ranked well behind other personnel-related issues (cf. Figure 10). The business survey of around 14,000 companies carried out in the year 2000 also revealed that only four of every ten companies in western and eastern Germany have any experience with older staff (i.e. workers aged 50 or older). The percentage figures for both these items are of course considerably higher in larger companies and in particular sectors of business and industry; nonetheless, at least at this level, the notion of demographic change as a creeping, largely unnoticed phenomenon in the world of work would appear to hit the nail on the head.

Several surveys of companies based in selected labour office districts in eastern and western Germany also suggest that respondents tend to regard the problem of population ageing as a medium to long-term rather than immediate problem: In each of the regions and companies (different sectors of industry and company sizes) quite different experiences have been accumulated with older workers and these overlap with various experiences regarding differentiated expectations in terms of job performance. One interesting factor is the – given the rather small sample (n = 88) provisional – finding that, in aggregate, the surveyed companies tend to rate older workers’ job performance as being the same as that of younger employees, but along different performance dimensions (cf. Table 2).

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20 While it is true that the question about personnel problems only focused on respondents’ perceptions of developments over the next two years, it is nonetheless surprising that the survey values were so low given the clearly apparent ageing of both the working population as a whole and companies’ workforces, combined with the widespread practice of externalising older workers and complaints, originating particularly from employers’ organisations, about the difficulty of recruiting new younger employees.
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Above all companies value the experience, attitudes to work and quality, discipline, reliability, and loyalty of older workers. The potential offered by younger employees, on the other hand, is mainly ascribed to their creativity, willingness and capability of learning new skills, flexibility, and physical resilience. The potential performance factors cited by companies for both age groups related to qualitatively different areas, nonetheless, in total, the same number of characteristics were cited for both older and younger employees. From the perspective of companies, in quantitative terms the potential work performance of older employees was in no way inferior to that of younger workers.

A similar assessment of the ageing problem was revealed in the study “Personnel and organisational development today” (Ganz, 2002). In response to the question: “what personnel problems currently affect your company?” 23% of the 518 surveyed companies stated that the ageing of their workforces represented a problem. Companies in which staffing levels are growing at an average of 5% a year regarded themselves as less affected by the problem of ageing than other companies.

Fig. 10: Personnel problems anticipated by companies in Germany 1997, 1999 and 2000.
Figures in percent and for the two subsequent years.
Source: SÖSTRA, graph based on IAB firm panel, various years

21 10,000 companies were written to, of which returns were received from 5%. Medium-sized and large companies are overrepresented in the sample. The problem of ageing was also mainly cited by large companies in the IAB firm panel.
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Two other issues which are also the subject of frequent public discussion were considered more important than the issue of “ageing workforces”. A total of 39.6% of companies regard the “shortage of qualified labour” and a total of 27.4% “continuing training” as areas of personnel policy in which action urgently needs to be taken.

<table>
<thead>
<tr>
<th>Potential work performance</th>
<th>Younger employees</th>
<th>Older employees</th>
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<tbody>
<tr>
<td></td>
<td>Number of times cited by companies*</td>
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<tr>
<td>Know-how and experience</td>
<td>+</td>
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<tr>
<td>Theoretical knowledge</td>
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<td>Creativity</td>
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<td>Capability of learning</td>
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<td>Attitude to work, discipline</td>
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<td>Attitude to quality</td>
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<td>Reliability</td>
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<td>Loyalty</td>
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<td>Team skills</td>
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<td>Leadership skills</td>
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<tr>
<td>Flexibility, responsiveness</td>
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<tr>
<td>Physical resilience</td>
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<td>Mental resilience</td>
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<td>Professional ambition</td>
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</tbody>
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* +++ = very frequently cited  ++ = frequently cited  + = seldom cited

Table 2: Comparison of potential work performance of younger and older employees – results taken from company surveys. Source: INIFES/SÖSTRA surveys of companies in the labour office districts Central Berlin, Schweinfurt and Suhl, 2000/2001
3.2 Demographic change and the craft trade sector

Many specialists anticipated that large parts of the German craft trade sector would be particularly affected by the impact of demographic upheavals on the world of work and especially on the availability of labour. This has certainly been the case with regard to changes in the supply of labour due to quite different causes (cf. e.g. Mendius 2001, page 23ff.). At the same time, there are numerous indicators which suggest that, especially in this extremely important sector of the economy which, in the year 2000, provided work to approximately 5.5 million workers in over 600,000 firms, possibly owing to the predominantly small business structure in this sector (in which on average firms employ a workforce of nine staff) there is very little awareness of the momentous changes ahead and even less regarding the action which will need to be taken in response (ZDH 2002). Precisely owing to these characteristics most of these firms have not been able to develop a strategic response to these developments and their ability to generate potential solutions to the impending problems was consequently rated as particularly low. Against this background the joint transfer project has focused particularly on the craft trade sector.

![Fig. 11: Current personnel problems in companies](source: Fraunhofer IAO (Ganz 2002))
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sector and has carried out several projects in this field.\textsuperscript{22} It was also possible to evaluate a survey of expert opinion to obtain up-to-date “cross-sectional information” (not currently available in this form for other branches of the economy) about the perception of demographic change in the craft trade sector and about the impact this is expected to have in the near future. Extracts from this information are presented in the following.\textsuperscript{23}

The demographic challenge – the point of departure in the craft trade sector

One of the typical characteristics of almost all the (almost 100) branches of the craft trade sector is that they all employ a high proportion of workers who have completed a course of vocational training in their relevant craft or trade and that, in order to supply their products and services, they are highly dependent on input from their qualified employees. It is for this reason that the supply of such qualified employees is of such existential importance and a shortage of skilled labour may well spell the end for many of these firms. A second characteristic of the craft trade sector is that it has always trained more workers than it actually requires (on average around twice as many as the actual number needed) and has thus provided qualified employees for other branches of business and industry. One of the reasons for this surplus training has been the widespread belief in the industry that this was the only way of guaranteeing that qualified employees would be available in sufficient numbers. Bearing in mind that most craft trade firms occupy a relatively weak position on the labour market, it is understandable that whenever there appears to be a growing shortage of labour and of “new entrants”, craft trade firms and particularly their full-time and honorary representatives immediately start ringing alarm bells. Against the background of the anticipated impact of demographic change, one important focus of the survey of expert opinion was therefore the supply of labour.\textsuperscript{24}

In general we may assume that both employees and company managements are still poorly informed about the phenomenon of demographic change and the problems which this entails for the world of work in particular. Very little thought seems to have been expended, in particular, on suitable models for tackling the challenges (see below). In the meantime it does

\textsuperscript{22} Amongst other things, these involved developing and testing (in close cooperation with firms in selected branches and regions) model personnel development, qualification and work arrangement concepts designed to cope with demographic changes. Initiatives were also launched in close cooperation with stakeholders throughout the firms and across the industry designed to create additional jobs (cf. 6.3). Several industrywide initiatives were also started to sensitize important multiplicators in the craft trade sector.

\textsuperscript{23} The survey was performed under the heading “The major challenges facing the craft trade sector: innovative work arrangements and comprehensive qualification as instruments for coping with the demographic challenge – a survey of expert opinion in the craft trade sector” in the framework of the joint BMBF-funded project “Successful changes in work arrangements, organisation and management in craft trade firms” (Mendius, Schütt 2002; Mendius 2002).

\textsuperscript{24} The written survey was geared to experts who not only possessed specialist knowledge in particular branches but who were also well informed about developments in the craft trade sector as a whole, and took place in May/June 2001. 1,308 questionnaires were sent out of which 447 could be subsequently evaluated, i.e., the return rate was 34.4\%. 
however appear that people in the craft trade sector at least are better informed: 30 % of the experts surveyed stated that they were well informed about the structure and extent of demographic change, and 64 % believe they are relatively well informed. A mere 6 % stated that they were only marginally informed and less than 1 % acknowledged that they were very poorly informed – extremely surprising findings, particularly for “specialists in the craft trade sector”. However, it is important to bear in mind that the survey took place among “craft trade experts” who are no doubt better informed than the average employee or business proprietor about issues of this type, especially as one of the primary tasks of these experts is to keep up to date on important developments in the realms of social and labour market policy. Nonetheless, the degree to which this group of people were well informed is surprising and all the indications are that the wide range of activities recently aimed at addressing and sensitizing people to this issue may well have borne fruit, even if it is not possible to make any direct historical comparisons.

In order to arrive at an accurate assessment of these and other responses (outlined below) to the subject of “demography and the world of work”, the survey also focused on respondents’ view of the overall development of the craft trade sector.

For the period up to 2010 approximately 24 % of respondents expect turnover to increase while 56 % expect it to remain stable; only 20 % expect turnover to drop. In contrast, only 11 % expect employment levels to rise, half anticipate stagnation, and almost 40 % predict a fall in employment (cf. Figure 12).

92 % of those surveyed believe that craft trade firms will be confronted by ageing workforces. 30 % of respondents concur entirely with the proposal that ageing workforces will also lead to changes in the world of work in the craft trade sector by the year 2010; 61 % believe this is true to some extent, and only 9 % reject this suggestion. In 1997, in contrast, over half of respondents did not believe that such changes would take place (44 % responded “probably not”, 7 % “not at all”) – and this too is doubtless an indication that increasing public awareness of demographic change in recent years has also affected those in the craft trade sector. It would however be fair to assume that the impact of these changes will vary from one branch of the craft trade sector to the next. The branches that are likely to feel the sustained impact of demographic change include the building trade (47 % expect to be severely affected, 35 % moderately), the clothing, textile and leather industries (46 % severe, 38 % moderate), as well as the food industry (33 % severe and 44 % moderate).

The survey then asked about the most probable and the most effective actions which craft trade firms will or could adopt in response to ageing workforces (cf. Figure 13). Among the actions which it was thought were most likely to be adopted, more respondents (50 %) believed that firms would opt for “improvements in technical equipment” rather than “greater investment in lifelong learning” (41 %) or providing “training targeted specifically at older workers” (37 %); as far as the anticipated effectiveness of these actions was concerned,

25 A comparable question was not included in the 1997 survey.
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however, 49% of respondents tipped for lifelong learning ahead of personnel development (41%). In terms of effectiveness, “improvements in technical equipment” were cited by 37% compared with 41% who believed “stepping up personnel development and career planning” would prove more effective (although this was only thought to be the most probable approach by 30% of those surveyed).

Quite some time before attention began to be focused on ageing workforces discussion in the craft trade sector had already turned to the problems that master craftsmen wishing to retire were experiencing finding successors able to take over their businesses. That this problem has recently reached such a scale is due to the rapid ageing of business proprietors. The seriousness of this problem is also reflected in the survey results, and 36% of respondents stated their belief that the “ageing of business proprietors” is a more pressing problem than the ageing of workforces; 58% believed that both problems are equally serious and only 6% regarded the ageing of proprietors as less important than that of workforces. It is therefore not surprising that 58% of respondents believe that the problems associated with bequeathing firms to successors are “considerable and to some extent intractable or barely solvable” and the remaining respondents believe this issue is, at the very least, an average if nonetheless solvable problem.
Although demographic change is expected to have a substantial impact, nonetheless 29% of those surveyed still believe that there will be a surplus of labour on the labour market as a whole in the period running up to 2010. 22% expect unemployment to rise (4% expect it rise dramatically, 18% to rise slightly); 29% expect unemployment to remain at current rates and 48% expect it to fall (42% slightly, 6% dramatically).

In contrast, during the first wave in 1997, 61% believed that it was very probable and 32% probable that there would a general oversupply of labour in the subsequent 10 to 15 years, and in this respect it would be fair to assume that views on this matter have changed significantly.

Even though around a third (29%) of those covered by the current survey expected there to be a surplus of labour, 97% of those surveyed believed the German economy as a whole would be confronted with a shortage of workers with specific types of qualification and particularly of qualified employees with industrial training (85% of those surveyed), qualified employees with technical university or polytechnic qualifications (68% of those surveyed) and master craftsmen (44% of those surveyed). As might be expected, the unskilled and semi-skilled bring up the rear; only 7% of respondents believe that there will be a shortage of this type of labour.
Given currently anticipated demographic conditions, only 29% believe that the craft trade sector will be able to find a sufficient supply of labour in the period up to 2010. Asked how they thought the craft trade sector would cope with these foreseeable developments, the experts cited the following options with the stated frequencies. Firms will

- take active steps in response to tougher competition for younger, qualified employees (80% in 2001, 87% in 1997);
- increasingly fall back on experienced older qualified employees in the future and will endeavour to keep these workers on their payrolls (69% in 2001, 84% in 1997);
- step up their efforts to recruit foreign workers (only asked in 2001: 56%);
- intensify rationalisation measures to ensure that they are less dependent on qualified employees (only asked in 2001: 49%);
- increase the number of female employees, even in firms which currently have a predominantly male workforce (40% in 2001, 46% in 1997);
- respond to the rise in the retirement age by implementing collective agreements which govern “semi-retirement” (25% in 2001, 44% in 1997).

Asked about the most important actions required in order to meet demand for labour, respondents suggested that firms could:

- attempt to halt the drain of labour and find ways of keeping skilled workers in the firm (83%);
- train more young people (51%);
- invest more in public education (41%).

These results are surprising in that they appear in many ways to contradict the responses given to the questions discussed earlier in this booklet. For example, although there is growing awareness of the problems which demographic change entail, less importance appears to be attached to the option of keeping older qualified employees in firms. If engaging in sustained competition for younger qualified employees is, at it appears to be, the option preferred by most respondents it is questionable as to whether – bearing in mind the relatively weak position of many craft trade firms on the labour market and the shrinking number of available younger workers – this strategy is likely to prove successful for most of the firms concerned. That the option of recruiting more women is still advocated by relatively few respondents (ranked fifth among the six possible options) – despite the fact that women represent the greatest potential pool of untapped labour – is also an indication that too many firms have still not apparently recognised the way the wind is blowing (cf. Chapter 6.2).

The preferred option of stepping up efforts to recruit foreign workers (ranked 3 among all possible options), on the other hand, is probably related to the current green card debate. Respondents obviously believe that increased immigration would alleviate their recruitment problems even though there is now a fair degree of consensus among demographers that immigration from other (mainly eastern) European neighbouring countries will not be sufficient in itself to solve the structural problems associated with demographic change.
The findings clearly demonstrate that respondents continue to believe that the best way of ensuring an adequate supply of labour in the craft trade sector in the future is to recruit new workers from outside the firms themselves and, above all, by continuing to focus on the training of young people. With regard to the training of skilled workers in the period up to 2010, 81% of respondents concurred with the statement that craft trade firms will continue to train more young people than they actually require in the future, primarily because they believe that this is the only tenable means of guaranteeing that they can meet their demand for new entrants to their trades and professions (73% of those agreeing) and because this strategy enables them to boost the available choice of skilled workers (65%). Those (17%), respondents who assumed that firms would simply train enough young people to meet their labour needs argued that this would then normally enable firms to take on all the apprentices they had trained. Despite the fact that respondents are aware of the demographic upheavals underway and the consequences these will have for the craft trade sector, much less attention was paid to the option of maintaining workforces by concentrating more on retaining and developing the human resources currently available in existing workforces.26

The impending ageing of workforces often arouses considerable anxiety that this phenomenon could have a seriously deleterious affect on the innovation potential of firms. As firms in the craft trade sector will also be faced with a massive demand for innovative products and services in the future, respondents were also asked what effect they believed ageing workforces would have in this respect. 14% agreed wholeheartedly that it would in general be more difficult to implement innovations in firms with older workforces; 39% thought it would “probably be more difficult” to implement innovations with an older workforce. On the other hand, 33% rejected the statement “probably more difficult” and 14% rejected this link between older workforces and difficulty of implementing innovations altogether. In other words, a surprisingly high proportion of respondents, almost half, in the craft trade sector reject a prejudice frequently reflected in the relevant publications.

There is a large degree of consensus in the public debate that one potentially important method of managing pressure for more innovation in the framework of demographic change is to move towards innovative work arrangements. Over 95% of experts from craft trade firms also concurred with the statement that it will only be possible to meet the challenges confronting firms in the craft trade sector if their internal structures (organisation, personnel management and work arrangements) are updated. At the same time, 71% also took the view that pressure for change affects all firms in the craft trade sector. 94% of those surveyed also believe that a holistic approach is required if the necessary changes are to be mastered. A number of the areas of action included in the discussion also related to ways of coping with the changing age

26 A survey of craft trade firms undertaken by the ZDH revealed that firms are already experiencing problems filling vacant training positions (on average 1.4 training positions remain vacant). The main reasons cited for this state of affairs were the frequently inadequate qualifications of applicants and the lack of interest in training in the relevant trades. The survey also showed however that firms are stepping up their training efforts in an attempt to recruit more labour (23.1%) as well as endeavouring to improve the qualifications of their existing staff by offering continuing on-the-job training (21.6%) (cf. Zentralverband des Deutschen Handwerks 2001, page 14–19).
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structure of workforces. Systematic job rotation as a means of broadening employees’ range of
skills and reinforcing the flexibility of staff was considered very important by 17% and
important by 34%. 26% even believed that it was very important and 48% important to
develop and secure company-based know-how by, for example, putting together age-mixed
workforces (cf. Chapter 5.3). Even the aim – urgently necessary for ageing workforces – of
“avoiding long-term, ill-balanced stress situations by introducing systematic switching from one
task to another” (refer also to Chapter 5.2) was regarded as “very important” by 43% and as
“important” by 47% of respondents – an extraordinarily high level of agreement.

Summing up these findings in brief it appears that the message that “demographic change and
the world of work is a topic which also affects the craft trade sector” does at least appear to
have been heard by a large number of those with knowledge and experience in this sector of
the economy and who hold full-time and honorary positions in the relevant organisations.
There also seems to be a fair degree of interest in and awareness of the problems which demo-
graphic change entails. Discussion about the necessary changes and potential solutions is
beginning to get underway. At the same time there can be little doubt that the problems
involved are not always seen for what they are and there are still considerable inconsistencies
not only in the way developments are interpreted but especially in terms of the active strategies
which should be adopted. The joint transfer projects which focused on the craft trade sector
have had an important impact in stimulating thought in this field. A new project is currently
underway as part of the Federal Ministry of Education and Research’s Demography Initiative
which focuses on good practice in the management of demographic problems in 50 firms in the
plumbing, heating and air-conditioning trades.27

Ensuring that relevant information and good practice is disseminated widely and swiftly, and
making sure in particular that information finds its way into other branches and types of firm in
the craft trade sector, is a mammoth task bearing in mind the hundreds of thousands of firms
operating in this sector. It is a task which can only be successfully tackled if the relevant stake-
holders, i.e. firms, workforces, their institutional representatives, and representatives from the
worlds of politics and academic research, continue to collaborate in this field28.

