



universität
wien

Joint Programme Initiative (JPI)

Understanding employment participation of older workers (UEP) – Austrian National Report

Ingrid Mairhuber, Elisabeth Prammer (FORBA)

Ulrike Waginger, Brigitte Steinbauer (Universität Wien)

Februar 2015

Forschungs- und Beratungsstelle Arbeitswelt
A-1020 WIEN, Aspernbrückengasse 4/5
Tel.: +431 21 24 700
Fax: +431 21 24 700-77
office@forba.at
<http://www.forba.at>

CONTENTS

<i>INTRODUCTION: NATIONAL BACKGROUND</i>	1
1. <i>METHOD</i>	6
2. <i>FINDINGS</i>	7
2.1. <i>Labour Market</i>	7
2.2. <i>Legislation & its Implementation</i>	8
2.3. <i>Financial Factors</i>	10
2.4. <i>Social Position</i>	12
2.5. <i>Domestic Domain</i>	13
2.6. <i>Work: HRM and Interventions</i>	14
2.7. <i>Work: Work Factors</i>	15
2.8. <i>Health & Health-Related Behaviour</i>	16
2.9. <i>Work Ability</i>	17
2.10. <i>Motivation</i>	18
3. <i>DISCUSSION</i>	20
3.1. <i>Labour Market</i>	20
3.2. <i>Legislation & its Implementation</i>	20
3.3. <i>Financial Factors</i>	21
3.4. <i>Social Position</i>	21
3.5. <i>Domestic Domain</i>	22
3.6. <i>Work: HRM and Interventions</i>	22
3.7. <i>Work: Work Factors</i>	23
3.8. <i>Health & Health-Related Behaviour</i>	23
3.9. <i>Work Ability</i>	24
3.10. <i>Motivation</i>	24
4. <i>POLITICAL RECOMMENDATIONS: RESEARCH NEEDS</i>	26
<i>REFERENCES</i>	27

INTRODUCTION: NATIONAL BACKGROUND

Demographic and employment outlook

According to the population forecast of Statistik Austria for 2013, Austria's population is set to grow from 8.43 million (2012) to 8.99 million by 2030 and 9.37 million by 2060. During the same period, the country's age structure will shift towards older people. While currently 18% of the population are aged 65 or above, this percentage will have risen to 24% by 2030 and to 29% by 2060.

Owing to this changing age structure, Statistik Austria labour market forecasts assume that the size of the Austrian labour force (i.e. employed and unemployed persons) will peak at 4.162 million in 2018 and then see a demographics-related dip to 4.041 million by 2034, before rebound seeing another increase. A considerable part of this growth of the labour force from the mid-2030s onwards will be due to an increase in female workers. As the workers of the baby-boom generation are growing older and the labour-market-participation behaviour of persons aged 45 and above is expected to change, the number of older workers is set to see a substantial rise. Thus, the workforce aged 45 and above is expected to grow from ca. 37% (2012) to 39% by 2030 and to 42% by 2060. A recent study even expects the Austrian workforce to see a slight increase, rather than a drop, until 2030, due to better education (= there is a close link between qualification and labour market participation), changing (female) labour market behaviour and the effects of recent pension reforms (i.e. restriction of access to early retirement pensions) (Horvarth/Mahringer 2014:411).

Economic dependency ratio

According to Wöss/Türk (2011), public debates on the long-term financial sustainability of the Austrian pension system tend to be based on demographic arguments so that future shifts in the age structure of the population are frequently (mis)interpreted in terms of shifts in the ratio of pensioners and the working population. Generally, this demographic dependency ratio (age ratio) describes the number of people aged 65 and over in relation to the number of people of working age (aged between 15 and 64). Unlike the demographic dependency ratio, the economic dependency ratio describes the number of people who are economically dependent in relation to those who are economically active. One of the most common economic dependency ratios in Austria is the retirement ratio, relating the number of pensioners to the number of persons paying social security contributions. Wöss/Türk of the Austrian Chamber of Labour have developed an economic 'dependency ratio calculator' based on a broader definition that relates the number of pensioners and unemployed people to the number of economically active persons (Wöss/Türk 2011).

Future scenarios of the long-term financial sustainability of the Austrian pension system thus are not only increasingly based on a lower dependency; the broader concept of the economic dependency ratio also offers a lot more scope for action/(scenarios of) policy intervention as the economic dependency ratio is largely determined by employment and unemployment rates. Suggestions for policy intervention can therefore be directed towards a reduction of unemployment, the rapid labour market integration of young people on completing their training, an increase of the labour market participation of women, the avoidance of early retirement due to ill health by means of better health-

care provisions, an improved labour market integration of older (male and female) workers, etc. (see also: Wöss/Türk 2011:4).

Employment and unemployment figures (older people)

Although the labour market participation of workers aged over 55 has grown steadily since the turn of the millennium, compared to other EU countries employment rates for older workers in Austria are still quite low. A closer look, especially if we take gender and cohort differences into account, shows that the employment rate of workers five years before they reach statutory retirement age is much higher among women than among men. Thus, in 2013 the employment rate for women aged between 55 and 59 amounted to 54.5%, compared to an employment rate for men aged between 60 and 64 of 32% (Statistik Austria 2014, download: 26. September, 2014).

Table 1: Employment rate for older workers in Austria 2004 and 2013

Age	2004	2013
women		
55-59	32.8	54.5
60-64	7.0	14.8
55-64	19.3	36.0
men		
55-59	62.5	73.3
60-64	16.6	31.9
55-64	38.9	54.3

Source: Statistik Austria, download: 15.1.2015

The low employment rates of older workers reflect both the legal provisions facilitating early retirement (women from age 55; men from age 60) and the labour market discrimination against older workers. The latter can also be gleaned from the higher unemployment rate (national calculation) among older workers. Unemployment among older workers is not only above that of young people but well exceeded the general average even during the crisis year of 2009 (for details see: Mairhuber 2011:64f.). In 2013, the unemployment rate among older workers who lost their job in the last five years before statutory retirement age was 8.3% for women (aged between 50 and 54) and as much as 14.5% for men (aged between 60 and 64) (Unemployment rate 2013; download: September 26, 2014; <http://www.dnet.at/bali/User.aspx>).

Table 2: Unemployment rate for older workers in Austria 2009 and 2014

Age	2009	2013
women		
50-54	5.9	7.0
55-59	7.2	9.4
60-64	2.8	3.6
15-64	6.4	7.6
men		
50-54	7.8	9.0
55-59	9.0	10.7
60-64	11.9	15.9
15-64	8.0	9.0

Source: <http://www.dnet.at/bali/User.aspx> (download 15.1.2015)

Non-standard employment, such as marginal employment, temporary employment, agency work or 'quasi-freelance' work can be mainly found in Austria at the start and end of working life. Especially marginal employment plays an important role among older women from age 60 and men from age 65. Part-time work, the most frequent type of non-standard employment, plays a key role among women throughout their working lives, especially during the key period of labour market participation (from ages 30 to 50). Among men, part-time only plays a certain role in the context of the 'part-time work for older workers' scheme (*Altersteilzeit*) (for details see: Knittler/Stadler 2012:484f.).

Retirement figures and trends

In Austria, early retirement was extensively used for many decades to mitigate the employment effects of restructuring. Since the turn of the millennium, the effective retirement age has been rising – also due to increasingly restrictive regulations implemented by recent pension reforms (Türk 2010:249).

Although women's statutory retirement age is (still) five years below that of men in Austria, Austrian women rarely take advantage of these provisions – especially due to the gendered division of labour and associated missing insurance periods. If we look at the effective retirement age by type of pension, the effective retirement age in 2013 for those receiving old-age pensions (excluding disability pensions) was 62.8 among men and 59.2 among women. Thus, the retirement age among women was only slightly below the statutory female retirement age of 60.

Table 3: Average effective retirement age

	1970	1980	1990	2000	2005	2010	2011	2012	2013
Women									
old-age pension	61.5	59.5	59.7	58.3	59.5	59.3	59.4	59.3	59.2
disability pension	56.5	55.1	52.4	49.2	51.0	50.1	50.1	50.3	49.7
both	60.4	58.3	57.5	56.8	57.1	57.1	57.3	57.4	57.5
Men									
old-age pension	64.2	62.5	62.1	60.5	63.4	62.6	62.7	62.9	62.8
disability pension	56.7	53.9	53.9	51.8	53.9	53.5	57.3	53.8	53.5
both	61.9	59.2	58.3	58.5	59	59.1	59.2	59.4	59.6

Source: Statistik Austria (download: September 26, 2014).

Overall, in 2007 3.4% of working-age women and 5.8% of working-age men in Austria received a disability pension. Following a steady rise, the share of disability pensions among all newly awarded retirement pensions has been going down since 2000 (OECD 2010; also see: Türk 2008, Mayrhuber/Knittler 2010). In addition, studies show that male recipients of a disability pension are likely to die 10 years (women 7 years) before their peers receiving an old-age pension (Guger et al 2007:236).

Even though, on average, women in Austria do not retire much earlier than men, gender gaps in pension benefit levels are massive (around 50 per cent). This is due to the employment-centred design of the Austrian pension system. The limited labour market integration of women in Austria (for details see Mairhuber/Papouschek 2010) and the gender pay gap have a direct negative impact on female pension benefit levels. Even though female labour market participation has been on the increase for decades, only a small reduction of the gender pension gap can be observed. Thus, in 2013, the median newly awarded old-age pension for women was €1,089.-, compared to €1,662.- for men; the median newly awarded invalidity pension was €785.- for women and €1,154.- for men (Statistik Austria, download: September 26, 2014).

