

Propensities to Work at an Old Age

Acknowledging Differences in Active Ageing?

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Preface

Along with an ageing society, policymakers have implemented several labour market and pension reforms to access labour resources to counteract the demographic trend that challenges the long-term financial sustainability of social security systems as the number of beneficiaries is rising while the number of contributors is declining. The policy to extend working life aims to increase labour participation among older individuals. To answer the question of how older workers have adapted their exit patterns in the context of changing retirement institutions in Germany, I conducted four studies. *Article 1* (Fechter 2019a) uses data from the German Socio-Economic Panel (GSOEP) to investigate the relationship between shifts in exit patterns and labour flexibility in the late employment phase. The results show that higher shares of flexible employment are consistent with prolonged employment, thus, introducing a new retirement pathway through part-time employment models. Using the linked data set of the Survey of Health, Ageing and Retirement in Europe (SHARE) with the Versichertenkontenstichprobe (VKST) of FDZ-RV (SHARE-RV), *Article 2* (Fechter 2019b) presents differences in gradual retirement by health and life course determinants, finding little evidence that instruments of bridged employment are effective in facilitating prolonged employment equally among individuals. Transitions from full-time into part-time employment from the age 50 onwards rather decrease labour supply, suggesting that older individuals in Germany are favouring earlier exits over extending working careers. *Article 3* (Fechter/Weiland 2019) examines life course determinants of employment biographies with the SHARE-RV and shows that despite increased employment towards the late career for younger cohorts, additional earning point accumulation to the public pension is moderate, thus, increasing new social risks for specific labour market groups. *Article 4* (Schmidhuber et al. 2019) retraces the development of increased retirement ages for German older workers compared to Austrian workers from 2005 to 2015. Based on the SHARE data, the analysis demonstrates that the retirement age has increased in both countries, however, this rise was stronger in Germany and is associated with new forms of inequalities towards skill-levels in Germany.

Studying employment among older individuals reveals heterogeneous changes in the patterns of late careers. Considering privatisation and marketisation of the pension system, working longer is likely for some individuals. For those, particularly the use of part-time employment as an instrument to engage in old-age labour is striking. Though, it shows that the specific working time arrangements of late employment influence retirement timing. For individuals in full-time employment, reducing working hours results in earlier exits. Furthermore, individuals with de-standardised careers have a higher probability of prolonging careers as a means of downsizing working hours. As a consequence, more employment is not linked to higher pension outcomes. Thus, new forms of retirement processes in terms of early and late exits are in evidence, which is more strongly attached to individual abilities and socioeconomic profiles: on the one hand, the potential to prolong late careers is challenged for some groups. On the other hand, for those individuals exiting later, market-induced risks emerge. The extension of working lives represents new modes in German welfare characterised by less compensation, resulting in social policy demands. Hence, this dissertation provides prospects for social policy-making to address current challenges in prolonged working lives beyond positive fiscal impacts.

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1. Introduction

As in many other European countries, a key challenge in German public policies is posed by the demographic change pressuring financially existing social security systems. The policies known as *Active Ageing* aim to extend working lives by adjusting retirement structures for an ageing society aiming at activating labour resources. Increased employment is associated with threefold benefits: individuals pay longer into the social security fund and collect retirement benefits later; *Active Ageing* policies are related to better health; and prolonged employment prevents the risk of deprived situations after employable age as a result of shorter and more interrupted earning histories (Aliaj et al. 2016). Thus, the European Commission (2004) sees in extending working lives the potential to realise benefits from increased life expectancy. By promoting employment as a new norm to secure higher life expectancies, resilient demographic measures to counter capacity deficits are implemented in favour of future generations (Barr 2004).

To counteract imbalances in the labour force and to retain the sustainability of pensions systems, Germany also adopted several measures of *Active Ageing* to increase labour participation among different cohorts. Raising the age of retirement and closing early retirement options characterises the trend of accessing labour resources in the group of older individuals by increasing the number of workers (Hofäcker et al. 2016). For Germany, demographic developments pose explicit challenges to the pension model. The *inter-generational contract* (*Generationenvertrag*) of 1957 applies the fundamental principle that each generation pays the pension of its parents' generation (Ebert 2018). Therefore, redistribution between generations is managed as retired cohorts participate in general economic dynamics – e.g., the generation of economic surplus due to technological progress after the *Second World War* (*ibid.*). However, lower activity rates – e.g., demographic developments – challenge this doctrine by increasing shares of the pensionable population compared with the number of individuals participating in the labour market (Simonovits 2003).

To increase old-age employment activities, bridging employment as a means of working longer instead of retiring has become popular among older workers (van der Horst et al. 2017). For example, this trend shows in the Annual Report 2018/19 submitted by the *German Council of Economic Experts* (*Sachverständigenrat*) to Chancellor *Angela Merkel*. The report draws on the consequences from demographic changes, labour market developments and pension policies. Here, counteracting population ageing is recommended by accessing labour reserves through flexible forms of a labour organisation (*Sachverständigenrat* 2018). With this, the government seeks to encourage employers to retain a skilled labour force that otherwise might retire and other groups that are usually under-represented in labour participation – i.e., older workers, individuals with health issues, workers with informal care responsibilities (Messenger/Ray 2015). Thus, recent German political measures focus on increasing labour supply, by specifically directing flexible forms of labour to increase the scope of potential labour participants. From this institutional background, the general aim of this dissertation is derived, pursuing the question of how old-age work propensities are stipulated by the recent *Active Ageing* measures. In particular, it is drawn on the three benefit dimensions of *Active Ageing*, which have been outlined above.

The research objective focuses on the study of the end of career employment structures as a consequence of the demographic developments, which evoked the new policy instruments. It is assumed that an increasing share of older workers will be allocated to employment in flexible, unregulated labour markets, enlarging the focus of retirement research by welfare state exploration. Thus, the general research question of this dissertation is *how work propensities before retirement are determined by labour situations of older individuals in the context of a changing retirement regime*. For analytical reasons, it is split into two global research questions:

1. *What are the effects of extended working lives on individuals' work-retirement transitions?*
2. *Have policy reactions to macro-economic developments and longevity risks changed modes of German welfare?*

This framework paper connects the findings of four articles of this publication-based dissertation by applying the general research aim, with the purpose to review the impact of the sketched objectives of *Active Ageing*. The structure is as follows: in chapter 2, it is described why the German case is used for analysis and gives a short review of the theoretical background of this dissertation. Further, the research gaps are presented by drawing on insights of previous literature and empirical evidence on determinants of old-age labour supply. The discovered research gaps are synthesised with the empirical findings of the four articles of this dissertation and are presented in chapter 3. These four articles analyse the exit patterns in the context of changing retirement institutions in Germany.

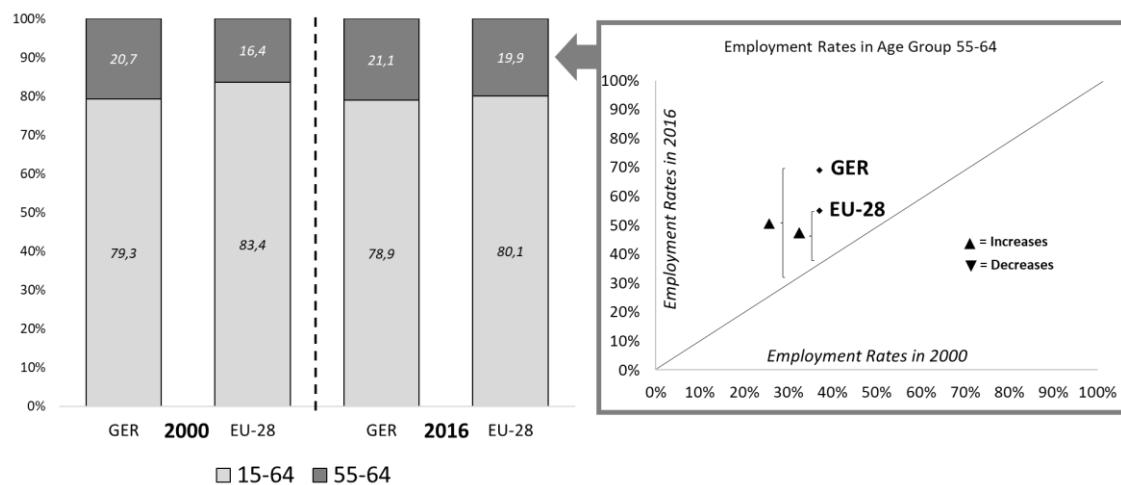
This dissertation demonstrates that the adaption towards delayed retirement proceeds by increased shares of flexible employment towards the late career (*Article 1*), accessing the institutional impact of *Active Ageing*. Furthermore, it shows that this adaption process is not linear, but that exit patterns differ considering continuous part-time labour and transitions from full to part-time employment dependent on social factors and personal predispositions (*Article 2*). In this article, it is outlined how involuntary factors stipulate the potential to prolong careers as de-standardised careers positively relate to delayed retirement by downsizing working hours, while for poor health reductions in working hours relate to early exits. *Article 3* draws on this evidence by supporting the understanding of new social risks among older individuals as retirement patterns become more de-standardised dependent on life-course determinants. Here, the aim of *Active Ageing* is addressed to prolong careers with the purpose to overcome benefit deficits caused by interrupted employment biographies. Comparing Germany with Austria disentangles the concept of welfare state typology by discussing new forms of inequality caused by diverging paths of welfare policies between those countries (*Article 4*).

Afterwards, the results on the impact of *Active Ageing* received from the four papers and the consequences for the German retirement regime are summarised in chapter 4. The challenges and opportunities for policymaking and future research demand are outlined in chapter 5, which shows in line with previous research in its notice of rising social inequalities in the transitions from work to retirement (Buchholz et al. 2013, Hofäcker et al. 2016, Hess 2017). Previous research is extended by extricating the propensity to work at an old age considering the impacts of *Active Ageing*. It becomes apparent that retirement is highly linked to prior employment life, thus, encouraging future research to focus on labour markets when aiming at understanding retirement pathways.

2. Theoretical Approaches to Changing Exit Patterns

Transitions from education to work to retirement has been defined by Kohli et al. (1991) as the classic trichotomy of life phases defined before employment, during employment and after employment. At the beginning of stage three (Kohli et al. 1991), life annuity starts to be received, when retirees attain a monthly benefit for the rest of their lives (Simonovits 2003, Barr 2004, Brussig et al. 2016). Years spent in the labour market is, therefore maximised in stage two. *Active Ageing* measures have approached the prolongation of stage two and the delay of entering in stage three. When the transitions from stage two to stage three is regarded descriptively for older individuals in the European Union (EU), it shows that the group of age 55-64 is more and more in employment instead of in retirement (*Figure 1*). Employment rates of older German individuals are outgrowing the increases in an EU-average comparing the years 2000 with 2016 (see Ebbinghaus/Hofäcker 2013, Knuth 2014, Brandl 2016).