27 For more information refer to: www.demotrans.de
28 A specialist discussion has already been held at the ISF Munich under the heading “Has the craft trade
sector missed the boat? The demographic challenge and strategies for deepening awareness of the prob-
lem of ‘demographic development’ among target groups in craft trade firms and institutions”. The dis-
cussion focused on concepts which a) would make the topics of “demographic upheaval” and the action
responses this requires accessible to specific target groups in the craft trade sector, and b) provide the rel-
evant people and institutions with suitable tools which would enable them to implement the objectives
outlined in brief above.
3.3 Widening public discussion

Demography and the future of work have recently moved to the forefront of public concern in Germany. Politicians, the social partners, and an increasingly large number of companies are all showing a growing interest in the issues relating to ageing workforces. In an article for the German newspaper Die Welt (Steinmeier 2001), the Head of the Kanzleramt, Dr. Frank-Walter Steinmeier, for example, welcomed the fact that this subject was at last receiving the attention it deserves and clearly stated his view that work performance right into old age depended on a willingness to engage in lifelong learning. He also added that “the changes taking place on the labour market offer entirely new perspectives for trade unions and employers in terms of restructuring the world of work.”

At its seventh roundtable session on March 4, 2001, the Alliance for Jobs also resolved to launch a skills campaign designed to counteract the effects of a dwindling supply of labour and to kick off a paradigm shift in terms of the employment of older workers. One of the objectives of this skills campaign is to improve the general framework for lifelong work-oriented learning in order to promote and sustain the employability of all age groups and sections of the population. “The Alliance for Jobs has also initiated a paradigm shift in terms of the employment of older workers in response to demographic developments which, over the long term, will not only erode the size of the population of employable age but will also see an increase in the proportion of older people among the active population. Rather than encouraging people to exit working life before they reach pensionable age, the primary aims of a future employment policy and action must be to boost the employment of older workers, to retain people in their jobs, and to reintegrate the currently unemployed into the labour market.” (Bundesregierung 2001)

The issue of demography and the world of work directly affects fundamental vested interests. The article written by the president of the BDA (German Confederation of Employers), Dieter Hundt, “Enhancing the potential offered by older workers”, is a further indication that employers too are responding to the sectoral shortage of qualified labour by paying more attention to their older workers (Hundt 2001; BDA 2001). Hundt argues for a paradigm shift involving the greater participation of older employees in the labour force and calls for:

- Wholesale deregulation of the labour market: greater liberalization of employment regulations would also improve the job prospects of older workers.
- Performance rather than age-related privileges: special rules which were originally introduced with the best of intentions now act as a brake on the employment of older workers and should now be rethought and relaxed.
- A reform of unemployment benefits: older people are entitled to draw unemployment benefit for an extended period of up to 32 months – this should now should be cut back to a uniform period of twelve months as a way of paving the way back into employment for older people in particular.

29 Refer to Siemann, Braun 2002; Weimer et al. 2001; Gertz 2001; Witte 2001 for the media echo to this debate. Refer also to the press folder at www.demotrans.de
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- Improvements in the labour exchange services offered to older employees: as a proven springboard into the labour market, more use should be made of temporary employment. Inhibiting statutory regulations should be liberalized in this area.
- A step-by-step increase in the retirement age to 67. The ceiling for the permissible additional income which the over-65s are entitled to earn should be raised in order to exploit the positive effects this would have on both the labour market and the pension system.
- Lifelong learning: younger workers should be introduced to the concept of “learning how to learn” today. Special further training courses are also required for older workers.

The paper “Joint workplace initiatives are needed for older workers” by Ursula Engelen-Kefer, deputy chairperson of the DGB (Confederation of German Trade Unions) calls for a change of course involving targeted medium and long-term investment in boosting the skills and qualifications of employees (Engelen-Kefer 2001). She emphasizes that the foreseeable process of ageing at the company workplace can only be successfully managed if the social partners work together to take joint action:

- Action needs to be taken within firms to counteract prejudices and stereotypes regarding the work performance and qualifications of older workers.
- Work needs to be organised in companies in such a way that stresses and the risk of premature health problems is minimised and avoided wherever possible.
- Flexible working-time arrangements should provide scope for people to continue to restructure their periods of work throughout their working lives.
- This would contribute to the improved health of workers and also enhance people’s ability to achieve a better work-life balance.
- The slogan “lifelong learning” must become a reality.
- Firms should create the structures which reconcile periods of work and training.
- The polarisation of older and younger teams of employees should be counteracted by introducing age-mixed workforces and the positive traits offered by older workers, such as experience and reliability, emphasized as an antidote to the “youth craze”.
- Special attention should be paid to continuing training for older employees.

In-depth and informed public debate on the topics of ageing workforces and older employees really took off in 2001. However, we are still waiting for examples of good practice to be adopted on anything like the scale or at the speed which is required given the enormity and urgency of the problems ahead, in companies themselves and right across the world of work.

Organisations such as chambers of commerce, associations, federations as well as employers and trade unions will need to respond to the impact of demographic change and develop strategies designed to support ageing-appropriate gainful employment for their respective target groups (cf. Mohr, Wolff 2002 on actions required at the inter-company level).
Demographic trends confront companies with the challenge of creating age structures which enable them to maintain and even enhance their innovative ability. Manpower deployment decisions and recruitment strategies geared exclusively to younger workers in the belief that these offer superior job performance and are more innovative should be rethought bearing in mind the fact that fewer younger workers will be available in the future. The challenges for the personnel and innovation management of the future are:

- Creating mixed age structures: it is important to avoid recruiting staff who, if they are all in the same age group will also all retire at the same time.
- Promoting the transfer of know-how between company staff of different ages and making systematic use of the complementary, age-specific skills of younger and older workers.
- Systematic inclusion of older employees in innovation processes in order to draw on the experience of this group.

This Chapter focuses on examples of practice which prevent creeping changes in the age structure of company workforces adversely affecting productivity, weakening companies’ flexibility and innovative capacity, or in the worst case threatening the very existence of firms.

4.1 The age structure of company workforces

Changes in age structure

The age structure of workforces in many companies is already maturing at a rapid pace owing to the fact that the members of the baby-boomer generation are now over 30 (cf. Figure 3). As a result of the demanding policies pursued in recent years which hit older workers in particular, a disproportionately large share of companies’ workforces are members of the “middle” age groups – age groups which also represent an above-average bulge in the population figures as a whole – with the result that these generations are now growing older “en bloc”. Since there are fewer and fewer younger people, the proportion of older employees in the workforce is growing despite continued early exit practices. Changes in the age structure of company workforces and the subsequent process of collective ageing has been particularly dramatic in eastern Germany following the collapse of large sections of local industry and massive staff shakeouts in the “surviving” companies during the 1990s: by inducing older workers to leave the labour force early on the one hand, and by making younger staff redundant on the other.

What form does a change in the age structure of particular companies take? The following graph illustrates one typical example of the compressed age structure of the workforce in a machine tools company.
Balanced age structures and the innovative ability of companies

A compressed age structure

This east German firm was forced to make deep cuts in its workforce following German reunification. In conformity with the criteria laid down in social legislation and collective bargaining agreements, the main instrument used to downsize the workforce was the early retirement of older and redundancies among younger employees. The number of orders on the company’s books were and are not sufficient to recruit adequate numbers of apprentices in particular and to take them on after training. Nonetheless, the company does not have any problems with the comparatively high proportion of over 40-year-olds on its payroll; on the contrary, the firm is only able to remain competitive and innovative because it is able to capitalize on the experience and know-how of this older workforce. The main problem confronting the firm is that over the next 10 to 15 years approximately 1/4, and if it is not able to retain those of its employees who are over 50 until they reach retirement age, up to half of the workforce – including those with the most experience – will retire from work. The firm is thus confronted with the dilemma of keeping a sufficient number of employees until they reach the age of 60 or 65 and, at the same time, compensating for the departures which will nonetheless take place by finding qualified younger employees in good time. Above all, the firm must somehow find a way of organising the transfer of know-how from older to younger staff and guaranteeing that this transfer takes place in good time.

In this and many similar cases the main task is to compensate for the looming loss of experienced workers and to make sure that know-how and competence is systematically transferred to younger employees. Stepping up the professional training of skilled workers is no solution in this case as the current business position of the company is such that it is not able to take apprentices on to its payroll on completion of their training, let alone build up a surplus store of younger qualified employees in anticipation of a shortage of new recruits which – owing to the
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plummeting birth rate in the new federal states of the east – is expected to be felt in five to ten years time. As a result, many east German regions are currently experiencing massive outward migration of qualified, younger workers in particular.

Companies with a compressed age structure can be found in many sectors of business and industry – including in the former federal states of West Germany. The workforces of these firms are dominated by employees aged 30–40, and this structure mirrors the age pyramid of the German population or of the population of working age. Falling market volume, stagnation, productivity gains and rationalisation as well as the fact that very few younger workers have been recruited in recent years have resulted in dwindling or static workforces. But it is not only these companies which are threatened by collective ageing, firms in other sectors of the economy – not least those in the craft trade sector – are also feeling the impact of similar, unbalanced age structures.

A prime example of the changing age structure of workforces is provided by the roofing trade – a trade which more and more workers are leaving.

As far as the age structure of roofing firms is concerned, it is immediately noticeable that almost two-thirds of these firms’ employees are younger than 35, while the age groups over 35 are far more weakly represented. Workers aged 25–34 form a particularly large share of these firms’ workforces (34%). Assuming that the over 35-year-olds continue over the next 10 years to leave the trade at the same rate as they have done to date, the dwindling supply of younger

Fig. 15: Age structure of roofers 1999. Figures from the Bundesanstalt für Arbeit, June 30, 1999.
Source: Hochschule Niederrhein (Packebusch, Weber 2001b, page 43)
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workers on the labour market may well lead to massive labour shortages in this trade significantly narrowing firms room for manoeuvre and possibly even resulting in closures.

If the menacing consequences of these developments are to be avoided it is essential that those involved focus on the reasons why the over 35-year-olds are leaving the trade and must also find ways of arresting this trend. The cause lies primarily in the fact that the type of work carried out by roofers, and the way it is organised, sets strict limits on the duration of these workers’ working lives – as things stand, work conditions are such that physical decline means that many workers are only able to remain active in the trade for a maximum of 20 to 30 years.

This tendency for workers to leave the trade presented very few problems in the past because those affected found it relatively easy to find new jobs in industry or in the services sector. However, because there are now fewer employment opportunities outside the craft trade sector, this has become a more and more difficult option in recent years. The result has been that pressure has grown on workers to stay in their firms. In this new situation new importance accrues to preventive and corrective initiatives designed to bring about changes in organisational arrangements and working practices or in lifetime career choices. However, the widespread implementation of these initiatives not only depends on corresponding personnel development, qualification and work arrangements, but above all on a fundamental rethink about the management of human resources (cf. Packebusch, Weber 2001b).

A prime example of unbalanced and unsustainable workforce age structures is provided by the youth-fixated IT and software industry. This tendency is exacerbated by the structure of this sector, its large number of young companies, start-ups and closures, and the rapid pace of technological change and a concomitant process of rapid know-how obsolescence. In this sector 40-year-old software developers are already considered to be “old”. Companies rely on recruiting a steady stream of university graduates able to bring the very latest scientific knowledge with them. It appears to have escaped most people’s notice that demographic changes are making this human resources strategy increasingly untenable – at best it will only be possible for a handful of firms (to the detriment of the vast majority) to continue pursuing this approach to human resources in the future.

The phenomenon of demographic change seems to be regarded by many companies at present as a limited “shortage of qualified labour”, particularly of younger technically skilled specialists and engineers, rather than being recognised for what it is: the ageing of the workforce right across the board. While the decline in the population will begin having a major impact in Germany from 2020 onwards, the main changes in the age composition of the working population will take place in the years 2000–2020. For the first time there will be more people over 50 than under 30 in the working population. Age discrepancies are growing. To begin with there will be fewer and fewer 20 to 30-year-olds in the working population, soon to be followed by the 30 to 40-year-olds. The number of 40 to 49-year-olds will increase first reaching a pinnacle in the year 2010. The growth in the proportion of people over 50 in the working population will take off between 2005 and 2010 and will peak in the following decade (cf. Volkholz, Köchling 2002).
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Table 3: Demographic development of the working population in 10-year cohorts 1979–2020 in percent.
Basis: Statistisches Bundesamt, various years; from 2005 onwards
(Prognos 1998, page 64ff)
Based on: GfAH (Volkholz, Köchling 2002)

As table 3 reveals, there is a steady increase rather than a sudden jump in the proportion of older workers in the labour force. The baby-boomers are getting older. What consequences will this development have for companies?

- Phase 1: Right up until the 1990s, companies which concentrated primarily on recruiting younger employees (youth-oriented personnel policy) profited from the demographic situation because the under-40 age groups were numerically strong.
- Phase 2: The proportion of people over 40 will increase during the first decade of this century. Human resource development will become an increasingly important competitive factor. The issue here is to maintain and continue to develop the skills and qualifications of

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30 Ratio of under 29-year-olds to over 50-year-olds. This figure shows how many younger people are in gainful employment in comparison with the number of older people in gainful employment.
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the baby boom generation. During this phase there will be an opportunity to initiate preventive action geared towards a long-term personnel development policy.

• Phase 3: As of 2010 the number of over 50-year-olds will continue to increase disproportionately. Many companies will be confronted with the reality that the average age of workforces is rising. Companies which have still not developed sustainable models for managing ageing workforces will be threatened by a loss of innovative potential and performance.

The ageing of workforces is a “creeping process” which currently impacts companies in very different ways, depending on their respective age structures, personnel policies and corporate cultures. Owing to the increase in the number of people in the working population in the middle and older age groups in the decades ahead, it would be reasonable to assume that the average age of the workforces of almost all companies will rise rapidly. It is important to bear in mind that in the face of future demographic developments “wait-and-see or do-nothing” responses will very soon become untenable. Ignoring the changes in the age structure of the workforce could prove an extremely expensive strategy. It is essential that those involved learn how to manage ageing groups of workers as quickly as possible.

Homogeneous and heterogeneous age structures

A central task of personnel policy should be to make sure that the age structure of company workforces is as balanced as possible. The dominance of particular age groups (age homogeneity) should be avoided in order to prevent age gaps appearing in the available human resources and to steer clear of marked waves of recruitment and retirement. For this reason, a key task is to plan the right mixture of youth and maturity in advance. What is the right “age mix” though? At the company level, the right balance has been achieved if the number of recruitments matches the number of retirements and if the workforce is not numerically dominated by a single age group – in other words, if the company has a diverse age base, as illustrated by Figure 16. However, an absolutely equal distribution of all age groups is unlikely given that the age spread among the population or labour force as a whole is not even.

Assuming that a disproportionately large share of the labour force will be entering retirement in a few years time (age focus), companies will be face a two-pronged threat:

• A sudden loss of irretrievable know-how when employees leave their companies. Age-mixed teams will need to be set up to ensure the timely transfer of know-how and responsibility from older to younger workers.
• A massive recruitment drive will be required. Many new, and if current practices are sustained, young employees will need to be integrated at the workplace at a single stroke. The

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31 Strictly speaking this only applies to companies which plan to maintain roughly the same number of employees on their payrolls over the medium to long term. If, on the other hand, companies plan to expand or contract, they will naturally have to take this into account in the age composition of their workforces.
recruitment of new employees should not therefore concentrate solely on young workers as this will only create the same wave effect in the future. A purely youth-oriented recruitment strategy would simply substitute the dominance of one age group by another. The consequences would be a massive “culture shock” involving considerable transitional friction.

The situation would be particularly precarious if the recruitment drive had to take place in a situation characterised by a shortage (and corresponding increase in the cost of) younger labour. However, this is precisely the scenario we may expect for companies faced with the need for large-scale recruitments in five to ten years time when demographic changes really do begin to make themselves felt.

Many company departments have their own “matured” staffing structures the homogeneity or heterogeneity of which differ sharply from each other. There are sometimes good reasons for this grounded in working practice (new occupations or the need for know-how), however these differences may also merely reflect the prejudices that senior personnel hold about particular groups of workers and who may, for example, not accept “a woman in a man’s job”. Prejudices tend to thrive in companies which are consciously geared towards homogeneous staffing structures (e.g. young, male, qualified, German). This orientation may prove to be a trap and lead to recruitment problems however. In other companies, in contrast, personnel policy guide-
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lines may prescribe a pronounced orientation towards heterogeneous workforce structures as well as equal rights for all groups of workers. This does however require a corporate culture which takes account of the different interests and needs of all members of the workforce. Companies which successfully manage to integrate different groups of workers at the workplace have much broader recruitment options available to them in the face of a looming shortage of young potential employees (cf. Köchling 2001, page 21).

It is essential that those engaged in human resources management focus on the structural issues associated with an ageing workforce if they are to be in a position to recognize future problems and imbalances in good time and take timely action. Many personnel managers are, however, apparently unaware of the age structure of their workforces or of the staff active in particular areas of their companies.

The critical age structure of a financial services provider:

An analysis of the age structure of the workforce revealed that most of the company's field sales representatives were over 55. These employees had built up relationships with customers over a period of many years. The foreseeable departure of these employees from the company may jeopardise its ability hold on to these customers in the future. In response to this threat, the company tried to make sure that all the older employees were accompanied by younger staff to ensure that a degree of personal continuity was maintained in the customer relationship.

This example demonstrates the business effects which an age structure with a disproportionate number of older employees can have, particularly if the retirement of one group of workers threatens to bring with it the loss of know-how or of important customer relationships.

Homogeneous and imbalanced age structures can only usually be modified by compensatory medium to long-term personnel policies.

Creating a mix of youth and maturity

In a small IT company, the 27-year-old manager was the oldest member of staff. In order to cope with the burgeoning chaos, the company decided to look specifically for an older employee. A 50-year-old scientist was recruited whose envisaged task was to take on responsibility for quality and project management. This new employee was consciously deployed as a counterbalance to the “dynamic young” team of software developers. After only a few months, it soon became apparent that this older member of staff also made a positive, more mature impression when dealing with conservative potential customers or in discussions with the lending banks.

The age structures and development of workforces in various company departments and functions often differ quite markedly. In these cases companies also need to implement differentiated measures as table 4 shows.
Example: Analysis and extrapolation of workforce age structure

Table 4 draws on the example of a company group to show how different the age structures in various functional groups can be. It is differences such as these which make it so difficult to generalise about the challenges confronting companies. It is important to take these differences into account if general interest is to be raised in the problems of ageing workforces. The “focused” group report (table 3) in which the present and future age structures of various functional areas are outlined shows what form this can take. The report discusses in a clear and simple way the action which may need to be taken in each functional group. It is apparent then that it is not easy to extrapolate action for individual companies and firms from general sociological trends regarding the ageing of workforces. It is however possible to pose questions (establish hypotheses) and ask whether particular developments affect particular firms and what such developments might mean for the future?

