

Policies for an Ageing Workforce

Work-life balance, working conditions
and equal opportunities



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**FOREWORD by
Commissioner Marianne Thyssen**

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*Report of a CEPS - NIESR - FACTAGE
and Eurofound conference*

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FACTAGE - Fairer Active Ageing for Europe

FACTAGE is a Joint Programming Initiative – More Years, Better Lives – project.

Starting from the premise that there is considerable scope to increase the average length of working lives and promote active ageing in its many facets, the [FACTAGE](#) project recognised that this potential demands attention to equality, not least prospectively. The fundamental issue of how to match the requirement to work longer with concerns about intergenerational distribution was also a focus of this project.

The project is jointly funded by national research foundations in Belgium, Germany, Austria, Spain and the UK. The research consortium is led by CEPS (Belgium) with NIESR (UK), Statistics Austria, the University of Koblenz Landau (Germany) and the University of the Basque Country (Spain) as partners.

Visit the project website – www.factage.eu – for more information.

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Contents

Foreword <i>by Marianne Thyssen, European Commissioner for Employment, Social Affairs, Skills and Labour Mobility..i</i>	
Executive summary <i>by Mikkel Barslund</i>	iii
Work-life balance over the course of working life <i>by Robert Anderson</i>	1
'Til work do us part?' Domestic relationships in extended working life households <i>by Nathan Hudson-Sharp, Andreas Cebulla, Lucy Stokes and David Wilkinson</i>	6
Work-life balance policies and reconciling work and care <i>by Gerd Naegele</i>	11
Working conditions at different ages: a sustainable work perspective <i>by Oscar Vargas</i>	16
Working conditions and the length of working lives <i>by Mikkel Barslund, Andreas Cebulla and Jacob Gareth Stauning Prewett</i>	22
Socio-economic inequalities in mortality and health <i>by Johannes Klotz and Tobias Göllner</i>	27
Extending working lives through flexible retirement schemes <i>by Hans Dubois</i>	32
Skill mismatch among older workers and workplace performance in Britain <i>by David Wilkinson, Lucy Stokes, Andreas Cebulla and Nathan Hudson-Sharp</i>	38
Skills mismatch among older workers <i>by Markus Bönisch, Jakob Peterbauer and Eduard Stöger</i>	44
Changing patterns of older workers' employment: evidence from Austria, Germany and the UK <i>by Charlotte Fechter and Werner Sesselmeier</i>	51
What factors drive longer working lives? <i>by Mikkel Barslund and Gilles Thirion</i>	57
Active ageing: much more than paid work <i>by Alan Walker</i>	63

List of Figures and Tables

Figure 1. Employees providing care to children or grandchildren, by gender and age group (%)	3
Figure 2. Employees providing care to disabled or infirm persons, by gender and age group (%)	3
Figure 3. Hours spent per week on housework for coupled men and women, by working status (pre and post retirement)	8
Figure 4. Hours spent per week on housework for coupled men and women in lower-skilled households, by working status (pre- and post-retirement) ..	9
Figure 5. Index of physical risks by age	17
Figure 6. Percentage of workers reporting impact of work on health by age.....	18
Figure 7. Self-reported health status by age: share of workers reporting good health.....	20
Figure 8. HR policies and age of effective retirement	23
Figure 9. Job satisfaction and educational attainment, 50-59 year olds.....	25
Figure 10. Age-adjusted mortality risk of Polish males	30
Figure 11. Partial retirement schemes, EU28 and Norway 2016.....	34
Figure 12. Perceptions of skill (mis)match among employees in 2004 and 2011 – percentage of workers reporting how their skills relate to current job needs	40
Figure 13. Perception of skill mismatch among employees in 2011 by age – percentage of workers reporting how their skills relate current job needs.....	40
Figure 14. Skill mismatch measure	45
Figure 15. Literacy skills (left graph) and skill use (right graph) by age in the five FACTAGE countries (only currently employed persons).....	46
Figure 16. Literacy under- and over-utilisation (25-49, 50-65) in the five Factage countries	47
Figure 17. Numeracy under- and over-utilisation (25-49, 50-65) in the five Factage countries.....	48
Figure 18. Share of 55-64 in 15-64 population and employment rates of 55-64 from 2000-2016.....	52
Figure 19. Development of labour volumes in the age group 55-64	53
Figure 20. Employment structure, 55-64 year olds	54
Figure 21. Labour market participation rates for 55-69 year olds in the EU (men and women)	58
Figure 22. Decomposition of changes in activity rates among the 55-69 year olds..	59
Figure 23. Decomposition of the explained part with confidence intervals, 55-69 year olds	61
Table 1. Retention probability across the countries studied	55

FOREWORD

*BY MARIANNE THYSSEN,
EUROPEAN COMMISSIONER FOR EMPLOYMENT,
SOCIAL AFFAIRS, SKILLS AND LABOUR MOBILITY*

We are all growing older. On average, life expectancy increases by three months every year. Seen over the span of the last century, this is a testament to enormous social progress.

But since we are living longer, we also need to work longer so that the proportion of life spent in employment remains more or less constant. This is the basic premise for maintaining not only our pension systems but also the welfare state, solidarity between generations, and the social fabric.

However, to make sure that everyone can work longer, it is not just pension systems that need reform. We need to promote active ageing, so that people who live longer are also healthy, both physically and mentally, and can therefore also work longer. We need workplaces to be adapted to ageing. We need working times to be adapted to people's needs throughout life, and we need to maintain and update skills.

It is not just long life that puts our pension systems under pressure, also the world of work is changing. Today, around 40% of working people in Europe are in self-employment or employment that is not permanent or full-time. In the future, people will switch jobs and careers even more often during their lives. A combination of jobs also means a mix of pension contributions. Career gaps can cause holes in pension coverage. That doesn't only impact people, who could face lower pensions, it also potentially undermines our pension systems.

Moreover, the gender gaps in pay and pensions remain staggeringly large. Because of differences in earnings, career length and work intensity, women are more likely to receive inadequate pensions. That is not just unfair, it is simply unsustainable at a time when we need everyone to contribute to our economy and our pension systems, to keep them afloat.

During my mandate, the European Parliament, Council, and Commission solemnly proclaimed the European Pillar of Social Rights. This is a framework to modernise employment and social policies in view of the challenges of the 21st century, keeping the individual at the centre of it all. With the European Pillar of Social Rights, policymakers have the right compass to make the right choices. Member States agreed to ensure access to social protection for all workers and the self-employed. Together with social partners, they carry out reforms that often directly follow the guidance in our country-specific recommendations. They increasingly link sustainability gains to measures that safeguard pension adequacy. They take measures to prolong working lives, limit early retirement, and link pensions to life expectancy. These efforts are bringing results: we have 11.4 million more older workers in employment than in the past decade. Nevertheless, we need to do more when it comes to pension reform. We need to look at supplementary pensions, which are becoming more common. Together, we have to figure out how to make them a cost-effective and broadly accessible source of retirement income.

Skills are also an important part of the jigsaw. If we want our people – old and young – to have quality jobs and be able to fully participate in today’s economy and society, then investment in skills and lifelong learning for everyone are the preconditions that pave the way.

However, ageing does not just pose challenges. If Member States promote the right active ageing approach, this also offers opportunities. Firstly, active ageing means more social opportunities. Older people contribute to society too. We should empower them to work, learn and volunteer, according to individual needs, preferences and capacities. Secondly, active ageing means economic opportunities. Older people represent a growing market. Servicing this market will lead to business opportunities and innovations in which Europe could be a leader. And the experience and expertise of older people is an indispensable asset for our economies – an asset that grows when they can properly pass on the torch by mentoring younger generations.

In short, we must continue to meet the challenges and opportunities of an ageing world.

This publication is a useful contribution to that debate.

EXECUTIVE SUMMARY

BY MIKKEL BARSLUND

At a time of rapid population ageing, a key means of sustaining current welfare states is to extend the length of working lives. In 2050, the share of people over the age of 75 years will be the same as the share over 65 years today. And just as not all are able to work to the age of 65 now, not everyone will be able to work to the age of 75 in 2050; even if future older workers will in all likelihood be healthier and have better working aids at their disposal.

Extending average working lives by 10 years, and at the same time ensuring an adequate social safety net for those unable to work into their late 60s and 70s, is a major social policy challenge for the coming decades. And because people are much more likely to work late in life if they had stable careers before reaching 60, tackling this policy challenge means pulling on many more social policy levers than just pension policy.

While being keenly aware of these issues and how they relate to the overall agenda of active ageing, Commissioner Thyssen also reminds us in her Foreword that marked increases in life expectancy – both past and in the future – represent enormous social progress. The Commissioner makes the point that older people too contribute to society. And more so with lifelong learning and investment in skills.

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Robert Anderson also takes a life-course perspective in his contribution on work-life balance and caring commitments, based on Eurofound's European Quality of Life survey. While the role of caring is widely spread over the life cycle, he notes that 27% of women aged 50-64 care for infirm or disabled people at least once a week, and that demographic group has seen – and will continue to see – notable growth in labour force participation, thereby increasing the potential for issues related to work-life balance.

This gender dimension is what Nathan Hudson-Sharp, Andreas Cebulla, Lucy Stokes and David Wilkinson zoom in on in their chapter when they look at the domestic division of labour within households around the time of retirement. Given the number of hours spent on domestic chores – women do more, men less, this is an under-researched topic. As the length of women’s careers is set to catch up with that of men, they find that working longer may perpetuate unequal divisions of domestic labour.

Work-life balance emerges again as an important theme in Gerd Naegele’s contribution, when he emphasises the importance of analysing and learning from policies at the level of companies to extend working lives sustainably. Sustainability and working conditions – related primarily to the impact on health – is also prominent in the chapter by Oscar Vargas. He observes that working conditions characterised by a good physical environment and working time autonomy are particularly conducive to longer working lives. He cites findings showing that older workers report better than average work-life balance, reminding us of the importance of considering a life-course perspective on the sustainability of professional careers.

Mikkel Barslund, Andreas Cebulla and Jacob Gareth Stauning Prewett address the question of how much longer people work when job satisfaction is high. They report that job satisfaction among older workers is in fact already rather high; around 90% of workers report being very satisfied or satisfied with their job. However, findings suggest that 10% of unsatisfied workers would work on average 9-12 months longer if their job conditions were satisfactory. They conclude that better working conditions – though desirable – will not by themselves increase the average length of working lives substantially.

Two chapters relate to pension policy. First, Johannes Klotz and Tobias Göllner, based on their extensive work on socio-economic inequalities in mortality and health, question the fairness of uniform pension ages when there

... there are large differences in life expectancy between individuals with low and high educational attainment.

are large differences in life expectancy between individuals with low and high educational attainment. They underpin their argument by pointing to the link between poor health and high mortality. One option to relax strict uniform retirement ages is that of partial retirement; the topic of the chapter by Hans Dubois. Almost half of workers aged 50 or over in the EU would like to reduce their working hours. Partial retirement schemes may meet this demand and at the same time facilitate longer working lives. However, as noted, it is a delicate balance between serving those in need and limiting attractiveness for those with working conditions that enable them to work full time for longer. He concludes that well-designed partial retirement reforms have the potential to extend working lives.

A prerequisite for staying in employment is to have skills demanded by the labour market. Two chapters are concerned with older workers skills, and specifically the utilisation of skills. The contribution by Markus Bönish, Jakob Peterbauser and Eduard Stöger looks at skills mismatch across working lives. Their positive conclusion – at least seen from an ageing society perspective – is that older workers are more likely to (over)use their acquired skills. The second chapter on skills usage, by David Wilkinson, Lucy Stokes, Andreas Cebulla and Nathan Hudson-Sharp is concerned with skills mismatch and job satisfaction, based on data from the UK. They find that individuals whose skills are either underused or overused express less satisfaction with work, and that this relationship is stable across the life cycle. What emerges is that when it comes to skill utilisation in the workplace, older workers are in fact not much different from the average employee.

Following on from the issue of skills, Barslund and Thirion consider, among other things, how far changes in educational attainment have been a driver of the observed increase in labour market activity among 55-69 year olds over the past decade. They find that it has, but only to a small extent. For the nine EU countries covered by their study, increased average educational attainment is associated with only a 1 percentage point increase in labour market activity for 55-69 year olds. This compares with a total increase of 15 percentage points (13 for men and 17 for women). Overall, their findings suggest that pension reforms, together with reforms to access early retirement, could explain most of the increase in labour market participation. Charlotte Fechter and Werner Sesselmeier look in more detail at employment of older workers in Germany, Austria and the UK. They point out that the increase in employment among 55-64 year olds goes hand in hand with an increase in part-time work in Austria and Germany, which is not the case in the UK or in the EU28. They attribute this finding to the mushrooming of so-called mini-jobs in Germany and Austria.

The closing chapter asks us to consider the much broader agenda of active ageing in full. Alan Walker –

building on his body of research stretching back 40 years – indirectly makes a forceful argument for viewing much of what is written in the previous chapters through the lens of a comprehensive societal strategy to realise the potential of ageing societies. He warns against too narrow a focus on prolonging employment. Rather, he frames the policy challenge as one of

Alan Walker – building on his body of research stretching back 40 years – indirectly makes a forceful argument for viewing much of what is written in the previous chapters through the lens of a comprehensive societal strategy to realise the potential of ageing societies.

... [joining] up the separate domains - employment, health, social protection, social inclusion, education, transport and so on - so that they are mutually supportive,

which is a message I suspect most of the contributors to this volume would endorse.

This book gives concise and valuable insights into the most important issues surrounding the social policy challenge of extending working lives.

WORK-LIFE BALANCE OVER THE COURSE OF WORKING LIFE

BY ROBERT ANDERSON¹

Reconciliation between working and non-working life is a longstanding interest of the EU institutions, member state governments and social partners. At EU level, the issue of work-life balance has predominantly concerned work and the parental care of young children; however, challenges to work-life balance increasingly stem from the ageing of the population. This brings responsibilities for caring for disabled and infirm people. In general, the issue of work-life balance has been high on the EU policy agenda, being associated with both gender equality and access to social protection. In the most recent policy initiatives at EU level, in November 2017 at the Gothenburg Social Summit for Fair Jobs and Growth, the European Pillar of Social Rights was proclaimed.

The Pillar is intended to renew the process of upward convergence in living and working conditions in the EU (European Commission, 2017). A key principle of the Pillar is to develop a set of initiatives that refocus work-life balance as an issue affecting citizens and workers over the life course. To this end, it includes the initial proposal for a Directive on Work-life Balance for parents and carers, reflecting growing concern about meeting workers' care responsibilities at all ages during working life. The Directive aims to modernise the existing legal framework by introducing carers' leave and paternity leave, and by extending the right to request flexible working time arrangements. (It also includes less detailed principles to promote affordable early childhood education and care and long-term care of good quality.)

Eurofound's European Quality of Life Survey (EQLS) supplies data that give a picture of care responsibilities in the EU and of issues related to work-life

¹ Robert Anderson has worked for more than 30 years on health, living conditions and quality of life in addition to a range of related topic. Most recently he was the Head of Living Conditions and Quality of Life Unit at Eurofound.

balance. The survey has been conducted four times – in 2003, 2007, 2011 and 2016. Face-to-face interviews are conducted with the resident population aged 18 years and over in private households in all member states. In the most recent survey, fieldwork ran from September 2016 to February 2017. The data produced are weighted so as to be representative of each member state, as well as of the EU28 as a whole. In the 2016 survey, questions about care responsibilities distinguished between care for children and grandchildren, and also between care for people with disabilities aged under 75 years and those aged 75 or over.

Most people (77%) who have children aged under 18, not surprisingly, care for and/or bring up their children every day. Grandparents also make a significant contribution to childcare. Among grandparents in the EU, 29% of men and 35% of women report providing care and/or education to grandchildren at least once or twice a week. By country, the rates are highest in Cyprus (56%), Luxembourg (51%), Malta (51%) and Spain (42%) (Eurofound, 2017). Provision of care is a responsibility that people exercise over the whole of their working life and indeed into older age. With regard to care for infirm or disabled persons, 12% of EQLS respondents say they provide care at least once

Twice as many women as men care for someone on a daily basis.

or twice a week to someone aged under 75 (11% of men and 13% of women), and the same proportion (12%) of respondents say they are involved in caring at least weekly for someone aged 75 or over (10% of men and 14% of women). The main gender difference

in providing care to a disabled or infirm person relates to daily care: twice as many women as men care for someone on a daily basis. Involvement in care increases with the age of the respondent; this is particularly the case for women, when the recipient is an older adult relative, neighbour or friend.

