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The emerging trend of work beyond retirement age in Germany

Increasing social inequality?

Increased longevity and a still widespread trend towards labour force exit before reaching formal retirement ages increasingly put the financial sustainability of current pension and social security systems at risk. The looming retirement of large baby boomer cohorts might even increase this financial pressure and add a shortage of (skilled) labour to the list of challenges. Consequently, pension and labour market experts push for extending working lives and keeping older workers longer in the labour market [9].

Policy makers in several European countries have begun to implement different policies to reverse early retirement, amongst others, the legal retirement age has been increased in several European countries. The implementation of such reforms takes time and is often met with considerable scepticism by unions [1] and by employees [15]. As one major component of the politically promoted 'active ageing paradigm' [29], active employment policies encouraging work until or even beyond the legal retirement age have turned into a complementary strategy to promote longer working lives. Yet, researchers and political actors raise the concern that not all workers are equally able to adhere to such institutionalised expectations [3, 16]. It is thus of vital political and societal importance to understand individuals' retirement decisions and how they are affected by recent policy changes.

Previous research on Germany focussed primarily on exit decisions in pre-retirement ages [5, 20], while rather little attention has been paid to work beyond retirement ages ([14, 17, 22] for exceptions). In this paper we first describe the emerging trend of working beyond formal retirement age in Germany over the last two decades that were characterised by a gradual institutional shift from early exit to activation policies. Second, we explore the determinants that shape older employees' decisions to work beyond retirement age, and how their influence has changed throughout the recent policy shift. In addition to exploring trends over time, we also investigate whether the trend of working beyond retirement age is characterized by socio-economic inequalities in the degree of choice of retirement timing.

What drives retirement decisions?

Various theoretical approaches have been proposed to capture the complexity of the retirement decision (e.g. rational choice theory, role theory). Moreover, empirical research has found a multitude of factors that impact the retirement decision (see [30] for a review). Still lacking is a unified theoretical approach to explain retirement decisions in such a holistic context. Rather than proposing such an encompassing theoretical model, in this paper, we rely on

a heuristic model that reduces the diversity of factors to two main components: the *individual ability* and the *individual desire* to continue working [23]. The ability to continue working refers to the individual health as a necessary precondition to perform required tasks, but also to the ability to find an adequate job given one's own qualification profile. The individual desire to work captures *financial* aspects, such as the value of individual pension rights (in relation to future consumption plans) or the overall financial situation of the individual (e.g. the existence of loans or debts), but also *nonmaterial* work-related gratifications such as enjoying work, social contacts and recognition. We assume that the interplay of the ability and the desire to continue working (respectively to retire) frames the retirement decision of older workers approaching retirement age.

Notably, these dimensions may not always be in accordance with each other. Previous research has shown that, for example, a high individual desire to work may be counteracted by persistent labour market obstacles that constrain the individual ability to continue working [2]. Does this assertion still hold true for the most recent period where measures to support older workers' employment have gained importance? To answer this question, we first briefly summarize the relevant institutional shifts impacting on older workers' employment in Germany

throughout the last two decades. We then develop hypotheses about how these policy trends have affected the ability and the desire to work longer and how this pattern may have changed over time.

Gradual shift in conditions for longer working lives

Throughout recent decades, there have been significant changes in the sociodemographic and labour market conditions affecting retirement transitions. On the one hand, increases in life expectancy in general were accompanied by a rise in years of disability-free, healthy life expectancy [21]. Furthermore, structural economic change and the educational expansion since the 1970s have led to a gradual transformation from physically demanding ‘blue collar’ occupations to physically less strenuous work in the service sector [2].