Source: GfAH (Volkholz, Köchling 2001)

<table>
<thead>
<tr>
<th>Functional groups1)</th>
<th>Replacement needs – 2010 in %</th>
<th>Proportion of staff over 50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Securing supply of new recruits</td>
<td>2000</td>
</tr>
<tr>
<td>A) Senior personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical non-pay scale staff</td>
<td></td>
<td>33.9</td>
</tr>
<tr>
<td>Commercial non-pay scale staff</td>
<td></td>
<td>34.2</td>
</tr>
<tr>
<td>Salaried master craftsman</td>
<td></td>
<td>19.5</td>
</tr>
<tr>
<td>Gang foreman</td>
<td></td>
<td>14.8</td>
</tr>
<tr>
<td>Subforemen</td>
<td></td>
<td>16.5</td>
</tr>
<tr>
<td>B) Non-senior personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical staff</td>
<td>Mastering technical change</td>
<td>17.2</td>
</tr>
<tr>
<td>Commercial staff</td>
<td></td>
<td>9.5</td>
</tr>
<tr>
<td>Qualified employees2)</td>
<td></td>
<td>8.2</td>
</tr>
<tr>
<td>Semi-skilled2)</td>
<td></td>
<td>13.6</td>
</tr>
</tbody>
</table>

1) Pension in 2010 at 65!
2) Today’s strongly represented 30–40 age group will be 40–49-years-old in 2010. The “50-threshold” will be crossed after 2010!

Table 4: Various internal age structures: focused group company report on the consequences of an ageing workforce (names deleted). Source: GfAH (Volkholz, Köchling 2002).
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The “right” age structure depends on the company or industry concerned, regional circumstances and the skills and qualifications available to the company and the labour market in general. Nonetheless, companies may be playing with fire in the long-term if the age structure of their workforces deviate excessively from the age distribution of the population of working age.

A personnel policy geared towards the principle of age heterogeneity can however clash with the broader needs of the community. Firms which attempt to create a diverse age base may, given the marked imbalance in the proportional sizes of each of the age groups in the population of working age as a whole, find themselves in tough competition with each other on personnel recruitment markets. This will contribute to more unequal competitive conditions. If disproportionate recruitment costs and labour market problems for particularly strongly represented cohorts are to be avoided the planned age structure of workforces should not vary too much from that of the population of working age as a whole.

4.2 Collaboration between older and younger workers and inter-generational knowledge transfer

Marginalization processes can be avoided and the strengths of all employees better exploited by improving the level of cooperation between different age groups in firms. The differing skills profiles and experience of younger and older employees can fruitfully complement each other. The inter-generational transfer of know-how and experience depends crucially on the principles of age-mixed workforces and regular cooperation however.

Cooperation between the generations is frequently impaired by mutual prejudice, however. The following example describes how such barriers to cooperation may arise.

**Age-mixed workforces in the field of software development**

The IT department of a company in the banking and insurance industry has two teams with two entirely different missions. Firstly: managing and servicing existing software programs. Secondly: developing new software products. The teams involved in modifying existing programs in line with changed business processes mainly consist of older employees. These employees typically have many years of specialised experience in particular areas and wield a great deal of routine knowledge about how to deal with recurring tasks. If these tasks need to be performed less frequently, it is often difficult to redeploy the older employees in the younger teams of developers. Because their qualifications and skills are often out of date,

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32 With regard to analysis and consultancy tools which provide examples of good practice and personnel concepts tailored to meet the needs of various types of firm and to avoid demographic pitfalls, refer to the consultancy modules “Projekt Zukunft. Die Altersschere revolutioniert die Personalpolitik (Project Future. The population gap revolutionises personnel policy)” and “Projekt Zukunft. Leitfaden zur Selbstanalyse altersstruktureller Probleme im Unternehmen (Project Future. A guide to the analysis of age-structure problems in companies)” (Köchling, Volkholz 2002; Köchling 2002a; Köchling 2002b).
it is not easy to find new tasks for them and – owing to their learning habits – they often have difficulties learning new programming languages; younger employees also tend to hold considerable prejudices about the job performance of older employees.

How can these specialisation pitfalls be avoided? One potential solution would be to integrate the development and management of older and new products in a single team. This would only be possible if younger and older software developers were mixed at an early stage. In principle both age groups could profit from one another – the older employees could upgrade their qualifications on the job with the aid of the younger employees, who in turn could profit from the quality awareness and project management experience of the older employees.

The dominance of one age group in an organisation or team has a determining influence on workplace culture and can lead to the marginalization of underrepresented age groups (cf. Jasper, Rohwedder, Schletz 2001, page 84). This marginalization negates the potential synergy effects which may arise when people with different experience and backgrounds, such as young and old employees, work together. This is one of the reasons why some companies are beginning to intensify the exchange of experience and know-how between young and old in age-mixed teams. This type of cooperation should above all provide older employees with the opportunity of maintaining their performance and innovative flexibility for as long as possible. Younger employees should aim to profit from the experience of their older colleagues and contribute their specialist know-how.

Exploiting employees’ experience
The proprietor of a roofing firm employing a workforce of 20 recently took on a 56-year-old skilled craftsman. The reason for this recruitment was this new employee’s many years of experience in the trade. He was to be deployed on building sites where he worked with a young craftsman or apprentice. The positive impact on the training of younger employees soon demonstrated that the recruitment of the older skilled craftsman had been a real “stroke of luck” for the firm.

Source: Hochschule Niederrhein (Packebusch, Weber 2001a, page 64)

Experience is regarded as an essential ingredient in the skill mix for successfully managing complex tasks (such as repair and maintenance processes) and for the production/assembly of complex products which demand a high level of quality and functionality. This experience cannot be built up and passed on overnight, but neither is it the exclusive preserve of older workers bearing in mind that, depending on the complexity of the task, such experience can take around eight to ten years to acquire. Know-how which has been acquired over a long period of time not only includes pivotal technical knowledge, but can also encompass the skills needed to recognise problem situations, deal with customers, employees and suppliers, as well special individual abilities and optimised working methods. The problem is how to transfer this kind of highly-developed know-how on to younger employees who have entirely different occupational biographies behind them.

It is important in this context to differentiate between the conscious and unconscious transfer of experience and know-how. Discussions with mechanical engineering firms revealed that
unconsciously transferred experience, the contents of which are difficult to verbalise, is regarded as considerably more extensive than consciously transferred experience. This kind of intuitive knowledge is transferred on a day-to-day, on-the-job basis and is crucially dependent on good working relationships between colleagues and a cooperative sharing and assignment of tasks. Complex experience which has been built up over a span of many years can only be transferred in a work-based setting while the relevant practical tasks are being performed (cf. Reif et al. 1998).

To date the work-based transfer of know-how has tended to be haphazard and unsystematic. Know-how is unlikely to be transferred from one generation to the next automatically. If the transfer of know-how is to take place in a managed and systematic way, it is essential that the anxieties which the relevant older employees may have regarding their jobs are allayed and that incentives are created which offer benefits to all employees who take an active part in the transfer process. Younger and older employees must develop a shared interest in assuring that such a transfer is successful (Oesterreich 1998, page 36).

In order to ensure a successful transfer of know-how priority must be given to clarifying the willingness of individual older employees to pass on their expertise and the readiness of younger employees to take it on board. Four important conditions must be met if older employees are going to be willing to share the experience, tried-and-tested know-how, and expertise that they have accumulated during their working lives with their colleagues (Baitsch 1998, page 43):

- Older employees’ work role must be enhanced: the teaching function must become a definitive element of such workers’ tasks.
- Teaching must be supported: older employees must be able to learn themselves how they can best fulfil their teaching role.
- Opportunities must be created: there must be both task-related opportunities and sufficient time available during the course of a normal working day for older employees to carry out their teaching function.
- Incentives must be created: there must be a material incentive for older workers to carry out their function.

One popular and systematic model for ensuring that knowledge is transferred from older to younger employees is tandem training. The aim of tandem training is to retain and conserve the existing knowledge of an older employee and to transfer his or her experience to a younger employee. The success of tandem training does however depend on a context from which both tandem partners can profit (a win-win constellation) as the following example shows.

**Tandem training: reorganising the sales function of a pharmaceutical company.**
The appointed successor of the company's marketing manager was deployed alongside the manager three years before the latter was due to retire: both employees were assigned the task of working together on the reorganization of the sales function and ensuring continuity of customer support. This arrangement provided the successor with an optimum induction into his future tasks as well as enabling the precise timing of the transfer of management
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responsible to be clarified. The challenge for the marketing manager was to reorganize the sales function in collaboration with his successor and to contribute his own experience in the process. The collaboration between the incumbent manager and his successor went as well as it did because each was given clearly defined roles, and because there was a fixed hand-over date without this involving a premature loss of status on the part of the marketing manager.


Knowledge transfer is contingent on intact interpersonal relationships. Employees are unwilling to part with their knowledge if they fear that by sharing such know-how they will make themselves superfluous. Employees will impart their knowledge if this enables colleagues to relieve them of work or if the employer is able to convince them that it is particularly important for the continued functioning of internal work processes that their knowledge is transferred. Identification with the company or area of work reinforces people’s willingness to pass on their knowledge.

Knowledge transfer is not a one-way process, however. Transfers can take place in two directions – from the older employee to the younger and vice versa. A complementary relationship between the experience of older employees and the knowledge of younger ones promotes an equal relationship of intergenerational collaboration.

Fig. 17: Framework for successful tandem training in a sales function.
Based on INCON (Maier 2001).
4.3 Innovative ability relates to setting rather than age factors

The predominant view propounded in the scientific literature is that innovative ability is not simply a characteristic of the structure of human personality, nor is it necessarily conjured up by a particular type of work system (i.e. the way work is organised, management, corporate culture etc.). Two important issues need to be taken into account (cf. Jasper, Rohwedder, Schletz 2001, page 69).

• Firstly – even assuming outstanding innovation management – it is only ever possible to finally determine in retrospect whether a specific change may genuinely be regarded as an innovation. New product and process developments as well as fundamental changes in structures cannot be regarded as innovative or non-innovative from the word go. Only after such changes have proved successful and their value confirmed in practice (e.g. success on the market) is it possible to decide whether the epithet “innovation” really fits the case.

• Secondly, and following on from the above, innovation is a highly-complex process involving uncertain outcomes and there is no single algorithm for ensuring its success. Nonetheless there are conditions and circumstances which foster or inhibit the generation of innovations.

As a result, there is no patent recipe for promoting the willingness and ability of people to generate innovations. However, working conditions may be organized in such a way that they either block or encourage innovative thought and behaviour.

A project run by the company Unique GmbH – “Boosting innovation among all age groups – consultancy support for SMEs” – delivered results which revealed that a work setting which demonstrates the following characteristics stimulates the willingness and ability of employees to engage in innovative activities:

• Work environments which allow knowledge to grow and new perspectives to be adopted and which facilitate the interpenetration of “old” and new knowledge
• A wide variety of diverse and challenging work tasks
• Cooperative management and participation
• Self determination and freedom of scope at work (room for experiments)
• “Error-tolerant structures” in which failures are a planned contingency
• A culture of employer-employee trust
• Transparent internal processes and procedures
• Stimulating, open working atmosphere (impulses from within and without the workplace)
• Managed company-level intergenerational exchanges
• Discernible purpose and benefit of the envisaged innovation

The work setting has a major influence on the willingness and ability of employees of all ages to engage in innovative behaviour. The older a company’s employees are, the stronger is the relationship between the type of work setting and people’s willingness and ability to engage in innovative behaviour. In other words, companies with ageing workforces can be or remain innovative – but they must take the right steps both in terms of organisation and management, as well as with regard to personnel development (cf. Jasper, Rohwedder, Schletz 2001, page 71).
Innovation management is thus always a facet of human resource management. As long as human resource management is regarded as being a significant formative and strategic influencing factor then there are numerous new opportunities available for continuing to develop existing human resources. The available options for action must be identified, the levers of changes must be pinpointed, and steps taken to improve communication and cooperation between different age groups and with those key people in whose heads know-how resides in the innovation process (cf. Astor 2002).

The “Intergenerational teams in the innovation process” project carried out by the VDI/VDE-IT generated four levels of analysis and action for integrated human resource and innovation management (cf. Astor, Wessels 2002a).

- Workforce structure: this reflects the company’s history with different phases of staff expansion or downsizing; active company staff are also described.
- Innovation process: the focus is on examining the management of internal processes, the interfaces within the company itself and with external partners in research, development, sales and distribution.
- Human resource management: awareness of the development and qualification of human resources represents a pivotal factor in the success of innovations.
- Teams in the innovation process: building teams during the innovation process is one way of bringing about the systematic integration of knowledge transfer processes. Formalised teams are fairly unusual in smaller companies; however, disciplinary and cross-functional collaboration is of central importance in this area too.

VDI/VDE-IT (cf. Astor, Wessels 2002b) identify the following areas of action in terms of team building in the innovation process:

- Transparent workforce structures.
- Analysing the strengths and weaknesses of the innovation process.
- Identifying key people on whom the success of the innovation depends.
- Specifying strategic innovation objectives and making these widely known.
- Emphasising the major importance of human resource management.
- Integrating medium and long-term perspectives in planning.
- Taking account of the action-relevant age distribution in the company and in particular functions or departments
- Conserving experience and facilitating the acquisition of new know-how.
- Creating scope for communication and cooperation.
- Implementing strategies in concrete actions.

Innovation in R & D

The VDI has issued a warning that a shortage of engineers threatens the future of Germany’s technology sector. The association has analysed several scenarios and presented figures for the replacement and recruitment of additional engineers: in the mechanical and electrical engineering sector the association forecasts annual requirements of 20,000 engineers. Almost one in
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five of all unfillable vacancies on the labour market are advertised for engineers. At the same
time, however, approximately 51,000 engineers are unemployed, more than half of whom are
aged over 45. Bearing in mind the alleged lack of suitable qualified employees and current
demographic developments greater use needs to be made of the know-how of older engineers
(cf. Henning 2002).

While companies state that they need a lot of engineers, they do not appear to be aware that
the education system is only able to offer a very restricted pool of young engineers. At the same
time the number of unemployed older engineers has been increasing steadily since 1995. This is
partly an outcome of attitudes held by the management of many companies which associate a
stringent innovation orientation with the recruitment of younger employees. In addition to this,
in some respects, precarious situation (cf. Bosch et al. 2001) on this sectoral labour market
Hamburg-Harburg Technical University has, on the basis of 30 case studies, identified a typical
assignment of roles: young innovative personnel are preferentially set to work on key new tech-
nologies in the fields of electronics and IT and older innovators are deployed in the field of
application technologies which they have designed in the past (Fröhner, Nawroth, Hamad 2001,
page 34).

If older and younger workers are to be integrated together in internal processes, account not
only needs to be taken of the focal activities of both groups but also of mutual perceptions
each generation has of the other. One consistent characteristic of the image both groups have
of themselves and of each other is that younger people are thought of as being less risk averse
and older people more experienced. The following table, “The mutual perceptions of older and
younger engineers” is based on the study carried out by Hamburg-Harburg Technical University.

<table>
<thead>
<tr>
<th>Perceptions of older workers</th>
<th>Perceptions of younger workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger (n = 20) workers see older workers</td>
<td>Older workers (n = 20) see younger workers</td>
</tr>
<tr>
<td>as:</td>
<td>as:</td>
</tr>
<tr>
<td>• less willing to embrace change</td>
<td>• more willing to accept risks,</td>
</tr>
<tr>
<td>• more self confident and</td>
<td>• faster and</td>
</tr>
<tr>
<td>• experienced.</td>
<td>• more likely to make mistakes.</td>
</tr>
<tr>
<td>Older workers also usually see themselves as:</td>
<td></td>
</tr>
<tr>
<td>• much more experienced,</td>
<td>Younger workers see themselves as</td>
</tr>
<tr>
<td>• much more task centred,</td>
<td>• excluding other differentiated traits as predominantly more willing to accept risk, and</td>
</tr>
<tr>
<td>• but not as able to withstand physical stress and strain.</td>
<td>• complain of back and arm problems even when they are relatively young.</td>
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</tbody>
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Table 5: How do younger and older engineers see themselves?
Source: Hamburg-Harburg Technical University (Fröhner et al. 2001)
Studies performed in the framework of the "Innovation, workforce structures and ageing workers" research project revealed that young and old innovative workers tend to weight factors which impede innovation quite differently. While a lack of strategic information and inadequate opportunities for continuing training are emphasized by all age groups, older innovative workers attributed greater significance to the lack of recognition accorded to their own work; younger workers tended rather to identify problems with the organisation (Fröhner, Nawroth 2000). However, the surveyed engineers not only pinpointed internal and external factors which act as a brake on innovation, they also recognised that companies also offer positive incentives for innovation – particularly in terms of opportunities for personnel to contribute their own expertise and experience to tasks, a good working atmosphere, and earnings opportunities (Nawroth 2001).

As R & D activities involve rapidly changing sets of tasks, the inevitable obsolescence of knowledge acquired in specific contexts means that engineers in particular must be provided with opportunities for ongoing further training. R & D work must be designed in such a way that negative stresses are avoided, staff can continue to acquire new qualifications, and the potential offered by individuals’ acquired experience is duly recognised and exploited.

Core innovative groups include engineers and skilled workers, and those with pivotal commercial and technical intellectual assets. Improving collaboration between various departments, hierarchical levels and people is often identified as a major prerequisite for boosting the innovative ability of companies, particularly in large enterprises. The inclusion in product development and other projects of several organisational entities within larger companies also involves an immense degree of complex resource coordination. Diverging responsibilities then often lead to conflicts between project and line activities.

Medium-sized enterprises frequently have very different innovation structures than large enterprises. The R & D function and maintenance of state-of-the-art technology is usually a critically vital element of the industrial operations of SMEs. The dividing lines between development and production, between product and process development, and between market and innovation policy are unclear and, in principle, small and medium-sized enterprises can often be regarded as a single innovation network. Older entrepreneurs or managers are frequently the people who inspire and set innovation processes in motion and who keep their workforces on the go through the sheer force of their new ideas.

This fosters an environment in which innovation is not simply driven in isolation by individual departments but in which innovation is the concern of a broad swathe of the workforce as a whole. Innovation is no longer regarded as a special activity carried out by selected employees but as a unified process consisting of cross-departmental and inter-company social exchanges involving give-and-take learning processes between all those involved. The success of this innovation model depends crucially on the faith the entrepreneur or management has in the different innovation potential of all the company’s employees – younger, ‘middle-aged’ and older workers alike (cf. Reindl 2000; Pack et al. 2000).
5 Ageing-appropriate work and personnel policy

5.1 Challenges confronting sustainable work and personnel policy

Bearing in mind the imminent shortage of skilled labour in particular specialist segments (e.g. university graduates in the IT sector) predicted in numerous forecasts and the inevitable ageing of the workforce as a whole, it is essential that companies not only seek to recruit and retain qualified and highly-productive employees but also demand and foster a process of lifelong learning among all workers. Higher priority must also be given to longer-term human resource management to enable companies to develop and implement ageing-appropriate work and personnel policies.

Work on developing adequate response strategies must begin immediately given that the process of demographic change continues apace. The current debate in companies about positive recruitment strategies for “high potentials” does not go anything like far enough towards meeting this challenge. As far as the problems of recruiting skilled labour and ageing workforces are concerned, companies must rethink their positions and must step up the amounts they invest in qualifying their 40–50-year-old employees – a group which has to some extent forgotten what it is like to learn new skills. Currently the resources and specific potentials offered by this group are often only unsystematically exploited, if at all. The problem is not just the training gap in the community as a whole, but also in the failure to provide sufficient further training in firms themselves. Companies will become more interested in extending the working lives of their workers, or retaining their employees, as soon as the impact of a shortage of skilled workers becomes more critical. The departure of employees who have built up

Fig. 18: Longer-term human resources orientation.
Source Fraunhofer IAO (cf. Bullinger 2001)
experience which is of specific relevance to the employing companies and in whose further training firms have invested often represents a painful loss of competence and experience for companies (cf. Buck 2001b).