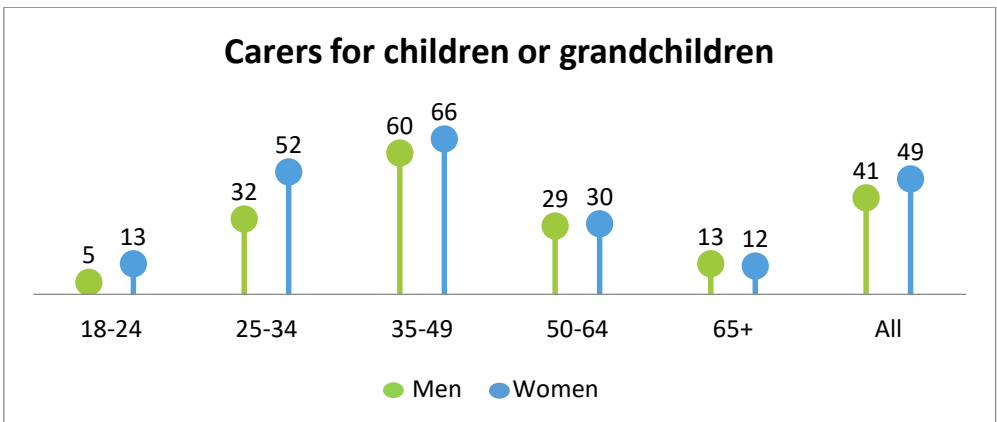
Since 2003, there is no evidence that the proportions of people providing care to disabled persons at least once a week have fallen. However, a better understanding of care provision demands more information about trends in the intensity or frequency of care provision, as well as the tasks performed, and the extent to which care work is shared with other informal or formal providers.

Most people of working age who provide care to disabled or infirm persons are in employment. Overall, among those aged 18-64 years, some 73% of men providing care at least weekly are in paid jobs, compared with 58% of women; these proportions are somewhat lower among people aged 50-64 years (69% and 53% respectively). Among these carers in employment, 39% work 35 hours or fewer per week in their main job; this proportion of part-time workers is higher among female than male carers – 53% compared with 22%.

More than one-quarter of female workers (27%) and a significant proportion of male workers (17%) provide care at least once a week.

The involvement of workers in care can instructively be presented in terms of the proportions who provide care at least once a week (Figures 1 and 2). A high proportion of workers aged 35-49 years are involved in caring for both children and disabled persons, especially female workers. Among workers aged 50-64 – the classic ‘older workers’ cohort – more than one-quarter of female workers (27%) and a significant proportion of male workers (17%) provide care at least once a week for someone with a disability or illness. It is precisely among this population of older women workers (aged 50-64 years) that employment rates have been increasing steadily over the past 15 years.

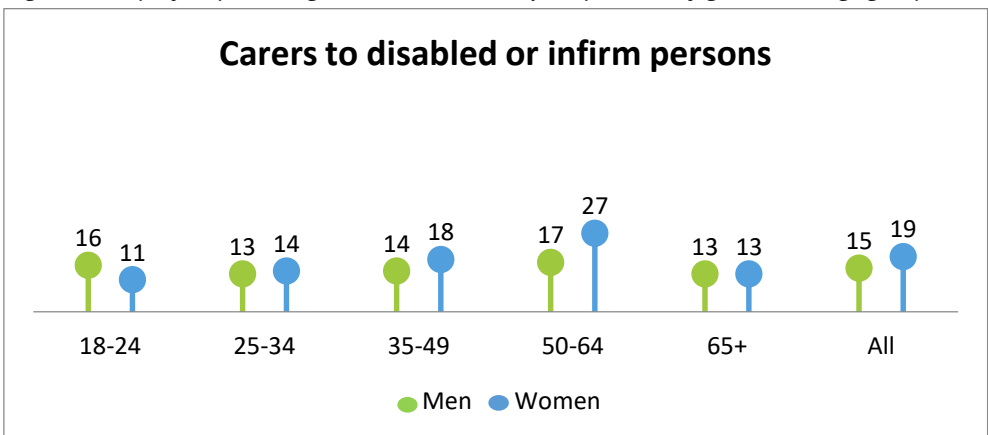
Figure 1. Employees providing care to children or grandchildren, by gender and age group (%)



Note: Proportion of workers providing care at least once a week.

Source: EQLS 2016.

Figure 2. Employees providing care to disabled or infirm persons, by gender and age group (%)



Note: Proportion of workers providing care at least once a week.

Source: EQLS 2016.

The probability of providing care to a disabled or infirm person, as well as the likelihood of being a carer in employment, varies from one member state to another. This is most evident among people providing 'regular care' (several days a week or every day). Overall, one person in eight of working age provides regular care for a disabled or infirm person (9% of men and 15% of women). The employment rate of male regular carers is 73%, compared to 72% for men of working age who are not regular carers; among women of working age, 54% of regular carers are in employment compared to 63% of women of the same age who are not regular carers.

The proportions of people providing regular care vary widely between member states, ranging from over 20% in France and Latvia to only 6% in Germany and 5% in Austria. In general, the proportions of regular carers would

The proportions of regular carers who are in employment are lowest in the Balkan and Mediterranean countries.

be expected to relate to traditions of informal care, as well as to the availability of formal long-term care services. This expectation appears relatively consistent with the figures from the Nordic countries, the Baltic states, Ireland and the United Kingdom. For other countries,

however, the relationship is less clear. The proportions of regular carers who are in employment are lowest in the Balkan and Mediterranean countries.

One specific question in the EQLS asks how easy or difficult it is to combine paid work with care responsibilities. Perhaps somewhat surprisingly, a majority of carers of both children and disabled people report that it is "rather easy" (48%) or "very easy" (15%); only 31% describe it as "rather difficult" and 6% "very difficult". Probably this reflects, in part, accommodations that respondents have achieved by reducing their working hours. In general, between carers of children and carers of people with disabilities, there is no difference in the proportions reporting that reconciliation of work and care is difficult. However, there is a significant difference among workers providing care "every day": among these workers, 36% of carers of children report that combining paid work with care is "difficult" compared with 42% of workers involved in the care of disabled or infirm people.

Overall, women are more likely than men to report difficulties in combining work with care: 40% find it "rather" or "very" difficult, compared to 33% of men. Among those working full-time (35 hours or more per week), 49% of women describe it as rather difficult or very difficult, compared to 35% of men. Again, this difference may reflect differences in the intensity of care provision and/or the tasks undertaken, as well as in the number of working hours and the availability of flexible working arrangements or formal care services. Not surprisingly, there are large differences between member states in the proportion of workers finding it more or less difficult to combine paid work

with care: the proportions of workers finding this reconciliation to be “very difficult” are highest in Greece (22%), Cyprus (18%), Romania (13%) and the Czech Republic (13%); the proportions reporting that combining work with care is “very easy” are highest in Austria (27%), Ireland (26%), the Netherlands (26%), and the United Kingdom (25%).

In conclusion, results from the EQLS highlight the role and contribution of workers at all ages to providing care, both to children and to people with disabilities or infirmities. The new initiative to implement the measures of the European Social Pillar, both legislative and non-legislative, to support workers at all ages with their care responsibilities is clearly moving in the right direction. The data underline the importance of recognising the care provided for disabled people, in addition to that provided by parents for young children. Care for children and disabled people occupies a high proportion of people aged 50 and over, particularly women in the older workforce. The frequency and intensity of this care work demands further policy attention, as it seems clear that women are involved to a greater extent than men in heavier care tasks. Well over half of all men and women of working age who are now providing care to disabled people are in employment, and the proportions of older workers with care responsibilities appear to have increased. Both the likelihood of being a carer, and of being a carer in employment, varies markedly between member states, reflecting at least in part, the (in)adequacy of formal care infrastructures. Care as a barrier to employment has received much attention; balancing care with paid employment – particularly care for disabled people – is likely to become increasingly pertinent for policies in all member states.

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‘TIL WORK DO US PART?’

DOMESTIC RELATIONSHIPS

IN EXTENDED WORKING LIFE HOUSEHOLDS

BY NATHAN HUDSON-SHARP, ANDREAS CEBULLA,
LUCY STOKES AND DAVID WILKINSON²

Facilitating opportunities for a better work-life balance is one key route through which individuals may be encouraged to extend their working lives. Recent years have seen the expansion of a variety of employer-led supportive and flexible working practices that aim to reconcile the pressures of work and home life (Eurofound, 2017). However, while the work-life balance of older workers has increasingly become a focus of employer-related initiatives

While the work-life balance of older workers has increasingly become a focus of employer-related initiatives and research, little is known about the impacts of extending working lives on domestic divisions of labour.

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domestic work than men, limiting their ability to act on an equal footing within the workplace (Lyonette and Crompton, 2015; Kan et al., 2011). Furthermore, while men’s contribution to housework has increased in both absolute and

Gendered domestic divisions of labour continue to be one of the most persistent barriers to gender equality (Lyonette and Crompton, 2015). Despite the increase in female labour market participation, women still carry out more

² Nathan Hudson-Sharp is Senior Social Researcher at NIESR where he undertakes mixed-methods research on poverty and equality. Lucy Stokes is a Principal Economist in the Education and Labour Directorate at NIESR. Andreas Cebulla is Senior Research Fellow at the South Australian Centre for Economic Studies, University of Adelaide and Fellow at the National Institute of Economic and Social Research (NIESR). David Wilkinson is a Principal Research Fellow at UCL’s Department of Social Science and Fellow at the National Institute of Economic and Social Research (NIESR).

relative terms (Kan et al., 2011), normative ideologies of gender continue to strongly determine domestic divisions of labour. This results in women not only continuing to undertake the bulk of domestic chores, but domestic labour also being subject to a significant degree of gender stereotyping and segregation, with men's contributions often limited to shopping, gardening and household repair, at the expense of more routine tasks such as cooking, cleaning and laundry (Kan et al., 2011).

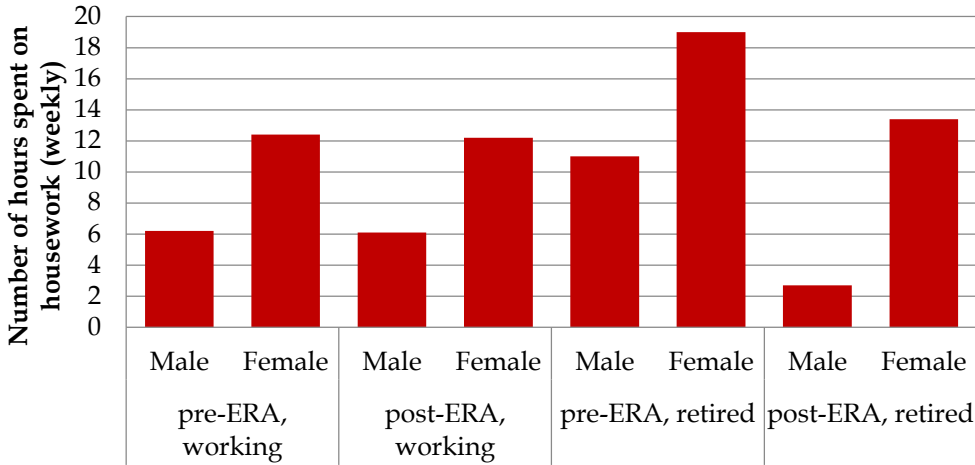
Previous research has shown retirement to offer households the opportunity to reconsider established domestic divisions of labour. This has been identified to be to the benefit of female spouses, with unequal domestic divisions of labour tending to erode (Leopold and Skopek, 2016). Little is known, however, about the impact of extending working life. Of the limited research available, evidence suggests there to be a widening of inequitable domestic divisions of labour in households with post-retirement age workers across Europe (Cebulla et al., 2019). More country-specific research, however, is required as greater numbers of individuals remain in work for longer.

In this study we focus on the UK, using data from *Understanding Society*, a longitudinal survey following around 40,000 households.³ Our initial analysis makes use of cross-sectional data for 2016. We consider individuals living in coupled households and compare those who are five years prior to effective retirement age, with those who are five years post effective retirement age. Figure 3 shows the number of hours men and women reported spending on housework per week, according to whether they were pre- or post- effective retirement age and whether they were in work. This indicates that the contribution men and women make to household domestic chores remains consistently unequal upon extending working life, with women spending at least six additional hours a week on housework compared to men, regardless of their employment or extended working life status.

The contribution men and women make to household domestic chores remains consistently unequal upon extending working life.

³ See *Understanding Society* at: <http://www.understandingsociety.ac.uk/>.

Figure 3. Hours spent per week on housework for coupled men and women, by working status (pre and post retirement)⁴



Note: ERA = Effective Retirement Age.

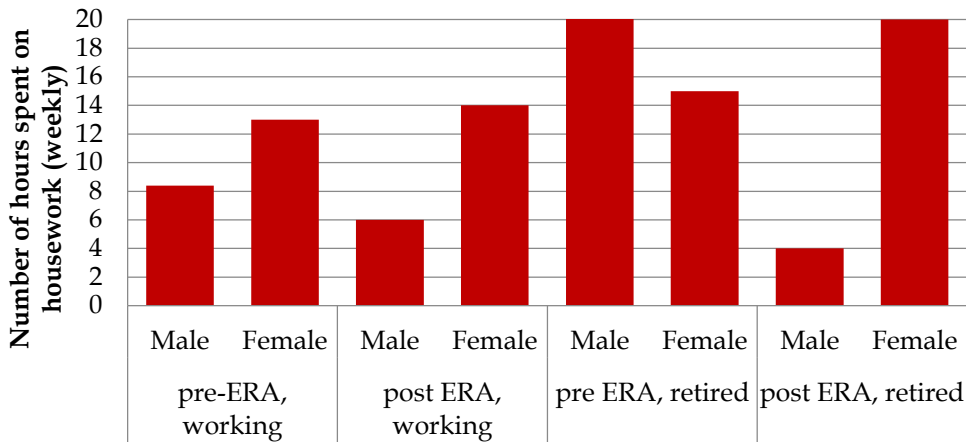
Source: Understanding Society (2016), authors' calculations.

Interestingly, analyses of lower-skilled⁵ households (Figure 3) indicate that while unequal gendered domestic divisions of labour persist in the majority of cases, with coupled women continuing to spend more time on housework than coupled men, for this group early retirement seems to adjust household dynamics. As shown by Figure 4, lower-skilled coupled men who retire early (pre-ERA retired) undertake more housework than their female counterparts, on average. Lower-skilled coupled men who are retired and post-effective retirement age (post-ERA retired), however, do significantly less. These findings coincide with previous research that suggests coupled men within lower-skilled households exhibit greater willingness to undertake domestic tasks, in part due to the financial necessity of female labour market participation, and that couples tend to revert to pre-retirement divisions of housework upon both exiting the labour market (Leopold and Skopek, 2016).

⁴ Pre-ERA (Effective Retirement Age): 59 to 64 for men and 57 to 62 for women. Post-ERA: 65 to 70 for men and 63 to 68 for women.

⁵ Defined using the Registrar General's Social Class as 'unskilled' and 'partly skilled'.

Figure 4. Hours spent per week on housework for coupled men and women in lower-skilled households, by working status (pre- and post-retirement)



Source: Understanding Society (2016), authors' calculations.

Unequal divisions of domestic labour may well have broader consequences for relationships. Studies have found that women who report performing more housework are less likely to be satisfied with their relationship, and are more likely to consider breaking up (Ruppanner et al., 2017). This relationship, however, has been identified to be mediated strongly by societal and personal factors, as well as cultural and personal perceptions of fairness or unfairness. More specifically, perceptions of what constitutes a fair distribution of housework may have little to do with the amount of time spent doing housework, but are rather determined by other factors such as the strength of the relationship between partners (Henchoz et al., 2013) or social comparison as partners compare their experiences with those of similar others (Nakamura and Akiyoshi, 2015). Add to this familistic norms, gendered perceptions of marriage and work, as well as the differentials in earnings rewards (Brown and Roberts, 2014; Lyonette and Crompton, 2015), the relationship between housework and relationship satisfaction becomes increasingly complex.

Our preliminary analysis has suggested, in line with existing evidence, that working longer may perpetuate unequal divisions of domestic labour. In further work, to be conducted as part of the FACTAGE project, we will exploit the panel component of the survey to explore more precisely how the extension of working lives may impact upon domestic divisions of labour within households over time. By doing so, we aim to shed

Our preliminary analysis has suggested, in line with existing evidence, that working longer may perpetuate unequal divisions of domestic labour.

light on the seldom considered ‘work-life balance’ of post-retirement working households with regard to domestic divisions of labour, as well as raise questions regarding the potential gendered inequalities of extended working life.

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WORK-LIFE BALANCE POLICIES AND RECONCILING WORK AND CARE

BY GERD NAEGELE⁶

Policies subsumed under the umbrella of work-life balance respond to both the increasing importance of private life in work and retirement (as explicitly taken up in the concept of workability and employability) and to changes in work-related private needs and motivations, which to a great extent are the result of overall social, demographic and political changes (Naegele et al., 2003).