On the other hand, faced with the prospect of demographic ageing, Germany policymakers enacted a thorough change in policies directed at older workers. While up to the mid-1990s, Germany followed an “extensive Continental European labour shedding strategy” ([12] p. 117) and featured a “generous early retirement culture” ([4] p. 281; own translation), it seemed to have successfully reversed this trend by the year 2010 [11]. Building on previous research, roughly three phases of this policy shift can be differentiated:

- The 1980s still reflect the ‘*peak phase*’ of early retirement. Various opportunities for early retirement through both public pension systems and other welfare programs (e.g. unemployment insurance) existed which were often further underpinned by even more generous company practices [24]. At the same time, virtually no policies encouraged work beyond retirement age [7, 12].
- The 1990s saw *contradictory reforms*: On the one hand, popular early retirement pathways were kept up, such as the state-subsidised ‘block model’ of partial retirement, in which the final career phase of an older worker was split evenly into a first half of (mostly) full-time work and a second half

of inactivity. On the other hand, first incentives to work and contribute for longer were introduced through the closing of some early exit pathways, increased political focus on additional private pension insurance plans, finally culminating in the introduction of the Riestert-Rente as part of the pension reform in 2000/2001 [12].

- Finally, *since the turn of the millennium*, Germany followed the European trend from early exit to *activation* of further restricting pathways into early retirement. Newly introduced ‘active ageing policies’ aim at increasing employment, participation in society and healthy and independent living of older people (see [10] for an overview). Within this framework, particularly the introduction of active labour market programmes for older workers and the raising of standard retirement age for receiving full pensions from 65 to 67 increased incentives for older employees to work and contribute longer.

Does the paradigm shift promote rising social inequalities in old age?

In general, these sociodemographic and policy trends can be assumed to increase the individual likelihood to work up to or even beyond legal retirement age: Improved healthy life expectancy and less strenuous workplace demands increase the *ability* of older employees to work up to (or beyond) formal retirement ages. At the same time, cuts in early retirement opportunities reinforce the financial necessity of a longer working life, while recent activation programmes should have promoted the *desire* to work longer.

However, this universal trend might not affect all workers in the same way. Particularly education seems to be a valid proxy to summarize several interrelated characteristics that are known to be influential individual-level determinants of the retirement decision (e.g. work place characteristics and work autonomy, health, income, labour market chances). Previous research shows that better educated workers are more likely to remain in employment [6] as high-skilled jobs are

usually less physically demanding. At the same time, educational attainment makes it easier to react to changing labour market demands, thus enhancing the opportunities for work continuation [2]. And although their financial need might not be particularly pronounced, the high-skilled also expect to get higher nonmaterial rewards through more varied work tasks and a higher work autonomy out of continued employment, as indicated by the ‘silver workers’ literature [17].

In contrast, the ability of lower skilled workers to remain in employment is constrained by their lower qualification profile, their lower participation in continued education and training measures [27] and physically more demanding working conditions, often resulting in serious health impairments at the end of their working career. Throughout the ‘early retirement phase’ of the 1980s and early 1990s, these disadvantages in employment opportunities of low-skilled workers had been compensated by generous opportunities for early exit through various combinations of public early retirement pathways (e.g. by combining unemployment insurance and early pensions) which often provided high replacement levels particularly for lower-skilled workers. For this time period, their likelihood to work beyond retirement age was low due to a combination of low need and low ability. Yet, this situation may have changed throughout the transition from early exit to activation policies: early retirement opportunities were made increasingly financially unattractive through the closure of early exit pathways and formal retirement age increases. This increase in the financial necessity to continue working was not accompanied in a respective improvement of employability since active labour market policies and lifelong learning initiatives were mainly used by those with higher education. The apparent discrepancy between an increased necessity and a low ability to work results in an increased likelihood of low-skilled workers to work beyond retirement age in the 2000s—but possibly in less advantageous jobs and under less favourable employment conditions.

In sum, we thus expect an increase in the propensity of lower-skilled workers to

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The emerging trend of work beyond retirement age in Germany. Increasing social inequality?

Abstract

Background. Population ageing, demographic change and the financial crisis has put the financial sustainability of the German pension system at risk. In reaction to these challenges, Germany recently abandoned generous early retirement policies and moved towards policies encouraging higher employment among the elderly.

Objectives. In this article we evaluate how these labour market and pension policies affected the retirement decisions of older workers in Germany over the last three decades. Complementing previous research on early retirement, we focus in particular on those working past the mandatory retirement age of 65 years and examine whether the composition of this group of postretirement-age workers has changed over time.