Pension policies and reforms

Since the mid-1980s, numerous pension reforms have led both to limitations in the access to early retirement pensions and to considerable reductions in benefit levels. Due to 'budgetary considerations' (1980s), 'the long-term sustainability of pension insurance' and 'demographic change (since the early 1990s), the reforms have continually strengthened the insurance or equivalence principle, regardless of any changes in the labour market (including the rise of atypical employment and increasing unemployment). This has made the claim to a pension as well as pension levels ever more dependent on labour market participation, especially in terms of continuity, length and the level of earned income. Career breaks, part-time work and low income result in lower pension benefits. At the same time, derived pension benefits have been

continuously reduced (for details see Mairhuber 2000, pp. 183ff). Thus, it is mostly women who lack financial security in old age even if the number of men with increasingly discontinuous careers is also on the rise.

The pension reform of 1993 was already governed by the slogan 'financial sustainability in view of demographic changes'. But this pension reform also was an exception in so far as it not only brought about restrictions and cuts but also structural improvements for women. Thus, the so-called 'child-raising periods' were introduced, which are due for a maximum of 48 months per child and are calculated cumulatively, independently of any simultaneous insurable employment (for more details see Mairhuber 2000, p. 165ff).

The 2003 pension reform as well as the 2004 'harmonisation' of all pension schemes, by contrast, went far beyond simply tightening access criteria and reducing benefit levels: the abolition of all early retirement pensions and a fundamental reform of the calculation mode (now extended to a person's entire life-time earnings) meant a re-orientation in Austrian retirement pension policy and a departure from the principle of safeguarding living standards. Improvements in the calculation of benefits (for example, better upgrading factors and longer child-raising periods) introduced by the 2004 'pension harmonisation' were far outweighed by the disadvantages these changes brought about, especially for women: years of part-time work are now fully taken into account in the pension assessment, and the assessment basis for periods of unemployment was drastically reduced (for more details see Mairhuber 2009).

Even though the share of disability pensions among the working-age population has been going down since 2000, and is relatively low by international standards, in 2012 a comprehensive reform of disability pensions was implemented. This reform included the abolition (from 1 January 2014) of temporary disability pensions for all persons born after 1963. Persons with temporary disability are now entitled to medical or labour market rehabilitation, coupled with either a 'rehabilitation benefit' paid for by the health insurance scheme or a 'retraining benefit' paid from unemployment insurance.

1. *METHOD*

The search strategy was based on a four-step process:

1) First of all, key references were identified by means of a systematic literature review using the most appropriate search engines and screening databases (Web of Science, Google, Google Scholar), with search terms in German and English. A time frame was set from 2006 to 2014. The studies found were narrowed down to the national context of Austria or comparative European studies including Austria. The texts found were limited to reviewed articles.

2) To identify scientific reports that have not undergone a review process but were issued by, e.g. ministries and research institutes, publications and homepages of national authorities were screened (e.g. Federal Ministry of Labour, Social Policy and Consumer Protection, Public Employment Service, Main Association of Austrian Social Insurance Institutions, Austrian Institute of Economic Research (WIFO), Institute for Advanced Studies (IAS), Statistik Austria).

3) Further references were found within literature quotes in the texts. Some authors were cited frequently, thus a search was undertaken for further studies by these authors. Within the texts, new terms of reference were identified and another round of database screening was carried out.

4) Research was narrowed down by identifying key literature. This literature was categorised within domains and then analysed. Within this process, the first finding was defined – some texts relate to more than one domain (e.g. health, gender). In addition, a literature list was drawn up with key literature and search terms, categorised by domain, with a direct link to the article.

2. FINDINGS

2.1. Labour Market

One major finding is that withdrawing from the labour market is not always a voluntary decision taken by the older worker. Older workers are motivated to retire e.g. by attractive demand-sided offers by the employer. Empirical studies come to the conclusion “that not only workers but also firms have to be viewed as actors in the early retirement decision” (Riedel/Hofer 2013:10). Expensive older workers have been replaced by less expensive younger workers, especially within struggling industries. Soft landing plans offer incentives to retire earlier (Riedel/Hofer 2013:15). Also international comparison come to the conclusion that specially in times of economic recession older workers are forced into early retirement (Fischer/Sousa-Poza 2006).

Austrian studies also deal with the question if the people who retire come from the labour market or out of unemployment. There is strong evidence that older people experience unemployment before receiving a pension benefit: in 2013, about 24 % of men and about 19% of women retired out of unemployment (see: Table 4.)(see also: Halmdienst et al. 2014: 23).

Table 4: Types of transition to retirement 2013

	...from employment	...from voluntary/self-insurance	...from illness	...from unemployment	...others
Women	59.9	4.4	8.0	18.8	8.9
Old age pensions	69.3	5.1	1.1	15.1	9.4
Disability pensions	19.3	1.4	37.9	34.8	6.7
Men	58.1	1.6	12.4	23.9	4.0
Old-age pensions	76.9	2.3	1.1	15.3	4.4
Disability pensions	27.4	0.5	30.8	38.0	3.4

Source: BMASK (2014): Quartalsbericht 2/2014

Further studies using Austrian social security data consider the transition phases when older workers “are too old to work but still too young to retire” (Ichino et al. 2013). This transition phase, and also the determinants for transition, seem to be a crucial topic within the discussion.

Studies have also dealt with the question if the exit of older workers will increase the labour market entry of younger people. According to aggregate data for all EU countries, there is no statistically significant correlation between the exit rate from the labour market (or subsidised part-time work for older workers) of the elderly in 2009 and youth unemployment rate (Eichhorst 2013:07).

Another question was on the employment prospects of old and young workers after a plant closure, where the main finding (using Austrian social security data) was ‘that old and young workers face similar displacement costs in terms of employment in the long-run, but old workers lose considerably more initially and gain later’ (Ichino et al. 2013:1).

According to a study based on SHARE data (including Austria), many older workers do not give up their job because of favourable early retirement arrangements but because they don't see other job options (Radl 2013:655). Furthermore, there is hardly any possibility to keep on working after retirement (Schober/Winter-Ebmer 2011:8).

Scientific studies and non-scientific reports deal with the question if other reasons, like stereotypes, are affecting the employability of older workers (Radl 2013:655). Stereotypes are, e.g. older workers being too expensive, having out-dated qualifications, being less willing to take training, being less innovative, are less willing to adjust to company rules and being sick more often. A report of the Austrian Employment Service (Arbeitsmarktservie Österreich) shows that stereotypes are responsible for leaving older workers without jobs (Arbeitsmarktservie Österreich 2013).

2.2. Legislation & its Implementation

International comparative studies (see, for example: Gruber/Wise 2005, Fischer/Sousa-Pozer 2006; Börsch-Supan et al. 2008; Mühlberger et al. 2010) show that the institutional design of the social security systems (such as eligibility criteria or benefit generosity) has a strong impact on the labour market participation of older workers. It is important to emphasise that this does not only refer to the area of pension insurance and the availability and conditions of early or statutory retirement. A decisive factor influencing the labour market participation of older workers is the availability and conditions of benefits in the case of ill health, disability or unemployment (Budimir 2011:128).

Recent comparative studies (Famira-Mühlberger et al. 2010, Famira-Mühlberger 2010a) tried to address the different reasons for the labour market inactivity of older workers or the different pathways by which older workers leave the labour market. For Austria, the authors showed that – at least so far – the relatively early labour market exit of workers aged between 50 and 64 is mainly due to early retirement pensions. Labour market inactivity due to ill health, disability or benefits derived from health insurance entitlements are less important – also because the relevant regulations are, and have been, very restrictive by international comparison. Unemployment or benefits derived from unemployment insurance are not really relevant in this context either (Budimir

2011:133). Thus, in 2008, 71.4% of those 50- to 64-year-old persons in Austria who were not active in the labour market did so because they received pension benefits (82% of men and 68% of women) (Famira-Mühlberger 2010:9). For women, family-related care obligations as well as other family-related or personal reasons played another important role (Budimir 2011:129).

It must, however, also be noted that access to early retirement has been drastically restricted since the turn of the millennium. In 2000, early retirement pensions due to reduced work ability were abolished and the eligibility criteria (e.g. gradual increase in the early retirement age, benefit penalties for early retirement) for the remaining early retirement pensions (e.g. early retirement pensions due to unemployment or long insurance periods) were tightened. In 2003, even these early retirement pension provisions were phased out and partly replaced by new regulations, which again allow older workers to leave the labour market before having reached statutory retirement age (e.g. pension due to long insurance contributions 2003 and a 'corridor pension' 2004¹) but these changes have de facto excluded women from early retirement or have, at least, brought about deteriorations, in particular for women (for details see Mairhuber 2011:69ff.).