Starting points are the not directly work(place)-related dimensions of employability – conceptualised as “social environment” and “family” in the “house of workability” (Ilmarinen, 2005). Work-life balance policies are strongly related to the concept of life-course orientation in corporate personnel policies, which has its origin in the idea that in order to change corporate life one has to understand human life, since the latter gives individuals “the strength to cope with everyday chores and provides a basis for a good retirement – or not” (Ilmarinen, 2005: 101):

A life-course-oriented personnel policy means a human resources management system that is strategically adapted to the needs of employees in the course of their work cycles and lifecycles and covers all stages of life from choice of occupation to retirement. (...) It is true that such a lifecycle-oriented human resources management system cannot altogether dispense with – at least approximate – age limits. ... Such systems make it easier to avoid rigid and consequently counter-productive categorisation according to the chronological age, which can also hardly be justified by scientific facts, and instead adapt human resources policy measures more closely to the individual occupational

⁶ Gerd Naegele led the recent JPI More Years Better Life project EXTEND and was a Professor of Social Gerontology at the Technical University of Dortmund (Germany) as well as director of the Institute of Gerontology at the University of Dortmund for more than 35 years.

cycles and lifecycles of the employees, which, by the way, have recently become much more variable" (BMFSFJ, 2010: 123).

German literature proposes a distinction between five lifecycles: occupational lifecycle (from choice of occupation to retirement); corporate lifecycle (relating to the time from joining to leaving a company); job-related lifecycle (from taking up to leaving a position); family lifecycle (from parenting to care-giving to parents/dependants); and a biosocial lifecycle (orientation on 'age-related' changes in performance) (BMFSFJ, 2010: 123). Life-course orientation in older worker policies is a convincing approach because it immediately speaks to quality of work and quality of life as increasingly important dimensions in the decision whether to take (earlier) retirement or work longer. Further life-course orientation addresses significant changes in working life courses in the wake of demographic and social change. In general, the approach convincingly corresponds with the indirect work-related dimensions of the workability concept.

How to foster work-life balance policies is one of the domains of the German Sozial-Holding in Mönchengladbach, analysed in both the MOPACT and EXTEND projects. This company started its HR strategy with scientifically conducted research on the company's age structure and the future need for human capital. The measures refer to a whole range of (explicitly gender-oriented) offers with the concept of *life-course oriented personnel policies* as the underlying anchor. This company was a frequent winner of the AARP (American Association of Retired Persons) award for good practice in company age management. A case study conducted for the project MOPACT (WP 3) reveals the following examples of 'good practice' in the field of life-course-oriented HR policies in this company:

- Shift to part-time jobs temporarily
- Psychological consulting (e.g. burn out, cases of 'double burden')
- Health promotion for 'double burdened' employees
- (Late) career planning
- LLL during work-time interruptions/breaks for private reasons
- Retraining at all ages (*Umschulung*)
- Flexible retirement schemes, offers of 'silver work'
- Measures for reconciling work and private care obligations
- Retirement consulting

In contrast to explicit life-course approaches are those aiming at *risky* life events. With respect to older workers one case stands out in the MOPACT context: reconciling work and care, which has increasingly gained importance for (early) retirement decisions (Reichert et al., 2017). Although of increasing significance, this risk is primarily regarded as an (isolated) social event and not as one needing to be treated as an overarching life-course related issue. So far, care obligations towards children are still treated with more enthusiasm in public policy debates as well as in company personnel policies than the care of elderly persons. Increasing employment rates of older female workers due to generational replacement will especially necessitate innovative solutions. Care leave could possibly be part of the solution, but such policies bear the risk of reducing the labour market attractiveness of some groups (e.g. companies could be reluctant to hire older women since currently this is the group with a high probability of elderly care obligations, and in contrast to motherhood planning, is more insecure). This is confirmed by a recently published report by the European Commission stating that “too little attention has been paid to the role of the carer” since this has been “rarely recognised as a problematic issue as such. In the majority of countries, LTC policies are geared to the dependent person and overlook the carer’s situation” (Bouquet, Spasova and Vanhercke, 2016: 8).

So far, care obligations towards children are still treated with more enthusiasm in public policy debates as well as in company personnel policies than the care of elderly persons.

One of MOPACT’s case study companies that specifically aims to address the issue of reconciling work and care was selected as ‘good practice’: North Warwickshire Borough Council (UK). This company offers ‘Carer’s Leave’. Employers registered as carers with their line manager and HR can save up to two weeks of working time (so the number of hours depends on the number of contracted working hours), and take time off for emergencies or planned

The overarching goal should be a sustainable and socially acceptable extension of working lives.

hospital visits. Generally, this is limited to three weeks per year but can be extended if the line manager agrees. Perbit Software, Fraport and Sozialholding Mönchengladbach (all in Germany) allow their older workers to shift to part-time jobs temporarily in the event of private care obligations.⁷

There are a few lessons to be learnt from MOPACT’s case studies in the field of work-life balance policies, which can be summarised as follows:

⁷ For more examples of ‘good practice’ see the Eurofound report written by Cullen and Gareis (2011).

- Demographic change within the labour market can be shaped positively. In so doing, the overarching goal should be a *sustainable* and *socially acceptable* extension of working lives for all 'in dignity'.
- Policies can only give incentives for longer working lives. It is short-sighted to pursue the extension of working lives on a national/political level if on the meso and micro level relevant key actor groups are reluctant or unprepared to follow. Pension, retirement, employment and disability policies must be *strategically linked* to incentivising and activating employment policies, particularly at company level.
- To aim primarily (or even exclusively) at *financial incentives* is of very limited value if not strategically embedded in workplace-related HR policies aiming to maintain/promote workability/employability.
- The company/employer level is crucial to *enabling* working for longer, as are company-based age-/ageing-management approaches. Particular focus should be placed on SMEs (for different reasons). The concepts of *workability/employability* are the best points of departure for good practices.
- Companies' actions are highly dependent on HR leaders' ideas/attitudes and should be embedded in an overarching positive 'demographic-sensitive' culture. The active involvement of worker's councils and 'end users' is needed. Collective agreements are helpful for facilitating and promoting good practices and financial cost-benefit analyses are crucial to convincing management.

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WORKING CONDITIONS AT DIFFERENT AGES: A SUSTAINABLE WORK PERSPECTIVE

BY OSCAR VARGAS⁸

Demographic ageing implies a greater participation of older people in the labour market. To enable this, it is important to examine the factors that can facilitate or hinder extended working lives. Making work more sustainable over the life course requires working conditions that support individuals to remain in work until the statutory retirement age.

Many factors influence sustainable work: individual characteristics, work-related elements, social norms and the institutional context.

The Eurofound report *Working conditions of workers of different ages* (2017) focuses on certain aspects of working conditions and their outcomes – namely work-life balance, health and well-being, and career prospects as factors contributing to sustainable work and remaining in work until retirement age. The analysis is based on the sixth *European Working Conditions Survey* (EWCS, 2015). The first part of the analysis seeks to identify the working condition factors that have an effect on sustainable work. The second part looks at the distribution of these factors by age groups and finally there is an analysis of differences by occupation and country.

The effects of working conditions on health, well-being, work-life balance and attitude towards work sustainability, as well as their interrelation, are estimated with a statistical method called structural equation modelling. The findings show that poor working conditions have a negative impact on sustainable work outcomes for all employees, regardless of age. Employees who are exposed to physical risks and ‘quantitative demands’ (working at high speed and to tight deadlines) are more likely to experience worse health and a poorer work-life balance. They are also more likely to state that they will not be able to

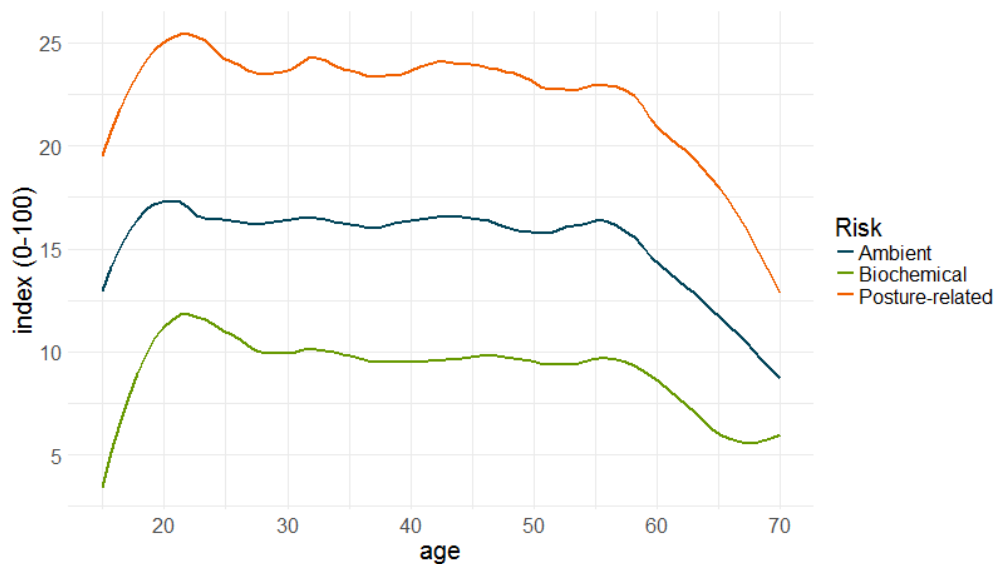
⁸ Oscar Vargas is a Research Officer at Eurofound where his work focuses on working conditions and sustainable work.

continue work until age 60. An intention to leave the workforce earlier is also significantly associated with poor-quality management and experiencing adverse social behaviour.

Some aspects of working conditions remain stable or deteriorate until the age of 55 and then improve. Workers aged 55 and over report less exposure to physical risks (Figure 5), shorter weekly working hours and greater working time autonomy; older employees also report better work-life balance. The improvement of some working conditions and outcomes between ages 55 and 65 reflects the fact that some workers leave the labour market at that stage because of the lack of sustainable working conditions and others are able to adapt their working conditions to their life stage and remain at work. These findings suggest that some workers only continue working until an older age under certain good working conditions.

Workers aged 55 and over report less exposure to physical risks, shorter weekly working hours and greater working time autonomy; older employees also report better work-life balance.

Figure 5. Index of physical risks by age



Source: "Working conditions of workers of different ages", Eurofound report 2017, p. 28.

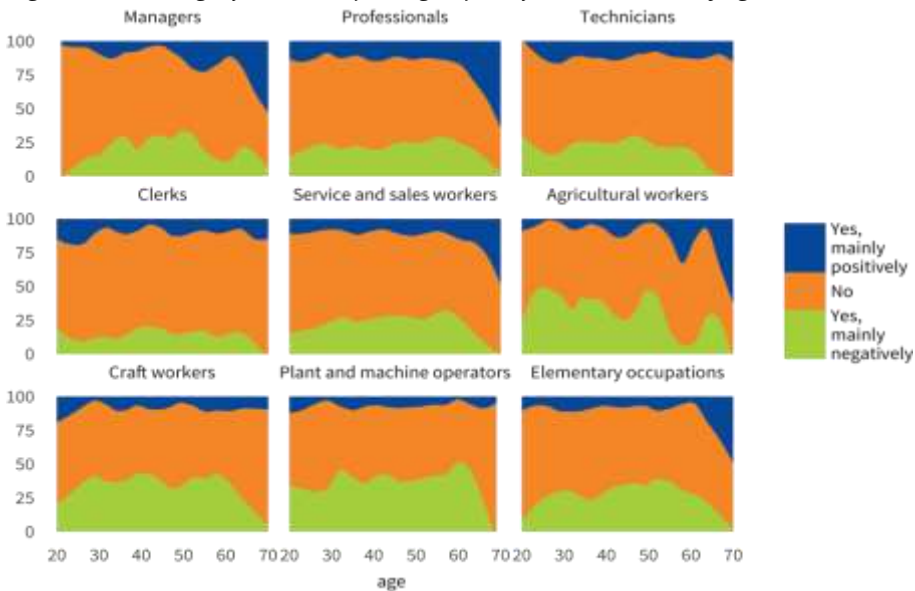
However, older employees also participate less in training, and have more limited career prospects.

There are differences by age in relation to difficult working conditions. Workers aged 45-54 years report fewer quantitative demands but their level of exposure to physical risks is nearly as high as that of younger workers. A critical issue for employees aged 35-44 years is work-life balance, since they tend to work longer hours and have more care responsibilities. Results are mixed for younger employees (aged under 35) regarding the social environment at work. They are more likely to have social support and positive encouragement from their colleagues and boss, but also experience more adverse social behaviour – particularly women. They are also the most likely to work on temporary contracts, which may contribute to the greater job insecurity they report.

The analysis goes on to identify differences by occupation. These differences show that, in general, mid- and low-level occupations have worse working conditions over the life course; in addition, a lower occupational level is associated with poorer health and well-being, and poorer career prospects. For example, at lower occupational levels, health deteriorates with age. The impact of poor working conditions from a young age is likely to accumulate, resulting in poor outcomes at an older age. This is especially relevant for those occupations where workers are exposed to such conditions throughout their working-life. A clear example is the difference between ‘professionals’ and ‘plant and machine operators’ in relation to the impact of work on the health (Figure 6).

A lower occupational level is associated with poorer health and well-being.

Figure 6. Percentage of workers reporting impact of work on health by age



Source: “Working conditions of workers of different ages”, Eurofound report 2017, p. 45.

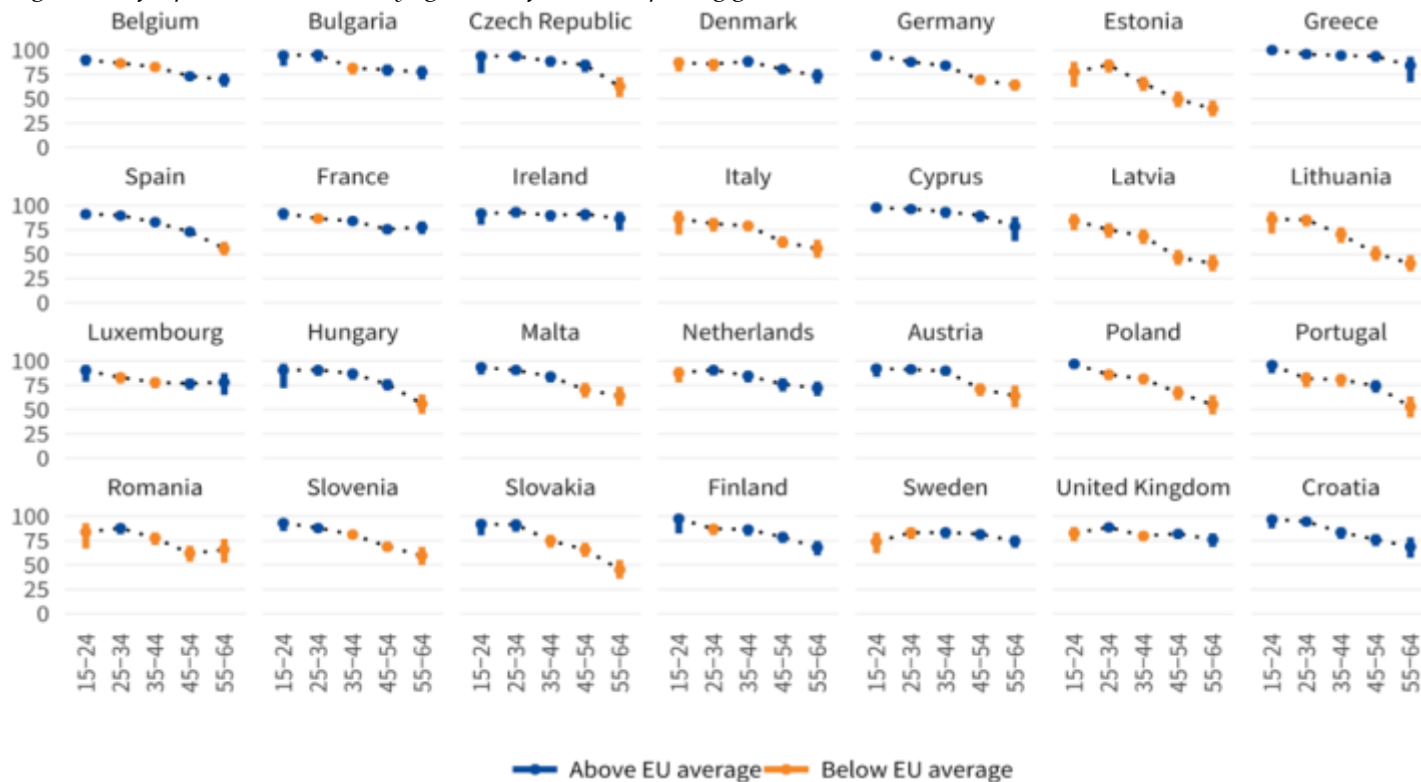
Differences by age group in relation to working conditions vary by country and by age group across countries; differences also emerge in relation to self-reported health status. Some countries present a comparatively poor health status; moreover, the change with age is more accentuated in some countries than in others (Figure 7). This is just one example of the challenges facing countries in relation to encouraging workers to remain in work until their legal retirement age.

The country analysis also juxtaposes indicators of sustainable work outcomes (developed by Eurofound and based on the EWCS, 2015) with the expected duration of working life in a given country (based on an indicator developed by Eurostat from the EU Labour Force Survey, 2015). Belgium, for example, with its generally good ranking for sustainable work over the life course, has a shorter duration of working life. By contrast, Estonia, with poorer results for sustainable work outcomes, has a longer duration of working life and higher employment rates at older ages. These differences could be due to different institutional arrangements (including financial compensation) that facilitate or hinder early retirement. It follows that, while improving working conditions can contribute to sustainable and extended working lives, national institutions and norms continue to play an important role in relation to actual participation in the labour market.