Figure 1 Population Share of 55-64-year olds from those aged 15-64 years and Employment Rates of 55-64-year olds from 2000-2016¹



Source: Eurostat 2018, own calculations.

Financial incentives to discourage early retirement as a consequence of *Active Ageing* regulations seem to impact older individuals in the German employment model consistently by increasing employment rates among the 55-64-year-old age group (Riphahn/Schrader 2014). From 2003 to 2013, the retention rate of the 55-64-year-old age group has increased from 31.3 per cent to 57.9 per cent as a percentage of all employees aged 55-59 years in the five previous years in Germany (OECD 2014). Also, German separation rates decrease, dropping from 16.4 per cent in 2003 to 9.3 per cent in 2013, suggesting that employers kept older individuals longer and filled existing positions less often with external applicants (*ibid.*). However, higher old-age employment not merely relates to higher statutory retirement ages but also a higher amount of 55+ individuals in the labour market and the successive reduction of early retirement schemes as well as an overall upturn of the business cycle (Fechter/Sesselmeier 2017).

¹ The data of EU-28 relates to EU-27 for the year 2000.

By considering that more individuals are in employment after the *Active Ageing* measures have been implemented, research looking beyond quantitative aims and into employment structures are supported. In this dissertation, the aim is to understand old-age work propensities. Germany is the main country of analysis, which is due to several reasons. In Germany, the increase of old-age employment is above average compared to other countries in the EU. Also, the ratio of older individuals is at a higher level. Foremost, Germany used to be categorised as a country with an early retirement regime. However, the combination of pension and labour market policies since 2000 is suspected of having contributed to an institutional change towards late exits as it will be shown in the following chapters. In sum, the German retirement regime is in flux, and the old-age labour supply is higher compared to other EU-countries. Choosing Germany as the country of analysis facilitates to explain significant changes in old-age labour supply across time. Thus, Germany is predestined for analysis given this dissertation's research aim.

2.1 Institutionalism

Institutionalism stipulates that national policies affect individuals' values and behaviour (Hall/Taylor 1996). Institutional variation is found on a national, and a subnational level, i.e., the private sphere, and institutions are distinguished according to the sanctioning mechanism (Voigt 2018). In the latter, institutions are referred to as being internal. Here, rule-breaking is sanctioned by members of the society (*ibid.*). This dissertation adopts the external perspective, focusing on those rules whose non-compliance is sanctioned by representatives of the state (Teorell 2018).

Labour exits in Europe are linked to country-specific determinants such as institutional differences in pension systems and welfare arrangements, education systems and active labour market policies (Engelhardt 2011). New Institutional Economics has proposed incorporating the context when pursuing the analysis of institutions (Voigt 2018). In the field of German public policies, distinct variations from traditional policy-making have been agreed upon since 2000 (Ebbinghaus 2006). As a conservative welfare state, Germany is traditionally defined as transfer-orientated, aiming at status maintenance (Esping-Andersen 1990, Ebbinghaus 2011, Buchholz et al. 2013). As suggested by New Institutional Economics, the role of initial institutional conditions has a vital impact on economic performance (Voigt 2018). Conservative welfare approaches relate to mechanisms of compensation, differing in their regime logic from both liberal and social democratic schemes (Esping-Andersen 1990). Historically, the liberal welfare state typically adjusts to societal challenges through a high degree of individualisation with a relatively limited role of the state (*ibid.*). The doctrine to assume that all adults are potentially workers implies they will turn to the market if services are needed (van der Horst et al. 2017). By contrast, conservative welfare states – e.g., Germany – are assumed to operate with a higher degree of provision mechanisms (Schmidt 2010). Increasing labour participation though prolonged working lives to overcome demographic challenges marks a welfare approach applying to a higher stake the principle of self-responsibility. The classification of Germany as a conservative welfare state applies to the general pension reform of 1957 when the pay-as-you-go (PAYG) retirement system was implemented (Radl 2014). In a PAYG retirement system, current expenses for pensions are mostly paid with the contributions from the dependently employed labour force based on parity with employers

(ibid.). Thus, financial unsustainability of the German retirement system is caused by the ratio of actual pensioners to actual workers developing towards fewer working-age individuals. Since 2001, the German retirement system is based on three organisational types described as pillars, with public pensions in the first pillar; occupational pension systems, managed by private firms in the second pillar; and personal saving plans, run by private funds in the third pillar (Barr 2004, Behrendt/Woodall 2015). The last pillar relates to financial consolidations of the retirement system in 2001. At this time, an ageing society and high unemployment of the 1990s in times of the re-unification challenged the PAYG doctrine and evoked the introduction of private pensions incorporated in the third pillar in the German pension in 2001 (Bridgen/Meyer 2014). In particular, the German Pension Fund manages public pensions. Here, wage-related social contributions are the main source of funding of the public pension. The equivalence principle of the German old-age security system explains that current incomes positively correlate with the accumulated pension entitlements, which defines that higher contributions result in higher pension benefits (Grabka et al. 2018). Therefore, an individual pension is based on one earning point reflecting one year of employment with an average income (Radl 2014). Since 1957, pensions are dynamic, changing with the ratio of gross earnings to the number of employees on average to the previous year (Haupt 2014). With the aim that future generations are not paying much higher net contributions, contribution rates were fixed with the reform of 2001. As a consequence, decreasing pension levels lead to a gap in individual old-age provision. In the end, the relevance of the private old-age provision has increased. In the German Pension Model, time spent in the labour market equals the accumulation of earning points with the dependence of income determining pension incomes at stage three (Ebert 2018). Accordingly, private provision is seen as a tool for supplement pension entitlements to meet incomplete contribution careers (Simonovits 2003).

By increasing the degree of self-responsibility in the retirement system, the extent of intergenerational redistribution was revised (Haupt 2014). Hence, the general aim of the German retirement system to cover longevity risks was adjusted for the demographic process of an ageing society by voluntary contributions to funded pensions to raise individual savings applying tax advantages (Haupt 2014, Ebbinghaus 2015, Rürup 2018). By allowing individuals to make provisions for their old-age in parts self-responsively, the German retirement regime logic experienced a shift from the mechanism of compensation towards more activation (Bridgen/Meyer 2014). Through extending late careers, the division of responsibilities between welfare institutions and an individual's life courses is likely to have shifted further. The retirement system was adjusted by *Active Ageing* measures in the form of the fourth pillar employment to secure longevity risk (Walker/Maltby 2012).

Prolonged employment as insurance against social risks show a reduction in the traditionally regulative mechanisms of the German welfare state and are likely to be linked to higher retirement de-standardisation characterised by less similar labour exit processes across the population (Madero-Cabib/Fasang 2016). As Coleman (2000) argues, individual decisions such as retirement transitions depend on the institutional framework, which creates, form and influence behaviour (Hofäcker et al. 2019). By institutionalising options to retire or by restricting specific behaviour through pension policies, the individual is affected in its decision to organise retirement and define the opportunities externally (ibid.). In this specific institutional situation, different individual decision parameters play a

role in the retirement choice (*ibid.*). As part of New Institutional Economics, this approach allows connecting institutions through the behaviour they produce (Bednar 2018). Benefits from extended working lives shape the institutional retirement pathways and allow individual retirement processes that are not formed by an explicit institutional pathway (Fasang 2012). Extended working lives is expected to invoke behavioural spill-overs among institutions (Bednar 2018). Changes in individuals' work-retirement transitions indicate that older individuals show increasing differences in choosing between and combining institutional retirement pathways (Fasang 2012).

2.2 Rational Choice Theory

Political retirement regulations in Germany seem to be effective in maintaining older workers in the labour market. By delaying retirement through accessing labour resources, patterns of late employment are likely to have changed to encourage labour market attachment while reconciling personal preferences in prolonged working lives (Bauknecht/Naegele 2015, Fechter/Sesselmeier 2017). Rational Choice Theory suggests a way to distinguish between end-of-career decisions. Several scholars (e.g., Gruber/Wise 2002, van Oorschot/Jensen 2009, de Preter et al. 2013, Ebbinghaus/Hofäcker 2013, Sesselmeier et al. 2014, Hess 2017) have adopted this approach to model retirement decisions as rational choices by assuming that the individual chooses based on the perceived costs and benefits of having more leisure time (financial resources versus time resources). The minimisation of costs and maximisation of benefits lead to the eventual retirement timing. Therefore, later employment exits will emerge when financial incentives to keep older individuals in the labour market outweigh the monetary incentives of the pension systems (Engelhardt 2011). Flexible working arrangements are seen as a tool to improve choices in the nature and timing of retirement for older workers (Loretto/Vickerstaff 2015). Hess (2016) shows that retirement has effectively been delayed since 2000 in Germany. The push-and-pull factor framework allows considering continuous labour market participation to be influenced by institutional as well as individual parameters (Radl 2007), where push factors are understood as barriers to prolong careers while pull factors are understood as work disincentives (Ebbinghaus/Hofäcker 2013). Therefore, prolonged working lives are based on the value individual's assignment of labour or family and leisure time, i.e., the rational choice, according to the incentive structure of the institutional arrangements of social insurance (de Preter et al. 2013, Hofäcker et al. 2019).

After this brief presentation of the theoretical approaches of this dissertation, the following section draws on empirical evidence and previous research. The literature's research gaps are revealed by differentiating old-age exit patterns between:

- the institutional perspective,
- the individual perspective,
- the life-course perspective and
- the socio-economic perspective.

Based on the concept of this publication-based dissertation, the four articles take up these gaps derived from the different perspectives on old-age work propensities.