In the past company employees have been mainly regarded as a cost factor. However, there is now a growing realization among employers that highly-qualified, motivated employees are among the most valuable resources available to firms. As a result, companies are becoming increasingly vigilant in the field of human resource management. In contrast to short-term business management policies, successful personnel policy will in the future be shaped more longer-term considerations – taking account of the occupational biographies of employees and ensuring that the work capacity of older workers can be effectively used. Three phases are important from the company’s perspective:

- **Finding**
  Firms not only have to hire qualified and high-performance employees, they must also ensure that they are integrated as well as possible into the company (e.g. by mentoring).

- **Retaining and developing**
  The optimum deployment of employees whilst drawing on existing qualifications by organising challenging, instructive activities and opportunities for individual development and, above all, horizontal career pathways.

- **Re-positioning**
  Enabling employees to change their area of activity (e.g. elimination of particular fields of business, reorientation taking account of employees’ preferences). Broadening employee deployment perspectives. Enabling phased retirement.

**Example of good personnel policy practice**

The company initiated active measures at both ends of the age spectrum as part of a focused innovation and personnel policy designed to develop the new know-how offered by young, newly-recruited employees and, simultaneously, to implement medium-term planning with exit scenarios for the company’s older employees. This strategy provides the company with a range of action options which can be used to recruit and offer qualified applicants from a wider catchment area attractive and lucrative jobs. The company is now able to adopt a proactive approach to its older employees, to discuss the timing of employees’ exit from work in good time, and to bring about all-round transparency enabling it to identify its replacement needs at an early stage. Source: VDI/VDE (Astor 2001, page 51).

The need for skilled labour is growing as knowledge-based competition intensifies demand for qualifications. If it is not possible to meet these requirements, many companies will find that they are no longer able to grow or implement innovations as planned. In the future this will particularly affect companies – above all the many small and medium-sized enterprises – which are not in a position to compete with the image or match the security and pay offered by blue-chip companies and which, as a result, occupy a relatively weak position on the labour market. The advantage these companies do have, however, is their ability to structure the jobs they do offer in such a way that they are attractive, varied and offer employees broad scope for shaping their own activities. As well as being able to market their jobs both inside and outside the firm, these
companies are also able to make a commitment to transparent, systematic, and yet unbureaucratic, decentralized human resource management which offers their employees professional and individual development opportunities. Much greater use needs to be made of personnel evaluation meetings in which individual development plans can be agreed between senior personnel and employees. In order to prevent undesirable staff turnover, it is also essential that employees are drawn more intensively into decision-making processes which affect both the way their work is organised and their own development opportunities.

There are a variety of options available to companies which enable them to respond to demographic developments in good time. These options are currently being tested and implemented in the context of the Demography Initiative funded by the BMBF which involves 150 companies. These firms are supported by the industrial and trade associations VDMA, ZVEI and ZV-SHK (refer also to www.demotrans.de). These options can be broken down into short, medium and long-term planning horizons.

**Short-term action**

- An analysis of the age and workforce structure of firms and particular areas of work with the aim of identifying any disequilibrium in age distribution and the problems which this may engender.
- Initiation of intergenerational collaboration and the introduction of tandem training enabling firms to ensure that the experience and know-how of retiring employees is transferred to their successors in good time.
- Modified and extended recruitment and personnel development strategies designed to dig deep into the reserves available on the labour market – these strategies should also be aimed at "new" target groups such as women or the older unemployed.

**Effective medium-term action**

- Enhancing and highlighting the attractiveness of working for the firm. Companies will only be able to entice and retain the best talent if they are perceived as an attractive option on the labour market by potential job applicants.
- Counteracting prejudices about the job performance of older employees and exploiting the experience of older workers in innovative projects in order to avoid impasses.
- Providing ageing employees with development perspectives in order to thwart entrenched expectations of early retirement, e.g. by developing age-appropriate, career management geared to each phase of working life and providing flexible routes into final retirement.33
- Establishing age-mixed teams which guarantee that knowledge and experience is transferred and the complementary strengths of younger and older workers are utilized.

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33 This is at any rate a more sustainable strategy than demanding lower pay for older employees or that the unemployment benefits paid to the older unemployed be cancelled after a strictly limited period. With the exception of the public sector, age-related pay on a relevant scale is only received by those with higher qualifications or in higher hierarchical groups (cf. WSI et al. 2001, page 21; European Commission 2000, page 121 f.).
Long-term action

- Boosting the status of skill careers alongside hierarchical careers; fostering people’s ability to adapt and learn by switching personnel between tasks and positions.
- Fostering lifelong competence development; activating ‘middle-aged’ and older employees by providing continuing training and opportunities for taking on new activities.
- Re-designing or avoiding activities which can only be performed for a limited period of time; avoiding longer-term repetitive stresses and strains on employees and introducing measures which reduce or provide a break from arduous tasks.
- Establishing balanced personnel and age structures in specific areas of work and throughout the company with the aim of avoiding waves of recruitments and retirements.

Given that demographic change cannot be responded to at the level of the individual firm alone, it is also necessary for everyone involved in the work setting, the intermediary actors such as employer and trade union organisations as well as political institutions, to be sensitized to these developments and spurred into action. Companies must be monitored and supported as they implement the changes to their work and personnel policy outlined here. It will only be possible to buttress the activities taken by companies if the intermediary actors and political institutions referred to are able to reach a consensus on how to jointly promote the development of a broad, consistent course of action.

5.2 Ageing-appropriate job design

The contents and organisation of work should be designed in such a way that employees are able to remain active in their jobs throughout their working lives without suffering physical or mental occupational health risks. In this context, the conservation and development of people’s learning abilities should be regarded as a key aspect of individual health and work performance.34

Research on ageing in the fields of psychology and the social sciences in general has irrefutably demonstrated that – at least until people reach statutory retirement age – it is not as a rule biological age as such which is responsible for the performance problems which can occur as employees grow older but primarily the long-term impact of stressful and poor working conditions (cf. Wachtler 2000). It is for this reason that attention must be paid to the actual circumstances in which people work. It is these conditions which exercise a crucial influence on whether employees’ productive job performance and thus their ability to undertake a variety of tasks is conserved well into old age, whether their qualifications are adapted in line with new requirements, whether they are fostered, and whether the development of compensatory mechanisms to balance out potential age-related changes is supported by such work arrangements.

34 “Ageing-appropriate” job design is relevant to a person’s entire career history, while “age-appropriate” job design involves special actions for a particular age group.
If the working capacity of older workers begins to go into decline, this is often the result of accumulated stress originating from the employee’s previous occupational activities. All the same, the fact that the performance of older employees often suffers in intensely stressful areas of work is far too often regarded as a “natural” phenomenon or simply ascribed to “age” itself. Age only becomes a problem in a work context if the relationship between work demands on the one hand and individual working capacity on the other are no longer matched. Another reason for physical decline or the burn-out syndrome, for a deterioration in mental flexibility and the inability to learn new skills is the period of time to which workers are subject to lop-sided, monotonous work stresses and strains (Morschhäuser 1999a; Pack et al. 2000).

One-sided and long-term stress – be it physical or mental – increases the probability of workers suffering from health problems. This is not only true of jobs which require workers to undertake extremely heavy physical work, but is equally applicable to jobs in which workers are forced to adopt particular postures, e.g. software developers working at computers. A lack of physical activity and frequently adopted postures at the workplace, such as permanent sitting, can also impair job performance and, in the final analysis, is just as likely to result in back problems as heaving lifting.
Work arrangements must take account of the fact that, depending on the type and mix of demands placed on workers, over the medium to long-term people’s physical and mental performance capacities are modified by training, learning or processes of decline. The way to avoid lop-sided stresses is to build systematic changes into workloads rather than reducing overall workloads. The aim must be to achieve a balanced mix of stresses and strains so that people’s physical and mental capacities are conserved and enhanced through training. In other words, work should enable people to

- adopt a number of different postures and movements (e.g. regular changing between activities during which they are required to walk, stand, or sit),
- switch between different mental or cognitive demands (e.g. between creative, problem-solving tasks and routine activities).

Work structures which place balanced demands on workers promote physical and mental well-being (cf. Buck 2002)!

If we take a realistic view of the conditions in fields of work which place highly intensive routine loads and stresses on workers (such as on assembly lines where the pace of work is dictated by machines) – jobs which will continue to exist in the future – it is quite clear that the ageing-appropriate management of working conditions needs to be understood in the very broadest

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Fig. 20: Objectives of ageing-appropriate job design.
Based on ISO: Slide presentation “Ageing-appropriate human resource management -fit till retirement”, www.demotrans.de
terms and cannot simply be limited to technical changes and the observance of occupational safety and health regulations. It is true that it is often necessary for firms to concentrate primarily on ergonomic job design and occupational health – indeed these issues deserve much more attention. Nonetheless, these measures ignore a whole range of loads and stresses to which workers are subjected in these areas. If the health-span of employers working under such highly intensive loads and stresses is to be extended for as long as possible, it is essential that entirely new forms of work organization and task assignment are introduced (Huber 2002).

In the future work must be managed in a way which prevents excessive stresses and strains being placed on people, which promotes the mental and physical performance of employees throughout their (working) lives, and which ensures that the capacities of ageing employees are exploited to a much greater extent than has been the case to date.

5.3 Age-mixed groups and teams

Age-mixed groups are primarily formed in order to safeguard the transfer of the specialist and organizational experience and know-how of older members of the workforce. Age-mixed groups and teamwork are frequently cited by academics and those on the ground in firms alike as a ready-made solution for maintaining older employees in work right up until they reach old age or integrating workers whose work capacities are limited to some extent in the workforce. The idea is that younger workers will relieve older workers of some of the heavier physical work while, on the other hand, older workers will be able to support younger ones by contributing their experience. The strengths ascribed to each age group, it is thought, will be combined in the form of a group performance. At first glance this concept of age-mixed group work appears persuasive – in the long term, however, it can have disastrous consequences as it frequently works against a systematic change in the demands and stresses placed on individual employees.

Experience shows that there is a danger – in order to bring about short-term internal optimisations – of age-mixed groups or teams generating work arrangements involving excessive specialization and task assignment. This is not only true of the production sector, but can also be found among project, research and development groups working on complex tasks. The tendency towards a disproportionate specialization of labour offers short-term advantages and is consequently found in many teams as the following example reveals.

**Age-mixed group work involving monotonous task performance**

Younger and older workers are deployed in the parts assembly process of a car-maker. Employees work in age-mixed groups: the actual division of labour is decided upon in the groups themselves. Although the group is, in formal terms, highly qualified, the members of the group carry out the sub-tasks which they can do best and fastest. As a result, the tasks in the group are assigned in such a way that younger workers mainly carry out the manual assembly tasks, while – owing to their experience and “entrenched rights” – the older members of the group perform the more complex activities (testing, adjusting, reworking). In principle all the members of the group are thus deployed in a way which ensures that they make an optimum contribution to the performance of the group as a whole.
Given that the assembly activities carried out by the younger members of the group mainly call for physical strength, dexterity, and speed, the physical abilities required by the younger workers are permanently being trained. The actual skills and qualifications which these workers possess are not demanded, however. On the other hand, we may assume that, as the older experienced employees carry out the more complex activities (e.g. quality assurance, reworking), their existing qualifications, experience and learning skills are maintained or even enhanced. For the group as a whole, or for the work system itself, however, it would be reasonable to assume that, in the medium-term, an age-related polarisation of qualifications will be built into the group’s work. The ability of the group to manage its own task assignment has resulted in a low level of deployment flexibility. Quality and productivity problems arise every time an employee with key skills is away from work on holiday or owing to sickness. Source: Fraunhofer IAO.

As real working practice shows, a number of basic conditions need to be met in order to establish stable age-mixed group work:

- An age-mixed group must, in principle, provide the same performance (quantities/time) as a group in which employees are all in the same age group. If this is not the case, widely-implemented benchmarking of different groups exerts pressure which result in internal conflicts between older and younger members. These conflicts are more likely to occur if variable performance-related pay elements, such as premiums for example, are paid to groups.
• Potential limits to the physical working capacity of older workers must be compensated for with experience, problem-solving and planning skills. This means that the work task of the group should not be reduced to purely operative activities such as manual assembly as, particularly when the pace of work is not dictated by the group itself, as in the case in assembly line production, it then becomes extremely difficult to adopt compensatory strategies.

If a sufficient breadth of indirect sub-activities (job enrichment) are organized, the members of the group are able to maintain and train their existing physical and mental work resources by regularly rotating from one group activity to the next. In order to guarantee that rotation between all the group’s activities really does take place, suitable incentive systems (i.e. pay-related incentives) must be introduced. This allows workers to avoid repetitive stresses and strains which are likely to jeopardize their ability to continue working right up until retirement. Recognized ergonomic criteria and principles thus also apply to the management and introduction of age-mixed group work (cf. Buck 2001a).
Ageing-appropriate work and personnel policy

Age-mixed teams make it easier for younger employees to build up their own experience and know-how provided that there are a sufficient number of complex tasks which force the members of the team to cooperate with each other. Experience can only be transferred between the generations in a context of direct collaboration. It is also essential that, in the framework of regular group meetings for example, team members are given the time they need in order to exchange experience and engage in mutual learning during the work process.

**Age-mixed project teams**

Project teams are created when extensive planning and tasks need to be performed which meet specific targets and deadlines. Project work is characterized by interdisciplinary collaboration. It is much easier to arrive at answers to questions such as “how was this task tackled in the past?” or “who has specialist knowledge in this area?” if older workers are integrated in these teams. By virtue of their experience older workers are often able to contribute critically-important ideas and are also familiar with the potentially wrong way of tackling tasks. Project teams consisting of younger and older workers are more efficient and are better able to avoid planning mistakes. Source: BDA (2001, page 22).

Job enhancement – introducing a broader variety of tasks and working environments for individual employees – is a crucial requirement for companies which employ ageing workforces in particular. Age-mixed teamwork involving systematic job rotation increases the flexibility with which personnel capacities can be deployed and also offers learning opportunities to all employees. The danger of stagnating qualification levels and over-specialization can be avoided by arranging for systematic changes from one activity to another. Employees who are trained to cope with changing work contents will also be better equipped to cope easily with new working environments and new demands as they grow older.

**5.4 Further training and lifelong learning**

Discussion is currently dominated by calls issuing from business and industry for faster and more direct forms of training and a sufficient number of younger people with particularly scarce qualifications. However, as the average age of workforces rises, firms will be forced to concentrate much more than they have done in the past on the potential offered by existing ‘middle-aged’ or older employees. Studies (Coomans, 2001) have revealed that as workers grow older they are at present less likely to take part in further training initiatives.

Older people in Germany engage less often in further training than do younger people. Because younger learners also spend more time on further training than do older learners, this also exacerbates age-specific structural differences if an assessment of the overall amount of training as such is expanded to include the duration of training courses (cf. Bundesministerium für Bildung und Forschung 2001). The following diagram shows that those aged 50–64 are much less likely to take part in further training than are their younger colleagues. However, one strikingly positive development is the increasing levels of participation in training among all three age groups.
Given the need for highly-qualified workers and the dramatic rate of technological change, company personnel policy should concentrate on developing the skills potential of all age groups. The concept of lifelong learning will only have positive effects if further training continues to be offered as an established part of companies’ personnel development policies to members of all age groups (BDA 2001, page 20).

No company can afford to abandon the continuing development of its 40 to 50-year-old employees – especially considering that this age cohort still has 15 to 25 years of working life ahead of it before its members reach statutory retirement age. Withholding further training from this group will only result in stagnation and the relevant employees failing to develop their full potential work performance.

Many firms have now recognized that their human resources represent their most valuable assets. It is equally important that every single worker realizes that his or her own qualifications, and their continuing development throughout their working lives, will increase the number of options available to them on the labour market. Unlike in the past, it is unusual nowadays for people to be able to remain in the trade or profession in which they first trained right up until they retire. For this reason, it is essential that people begin to realize that when they have ended their school careers and completed their first period of vocational training that there will still be learning phases ahead in life.
The concept of lifelong learning is however problematic if employees have not learned or cannot learn how to keep themselves abreast of new qualification developments in their trade or profession. Long phases during which people do not engage in fresh learning tend to erode their learning habits and the low motivation of older workers to learn is often falsely ascribed simply to their age.

Discussion about learning organisations and lifelong learning often implies that there must be built-in incentives to learn at the workplace and in the work process. “The most important factor inhibiting learning is an activity for which there is objectively nothing new to learn” (Hacker 1990). Many work systems simply lack inherent incentives to learn – on the contrary, the demands placed on people are frequently too low35, tend to have a de-skilling effect and, in the long term, erode people’s learning habits.

If the work situation fails to provide a permanent incentive to learn, then as people grow older they will also grow out of the habit of learning. Skilled workers deployed in production operations, for example, will gradually lose the qualifications they once acquired if they are not given the opportunity of carrying out maintenance, quality assurance, or logistical tasks alongside their operative activities. The initial advantage over semi-skilled workers which qualifications provide skilled workers is frittered away over time if these skills are not used in practice.

The learning processes relevant to older employees thus differ from those of their younger colleagues if – by virtue of many years of unchanging work demands – they are no longer used to learning. Their learning abilities first need to be reactivated (Bullinger, Witzgall 2002). In other words:

- Regardless of age, people who are no longer used to learning need to be given sufficient time to learn. There will be much greater variety in individuals’ learning tempos and, on the whole, older people will learn more slowly than people who have plenty of practice in learning. For this reason self-paced learning is an essential prerequisite of the learning situation.
- Competitive situations which may provoke anxieties must be avoided. People who are not used to learning will often be afraid of learning new things. It is important to verify to what extent the lack of motivation to learn which is often ascribed to older people might be an expression of people’s fear of failure. These fears need to be acknowledged and taken on board.
- The learning situation should permit the learner to make links with his or her previous experience. New learning material which builds on existing experience and the contents of activities which are already being performed will take account of many employees’ implementation and practical interests. It is easier to impart theoretical or abstract material if what is learnt can be used to solve practical problems and tasks. In this respect, it is preferable to offer task-centred, work-related learning.

35 Initial qualifications are not used and decay owing to lack of practice.
"New" work-related qualifications cannot and should not be taught exclusively in external settings, but should, on the whole, be created on site and integrated in practical applications if they are to be learned by older employees. A further challenge is learning to forget obsolete knowledge and inadequate working methods. The theory that “what was successful in the past can’t be bad today” is of very little relevance in a world of accelerating technological and organisational change. A stubborn refusal to budge from old experience can block learning processes if this means that people are unwilling to be open-minded and embrace new ideas. In these cases it is important to focus explicitly on the inadequacies and potential errors which long-established working methods may represent. People will only be motivated to engage in active learning if they realize that there is no alternative to acquiring new skills as the following example illustrates.