Conclusions

- Better working conditions mean sustainable work and facilitate participation in the labour market. This is true for all age groups: therefore, a life-course perspective is necessary while taking into account differences in working conditions for different age groups.
- It is at the age of 55 that participation in work declines markedly. Conditions of work such as good physical environment, lower quantitative demands and working time autonomy increase the likelihood of workers continuing to work at age 55 and over.
- Both physical and psychosocial risks are relevant for sustainable work: psychosocial risks could be more prominently taken into account in policies related to arduous jobs. Special attention needs to be paid to lower occupational levels.

Figure 7. Self-reported health status by age: share of workers reporting good health



Source: "Working conditions of workers of different ages", Eurofound report 2017, p. 55.

- Institutional and social contexts play an important role in determining duration of working life. Extending working life hence depends on measures in the areas of pension systems, health, education and care. However, working conditions and their outcomes play a role and significant variations exist between countries. These differences across countries should be considered not only for national-level policies, but also for EU-level initiatives, including the implementation of the Social Partners' Framework Agreement on Active Ageing (ETUC-CES et al., 2017).

Extending working life hence depends on measures in the areas of pension systems, health, education and care.
- Changes in the world of work are likely to have implications for working conditions across all ages and could impact on sustainable work over the life course. For example, the use of temporary contracts (currently limited largely to younger employees) may spread to other age groups with potential consequences. At the same time, technological developments associated with the digitalisation of work may offer opportunities for older workers' participation. Research and policy work need to monitor these developments.

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WORKING CONDITIONS AND THE LENGTH OF WORKING LIVES

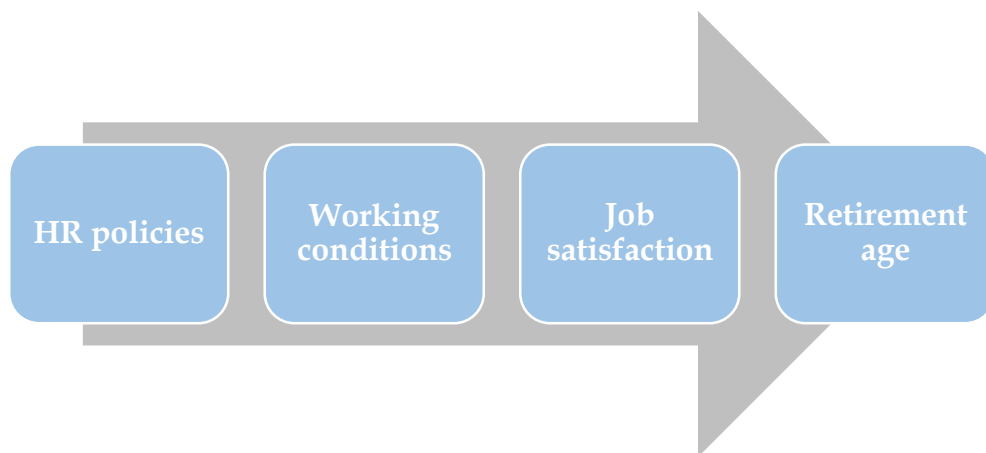
BY MIKKEL BARSLUND, ANDREAS CEBULLA
AND JACOB GARETH STAUNING PREWETT⁹

This chapter focuses on the extent to which improvements in human resource (HR) management policies can play a role in extending working lives.¹⁰ HR policies – such as workplace and age management practices – can be valuable tools to discourage older workers from retiring early, and to motivate and incentivise those close to retirement age to stay in work longer (D’Addio et al., 2010; Thorsen et al., 2012). One such mechanism is via increased job satisfaction, which is the main focus of this study. More broadly, we relate working conditions to HR management policies. The central hypothesis is that HR management policies shape working conditions. These then affect employee job satisfaction which, in turn, influences retirement decisions (Figure 8).

⁹ Mikkel Barslund is a Research Fellow at CEPS where he leads the Ageing Societies Programme. Andreas Cebulla is Senior Research Fellow at the South Australian Centre for Economic Studies, University of Adelaide and Fellow at the National Institute of Economic and Social Research (NIESR). Jacob Gareth Stauning Prewett has a MSc. in Economics and was an intern in CEPS.

¹⁰ We use HR management policies in a broad sense covering all policies aimed at improving working conditions and job satisfaction.

Figure 8. HR policies and age of effective retirement



Source: authors' own illustration.

A body of research suggests that there is a positive association between job satisfaction and delayed retirement (von Bonsdorff et al., 2010; Topa et al., 2009). However, few studies quantify the potential impact of a general improvement in working conditions on the length of working lives. Barslund et al. (2019) looked at workers aged 50-64 years and estimated the maximum potential of improved working conditions to lengthen working lives.

Measuring working conditions and job satisfaction

Data on working conditions, overall job satisfaction, and retirement status along with a number of socio-demographic controls is provided in the Survey of Health, Ageing and Retirement in Europe (SHARE) database (see Barslund et al., 2019). The data covers 12 countries over an 11-year time span, divided into five waves of observations (2004, 2006/7, 2010/11, 2013, and 2015).

Working conditions are subject to common European regulations and directives, but nonetheless vary widely between countries and workplaces. In this study, statements of employee satisfaction are taken to measure the prevalence and subjectively experienced quality of working conditions, which include physical workload, time pressure, autonomy, availability of support in difficult situations, recognition, perceived adequacy of salary, promotion prospects, and job security. SHARE elicits employees' assessments of the working conditions through agreement or disagreement with statements, such as "My job is physically demanding", using a four-point Likert-scale: strongly agree, agree, disagree, and strongly disagree.

Much of the literature on retirement relies on questions related to retirement *intentions*, which can be a poor indicator of actual *behaviour* (van Solinge and Henkens, 2013; Solem et al., 2014). SHARE is a longitudinal study that follows the same employees over several years. This allows the present study to observe (assessments of) working conditions up to the point of actual retirement.

The effect of job satisfaction on length of working lives

Barslund et al. (2019) find a strong positive correlation between working conditions and overall job satisfaction, in particular between the latter and being *very* satisfied with each of the eight items listed above. This suggests that improving working conditions could potentially also improve aggregate job satisfaction.

Find a strong positive correlation between working conditions and overall job satisfaction.

The data show existing levels of job satisfaction among older workers to be very high, and this holds across educational groups (Figure 9). This concurs with findings from the European Working Conditions

Survey (2017) that 87% of workers in the EU over the age of 50 are “satisfied” or “very satisfied” with working conditions.¹¹ Additionally, our analysis shows that around 35% of workers who are very satisfied with their job would nevertheless like to retire as soon as possible.

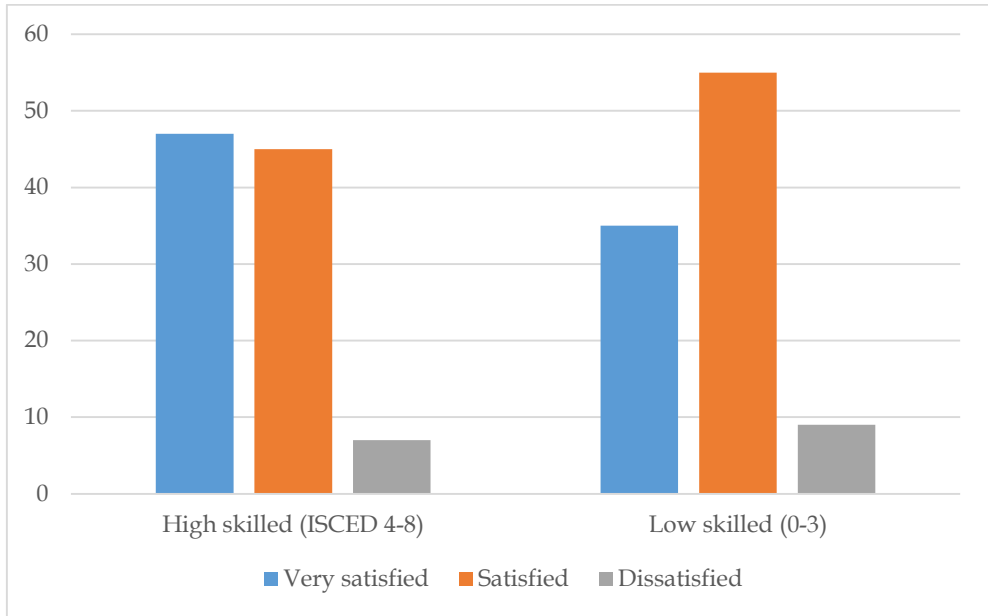
Given this already high level of job satisfaction, and the fact that being very satisfied with working conditions does not necessarily imply a wish to extend working life, shows that there may be a natural limit to how far better, age-friendly workplaces can lead to extended working lives.

Data show existing levels of job satisfaction among older workers to be very high.

Relating the number of years worked to job satisfaction in a regression analysis framework controlling for gender, age, educational level and country confirms that, on average, the effect on actual retirement ages of better working conditions and, in turn, higher job satisfaction may be small. Over a range of different econometric specifications, older workers aged 50 to 54 who express a high level of satisfaction with their job tended to retire between 9-12 months later than workers in the same age group who are dissatisfied with their jobs. The effect is somewhat higher for women and high-skilled workers.

¹¹ See: www.eurofound.europa.eu/data/european-working-conditions-survey.

Figure 9. Job satisfaction and educational attainment, 50-59 year olds



Source: SHARE data waves 1, 2, 4, 5 and 6.

At the individual level, this effect is, of course, substantial, but because it would apply to relatively few individuals (who are currently less satisfied with their workplaces), the average effect is much smaller. In a hypothetical counterfactual situation where all older workers are very satisfied with their job, people would, on average, work around three months longer before retiring than they presently do.

Conclusion

Estimates from this study suggest that the potential effect of HR measures on retirement ages is comparatively small. This conclusion is in line with Beehr et al. (2000: 219) who found that “a larger number of the non-work variables (five out of eight) predicted retirement age than work-related variables (one out of seven). In other words, more elements of life outside the workplace were predictors of the retirement criterion than attitudes and perceptions about the workplace itself” (see Barslund et al., 2019).

Improving working conditions alone will not drive a significant increase in the years spent economically active in

Needless to say, this should not deter efforts to create better and (for all ages) friendlier workplaces. However, improving working conditions alone will

not drive a significant increase in the years spent economically active in older age.

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SOCIO-ECONOMIC INEQUALITIES IN MORTALITY AND HEALTH

BY JOHANNES KLOTZ AND TOBIAS GÖLLNER¹²

In an era of demographic ageing, pension reforms that aim to increase the effective retirement age have come to the fore. However, mortality differences between socio-economic subgroups are not necessarily reflected in this policy discourse. For all European countries with available data it is found that those with higher education, higher incomes and better occupational positions live longer, on average, than the poor. There is also evidence that in general, the substantial mortality improvements of recent decades (e.g. the 'cardiovascular revolution' at advanced ages) have not been accompanied by a reduction in socio-economic inequalities. Differential mortality can be observed for all age groups and now for almost all causes of death (an exception would be breast cancer in women).

The magnitude of differences varies between men and women and from country to country. To cite a few examples: in Belgium in 2001-04, the difference in remaining life expectancy at age 25 between those with tertiary education and those with primary education was 5.7 years for men and 3.7 years for women (Deboosere et al., 2009). For England and Wales in 2007-11, the difference in remaining life expectancy at age 65 between the highest two job classes and the lowest job class was 3.9 years for men and 3.1 years for women (White, 2015). In the Danish population of 2014, the difference in life expectancy at birth between the highest and the lowest income quartile was 9.7 years for men and 5.7 years for women (Brønnum-Hansen, 2017).

¹² Johannes Klotz and Tobias Göllner are Senior Researchers at Statistics Austria.

The high mortality of people in lower socio-economic positions not only means that these people are disadvantaged, but that it also comes with a social cost. This is most visible in premature deaths, which are largely avoidable if cause of death is considered (e.g. accidents, suicides, lung cancer or heart disease in midlife). More generally, high mortality results from high morbidity, resulting in a higher prevalence of disability, early retirement and health-related unemployment. The economic costs of health inequalities in the European Union were estimated to be 1.4 - 9.4 % of GDP (Mackenbach et al., 2011).

General research findings on differential mortality question the fairness of a uniform pension age when short-living poor people are likely to subsidise the pensions of long-living rich.

General research findings on differential mortality question the fairness of a uniform pension age when short-living poor people are likely to subsidise the pensions of long-living rich.

Besides unintended redistribution effects, socio-economic excess mortality may have adverse fiscal consequences if those living longer than average also have higher pensions. Also, the sheer physical possibility of longer working lives must be subject to question for those population groups that are prone to premature death and probably poor health.

Although it is clear that any pension system redistributes from short-living to long-living people on an individual level (which is, after all, the very purpose of pension insurance), this becomes problematic when certain groups are systematically disadvantaged in the public pension system on a macro level. If for large groups of individuals the expected discounted contributions are lower, in total, than the expected discounted benefits, the principle of actuarial fairness is violated, and one may consider taking socio-economic differences into account in tuning parameters such as the replacement rate, the retirement age or the accrual rate (Knell, 2016).

However, actuarial fairness is not necessarily actual fairness, and may come with adverse behavioural incentives. The essential question is: which part of excess mortality is attributable to personal responsibilities and which to external circumstances? While it is generally agreed that public pension systems should compensate – at least to some degree – for variation in external circumstances, this is not the case when it comes to personal responsibilities.

Which part of excess mortality is attributable to personal responsibilities and which to external circumstances?

A key issue in the analysis of the social gradient of mortality is its variation between countries. Since European countries differ substantially in terms of their pension systems, health systems and labour market policies, a comparative European perspective could reveal significant determinants of social inequalities in mortality. A major

deficiency in this regard is that mortality by socio-economic status is not part of the European statistical system. As of 2017, some European countries still cannot provide any figures on socio-economic differences in mortality, and available figures are not easily comparable across countries because of different data sources, reference periods, mortality indicators, and socio-economic breakdowns (as can readily be seen from the examples above).

Prof. Dr. Johan Mackenbach and the Erasmus MC Rotterdam are renowned for their continued efforts to increase the comparability of existing data. They mostly use high-quality register or census data matched with mortality registers (although in some instances also lower-quality cross-sectional data) and do *ex post* harmonisation of the different variables to optimise comparability between countries. This approach has high data quality but is limited to countries that can provide national data. The same goes for recent figures published by Eurostat and the OECD, which are furthermore restricted to a breakdown by broad educational levels. In contrast, a method has been developed in the FACTAGE project that takes a different approach by using data that cover the entire European Union and are harmonised between countries from the outset.

Mortality by socio-economic status is not part of the European statistical system.

The output-harmonised European Statistics on Income and Living Conditions (EU-SILC) sample survey has been conducted annually in all EU member states plus some additional countries since 2004 or so. This guarantees coverage and comparability between countries. However, it comes with restrictions in other quality dimensions – most notably reduced precision due to the sample data instead of a complete enumeration, but also accuracy of vital status information in the longitudinal component of the survey and health-related nonresponse. On the plus side, EU-SILC contains an abundance of social stratification variables, and also some health variables.

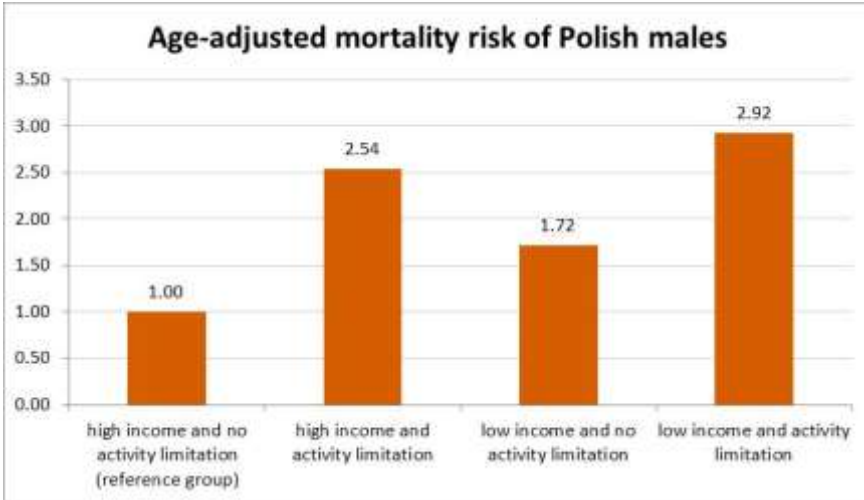
To assess differential mortality in a comparative European fashion and with a variety of stratification variables, we developed the FACTAGE method for the EU-SILC User Database, an open database available for researchers. We

To assess differential mortality in a comparative European fashion and with a variety of stratification variables, we developed the FACTAGE method for the EU-SILC User Database.

use the longitudinal component of the survey to assess the mortality risk of population subgroups. We show one example of analysis for Polish males, made possible via our method. Survey respondents were grouped into four categories based on their income (above or below the median income) combined with their health status (activity limitation of any gradient or no activity limitation). For the operationalisation of the health status we

chose the Global Activity Limitation Indicator (GALI), which indicates health-related limitations according to a three-point scale: severely limited, limited but not severely and not limited at all. For our application we merged the first two groups together.