Institutional Perspective

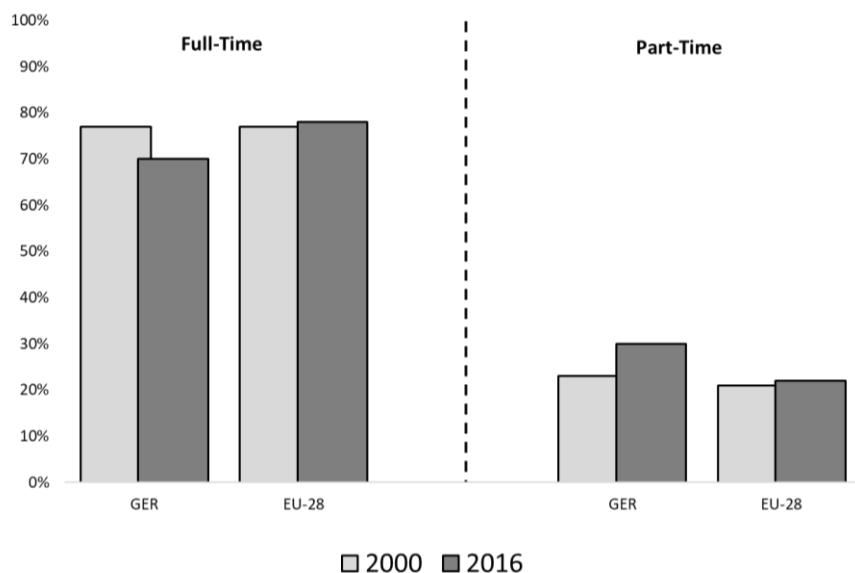
Article 1 approaches institutional structures with microdata on the behaviour of workers to add information on policy studies in the field retirement research. Pull factors on the macro level emerge in the form of incentive structures offered by the social security system (de Preter et al. 2013). Before 2000, Germany applied an employment exit strategy of externalising older workers through early retirement schemes and unemployment bridges; however, ageing societies have challenged those policies (Frerichs/Naegele 2008). In 2009, the Old-Age Part-Time Scheme (*Altersteilzeit*) was abolished because it was seen as a tool for early retirement with negative effects on the total labour supply (Radl 2014, Hofäcker et al. 2016). Radl (2014) discusses this scheme of early retirement, outlining that it had been criticised heavily due to the schemes failure to phase retirement. It rather supported early exits from the labour market. This finding is accompanied by research from Boockmann et al. (2012), which shows that employment spells are not prolonged regarding changes from full-time to part-time work for those aged 50+ years. Furthermore, the successive adjustment of the statutory retirement age to 65 years was reformed in 2000 and was completed in the year 2011 (Radl 2014). Until 2029, it will be raised to 67 years (Buslei 2019). The possibility to continue working after the statutory retirement age is given with an annual bonus of eight per cent (OECD 2017). Buchholz et al. (2008) show that unemployment is often used as a possibility for early retirement. In Germany, unemployment benefits have been adjusted at the beginning of 2000 and are split into two periods. Contributions to pension schemes depend on the specific period of the unemployment model. Unemployment benefits I (*Arbeitslosengeld I*) is paid for 6-24 months according to the length of former employment, and social security contributions are covered based on the 80 per cent previous to gross earnings (OECD 2015). Unemployment benefits II (*Arbeitslosengeld II*) refers to *Hartz*-regulations, where unemployment benefits are paid at a lower rate, and financial contributions on the pension scheme are not granted (*ibid.*). Individuals who have been unemployed for more than one year at the age of 58 years and older are forced to enter into old-age retirement with deductions (Brussig 2016). With the introduction of new technologies and production concepts, the expectation on the human capital of labour supply is likely to change substantially, increasing the necessity of training options at an old age (Naegele 2003). Public expenditures of the *Federal Employment Agency* (BA) are rising in 2019 from 1.66 million to 2.10 million Euros (BA 2018) as part of active labour policies, counteracting skill-mismatch caused by economic restructuring. For Germany, the OECD Database on Labour Market Programmes shows that, in 2015, public expenditure on training programmes as part of active labour market policies is above the OECD average at 0.2 per cent of GDP and fills the seventh position among the OECD countries (OECD 2018). Although research (e.g., Frerichs/Naegele 2008, Bilger et al. 2017) shows that comprehensive and practical implementations still have not reached their full potential. Nonetheless, adult training and lifelong learning opportunities have been made available, and participation rates of employed 55- to 64-year olds was approximately 50 per cent in 2017 (Destatis 2018). Longitudinal development shows increasing engagement in non-formal education in the 55-59-year-old age group and 60-64-year-old age group since 2007 (Bilger et al. 2017). This result is also visible in the decline of seniority wages, which are seen as insufficient incentives to engage in training and are associated with lower productivity of older workers (de Preter et al. 2013). The ratio of relative earnings from ages 55-

64 years to ages 25-54 years is negative (-10%) and has slightly increased (-11%) indicating that the average earnings of older individuals are higher than those aged 25-54 years but have slightly approximated over the past ten years (OECD 2016). Therefore, age-earning profiles have become more dynamic but are still rigid in their wage response to productivity levels (de Preter et al. 2013). As an economic consequence from this financial adjustment limitation, de Preter et al. (2013) assume that the demand for older workers declines. However, counteracts with Employment Protection Legislation (EPL), which are strict in Germany, resulting in high firing taxes for older workers (OECD 2016).

Nonetheless, possibilities for early retirement exist. The long-term insured has the opportunity to retire without any pension penalties after 45 contribution years at the age of 63 years (OECD 2015). For cohorts 1953 and older, the eligibility ages increase successively by two months per year. Therefore, cohort 1965 will be eligible by the age of 65 years. Other retirement pathways offer the opportunity to retire before statutory retirement age, albeit with deductions. Long-term insurance periods covering 35 contribution years are eligible for retirement at the age of 63 years and is available with a permanent deduction by 3.6 per cent for each year that the pensioner falls short of the statutory retirement age in line with the rise in the statutory retirement age (*ibid.*). Additionally, an old-age pension for severely handicapped people is available with a maximum reduction of 10.8 per cent. Requirements are a period of 35 contribution years and an assessed degree of 50 per cent handicap at the age of 60 and eight months, which gradually increased to 62 (*ibid.*). Despite public pensions, the third pillar involves various voluntary funded types of savings for old age, some with risk pooling (life insurance) and others without such insurance elements (European Commission 2015). Personal pensions and occupational pensions have been fostered to increase benefits levels to make up for income gaps at an old age (*ibid.*).

Along with those measures, flexible working arrangements are supported to engage in extended working lives (see Sachverständigenrat 2018). By creating labour market opportunities for older workers, push factors are reduced (de Preter et al. 2013). The lack of active labour market policies in Germany during the 1990 evoked policy discussions to access labour resources to encourage employment based on low-wage jobs (Eurofound 2016). The establishment of labour market opportunities through the *Hartz*-reform, introduced in the country during the early 2000s, contributed to decreased duration of unemployment spells because re-entering into the labour market based on flexible employment has become less difficult (Eichhorst/Tobsch 2013, Eichhorst/Marx 2015). While those wages are in line with sectoral collective agreements, the social security benefits concerning earning point accumulation are voluntary. Those measures have resulted in increased hiring rates between 2003 and 2013 (OECD 2014), although the hiring rates increased more based on part-time employment models (Fechter/Sesselmeier 2017). This result seems to be a reversion of trends as research by Böhnke et al. (2015) finds using SOEP data of 2002-2011 that flexible employment plays a minor role for older individuals. In 2016, full-time employment decreased in Germany below the EU-average compared with that in 2000 (*Figure 2*).

Figure 2 Employment Structure² in Germany



Source: Eurostat 2018; own calculations³.

The share of part-time employment in Germany has increased over the years and is above the EU-average. The rise in part-time employment suggests that increases in the employment rates emerge to a higher share through part-time employment; however, the dominance of the standard full-time employment model is still evident. Compared with the EU, full-time employment is below the EU-average, while part-time employment is above the EU-average. Thus, labour is to a high degree organised through forms of flexible work in Germany since 2000. Various definitions of part-time employment exist. While the *International Labour Organisation* (ILO) defines part-time work as weekly working hours deviating from the concept of full-time work of 40-48 hours⁴ per week depending on the national labour legislation, the OECD defines part-time employment to individuals usually working less than 30 hours per week in their main job. Labour surveys typically leave the choice between part-time or full-time employment up to the survey participant (Messenger/Ray 2013). Furthermore, across countries, a different legal labour status defines part-time working arrangements – e.g., in Germany, where marginal employment reflects part-time employment based on mini-jobs defining employment based on usually 15 hours per week. In this dissertation, the definition of part-time employment models is received from scientific literature, where part-time work is usually referred to as flexible working arrangements (Hess et al. 2018, Cebulla et al. 2019), deviating in their standards from the national concept of full-time employment (see Böhnke 2015). Thus, the influence of non-standard forms of employment on retirement timing needs further investigation. From those considerations on

² Referring to the definition of the Labour Force Survey by Eurostat (2018) “full-time/part-time distinction in the main job is made based on a spontaneous answer given by the respondent in all countries [...].” As described in Fechter and Sesselmeier (2017), temporary work is unlikely among the 55-64-year-old age group and is reducing in time (OECD 2014) and, thus, are not further investigated as a specific form of old-age employment.

³ The calculations are based on the concept of employed persons, defined as persons aged 15 and over who performed work, even for only one hour per week, for pay, profit or family gain during the reference week or were not at work but had a job or business from which they were temporarily absent because of, for instance, illness, holidays, industrial dispute, and education or training (Eurostat 2018).

⁴ Although, the standard working-time schedule defines an eight-hour day and a 48-hour week, exceptions exist for a certain number of countries with 38 to 40-hour weeks.

adjusted labour institutions, the research gap concerning their effects on employment structures is derived. *Article 1* covers specifically the topic of *Active Ageing* by applying the approach to measure changing exit patterns since the introduction of these policy instruments.

However, this simplified definition has to be enlarged by several considerations. Following the framework of Rational Choice Theory, individuals will retire when income consequences are minimised, disregarding the effects of working conditions (de Preter et al. 2013). When changes in pension wealth from working an additional year fails to exceed the value of contributions paid based on prolonged employment, the individual will retire. Therefore, incentives for flexible work could result in earlier exits if individual factors decrease the value for additional contributions. Those considerations highlight social attributes and personal predispositions in the choice of gradual retirement through flexible working arrangements.

Individual Perspective

Conditions that favour and impede the ability to use labour flexibility as a tool for retention depend on the institutional context and are also likely to be unequally accessible for older individuals. Loretto and Vickerstaff (2014) report for the UK that analytical differences emerge regarding continuous part-time employment against the active decision to downsize working hours. Further, van der Horst et al. (2017) outline that the assumption of gradual retirement to be the norm in prolonged working lives has to be regarded with caution because high rates of part-time employment could reflect the continuation of part-time employment. This perspective is supported by Messenger and Ray (2013), who provided the differentiation of voluntary and involuntary part-time employment, which is taken up in *Article 2*. Voluntary dimensions are defined as those cases where changed working-time preferences of employees support labour integration. Shultz et al. (1998) show that those perceiving retirement to be voluntary have higher life satisfaction scores and rated themselves as healthier than those who perceived their retirement as involuntary. Furthermore, the occurrence of part-time employment of older workers is likely to relate to personal preferences in working time reductions. Thus, the prolongation of working lives based on flexible employment, delays accesses to social security schemes, increases individual benefit levels, and, by staying attached to the labour market, training opportunities counteract skill mismatches at an old age (Fechter/Sesselmeier 2017).

Involuntary dimensions are defined as all those cases where limiting factors decrease the options of labour integration. Despite many positive side effects of flexible work, several dimensions of inequality in part-time work exist (Messenger/Ray 2013). Research by Brussig (2010) suggests that labour exit dynamics have become involuntary for certain occupational groups. Financial resources affect retirement decisions, and reasons for monetary situations at old age are manifold (Smeaton et al. 2009). While the manufacturing industry or specific types of work are declining, qualification is of particular importance for late-career employment decisions (Buchholz et al. 2008). Individuals with low qualifications should be much more affected by economic restructuring processes and, thus, Engelhardt (2011) expects that they generally have lower labour-force participation and retire earlier than their highly qualified counterparts do. However, Hess (2017) shows that, for both the high- and low-educated, the utility to retire late is higher than for individuals with intermediate education.