Recent empirical studies have tried to address the impact of the pension reforms of 2000, 2003 and 2004² on the effective retirement age (Stefanits/Hollarek 2007; Türk 2008; Budimir 2010, Staubli/Zweimüller 2013; Horvarth/Mahringer 2014) and, to some extent, also on pension levels (Stefanits/Hollarek 2008; Mayrhuber 2004 and 2006). Empirical analyses suggest that the tightening of eligibility criteria for early retirement pensions and the abolishment of early retirement pensions have significantly delayed retirement. They also show, however, that transitional provisions, as well as the newly created schemes (i.e. pension due to long periods of insurance contributions paid and 'corridor pensions'), are slowing down this development (Stefanits/Hollarek 2007, Türk 2010, Budimir 2010). At the same time, the exit from standard employment tends to occur at an ever earlier age today. The so-called 'employment gap' thus created between a person's exit from the labour market (e.g. in the shape of unemployment, sick leave, atypical employment) and the start of retirement is happening at the expense of older women and men concerned (Budimir 2010, Mayrhuber/Knittler 2010) (see also Table 4 above). In their analysis of disability pensions, Guger et al. (2007:233) even talk about a 'tendency towards a precarisation of the labour-market exit phase' – similar to the increasingly precarious labour market entry phase among young workers. Based on SHARE-data (including wave 5), Halmdienst et al. (2014:23) show that about one quarter of Austrian pensioners experience at least one year of non-employed before receiving a pension benefit.

¹ 'Corridor pensions allow workers to leave the labour market at the age of 62, albeit with a reduction of pension benefits of 5.1% per year of retirement before statutory retirement age.

² The 2004 Pension Reform introduced a uniform pension law covering people in all occupations (including civil servants). This so-called harmonised pension system includes a new individual 'pension account', which is more or less a national account of a defined benefit type. The Pension Reform of 2004 came into force in 2005 but its impact will only make itself properly felt in the coming decades and is not yet reflected in the recent empirical studies.

Staubli/Zweimüller (2013) show that, due to the reforms, the early retirement age for women and men has risen, but they also point out large spillover effects on the unemployment insurance scheme with negligible effects on disability insurance claims. Manoli/Weber (2013) found that among the group of workers who are highly attached to the labour market, the increase in early retirement age directly led to longer working careers while spillovers on other social insurance programmes were minimal.

Only few empirical studies are available that focus on the impact of recent pension reforms on the level of pension payments (Stefanits/Hollarek 2008, Mayrhuber 2004 and 2006). Due to the new method of calculating pension levels (now extended to a person's entire lifetime earnings), it is clear, however, that, in the long run, massive reductions in pension levels can be expected.³ As the level of pension payments is increasingly tied to individual career biographies, people with discontinuous careers (due to unemployment, atypical employment, childcare and nursing care obligations, etc.), i.e. especially women, will be particularly affected. The negative effects of pension reforms can only be compensated for if individuals (especially women) manage to remain in employment longer (also see Mairhuber 2013).

A recent econometric study (Inderbitzin et al. 2013) explores how extended unemployment benefits for older workers (in place between June 1988 und July 1993 in certain regions of Austria especially hard hit by an economic crisis of the iron and steel industry) affect early retirement and social welfare. The authors come to the conclusion that programme complementarity (increased take-up of unemployment benefits followed by disability pension) is, in quantitative terms, important for workers aged 50 and above while programme substitution (increased take-up of unemployment benefit instead of disability pension) is, in quantitative terms, relevant for workers aged 55 and above. All together, the extended unemployment benefit programme contributed to raising the incidence of early retirement among eligible unemployed workers (Inderbitzin et al. 2013:13)

According to Graf et al. (2011), the subsidised old-age part-time scheme (*Altersteilzeit*) introduced in 2000 to allow flexible retirement options for older workers is meant to reduce early labour market exit by offering older workers favourable part-time conditions. At the same time, the analyses show that most older workers substitute part-time work for full-time work and thus the overall effect on labour supply is rather negative.

2.3. *Financial Factors*

The question of how far the financial factors impact on the labour market participation or retirement behaviour of older workers is, on the one hand, related to the design of a country's social security system. In addition to the general benefit generosity of the

³ There have been some paradoxical short-term effects (such as higher pension benefit levels for those with long period of pension insurance contributions who have left the labour market early) but these are mainly due to transitional regulations.

pension system, special financial incentives (e.g. bonuses for delaying retirement or penalties for early retirement) are important to answer the question if and when leaving the labour market is affordable or offers the most favourable conditions (see, for example, Gruber/Wise 2005; Hofer/Koman 2006). As shown in the chapter on 'Legislation & its Implementation' in this report, the tightening of eligibility criteria for early retirement significantly delayed retirement in Austria. Within this context, penalties for early retirement play an important role. Hanappi (2012:1) developed an econometric model thus providing robust evidence for the effects of such incentive measures on old-age labour supply in Austria. The simulation of several reform scenarios shows that a stronger emphasis on financial incentives in the pension system (the introduction of additional bonuses and penalties) reduces the out-of-labour force ratio of individuals aged 56-65 by 16.3% for females and 13.4% for males.

Based on national administrative data from 1998 to 2003, Raab (2011) investigated how financial incentives impact on individual retirement behaviour. His micro-estimation indicates that Austrians show a relative strong reaction to changes in the financial incentive structure (see also: Hofer/Koman 2006). However, women and men respond to financial incentives in different ways. According to Raab (2011), Austrians are quite proactive and forward-thinking in their retirement decisions.

Contradicting the argument that people decide on the best time for retiring based on rational financial considerations, Hanappi (2012:37f.) notes that 'the Austrian retirement regulations are characterised by a considerable degree of diversity, especially for individuals retiring within the time frame of this observational period (2002-2009). Due to this complexity (as well as the uncertainty related to potential future reforms), it is not entirely clear to what extent Austrian individuals are in fact capable of forming rational expectations about their future entitlements'.

According to the Austrian results of the 2012 Labour Force Survey ad hoc module on transition from work to retirement, four out of ten persons indicated that financial reasons (higher pension levels: 38.6%, higher income: 39.0%) would have contributed (already retired) or would contribute (still employed) to their staying in employment longer than planned (Statistik Austria 2013:21f.).

Based on analyses of Austrian severance payment regulations (i.e. a lump-sum cash benefit that is due to workers from their employers at the time of their entry into retirement), Manoli/Weber (2011) arrive at the conclusion that the retirement decisions of older workers are only moderately influenced by financial incentives.

The possibility of retiring early is, of course, a matter of being able to afford doing so, and thus is also related to the availability of additional assets and/or the previously earned labour market income. Investigations by Dorn/Sousa-Poza (2005) for Switzerland indicate that the wage rate is an important determinant. They found that early retirement is less prevalent among people with lower wages. This result supports the hypothesis that early retirement is barely affordable to poorer persons. People with a medium income, on the other hand, usually have the possibility to accumulate enough assets in private or occupational retirement plans. Analyses based on SHARE data

(including Austria) show that blue-collar workers with a low social position retire later than the upper class, except for involuntary retirement for health reasons. At the same time, women retire earlier than men, despite lower levels of financial preparation (Radl 2013:662ff.) (see also the chapter on Social Position).

By means of a micro-econometric model of household labour supply, Narazani/Shima (2009:17) come to the conclusion that reforms characterised by moderately generous income support while working, along with lower pension entitlements for early retirement, could encourage labour supply among older workers.

Based on SHARE-data, Angelini et al. (2009) have investigated if there is an early retirement trap, i.e. whether people who retired early are more likely to find themselves in financial hardship in the long run. For Austria, they find some evidence that individuals who retire early are better off in the short run but worse off in the long run and may well face financial hardship (Angelini et al. 2009:481; see also: Halmdienst et al 2014:34).

Schnalzenberger/Winter-Ebmer (2009) examine the impact of a layoff tax introduced in Austria for the layoff of workers over 50 years of age (and employed by one employer for more than ten years) in 1996. Results show substantial reductions in the displacement of older workers, especially after the tax saw significant increase in 2000. However, the layoff tax was abolished again from 1 September 2009 in the course of Austria's efforts to combat the financial crisis in an attempt to ease the financial burden encumbering employers (Schober/Schnalzenberger/Winter-Ebmer 2011:469).

2.4. *Social Position*

Within social position there are three main items influencing the retirement behaviour: class, gender and education and thus influencing again health, which already was stated to have an impact on retirement behaviour (BMASK 2012:340). According to Wahrendorf et al. (2013:792), the term social position comprises occupational class, occupational status and occupational skill level.

According to an analysis of SHARE data, class has a significant influence on retirement behaviour. 'The lower the people's social positions, the more likely they are to have retirement intentions' (Wahrendorf et al. 2013:792). But there is a difference in intentions and behaviour: also based on SHARE data, Radl (2013: 662) shows that blue-collar workers with a low social position retire later than the upper class, except for involuntary retirement due to health reasons. This might be due to financial factors and therefore not being able to retire early. Concerning health reasons, there is a 'high rate of involuntary early retirement among blue-collar workers reaffirming that disability is often the consequence of physical work' (Radl 2013:662).

There is a two-fold consideration towards difference in retirement behaviour due to gender. Based on SHARE data, Radl (2013: 659) found out that 'women's retirement behaviour does not differ significantly from that of men when controlling for class position and family situation'. But, besides retirement intention, women face the

problem of being pushed out of their jobs earlier than men. 'The fact that women are pushed out of the labour market at a younger age than men seems largely due to their disadvantaged class position' (Radl 2013: 666). Concerning social position and gender, though, the retirement behaviour is influenced by the financial situation, which is again influenced by a lower income of women.

'In Austria there is a close connection between the level of education and participation at the labour market' (Horvath/Mahringer 2014: 414). This connection is affecting the employability and is especially valid for people aged between 55 and 59 years (Horvath/Mahringer 2014: 415). Thus, people who spend more time in education retire later (see also Radl 2013: 659). Studies show that education has an effect on retirement, especially affecting labour market participation of women in general. Being undereducated tends to increase the probability of partial and full retirement for female workers and the probability of partial retirement for male workers (Schnalzenberger et al. 2014:16).