Data and methods. We analyse pooled cross-sectional data from three rounds of the German Ageing Survey which allow us to cover the last three decades from 1980 to 2008. Estimating multinomial logit models we distinguish explanatory factors on the individual, organizational and institutional level that frame the decision to leave the labour market before the age of 65, to stop working at 65 or to work past 65.

Results. Over the last three decades, the share of German workers leaving the labour market after the mandatory retirement age of 65 has increased markedly. This trend towards working longer has changed particularly among the low educated workforce which in previous decades traditionally has exhibited a tendency to retire early. In con-

trast to high-skilled workers, the decision to work longer among low-educated workers is mainly driven by financial need (and is usually not in line with their desire or their ability to work for longer).

Conclusion. Our findings suggest an increase in social inequality in retirement decisions as a result of the policy shift towards activation. We conclude by arguing for a more fine-grained understanding of the reasons why people work longer. Such research would provide valuable insights into how to design future labour market and pension reforms preventing a rise in social inequalities.

Keywords

Retirement · Employment · Social change · Public policy · Social class

Arbeiten nach 65 in Deutschland. Eine zunehmende soziale Ungleichheit?

Zusammenfassung

Hintergrund. Die immer älter werdende Gesellschaft, der demografische Wandel und die gegenwärtige Finanzkrise stellen die Finanzierbarkeit des deutschen Rentensystems vor neue Herausforderungen. Als Antwort auf diese Herausforderungen hat die deutsche Arbeitsmarktpolitik in den vergangenen Jahren attraktive Frühverrentungsmöglichkeiten zunehmend eingeschränkt und Reformen eingeleitet, um die Beschäftigung älterer Menschen zu verlängern (Politik des aktiven Alterns).

Fragestellung. In diesem Artikel untersuchen wir, wie diese veränderte Arbeitsmarkt- und Rentenpolitik die Renteneintrittsentscheidung von Arbeitnehmern in Deutschland beeinflusst. In Abgrenzung zu existierender Forschung, die sich bislang weitestgehend auf Frühverrentungsentscheidungen konzentrierte, fokussieren wir uns in diesem Artikel insbesondere auf Personen, die über das offizielle Rentenalter von 65 Jahren hinaus arbeiten. Neben der absoluten Häufigkeit von Arbeit über das Ruhestandsalter hinaus untersuchen wir dabei die

Frage, ob sich die soziale Zusammensetzung dieser Gruppe in den letzten drei Jahrzehnten verändert hat.

Daten und Methoden. Die Datengrundlage unserer Analysen bilden die ersten drei Wellen des Deutschen Alterssurveys (DEAS), die uns ermöglichen, Ruhestandsentscheidungen und deren Motive über einen Zeitraum von 1980 bis 2008 zu rekonstruieren. Anhand multinomialer logistischer Regressionen unterscheiden wir zwischen individuellen, organisatorischen und institutionellen Einflussfaktoren auf die Entscheidung, den Arbeitsmarkt vorzeitig, zum regulären Ruhestandsalter oder nach dem regulären Ruhestandsalter zu verlassen.

Ergebnisse. Im Verlauf der letzten drei Jahrzehnte hat der Anteil der Arbeitnehmer, der den Arbeitsmarkt erst nach dem offiziellen Rentenalter von 65 Jahren verlässt, stark zugenommen. Diese Neigung länger erwerbstätig zu sein, findet sich zunehmend häufiger bei Arbeitnehmern mit niedriger Bildung, die in der Vergangenheit auf finanziell attraktive Frühverrentungsmöglichkeiten

zurückgreifen konnten, jedoch zunehmend aus finanziellen Gründen weiterarbeiten müssen. Dieser zunehmende Druck zur Verlängerung der Erwerbskarriere entspricht jedoch meist weder dem Wunsch der niedrig gebildeten Arbeitnehmer noch ihren Möglichkeiten länger zu arbeiten.