Different mechanisms in each of the groups at the upper and lower end cause this development. Hess (2017) argues that high-educated older workers have a high job attachment that is linked to high levels of prestige experiences and lost if the individual retires (see also Radl 2007), while low educated postpone retirement due to financial reasons (see also Smeaton et al. 2009, Hochfellner/Burkert 2013). Referring to the Rational Choice Theory, this means that flexible employment arrangements may function as a possibility for continuous employment based on low wage among those with low qualification. Findings by Eichhorst et al. (2015) show the expansion of non-standard forms of employment among high-qualified and low-qualified occupational groups. Regarding social protection, this development is even more problematic when unemployment occurs, resulting in an even lower pension's claims (Brussig/Knuth 2011). Part-time employment is associated with less advantageous positions regarding wage and skill, and inequality in part-time schemes emerges in terms of segmentation tendencies (Messenger/Ray 2013). Prolonged working lives can, therefore, cause structural disadvantages if skill mismatch, economic developments such as effects of digitalisation, or long-term unemployment and unequal allocation of informal care obligations between men and women pose obstacles to engage in full-time positions. Thus, individuals may be constrained in their ability to bargain for better work conditions (*ibid.*). Further inequalities are seen relative to full-time employment – e.g., when moving into employment with increased working hours is limited. Part-time employment may even pose higher costs to employers when two or more part-time employees cover one full-time spot, and job-sharing agreements need to be bargained among compatible workers (*ibid.*). Furthermore, research reveals that employers show reluctance to invest in part-time workers' skill development in terms of training schemes (Eichhorst/Konle-Seidl 2016). (Long-term) Unemployment at an old age is a major risk factor that determines forms of employment at an old age and prolongation of labour and points towards difficulties of older individuals re-integrating into the labour market (DGB 2015, Brussig 2016). Individuals with lower lifetime earnings, often correlated with lower education, are forced to work longer to accumulate higher pension benefits (König et al. 2016), which also accounts for individuals who have employment careers reflecting continuous full-time employment in the growing low-wage sector (Kistler/Trischler 2014). Individuals with unstable work biographies are likely to depend on flexible working arrangements to prolong working lives. On the one hand, retirement research claims that full-time employed individuals will retire earlier than individuals who have shares of part-time employment in labour integration (Madero-Cabib/Fasang 2016). This result is in line with the retirement opportunities at the age of 63 years for the long term insured, allowing individuals with long contribution careers to retire early (see above). Following those theoretical assumptions, bridging late employment using mechanisms of labour flexibility will result in later retirement of individuals with de-standardised careers. On the other hand, research argues that perceived bad working conditions – e.g., level of career growth opportunity or level to which new things are learned – influence individuals to exit the labour market early (van Oorschot/Jensen 2009). This result is in line with research (e.g., Boockmann et al. 2012, Hess et al. 2018) showing that flexible working arrangements are consistent with early exits from the labour market. Those findings relate to less advantageous positions regarding wage and skill in the context of part-time employment models (Messenger/Ray 2013).

Prolonged working lives in the context of voluntary and involuntary parameters are subject to *Article 2*. Furthermore, several individual predispositions enlarge this perspective. The basic idea of accessing labour resources through flexible employment options is to help specific groups engage in paid labour that otherwise would have difficulties to enter the labour market. Health factors that extend or limit work capacities at an old age strongly link to late career decisions (Eibich 2015). If poor health fosters early exits from the labour market, then rational choices on labour prolongation are limited (Dorn/Sousa-Poza 2007). As Brussig (2010) shows, the share of those leaving the labour market due to mental problems rises and increases exits into early retirement. In line with accessing labour resources through flexible working mechanisms, a reduced number of working hours contributes to reductions of physical strains. Therefore, part-time employment schemes could lead to ongoing employment (Loretto/Vickerstaff 2015). Research by Hess et al. (2018) shows that employees in jobs with high physical strains seem to benefit the most from part-time work because they cannot work full-time due to health reasons and would drop out of the workforce completely if they did not have the option of part-time work. This result is in line with Alavinia and Burdorf (2008) who find that social policies to encourage employment among older individuals are necessary to overcome associations of being out of the labour market and ill-health. However, the relationship between health and retirement is complicated (Oksanen/Virtanen 2012). It remains difficult to differentiate whether retirement is pushed based on poor health to improve again in the long-run upon retirement (Eibich 2015), or whether the retirement transition increases the risk of poor health due to the loss of social connections or reduction in income (Oksanen/Virtanen 2012). Flexible working conditions may prevent early retirement based on health issues. Based on those considerations on the determinants of old-age labour supply, the research gap covered in *Article 2* is derived.

Life-course perspective

The hazards for early labour market exits are associated with life course characteristics. At the same time, policy shifts towards labour continuation coincide with the dynamics of the labour market towards a post-industrial employment model (Hinrichs/Jessoula 2012). The partial substitution of (female) domestic labour in the service industry have changed work-family schemes (Blossfeld/Drobnić 2001), showing consistent with an increasing reliance on part-time jobs – and active labour market policies – i.e., life-long learning and training programmes (Hinrichs/Jessoula 2012). While the distribution among the cohorts is adjusted for an ageing society, employment models are also dynamic and in flux across cohorts (*ibid.*), which is depicted in detail in *Article 3*. The basic logic of the German retirement system ensures a relatively high benefit to workers with regular contributions and, thus, shows a high sensitivity to labour market developments (Möhring 2016). Pension wealth relies not only on contribution spans but also on wage dynamics and active and passive periods in the labour market (Haupt 2014, Möhring 2016). From the 1940s to the mid-1970s, the male breadwinner model with a strong female family orientation was based on the social protection system in (West-)Germany (Schmidt 2010, Hinrichs/Jessoula 2012, Möhring 2016). The stability of household structures has declined as a consequence of relationship breakdowns in both married and cohabiting couples, which modifies an individual's expectation about their options and risks over the life course (Anxo et al. 2006). A reduction in inactive individuals accompanied this development. Conversely, it has been

exchanged by labour integration based on part-time employment (Allmendinger et al. 2012). New labour market arrangements are characterised by transiting between different labour status with periods of unemployment, educational training, unpaid family work and retirement (Hinrichs/Jessoula 2012). As part of globalisation processes, labour demand has become more elastic, and labour supply has become more easily substitutable, in turn, contributing to higher employment volatility (Meriküll/Rööm 2014). With a varying benchmark of biographies and institutional changes (Möhring 2016), time spent outside the labour market, marginal labour market status and sector-dependent (lower) payment have become more common (Bosch et al. 2009). Less linear employment histories affect income situations at an old age. Replacement rates in Germany are highly life-course sensitive and reflect the income maintenance received during working lives, reaching 50 per cent of individual net earnings in retirement (OECD 2015). In mature pension systems, pensioners would have full-contribution histories (Simonovits 2003). In the case of Germany, a standard old-age pension would be reached by an average earner who retires at retirement age after the collection of 45 earning points (Ebert 2018). Thus, benefits are not only an increasing function of the length of employment. They also link to the height of earnings of employment (Fasang 2012, Ebert 2018). The more income types an individual goes through, the higher the differentiation of retirement trajectories (Fasang 2012). Increasing the length of earning point accumulation by accessing labour reserves through delayed retirement ages and the reversion of early retirement options through *Active Ageing* measures mark another major policy shift in the German retirement scheme. However, whether longer employment increases earning point accumulation in light of de-standardised life courses is unclear and, thus, is the third research gap. The effects of increased complexities of life courses on retirement outcomes are covered in Article 3.

Socio-economic perspective

Article 4 draws on socio-economic aspects in retirement in a welfare-state comparison. Generally, research (e.g., Dahl et al. 2003, Radl 2013, van der Horst et al. 2017) shows significant differences between male and female late career choices. Informal caregiving activities are usually associated with women – e.g., caring for grandchildren or other dependents living in the household – may limit the time available to spend in labour. As Hofäcker and König (2013) point out, according to the traditional male breadwinner model, women are more likely to engage in flexible working arrangements to accommodate childcare and family responsibilities, whereas men decide to engage in flexible work to extend working time. Findings by Loretto and Vickerstaff (2015) suggest, based on the findings of UK women, that women take advantage of flexible work to take up the opportunity of a proper job, while men tend to downsize working hours to allocate more time with their families. However, along with flexible working arrangements, working outside the house becomes more compatible with women (*ibid.*). Möhring and Weiland (2018) introduce different family models dependent on female labour participation – i.e., male single-earner households, dual-earner structures and modifications of the male breadwinner model marked by additional earning profiles. Moreover, there exist occupational differences regarding the opportunity to downsize working hours at an old age. While the service sector is usually associated with working part-time based on inferior job quality (Bosch et al. 2009, Hinrichs/Jessoula 2012), taking care of residents requires support 24 hours per day. Therefore, the

formal care sector, which is likewise dominated by female labour, may limit opportunities to reduce hours worked based on flexible working arrangements (Bauknecht/Naegele 2016). Another factor influencing retirement transitions is generated through German spousal tax splitting, permitting spouses to file taxes jointly. This tax option treats spouses as if both parts would receive exactly half of the common income, implying that they are taxed like individual units (Schneider 2017). The underlying presumption is that a married couple is regarded as one economic unit, guaranteeing that the overall tax burden is independent of the distribution of employment between both partners (*ibid.*). Thus, the higher the disparity between incomes, the more beneficial the splitting, thereby achieving the highest benefits for first-earner models. The overall aim of spousal tax splitting refers to the taxation of married couples according to their common economic success (*ibid.*). Those differences have caused debates (e.g., Price 2003, Loretto/Vickerstaff 2015) on the demand of research considering male and female retirement patterns separately. Thus, many decisions regarding the timing of retirement, are caused by domestic contexts that emerge as a combination of the traditional family and gender roles, along with recent opportunities (*ibid.*). Labour-market attachment is influenced by family and partnership constellations, indicating that having a spouse is a significant predictor for transitions into an early retirement (Anxo et al. 2006, Sesselmeier et al. 2014). The results of Sesselmeier et al. (2014) show that retirement transitions are coordinated between married and cohabiting couples and are not decided individually, which is not only linked to structural reasons and cost-benefit considerations but also on social determinants. Research by van der Horst et al. (2017) discuss that late employment patterns suggesting gradual retirement are not as common as expected; thus, rather than downsizing working hours at an old age, individuals already are in part-time employment. This late-career pattern is especially popular among women, supporting the view of gender asymmetric labour exit pathways. Van der Horst et al. (2017, p. 13) argue that this concentration is caused by the modified male breadwinner model, "in which married women often work part-time during their career to supplement the incomes of their typically full-time working partners" and, thus, have a limited bargaining power in work-retirement decisions. Regarding the impact of macro-level changes on micro-level behaviour, the research gap on covers the effects of welfare variation in a two-country comparison in *Article 4*.