Figure 10. Age-adjusted mortality risk of Polish males



Source: Statistics Austria.

Our reference group is Polish men with high income and no activity limitation. Compared to them, the age-adjusted mortality risk of males who have low income and no activity limitation is 1.7 times as high (Figure 10). When we look at the group with activity limitation, we see that males with high income have a 2.5 times higher mortality risk, and this is even higher for those with low income, reaching 2.9. To the best of our knowledge, these are the first figures of this kind ever published for Poland. Further details on the FACTAGE method and some exemplary findings can be found in *Estimating Differential Mortality from EU-SILC Longitudinal Data - A Feasibility Study*, available on the FACTAGE webpage as a full research report or policy brief.

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EXTENDING WORKING LIVES THROUGH FLEXIBLE RETIREMENT SCHEMES

BY HANS DUBOIS¹³

Working longer by working less?

Governments, social partners and pension funds in the EU have taken measures to increase the sustainability of their pension systems. These measures come with challenges. Pensions have been cut or contributions have increased. Inevitably, such measures have intergenerational distributional impacts; they also decrease pension adequacy, or put pressure on wage cost or disposable income. Furthermore, the statutory pension age has risen and early retirement is discouraged.

However, in practice, 25% of pensioners aged 50-69 exit the labour early in the EU because of health problems, disabilities, or care commitments. With rising pension ages and less attainable early retirement gradually being introduced, more people are likely to leave the labour market through other routes: disability and illness as a reason for labour market inactivity among older people is on the rise, while retirement as a reason is decreasing (Eurofound, 2016a; 2017).

Partial retirement schemes facilitate reduced working hours for older people by providing a partial pension or benefit.

Measures to enable and motivate longer working lives can address such challenges. These measures can be multiple, taking a life-course approach (Eurofound, 2016a). Some of these measures concern pensions, including measures to

facilitate people working beyond the statutory retirement age (Eurofound, 2012). Partial retirement schemes facilitate reduced working hours for older

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people by providing a partial pension or benefit, and can also enable and motivate people to remain in work until retirement age.

The case for partial retirement

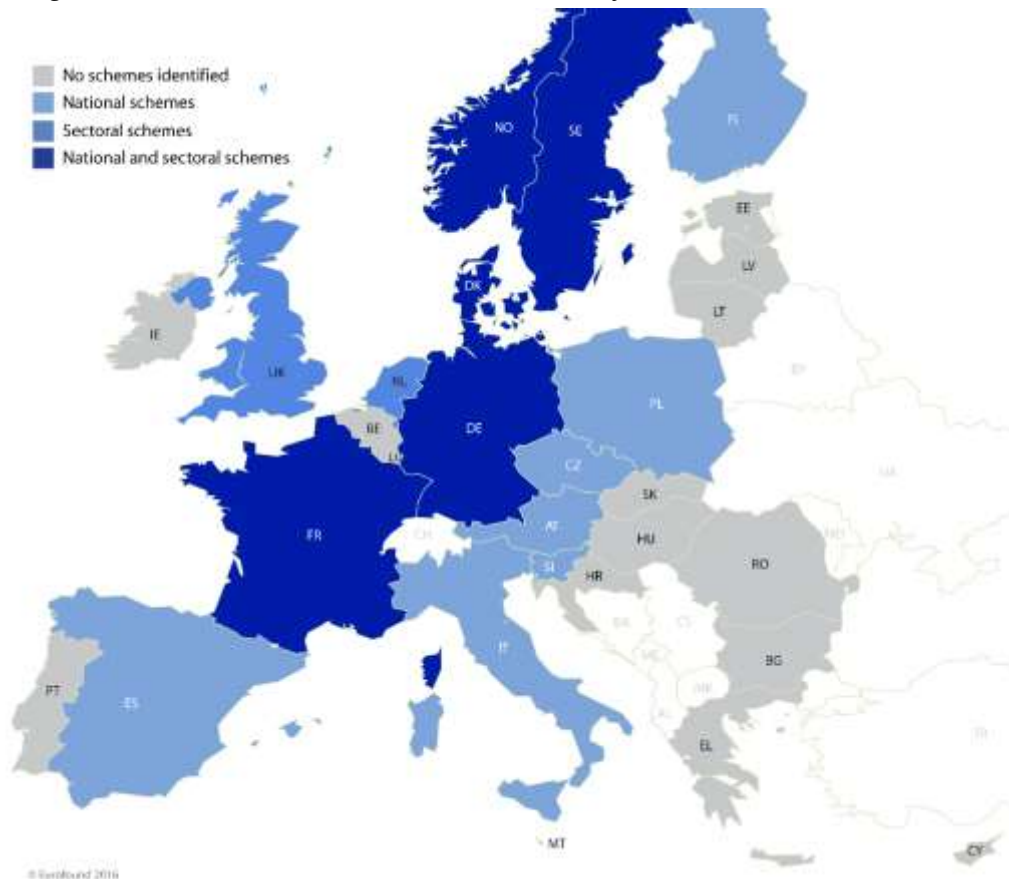
Just under half (45%) of workers aged 50 or over in the EU would like to reduce their working hours, taking into account their financial needs. It is important to acknowledge heterogeneity among older workers (11% would like to work more hours and 44% are satisfied with them). However, for many, a reduction in working hours would better align with their preferences, *motivating* them to continue working longer (Eurofound, 2014). If the loss of income from a reduction of working hours is compensated for by a partial pension or benefit, more people are likely to prefer a reduction. Overall, the Eurofound analysis of Eurobarometer data indicates that the idea of a part-time job and partial pension (instead of full retirement) appeals to almost two-thirds (65%) of Europeans (Eurofound, 2016a).

Facilitating shorter working hours can do more than simply motivate people to continue working; it can also enable them to do so. Over one-quarter (27%) of workers in the EU say they would not be able to continue working until the age of 60 (Eurofound, 2016b). National survey results suggest that shorter working hours are key to enabling them to work until this age. For instance, a survey in Sweden revealed that 16% of workers aged 50-64 felt unable to work until retirement age; most (60%) said that shorter working hours would enable them to continue (Statistiska centralbyrån, 2006).

Over one-quarter (27%) of workers in the EU say they would not be able to continue working until the age of 60.

Eurofound has mapped national and (large) occupational partial retirement schemes in the EU and Norway (Eurofound, 2016a). Such schemes could be identified in about half the countries (Figure 11). The schemes vary greatly in their coverage, rationale and financing. Some require (partial) replacement of the near-retiree by another worker. Flexibility is limited – for instance, with respect to the age at which people can use the scheme and the extent to which working time can be reduced. In some schemes, partial retirement is an employee entitlement, while other schemes require employer agreement.

Figure 11. Partial retirement schemes, EU28 and Norway 2016



Source: Eurofound (2016a).

Does partial retirement extend working lives?

Several partial retirement schemes have been evaluated. Overall, these schemes have not unambiguously extended working lives in terms of overall hours contributed to the economy. Often, the reduction in hours for those who partially retire outweighs the increase in hours contributed to the economy by facilitating longer working lives for certain groups of partial retirees. Regardless of results, these assessments face methodological challenges. Many lack working time data for partial retirees. It is also hard to know what partial retirees would have done had they not partially retired. Case studies of schemes add detail to this body of evidence (Eurofound, 2016a). While – in the aggregate – schemes could often be judged ‘unsuccessful’ in terms of extending working lives, they do extend working lives for subgroups of people, such as those with health

problems. However, it is hard to ensure that these subgroups take up the schemes rather than those groups that could continue working without a reduction in hours had they not taken up the scheme.

A delicate balance

To extend working lives, partial retirement schemes should not be too attractive. They may then enable and motivate some people to work longer, even stimulating people to work until the age at which they become entitled to the scheme. But this positive impact is easily outweighed by the reduction in working hours by those who would have continued working without a reduction in working hours. However, schemes should also not be so unattractive that they fail to motivate and enable people.

Interaction, complexity and information

Partial retirement schemes interact with tax and welfare systems. For policymakers this increases the need to coordinate reforms closely with other institutions. People who are entitled to the schemes may be unaware of their existence, access or precise consequences for future income. Employer information sessions some years before pension age can help, but can be a challenge for smaller companies.

People who are entitled to the schemes may be unaware of their existence, access or precise consequences for future income.

'Partial', not 'phased' retirement

Eurofound chose the label 'partial retirement' rather than 'phased retirement', as the latter is often interpreted as a step in 'phasing-out' work. Many schemes have had the rationale to smooth the path into retirement (rather than to extend working lives), and many use partial retirement schemes for this purpose. However, some workers may for instance need only a short period of reduced working hours due to caring commitments. Working lives can be extended by facilitating reversals of increased hours (as in national schemes in Finland, France, Norway and Sweden, and sector schemes in Germany and the UK). For employers it may be a challenge to accommodate reversals; where reversals are possible this has sometimes required pre-set plans, notice periods and mutual agreement.

Facilitating part-time work

Partial retirement schemes are easier to implement in countries and sectors where part-time work is common. However, these schemes have more potential

where it is not common. Partial retirement schemes have made part-time work more common in a number of countries, namely Belgium, Finland, Germany and Sweden.

Employees have sometimes been partially retired against their will. However, partial retirement has also prevented unemployment. It is easier to reintegrate a worker who is at least partially employed than someone who has not been employed for some time.

Fairness

Publicly paid partial retirement schemes can be seen as unfair if they are mainly used by high-income earners (this has been the experience in Austria and Finland), even if extending working lives may also be important for this group. Partial retirement can be more important as an enabler for low-income workers, but these workers may not be able to bear any reduction of income at all. A solution could lie in making partial pensions or benefits non-proportional to income (examples can be found in Belgium and Denmark). Fairness is also an issue when schemes are unavailable to people who already work part-time, who move into employment from inactivity (so increase, rather than reduce, their hours), or are below a certain age.

Decoupled systems

Countries with the earliest examples of partial retirement schemes (Finland, Norway and Sweden) have all moved to 'decoupled systems'. In these systems, a partial pension can be drawn independently of working time reductions and be funded by reduced future pension. These flexible systems address some fairness issues and avoid schemes being too attractive. However, they also risk eroding future pensions. Norway has addressed this by requiring a minimum required pension accumulation in order for workers to be entitled to participate. A downside is that in practice this has restricted access for people with limited pension accumulation – in particular for women.

Taking a broader perspective: partial retirement has potential

Taking a more macro-level view, partial retirement can lengthen working lives if it facilitates a broader reform – if, for instance, measures to discourage early retirement or to raise the pension age are accepted partly because they come with an option to partially retire.

Furthermore, the context is changing. The economy is picking up, and reforms taken in recent years to increase the pension age and discourage early

retirement are gradually kicking in. Data from Eurofound's European Quality of Life Survey data reveal that 13% of people in the EU are *very* worried that their income may not be sufficient in old age, with higher rates among women (14%) than men (12%), and for people aged 50-64 (16%) (Eurofound, 2018). In particular, women aged 35-64 are often extremely worried (17%). For workers to accumulate enough pension rights, and for employers to maintain an effective workforce, along with other measures, there may be more need for partial retirement schemes.

Lastly, if the overall policy objective were to improve quality of life rather than to extend working lives, partial retirement is more likely to be judged effective as it facilitates a better alignment of working hours and preferences.

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SKILL MISMATCH AMONG OLDER WORKERS AND WORKPLACE PERFORMANCE IN BRITAIN

BY DAVID WILKINSON, LUCY STOKES,
ANDREAS CEBULLA AND NATHAN HUDSON-SHARP¹⁴

Introduction

One of the key responses to population ageing in the UK has been an increase in the state pension age, which has created an expectation that older workers stay in employment for longer. For employers, one important consideration when retaining and recruiting older rather than younger workers is the relative productivity of these workers. Whilst the empirical evidence on the relationship between age and productivity is inconclusive, the evidence for the vulnerability of older workers in the labour market is strong. Van Dalen et al. (2010) found that both employers and employees rate the productivity of older workers substantially lower than that of younger workers, but they have different desirable attributes and skills. The perceived comparative advantage of older workers lies in their organisational commitment, reliability and social skills, whereas the perceived comparative advantage of younger workers relates to their flexibility, physical and mental capacity and willingness to learn new technological skills.

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The extent to which the skills possessed by older workers are utilised in the workplace will dictate to some extent whether working lives can be extended. Furthermore, amongst the initiatives used by employers in the UK, and elsewhere, to extend working lives are redeployment of older workers to less demanding jobs, as well as an increasing use of flexible working and partial or phased retirement policies (Cebulla and Wilkinson, 2019). In view of this, older workers may face a greater risk of their skills being under-utilised in the workplace, with potential consequences for both the employee and the organisation in which they work.

We explore the experience of skill under(over)-utilisation or skill mismatch as reported by employees in British workplaces and the relationship between skills mismatch and job satisfaction, and the performance of these workplaces. We exploit a linked employer-employee dataset, the Workplace Employment Relations Survey (WERS), a nationally representative survey of British workplaces, covering 2,680 workplaces in 2011 (van Wanrooy et al., 2013) and 2,295 workplaces in 2004 (Kersley et al., 2006). The survey includes an interview with the most senior manager responsible for employment relations and personnel issues at the workplace, as well as a self-completion questionnaire distributed to up to 25 randomly selected employees.¹⁵

The notion of skill has several meanings and different definitions across different disciplines. A variety of concepts are therefore considered in relation to skill mismatch (Green, 2016) covering ‘skill shortage’ (supply is less than demand); ‘skills deficit’ (supply equals demand, but both are sub-optimal); ‘skill gap’ (employees perceived to lack some competencies needed to carry out their job); ‘under(over)-education’ (an employee’s education is lower (higher) than required to do the job”).

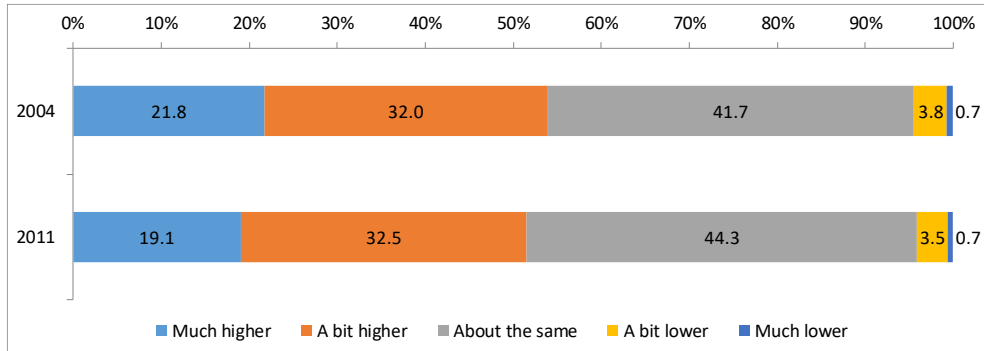
Our indicator of skill mismatch is based on how respondents to the survey of employees perceive their own skills relative to the skills needed to do their present job. Hence, this is open to the respondents’ own interpretation of the meaning of skills, yet is broadly akin to the skill gap or skill under(over)-utilisation definition.

Skill mismatch by age

Very few employees (less than 5%) reported that their own skills were lower than needed to do their present job (Figure 12). In contrast, just over half of employees reported that their own skills were higher than needed to do their present job.

¹⁵ For more information about WERS visit www.wers2011.info.

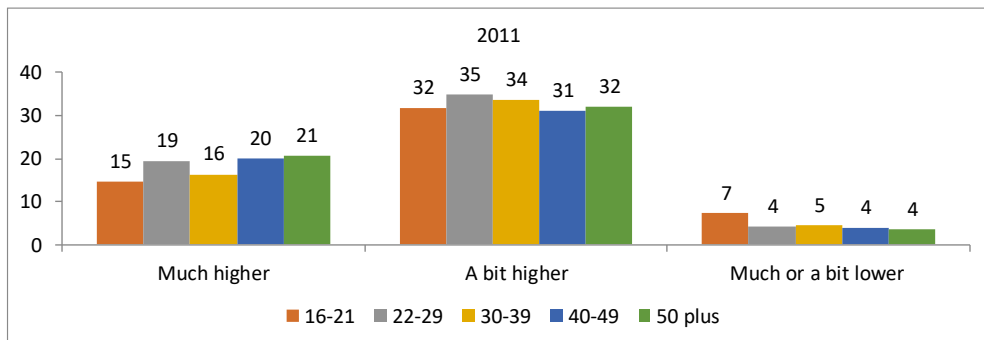
Figure 12. Perceptions of skill (mis)match among employees in 2004 and 2011 – percentage of workers reporting how their skills relate to current job needs



Sources: 2004 and 2011 Workplace Employment Relations Surveys.

The variation in skill mismatch by age was minimal. Figure 13 shows that in 2011, 23% of older workers (aged 50 plus) reported that their own skills were much higher than required to do their present job (a high degree of skill under-utilisation) and 21% reported this in 2011. Just 4% of older workers reported that their own skills were lower than required to do their present in 2011.