2.5. *Domestic Domain*

International and comparative studies indicate that the retirement decisions of married couples are usually made jointly and are rarely individual decisions (see, for example, Loretto/Vickerstaff. 2013; Radl/Himmelreicher 2014). Based on SHARE data that include Austria, Radl (2013:659) found that having a retired spouse makes retirement for a married person about 80% more likely than having a spouse who is working. Unfortunately, results are only presented at an aggregated level. Specific or detailed (quantitative or qualitative) studies for Austria could not be found.

Another factor at household level that most likely has an influence on the labour market participation or retirement behaviour of older workers are family care responsibilities, including both care obligations for grandchildren and nursing care obligations for elderly family members. Regarding the former, an analysis (also based on SHARE data) by Hochman/Lewin-Epstein (2013:40) confirms that grandparenthood raises the preference for retiring early, irrespective of the actual time grandparents spend looking after grandchildren. Interestingly, no confirmation could be found of the expected gender effects, i.e. that women are likely to be more frequently subject to grandparenting effects than men because of their stronger family commitments. Again, results are only presented at an aggregated level, and no specific quantitative or qualitative studies could be found for Austria.

A recent gender-sensitive study based on a national survey by Schneider et al. (2012) shows that male and female workers' intention to change jobs or exit the labour market due to care obligations is shaped by the different characteristics of informal caregiving: flexitime increases the job and labour market attachment of female workers with eldercare responsibilities. The intensity of personal care provided increases the probability of male workers to leave the labour market early. Care for an elderly person in need of supervision (typically in the case of dementia) makes the labour market exit of female workers less likely, thus lending support to the idea of the respite effect of

work. The latter result is remarkable and supports findings that employment can function as a retreat as it offers carers a relatively structured environment (Schneider et al. 2013: 1245).

2.6. *Work: HRM and Interventions*

Evidence on the impact of human resource interventions on employment participation of older workers in Austria is frequently found in reports from governmental organisations and large interest groups; however, primary research on the field is rather narrow.

Driven by the discussions of demographic change and an ageing workforce, a number of reports commissioned by the Austrian labour organisations targeting human resources (HR) professionals (WKO 2010a, WKO 2010b, AK/OEGB 2010) are available. These descriptive reports reviewing the current state of research and giving best practice examples from national, as well as international evidence, aim to adjust prevailing negative stereotypes and improve the valuation and image of older workers by providing advice and examples on the implementation of successful age and diversity management in companies.

Several organisations, which already implemented age-management strategies to improve and extend the working life of older employees, have initiated their own research to evaluate measures taken (Karazman et al. 2005, Verbund AG 2011, Havelka 2012). These surveys are mostly carried out by the company itself or commissioned to consulting agencies. Initiatives often focused on organisational health promotion and working conditions and were seen as successful and effective in the event that job performance and job satisfaction increased or that a positive cost-benefit ratio was revealed. Less emphasis was put, however, on the analysis, whether an initiative was suitable in delaying the intended retirement age. Unfortunately, much of organisation-driven research remains inaccessible for the scientific audience, in particular, if opinion research institutes were commissioned to conduct the research.

Important HR interventions to facilitate employment participation of older workers were age-adapted flexible working arrangements, including the reduction of working hours or the adjustment of working speed, as well as the provision of the possibility of a gradual retirement (Biffel 2006, Kloimüller/Czeskleba 2013, WKO 2012). In addition to these arrangements, job recruitment, lifelong-learning, internal career development, modernisation of work and health promotion were shown to be good practice interventions for age-management in organisations (Nägele/Walker 2006, Taylor 2006). In European cross-country comparison of age-management strategies, Taylor (2006) points to successful Austrian age-management examples, which were realised mostly through action research projects and often included health maintenance measures to extend work participation of older workers. According to Taylor (2006), private companies put more emphasis on the sustainability of the workforce than public institutions did in Austria.

Three main factors for the prevailing low employment rates of older workers in Austria were identified by Biffl (2006): older workers are often not perceived as an important resource, but rather as a burden by employers and managers; early exit from working life is considered a desirable option and older workers are regarded to cope better with job loss in case staff has to be reduced. Age-discrimination, prejudices and negative stereotypes towards older workers were also investigated in a study by Vogt and Krenn (2010) revealing that the age-composition of staff was the key influence for the recruitment of an older person.

Little evidence can be found on the hurdles of the implementation of HR measures and interventions. Kloimüller/Czeskleba (2013) emphasise the importance of the commitment of the management to measures taken, as well as the acceptance of employees to successfully implement them. If interventions are not regarded as important, chances are high that barriers among management or employees will occur, leading to a failure of the initiative.

The influence of the seniority wage model on retirement decisions of firms was examined by Frimmel et al. (2014) using data from the Austrian Social Security Database, including over 39,000 male blue-collar workers aged 57-65. Results showed that larger wage growth gradients resulted in lower retirement age. Even when controlling for individual retirement incentives, this effect was regarded to play a significant role for retirement decisions of firms.

2.7. *Work: Work Factors*

The effects of physical, psychological and social working conditions on work participation of older employees have been subject to intense research throughout Europe. Despite the number of studies exploring the issue from a cross-country comparative perspective, only very few tackle the situation in Austria in particular. Working conditions and their impact on health and work participation of the entire working population are investigated by a number of studies in Austria (e.g. Eichmann 2014, Statistik Austria 2009). Evidence on the effects of work factors on retirement decisions of older workers, however, is very limited.

According to a study from Statistik Austria (2009), 37.3% of employees aged 60 and over experience a compromised everyday life due to rising occupational health issues. The influence of working conditions on retirement intentions was examined by Eibel (2009), including 4,214 older workers from various sectors. Findings showed that the higher the levels of stressors (low job satisfaction, effort-reward imbalance and psycho-emotional stress) were, the more likely was an early exit from working life. The perceived imbalance of stress and regeneration increased continuously after age 45, leading to a higher acceptance of early retirement (Eibel et al. 2009).

Reasons to extend working lives of people aged 50 to 69 were explored in a study on the transition from work to retirement including 7,955 employed or retired persons (Statistik Austria 2013). Almost half of the respondents (47.5%) stated at least one

reason for postponing their intended retirement (which would have delayed their retirement). Regarding work factors, three out of ten participants considered health-oriented working conditions (29.3%) one main factor to extend working life, followed by more flexible working time arrangements (16.9%), a change of occupational activity (15%) as well as an improved working atmosphere (relationships with colleagues and superiors, 10.9%). Based on the last wave of SHARE data, Halmdienst et al. (2014:56) come to the conclusion that the most promising measures to extend working lives would be options to reduce working time and to move into a less stressful job.

The positive effects of improved working conditions and age-adapted workplaces on labour participation were shown by Karazman et al. (2005). Less exhaustion, better sleep regeneration and higher satisfaction with private life were achieved by adapting the shift plan of older workers. While six workers left due to health problems or chose early retirement in the control group, no employee left in the reform group.

Austria was included in some cross-country comparative studies on work quality and working conditions of older workers (Riedel/Hofer 2013, Reinhardt et al. 2013, Börsch-Supan et al. 2009, Schnalzenberger et al. 2011), but results were presented at an aggregate level only. Analysing SHARE data, Börsch-Supan et al. (2009) revealed that poor levels of work quality (assessed by the imbalance between a worker's efforts and the rewards given in return) were related to early job exit across all countries included in the study. For Austria, results indicated a rather poor overall quality of work.

2.8. Health & Health-Related Behaviour

According to an analysis of the 2006 ad hoc module of the European Labour Force Survey, ill health is a major issue for not being able to participate in the labour market (Riedel/Hofer 2013:04). In Austria, ill health is clearly linked to early retirement (Mayrhuber/Tockner 2011). Although a downward trend can be observed, especially since the turn of the millennium, in 2013 still 26.2% of retirements in Austria were due to ill health (34.5% men and 18.5% women) (see Table 4 above) Based on SHARE data Radl (2013: 666) shows, that 'ill-health and unemployment remain heavy obstacles to prolonging working life' (see also: Halmdienst et al. 2014:22). There is also a close connection between long-term sickness leave and a high risk of invalidity (Mayrhuber/Tockner 2011:169).

Thus, within the discussion on the extension of working life, especially for older workers, health is considered to be a crucial issue: health restrictions have an effect on the type of work and the number of working hours (Statistik Austria 2013:12). In Austria, health has a stronger influence on the exit from the labour market for both voluntary and involuntary early retirement, although persons who have health problems and continue to work only in rare cases reported negative consequences at work (Schober/Winter-Ebmer 2011:5).

It is important to note, that the timing of retirement (early exit) and the way of retirement (involuntary) have an effect on being psychologically vulnerable (Vickerstaff

2006:510). Involuntary early retirement has a negative impact on health as there is less cognitive and physical activity and a change in daily routines which might lead to unhealthy behaviour (Kuhn et al 2010:2; 31; 32). Using Austrian social security data, job loss has a strong impact on older workers and low-wage workers with a strong increase in mortality among men and an increase in suicides and alcohol-related mortality. The results, however, indicated no causal effect of early retirement on mortality for females (Kuhn et al. 2010:5). Furthermore, a study using data from ELSA, SHARE and HRS showed that 'early retirement has a significant negative impact on the cognitive ability of people in their early 60s' and that the prospect of retirement reduces the incentive to engage in mentally stimulating activities (Rohwedder et al. 2010:11).