In sum, the four articles cover the research gaps derived from studying previous literature and empirical evidence and are as follows:

- *Article 1* examines the effects of current pension policies on employment situations of older workers in the German institutional context.
- *Article 2* analyses the relationship between voluntary and involuntary end-of-career labour market behaviour and old-age labour supply.
- *Article 3* examines the influence of life course parameters for retirement outcomes.
- *Article 4* shows in detail the social consequences of changes in pension policies in a cross country analysis drawing on welfare structures.

The next part presents the specific research objectives derived from chapter 2.

3. Synthesis of the Theoretical Considerations and Empirical Insights

Studying the previous literature and empirical insights show that the doctrine of extended working lives is consistent with delayed retirement. This dissertation aims to provide a comprehensive overview of the effects of *Active Ageing* measures on late labour market exit patterns and answer the question *how to work propensities before retirement are determined by labour situations of older individuals in the context of a changing retirement regime*. Previous literature on labour exits hints to study the employment structures as a channel of inequalities in the retirement process. Thus, employment patterns are the central research objective of this dissertation. Several determinants of end-of-career choices are considered to account for this research question.

Individuals are studied in their likeliness to reduce their working hours as a consequence of *Active Ageing* measures to approach the first research gap. Therefore, *Article 1* looks beyond the dimensions of work, aiming to explain the relationship between labour exit patterns and individual level aspects. Thus, flexible working arrangements are explored for group-dependent differences in extended working lives.

By considering exit patterns, the previous literature has hinted that the effects of flexible working arrangements on the late employment phase extend the definition of gradual retirement in terms of voluntary and involuntary dimensions. Thus, in a second step, employment transitions are analysed to account for this research gap (*Article 2*). Here, working arrangements are differentiated between the principle of full-time employment and transitions into part-time employment. Possible benefits to older individuals from flexible work, if used by different groups with diverse sociological attributes and personal predispositions, are examined in *Article 2*.

The German welfare state provides institutional (dis-)incentives for continuous work based on part-time employment models. Later entries to pension schemes are expected to relieve pressure to social security schemes. In theory, longer employment careers contribute to a higher individual earning point accumulation, compensating for perforated contribution histories. The research gap on the life course as a cause for retirement outcomes is addressed. Therefore, *Article 3* includes differences in exit patterns based on life-course characteristics which impact earning point accumulation.

The effects on old age labour supply are studied between countries to consider institutional variation addressing the fourth research gap reporting on the effects of *Active Ageing* on welfare change comprehensively. Thus, *Article 4* reports the differences in delayed retirement between two countries, Austria and Germany, to understand socio-economic characteristics in institutional variation.

The following table (*Table 1*) summarises the main findings of the four articles covering the central research questions of this publication-based dissertation by pointing out for each of the articles the general topic, research aim, chosen theoretical access, (in)dependent variables and measurement concepts, as well as the method and data chosen, to approach the article-specific research questions.

Table 1 Synthesis of the Theoretical Considerations and Empirical Insights

Article 1	Fechter, C. (2019a): New Modes, New Challenges? The Influence of Extended Working Lives on the Late Employment Phase in Germany. <i>Sozialer Fortschritt</i> , 68(4), pp. 313-338.					
	General topic					
	The effect of <i>Active Ageing</i> measures on the labour organisation of the late career.					
	Research questions					
	<ul style="list-style-type: none"> – What is the relationship between shifts in exit patterns and labour flexibility in the late employment phase? – How do differences in social attributes and personal predispositions relate to the use of flexible working arrangements as an instrument for delayed retirement? 					
Research strategy	Research aim	Theoretical access	Dependent variable	Main independent variable	Method/data	
	Within-unit differences in delayed exit patterns	<ul style="list-style-type: none"> – Divergence in the welfare scheme – Push/Pull Design – Flexible Employment 	Old-age employment	Implementation of extended working lives in national policies	<ul style="list-style-type: none"> – Fixed effects regression model – Longitudinal – GSOEP 	
			Operationalisation			
			Working Hours	Two-period time dummy, age groups		
	Main Findings					
	<ul style="list-style-type: none"> – Flexible employment is consistent with prolonged employment – Younger age groups compared to older age groups show higher shares of reduced working hours – Inconsistencies in the institutional aim of <i>Active Ageing</i> and later exits 					

Article 2	Fechter, C. (2019b): The Role of Health in Flexible Working Arrangements. Avenues To a Longer Working Life? <i>Zeitschrift für Gerontologie und Geriatrie</i> , online first, DOI: 10.1007/s00391-019-01551-1.								
	General topic								
	The effect of part-time employment schemes on labour prolongation of individuals in different health states.								
Research questions									
	<ul style="list-style-type: none"> – What differences exist between voluntary and involuntary labour flexibility? – What conclusions can be drawn on the adaption of a higher degree of individualisation in the German social policy making? 								
	<table border="1" data-bbox="384 620 1936 660"> <thead> <tr> <th data-bbox="384 620 451 660">Research aim</th><th data-bbox="451 620 586 660">Theoretical access</th><th data-bbox="586 620 855 660">Dependent variable</th><th data-bbox="855 620 1551 660">Main independent variable</th><th data-bbox="1551 620 1936 660">Method/data</th></tr> </thead> </table>					Research aim	Theoretical access	Dependent variable	Main independent variable
Research aim	Theoretical access	Dependent variable	Main independent variable	Method/data					
Research Strategy	Relation of individual push factors on retirement timing	<ul style="list-style-type: none"> – Outcome research – Push/Pull Design – Downsizing working hours 	<p>Labour exit rate</p> <p style="text-align: center;">Operationalisation</p> <p>Survival Rate</p>	Interaction effect between Flexible Working Arrangements and Health status	<ul style="list-style-type: none"> – Survival Analysis – SHARE-RV 				
	Main Findings <ul style="list-style-type: none"> – Positive effects between health and gradual retirement – Life course dependent performance limitations point towards involuntary later exits – Risk provision reflects a higher degree of individualisation 								

Article 3 Fechter, C./Weiland, A. (2019): Implications of Changing Employment Patterns for Pension Outcomes in Germany. *Advances in Life Course Research*, Submitted for review.

General topic

The effects of employment career complexity on pension outcomes.

Research questions

- Which insights on disparities in employment give the life-course perspective?
- Which implications can be derived from the findings for future protection schemes?

	Research aim	Theoretical access	Dependent variable	Main independent variable	Method/data	
Research strategy	Impact of structural differences in labour market performance for pension outcomes	<ul style="list-style-type: none"> – Life course design – Cohort comparison – Socioeconomic attributes 	Earning point accumulation	Interaction effect between employment careers and socioeconomic profiles	<ul style="list-style-type: none"> – Sequence analysis – Regression analysis – SHARE-RV 	
			Operationalisation			
			Earning points	Complexity indicator, socioeconomic profiles		

Main Findings

- Increasingly complexity of employment careers, with higher shares of flexible work in the late career
- The disparity among gender, educational level, cohort and precarity in the regional dimension
- More employment links negatively to earning point accumulation

Article 4	Schmidhuber, L./Fechter, C./Schröder, H./Hess, M. (2019): Pension reforms and retirement timing in Austria and Germany: Do institutional country clusters stick in times of demographic change. <i>Socio-Economic Review</i> , Submitted for review.				
	General topic				
	The comparative effect of <i>Active Ageing</i> on exit ages in Austria and Germany.				
	Research questions				
Research strategy	Research aim	Theoretical access	Dependent variable	Main independent variable	Method/data
	Impacts of institutional push and pull factors for shaping exit patterns	<ul style="list-style-type: none"> – Most similar system design – Convergence – Push/Pull Design 	Retirement Age	Country Profiles	<ul style="list-style-type: none"> – OLS regression analysis – Cross-sectional – SHARE
			Operationalisation		
			Age	Socioeconomic profiles of Austrian, German and sample	
	Main Findings				
	<ul style="list-style-type: none"> – Delayed Retirement in both Conservative Welfare States – New welfare modes in Germany point towards welfare variation – New inequalities emerge in the context of less compensating welfare policies 				

4. Results

In light of demographic developments, economic reasons drive policy-makers to emphasise employment in later life. The implementation of *Active Ageing* policies in the German national context is organised by delaying retirement ages and closing early retirement pathways. Thus, securing longevity risks through prolonged labour market integration has become the new norm. Later collections of retirement benefits relieve the social security fund as the labour supply increases. Further, retaining in the labour market is associated with having a positive impact on health, and it is understood to compensate for more de-standardised employment careers.

However, the four articles find ambivalent effects of extended working lives on retirement transitions and are threefold:

- first, it shows that later exits from the labour market are associated with labour de-standardisation (4.1)
- second, it is revealed that prolonged employment is not a rational choice across all labour market groups (4.2)
- third, more employment is not necessarily linked to higher pension benefits (4.3).

Thus, this dissertation discovers that *Active Ageing* is only partially successful in its aim to delay labour exits. It is likely that with the new mechanisms of welfare intervention, Germany has moved into the direction of a more liberal welfare state, as the social consequences from longer working careers show higher degrees of individualisation (4.4). The lack of compensating German social policy in prolonging working careers is precarious for specific labour market participants. In the following part, this dissertation's contribution to the current state of research is outlined, drawing on the results of the four articles.

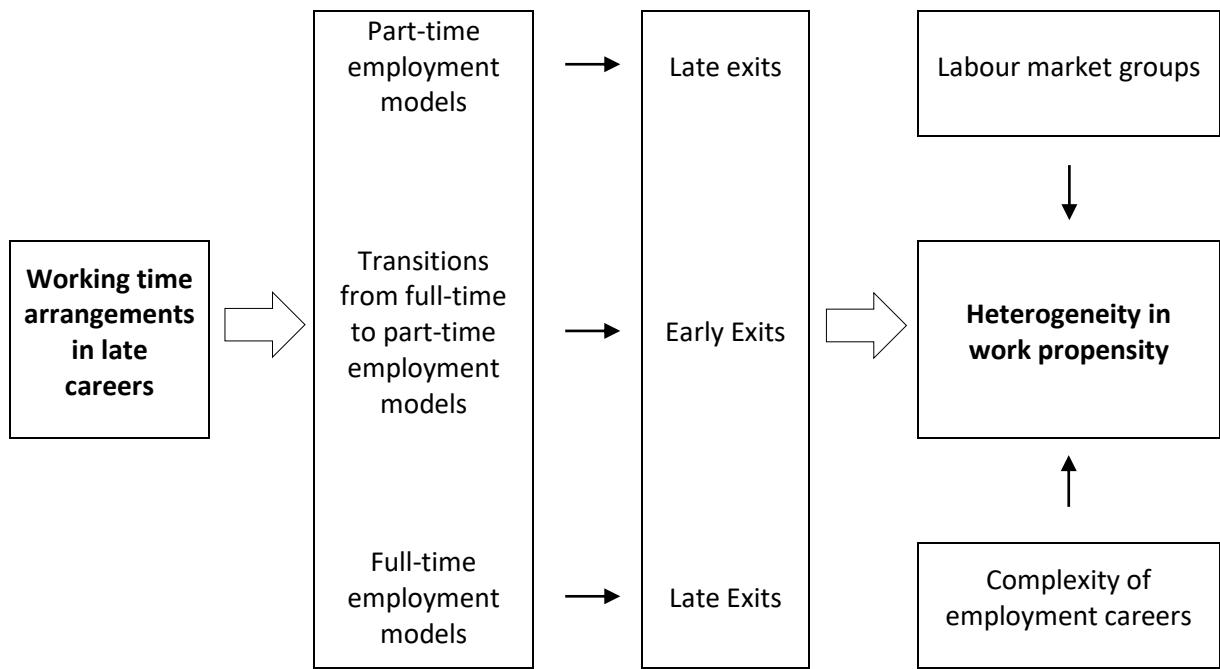
4.1 Institutional Effects

The idea of flexible employment pathways in late-career employment is seen as a popular instrument to reach continuous working lives and delaying retirement. By studying different dimensions of the end of career employment in *Article 1*, *2* and *3*, an ambivalent impact of *Active Ageing* on prolonged working lives has been observed accounting for the first research gap.