Motivation to learn
A highly-innovative international conglomerate in the IT sector discovered that older employees (in this case engineers) aged 40 and over in particular find it slightly easier to acquire new knowledge because they usually have experience of several previous technological leaps. These employees realize just how quickly knowledge can become obsolete. On the other hand, many younger employees in this company were not motivated to engage in training because it was important to them, for career reasons, to manage their current projects successfully and because they believed that the knowledge they had brought with them into the company from their university studies would stand up to the test of time. Source: Fraunhofer IAO.

Recent calls for more intensive continuing training of older employees make perfect sense in themselves – they do not go far enough however. The key issue is to ensure that the idea of lifelong learning is fleshed out with contents and methods and becomes a reality for all age groups. The biggest risk for both companies and workers is that extended phases of non-learning will erode people’s ability to learn at all.

Concepts and actions designed to promote the employability and employment of older workers are also the focus of a series of trials run by the BIBB36. These trials examine how age-related continuing vocational training can contribute to the successful integration of older workers in the labour force (cf. Trojaner 2001; Schemme 2001).

5.5 Managing occupational biographies

Effective models for managing people’s occupational biographies should not be restricted to older workers who are already beginning to experience a decline in their working capacity but must begin right at the start of people’s working lives or even during initial vocational training. Action should be taken at the earliest possible stage to counteract a foreseeable decline in

36 Bundesinstitut für berufliche Bildung (Federal Institute for Vocational Training)
skills, health and motivation, and this also depends on a change of attitudes among employees and employers alike: the orientation in the future must shift away from the job position, job description, profession/activity itself towards fields of occupation which are associated with opportunities for the development of individuals and specialist skills. Part of this learning process will also be to sever the expected link between new fields of occupation and better pay or hierarchical promotion – on the contrary, new fields of occupation should also be accepted or aspired to even if the new activity “only” offers an opportunity of getting to know a new work setting, acquiring new experiences, and contributing one’s own skills and expertise in a new context. From the point of view of companies and workers alike, it will only be possible to facilitate mobility of this type to the extent that it is possible to guarantee job security and maintain people’s standards of living. The decisive criteria for such labour mobility should be (cf. Pack et al. 2000) that:

- New knowledge is acquired.
- Emerging patterns of work involving stresses and strains which pose a threat to workers’ health are discontinued.
- New social constellations (group work, teams, process chains in work procedures, etc.) are experienced and allow people to learn new key skills and, in particular enhance people’s organisational and social skills and their ability to deal with stress.
- Individuals’ willingness and ability to come to terms with new work situations and adapt to new work demands must be given active support.

It is essential that occupational biographies are managed in a planned way. It is not enough simply to note that there is an increase in patchwork biographies. The timing of demands, incentives and stresses and strains in working life must be managed in a way which prevents people suffering premature deleterious health effects and which promotes the motivation and performance of employees.

Given that traditional vertical careers and upward career progression will become less and less viable as a result of flatter hierarchies and ageing workforces, new ways of changing employees’ posts in companies must be planned and established. Greater attention needs to be paid to transferring people horizontally from one activity to another. The various fields of occupation in companies generally place very different workloads, stresses and demands on people. Some of these pose critical problems for older workers, others are entirely unproblematic. There is usually plenty of scope within companies for deploying employees in a way which enables occupational biographies to be managed in a manner which takes account of the process of ageing and makes optimum use of the array of work demands which need to be met in the respective company. If the appropriate jobs are not available, additional job design action will need to be taken (cf. Pack et al. 2000) as the following case study illustrates.
Career planning in a software company

This medium-sized company, which employs approximately 300 software developers, has successfully offered IT services and consultancy in software, network and workflow solutions on the market over a period of many years. After protracted negotiations between the management and works council, a personnel development agreement was reached for the whole company. This agreement differentiates between two career objectives (branch office and sales manager) and three career paths (consultant, technical specialist, and sales professional). It goes without saying that not every employee will be able to attain the position of branch officer or sales manager – however, the idea is to signalise that it is legitimate for all software developers to strive to attain these goals. In other words, employees are provided with orientation and told what they can achieve and how to get there.

Four intermediary steps are also defined for each career path and employees are also able to aspire to these goals as part of their own individual development. Employees are also able to switch from one field of occupation to another to some extent (i.e. between career paths) – in particular at any stage of their careers as consultants or technical specialists. This solution also makes sense because very experienced developers are only able or willing to branch out from their highly-specific areas of expertise at a very late stage. The solution therefore also offers this group of employees the prospect of a change in career direction even later on in their working lives.

As an example, somebody who has pursued a long professional career in a specialist area and who has gained experience as the manager of a competence centre (in a relatively specialist area of expertise) is still able to switch jobs and become a corporate consultant. The additional competences and training which are required in order for this employee to make such a relatively late career move are defined in detail at the transition stage between jobs. Source: BTU Cottbus (Lünstroth 2001, page 58).

A change in work activity is, in many cases, only possible if alternative career structures are visibly available at the same hierarchical level in the company as this enables people to switch jobs even in firms which operate with flat hierarchies with relatively few opportunities for moving upwards into management positions. The opportunities for changing to a new position nonetheless depend on the qualifications workers are able to offer. People will, however, only be sufficiently motivated to embark on new horizontal careers if such career paths enjoy the requisite prestige in the company and community as a whole.

Everybody engaged in gainful employment needs to take stock at certain intervals in their working lives and look for new challenges. The meaning of one’s own work and a search for future goals tend to become issues in the middle of people’s occupational biographies in particular. This process of identifying where one stands and searching for orientation was, for example, addressed as part of Siemens’ Compass Project.
The Siemens Compass Project

In contrast with newly-recruited trainees, much less attention is paid over the years to providing personnel development measures for older engineers, quite simply because this group of employees “knows what it is doing”. In the framework of this project, employees were given the opportunity of looking at their own self-image, the image others have of them, and with own strengths and weaknesses. An individual development plan was then created and concrete steps agreed with managers and human resource management (cf. Stuttgarter Zeitung, December 30, 2000).

Lifetime working-time arrangements

Lifetime working-time arrangements represent an innovative, sustainable and holistic concept of working-time practices which covers the whole of an individual’s working life from the moment they start their first job right through to retirement. Flexible work-life arrangements (periods of work, leisure, time with the family) as well as phases of further training offer the possibility of meeting the individual needs and preferences of employees at different stages of their life (cf. Krämer 2002a).

Example: geriatric care

Lifetime working-time arrangements are apparent in the care sector where a high degree of flexibility in hours of work is already well established, i.e. given the plethora of various working patterns such as shift work, part-time work, overtime or weekend duties, normal working hours are the exception rather than the rule. The idea is to project existing daily, weekly, and monthly flexible work hours practice – which at present often only take account
of management concerns – across the whole of employees’ working lives and to plan the interests of employees into working-time practices on a systematic basis.

Consultancy experience in company working hours planning groups has shown that, in terms of effective lifetime work-life arrangements, employees are primarily interested in models which enable them to determine their own working hours as much as possible. As well as a desire for more general freedom of scope to plan their own periods of work, employees are also interested in individualized options which enable them to reconcile their working hours with family demands/private interests and achieve a better balance between home and working lives – including a reduction in the level of stress at work. As the workers in the middle age groups are generally pessimistic about their own readiness and ability to work right up to pensionable age under current working conditions, options for shortening the duration of working lives or for managing individual transitions to retirement, as well as part time work for older workers, are regarded as essential. One central instrument for managing working hours will be the introduction of working time accounts. Varying – particularly reducing – contractual working hours in the framework of working time options is rejected by most employees owing to the anticipated external effects this would have on their level of pension entitlements later in life. Source: FFG (Krämer 2002a).

Compared with annualised working time accounts, long-term time accounts enable spells of work to be spread in a planned way across longer phases of people’s working lives and thus offer greater potential for managing periods of work which fit in with the different stages of people’s lives, their current work activities, and their occupational biographies. Because employees are able to accumulate large working hour credits using working time savings accounts, it is in the interest of all those involved to introduce what are referred to as “time-banking” contracts. It is important to note that this method of managing lifetime working-time arrangements has a central influence on the management of individuals’ time requirements, but should not be misused as a new method of introducing early retirement through the backdoor. For this reason it is especially important that working time accounts are introduced on a voluntary and planned basis in the framework of consultation focusing on lifetime working times. The voluntary principle is important to the extent that the scale on which significant working hour credits are accumulated and made available for the purpose of establishing an atypical work-life balance should be dependent on the wishes of employees and the individual options available to them. The key benefits offered by these accounts depends on the degree to which employees are able to determine how the time saved is used (Zimmermann 1999).

In the future the typically compressed models of employment currently available should be replaced with employment models which include distributed phases of training and work which, for example, offer flexible opportunities for people to stop and start work or to take recovery periods off from work. There is a great deal of scope for establishing new forms of working arrangements in this respect which take particular account of phases of further training and lifelong learning opportunities (cf. Senatsverwaltung für Arbeit, Soziales und Frauen 2001).
In contrast, it is safe to assume that hitherto discussed proposals to extend people's working lives are unlikely to work out in practice, especially bearing in mind the trend in the opposite direction in the past. This is particularly true given that a large section of the labour force who have already been in gainful employment for a long period of time now have deeply-entrenched expectations about their own early retirement – especially as they have not only witnessed but also financed the early exits from work of their older colleagues over many decades.

If working times are to be effectively reorganised throughout people's careers (see section on "semi-retirement" in Chapter 6.1), by for example introducing atypical work patterns or counteracting current patterns of compressed working lives (Barkholz, 1998; Dostal, 2001), it is essential that people's current expectations are addressed and those affected offered plausible and acceptable solutions. It is also the case that simply raising the age of retirement without tackling any of the employment-related factors such as the risk of invalidity or erosion of skills which frequently force employees into early retirement is unlikely to have any effect whatsoever (cf. Chapter 2.2).
5.6 Health and job performance

The first international health promotion conference of the World Health Organisation (WHO) in 1986 passed the so-called Ottawa Charter which states that “health promotion is the process of enabling people to exercise more control over their own health and over their environments and to make choices conducive to health…… The way society organizes work should be a source of health for people and should help create a healthy society.”

It is only possible to neutralize work-related health threats if people actually know what the dangers are. The Wissenschaftliche Institut der Ortskrankenkassen (WIdO), for example, evaluated the results of a survey of more than 20,000 respondents in 100 companies carried out during the period 1994–1998. Backache was the most frequently cited health problem and is often suffered by 45 percent of those surveyed. The second most frequent problem was muscle tenseness and cramps which often lead to back problems. 34 percent of those surveyed often suffer these problems. The third most frequent problem was fatigue and exhaustion. Most of those surveyed believe that their health problems are related to conditions at the workplace. This is particularly true of backaches, muscle cramps, irritability, nervousness, restlessness, sore eyes, and joint pains. These health complaints were associated by two thirds of employees with the workplace (cf. Rehbein 2001).

A look at the statistical data on the links between age and incapacity for work reveals two contradictory trends: The number of cases of incapacity for work is highest among those aged up to 24 and comparatively low among the over 45-year-olds.

![Fig. 26: The most frequent health problems encountered at the workplace. Source: Wissenschaftliches Institut der AOK (Rehbein 2001)](image-url)
while the number of days off due to sickness per individual employee increases drastically with age. Older workers are not then more often sick than younger workers; but when they do fall ill, they are – on average – incapacitated for work for longer (Morschhäuser 2002).

The number of company employees health problems which prevent undertaking certain types of tasks generally rises dramatically in the older age groups. What many of these employees need is a workplace tailored to their work capacity. However, in the wake of successive waves of modernisation and rationalisation, less stressful fields of occupation which used to offer particular employment niches to older workers suffering health problems are becoming more and more of a rarity. At the same time the performances demands have risen in many areas of production and service provision. As a result, it becoming increasingly difficult to find suitable jobs for these employees, and present practice tends to shunt them, and particularly low-skilled workers, out of employment altogether (cf. Morschhäuser 2002).

**Participatory health management in a foundry**

Foundry work has always been especially strenuous and stressful characterised by heavy physical labour, high performance demands and a taxing working environment. The present example of a foundry with over 1,000 workers also uses a workforce composed of comparatively older workers: 43 percent of the foundry’s employees are 45 or older.

The first step in the company’s health management initiative was to form a working party responsible for planning and coordinating activities and reaching decisions on all the measures to be taken. Members of the working party came from the foundry management, representatives from the personnel department, the work council, and the company’s medical service, as well as scientific observers.

The results of an employee survey – the apparent increase in health complaints, or the widespread scepticism of respondents regarding their ability to continue performing their jobs in the long term – clearly demonstrated how important it is to do more for the health of the company’s employees. The view of work-related health risks already held by members of the working party was confirmed and also underscored in figures. The survey thus delivered the working party with important material for arguing for action within the company designed to promote the health of its employees. Attention was also drawn to working conditions which have serious implications for people’s health (such as working arrangements which call for high levels of concentration, and which subject workers to monotonous stresses and strains) which had previously been more or less ignored.

A comparison of each of the different areas of operation within the foundry showed that the health and work situation of each respective group of workers differed markedly. On the basis of these results, one field of occupation was ranked as especially deleterious to employees’ health and the health workshop subsequently performed in this area.

The employee survey acted as a catalyst which expedited the approval and installation of a long-planned new air-conditioning system designed to reduce ambient pollution at a cost of 10 million euros. The company’s medical service also made a strong case for a behaviour-
oriented skin protection and movement programme. Proposals for alternative work arrangements elaborated in the health workshops, such as improved lighting, noise reduction and more ergonomic work organisation were implemented – to some extent before the trial had even been completed.

The meetings of the working party, the employee survey, and the health workshops were accompanied by events and discussions with master craftsmen, shop stewards and workers, all of whom were kept informed about the status of the planned actions and involved in discussion of the results. One important outcome of this procedure was that new forms of communication were created which supported an intensive focus on health issues, ways of maintaining people in good health, and greater awareness of health deficits. Employees were able to air their grievances and those responsible were able to respond with, in some cases almost immediate, corrective action (e.g. the purchase of safety goggles and handling aids which enable people to avoid unhealthy postures at especially strenuous workplaces). Source: ISO (Morschhäuser, Schmidt 2002, page 21).

If people are to stay in good health in physically or mentally strenuous jobs and fields of occupation right up to old age it is essential to promote awareness and understanding of firm-based health promotion and other actions. With regard to ageing issues, not only must the technical management of work activities be subject to close scrutiny – work organisation, manpower deployment decisions, skills, working hour rules, corporate culture, the work atmosphere, as well as the attitude of employees to their work all need to be taken into account. This perspective also demands that firms ensure that health promotion is an integral part of the company’s overall mission (cf. Morschhäuser 1999b).

**The effect of age on performance**

When workers begin to abandon certain types of work activities before they reach retirement age this is not usually the inevitable result of processes of biological ageing. The fact that some people continue to be innovative, productive – and, at the very least, well paid – when they are 70, while others are thought to be almost too old for their jobs when they are only 45 obviously has less to do with the biologically determined changes in people’s work capacity which accompany the ageing process, than it has with the type of activity and career responsible for such decline. (Behrens et al., 2002)

People’s qualitative performance potential increases as they grow older. Studies, experience, and practice evaluations confirm that ageing is accompanied by a shift rather a decline in performance (Karazman, 2000):

- Decline in physical work capacities
- Conservation of mental work capacities (awareness, concentration)
- Enhancement of cognitive and social skills
One key focus of psychological and gerontological research has concentrated on the development of cognitive performance characteristics and the personality changes accompanying the maturation process. Numerous studies concur in demonstrating that personality characteristics such as a person’s level of introversion/extroversion along thinking, emotional and action dimensions, emotional stability, self perception or self-efficacy (locus of control) beliefs remain largely stable well into old age. Simplifying the findings somewhat it is possible to summarise the empirical studies on mental performance as follows (cf. also Chapter 3.1):

- Older adults generally exhibit deterioration in reaction times and perceptual skills; information processing also slows down in old age. These performance deficits can, to the extent that they occur at all or play a role in the work process, be compensated for by making suitable changes in work arrangements.
- Performance prerequisites such as memory, creativity, problem-solving skills, intelligence, social skills or the ability to cope with stress are highly dependent on the amount of stimulation people are subject to in the course of their working lives. If they are actively supported, these abilities can be maintained or even improved in old age.

**Factors influencing performance:**
- Private lifestyles
- Socialisation, education/training
- Self-perception, perceptions of others
- Previous activities (stresses, training)
- Performance demands at work
- Stimulus to learn provided by work

**Fig. 27:** Individual differences in the development of work performance with increasing age.
Source: Fraunhofer IAO (Buck 2002)

37 Many studies of age-related changes in performance characteristics relate to the group of over 65-year-olds. Whether the outcomes of these studies are relevant to people of working age is a moot point.
Even if certain typical changes in performance parameters can be demonstrated to take place as people grow older, these by no means affect all those in gainful employment in a particular age cohort to the same extent. The range of individual differences in performance grows wider as people grow increasingly older: i.e. the same parameter may fall, stay unchanged, or even improve within one and the same age group. The view that age-typical changes affect all older employees in the same way must be supplanted by a perspective which focuses primarily on individual performance ability. Character traits, occupational biographies, constitution and level of training are all important factors influencing the prerequisites of performance. Many employees have also developed useful compensatory strategies for coping with the age-related limitations they may experience at the workplace.
6 Labour market policy and new fields of occupation for older employees

6.1 Labour market policy

Regional unemployment statistics are published at the district labour office level for the so-called classic problem groups on the labour market (women, young people, foreigners). This is not the case however as far as unemployment rates among older workers are concerned although, as the experience gained in the transfer project has shown, these statistics would be particularly important for the purpose of sensitizing regional labour market actors to the issues at stake (cf. Hilpert, Nickolay 2001). Although this is partly due to statistical problems (the values are distorted by survey date problems and regional differences in the way retirement is handled, cf. Chapter 2), the main problem seems to be a reluctance to open up “yet another front” in this area of policy. However, this type of information – if made compatible with the data, unavailable to date, on the way retirement is handled in different regions – would be of central importance, particularly for the self-administering insurance bodies, in the formulation of an effective labour market policy for older workers.