Figure 13. Perception of skill mismatch among employees in 2011 by age – percentage of workers reporting how their skills relate current job needs



Source: 2011 Workplace Employment Relations Surveys.

Skill mismatch and job satisfaction

The experience of skill mismatch (over / under utilisation) may however be different for older and younger workers in terms of their job satisfaction.

In our simplest model, we find that mismatched workers whose skills are either over- or under-utilised have lower levels of job satisfaction than workers whose skills matched their jobs. In addition, we find that the youngest and oldest workers were the most satisfied.

We find that mismatched workers whose skills are either over- or under-utilised have lower levels of job satisfaction than workers whose skills matched their jobs.

When we explore the relationship between skill mismatch and age, older mismatched workers were no more/less satisfied than mismatched workers aged 22 to 49.

Skill mismatch and workplace performance

We also consider the associations between workplace performance, skill mismatch and age. We explore a range of measures of workplace performance: managers' assessments in terms of: financial performance, labour productivity and the quality of service or product, a composite measure combining all three of these measures, as well as absence and quit rates.

Older mismatched workers were no more/less satisfied than mismatched workers aged 22 to 49.

Looking at 2004 and 2011 together, workplaces with a higher percentage of mismatched workers (both over- and under-utilised skills) do not have significantly higher or lower performance

on any of the workplace performance measures considered. However, in line with Mahy et al. (2015) and Quintini (2011), the coefficients on the percentage of workers whose skills are under-utilised are all positive and the coefficients on the percentage of workers whose skills are over-utilised are all negative. This provides some indication that workplaces tend to perform better with more under-utilised workers and worse with more over-utilised workers.

These associations change a little when we allow for differences by the proportion of older workers in the workplace. In workplaces where the majority of the workforce was aged 50 plus, having more workers whose skills are under-utilised is associated with reporting a better quality of service or product. Similarly, we find better labour productivity and a higher composite performance score when there is a higher percentage of workers whose skills are over-utilised and the majority of the workforce is aged 50 or over. Although this relationship is only evident in 2011.

In workplaces where the majority of the workforce was aged 50 plus, having more workers whose skills are under-utilised is associated with reporting a better quality of service or product.

These results suggest that having older mismatched workers may not necessarily be a bad thing for employers, whereas having younger mismatched workers, particularly those whose skills are over-utilised, is more likely to be associated with poorer performance.

A similar story is evident for absences and quit rates. When we allow for differences between workplaces depending on whether they have a majority of older workers or not, we find that those workplaces with a minority of older workers have a higher quit rate when their workers' skills are more likely to be under-utilised. While workplaces with a majority of older workers have a lower quit rate when their workers' skills are more likely to be under-utilised.

Conclusions

Our analysis indicates that more than half of workers feel their skills are higher than needed to do their current job. As found by van Wanrooy et al. (2013), workers who feel that their skills are under-utilised have lower job satisfaction than workers whose skills do match their jobs. Similarly, workers whose skills are over-utilised have lower job satisfaction than matched workers.

The extent of skill mismatch does not vary much by age, and we find no evidence that older (aged 50 or over) mismatched workers have job satisfaction different from prime age mismatched workers.

Our findings in relation to workplace performance, including absences and quits, are indicative rather than conclusive but suggest that having workers whose skills are under-utilised when there are a lot of older workers in the workplace may have benefits for employers. Certainly, this appears more likely to be the case than when there are fewer older workers in the workplace. This is

Having workers whose skills are under-utilised when there are a lot of older workers in the workplace may have benefits for employers.

consistent with the notion that older workers offer something beyond what they conceive to be valuable in terms of the skills required to do their own jobs. It is of note that the aspect of performance that is most associated with this mismatch is the quality of service and product, so older workers who think they are not

utilising their skills to their full extent may still be producing better quality outputs. The findings also suggest that the policy of redeploying older workers to jobs that are perceived as less demanding – perhaps meaning that these workers feel their skills do not match the requirements of the job – may be precisely because employers see value in these employees that they themselves are unable to fully appreciate.

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SKILLS MISMATCH AMONG OLDER WORKERS

BY *MARKUS BÖNISCH, JAKOB PETERBAUER*
AND *EDUARD STÖGER*¹⁶

Skills are viewed as a major component of knowledge-based economies. On an individual level, skills can support labour market success and can have an effect on earnings and job satisfaction (Hanushek et al., 2014). But skills must be used efficiently to generate these positive labour market outcomes. If this is not the case, skill mismatch occurs. This means that workers either do not meet the skills required at their workplace (under-skilled / over-utilisation) or have higher skills than needed (over-skilled / under-utilisation).

In this chapter, we look at differences between two age groups (25-49 and 50-65 years) with regard to their skill levels and skill use at the work place. We analyse how older workers (50-65) utilise their skills in the workplace compared to the younger ones. Which factors influence skill utilisation? Does age have a relevant effect on skill mismatch when controlling for gender, education and other variables? Do older workers tend to lose their skills because these skills are not fully utilised in the workplace? And what are the effects of over- or under-utilisation of skills on earnings and job satisfaction? The focus of our empirical research is on the analysis of the PIAAC dataset¹⁷ for the five countries

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¹⁷ The Programme for the International Assessment of Adult Competencies (PIAAC; OECD 2016) provides the opportunity to measure skill mismatch in a comparable way in various countries. PIAAC gathers broad information on basic skills (Literacy, Numeracy, Problem solving in technology rich environments) and on the use of these skills at work for adults aged 16 to 65. PIAAC is a cross sectional survey conducted in over 30 countries. The data was collected 2011/12 with a sample size of approximately 5,000 persons (16 to 65) per country.

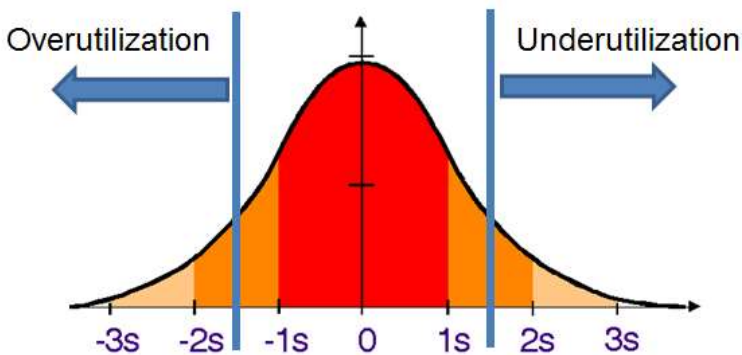
that participate in the European FACTAGE (Fairer Active Ageing for Europe) project: Austria, Germany, Spain, Belgium and the UK.

How to measure skill mismatch

The analysis of skill mismatch is difficult, because different measures can lead to different results regarding the correlation between skill mismatch and labour market outcomes (Perry et al., 2014).

Our skill mismatch analyses are based on an adjusted version of a skill mismatch measure suggested by Allen et al. (2013). The measures developed by the authors represent the extent of skill use relative to skill level. First, they standardise¹⁸ the first plausible value of the literacy and numeracy scale respectively. In a second step, they construct scales to examine skill use. For literacy use they averaged 12 items included in the background questionnaire to indicate literacy use at work – for numeracy use six numeracy use items were averaged. They then standardised the skill use scales to make them comparable to the skill-level scales before subtracting each standardised skill use measure from the corresponding standardised skill level measure. The resulting measures are metric scales which link skill level and skill use with each other. Allen et al. (2013) define all individuals with a score below -1.5 as over-utilised – respondents with a value greater than 1.5 are defined as under-utilised (see also Figure 14). Respondents who are neither over- nor under-utilised are considered as well matched.

Figure 14. Skill mismatch measure



Source: Allen et al. (2013).

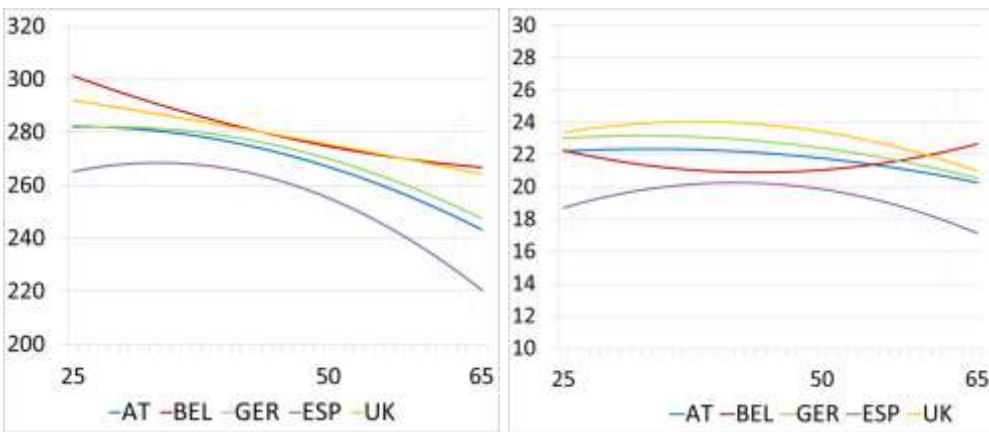
¹⁸ Z-transformation (mean=0, standard deviation=1).

Skills, skill use and skill mismatch

Literacy skills and numeracy skills are decreasing with age in all five countries. This pattern is very similar in Belgium, Germany, Austria and Spain – although on a different absolute skill level. In England and Northern Ireland there is a slightly different pattern. Skills are also decreasing with age but not as much as in the other countries. Figure 15 (left graph) shows the age-skills-profile in literacy of 25 to 65 year old employed persons in the different countries. The decrease of skills can be explained by a cohort effect or/and an age effect. So the expansion of education and/or educational reforms may increase the potential skill level of younger cohorts. But also a cognitive decline may have an effect on the skill level of older people. The cross-sectional design of PIAAC does not allow us to disentangle the two effects. Only longitudinal data would provide a more accurate picture.

The relationship between literacy skill use and age does not point to a clear trend (see Figure 15 – right graph). In most countries there is a little peak of skill use between the age of 35 and 45, and older individuals (50-65) tend to use their skills a bit less, but the differences are small. The trend in Belgium appears to be inverse. Here, older workers tend to use their skills a bit more.

Figure 15. Literacy skills (left graph) and skill use (right graph) by age in the five FACTAGE countries (only currently employed persons)



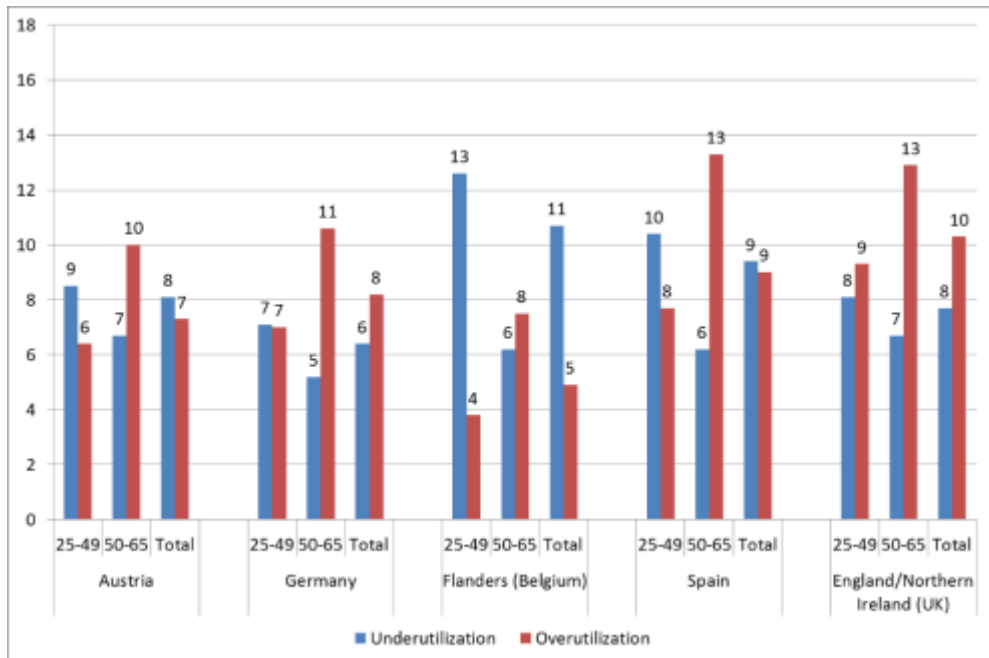
Source: PIAAC (2012).

In the next step, we look at skills mismatch. Literacy mismatch in our analysis is the respondent’s mismatch regarding the “ability to understand, evaluate, use and engage with written texts in order to participate in society, achieve one’s goals, and develop one’s knowledge and potential” (OECD, 2016a).

The percentage of matched workers (adequate utilisation of literacy skills) is quite comparable between countries (see Figure 16), ranging from around 85% in Austria, Germany and Belgium to around 82% in Spain and the UK. The under-utilisation of literacy skills is highest in Belgium, at 11% and lowest in Germany, at 6%. Over-utilisation of literacy skills is highest in England/Northern Ireland with 10% and lowest in Belgium, at 5%.

But one clear trend can be observed in all countries: older workers (50-65) tend to over-utilise their literacy skills more than younger workers. The highest percentage of older workers over-utilising their skills can be found in Spain (13%) and in England/Northern Ireland (13%). The lowest is in Belgium, at 8%.

Figure 16. Literacy under- and over-utilisation (25-49, 50-65) in the five Factage countries



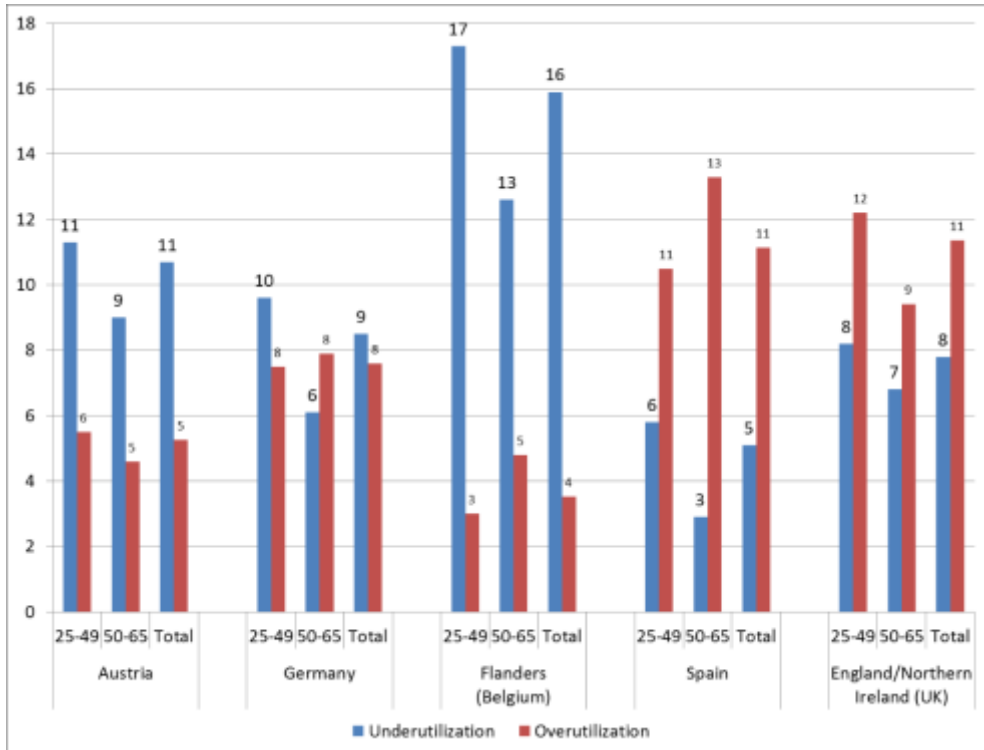
Source: PIAAC (2012).

The percentage of matched workers with regard to numeracy skills is also quite comparable between countries (see Figure 17), ranging from around 84% in Austria, Germany and Spain to around 81% in Belgium and the UK. The under-utilisation of numeracy skills is highest in Belgium (16%) and lowest in Spain (5%). The over-utilisation of numeracy skills is highest in England/Northern Ireland and Spain (both around 11%) and lowest in Belgium, at 4%.

The relationship between utilisation and age is less clear and less significant when looking at numeracy skills. In Austria and England/Northern

Ireland the over-utilisation of numeracy skills is even lower for the 50 to 65 year old workers than for the younger ones.

Figure 17. Numeracy under- and over-utilisation (25-49, 50-65) in the five Facage countries



Source: PIAAC (2012).

Conclusions

In general, older workers have lower skills than younger workers¹⁹ but tend to over-utilise their skills more. So the potential risk of skill loss would be higher for younger workers with less (skill) demanding jobs.

The highest rate of under-utilisation for literacy and numeracy is observed in Belgium (Flanders), which points to a less effective use of skills and possible negative effects on productivity and on the skills themselves. In England, Northern Ireland and Spain the over-utilisation rates are quite high compared to the other countries, which points to a somewhat fuller use of workers' available skills. Germany and Austria show a slightly higher rate of well-matched employees.