What is an important finding is that not only the fact of being unhealthy but even the perception of having poor health (Alavinia/Burdorf 2008) has a tremendous effect on the labour market participation: an analysis based on SHARE data (including Austria) shows that 'more individuals with poor well-being plan to retire as early as possible compared to individuals with higher levels of well-being' (Siegrist et al. 2006).

Concerning mental illnesses, an analysis of SHARE data shows that 'depression is the most important health problem leading to exit from paid work' (Alavinia/Burdorf 2008:41). Studies have shown that the first indicators of health-related job exit are shown years before: the need for health services and invalidity is significantly higher many years prior to invalidity, and is indicated by a higher number of doctoral visits (five years) and consumption of medicine (seven years) (Mayrhuber/Tockner 2011). In Austria, mental illness has a high impact on labour market participation. Only three out of ten people with anxiety disorder or depression are in employment (Statistik Austria 2013:12). According to SHARE data, this influences an extension of the working life because recovery is difficult and long-term unemployment is often the consequence (Alavinia/Burdorf 2008:39).

Concerning physical limitations, there are also defined major issues. According to SHARE data, 'stroke and diabetes were strongly associated with early retirement' (Alavinia/Burdorf 2008:41). In Austria, the most common illnesses are musculoskeletal, cardiovascular diseases, headache and skin diseases (Statistik Austria 2013:11). Also 'obesity and physical inactivity had statistically significant associations with any type of quitting work' (Alavinia/Burdorf 2008). There is a close relationship between education and health. The lower the level of education, the higher the risk for a health-related restriction (Statistik Austria 2013:12).

2.9. Work Ability

Maintaining work ability over the life course is an important precondition for keeping older workers in employment (e.g. Hasselhorn/Freude 2007; Karazman 2007). Based on the broad definition of the Finnish Work Ability Concept (see for example: Ilmarinen 2009), work ability is not only a question of physical health and wellbeing but of additional individual resources (e.g. skills, competences, motivation) as well as of work-related characteristics (e.g. work content, work organization, management). Thus all

these aspects play a decisive role in enabling older workers (with health problems) to fulfill work demands and continue to work (Geissler 2011) .

According to comparative studies poor health, chronic illness and disability are important determinants of early exit from the labour market as well as poor working conditions (Alavinia/Burdorf 2008) (see also: above). ‘This holds particularly true for occupations where working conditions cannot be modified or adjusted to a reduced work ability of employees, in particular jobs held by people with low social position⁴’ (Wahrendorf et al. 2013:793).

Comparative research has shown that exposures to physical and chemical agents at work influence work ability and thus increase the risk of early retirement. Due to labour market changes, work stress (i.e. a psychosocial working condition) has become another important aspect of poor working conditions (Wahrendorf et al. 2013:793).

An important factor for maintaining work ability is to retain good physical and psychosocial working conditions. This is especially true for workers of lower social positions. Based on SHARA data (including Austria) Wahrendorf et al. (2013:800f.) come to the conclusion: ‘Improving psychosocial working conditions among workers in lower social positions is an important target, strengthening the work ability of an ageing workforce in Europe’.

2.10. Motivation

Research on labour force participation of older workers in Austria has drawn little attention to motivational factors so far: only a single study specifically considered motivational aspects to remain in employment in later working life, specifically in the last ten years, which is why the time frame of the literature review was slightly extended to be able to include a second study found.

A study on the quality of working life of older employees, including 4,214 older workers from various sectors, examined retirement intentions by age, gender and work sector (Eibel et al. 2009). Findings underlined the importance of having resources within work activities, which implied having objectively existing choices and autonomies. These resources included the degrees of freedom, such as independent planning of work tasks and time, as well as choice of methods, measures and appropriate work speed; potential for development, considering use, development and transfer of acquired qualifications, skills and knowledge; information and transparency of organisational aims and motives, supporting affiliation and identification with the organisation; participation, describing possibilities to contribute to operational decisions; and social support, including the receipt and provision of help and support at work. Higher levels of work resources were associated with positive implications on the experience of work, job performance, work motivation, job satisfaction as well as on

⁴ Social position is defined in terms of three complementary measures of occupational position: occupational class, occupational status and occupational skill level (Wahrendorf et al. 2013:792).

health and well-being. The more freedom of action an older employee enjoyed, the higher were the chances of working until state pension age and beyond.

A second study on older workers in Upper Austria emphasised the impact of work motivation on the willingness of older people to continue employment in later working life (Blumberger et al. 2004). As main influences of work motivation, consisting of work satisfaction and work dissatisfaction, the authors distinguish between motivators, i.e. intrinsic factors such as job performance, appreciation at work, career options, responsibility, work enjoyment and identification with the company; and hygiene factors, i.e. extrinsic factors including income, working conditions and collaborations with colleagues. The study also included the capabilities of older workers, which consisted of health, qualification and work-life balance in their survey model. Increase in motivators and improvement of hygiene factors were suggested to support the work satisfaction of older workers.

Work enjoyment, satisfaction with working conditions, positive job challenges as well as the possibility to participate in advanced vocational trainings were found to improve the work motivation of older workers and thereby the likelihood of being in employment until state pension age.

Culture and Norms

Austria is clearly among the countries where an exit-oriented transition to retirement, as described by Jansen (2013), is still prevailing, and where early retirement is regarded as a desirable option by a large number of older workers (Biffel 2006).

A survey on attitudes of older workers towards the extension of working life commissioned by the Austrian Chamber of Commerce revealed that, regardless of measures taken by an organisation, the majority of employees aged 50 and over intend to retire at the earliest possibility (WKO 2012). Using SHARE data, Schober/Winter-Ebmer (2011) reported that among employees aged 50 to 59 in Austria, 57% of men and 49% of women indicated the wish to retire at the earliest possibility (compared to, on average, 51% and 48% found in other countries). Based on the last wave of SHARE data, Halmdienst et al. (2014) report that only 48% of men and 39% of women wish to retire at the earliest possible.

According to the Austrian results of the ad hoc module 2012 on transition from work to retirement, persons (still in employment) aged 50 to 69 years on average planned to work until they were 62.6 years old. Men intended to work until they were 63.5 years old and women until 61.4 years. The higher the educational attainment was, the higher was the planned retirement age. While persons with only compulsory education wished to remain in the labour market until they were 61.6 years old, the planned age at university level was 64.8 years (Statistik Austria 2013:21). These results are also in line with answers given by already retired persons: more than 34.1% would have preferred to have stayed longer at work – either in the last job or in another one – at the moment of leaving the labour market. Half of these persons left the labour market due to health problems (Statistik Austria 2013:21).

3. *DISCUSSION*

3.1. *Labour Market*

The number of national and European studies and data sources is balanced. The focus of the studies is a macro level perspective. The individual perspective and the impacts of the labour market situation on the life of older workers is not examined closely. Reports and studies issued by ministries, the Main Association of Austrian Social Insurance Institutions and the Public Employment Service give an overview over the Austrian labour market for older workers. Non-scientific reports and homepages also provide many good practices and measures, mostly initiatives from the social partners. The effects of the economic crises and its effects on the labour market and thus on retirement decisions are considered in some Austrian studies.

If European studies discuss the Austrian situation, they do so on an aggregate level. Within these studies there is a lack of the distinction between sectors and duration of professional life. Furthermore, they mostly consider job exit but do not have the whole working life perspective. Austria is taken as a negative example, stating that the statutory retirement age is not reached, that exit from labour market happens earlier for both sexes and that early retirement has long been a measure used to open the labour market for younger workers.

3.2. *Legislation & its Implementation*

The potential impact of the institutional framework on the employment and retirement behaviour of older workers in Austria is largely dealt with by econometric studies. These focus largely on the area of pension insurance and especially on the impact of increasingly restrictive pension reforms (abolishment of early retirement, introduction of deductions for retiring before reaching statutory retirement age, etc.) on the effective retirement age. The interplay and interaction of retirement regulations with other social security provisions (unemployment insurance, health-insurance provisions in the case of ill health and disability) was only investigated in a single international comparative study (carried out by Austrian authors). Questions of the fundability of the Austrian old-age pension scheme and budgetary effects are often in the foreground. What is often ignored is the demand side, i.e. the behaviour of employers and the living conditions of the older workers concerned. The latter is important in two ways: firstly, the question remains unanswered which or in how far other framework conditions or domains influence the labour market participation of older workers. Secondly, there has been little investigation into how the restrictive regulations of recent pension reforms impact on the living conditions and on securing the livelihood of older workers. Gender-specific analyses or at least a gender-specific presentation of results is also missing here.

This narrow focus and very specific scope of the research question may also be due to the fact that a majority of studies and analyses have been undertaken by economists

and/or within the framework of econometric analyses. Political science- or social science-oriented studies on the question of the effects of reform measures on the labour market behaviour and living conditions of older workers are few and far between. In addition, a number of studies were carried out by the responsible ministries or by the Main Association of Austrian Social Insurance Institutions itself, or were at least commissioned by these institutions. This also impacts on the (narrow) focus of extant studies and analyses.

In addition, the available studies and analyses are usually based on the 'old pension system' or on transitional provisions. This is to say that their findings cannot reflect the long-term impact of the recent reforms of the Austrian pension system, especially the far-reaching reforms of 2003 and 2004 (which effects will take years to become manifest), as the datasets used mostly refer to persons who exited the labour market before the new regulations came into force.