Quantitatively, it shows that more people delay retirement as a means of working longer. *Article 1* suggests that increased delayed exits are the results of prolonging careers with part-time employment schemes. However, *Article 2* points out that part-time schemes are not necessarily a driver for late exits. If individuals are in full-time employment in the late career, they are more likely to retire later. They only retire earlier when they reduce working hours. Also, *Article 2* suggests that the more de-standardised careers are, the more likely individuals retire later based on downsizing working hours, indicating involuntary career prolongations. To understand the relation between these results, *Article 3* needs consideration. It reveals changes in the patterns of household labour participation with new forms of labour organisation. After the mid-careers employment, the biographies diversify with higher shares of flexible forms of employment and a decreasing share of continuous full-time employment (*Article 3*). Summarising these findings of *Articles 1-3* suggest that employment careers are prolonged

with reduced working hours as a consequence of either former part-time or due to interruptive employment biographies. Otherwise, full-time employment indicates later exits; however, the share of full-time employment at the late employment phase is decreasing (*Article 2-3*). Thus, *Figure 3* explains the contribution of this dissertation to understand impacts of assessing labour reserves through *Active Ageing* measures, contributing to the first research gap.

Figure 3 Findings on Characteristics of Extended Working Lives



Source: Own considerations.

Therefore, through either the continuation of part-time employment at an older age or through downsizing working hours, different retirement behaviours are caused. Increasing old-age employment rates are significantly linked to more de-standardised pathways to retirement (*Articles 1-3*).

Thus, the propensity to work increases with different strengths along with the characteristics of the late employment phase contributing to the understanding of the first research gap. Therefore, new institutional arrangements of pension policies stipulate how individuals behave. However, it shows that the process of labour prolongation is not linear. Extending employment careers through flexible forms of work in the late employment phase is common. Late employment is not a simple extension of an individual's employment situation, rather interruptions of employment biographies encourage the re-entry via part-time employment schemes.

Furthermore, *Articles 1-3* show that specific groups reduce working hours to drop out of the labour market early. Therefore, the impact of *Active Ageing* varies for different labour market groups, which evokes considering voluntary and involuntary aspects of career prolongations. This dissertation's results indicate that institutional effects are depending on individual attributes, which are discussed in the following sections.

4.2 Discrepancies in Rational Choices

The findings give insights into the second research gap on voluntary and involuntary late career prolongations. Prolonged careers in Germany produce the dominance of disparities on a more diverse level by combining old social risks with new ones. Thus, this dissertation supports to understand risk structures in exit patterns, which are outlined in the following.

Old social risks: Gender, Health, Occupation

Labour participation at an old age seems to have developed with more strength for women (*Article 3*). However, major differences exist between older women and men regarding their incentives and disincentives to stay in paid work (*Article 1-2*). While female labour participation has improved in productivity greatly over the past two decades – through an increasing share of formerly inactive women participated in the labour market – exit patterns in late employment still emerge gendered (*Article 1-3*). Prolonging female employment through patterns of labour flexibility occurs at a higher level compared to men, which is due to prolonging employment as a consequence of continuous part-time employment instead of downsizing working hours (*Article 2*). Life-course considerations reveal continuous part-time employment after work has been interrupted during the middle of female careers for maternity leave and childcare (*Article 3*). By offering flexible working options, job opportunities are created that increase the likeliness of female labour participation while reconciling informal care and household obligations (*Article 3*). Usually, re-entrances after caring times are based on working part-time, suggesting that women never went back to full-time employment after accommodating caring commitments (*Article 3*). Furthermore, *Article 2* observes that women have higher labour-exit-rates than men after moving from full-time into part-time employment. *Article 3* suggests that this effect also relates to care, playing a role at the end of female careers. In this case, the decision of women to exit the labour market early is implied by their household context, because single women are more likely to stay in paid labour compared to married women (*Article 3*).

Despite gendered exit patterns, involuntary gradual retirement relates to the dimensions of poor health (*Article 2*). Those in good health and for those in full-time employment relationships delay retirement. Thus, *Article 2* finds a contradiction to the aim of *Active Ageing* measures. Early exits occur from downsizing working hours if work-limiting factors emerge. For individuals with conditions of health, flexible working arrangements are utilised as avenues to early retirement. The combination of downsizing working hours and health issues relates to involuntary aspects resulting in early exits, possibly via the corridor of reduced earning capacity pensions at age 60 years (*Article 2*). Thus, the results suggest that phased retirement as a tool to foster healthy older workers in the labour market is ineffective. Rather, gradual retirement is used by those individuals in good health, who aim at lowering work intensities in the late career. As women are less likely to be in full-time employment in the late career, phasing retirement is a tool rather used by men (*Article 2-3*). Thus, prolonging working lives in a good health shape based on working hours' reductions relates to male privileges as *Article 2* figures.

Article 1 suggests that flexible working options for older workers will enhance employment propensity. In line with the findings of *Article 1*, unemployment emerges towards the end of the career, when

labour market integration across the life course shows low productivity levels. Older workers experience greater barriers to re-employment when they drop out of the labour market in the late employment phase (*Article 3*). For men, unemployment is more likely to persist after dropping out of the labour market in the late-career compared to women (*Article 1-3*). This relationship suggests that re-entries in the labour market at old age are more difficult for men than for women and are likely to be linked to sectoral dependent task-changes, making skills of male-typical occupations redundant (*Article 1*).

In summary, extending working lives still produce early exits from the labour market for some groups, which can be received as voluntary or involuntary (*Article 1-3*). Forms of part-time employment are dominated by female labour, limiting choices for voluntary gradual retirement for women (*Article 2*). Thus, prolonging working live is supposed to emerge involuntarily out of financial constraints (*Article 2*). While continuous part-time employment may be associated with voluntary exits as part of the modified breadwinner model, downsizing from full-time employment towards the end of the career is evoked by health limitations and occupation-dependent opportunities (*Article 2*). Considering dimensions of new social risks leads to further explanations for flexible working patterns are.

New social risks: Education, Cohort, Region

If individuals lack in educational and occupational training, they organise the re-integration in the labour market after exiting employment during the employable age through less regulative and more flexible employment forms (*Article 3*). Increases in the polarisation between low- and high-skilled workers shows for men, with low-skilled workers that are more likely unemployed or in flexible forms of labour at the end of the career (*Article 1*). Due to the dual education structure in Germany, the intermediate-skill levels are still highly organised in unions, resulting in state-sponsored retirement pathways – i.e., long-term insured pension at 63 years, consistent with the findings of *Article 2*, which shows that earlier exits are visible for male individuals with standard careers. *Article 1* finds for women that low working hours show a U-shaped relationship in the late career. Thus, women with an intermediate-skill level use part-time schemes in the late-career more than other skill levels do (*Article 1*). *Article 2* suggests that women use part-time schemes utilising continuous part-time employment instead of reducing working hours. Thus, concluding for the factor education, women show skill and gender disparities simultaneously towards the late career, when vocational training in part-time employment is insufficient across the life course (*Article 1*).

The results of *Article 1* show that the size of delayed exits varies over different age groups of older workers. Part-time employment patterns are especially strong for the age group below 60 years (*Article 1*). In line with these findings, *Article 2* shows that individuals above the age 60, compared with those at 50-59 years, are more likely to extend their working lives if they reduce working hours after being in full-time employment. Additionally, the life course perspective of *Article 3* reveals further differences in labour flexibility across cohorts. The findings show that cohorts engaging in the labour market in their prime career after 1990 have increasingly de-standardised labour performances. Therefore, the advantages and disadvantages each cohort had to face during the life course are vital for labour extensions (*Article 1-3*).

When applying the regional division, it shows that former East-German individuals, in particular, have employment biographies with large periods of unemployment in times of the reunion (*Article 3*). The findings of *Article 3* note that continuous poor labour situations define employment biographies in the former East-German federal states, which show high levels of unemployment because of the reunification effects. Integration into the labour market based on skill sets developed in times of the German Democratic Republic (GDR). *Article 3* supported the assumption that skill mismatches are especially apparent in states formerly belonging to the GDR, which is likely caused by economic restructuring towards a higher productivity level due to technological progress, substituting routine skills or intermediate skill levels by complementary high-skill demand and contributing to more interruptive employment biographies in East Germany.

Old inequalities in gender, health and occupation are accompanied by new social risks by skills, cohort and region. New social risks are likely to increase in importance and affect future older workers disproportionately compared to current retirees, because of increased employment complexity, skill obsolescence and consequences from modifications in the male breadwinner model. *Table 2* systematises this dissertation's empirical insights on rational choices to engage in extended working lives.

Table 2 Findings on Rational Choices in Work-Retirement Transitions

	<i>Voluntary</i>	<i>Involuntary</i>	<i>Dominance of Disparities</i>
<i>Early exits</i>	Continuous Part-time employment	Downsizing Working Hours	Gender, Health, Occupation
<i>Late exits</i>	Downsizing Working Hours	Continuous Part-time employment	Education, Cohort, Region

Source: Own considerations.

This dissertation shows that several aspects limit the potential to engage in late employment, increasing the likelihood of exiting early and are dominated by old social risks. New social risks link to extended working lives and evoke the debate on sustainable life courses as an indicator for unequal retirement patterns. For both, early and late exits labour market situation before retirement is an indicator of voluntary or involuntary decisions. Downsizing working hours may be seen as a tool for high-skilled workers. However, low-wage employment across the life course support involuntary continuous flexible employment. Thus, the study of old-age propensities to work has added insights on the individual's costs and benefit. Delaying labour exits are not only a consequence of financial considerations but are linked to opportunities, pointing towards discrepancies in rational choices.