Schlussfolgerung. Unsere Ergebnisse legen nahe, dass die gegenwärtig verfolgte Politik des aktiven Alterns zu einer Zunahme von sozialen Ungleichheiten bei den Renteneintrittsentscheidungen geführt hat. Um zukünftige Arbeitsmarkt- und Rentenreformen nachhaltig so zu gestalten, dass sie soziale Ungleichheiten nicht weiter verstärken, sollte zukünftige Forschung detaillierter die bislang noch sehr cursorisch erfassten Gründe erörtern, weshalb Arbeitnehmer über das offizielle Rentenalter von 65 Jahren hinaus arbeiten.

Schlüsselwörter

Renteneintritt · Beschäftigung · Sozialer Wandel · Renten- und Arbeitsmarktreform · Soziale Schichten

remain employed, gradually approaching that of the higher-educated. At the same time, we expect a widening of social inequalities in the nature of the underlying retirement transitions: While high educated workers will be more in command of their retirement decision, lower-skilled

workers will be more driven by the need to remain employed even when faced with unfavourable conditions.

Data and methods

Data

To answer these questions we analyse data from the “German Ageing Survey” (Deutscher Alterssurvey, DEAS), a na-

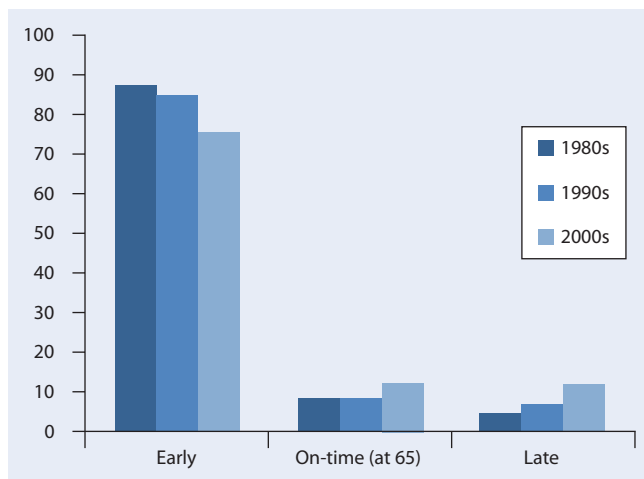


Fig. 1 ◀ Early, on-time and late retirement in Germany, 1980–2008

tionwide representative cross-sectional and longitudinal survey of the population aged 40 years and over [18]. This unique data set allows the investigation of the incidence and the composition of those working beyond retirement age not only at one single point in time, but also over time, following the gradual shift from early retirement to activation policies. We pool data from the available three cross-sectional rounds from 1996, 2002, and 2011 ($n=14,127$). After dropping respondents whose retirement decision has not yet been made (i.e. younger than 65 and still working) and respondents that exited employment more than 15 years before the first survey (to avoid memory errors and reduce sample selectivity) as well as listwise deletion of missing cases, we are left with 3,492 respondents in our analysis.

Dependent variable: the retirement decision

Retirement is a complex process that might consist of a sequence of several stages such as partial or full labour force exit, unemployment benefit receipt, pension receipt and/or bridge employment [13]. Research relying on cross sectional data and retrospective information usually defines the onset of retirement either as labour force exit or pension receipt (see [22] on how to combine both). We use self-reported retrospective information by DEAS respondents that have already left employment about their labour force exit (i.e. the year when people say they stopped working) to categorise them into three distinct groups: (1) those retiring

early (i.e. stop working before reaching the legal retirement age of 65), (2) those retiring at age 65 and (3) those working beyond 65.

We use this simple definition of retirement since it can be expected to be the most reliable retrospective measure of retirement: people should be better able to recall the year when they stopped working rather than that of receiving pension benefits due to the more direct impacts on their daily routines. Furthermore, employment exit (into either inactivity or unemployment) is of major importance from a welfare perspective, since it marks the transitions from a contributor to the welfare system to that of a transfer recipient. As previous research with longitudinal SOEP data had indicated returns to the labour market once having exited employment are a rather marginal phenomenon [7], we regard every self-reported exit as a final withdrawal. Finally, we refer to age 65 as the benchmark since this age has long served as an orientation marker within the German pension system and also is frequently used as a cross-national benchmark for early exit. In order to embed results from this German study in a larger international context, it seems most plausible to refer to age 65 when delineating early, on-time and late retirement.