3.3. Financial Factors

The question of how far financial factors influence the labour market participation and retirement behaviour of older workers is, to some extent, also covered by econometric studies focussing on the effects of the pension system design. Especially the impact of penalties for early retirement are analysed in this context. However, the findings in this context are rather varied, and the question arises whether older workers in Austria can actually base their timing of retirement on rational economic considerations in view of the multitude of reforms and the resulting complexity of legal provisions. Results of the Labour ForceSurvey ad hoc module on the transition from work to retirement indicate that financial reasons (e.g. positive incentives) could play a decisive role in delaying retirement. In-depth, especially qualitative, studies would be of great advantage in this context.

Some studies and analyses on financial factors are based on SHARE data and results are only presented at a European or aggregate level. Due to the rather diverse framework conditions (design of the social security system, labour market characteristics, etc.) of the countries involved, the relevance of findings for individual countries, and thus for Austria, is limited. In-depth analyses of individual questions (e.g. the impact of the wage rate on early retirement) would also be necessary here.

Similarly, the available economic or econometric studies completely or largely ignore gender differences.

Even though employer reactions to financial incentives were only dealt with in a single national study, it nonetheless provided rather insightful information.

3.4. Social Position

Studies dealing with the social position are mainly focusing on other topics and only include the aspect of social position. Many studies on social position are found if

searching for terms like gender, education or occupational class differences, but only one comparative study was found that focused on social position as a factor influencing retirement behaviour. Results are only presented at an aggregate level. Some studies are discussing the question of the impact of education or the educational attainment level on employment participation.

Some papers are discussing the question of the impact of education on employment participation; however, this is not as examined as are other topics such as health.

What is lacking in the studies is that they do not differentiate in terms of the status of work contracts (e.g. subsidised part-time work for older workers or the number of hours worked in the age group of 50 and above). They distinguish between the social position of blue and white-collar workers and there is a macro-level view on these working classes, but there is no distinction between the social position within sectors.

3.5. *Domestic Domain*

Regarding the domestic domain or the household level, only one national study investigates the impact of elderly care on labour market participation. This study, however, not only looks for quantitative evidence but also tried to identify specific conditions for improving the labour market attachment of workers with eldercare responsibilities.

Two studies are based on SHARE data (one related to the impact of grandparenthood on retirement decisions and one related to the question of spousal interaction effects on the timing of retirement) but, again, results are only presented at an aggregate level.

At least studies regarding the domestic domain or the household level distinguish between female and male workers and results are presented for women and men.

The impact of divorce or widowhood on the labour market participation of older workers has not yet been studied at all in Austria.

3.6. *Work: HRM and Interventions*

Research on human resource interventions was mostly provided or commissioned by the Austrian government and large interest groups such as the Chamber of Commerce, the Chamber of Labour and the research institute of the Public Employment Service, among others.

Although quite a number of reports can be found on the topic, only very few primary studies are available. Most evidence was collected in quantitative and case studies, and often measures were evaluated in regards to new legislative measures. Researchers investigating the field mostly have their background in economic sciences, sociology, occupational medicine and gerontology.

Quite a number of Austrian organisations have already implemented human resource management strategies and some, mostly large companies, conducted or commissioned

their own research projects. Unfortunately, many of these interventions have not been evaluated with respect to their effective impact on retirement decisions, and results often remain difficult to access, in particular if opinion research institutes were involved.

Compared to international findings on motives to employ older workers as well as on age-discrimination, prejudices and stereotypes towards the continuation of working in older age remain a rather neglected area of research in Austria.

3.7. *Work: Work Factors*

Despite of the number of studies dealing with work factors in general, evidence considering the impact of physical, psychological and social working conditions on retirement decisions in Austria is scarce. Only three studies focused on effects of work factors on employment participation of older workers in the given timeframe of past ten years in Austria in particular, covering primarily psychosocial aspects of working conditions. Physical work factors were investigated in studies including employees of all age groups and international cross-country comparative research.

All studies used quantitative research methods. Researchers were mostly economists or sociologists, followed by psychologists and was carried out by academic researchers, as well as by public and private research institutes, and was funded by governmental organisations (e.g. Austrian statistics office, Austrian Health Promotion Foundation), as well as the Austrian Federal Chamber of Labour.

3.8. *Health & Health-Related Behaviour*

Data and quantitative studies on health and early retirement are quite numerous: the topic is discussed within research papers and also in reports by research institutes like Statistik Austria and the Austrian Institute of Economic Research. Furthermore, information on health and labour market participation is quoted within the Austrian micro-census data set. Self-employed are mostly not considered within the studies and reports. The factors influencing illness are examined in numerous national and international analyses where two aspects of illness, namely occurrence and frequency, are considered.

Health-fostering programmes are discussed on a scientific level, on a public level by authorities like ministries and insurances and also on a level of interest groups, such as Trade Unions or Chamber of Labour and Chamber of Commerce. Health is furthermore discussed within platforms (www.arbeitundalter.at) and homepages, partly issued by authorities.

Health is also discussed in connection with the labour market participation in two ways: a) illness as a reason for inability to participate in the labour market; and b) non-participation in the labour market has a negative influence on health.

One major aspect in studies is how to create incentives within the framework for unemployment for older workers, old age provisions and the insurance system in case of non-permanent and permanent illnesses.

3.9. *Work Ability*

Although the first translation into German language of the Finnish Work Ability Index was carried out as early as 1995 by Austrian researchers (Karazman et al. 1995), the broad definition of the Finnish Work Ability Concept has hardly been considered by the Austrian scientific community. Thus academic research on the definition and impact of the Finnish Work Ability Concept on the labour market participation of older workers is widely missing in Austria.

At the same time measures to maintain work ability (i.e. rehabilitation and prevention) have become especially important in order to avoid early exit in Austria. Programmes for fostering health have been implemented and a big national programme for rehabilitation has been established, called fit2work, which is very much based on the Finnish Work Ability Concept (e.g. Kloimüller/Czeskleba 2013). Emphasis has been placed on the evaluation of psychological burdens. In this case, empirical evidence is still low as the programmes do not date far back and data needs to be evaluated in future. This holds potential for scientific analysis in the future and for improvement of the measuring of work ability.

Austrian reports dealing with work ability are often written by consultants carrying out health-fostering programmes for work ability (e.g. Karazman 2007), which is frequently discussed on the basis of measures and implementation programmes and within homepages listing company involvement. A term that is often connected to work ability is productive ageing. Within this field, reports collect good practices and implemented measures, and deal with the question of how to foster work ability of older workers. It is also discussed within other topics, e.g. social position and health.

3.10. *Motivation*

Despite of the rather recently described importance of intrinsic work motivation factors for working in older age, the topic has been scarcely tackled by Austrian research so far. With a slight extension of the timeframe, only two studies on the relationship between motivational factors and retirement intentions or decisions could be found. Some national surveys consider the prevailing 'retirement culture' in Austria as well as one cross-national study.

Research on work motivation factors is clearly dominated by psychologists. Studies were commissioned and funded by the Regional and Federal Chambers of Labour and the Austrian Chamber of Commerce.

In earlier literature motivational aspects related to employment participation of older workers were examined rather from a negative perspective, i.e. considering the loss of

motivation as one aspect to leave working life early on, and a decline of motivation with age was expected. Motivation in a positive sense as one key force to remain productive due to the experience of appreciation, meaningfulness, intrinsically reward or enjoyment at work, was not considered.

4. *POLITICAL RECOMMENDATIONS: RESEARCH NEEDS*

- Research should *apply a broad view* and take the different determinates of employment participation of older workers into account; this also means a shift from the now prevailing research focus on retirement determinants to the determinants of employment participation of older workers.
- In relation to this and contrary to the prevailing quantitative studies, *qualitative and mixed-method approaches* would be necessary; this also requires an extension and above all the cooperation of the involved academic disciplines.
- Research should aim at *collecting evidence from overlapping domains* such as the impact of attitudes and decisions from family and partners, the necessity to combine work with family care obligations, stereotypes of employers and colleagues, motivation of older workers etc.
- Quantitative and qualitative studies should take the *different impacts for different groups of older workers* (i.e. considering gender, social position, educational attainment or skill level, health status etc.) into account.
- More research (including the impact of legislative and financial factors) on the *labour market opportunities of older workers* and thus on the demand side to better understand the *motivation, attitude and behaviour of employers* towards the older workforce (including: *age-discrimination practices* and their effects, especially concerning *older female employees*) would be needed.
- Qualitative research on the *impact of pension reforms on different groups of older workers* (impact = possibility to retire, to remain in standard employment, level of pension benefit/decent living etc.) are required to know more about the *consequences for, opportunities of, and options available to*, different groups of older workers.
- Qualitative research on *retirement transitions of couples*, the impact of *grandparenthood, divorce and widowhood* as well as *family care obligations* on the labour market participation of older workers is missing and thus highly need in Austria.
- Research should investigate the *influence of, and association between health, working conditions and work ability* on effective retirement behaviour (and not only on retirement intentions) in different sectors; this also means the application of the broad definition of the *Finish Work Ability Concept*.
- Qualitative research on the *influence of motivational factors* on retirement decision and on the *preconditions for and specific needs of older female and male workers* to extend labour market participation would be of interest.