4.3 Life Course Effects

The following part draws on this dissertation's contribution to the third research gap of life course parameters influence retirement outcomes. As pointed out in 4.1, working lives are more likely to be extended through phased retirement if employment biographies are de-standardised. Later exits suggest that the third aim of *Active Ageing* measures is fulfilled. Though, the intersectional findings of *Article 3* point in the dimensions of life course developments towards precarious employment growth

showing downward dynamics regarding social protection. Thus, rather than prolonging careers to gain additional earning points as a consequence of interrupted employment careers, the findings of *Article 3* suggest that labour market integration is pursued to avoid deductions to pension wealth from early exits. The rising complexity of employment biographies with more frequent transitions and higher shares of forms of part-time employment or unemployment leads to individual differentiation and links to a substantial decrease in earning point accumulation, especially for East Germans (*Article 3*). For women, more work does not increase pension outcomes due to the high share of continuous part-time employment across the life course. *Article 3* reveals that, across the life course, women participate in the labour market more strongly and work more; however, low levels of earning point accumulation remain. Also, younger cohorts are showing decreases in earning point accumulation as a result of interruptive working lives. For young cohorts in East-Germany, even a precarious trend towards low earning point accumulation with long periods of unemployment throughout the life course and more frequent spells of being without a job towards the end of careers are visible (*Article 3*). In sum, more employment does not increase earning point accumulation. Thus, this dissertation concludes that the intention of *Active Ageing* to compensate for more interrupted employment biographies is not fulfilled. The findings rather point towards higher labour market attachment, which is not rewarded by higher pensions, drawing on the third research gap.

Three consequences from *Active Ageing* have been discussed by regarding the results of *Articles 1-3*, addressing this dissertation's first research question. It is found, that measures of closing early retirement pathways and delaying retirement ages have led to a shift towards later exits. Thus, the first aim of *Active Ageing* measures is fulfilled in its intention that individuals work longer and collect retirement benefits later. Regarding the second aim to foster healthy older workers through prolonged careers shows that health issues still are a major driver for early retirement despite possibilities to decrease working hours. Lastly, the insights from studying employment patterns suggest that more employment opposes higher pension outcomes. Insofar, the third aim of *Active Ageing* is not yet reached.

Studying the behaviour evoked by the new policies (Bednar 2019), *Articles 1-3* show that the establishment of a new policy guideline defined by a high degree of individualisation seems to result in barriers to delay retirement depending on individual aspects. Therefore, micropatterns create barriers to prolong employment despite the work incentives set by *Active Ageing*. The findings suggest a contradiction in the incentive setting of the German retirement regime. Traditionally, the retirement regime rewards continuous full-time employment biographies, while lately, incentives are set focussing on achieving the statutory retirement age. Thus, careers are increasingly prolonged based on complex employment lives to achieve the statutory retirement age, albeit other caring obligations. Here, new modes of welfare activation collide with traditional regime structures. Along with the diversification of social risk structures (old risks versus new risks), the findings of *Articles 1-3* render contributions to the debate on a changing welfare state, which is discussed in the next part. By drawing on social consequences from delaying retirement ages, this dissertation's contribution to the fourth research gap is summarised.

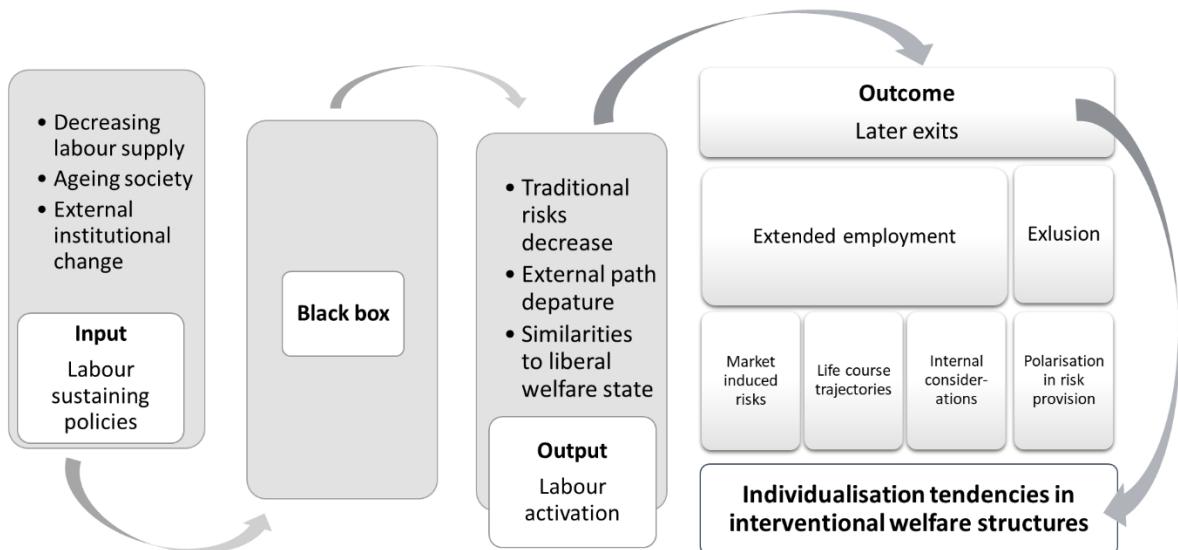
4.4 Welfare Variations

New conditions influence the demand on politics (DiMaggio 1988), which evoke the perspective of convergence between different national schemes. According to Dingeldey (2011), this approach allows the understanding of the initial conditions and the deviations from those starting points to measure institutional changes. *Article 4* takes up the discussion on welfare policies by comparing similar welfare states, Austria and Germany. The cross-sectional format of *Article 4* allows fixes the initial conditions in favour of a comparative approach, which adds information on how new features of welfare state intervention have affected trade-offs between institutions and economic performance. The results show that the countries deviate from their initial cluster in terms of the perspective of Convergence Theory. Delayed exit patterns for both countries as a consequence of raising the official retirement age and closing possibilities for early retirement are found. *Article 4* finds shifts in German welfare patterns, evoked by changing external institutions on the side of push- as well as pull-factors. Thus, exit patterns are delayed more strongly than in Austria. The divergence in economic performance is surprising because both states were classified initially to the conservative type (*Article 4*).

Regarding the emerging social consequences, two main trends have been acknowledged from *Article 4*. First, the gender gap in retirement timing is observed to have decreased in Germany compared with that in Austria. In 2015, German women were retiring later than men after controlling for several confounding variables. Therefore, delaying retirement by reducing pull factors coincides with reducing push factors to prolong employment in Germany (*Article 4*). Formerly inactive women have integrated into the German labour market based on part-time employment models (*Article 3*), which is consistent with the establishment of labour market opportunities offered by Minijobs. Insofar push factors for labour integration have been reduced simultaneously to incentives for early retirement (*Article 4*). Thus, *Article 4* finds that institutional push factors play an important role in labour retention, which is in line with the logic of liberal welfare states (see Hofäcker 2010). Second, results for the education gap accompany this development. It seems that educational differences have become larger in Germany than in Austria, comparing data from 2005 to 2015 (*Article 4*). As a consequence of labour market changes, demands on low-qualification have increased (*Article 3*). Thus, by comparing countries, the relevance of the educational background in the German welfare state is revealed again. Regarding the convergence between different national schemes, this dissertation finds deviations from their starting points. Germany shows to a greater extent than Austria liberal welfare state elements with fewer gender differences but stronger inequalities between educational groups (*Article 4*). For many years opening up early retirement pathways was seen as compensation for long-term employee loyalty in Germany (see Hofäcker 2010). However, this compensation mechanism was changed by rewarding late exits to ensure benefits for the workforce. Skill shortages as part of the German industrial economy model are also likely to be influential in strengthening those welfare elements that increase the likeliness of employers to retain skilled workers in the labour market. *Article 4* stresses that older individuals are competitive over younger ones, while the educational background moderates this finding. Skill shortages in Germany seem to have aroused a growing polarisation between high- and low-qualified individuals in the German labour market (*Article 4*).

It is concluded that similar political measures evoke equal developments within states, while the strength of the effect diverges between countries. From these findings on retirement regimes for Germany, a partial change from a compensating to an activating welfare state is derived. Along with changes in institutional architecture, typical challenges of liberal welfare states partially emerge in the German context (*Article 4*). Thus, this dissertation sheds light on the fourth research gap to understand the social consequences of shifts in welfare policies. The following *Figure 4* summarises the theoretical contribution of this dissertation to welfare state research.

Figure 4 Findings on Welfare Outcome



Source: Adapted by Easton (1965); own considerations.

As an outcome for welfare research, rewarding extended working lives as a central element of current pension policy is regarded with caution despite the exonerating effects for the social security system. Differences in old-age work propensities emerge as a consequence of *Active Ageing* in two categories: extended employment (late exits) and exclusion from extended employment (early exits). Thus, not all older workers benefit from the new pension and labour market reforms; certain groups of older workers are struggling to extend careers. Moreover, this dissertation clearly shows unequal conditions for those extending employment. By prolonging the phase of labour integration, market-induced risks emerge in the form of the characteristics of late employment, which matter for retirement transitions. Furthermore, long-term career trajectories and individual considerations influence retirement behaviour. Concluding for the second global research question, German welfare arrangements show individualisation tendencies. The complexity of risk structure – new risks in late exits and old risks in early exits – suggests that German welfare accounts neither to the conservative nor to the liberal cluster. Rather, modifications in traditional definitions are likely. Thereby, the demand for social policies to cover the emerging risk pattern emerges. In the next chapter, policy implications and further research demand revealed by this dissertation's findings are outlined.

5. Conclusions for Policy and Future Research

Even in light of the recent favourable labour market situation, current trends show socio-political risks. Employment as a new compensation mechanism is far from the norm across different social groups. Pushing retirement transitions further to an older age requires several political measures for individuals extending working lives and for those excluded from this opportunity, which is summarised in the following in line with three main principles.

(1) Enable the standard of living not only for people in favourable labour market conditions.

Reducing the regulatory gap between standard employment and flexible working forms is a major implication from this dissertation. Protection of individuals in marginal forms of employment against labour market risks is vital. Along with the changing norm from standard full-time careers towards complex employment careers, concepts of provision schemes need to be addressed. For conservative welfare states, the role of social partners is central (see Hofäcker 2010), although it has reduced in significance along with new forms of employment – i.e., mini-jobs – marking the absence of organising employment conditions in the low-wage sector. Thus, to reform marginal employment towards more substantial part-time work implies organising Minijobs through social partners and unions.

This dissertation shows that political incentives for women to integrate into labour based on full-time employment after childbirth have not yet reached their potential. Labour market inequalities still emerge through the unequal allocation of housework and childcare. Equal allocation of gainful work and family work increases the participation of women and will help stabilise the labour force potential. To reduce the double-burden carried by women, improving rewards for care-dependent labour exits are necessary. Thus, the incentives for combining care and work require adjustments need to cover more effectively female demands. Along with the proposals of the German Institute for Economic Research (DIW), this dissertation suggests introducing family working times. The model intends for both parents to reduce their working time to 80 per cent for a maximum of three years (DIW 2013). Financial support is paid afterwards based on parental allowance (*Elterngeld*). By studying informal care across the life course, women are not only more strongly affected in the mid-life stage but also towards the end of their careers by caring for grandchildren or elderly parents. Thus, expanding daycare nursery centres for children below the age of three years (DIW 2014) and increasing the share of affordable elderly care will increase the female employment propensity throughout the life course. In turn, the labour force potential increases as mothers participate more equally in employment, reducing the risk of low earning point accumulation.