In view of the demographically-determined changes taking place in the population of working age (cf. Figures 1 and 2 in Chapter 2) a labour market policy for employees in the later phases of their working life will need to be developed for a number of decades to come. Even if all the company-level measures discussed in Chapters 4 and 5 actually take effect – and above all in good time! – active labour market policies will still be indispensable for this group. Measures which simply shift the cost burden of this problem on to older workers – such as reducing unemployment benefit entitlement periods – will not create additional jobs (cf. Deutscher Bundestag 2001, page 236ff.)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Total number of unemployed supported</th>
<th>Proportion of older people among those receiving support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing vocational training</td>
<td>351,960</td>
<td>7.5 %</td>
</tr>
<tr>
<td>Short-term job creation schemes</td>
<td>203,601</td>
<td>33.5 %</td>
</tr>
<tr>
<td>Structural adjustment measures</td>
<td>109,756</td>
<td>24.5 %</td>
</tr>
<tr>
<td>Labour market ‘entry’ allowance</td>
<td>90,535</td>
<td>39.2 %</td>
</tr>
<tr>
<td>Training measures</td>
<td>47,492</td>
<td>12.3 %</td>
</tr>
</tbody>
</table>

Table 6: Participation of older workers in labour market policy instruments (50 years and older). Average figures for 2000. Source: Bundesanstalt für Arbeit 2001d

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38 The standard phrase “problem group” should be used with caution, as there is a danger that it may become a self-fulfilling prophecy which results in the stigmatisation of certain groups thus exacerbating the relevant problems. What is needed is to identify those groups which are experiencing more problems on the labour market and to include these groups in the statistics.
Labour market policy and new fields of occupation for older employees

The measures implemented in the past were at any rate inadequate. One source of evidence of this failure is provided by the Bundesanstalt für Arbeit itself (1999 and again in 2000/2001 under the heading “50 plus – they can do it”) as is the fact that older workers have almost always been underrepresented in the target groups at which active labour market policies have been traditionally directed: “The biggest discrepancy between the number of people impacted by active job creation measures and the actual number of people unemployed in any particular group is to be found among older people. The underrepresentation of this group is demonstrated by the fact that they only receive 16.5 % of all the support invested in job creation policies despite the fact that they account for 32.4 % of the total unemployed” (Bundesanstalt für Arbeit 2001c, page 12). Table 6 shows the proportion of over 50-year-olds taking part in various labour market policy schemes.

“Shunting” people into retirement

An instrument for tackling unemployment among older workers?

In a situation in which politicians and the general public are exerting pressure for more efficient government actions and cost cutting, the reduction of unemployment among older workers poses a huge dilemma for the employment services. As long as placement rates continue to focus exclusively on jobs on the primary labour market and personnel managers continue to indulge in the cult of youth as far as recruitment is concerned, creaming effects are inevitable. This effect is even stronger among the private enterprise organisations involved in policy implementation (employment agencies, trainers, etc. as permitted by the Job AQTIV Act): it goes without saying that these players will initially concentrate their efforts on placing those unemployed people, or those threatened with unemployment, for whom it is easiest to find a new job – older workers as a whole, and particularly the most difficult subgroup of older workers with additional employment deficits, will tend to be left out in the cold. This is also one of the reasons why many labour offices (at the federal state level) concentrated primarily on the 50–55 age group during the “50 plus” campaign (cf. Bundesanstalt für Arbeit 2001a, page 3381).

For the employment services it appears to make perfect sense – even if not at all in the interest of the community as a whole – to bring about reductions in the unemployment statistics by quickly transferring people from the ranks of the unemployed to the offices of the pension funds by exploiting the option provided by Section 428 SGB (German Social Code) III whereby unemployed people aged 58 and over can draw benefits, even if they are no longer available for work, and if they are willing to enter retirement at the earliest possible date at which no actuarial deductions are made from their pension.

39 To the disadvantage of the very weakest job seekers.
40 They are then no longer shown in the statistics as unemployed. The fact (cf. Koller 2001, page 18) that the absolute number of § 428 SGB III cases fell slightly between 1998 and 2000 (from 204,000 to 192,000) falls into perspective bearing in mind that the number of unemployed in the relevant age groups fell briefly during this period owing to demographic and general economic factors.
If we analyse the regional incidence of cases handled in accordance with § 428, in this case (and exceptionally) in relation (cf. Bisping, Böhme 1999) to the number of over 50-year-olds who are unemployed, it becomes clear that there are very big regional differences in the way this instrument is used (cf. Figure 28). It is also important to bear in mind that these nigh on 200,000 cases must also be added to the figures measuring underemployment among older workers referred to in Chapter 2. In the context of demographically-determined labour market problems it is therefore legitimate to question whether measures such as those provided for by § 428 SGB III should be regarded as an instrument of an active labour market policy at all – their sole purpose is take off some of the pressure from the labour market.

The “Semi-retirement” Act -
problematic application of a useful tool

The “Semi-retirement” Act (“Altersteilzeitgesetz”; AtG) is another example of a law which, while useful in itself, is mainly used to take the pressure off the labour market. “The AtG facilitates the phased retirement of workers who are at least 55-years-old; at the same time, the Act is also designed to provide a response to the increasing prevalence of early retirement” (our translation; Bundesanstalt für Arbeit 2001d, page 119). The support from the labour office which the Act provides for is linked to a registered unemployment person finding a job or a trainee being taken on in full-time employment. The envisaged “standard case” is quite clear: part-time employment and the immediate hiring of new employees. However, estimates for the year 2000 suggest that of an approximate 160,000 part-time workers subject to compulsory social insurance contributions around 80 percent fall in the so-called “block model” category (cf. Koller 2001, page 19f.). In reality, of course, it is perfectly clear that a two-and-a-half year period of full-time employment followed, in effect, by an exit from the employing firm and working life has little in common with the notion of “semi-retirement” or phased retirement. Another problem is that new employees are only taken on after a two-and-a-half year period of “old-age part time employment” has been completed just when huge problems are arising at the “second threshold” – in other words finding permanent employment for people who have completed their initial training in Germany's dual system, a problem which is associated with high levels of unemployment among younger people who have finished their apprenticeships. Until the situation is altered by demographic developments, it would certainly be helpful if the tool of “semi-retirement” and new jobs was used in the way it was originally intended.

Important opportunities are thus being wasted. This is not only true for the immediate creation of job openings for young people who have completed their training, but also applies in particular to the intensification of inter-generational collaboration and the option of bringing about a comprehensive transfer of experience from older to younger workers. However, many companies and older employees obviously prefer the block model – the main motivation of employees being to “escape” working conditions as quickly and finally as possible, often owing to health problems which they have already begun to suffer at work. In this respect the block model might actually exacerbate and accelerate the fatal spiral of intensifying and faster degeneration and wearing out of labour resources, while – in contrast – a true part-time model would offer a means of slowing down or even stopping this trend. The problem presented by the
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“block models” thus very closely resembles the experience of the systematic misuse of the so-called “59” rule by many companies in the past (cf. Infratest, ISG 1981, page 171; Mendius 1982). It would make more sense to redraft the rules in the “Semi-retirement” Act so as to either do away with the “block model” entirely or at least to make it more attractive to implement the part-time work provisions in the way originally intended (e.g. by the employment services providing graduated support).

Measures designed to promote standard forms of employment and employment programmes for the secondary labour market

The main beneficiaries of work integration and wage cost subsidies are older workers, and these measures appear to be highly successful (cf. Bundesanstalt für Arbeit 2001a, page 3382). Nevertheless, the problem with these instruments is – as ever with payments to private enterprises – that they tend to generate freerider and habituation effects. They potentially discriminate against older workers and, given their conceivable scale, it will also be impossible to finance such measures in the future if companies are only willing to take on older workers if they are enticed to do so with huge subsidies from the labour offices or from other public funding sources.

There are also financial limits to the numerous forms of job creation and structural adjustment policy measures, as well as to the broad spectrum of voluntary promotion measures either adopted by the employment services alone or in combination with labour market policies pursued by the federal states, etc. (cf. e.g. brief summary provided by the Bundesanstalt für Arbeit 2001a, page 3379ff.). While measures tailored especially to the needs of older workers are still relatively rare, those – as it were “best practice examples” of – programmes which have been initiated, such as the Bavarian Arbeitsmarktfonds (cf. e.g. Hilpert, Nickolay 2001) or the State of Thüringen’s “50+” programme (cf. Reuße 2002), offer numerous instances of “success stories”. They not only show that it is possible to find jobs on the primary labour market for older people or to persuade firms to take on older people, even if such workers have additional application handicaps, they also reveal that it can make sense for older workers to enter the secondary labour market and that they can be employed over a relatively long period up to pensionable age. Even if it is not possible in every case for these workers to move from the secondary to the primary labour market, most of these measures are nonetheless more efficient in fiscal and social policy terms than, for example, modifying the unfair dismissal protection regulations for older workers, raising the relevant time periods in the Unfair Dismissal Protection Act (tried in vain in 1996), or reducing the threshold age for fixed-term employment in § 14 (3) of the Act on Part-Time Work and Fixed-Term Employment Contracts (TzBfG), none of which create new jobs.

It is not possible in this booklet to provide general recommendations about which packages of measures offer the best prospect of success in various regional labour markets. The likelihood of measures being successful not only depends on the professions/trades/industries from which job seekers come and the type of jobs they are looking for, success is also highly contingent on a large number of different individual factors. It is not even possible to generalize about such
Fig. 28: Proportion of § 428 SGB III cases among the unemployed aged 50 or over, based on labour office districts in Germany at the end of June 2000. All figures in percent. Source: INIFES, graph based on figures provided by the Landesarbeitsamt Bayern, 2001
apparently obvious factors – substantiated in many cases – as the alleged employment deficits of older workers in the sphere, for example, of modern information and communications technology. In the experience of the employment services and as shown by the study carried out by the INIFES-SÖSTRA project, the personal coaching in the framework of courses offered by professional training and employment firms is an equally important factor: training people how to apply for jobs, how to cope with interviews, boosting the self-confidence of the long-term unemployed, self-marketing, follow-up help, and so on are often necessary preconditions for more extensive support which, in many cases, is financed by the provisions of § 10 SGB III. This source of funding is also relevant to the need to tailor measures designed to support older unemployed people or people threatened by unemployment in specific cases and regions as referred to above.41

At the regional level, the various actors on the labour market need to be sensitized and activated to take concrete action – lip service is not enough. The experiences gained in the context of the transfer project show that this is only possible if such action is supported at the grassroots level and coordinated with the cross-regional actors (state labour offices, departments of employment).

Private personnel service providers

Private labour market mediators, such as private personnel service firms (temping firms, outplacement and personnel consultants, employment agencies, etc.), have grown in importance in recent years in terms of finding jobs for the unemployed and allocating and training manpower. This is demonstrated not only by the growing number of new companies being set up in this sector but also by the increasing number of people being employed or placed. As a result, these companies as a whole also bear growing responsibility for the implementation of labour market policies (cf. Döhl 2002).

The reasons for this growth can be found in two parallel developments:

1. The restructuring and rationalisation measures implemented by companies (de-centralisation, outsourcing, concentration on core competences, etc.) which have not only led to considerable demanning (with the corresponding impact on the labour market and the job-finding tasks of employment agencies) but also to the transferral of human resource management tasks (above all recruitment and training tasks) to the business operations of private providers of personnel services.

2. The new personnel policy strategies adopted by companies which are geared to reducing the size of permanent workforces and making greater and more flexible use of outsourced labour (employees on temporary contracts, project work using external personnel resources, 41 The orientation of the new Job AQTV Act which places greater emphasis on preventive measures is without doubt a step in the right direction in terms of the labour market problems confronting older workers – provided that it is not used by firms to subsidise further cutbacks in staffing levels (cf. Pfafflin 2001).
increase in numbers of temporary workers and hired labour, etc.). The result of these changes is a general increase in labour market mobility and greater demands for mobility being placed on the labour force itself.

To date, private personnel agencies have not expressed very much interest in older workers, their problems, such as unemployment, or ways of tackling these problems. As might be expected, as far as older workers are concerned these private agencies have so far concentrated mainly on finding jobs for highly-qualified staff and management personnel. However, given the predictable and ongoing problem of underemployment linked with the demographically-determined changes in the (age) structure of the working population and the more or less stable (possibly even rising) proportion of older workers among the (long-term) unemployed, more attention will have to be dedicated to these issues in the future.

If more older working people (older unemployed) are to be included in the advisory and placement services provided by private personnel services agencies, it is essential that more intensive thought is expended on the special potentials (skills, abilities, experience, social and individual resources) offered by older people, and that service providers make an unprejudiced assessment of the situation and show themselves willing to offer the requisite training opportunities.

From the point of view of private providers of personnel services, and in terms of the work they have to do, there are four major approaches to improving the employment chances of older workers. However, three of these approaches – or levels at which they might become active – are largely outside the range of influence of these agencies:

1. A change in the personnel policy of companies (customers)
2. Changes on the Labour market
3. Deregulation
4. Cooperation with the state employment services

In the final analysis, how successful private personnel service agencies are in improving the employment opportunities of older workers/the older unemployed depends on a root and branch change in the personnel policy pursued by their customers (a trend away from youth-oriented and ageist human resource strategies). However, service providers have only very limited power to influence the behaviour of their customers and only at all to the extent that they are able to “offer” labour resources which meet customers’ demands for qualified and motivated older workers. One possible step in this direction would be for providers of personnel services themselves to act as manpower distributors and to build up their own “age-mixed” staff structures.

The way the labour market develops will have a fundamental influence on speeding such a change of attitudes in companies and will thus have an indirect impact on improving the ability of private employment agencies to find jobs for older workers. A short supply of the young and skilled labour companies are seeking – either owing to a general drop in unemployment levels (unlikely as this is in the near future) or owing to shortages in particular sectors of business and
industry or among particular occupational groups – would not only boost the willingness of companies to secure the existing know-how of their older employees (and thus to abandon a manifestly ageist personnel policy), it would also motivate companies to explore the pool of older workers available on the labour market when recruiting new employees. Such a reorientation would increase the placement scope available to personnel service agencies.

One more concrete way of improving the employment opportunities available to older workers is to intensify collaboration with the state employment services. Joint activities which already exist (such as regular reviews of the labour market, labour exchanges in labour offices for temping agencies, temporary work fairs) should be extended further.

Cooperation has improved significantly in recent years. The level of mutual involvement and support does however depend to a very large extent on the commitment of individual labour offices or their employees. What personnel service agencies want is more support training job seekers as well as clarification of existing regulations (relating for example to unemployment benefits or assistance). Labour offices should also do more to point out the options offered by temporary work to their unemployed clients.42

6.2 Increasing the rate of employment among women – more than a better use of “hidden reserves”

While the employment rate of German men aged 55–64 is, at 46.1 percent in 2000, slightly below the EU average of 47.9%, the rate for women in the same age group is actually slightly higher – 28.6 as against 27.9 percent in the EU as a whole (Eurostat definitions; cf. Europäische Kommission 2001b, pages 110 and 113). In terms of the whole group of women aged 15–64, the German value of 57.9 percent is considerably higher than the EU average of 54 percent. Nevertheless, it is important to note that all the available projections suggest that the propensity of women to work, and actual levels of female employment, are set to continue rising in Germany,43 in particular among the younger female cohorts among the population of working age (cf. Chapter 2.1) and (then) above all among older working women.

As far as the potential stock of skilled labour is concerned, it is important that younger and ‘middle-aged’ female cohorts in particular attain levels of qualification which are at least equal to those of men. In the past (and right up to the present day) women’s careers have typically been interrupted for lengthy periods of time and have often come to an end earlier than those of men. As a result, enormous investments in education and training have been parked as hidden reserves or even driven off the labour market entirely. This typical pattern of female

42 In the context of current debate, refer to “Eckpunkte für Sofortmaßnahmen in der Arbeitsvermittlung (Key aspects of immediate action in the field of job placement)” www.bundesregierung.de/dokumente/Artikel/iX_70822_7278.htm
43 The figures for eastern Germany are falling slightly while the figures in western Germany are rising to approach those in the east.
Labour market policy and new fields of occupation for older employees

Employment must and will be changed in the future. Women not only represent a pool of emergency labour which can be drawn on to compensate for the demographically-determined contraction in the size of the male population of working age which will take place in the foreseeable future; on the contrary, the high level of qualifications among women make them an interesting source of potential labour in their own right.

Figure 29 shows that for women aged 15–24, and particularly those in the 50–64 age group, the gaps between the current labour force participation rates achieved in Germany and the highest national labour force participation rates within the EU for the respective group in other countries are especially wide.

There are a number of reasons for the disadvantages women suffer in the world of work (cf. WSI, INIFES, Forschungsgruppe Tondorf 2001). “For example tax and benefit systems have strong implications for gender equality” (Commission of the European Communities 2001, page 99); in this context the EU Commission also highlights the need for Germany, in particular, to take action. The problems extend further than measures which, while well meant, are in reality bound up with disadvantages for women, such as child-rearing leave and the availability of child-care facilities. Gender-specific patterns of behaviour perpetuate inequalities in the use made of parental leave and “particularly in the case of long interruptions in people’s careers there is a danger that, among other things, additional problems are created for companies’ personnel planning functions. In these cases too, the deskilling processes which inevitably take place erode the profitability of investments in female human capital. Not only that, the greater assistance which is directed towards individual child care during longer periods of child-rearing

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44 This is not only due in part to changes in values, family structures and similar factors, it is also the result of legal and institutional changes, in pension law for example. As the traditional gender divisions on the labour market and in company organisations begin to be broken down slowly (cf. WSI, INIFES, Forschungsgruppe Tondorf 2001), these factors will not only have a major influence on the propensity of older women to engage in gainful employment in the future, they will also become increasingly necessary if women are to build up reasonably adequate pension rights for themselves.
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Leave can exacerbate entrenched role behaviour even more ...” (our translation; Engelbrech, Jungkunst 2001, page 1). The human capital which young women in particular represent for employers, as well as for the economy as a whole, can be secured and enhanced by providing continuing training and ensuring that these employees remain in contact with their firms (in some cases in the form of part-time work opportunities) during their periods of child-rearing leave. A suitable range of child-care facilities would represent one of the best ways of achieving this objective. As the population grows older, services of this type should not be confined to the care of children (and even then not just to pre-school children) but should also extend to nursing care for elderly people.

The extremely unsatisfactory level of child-care provision in Germany poses a severe challenge, both for public authorities and companies wishing to adopt a long-term human resource man-
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management strategy (cf. Table 7): “There are very few nursery or crèche care facilities for children under 3 and over 6 in Germany. In terms of nursery care for the under-3s Germany lags well behind most other countries and, in terms of facilities for primary school children, trails behind Denmark, Sweden and Finland. The current level of state-supported service in this area is inadequate. It is not feasible for companies to iron out these discrepancies in Germany” (our translation; Eichhorst et al. 2001, page 414).

There is a broad consensus between the academic community and those at grassroots level that the measures referred to above are absolutely vital. However, it is important not to lose sight of the fact that both public spending and the spending of private households are subject to constraints and that there are opportunity costs incurred in terms of the patterns of behaviour.