REFERENCES

- Alavinia, Seved Mohammad/Burdorf, Alex (2008): Unemployment and retirement and ill-health: a cross-sectional analysis across European countries; in: *International Archives of Occupational and Environmental Health*; Volume 82, Issue 1, pp.39-45
- Arbeiterkammer Wien (AK)/Österreichischer Gewerkschaftsbund (OEGB) (2010): *Ältere ArbeitnehmerInnen: Das verborgene Gold im Unternehmen – Arbeit altersgerecht gestalten*. Broschüre. Ludwig Boltzmann Institut für Menschenrechte, Wien.
- Arbeitsmarktservice Österreich (2013): *Alter hat Zukunft Informationen für ältere Arbeitsuchende (45+)*; Informationsbroschüre des AMS Wien; 6. Auflage; Wien
- Biffel, Gudrun (2006): *Age-Management – A Coping Strategy for Employers (The Case of the Automotive Industry)*. Working Paper. Österreichisches Institut für Wirtschaftsforschung, 274, Wien.
- Blumberger, Walter/Sepp, Renate/Affenzeller, Sabine (2004): *ARBEIT - ALTER - ANERKENNUNG*. Arbeiterkammer Oberösterreich & Land Oberösterreich.
- BMASK (Bundesministerium für Arbeit, Soziales und Konsumentenschutz) (2012): *Social Report 2011-2012*; Vienna
- BMASK (Bundesministerium für Arbeit, Soziales und Konsumentenschutz) (2014): *Quartalsbericht*; Wien; 1/2014
- Bolin, K./Lindgren, B./Lundborg, P. (2007): *Your next of kin or your own career? Caring and Working among the 50+ of Europe*, *Journal of Health Economics*, 27:, pp. 718-738.
- Börsch-Supan, Axel/Brugiavini, Agar/Croda, Enrica (2008): *The Role of Institutions in European Patterns of Work and Retirement*, *Working Papers Series*, 2008 (44).
- Börsch-Supan, Axel/Brugiavini, Agar/Croda, Enrica/Siegrist, Johannes (2009): *Retirement, Health, and the Quality of Work in Europe*. *The Four Pillars No. 45*.
- Budimir, Kristina (2010): *Das Pensionsantritts- und Erwerbsaustrittsgeschehen im Gefolge der Pensionsreformen 2000 und 2003*, in: *WIFO-Monatsberichte 9/2010*, pp. 735-751
- Budimir, Kristina (2011): *Der Einfluss sozialer Sicherungssysteme auf die Erwerbsbeteiligung Älterer im europäischen Vergleich*, in: *Soziale Sicherheit 2011/3*, pp. 126-134
- Eibel, Kerstin/Iwanowa, Anna/Jiménez, Paulino/Kallus, Wolfgang/Korunka, Christian/Kubicek, Bettina (2009): *Die Qualität des Arbeitslebens von älteren ArbeitnehmerInnen. Eine Studie der Bundesarbeiterkammer*.
- Eichhorst, Werner/Boeri, Tito/De Coen, An/Galasso, Vincenzo/Kendzia, Michael J./Steiber, Nadia (2013): *How to Combine the Entry of Young People in the Labour Market with the Retention of Older Workers?*; IZA Discussion Paper 7829
- Eichmann, Hubert/Saupe, Bernhard (2014): *Überblick über Arbeitsbedingungen in Österreich. Follow-up-Studie. Sozialpolitische Studienreihe. Band 15. Studie der Forschungs- und Beratungsstelle Arbeitswelt (FORBA) im Auftrag des Sozialministeriums*.
- Famira-Mühlberger, Ulrike/Budimir, Kristina/Eppel, Rainer/Huemer, Ulrike/Leoni, Thomas/Mayrhuber, Christine (2010a): *Soziale Sicherungssysteme und Arbeitsmarktperformance in der EU – Vertiefende Analyse*, *Forschungsbericht des WIFO*, Wien.
- Famira-Mühlberger, Ulrike/Budimir, Kristina/Eppel, Rainer/Huemer, Ulrike/Leoni, Thomas/Mayrhuber, Christine (2010): *Soziale Sicherungssysteme und*

- Arbeitsmarktperformance in der EU – Hauptergebnisse, Forschungsbericht des WIFO, Wien.
- Fischer, Justina A.V./Sousa-Poza, Alfonso (2006): The Institutional Determinants of Early Retirement in Europe, Discussion Paper no. 2006-08, University of St. Gallen.
- Frimmel, Wolfgang/Horvarth, Tom/Schnalzenberger, Mario/Winter-Ebmer, Rudolf (2014): The role of firms in retirement decisions. Preliminary draft. Johannes Kepler University Linz, Austria; Wifo Vienna, Austria.
- Geissler, Heinrich (2011): Voraussetzungen zur langfristigen Erhaltung der Arbeitsfähigkeit und altersgerechte Arbeit, in: WISO /2011/3, pp. 85-102.
- Graf, Nikolaus/Hofer, Helmut/Winter-Ebmer, Rudolf (2011): Labour Supply Effects of a Subsidised Old-Age Part-Time Scheme in Austria. *Journal for Labour Market Research*, 44, pp. 217–229
- Gruber, Jonathan/Wise, David A. (2005): Social Security Programs and Retirement around the World: Fiscal Implications, Introductions and Summary. NBER Working Paper No. 11290.
- Guger, Alois/Mayrhuber, Christine/Platsch, Daniela (2007): Invaliditäts-/Erwerbsunfähigkeitspensionen: Analysen für Österreich und internationale Erfahrungen, in: *Soziale Sicherheit* 2007/5, pp. 232-248.
- Halmdienst/ Nicole/Radhuber, Michael/Winter-Ebmer, Rudolf (2014): Berufliche Entwicklung und Weiterbildung von ArbeitnehmerInnen 50+. SHARE-Forschungsbericht; Eine Studie im Auftrag des BMASK
- Hammer, Bernhard/Prskawetz, Alexia (2012): The Public Reallocation of Resources across Age: A Comparison of Austria and Sweden; Working Paper 05/2012.
- Hanappi, Tibor (2012): Retirement Behaviour in Austria: Incentive Effects on Old-Age Labor Supply; NRN: The Austrian Center for Labor Economics and the Analysis of the Welfare State, Working Paper 1213
- Hasselhorn, Hans Martin/Freude, Gabriele (2007): Der Work Ability Index – ein Leitfaden, Schriftenreihe der Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, Sonderheft S 87, Dortmund/Berlin/Dresden
- Havelka, Christian (2012): „Fit und Top im Hilfswerk Job“. Endbericht.
- Hochman, Oshrat/Lewin-Epstein, Noah (2013): Determinants of early retirement preferences in Europe: The role of grantparenthood, *International Journal of Comparative Sociology*, 54 (1), pp. 29-47.
- Hofer, Helmut/Koman, Reinhard (2006): Social security and retirement incentives in Austria; in: *Empirica*; Volume 33, Issue 5, 2006, pp. 285-313.
- Hofer, Helmut/Weber, Andrea/Winter-Ebmer, Rudolf (2014): Labor market policy in Austria during the Crises; Vienna; Feb 2014.
- Horvath, Thomas/Mahringer, Helmut (2014): Einfluss von Bildungsexpansion und Pensionsreformen auf die Erwerbsbeteiligung; WIFO-Monatsberichte; 87 (6); pp.411-426.
- Ichino, Andrea/Schwerdt, Guido/Winter-Ebmer, Rudolf/Zweimüller, Josef: (2013): Too Old to Work, Too Young to Retire?; NRN: The Austrian Center for Labor Economics and the Analysis of the Welfare State, Working Paper 1309.
- Iltmarinen Juhani (2009) Work Ability – a comprehensive concept for occupational health research and prevention; Editorial. *Scand J Work Environ Health*; 35 (1); pp.1-5.

- Inderbitzin, Lukas/Staubli, Stefan/Zweimüller, Josef (2013): Extended Unemployment Benefits and Early Retirement: Program Complementarity and Program Substitution, Working Paper No. 1304, The Austrian Center for Labor Economics and the Analysis of the Welfare State, Linz.
- Jansen, A. (2013): Cultural retirement patterns: The impact of societal norms and values on the labor market participation of older people in Europe. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 65(2):223-251.
- Karazman, Rudolf/Karazman-Morawetz, Inge/Faux, Andreas/Lindorfer, Manfred (2005): Shift plan reform in chemical plant POLYFELT as precondition knowledge management between generations. *International Congress Series 1280 (2005)*, pp. 95–100.
- Karazman, Rudolf (2007): Employment and labour market policies for an aging workforce and initiatives at the workplace – National overview report: Austria
- Karazman, Rudolf/Geissler, Heinrich/Kloimüller, Irene (1995): Work Ability Index. Arbeitsbewältigungsindex. Erste deutschsprachige Ausgabe. Finnisches Institut für Arbeitsmedizin. Arbeitnehmerschutz 19, Helsinki
- Kloimüller, Irene/Czeskleba, Renate (2013): Fit für die Zukunft – Arbeitsfähigkeit erhalten. Das Bautagebuch für das Haus der Arbeitsfähigkeit. Programm der PVA und AUVA.
- Knittler, Käthe/Stadler, Bettina (2012): Atypische Beschäftigung während der Krise nach soziodemographischen Merkmalen, in *Statistische Nachrichten* 7/2012, pp. 476-495.
- Kuhn, Andreas/Wuellrich, Jean-Philippe/Zweimüller, Josef (2010): Fatal attraction? Access to early retirement and mortality; IZA Discussion Paper, 2010
- Loretto, Wendy/Vickerstaff, Sarah (2013): The domestic and gendered context for retirement, in: *Human Relations* 66(1), pp. 65–86.
- Mairhuber, Ingrid (2009): Entwicklung der österreichischen Alterssicherung seit den 1980er Jahren. In Christoph Herman/Roland Atzmüller (Hg.), *Die Dynamik des „österreichischen Modells“, Brüche und Kontinuitäten im Beschäftigungs- und Sozialsystems*, Berlin, pp. 187-212.
- Mairhuber, Ingrid (2011): Übergänge im Lebenserwerbsverlauf von Frauen und Männern – Herausforderungen und geschlechterdemokratische Perspektiven, Endbericht für den Jubiläumsfonds der Österreichischen Nationalbank, FORBA Forschungsbericht. Wien.
- Mairhuber, Ingrid (2013): Geschlechtergerechtigkeit in der österreichischen Pensionsversicherung. Aktuelle Situation und notwendige Veränderungen in: *Kurswechsel*, 4/2012, pp. 39-49.
- Mairhuber, Ingrid/Papouschek, Ulrike (2010): Frauenerwerbsarbeit in Österreich, Brüche und Kontinuitäten einer begrenzten Integration seit Mitte der 90er Jahre, in: Bundesministerin für Frauenangelegenheiten (eds.), *Frauenbericht 2010, Teil II*, Wien, pp. 427-464.
- Manoli, Dayanand S./Weber, Andrea (2011): Nonparametric Evidence on the Effects of Financial Incentives on Retirement Decisions, NBER Working Papers 17320, National Bureau of Economic Research.
- Manoli, Dayanand S./Weber, Andrea (2013): Labor Market Effects of the Early Retirement Age, mimeo, University of Mannheim
- Mayrhuber, Christine (2004): Pensionsharmonisierung in Österreich und ihre Auswirkungen auf Frauenpensionen. WIFO-Vorträge 94/2004
- Mayrhuber, Christine (2006): Pensionshöhe und Einkommensersatzraten nach Einführung des Allgemeinen Pensionsgesetzes. *WIFO-Monatsberichte* (11/2006), pp. 805-816.