(2) Guarantee individual and institutional financial sustainability through fulfilling careers.

Poverty risks in retirement increase despite more employment for specific groups. This dissertation shows that the principle of equivalence adequately covers full-time employment; however, part-time workers rarely qualify. Thus, the consequences of market-induced changes on employment forms emerge for a variety of labour participants. Minimum pensions in the (adjusted) form of the recently proposed retirement scheme by the current Minister of Labour Hubertus Heil (see Rudzio 2019) can contribute to overcoming precarious trends in retirement. Concluding from the findings of this

dissertation, the current concept of the minimum pensions needs adjustments regarding the addressed group of people, which currently would not reach all the relevant groups of older workers.

This dissertation adds to the understanding of the relevance of accepting multiple pillar provision. Deficits in earning point accumulations in the first pillar demand considerations on incentive setting in private provision, e.g., by offering standardised products in the third pillar.

(3) Social policies for those individuals who are unable to postpone the statutory retirement age.

Good health is likely to translate into longer working lives if strains to an individual's physical and mental health are reduced. Thus, at the organisational level, there should be sufficient scope to encourage organisations to provide wider advice and guidance concerning work options before retirement. If advantages from phased retirement are clearly stated, this retirement pathway is likely to support later exits beyond health factors. Nudging older workers to retain in labour based on lower work intensities could improve the perception of gradual retirement. Furthermore, preventive strategies to maintain health throughout the life course are demanded at the organisational level to increase labour participation at an old age.

Regarding the growing low-wage sector, which is likely to polarise due to reduced demands for intermediate-skills as a consequence of technological progress, provision mechanisms are needed to increase the trust in a providing welfare state. This dissertation finds increasing discrepancies between educational levels, making occupational development potentials indispensable. Provisions, as suggested by Hans et al. (2017), propose investing in human capital by expanding the concept of employment insurance by a third pillar supporting investments in vocational training. This way, the risks of unemployment and insecurity across the life course can be reduced. Furthermore, capturing information on vocational training and measures on digital competencies as part of active labour market policies in the BA could help to improve the awareness of digital literacy and concomitant research.

Despite these policy recommendations, this dissertation concludes three demands for future retirement research.

The first research deficit relates to the dimension of studying attitudes in old-age provision. This dissertation reveals several research gaps in this area, which are summarised in the following.

- Incentives for flexible work result in earlier exits once individual factors decrease the value for additional contributions. Thus, the adjustment of external institutions does not overcome or accelerate the development if internal institutions are not in line with the overall political aim. While external institutions have been implemented to activate labour resources, internal institutions such as perceptions of domestic task divisions have not adapted to new structures. Cebulla et al. (2019) show, at an old age, the domestic division still emerges as unequal. This result could support considerations on retirement as a typically male domain. Male decision-making dominates financial literacies of life-course economies. Under those considerations, gradual retirement through flexible work could emerge voluntarily for married women (Sesselmeier et al. 2014). Furthermore, working an additional year may only produce limited

advantages for women due to tax considerations. In the modified male breadwinner model, female labour is increasingly organised through part-time work, although as a supplement to male labour, because working on a higher level is limited in monetary advantages due to taxation regulations. Thus, to pursue the question of whether exit patterns are voluntarily gendered regarding incentive structures at the end of careers, further research is necessary. While joint income taxation of married couples possibly drives gender unequal retirement patterns, benefits from this regulation are strong for middle-class household working arrangements, which represent core workforce participants in the German employment model. Research should focus on internal considerations to understand how they influence unequal retirement patterns between men and women.

- This dissertation's findings suggest that the more de-standardised careers, the more likely individuals retire later based on downsizing working hours, indicating involuntary career prolongations. According to Rational Choice Theory, individuals would stay in full-time employment after interruptions in employment biographies have decreased earning point accumulation. This discrepancy suggests that other considerations, such as care obligations, stipulate the choice to stay in full-time employment, which needs to be acknowledged by research.
- Also, if a low acceptance rate stimulates late-career employment behaviour, insecurities and low trust in the welfare state could evoke path dependent early exits (see van Oorschot/Jensen 2009).

Second, regarding the previous topic on the acceptance in welfare instruments, variations in changing modes of welfare demand further research. Increasing the length of earning point accumulation by accessing labour reserves through delayed retirement ages and the reversion of early retirement mark a major policy shift in the German retirement scheme. The changing retirement regime interacts with several fields of social policies, i.e., family policies, labour market policies, educational policies. Thus, by detecting changes in the retirement regimes, interactions with the other fields are likely. Spill-over effects of changing retirement regimes in other institutional areas need to be subject to further analysis, studying new risk structures in the other spheres of welfare organisation.

The third major research demand concerns the effects of a changing skill demand on retirement transitions. Research should aim at detecting the required skills in the context of digitalisation and changing skill demands. This dissertation's findings suggest that unequal retirement patterns are likely to be linked to sectoral dependent task-changes, making skills of (male) typical occupations redundant. A comprehensive study of occupation-based future labour requirements will be needed to be conducted to understand the changes in competencies across gender and, thus, allow the adaptation of educational training and lifelong learning to new skill profiles.

Social security arrangements need to reflect labour market developments and the diversity of societies to prevent unequal ageing. This dissertation provides insights on the interactions between institutional arrangements and individual behaviour, offering ideas to maintain a stable labour force potential in light of demographic changes more sustainably.

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Papers

Article 1 Fechter, C. (2019a): New Modes, New Challenges? The Influence of Extended Working Lives on the Late Employment Phase in Germany. German Review of Social Policy, 68(4), pp. 313-338.

Abstract

In the past decade, old age security policies have aimed at providing incentives to prolong employment and change eligibility rules to reduce early retirement options; these are known as Active Ageing measures. Research reveals that extended working lives have altered exit patterns towards prolongation of the late employment phase. This paper draws on conditions in the organisation of work in the late employment phase. Using fixed effects regression models with the SOEP v33 data, absolute changes in working hours at the individual level measure late-career employment. The main results are in line with theoretical considerations and observe reduced hours worked on an individual level. Thus, the trend in reversing early exit patterns indicates a stronger organisation of late employment based on flexible work. Moreover, while female labour participation is increasing, structural differences show a higher female attachment to features of labour flexibility. The conclusions presented concern the changing mode of the German conservative welfare state and reveal a higher degree of individualisation as a balancing mechanism in social policy.

Keywords

Late employment, atypical employment, labour flexibility, fixed effects, SOEP

Article 2 Fechter, C. (2019b): The Role of Health in Flexible Working Arrangements. Avenues to a Longer Working Life? Z Gerontol Geriat, online first, DOI: 10.1007/s00391-019-01551-1.

Abstract

Background. In the context of retaining labour resources to meet demographic developments, phased retirement based on flexible work (FW) aims at delaying the labour force exits of older workers. Objective. How do health conditions relate to the use of FW as an instrument for gradual retirement to extend working lives? Material and methods. By evaluating Cox proportional hazard models and by linking survey data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) with register data from the Versichertenkontenstichprobe of the pension insurance records (VSKT), labour force exit rates at 50–65 years of age depending on health were analysed. Results. This study collated information about the discussion of labour flexibility as a tool to retain older workers in the labour market. It shows that reduced late career working hours lead to higher labour exit rates. Continuing to work in later life may be positively associated with health based on FW, which fosters opportunities to work part-time. Employees with poor health are unlikely to prolong their working lives through FW and are more likely to leave the labour market early. In line with research pointing towards the emergence of new forms of inequality among older individuals by changing welfare state incentives, the findings show significant impacts of life-course determinants on labour exit behaviour. Conclusion. Increasing labour market retention based on reducing working time depends on social attributes and personal preconditions. Influencing the attitude of older workers towards late retirement to adapt to future changes in societies remains a demand for research and policy debate discussing the benefits of gradual retirement for older workers.

Keywords

Late employment; Retirement pathways; Transitions; Survival analyses; SHARE-RV

Article 3 Fechter, C./Weiland, A. (2019): Implications of Changing Patterns of Employment Careers for Pension Outcomes. Submitted for review.

Abstract

This paper examines the impact of changing labour market conditions on individual financial well-being in East and West Germany. As careers become increasingly de-standardised, we expect the emergence of new social risks in the context of the German public pension system, which is characterised by a high degree of life-course sensitivity. Using SHARE-RV data, which links administrative records of the German pension insurance with waves 4 to 6 of the “Survey of Health, Ageing and Retirement in Europe” (SHARE) providing detailed life history data for individuals born between 1927 and 1965. In a first step, we apply sequence analysis to explore the de-standardisation and differentiation of employment trajectories for the birth cohorts 1936-1945, 1946-1955 and 1956-1965, separated by region and gender. In a second step, we apply multivariate regression analysis, scrutinising East-West differences in the accumulation of pension rights and the vulnerability of women and lower educated individuals across cohorts. We find that the employment trajectories of lower educated individuals are linked to a precarious accumulation of pension earning points in East Germany, while women in West Germany face persistent disadvantage. The differentiation of employment trajectories is associated with substantial disadvantages in both East and West Germany. This paper argues, that while incentives to encourage people to retire from the workforce later in life have become a key economic policy goal, posed changes in transitions cannot compensate the deficits in entitlements across the life course. As the social security arrangement is based on traditional welfare structures and societies of the industrial age, gaps in social provision emerge for certain labour participants through new forms of welfare policies.

Keywords

Employment careers; De-standardisation; Retirement; Sequence analysis; SHARE-RV

Article 4 Schmidhuber, L./Fechter, C./Schröder, H./Hess, M. (2019): Pension reforms and retirement timing in Austria and Germany: The role of the national framework for institutional country clusters. Revision.

Abstract

Many countries have reformed public policies to counter early retirement and low labour market participation of older individuals by closing early retirement pathways and delaying retirement timing. We investigate Germany and Austria, traditionally belonging to the same institutional cluster, to evaluate whether or not such national policy developments influence a country's institutional path as outlined by traditional institutional taxonomies. Using SHARE data, findings point to increasing average retirement ages in both countries, especially in Germany. Reasons for retirement indicate that early retirement becomes less important while working until pension age has gained in significance. For Austria, gender differences in retirement timing are found. In contrast, Germany seems to develop towards a more liberal welfare state, including low gender differences, but strong inequalities between education groups. Germany and Austria, thus, seem to increasingly diverge concerning policy developments, suggesting that institutional clusters are in flux in times of institutional change.

Keywords

Early retirement; late retirement; pension reform; institutionalism; Austria; Germany; SHARE