<table>
<thead>
<tr>
<th>Member states</th>
<th>Childcare coverage for the under-3s (1) (2)</th>
<th>Childcare coverage 3 to mandatory school age (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark (2)</td>
<td>64 %</td>
<td>91 %</td>
</tr>
<tr>
<td>Sweden (2)</td>
<td>48 %</td>
<td>80 %</td>
</tr>
<tr>
<td>Ireland</td>
<td>38 %</td>
<td>56 %</td>
</tr>
<tr>
<td>United Kingdom (3)</td>
<td>34 %</td>
<td>60 %</td>
</tr>
<tr>
<td>Belgium</td>
<td>30 %</td>
<td>97 %</td>
</tr>
<tr>
<td>France (2)</td>
<td>29 %</td>
<td>99 %</td>
</tr>
<tr>
<td>Finland (2)</td>
<td>22 %</td>
<td>66 %</td>
</tr>
<tr>
<td>Portugal</td>
<td>12 %</td>
<td>75 %</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td><strong>10 %</strong></td>
<td><strong>78 %</strong></td>
</tr>
<tr>
<td>Italy</td>
<td>6 %</td>
<td>95 %</td>
</tr>
<tr>
<td>Spain</td>
<td>5 %</td>
<td>84 %</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>5 %</td>
<td>98 %</td>
</tr>
<tr>
<td>Austria</td>
<td>4 %</td>
<td>68 %</td>
</tr>
<tr>
<td>Greece</td>
<td>3 %</td>
<td>46 %</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

(1) Proportion of young children using formal childcare arrangements.
(2) Coverage of children between 0–3 years should be analysed in conjunction with the existence of paid leave schemes. A good policy package should include both a sufficient provision of care services and adequate paid leave. Good examples can be found in Sweden, Finland, France and Denmark.
(3) England only.

Table 7: Comparison of the childcare coverage in various European countries.
(Source: Commission of the European Communities 2001, page 110).

There is a broad consensus between the academic community and those at grassroots level that the measures referred to above are absolutely vital. However, it is important not to lose sight of the fact that both public spending and the spending of private households are subject to constraints and that there are opportunity costs incurred in terms of the patterns of behaviour.
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inherent in increasingly family-unfriendly forms of work organisation and working conditions. Whatever the benefits offered, for example, by increasingly flexible work models which envisage spreading periods of work more evenly over workers’ entire working lives (cf. Chapter 5.5), it is important to remember that these models are entirely incompatible with trends towards fixed-term employment (in fact all forms of “modern” work arrangements). All the attempts made by companies to introduce these forms of flexibility undermine the stable framework needed if workers themselves are to develop more flexible working arrangements – and the conflict between both sides is not only more and more difficult to reconcile, it also often entails negative consequences for people wishing to start a family and have children, and thus has the negative impact on demographic development with which we are all too familiar.

6.3 An ageing labour force also requires new fields of employment

The previous sections of this booklet have demonstrated that there is in fact plenty of scope at the company level for developing solutions to problems associated with ageing workforces. At the same time, corresponding measures need to be taken in terms of labour market policy. However, the actions described will only be successful if the underlying changes are first subject to comprehensive analysis and all stakeholders cooperate in the development and implementation of suitable solutions. Assuming this is the case, it should be possible to reverse the trend of early exit from employment in the future. Nonetheless, it is probably unavoidable that many older workers will continue to lose their jobs – and for a lengthy period of time to come increasingly so, given the age structure of the working population. The main problem at the present time is still the almost four million people unemployed and an equally large “hidden reserve” consisting of an extraordinarily high proportion of older workers (cf. Chapter 2 in this booklet).

As a result, the creation of new jobs, alongside the ideas described in Chapters 4 and 5 for securing the innovative ability and competitiveness of companies operating with ageing workforces, will continue to play an important role in the foreseeable future. The creation of employment opportunities for older workers will be particularly important.

In this context it is important to bear the following relationship in mind: additional jobs are always to the benefit of everybody on the labour market – regardless of who actually takes these jobs on in the first place – including for those who occupy a relatively poor position on the labour market such as, to date, many older workers. Even if new jobs are taken by younger people, for example, the positions these young workers would otherwise have had will be vacated (or job vacancies will not be filled by younger staff) so that the position of older applicant in the labour market “queue” and their opportunities for reintegration in the labour force will improve. In this respect, the most effective labour market policy instrument for supporting so-called problem groups continues to be raising general levels of employment (§ 1 of the Stability Act on the promotion of economic stability and growth; StWG) by creating additional jobs. If there is strong demand for labour resources and a relative shortage of supply, it then becomes worthwhile a) for workers to enhance theirs skills and qualifications and b) for companies to invest in the human capital represented by their employees or to manage the
work demands placed on their employees in such a way that they can be fulfilled by workforces which do not always resemble “Olympic teams” in terms of performance. This insight is confirmed by the experience of full employment during the 1960s, a phase during which the so-called problem groups played a marginal role on the labour market even though there were doubtless numerous discrepancies between the skills sought and offered at that time too (what are now referred to as “mismatch problems”).

New jobs for older workers – an example in the craft trade sector

In the craft trade sector in particular there is considerable potential for securing existing jobs and, above all, creating new ones – including jobs which are suitable for older employees. This was demonstrated by one of the “first round” series of projects (cf. Mendius, Weimer 1998). This project showed that it is not only important to develop a concept which is coherent in itself but that the right type of framework conditions are necessary if real employment opportunities are to be created on a significant scale.45

Especially good conditions for the creation of new jobs have been identified in the field of environmental domestic technology (solar hot water heating, supplementary sources of heating, rainwater collection, etc.) and the exhaustive recycling of used vehicles in the form of non-destructive dismantling, reconditioning and reuse.46 One of the main reasons for choosing the car industry is that this important sector is currently confronted by massive impending structural changes. These tendencies were mainly triggered by strategies adopted by car makers to cut sales and distribution costs. These strategies included measures to streamline dealer networks by terminating dealer agreements and continuing efforts to reduce maintenance and repair costs. For this reason we may expect a significant drop in the number of vehicle repair workshops and garage mechanics in the years to come.

The vehicle repair trade has been experiencing problems employing older car mechanics in its workshop for quite some time now. Very few employees in this sector continue to work up until the normal retirement age. A large number of garage mechanics switch to other jobs in the same sector or leave the vehicle repair trade earlier – either immediately after completing their apprenticeships or, at the latest, at the age of around 35 to 40. Despite numerous improvements in working conditions, the main reasons for this level of exits from the trade continue to be the considerable physical strains placed on workers as well as increasing stress-related factors.

45 The activities discussed involve high unit labour costs. Turn to the references cited in the preceding footnote for a treatment of this topic in general and for ways and means of reducing the cost burdens associated with labour as a factor of production in specific cases.

46 The follow-up project performed in the framework of the “Demographic Change: Public Relations and Marketing Strategy” project shifted the focus to creating the conditions needed for the implementation of such initiatives relating to the recycling of used vehicles.
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The solution usually adopted in the craft trade sector for workers to migrate to other sections of industry is becoming less and less feasible owing to a general unwillingness or inability of other sectors to take up this slack. The downsizing tendencies in the vehicle repair trade are therefore likely to be reflected in higher unemployment, mainly among older workers. At the same time, as the number of younger people entering the market is falling, there will be fewer new apprentices (typically composing over 20% of the total workforce in the vehicle repair trade) in the future and workforces can therefore be expected to age considerably.

It goes without saying that in the vehicle repair trade too the priority must be to implement measures for existing workforces (of the type described in Chapters 3 and 4) designed to exploit and develop the skills and know-how of older workers and retain this section of the workforce in the firms. However, given the general climate outlined here, this will not be enough in itself.

For this reason the project aimed to support the development of models geared towards the preventive establishment of new fields of occupation (vehicle dismantling and current value fair repair work) and thus to create employment opportunities for those in this sector who are unemployed or threatened by unemployment. In this context, as much use as possible should be made of the existing vocational qualifications and know-how of those involved.

A process such as this will not take off of its own accord: both those directly affected and multipliers first need to be comprehensively informed about the relevant concept and their interest sustained over a longer period of time. All those on whom this strategy depends also need to be brought together in order to clarify the way such a concept could be implemented on the ground – bearing in mind that the idea of “total recycling of used vehicles as a source of jobs” involves a number of extremely complex interrelated issues. Not only is this approach impacted by a range of different external framework conditions, there are also very many different people involved who, at first glance, appear to have entirely different interests at stake. Alongside the vehicle repair trade itself and its trade associations, other important stakeholders include car makers, suppliers to the car industry, vehicles parts dealers, recycling businesses, the workers in these sectors of business and industry and their representatives, the employment services, regional industrial development agencies, and actors and projects on the secondary labour market.

A concrete example of a workplace initiative

Following an information and sensitization event organised in the framework of the project, an office of the trade union responsible for workers in the vehicle repair trade in eastern Germany took up the idea of developing the preventive creation of new employment opportunities for older employees threatened with unemployment in the vehicle repair trade and gave massive support to the implementation of the model in close collaboration with the project itself. The reason for the commitment of this trade union was that the specific region involved was experiencing a number of acute problems: a high level of general unemployment, a very critical situation in the local vehicle repair trade which had already led to the first closures, very few permanent jobs for newly qualified garage mechanics and electricians on completion of their apprenticeships, and the fact that younger qualified employees were leaving the vehicle repair trade in large numbers. Above all, however, there were very clear
signs that anticipated further demanning in the vehicle repair trade would have a marked impact on older workers who would then have very poor chances of finding new jobs. Above all it was local shop stewards who perceived massive difficulties for them and those they represent. At the suggestion of the responsible trade union, the approach discussed above was presented and discussed at several events – supported by appropriately prepared information material. As a result, it was not only possible to involve all the important actors in round-table discussion (the employment services, the local industrial development agency, regional educational establishments, the responsible state association for the vehicle repair trade, automobile recyclers, bodies involved on the secondary labour market, trade unions, representatives from the political parties), but also to get these stakeholders to help push ahead with this initiative.

The fact that car manufacturing is a traditional industry in the region was also conducive to the mobilisation of the regional political establishment and public bodies. This meant that important actors able to implement the model, such as car makers and suppliers to the car industry, with relevant dismantling and recycling competence were available on the ground. The passing of the EU “end-of-life-vehicles” directive has also created a legal framework which will significantly support the building up of a disposal and recycling infrastructure. The well-devised system for the reprocessing and recycling of materials and products established in former East Germany also played a significant role. The experiences gained with this system offered a suitable point of departure despite the fact that, in the past, the “throw-away” culture was perhaps even stronger in the east than it was in the west.

As a result, it was possible to form a project group involving all the major actors a the aim of which was to establish a regional system for the dismantling and recycling of used cars. There are still a whole series of steps which need to be taken before this project will be crowned with success. The size of the potential regional sales markets and the extent to which existing infrastructures can be used or new ones created still need to be clarified. The necessary training measures also need to be developed and provided. The relevant labour force needs to be informed and workers’ support for the project enlisted. Last but not least, the requisite funding needs to be drummed up.

The declared – and realistic – aim is to create jobs for older workers which will be economic and self-financing in the long term. The requisite coordination work will be undertaken in the initial run-up phase in the framework of job-creation schemes. No doubt labour market and regional promotional policies will be essential during the initial stages and for quite some time to come until the project has become firmly established. As things stand, the development and creation of innovative employment opportunities for older members of the working population are hardly likely to succeed if those involved expect the undertaking to be “ sparked off” by the free market alone. Reservations are frequently expressed about the use of such instruments. Attention is frequently drawn, in particular, to the danger of jeopardizing companies and jobs on the primary labour market inherent in the subsidisation of projects on the secondary labour market. Whether, and to what extent, such dangers really exist is the subject of heated debate. In the case discussed here, these kinds of displacement effects are
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unlikely to be generated – the relevant labour intensive, environmentally-friendly, and
resource-saving activities will mainly result in the creation of new jobs in areas in which com-
panies on the primary labour market are not currently active on any significant level.

Another good reason for subsidising these types of activities is that – as experience generally
shows – it is not possible within the existing structure of vehicle workshops to introduce wide-
spread use of end-of-life-vehicles or to create the corresponding employment opportunities.
As a result, the deployment of older employees in this area of work either means that workers
will have to demonstrate greater mobility between firms or those who are currently unem-
ployed will need to be drawn back into work – it is easier to realise both of these aims by
exploiting the existing SGB III rules. Concepts such as these are especially important for the
craft trade sector and for small and medium-sized enterprises in particular as most individual
companies do not have the available capacities needed in order to solve the problems
associated with ageing workforces (age-appropriate alternative workplaces, long-term career
planning). The preconditions for the success of such mobility processes are already in place in
the sense that the type of skills called for in order to carry out dismantling activities dovetail
with those held by skilled workers in the vehicle repair trade and the fact that the activities
involved are fundamentally compatible with working conditions suitable for older employees.
Analyses of activities carried out at existing dismantling workplaces performed in the
framework of the transfer project, reveal that a fundamental condition for the creation of rich
and varied jobs, and thus for the successful implementation of such models, is the further
development of current dismantling practice involving more extensive reconversion activities
and a larger range of parts. In addition, the working conditions offered by currently available
car recycling jobs need to be improved significantly if skilled older employees from the vehicle
repair trade are to be deployed in an optimum way. Source: ISF Munich.

In the framework of the ALFIH project, a second area in which existing jobs can be secured and
new employment opportunities for older workers created was identified in the building and
renovation trade. A continuing training module has been developed in this sector which pro-
motes cooperative skills for intercompany collaboration geared towards developing new tasks
and market opportunities in the field of facility management (cf. Lippe-Heinrich 2001; Wöste
2001).

The creation of additional employment opportunities for older workers (i.e. generating addi-
tional demand for labour resources) is feasible – but it is a costly process and dependent on a
plethora of preconditions being met. Such approaches are important and must be developed
further because of the continuing ageing of the population in particular and because unem-
ployment is set to rise among older workers in the foreseeable future – even if attempts to
prevent older workers from being laid off are successful. Information and sensitization
campaigns can – as the car recycling example has shown – trigger off processes and initiatives.
If it is also possible to provide qualified support, at least during the first few years, the prospects
for enduring success – and for the creation of economic, self-financing jobs – will be enhanced.
Additional jobs for older workers – an intermediary approach between “the market and the state”

Indubitably any approach which promises to create new additional jobs, especially for older workers on the primary labour market or at the very least in “border” areas in which an imminent move to the primary job market appears feasible, deserves to be given much more attention. At the same time, there are many factors which suggest that it is unlikely that the problem of inadequate employment opportunities for older workers can be solved with these means alone, not least because this group of workers includes a considerable number of people who – for reasons which cannot be discussed here – under current conditions are not, or only marginally, “fit for the market” (refer also to Böhle 2000).

None of the subprojects undertaken in the framework of the transfer project focused on these issues. At this point, however, it is possible to refer to certain ideas formulated by the advisory council to the project “Demographic change and the future of work in Germany” under the heading “New fields of employment between the market and the state: combining employment and pensions” (cf. Projektbeirat 1999, page 15ff.).

This paper (our translation) proposed “investigating new forms of publicly-supported employment of older workers...” In this context an essential prerequisite is the political will to delay the transition to retirement and to clarify “how a broad degree of concurrence with these strategies can be elicited from older people who are no longer ‘fit for the market’”.

The advisory council extends its argument:

It is especially important to examine what type of labour is currently in demand and which fields of employment are being neglected which cannot be tackled and organised either by the private sector (i.e. the market) alone or by the public sector in isolation. Study needs to focus on mixed forms of organisation conducive to developing and supporting new fields and forms of employment older workers.

In contrast to an early exit from the labour force, the aim of establishing such new fields of employment must be to ensure that people remain integrated in working life for as long as possible and are able to continue to make use of their skills and know-how. For this reason a decisive factor is that fields of employment are developed which are not only geared towards free-market processes but which, at the same time, do not represent the sole economic foundation of workers’ economic existences. In contrast with the pure “low-wage sector”, the lower market remuneration paid to employers (compared with fields of employment demanding similar levels of skill and qualification) should be combined with transfer income (e.g. wage subsidies, tax exemptions or partial pensions, see below) as well as other work or organisational “perks”, such as more freedom to determine working times, individualized working arrangements, etc. The development of such “new” fields of employment depends on institutional framework conditions which, in particular, promote and support special self-organisation skills and potentials. The systematic definition and testing out in practice of such new institutional arrangements, involving numerous different actors, represents a central
research and development task in this field – a task which links aspects of both company-based and non-market personnel policy. A major focus of this work should be on redesigning the transition from (full-time) employment to (complete) retirement. The option of combining earlier (part) retirement with a later total exit from employment should also be explored. In the same way, existing part-time work options and partial retirement also need to be looked at and, by developing new fields of employment, linked at the intercompany and at the market and state levels.

The main emphasis of this booklet has been to demonstrate that the most important resources for the successful – primarily preventive – management of demographically-determined changes at the company level (in conjunction with a broadly conceived firm-related labour and training policy) are the people on the ground at the company level (in other words, company managers as well as employees and their representatives). Given the scale of the demographic challenge, other factors also play a key role, however:

- It is essential to remember (although this aspect is often neglected) that solutions which are functional and attractive for individual firms may have negative impacts at the regional level or on the labour market as a whole.
- It is also important to realize that, given the massive exclusion of older workers which has already taken place, the habituation, deskilling and frequent stigmatisation processes which have already been initiated may well – even if enough jobs could be created on the primary labour market – stand in the way of a total reintegration of these workers in the primary labour market.

Against this background it would be fair to conclude that, while important approaches have been elaborated, potential solutions outlined and numerous activities initiated, the range of instruments needed in order to manage the process of demographic change in a satisfactory manner are still a long way from being fully developed, to say nothing of being effectively implemented on the ground. This topic is taken up in more depth in the next section.
7 Conclusions

The main reason why a series of research projects funded by the Federal Ministry of Education and Research (BMBF) have concentrated on the impact of demographic change on the world of work was the assumption that ongoing processes of ageing and a shortage of labour would lead to a decline in the innovative ability of German business and industry. Even during the first research phase from 1996 to 1999 it became clear that workforces were ageing at an accelerating pace but that the population of working age would only begin to shrink in the period 2015–2020. The initial research phase also demonstrated that there are nonetheless real opportunities available for managing this ageing process in such a way that it will not have a negative impact on economic development and employment. One serious shortcoming however proved to be that the general public as a whole, and particularly stakeholders at the company level, were very poorly informed and hardly aware of the issues involved in demographic change.

The subsequent transfer project, “Demographic Change: Public Relations and Marketing Strategy”, which got off the ground at the end of 1999 following the conclusion of the research phase and which encompassed 14 specific projects (cf. the outline of subprojects presented in the appendix), has certainly been relatively successful in terms of sensitizing people and stimulating public debate. At the same time – and not surprisingly given the scale and quality of the demographic upheaval – it became clear that the available data and knowledge was still far too scanty and by no means all the required solution strategies and measures had been developed – to say nothing of their implementation. This final section therefore represents an attempt to deduce some further conclusions.