- Mayrhuber, Christine/Knittler, Käthe (2010): Struktur und Finanzierungsformen der Sozialausgaben 2008, in: WIFO-Monatsberichte 5/2010, pp. 445-460.
- Mayrhuber, Christine/Tockner, Lukas (2012): Biographien der Inanspruchnahme von Gesundheitsdienstleistungen vor dem Antritt von Invaliditäts- und Berufsunfähigkeitspensionen; Soziale Sicherheit 4/2012, pp. 168-175.
- Nägele, Gerhard/Walker, Alan (2006): A guide to good practice in age management. European Foundation for the Improvement of Living and Working Conditions. Dublin.
- Narazani, Edlira/Schima, Isilda (2009): Labour incentives reforms in preretirement age in Austria, EUROMOD Working Paper No. EM1/09.
- OECD (2010): *Sickness, Disability and Work – Breaking the Barriers. A Synthesis of Findings across OECD Countries*; OECD Publishing
- Raab, Roman (2011): Financial incentives in the Austrian PAYG-pension system: micro-estimation, in: *Empirica, Journal of European Economics*, Volume 38, Issue 2; May 2011, pp. 231-257
- Räder, Evelyn (2013): Alt werden in Arbeit – wie kann das gelingen?; WSI Mitteilungen; Hans-Böckler-Stiftung; Düsseldorf; 2013 (05)
- Radl, Jonas (2013): Labour Market Exit and Social Stratification in Western Europe: The Effects of Social Class and Gender on the Timing of Retirement; *Eur Sociol Rev*; 29 (3); 2013; pp. 654-668
- Radl, Jonas/Himmelreicher, Ralf K. (2014): The Influence of Marital Status and Spousal Employment on Retirement Behavior in Germany and Spain, in: *Research on Aging*, Published online before print: 9 June 2014.
- Reinhardt, Jan D./Wahrendorf, Morten/Siegrist, Johannes (2013): Socioeconomic position, psychosocial work environment and disability in an ageing workforce: a longitudinal analysis of SHARE data from 11 European countries. *Occupational and Environmental Medicine* 70(3): pp. 156-163.
- Riedel, Monika/Hofer, Helmut (2013): Determinants of the Transition from Work to Retirement, Working Paper No. 1310, The Austrian Center for Labor Economics and the Analysis of the Welfare State, Linz
- Rohwedder, Susann/Willis, Robert J. (2010): Mental Retirement; *The journal of economic perspectives: a journal of the American Economic Association*; 24 (1); 2010, pp. 119-138
- Schnalzenberger, Mario/Schneeweis, Nicole/Winter-Ebmer, Rudolf/Zweimüller, Martina (2014): "Job Quality and Employment of Older People in Europe?"; *Labour*, February 2014
- Schnalzenberger, Mario/Schneeweis, Nicole/Winter-Ebmer, Rudolf/Zweimüller, Martina (2011): Job Quality and Employment of Older People in Europe. Working Paper No. 1108.
- Schnalzenberger, Mario/Winter-Ebmer, Rudolf (2009): Layoff Tax and Employment of the Elderly, in: *Labour Economics*, 16(6), pp. 618–624.
- Schober, Thomas/Schnalzenberger, Mario/Winter-Ebmer, Rudolf (2011): Kündigung unter Strafe – Beschäftigungsförderung für Ältere in Österreich, in *Wirtschaft und Gesellschaft* 3/2011, pp. 461-470
- Schober, Thomas/Winter-Ebmer, Rudolf (2011): Ältere Arbeitnehmer, gesundheitliche Einschränkungen und Übergänge in den Ruhestand; JKU; Linz.

- Siegrist, Johannes/Wahrendorf, Morten/Von dem Knesebeck O./Jürges H./Börsch-Supan, Axel (2006): Quality of Work, Well-being and Intended Early Retirement of Older Employees - Baseline Results from the SHARE Study; in: *European Journal of Public Health*; 17 (1); 2006, pp. 62–68
- Smeaton, D./McKay, S. (2003): *Working after state pension age: quantitative analysis*, Leeds: Department for Work and Pensions
- Statistik Austria (2009): *Arbeitsunfälle und arbeitsbezogene Gesundheitsprobleme - Modul der Arbeitskräfteerhebung 2007*.
- Statistik Austria (2012): *Arbeitskräfteerhebung 2011*, Wien
- Statistik Austria (2013): *Erwerbstätigkeit von Menschen mit gesundheitlichen Beeinträchtigungen. Modul der Arbeitskräfteerhebung 2011*; Wien
- Statistik Austria (2013): *Übergang vom Erwerbsleben in den Ruhestand. Modul der Arbeitskräfteerhebung 2012*.
- Staubli, Stefan/Zweimüller, Josef (2013): Does Raising the Retirement Age increase Employment of Older Workers? In: *Journal of Public Economics*, vol. 108, pp. 17-32.
- Stefanits, Hans/Hollarek, Franz (2007): Die Pensionsreformen der Jahre 2000, 2003 und 2004 – Auswirkungen auf das Antrittsverhalten, in: *Soziale Sicherheit* 2007/3, pp. 119-132
- Stefanits, Hans/Hollarek, Franz (2007a): Die Pensionsreformen der Jahre 2000, 2003 und 2004 – Auswirkungen auf das Erwerbsverhalten, in: *Soziale Sicherheit* 2007/9, pp. 234-253
- Stefanits, Hans/Hollarek, Franz (2008): Die Pensionsreformen der Jahre 2000, 2003 und 2004 – Auswirkungen auf die individuellen Pensionshöhen, in: *Soziale Sicherheit* 2008/4, pp. 178-193
- Taylor, Philip (2006): *Employment initiatives for an ageing workforce in the EU15*.
- Türk, Erich (2010): Keine Veränderung beim Pensionsantrittsverhalten? in: *Wirtschaft und Gesellschaft*, 2/2010, pp. 247-252
- Türk, Erik (2008): Entwicklungstrends gesundheitsbedingter Pensionierungen seit 1999. Eine kritische Analyse, in: Türk, Erik (ed.): *Invalidität: Aktuelle Debatten – Lösungsvorschläge*, Wien, pp. 5-15.
- Verbund AG (2011): *Fit & Gesund im VERBUND 2008 – 2010. FGÖ Endbericht*.
- Vogt, Marion/Krenn, Manfred (2010): Motive und Bedingungen von Unternehmen für die Einstellung älterer Arbeitsuchender. In: Steiner, Karin/Sturm, René (ed.), *Ältere am Arbeitsmarkt*, AMS Report 67, Wien, pp. 29-44.
- Wahrendorf, Morten/Dragano, Nico/Siegrist, Johannes (2013): Social Position, Work Stress, and Retirement Intentions: A Study with Older Employees from 11 European Countries; in: *Eur Sociol Rev*; 29 (4); 2013, pp. 792-802
- Wirtschaftskammer Österreich (WKO) (2010a): *Demografische Fitness - Wie sich Unternehmen auf den Wandel vorbereiten. Schriftenreihe des Wirtschaftsförderungsinstitutes Nr. 342. In Kooperation mit dem Bundesministerium für Wirtschaft, Familie und Jugend*.
- Wirtschaftskammer Österreich (WKO) (2010b): *Ältere Arbeitnehmer – Das Herzstück im Unternehmen. Abteilung für Sozialpolitik und Gesundheit*.
- Wirtschaftskammer Österreich (WKO) (2012): *Erwerbstätigkeit Älterer und Pensionsantritt in Österreich. Eine Sicht von Arbeitgebern und Arbeitnehmern. Dossier Wirtschaftspolitik 2012/13, Pensionsantritt in Österreich*.

Wöss, Josef/Türk, Erich (2011): Dependency ratios and demographic change. The labour market as a key element, ETUI Policy Brief, European Economic and Employment Policy, Issue 4/2011.