In general, older workers have lower skills than younger workers but tend to over-utilise their skills more. So the potential risk of skill loss would be higher for younger workers with less (skill) demanding jobs.

The relationship between age and skill utilisation is still significant in all countries except England and Northern Ireland when controlling for many other variables (gender, education, educational mismatch, language, occupation, economic sector) in a multiple regression analysis.²⁰ Educational mismatch also shows a strong relationship with skill utilisation. An underqualified person tends to over-utilise their skills and an overqualified person tends to under-

utilise their skills. Another relevant variable when looking at skill utilisation is the skill level of the job. Workers in high skilled jobs tend to over-utilise their skills more than workers in low skilled jobs.

The relationship between age and skill utilisation is still significant in all countries except England and Northern Ireland when controlling for many other variables.

We find similar effects of skill mismatch on income as in prior studies (Allen et al., 2013; Perry et al., 2014). Skill over-utilisation leads in general to a wage premium compared to well-matched workers. Skill under-utilisation results in a wage penalty. These effects are relatively high in England, Northern Ireland and Spain. Also in Germany and Austria, skill utilisation is significantly related to income; in particular, the wage penalty for skill underutilisation is

¹⁹ This can be caused by age effects (e.g. cognitive decline) and cohort effects (e.g. years spent in education or quality of education).

²⁰ We simultaneously estimated the relationship between skill mismatch and a number of characteristics by regression analysis. We maintain no causality between skill utilisation and all used independent variables, but like Allen et al. (2013) we argue that the used characteristics refer to group differences, which is interesting in itself for policymakers.

We conclude that in some countries skills are more over-utilised than in others, and that some countries under-utilise a large pool of skills. These national differences may relate to the fact that there are various national skill formation systems and different institutional settings in place.

fact that there are various national skill formation systems and different institutional settings in place, although the influence of these patterns on national differences in skills, skill mismatch and their relationship to labour market outcomes is at this point unclear.

fairly high. The situation in Belgium is a little different. Here the relationship between skills mismatch and income is very low or insignificant.

We conclude that in some countries skills are more over-utilised than in others, and that some countries under-utilise a large pool of skills. These national differences may relate to the

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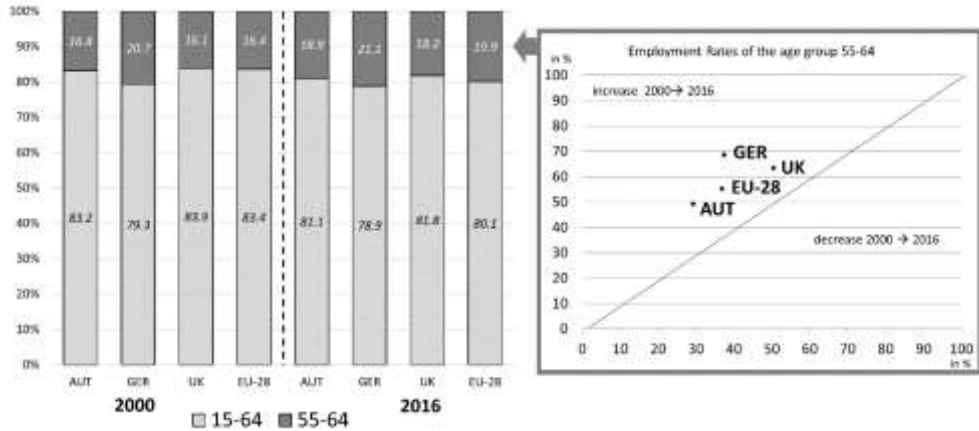
CHANGING PATTERNS OF OLDER WORKERS' EMPLOYMENT: EVIDENCE FROM AUSTRIA, GERMANY AND THE UK BY CHARLOTTE FECHTER AND WERNER SESSELMEIER²¹

Due to high unemployment rates and large restructuring of traditional industries (e.g. coal, mining) it was common practice in the late 1970s and 1980s to carry out workforce adjustments through early retirement schemes. This policy changed in the early 2000s, towards a focus on *Active Ageing* and maintaining older workers in the workforce (European Commission, 2004).

An abolishment or scaling back of early retirement schemes has been carried out in Austria and Germany over the past two decades. In the UK, historically following a liberal logic of welfare, obligations and more stringent sanctioning have continuously set incentives for late retirement. In Fechter and Sesselmeier (2016) and Fechter (2019) we looked at the effects of *Active Ageing* measures – in particular later statutory retirement ages and the abolishment of early retirement schemes – on maintaining labour supply, and consider the consequences for the employment situation of older workers.

²¹ Charlotte Fechter is Assistant Professor and Werner Sesselmeier is Professor at University of Koblenz-Landau.

Figure 18. Share of 55-64 in 15-64 population and employment rates of 55-64 from 2000-2016

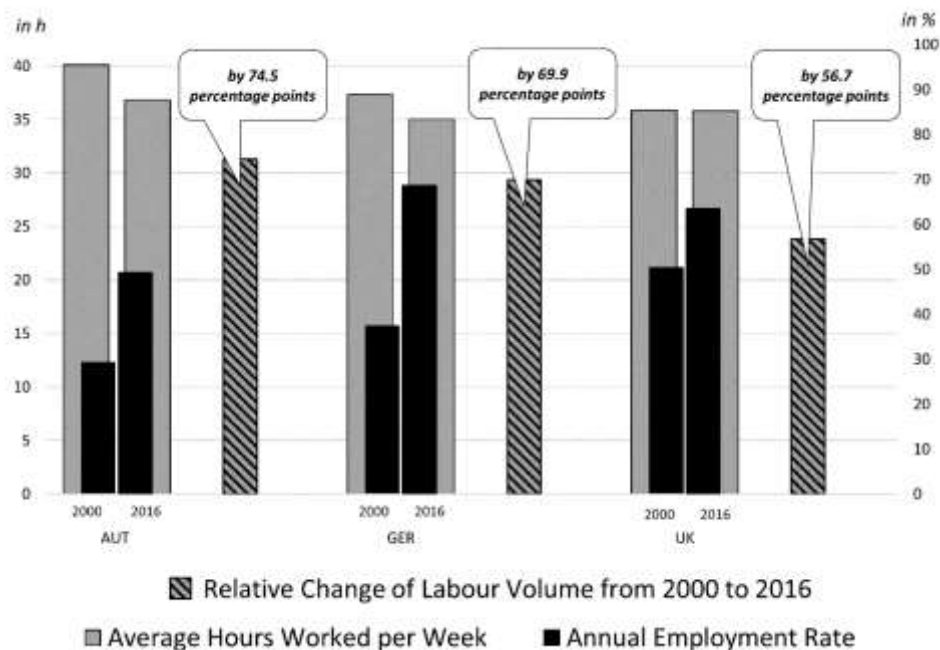


Source: EU-LFS, Eurostat; own calculations.

The share of 55-64 year olds in the work age population (15-64 year olds) has increased across all three countries (see Figure 18). It is above the EU average in Germany and higher than in both Austria and the UK, where the share of 55-64 year olds is below the EU28 average.

Since the year 2000 employment rates of older individuals (55-64) have increased significantly (Figure 18). Higher old age employment relates to higher statutory retirement ages and to the successive reduction of early retirement schemes, but also to formerly inactive individuals in this age becoming labour active, as well as an overall upturn of the business cycle. An increase in labour market participation rates of older workers does not necessarily lead to a one-to-one increase in number of hours worked, as marginal employees may work fewer hours. Figure 19 shows the increasing number of hours supplied by the age group 55-64 year olds in the period 2000-16. This increase is driven by a higher number of people in employment, which outweighs the fall in the average number of working hours for this age group.

Figure 19. Development of labour volumes in the age group 55-64

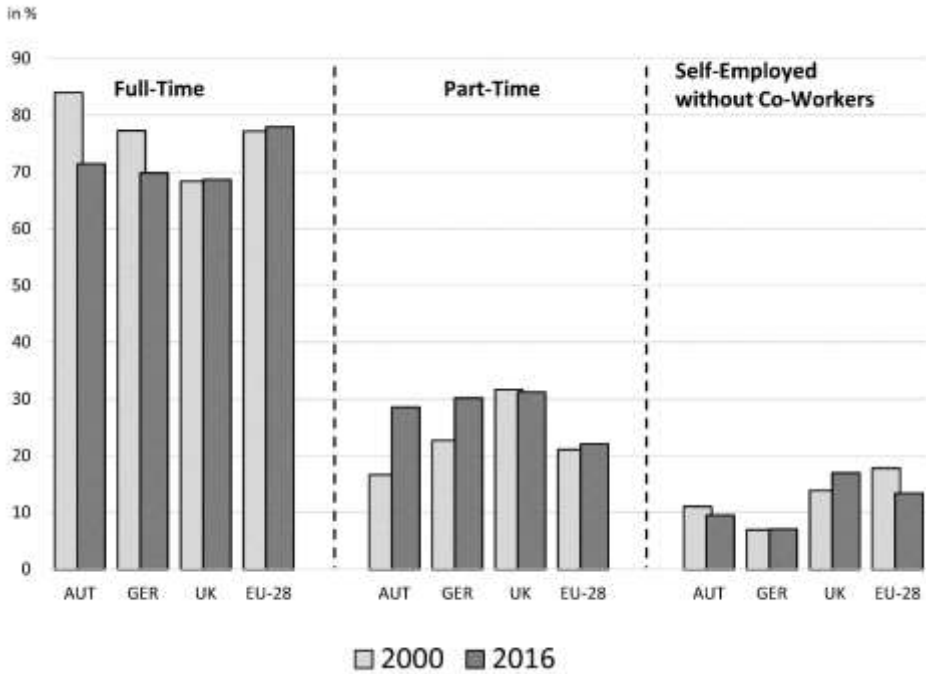


Source: Labour force survey statistics, OECD and Eurostat; own calculations.

In the UK, the average hours worked did not fall, but the initial number of hours worked was also lower than in Austria and Germany in the year 2000. In total the volume of work hours provided by older workers has increased significantly in the three countries considered here; notably so in Germany, where the increase is by 75% (Figure 19).

It is possible to dig a bit deeper into the changes of the labour market for 55-64 year olds by considering the structure of employment among employees, i.e. share employed full-time and part-time, and the share of this age group being self-employed (Figure 20).

Figure 20. Employment structure, 55-64 year olds



Source: EU-LFS, Eurostat; own calculations.

Figure 20 shows that higher employment rates in Austria and Germany have primarily come from an increase in part-time work, whereas this is not the case in UK; and also only present in EU28 to a much smaller extent than in Austria and Germany.

The increase in part-time employment in Austria and Germany may be explained by the emergence of so-called mini jobs.

The share of people employed part-time (among 55-64 year olds) has increased to be close to 30% in Austria and is even above 30% in Germany, close to the rate of part-time employment in the UK, which has remained unchanged since the year 2000.

The increase in part-time employment in Austria and Germany may be explained by the emergence of so-called mini jobs. Mini jobs are employment on special terms, for which there are restrictions in the number of working hours and wage income received. A special tax regime also applies as payroll taxes are carried by the employer only.

Self-employment (without employees) has somewhat gained in importance in the UK, where more than 15% of the cohort reports being self-employed. In Germany and Austria there has been little to no change in the

percentage reporting self-employment, whereas in the EU28 there has been a decline in the share of self-employed.

By considering factors that support the prolongation of employment (pull-factors: e.g. policy incentives such as higher statutory retirement ages) and factors that are seen as barriers to old age employment (push-factors: e.g. perforated career trajectories caused by a higher number of transitions through various employment states, i.e. unemployment, care and part-time employment, during the life course), we find that a combination of the strength of those factors determines the retention probability of older workers across the three countries (Table 1).

Table 1. Retention probability across the countries studied

	Austria	Germany	UK
<i>Pull-Factors</i>	Strong	Moderate	Weak
<i>Push-Factors</i>	Moderate	Moderate	Weak
<i>Timing of Labour Market Exit</i>	Voluntary Early Exit	Exit at Retirement Age	Late exit

Source: Fechter and Sesselmeier (2016).

For the UK we find that older individuals would rather prolong employment, which is caused by the dominance of the second pension pillar motivating the extension of employment through the incentive of high retirement incomes. In Germany, the incentives and disincentives are relatively equal, which means that older individuals will exit at retirement age. This development relates to reduced push-factors through the Hartz reforms in 2002-2003, enabling individuals to (re-)enter the labour market easily, and strong deductions on pension wealth in the case of early labour market exits. In Austria, individuals tend to choose an early exit, even though the mechanisms indicate incentives to work longer. Here, renewed early retirement pathways (Hacklerregelung) and late adjustments of equal retirement ages between men and women influence the choice of retirement timing.

We find that the implementation of Active Ageing measures - in particular later statutory retirement ages and the abolishment of early retirement schemes - prolong employment among older individuals.

We find that the implementation of *Active Ageing* measures – in particular later statutory retirement ages and the abolishment of early retirement schemes – prolong employment among older individuals. At the same time, however, employment at older age is increasingly deviating from standard full time employment.

From those theoretical and empirical considerations, we deduce that institutional incentives are effective in their aim to prolong working lives. Retirement transitions are affected by the (un-)employment patterns before labour exit and these transitions are greatly influenced by employment patterns over the life-course. There is evidence that career trajectories have become more perforated (at least in Germany), increasing the risk of insufficient old-age pension coverage.

Differences in retirement regimes across countries influence older workers' labour market performance. The policy challenges in each country thus depend on national institutional settings.

Differences in retirement regimes across countries influence older workers' labour market performance. The policy

challenges in each country thus depend on national institutional settings.

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WHAT FACTORS DRIVE LONGER WORKING LIVES?

BY MIKKEL BARSLUND AND GILLES THIRION²²

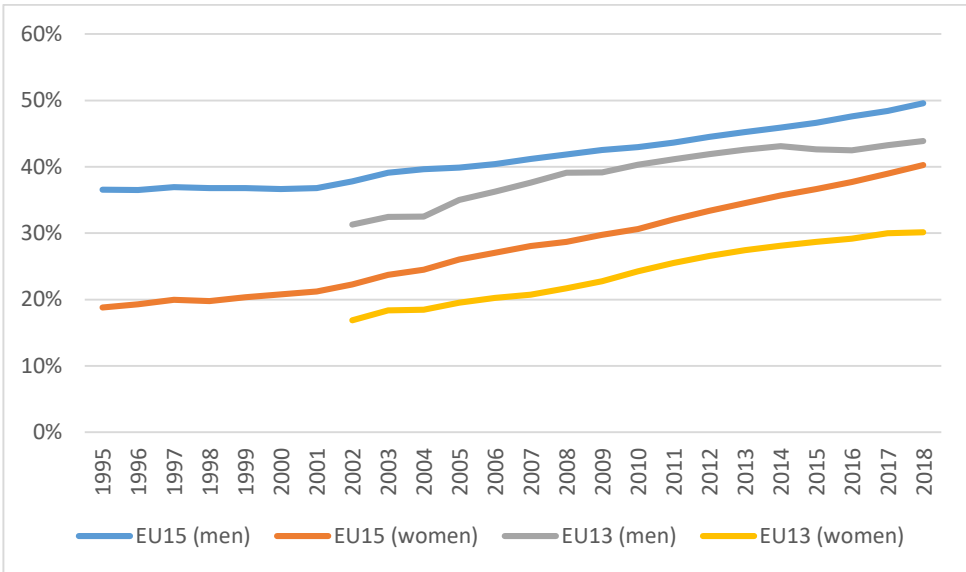
Longer working lives are a prerequisite for sustainable public finances at a time of rapidly ageing societies (Barslund and von Werder, 2016). For this reason, keeping people active on the labour market for longer has been a central pillar of labour market policy in EU countries for the past two decades. And, as is evident from a number of chapters in this book, the issue will continue to shape prospective labour market policy. Labour market participation rates of older workers (55 to 69 years) have in fact increased steadily for both men and women in most EU countries in this period (Figure 21). This development has been most pronounced among 55-64 year olds, but activity rates over the last 10 years also appear to have increased among the 65+, albeit more slowly. One factor driving this change has undoubtedly been the various, and often extensive, reforms to pensions and early retirement options, or more generally, the closing of different routes towards exiting the labour market before becoming eligible for statutory retirement (see Carone et al., 2016). Other factors have also influenced the potential for older workers to stay active in the labour market, however.

In a recent study we look at the demographic drivers of increasing activity rates among older workers (Barslund and Thirion, forthcoming). Specifically, we explore the absolute and relative contributions of non-policy related demographic composition effects. These non-policy changes are the age structure within the age group of 55 to 69 years, education levels, the health status of workers, and the sector of employment (i.e. manufacturing and services). We know that education and health are important determinants for the propensity to stay in the labour market (Alavinia and Burdorf, 2008; Larsen

²² Mikkel Barslund is a Research Fellow at CEPS, where he leads the Ageing Societies Programme. Gilles Thirion is an economist at the Directorate for Economic and Financial Affairs of the European Commission. He was previously a Researcher at the CEPS and the World Bank.

and Pedersen, 2015). Moreover, shifts in occupational structure may have resulted in less strenuous work tasks, thereby enabling people to work for longer. The age structure of the cohort of 55 to 69 year olds is also likely to play a role in the evolution of activity rates. We also considered whether changes to cohabiting rates may have affected labour force participation in the relevant age group.