Action at the company level

The problem of “limited periods of work activity” – in other words the phenomenon of workplaces at which employees cannot “grow old” – is one which affects companies in all sectors of business and industry. Redeploying personnel within the company to allegedly less strenuous workplaces is becoming increasingly difficult as many of these jobs have fallen victim to rationalisation processes. This problem has been exacerbated by forms of work organisation within firms which frequently envisage workers remaining at one and the same workplace and carrying out the same tasks over a period of many years so that workers are not confronted with the need to cope with fresh challenges and take little part in the further training programmes offered by employers. As a consequence vocational skills are eroded, employees’ learning skills atrophy, and flexibility and innovation suffer. Job histories of this type often make it very difficult to redeploy older workers in the context of restructuring measures. In other words, a lack of learning skills and flexibility is engendered by work situations throughout employees’ careers. Given the widespread existence of working environments involving arduous tasks and conditions, the primary objective must be to re-establish a situation in which the vast majority of older employees are enabled to remain at work until they reach the statutory retirement age. The work that this involves must be undertaken in the world of work and companies themselves.
The most important options available to companies regarding the management of ageing workforces include:

- **Ageing-appropriate job design and preventive occupational health measures** which will enable workers to remain in their jobs right up to retirement age.
- **Ongoing updating of the knowledge base** by implementing lifelong learning in companies. The maintenance and continued development of the know-how and skills already available to firms will grow in importance to the extent that firms are less able to rely on the recruitment of young staff as a source of new knowledge. More and older employees must be integrated in a continuous process of further training in the future. The fact that older people are still underrepresented among those participating in vocational training measures is not only due to companies’ cost-benefit analyses of investments in training – older workers, too, have so far shown insufficient willingness to engage in continuing training.
- **Avoiding lopsided specialisation and, in contrast, systematically promoting the development of a range of competences and flexibility** by ensuring that people carry out a variety of tasks and are subject to changing work demands throughout their company careers.
- **Supporting the intergenerational transfer of know-how in companies and systematically exploiting the complementary, age-specific skills of younger and older workers** by setting up age-mixed teams.

These personnel and organisational development measures are also essential in order to secure the innovative ability of companies operating with ageing workforces. Innovative ability is not age determined either, but is an expression of the work settings encountered during employees’ working lives. There are numerous examples which demonstrate that companies which operate in markets characterised by a dynamic knowledge base and rapid pace of innovative change can also be highly successful even if they mainly employ older workers. Several of Germany’s traditional branches of industry, such as the machine tools sector, owe a large part of their international success to their experience-based “innovative milieu” which is based on cooperation and exchanges between older experienced developers and new recruits able to offer fresh professional know-how. The youth-oriented innovation model propagated in the computer and software industries is by no means the only – or even the most appropriate – way forward.

In the future even more flexibility will be in demand in the world of work – not only in terms of the times at which workers will be expected to make their labour available but also in terms of the stability of career paths. An increasingly older population of working age threatens to collide with a world of work which demands patterns of behaviour tailored to younger age groups. For this reason, the employment problems confronting older workers are likely to intensify unless counteractive measures are taken in good time and efforts made to implement ageing-appropriate human resources and work-related policies.
Impact on the community as a whole

The fact that measures which may make perfect sense – in terms of profitability and effectiveness – for individual firms can have a negative impact on the community as a whole is indisputable. There is, for example, broad agreement that the established practice of shunting older employees off into early retirement shifts burdens on to the social insurance agencies and has exacerbated the miserable state of public finances. No-one now seriously questions that this state of affairs is insupportable.

A further striking example is the way the “Semi-retirement” Act is implemented in practice. The widespread use made of the “block model” is tantamount to the squandering of the potential flanking options available for the productive management of ageing workforces and, in effect, simply continues the entrenched practice of early retirement. Nonetheless, after only a very few years, discussions have at least begun to focus on how potential and appropriate objectives (phased retirement, transfer of know-how, fostering of intergenerational collaboration) can in fact be achieved.

This example demonstrates what is required if we are not only to “cope” with demographic change but to make positive use of the opportunities which it offers – intensive dialogue between all the relevant stakeholders (i.e. companies, employees, political and social insurance institutions, as well as NGOs). This dialogue must be used to clarify that patterns of behaviour and action which may promise to satisfy the short-term interests of one party can, in a broader context, generate much more serious disadvantages and even, in the long run, prove counter-productive for precisely those groupings aiming to profit from them. Dialogue should concentrate on analysing the current situation and evaluating, and subsequently implementing, potential measures in accordance with precisely such criteria.

Medium-term perspectives

In the short and medium term, the accelerating pace at which the population of working age is ageing is a much more important problem than the process of contraction which is set to take place at a later date. For the next 15 years or so it will be possible – based on realistic assumptions – to more than satisfy the demand for labour from existing reserves. These assumptions not only include continuing immigration on a scale roughly approximate to that over the last ten years but, above all, increased female participation rates and the cessation of the early externalisation practices which have so far been pursued so that these strategies do not affect those numerically large age groups, such as the “baby-boomers”, which are now approaching the age of 50.

It is essential that the conditions for increasing the female participation rate – an objective which is by no means contrary to the preferences of women themselves – are created as quickly
Conclusions

as possible. The idea, bandied about as “the reconciliation of working and family life,” of a package of measures including child-care facilities and alternative working-time practices is so important because initiatives of this type are essential if we are to avoid the negative repercussions which an increased female participation rate may have on long-term demographic developments.

The failure, induced by early retirement practices, to exploit the skills and qualifications acquired by the members – of both sexes – of the baby-boomer generation represents a huge waste of human resources. Given the increasing losses in pension rights associated with early retirement, this form of early exit from work will cease to meet with the same degree of “voluntary” acquiescence as it has done in the past. If companies, and the economy as a whole, are to remain competitive despite operating with increasingly older workforces which, in the near future, will be mainly fed from the population bulge age groups born in the post-war era, the health and work capacities of these cohorts must be conserved. However, actions oriented towards improving working and occupational health conditions and facilitating lifelong learning should not be narrowly focused on the older working population but must encompass all age groups, in particular today’s mid-age generations. Leaving aside humanitarian considerations altogether, the very fact of demographic change demands that we treat our human resources very differently than we have done in the past. As it would be fair to assume that work demands are likely to increase in such a way that workers will be expected to provide higher levels of qualification and to cope with even more knowledge-intensive processes, the investment of more resources in the vocational and further training of all age groups by companies – as well as at the macro-economic level – will assume vital strategic importance in terms of competitiveness. Skill and health-promoting measures must be initiated immediately if the population bulge age groups are to be kept in employment for longer than was usually the case in the past.

Labour market policies

In the short term creating the right supply and demand-side conditions for boosting employment levels are just as important as the package of health and learning measures discussed above. While the group of “older workers” is currently made up of the markedly under-represented age cohorts born in and around 1945, this only represents a temporary respite as far as the problem of unemployment among older workers and their premature externalisation is concerned – the current let up in demographic pressure is only very short term in nature. For this reason specific action in the framework of active labour market policies for older workers will continue to be required for many years to come. Despite widespread criticism, many measures – from job creation schemes through to training and wage cost subsidies – are proving to be both appropriate and necessary. Even if the central focus has to be on (re)integrating people in the primary labour market, financing work is still preferable to paying for unemployment or for measures which merely relieve the pressure on the labour market.

47 It should be emphasised that this problem also effects, or should effect, men.
Nonetheless, much more thought needs to be given to other ways of creating new fields of employment and occupation. Older workers will, at any rate, continue to be an important target group for employment promotion schemes for some time to come. As this target or problem group is even set to grow in importance, considerably more attention needs to be paid to this group in terms of the ongoing development of labour market policies.

**Immigration**

Demographic change and the issues associated with it has sparked intense political debate recently; but the aspect which has raised the most passionate discussion has been the case for and against the immigration of workers from abroad. Quite clearly those who favour encouraging immigration are not only concerned with the important issue of how to create reliable framework conditions for immigrants (as well as for the established population), they also emphasise the need for more workers from abroad to deal with the alleged gaps in the workforce in particular fields. However, in this context it is important to note the following:

- Even during periods of mass unemployment companies do, from time to time, find themselves in a situation in which it is difficult to find the specific skilled labour that they require, or at least not on terms which they regard as acceptable. Nonetheless, estimates bandied about in public discussion of the actual scale of this dearth of “skilled labour” are controversial.
- To date, the causes of the shortage of skilled labour have had little to do with demographic factors but are related to the disequilibrium between the supply and demand for labour on regional labour markets. To some extent, these shortfalls are in fact due to the failure of the relevant companies to provide enough vocational and further training themselves.
- Many imbalances can be explained by inadequately attractive working conditions or exaggerated expectations about the qualifications which applicants should be able to offer: it is just as rare to find firms or personnel officers who are wholly satisfied with the skills of existing workforces or of available job applicants as it is to find workforces for whom there is no leeway for improving their working conditions, their remuneration, or their promotion and qualification opportunities.

Under these conditions, the managed and controlled “import” of labour with specific qualifications may make a great deal of sense. However, as long as there is an oversupply of labour (and all the reliable labour market projections predict that this will be the case for a very long time to come) immigration must not be allowed to displace the provision of incentives needed in order to develop the required skills among the resident labour force (including in particular support targeted specifically at older workers). Even the planned arrival of specifically qualified labour is problematic unless particular preconditions are met – uncontrolled immigration would have much more negative consequences.

Given that calls for rapid and increasing immigration from the Eastern European candidate countries are emanating from certain important quarters, it is essential to point out that more immigration from these countries would not only bring direct disadvantages for Germany. Such
immigration would have even more negative effects on these neighbouring countries which would lose part of the stock of qualified labour they have expended so much effort in building up and which they urgently need during the current economic “catching-up” phase.48

Transfer of results

What steps can be taken to ensure that the useful experience drawn from tried and tested concepts for deploying ageing workforces, securing innovative ability and adopting “ageing-appropriate personnel policy” which have been successfully implemented by companies are not only elaborated and documented but, as far as possible, are also put into wide-scale practice?

Most of the projects run as part of the joint transfer project, as well as many other key research efforts, focus in particular on identifying, analysing and describing best or good practice. This approach certainly offers a number of advantages, particularly as it is easier to rouse the interest of one important target group – those actually involved in practical work on the ground – by drawing on case studies rather than comprehensive, detailed studies. There can be no doubt that many of the relevant stakeholders are very interested in expanding the exchange of lessons learned between such “good practice companies” – in the long run such a process of mutual learning and cooperation may actually help to turn “good” practice into even “better” practice.

However, if the aim is to have an influence on the broadest possible front, it is important not to overlook certain limitations inherent in this approach. Firstly, relatively few firms (and other institutions) are able to offer examples of model solutions which are, in themselves, sufficient to stimulate not only the required change processes but also to ensure that such processes are followed through to a successful conclusion. This is particularly true of the large number of small and medium-sized enterprises which, as this booklet has demonstrated, have an especially important role to play in the management of demographic change but which, at the same time, are in most cases comparatively ill-prepared and equipped to fulfil such a role.

If as many of these companies as possible are to be reached – and it is absolutely vital that they are – then it will not be enough just to make such model examples available. The next essential step is for these examples to be analysed from various angles, compared, and, above all, studied in terms of the specific preconditions which were met in concrete cases before such models could be implemented in practice. The groundwork would then be laid which would enable answers to be given to decisive questions posed by companies wishing to “follow a good example” – whether, for example, they already fulfil roughly comparable conditions (e.g. in terms of production resources, the qualifications of their workforces, or the capacity of the

48 The damage would not be limited to these countries alone but would also affect the other EU states once the accession states become full members of the community as the key – and inescapable – goal of achieving greater parity in living conditions between old and new member states over the medium-term would then require even more financial resources to be transferred to the new member states.
Conclusions

regional labour market) or have the means (or are able to mobilise them) for creating these conditions. This would also make it possible to classify such model approaches and to determine to what extent they might be feasibly implemented on a larger scale.

A good example in our area of study is the “youth-oriented personnel policy” discussed in this booklet. There will, as we have shown, always be some companies which will have the scope for action⁴⁹ which enables them to stick to this type of strategy. As the size of future generations of workers dwindles the harder this behaviour will affect other firms which are not able to cream off the very best labour on offer and the more problematic it will become for less attractive companies to imitate this recruitment pattern.

Summary

The aim of this booklet was not – indeed it could not be – to look at all the unanswered questions relating to the theme of “demographic change in the world of work”, let alone to find answers to specific issues. What we have attempted to achieve in this booklet is to draw on a number of examples which demonstrate that – not least thanks to the work funded by the Federal Ministry of Education and Research (BMBF) – some success has now been achieved in raising public awareness of the phenomenon of demographic change and encouraging the will to take action. It has also been possible to make important interactions transparent and to develop model solutions. Although there is still a great deal of work ahead, an important step forward has been made in tackling the task of managing demographic change in a way which is not only socially responsible but which fosters innovation. In order to finish this task it will be necessary to initiate cooperative processes between all the relevant stakeholders in the community which develop a self-reinforcing dynamic of their own. If this booklet has managed “to set the ball rolling” and to kick off a process in which social science research can continue to play a monitoring and supporting role, then it will have fulfilled its purpose.

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⁴⁹ Well ahead in the “demand queue for labour”.

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Brief presentation of the subprojects

The following section provides brief sketches of the institutions taking part in the transfer project “Demographic Change: Public Relations and Marketing Strategy” outlining their projects, contacts, main results and consultancy services. Please contact the projects directly for more detailed information.

Up-to-date results and numerous documents are available on the project website at www.demotrans.de.

Key topic

Balanced age structures and the innovative ability of companies

Old and young in company workforces. Intergenerational personnel policy as a competitive factor

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Objectives

Orientation of company human resources strategy towards long-term objectives: Age-mixed workforce structures, (age)balanced personnel policy

Results

Three consultancy modules in booklet form:

• The population gap: Promoting awareness and enhancing perceptions of the relevant problems and the demographic time bomb
• Early-warning indicators: Presentation of model solutions and human resource concepts tailored to the needs of different types of company
• Lifetime work models: Reorientation of personnel management towards the long-term maintenance of the work and innovative ability of all age groups
• The documents are also available at www.demotrans.de.
Dynamic job design for younger and older innovators

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Objectives
Consultancy concept for the dynamic design of jobs for innovators in response to the shortfall in engineers and in order to secure the creative potential of older engineers.

Results
• CD-ROM dynamic job design: Activity-related support for the interaction between younger and older innovators involved in product development; case studies and management proposals
• Printed guide: Materials designed to promote the awareness of human resources managers, management and inter-company multipliers

Growing innovation with and for all age groups – consultation services for small and medium-sized enterprises for the design of innovation-friendly work settings

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Objectives
Consultancy services for small and medium-sized enterprises with aged-centred workforce structures: analysis of innovation potential and inhibiting factors designed to support the design of innovation-friendly work settings.

Results
• Consultancy model in folder form
• Guidelines for raising awareness of the issues
• All the documents are also available at www.demotrans.de.
Intergenerational teams in the innovation process

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**Objectives**  
Development of a consulting instrument for the formation of age-mixed teams in the innovation process based on integrated innovation and human resource management

**Results**  
- Checklist: Team formation in the innovation process – a self-evaluation guide for innovative companies  
- Set of slides: Recommended actions relating to team formation in the innovation process  
- All the documents are also available at www.demotrans.de.

Key topic

**Ageing-appropriate work and personnel policy**

Consultation of software development companies on the impact of changes in age structures

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**Objectives**  
Raising the awareness of personnel officers, software developers and industry-wide participants. Career development solutions, training and the role of older software developers.

**Results**  
- Booklet including models, guides to practice, checklists and self-evaluation tests on the integration of older developers for software companies and software developers.  
- Publications on: age-mixed team formation, personnel development, the management of continuing training, job changes and career planning  
- All the documents are also available at www.demotrans.de
Designing work and careers to manage limited working lives in the context of intergenerational exchange

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Objectives
Concept developments for the extension of productive occupational duration in the industrial and service sectors

Results
• Consulting and awareness concepts and materials
• Concepts for industry-wide intermediary participants

Designing careers in small firms

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Objectives
Development of a modular human resource management model for the craft trade sector oriented towards the successful recruitment, retention and employability of employees up until the statutory retirement age.

Results
• Practical guide to action for companies
• Seminar modules for executive training and continuing professional development
• Set of slides
• All the documents will also be made available at www.demotrans.de.
Ageing-appropriate flexible work arrangements in the craft trade sector

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**Objectives**
Development of individual strategies for craft trade firms for employees aged 40 and over, including advanced training and consultancy concepts in the area of cooperative service provision and facility management.

**Results**
- Further training for skilled craftsmen and management staff relating to the problems and opportunities generated by demographic change
- Training in cooperation management
- All the documents are also available at www.demotrans.de.

Lifetime working-time arrangements in geriatric care

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**Objectives**
Development of models of lifetime working hours in geriatric care which enable employees to continue working in their profession for a longer period of time and which support the improved integration of work, training, and leisure.

**Results**
- Guide to action, lifetime working-time arrangements
- Self-assessment checklist
- Questionnaire for an employee survey
- All the documents are also available at www.demotrans.de.
Consulting strategies for an ageing-appropriate work and personnel policy

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Objectives
Development of ageing-appropriate work and personnel policy measures relating to health management, training concepts and company guidelines.

Results
• Set of slides for internal company events
• Booklet: Guide to action for an inclusive approach to health management
• Booklet: Guide to action for strategies geared towards the ageing-appropriate management of group work
• All the results are also available at www.demotrans.de.
Key topic

Employment and new fields of occupation for older employees

Awareness and activation for the problems facing older workers in the region

Objectives

Informing, sensitizing and activating the regional public and stakeholders regarding the problems of older workers in the form of events, publications and initiatives for people threatened with unemployment, the unemployed, and the “hidden reserve”.

Results

• Set of slides on the state of the labour market and the subject of the older unemployed
• Questionnaire for internal company surveys
• Documentation and materials for events
• Numerous documents are also available at www.demotrans.de.
Solving used vehicle problems and creating jobs for older employees in the automobile trade

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**Objectives**
Models solutions for the creation of jobs which enable the vocational qualifications and know-how of older workers and those threatened by unemployment to be exploited.

**Results**
- Guide to action for mobilisation processes
- Set of slides: Demographic change – what can the craft trade sector expect?
- Documentation: specialist meetings
- The documents are also available at www.demotrans.de.

Sensitization of non-public labour market mediators to the problems confronting older workers – potentials and barriers

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**Objectives**
Identifying the prerequisites and conditions required if non-public labour market mediators are to be willing and able to extend their services significantly to include older workers.

**Results**
- Booklet: Sensitizing private providers of personnel services to the issues
- Documents are also available at www.demotrans.de.
Key topic

Activation of intermediary institutions

Sensitization and activation of intermediary institutions to the problems confronting older employees

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Objectives
Activation of intermediary institutions in terms of support for ageing-appropriate forms of employment and implementation of concrete actions involving selected intermediaries.

Results
• Guide: Support for intermediary institutions
• Working papers for educational institutions, trade unions, chambers and industrial compensation societies
• All the documents are also available at www.demotrans.de.
Coordination

Central coordinating body for the entire joint transfer project

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Objectives

Promoting awareness of the challenges and opportunities linked to demographic change in the world of work. Dissemination of solution concepts and results as well as stimulating public debate.

Results

- Provision of a broad range of up-to-date information on the joint transfer project's website at www.demotrans.de
- Publication and editorial work on the booklet series “Demography and Employment”.
- Networking of various activities and stakeholders as well as transferring the results of conferences and events.
Brief presentation of the subprojects
Further information about the contents of overall project is available from:

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The project is funded by the Federal Ministry of Education and Research (BMBF) as part of the programme “Innovative work arrangements and the future of work”.  
Project number: 01HH9901/0
Demographic change in the world of work

Opportunities for an innovative approach to work – a german point of view

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