Figure 21. Labour market participation rates for 55-69 year olds in the EU (men and women)



Source: EU-LFS, Eurostat.

This analysis requires that labour force participation be coupled with various individual level characteristics, such as age, level of education, health status, main occupation, and cohabiting status. This is possible in the SHARE survey, but only for a subset of nine EU countries²³ and only for the period 2004 to 2015.²⁴ The nine countries in our study cover approximately 60% of the EU28 population in the relevant age group.

Before turning to the impact of demographic changes, it is worth looking at how these characteristics have changed at the aggregate level, based on information in the SHARE survey (see Barslund and Thirion, 2019). In the period from 2004 to 2015, the age group of 55-69 year olds became younger, in the sense

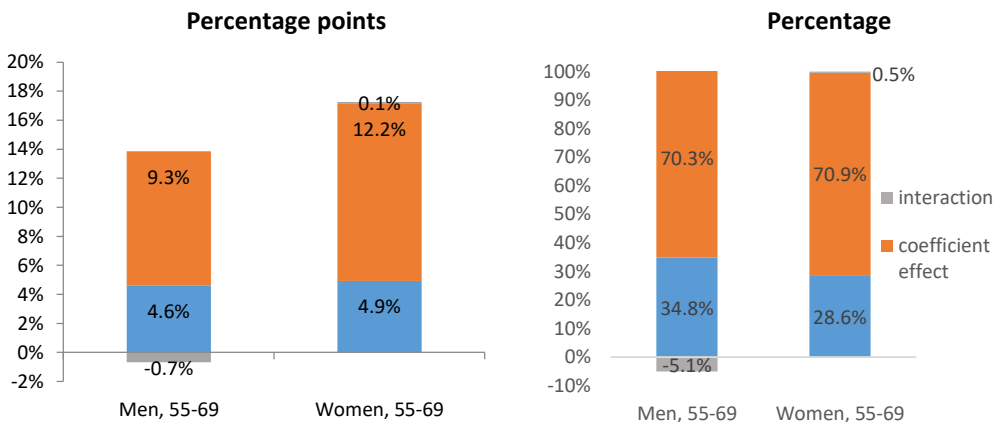
²³ Our EU countries for which information is available between 2004 and 2015 are Germany, Spain, France, Italy, the Netherlands, Austria, Belgium, Denmark and Sweden.

²⁴ SHARE – Survey of Health, Ageing and Retirement in Europe. See www.share-project.eu for more information.

that a larger share of the population in that age group was in the age range 55-59 in 2015 than in 2004. It also became healthier; even if the younger average age is taken into account. Importantly, the cohort of 55-69 year olds was better educated in 2015 than the corresponding cohort in 2004. And the propensity to work in services was higher in 2015 than in 2004. The share working in manufacturing, on the other hand, declined from around 30% to 20% during that period.

In order to assess the impact of changes within these important demographic factors on labour supply, we apply the Oaxaca-Blinder decomposition method over time periods (rather than over population subgroups, which is the traditional approach, Oaxaca, 1973). The methodology establishes, through linear regressions, a counterfactual to the labour force activity rates in 2015 by estimating what the 2004 labour market activity rates *would have been* with the demographic structure of 2015. Hence, we decomposed the difference in activity rates between 2004 and 2015 into two parts. One part is explained by demographic changes that we account for, while the other part of the difference remains unexplained. The unexplained part will comprise changes due to pension reforms, but also due to other potential changes to societal structure that we cannot control for in the linear regression methodology. Our results are therefore informative of the share of change in labour market activity rates that can be attributed to the changes we address. The analysis is performed for men and women separately in order to capture differences in starting points and circumstances.

Figure 22. Decomposition of changes in activity rates among the 55-69 year olds



Source: Barslund and Thirion (2019).

For the nine countries considered here the change in activity rates between 2004 and 2015 for the age group of 55 to 69 year olds was 13.2 percentage points

The change in activity rates between 2004 and 2015 for the age group of 55 to 69 year olds was 13.2 percentage points for men and 17.2 percentage points for women.

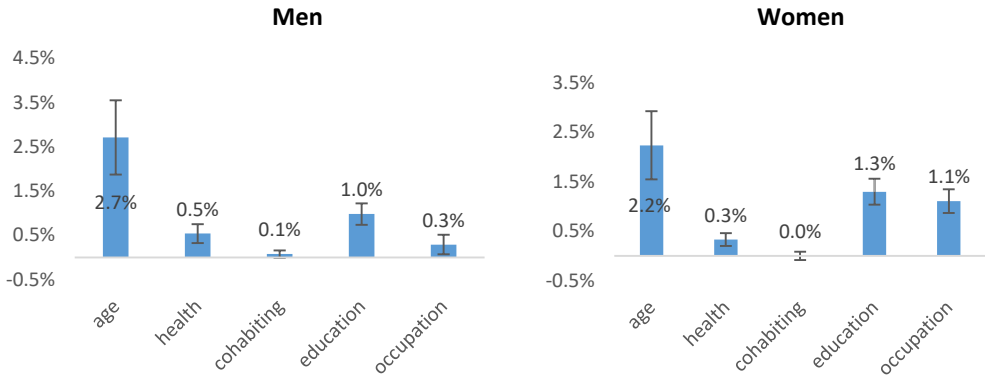
for men and 17.2 percentage points for women. The results reveal that for both genders around 5 percentage points (the composition effect) of this change can be attributed to changes in average health, education, age structure, and cohabitation status (Figure 22, left graph). In relative

terms, the composition changes – the explained part of the decomposition – accounts for 29% and 35% of the changes in activity rates for women and men respectively (Figure 22, right graph).

The bulk of the change in labour market activity rates cannot be explained by our demographic variables, but rather by the coefficient and interaction effects. The coefficient effect essential means that other changes than those included in the analysis have played a role in increasing labour market activity rates, i.e. the propensity to be active on the labour market for the relevant age group has changed for given individual characteristics. The *interaction effect* is a technical term to ensure that the decomposition adds up to the total change. It is not surprising that a larger part of the change in activity rates remains unexplained, since there has been intense policy focus on increasing the employment rates of this group of older potential workers. Most, if not all, of the countries have reformed early retirement schemes and pension incentives for working longer. Nevertheless, we are able to explain 30% of the increase in labour market activity. Below we focus on the part we can explain by the demographic variables included.

Of the 4.6 (for men) and 4.9 (for women) percentage-point increase that our analysis accounts for, the change in age structure makes up half or more than half (for men) of the increase (Figure 23). Labour market participation is much higher in the younger part of the age span 55 to 69 years than among the older members of this age group. Hence, while European populations have generally aged, the age composition within the 55-69 age group has actually shifted towards the younger part of the age span. This resembles findings elsewhere (European Commission, 2015). The second most important factor of those considered here is the improvement in educational attainment. However, education alone only explains around 1 percentage point of the increase, i.e. less than 10% of the overall change in activity rates.

Figure 23. Decomposition of the explained part with confidence intervals, 55-69 year olds



Note: 95% confidence intervals indicated.

Source: Barslund and Thirion (2019).

Changes in occupational structure, i.e. the shift from manufacturing jobs to jobs in the service sector, play a role that is almost equal in size to that played by education for women, whereas this is much less pronounced for men. Better health explains only a negligible part of the increase in labour market participation rates. This is in line with research showing that health status is seldom a limiting factor in retirement decisions (Jousten and Lefebvre, 2016).

In addition to the known fact that employment rates among older potential workers have increased substantially over the previous decade, the results presented above carry three messages: first, our results are indicative of early retirement and pension policies being a significant driver of longer working lives. Second, changes in age structure are important when looking at the 55-69 year olds, explaining almost a fifth of the total change in activity rates. This is important because this age group will not continue to get younger going forward. Finally, health, education and occupation explain approximately another fifth of the change, *taken together*. Each factor on its own has had a minor impact on changes in labour market participation rates.

Finally, health, education and occupation explain approximately another fifth of the change, taken together. Each factor on its own has had a minor impact on changes in labour market participation rates.

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ACTIVE AGEING: MUCH MORE THAN PAID WORK

BY ALAN WALKER²⁵

Active ageing is firmly established as the leading global policy strategy response to population ageing. In practice, however, the term ‘active ageing’ provides a convenient slogan for a wide range of policy discourses and initiatives concerning the impact of demographic change, only some of which are worthy of the label. In particular, a productivist ideology which reduces active ageing to working longer has come to dominate these discourses. This chapter explains this reduction and demonstrates the much broader potential of active ageing, a potential which, if realised, would more successfully achieve policymakers’ limited goal of extending working lives.

Active ageing in Europe

Following the launch of the idea of active ageing by the World Health Organisation (WHO) (2002) the concept spread rapidly, a process which was assisted greatly by its adoption by the United Nations in the second global strategy on ageing, the Madrid International Plan of Action on Ageing (UN, 2002). Both the UN Economic Council of Europe and the European Union (EU) were quick to seize upon the concept and translate it into policy proposals. Indeed, the EU may be said to have played an important formative role in the development of the concept, for example in proclaiming the role of older people as active participants in society as a core theme of the 1993 European Year of Older People, and through the activities it sponsored during the 1999 UN Year of Older People (European Commission, 1999).

Despite these contributions to the development of active ageing as a policy instrument and its continued application in EU discourses and major events,

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such as the 2012 European Year of Active Ageing and Solidarity Between Generations, in practice the issue that tends to dominate such initiatives is not active ageing but employment. This productivist orientation became apparent almost from the start, even though it contradicted the more comprehensive approach formulated in 1999. When the 2000 Lisbon Council established its 10-year strategy to make Europe “the most competitive and dynamic knowledge-based economy in the world”, it made full employment an overarching goal. Since this goal could not be achieved without raising the employment rate of older (55+) workers in most member states, it was not surprising that the 2001 Stockholm Summit introduced a specific target employment rate for older workers of 50%. This target was backed up by a guideline on active ageing which placed the employment of older workers centre stage in EU economic development and completed the productivist reduction of ‘active ageing’:

Member States should develop active ageing policies by adopting measures to maintain working capacity and skills of older workers, to introduce flexible working arrangements, and to raise employers’ awareness of older workers’ potential. They should ensure that older workers have sufficient access to further education and training and review tax and social protection systems with the aim of removing disincentives and creating incentives for them to remain in the labour market (European Commission, 2001, p. 50).

Although there have been periodic nods towards the more comprehensive notion of active ageing espoused by the WHO, and the European Commission in 1999, this narrow focus on employment and extending working lives continues to dominate EU policymaking. This is not to undervalue the importance of promoting employment opportunities for older workers and combating age barriers but, this is not active ageing (Walker, 2009; Walker and Maltby, 2012).

So what happened? In a nutshell, economic and market issues dominate European policymaking and are always prioritised. Moreover, while the aim of extending working lives is not incompatible with active ageing, the policy instruments at EU level do not lend themselves to the implementation of a more comprehensive version of this concept. Perhaps also the wide range of actions implied by a comprehensive approach are just too daunting for European policymakers to contemplate. Maybe the problem is the same as at the national level, where policymakers’ horizons are set by the short-term electoral cycle, and active ageing is a long-term strategy. Then there is the possibility that they simply do not ‘get’ active ageing; they do not grasp it and therefore are not aware of its enormous potential.

A narrow focus on employment and extending working lives continues to dominate EU policymaking.

The promise of active ageing

To understand the potential of active aging and its reach far beyond the labour market it is necessary to go back to the original concept advanced by the WHO (2002, p. 12):

Active ageing is the process of optimising opportunities for health, participation and security in order to enhance quality of life as people age.

The crucial phrase in this definition is 'as people age' rather than 'when they are old'. This recognises that ageing is lifelong and results from a lifetime of cumulative wear and tear, rather than being a phenomenon that commences at or around pension age. The great promise of active ageing, in social and economic terms, hangs on the fact that in the lifelong process of ageing the external environmental determinants are far more influential than the genetic ones, by as much as four or five to one (Gems and Partridge, 2013). There is wide biogerontological consensus on this point (López-Otin et al., 2013) and also on the fact

Active ageing is the process of optimising opportunities for health, participation and security in order to enhance quality of life as people age.

that there is no such thing as a gene for ageing – the ideas that human beings are programmed to live a fixed period or to age in a certain way (Kirkwood, 2005). The key environmental risk factors include both political economy variables such as deprivation, low socio-economic status, air pollution, unhealthy food production and occupational stress, and behavioural ones such as smoking, lack of exercise and poor diet. For example, there is clear evidence, derived from longitudinal data analyses, of associations between low socio-economic status and area deprivation in childhood and lower levels of functioning in old age (Walker, 2017; see also <http://www.newdynamics.group.shef.ac.uk/>).

The pre-eminence of the external, non-genetic factors in human ageing provides the key to realising the potential of active aging as well as pointing to the sorts of policy measures required to do so. The risk factors that inflict damage on the human body and mind and often result in the chronic conditions associated with loss of function in later life, or biological ageing, can be moderated or prevented entirely. These chronic conditions, often experienced as multi-morbidities, such as coronary heart disease, stroke, Type-2 diabetes and so on, may cut short lives prematurely or result in disabilities that reduce functioning and quality of life, and which may require treatment or care. But, adopting a life course approach to the aetiology of these chronic conditions highlights the potential to reduce and postpone them. This is the primary aim of the active ageing approach and why its adoption is so important for ageing societies.

The scientific evidence supporting active ageing is robust and growing continuously (see Fernandez-Ballesteros et al., 2013; <http://mopact.group.shef.ac.uk/about/>). Key examples include the beneficial effects of physical exercise: the active had 33-50% lower risk of developing Type-2 diabetes than

The scientific evidence supporting active ageing is robust and growing continuously.

the inactive; and the moderately active have a 20% lower risk of stroke incidence than the inactive. With respect to diet the association between fruit and vegetable intake and the reduced risk of cardiovascular disease and cancer is very clear: reductions in the risk of cardiovascular disease and all causes of mortality are

observed in an intake of 800g/day of both and, for total cancer, 600g/day (Aune et al., 2017). As these examples, from many, illustrate it is not scientific evidence that is lacking but the purposeful translation of this evidence into practical interventions and policy strategies. On this matter it may be that the tendency of policymakers to overemphasise employment has actually harmed the cause of a more comprehensive approach.

Realising the promise

What would a comprehensive strategy on active ageing look like? First of all, it would emphasise *prevention*. Implicit within this priority is a life course perspective because it is essential to intervene as early as possible, including during pregnancy and early life, to prevent later life chronic morbidities. Mid-life interventions are critical too because, between the ages of 35 and 55 there is a seven-fold increase in the prevalence of multi-morbidity. While interventions in later life, including a new generation of drugs (geroprotectors) can also be beneficial, it is essential also to activate secondary prevention and to ensure that remedial supports are available. A similar life course preventative approach should apply to working life. Here, rather than focusing only on late working

An active aging strategy should respect diversity and not take the 'one size fits all' approach of the working longer policy.

life, policymakers should encourage lifelong education and continuous training to prevent skill loss.

Second, the 'active' in active ageing should encompass all activities that contribute to physical and mental health and not just paid employment.

Indeed, the myopic policy focus on work may conflict with other personally and socially rewarding activities, such as volunteering. Thirdly, active ageing should be inclusive of all older people, even those with frailty. This is because of the danger of excluding the old-old and because the link between activity and health (including mental stimulation) holds firm into advanced old age. Fourthly, for example, gender sensitivity is critical (Foster and Walker, 2013). Cultural an active aging strategy should

respect diversity and not take the 'one size fits all' approach of the working longer policy. and national diversities must be taken into account, for example variations in cultural norms and institutional development between the north and south, and east and west in Europe. Finally, the idea of active ageing embodies both rights and obligations: the right to social protection, lifelong education and training, and so on, should be accompanied by obligations to take advantage of these opportunities and to remain active in other ways. From a gender perspective the realisation of such obligations requires specific supportive measures to enable women to participate on an equal basis to men. This is not to suggest that sanctions should be applied for non-compliance, but rather that the redefinition of the social contract that this comprehensive form of active ageing implies would entail education from an early age about the need for personal as well as socio-political responsibility in the adoption of prevention as a guideline for life.

It is clear from the above that realising a comprehensive strategy on active ageing would require a partnership between citizens and society. In this partnership the role of the state is to enable, facilitate and motivate citizens and to provide high quality social protection. It also has a critical role in regulating the meso sectors, especially employers, to ensure healthy working conditions and continuous training. For their part citizens have a duty to take advantage of lifelong learning and continuous training opportunities and to promote their own lifelong health and well-being. The big policy challenge is to join up the separate domains - employment, health, social protection, social inclusion, education, transport and so on - so that they are mutually supportive. This not likely to happen when the policy machine is focused exclusively on paid employment.

Realising a comprehensive strategy on active ageing would require a partnership between citizens and society.

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