Independent variable and controls

In order to trace changes in retirement decisions over time and link them to the gradual institutional change from early retirement to activation policies we distinguish respondents leaving the labour mar-

ket in the 1980s from those leaving the labour market in the 1990s or 2000s. Given the inherent restrictions of cross-sectional survey data in reconstructing the dynamics of life course trajectories, we confine our analyses to explain retirement behaviour with the help of time-invariant independent variables. Our main independent variable is education. As argued before education is a good proxy to capture the major aspects underlying the retirement decision. Higher levels of education are correlated with a better health status, with higher income, with higher occupational class and with better labour market chances. Moreover, education can be regarded as one of the major determinants of social inequality [25]. We distinguish three educational levels: lower secondary degree or less (ISECD 1/2—low), upper secondary or higher vocational education (ISCED 3/4—medium) and tertiary education (ISCED 5/6—high). In the multivariate analysis we control for further covariates that confound the effect of education since they are related to both the retirement decision and education. On the individual level we control for gender and place of residence (east/west Germany). To reflect workplace characteristics, we further include economic sector (differentiating primary, secondary, tertiary, and public sector employment) and the size of the company [differentiating between small (less than 20 employees), medium-sized (20–199 employees) and large firms (more than 199 employees)] as controls. Unfortunately, we are not able to control for the influence of health status on employment exit since health status is only available at the time of the interview (i.e. after people stopped working) and not before or at the time of employment exit.

Results

An overview of the incidence of early, on-time and late retirement for the three historical periods outlined above are provided in **Fig. 1**. Descriptive results reveal that, as hypothesized, the incidence of working longer increased over time, particularly in the last decade. While in the 1990s, almost nine out of ten employees retired before age 65, this proportion declined to three quarters in the last de-

Tab. 1 The retirement decision and explanatory variables, average marginal effects based on a multinomial logistic estimation

The retirement decision	Early	On-time (at 65)	Late
<i>Individual level</i>			
Education [ref. cat.: medium (ISCED 3–4)]			
– Low (ISCED 0–2)		0.006 [0.015]	0.001 [0.059]
– High (ISCED 5–6)		0.029** [0.012]	0.059** [0.013]
Gender (ref. cat.: female)			
– Male		0.051** [0.011]	0.032** [0.011]
Place of residence (ref. cat.: east Germany)			
– West Germany		0.032** [0.010]	0.036** [0.009]
<i>Job or organizational level</i>			
Economic sector (ref. cat.: secondary)			
– Primary		0.064** [0.031]	0.035 [0.023]
– Tertiary		–0.021** [0.011]	0.039** [0.013]
– Public		0.001 [0.014]	0.005 [0.013]
Firm size (ref. cat.: medium firm)			
– Small firm		0.045** [0.013]	0.016 [0.013]
– Large firm		0.009 [0.011]	–0.017 [0.011]
Occupational pension available			
– Yes		–0.022* [0.011]	–0.032** [0.011]
<i>Institutional level</i>			
Policy trend (ref. cat.: 1980s)			
– 1990s		0.002 [0.011]	0.011 [0.011]
– 2000s		0.046** [0.015]	0.048** [0.014]
n	3492		
McFaddens R ²	0.057		
LL	–1380.368		

*p<0.10; **p<0.05. ref. cat. reference category.

cade. At the same time, the proportion of those working beyond age 65 almost tripled from 4.5 to 12%. Working beyond retirement age thus increasingly figures as a significant phenomenon on the German labour market.

These findings appear to be well in line with the three institutional phases outlined earlier—with the greatest change in retirement behaviour occurring at a time when active ageing policies are widely implemented. Nonetheless, it needs to be noted that this period coincided with an economic boom period, making it more likely for older workers to remain employed respectively to potentially re-enter the labour market. Furthermore, educational and occupational upgrading across cohorts also meant that older workers may have found it easier to remain employed, given that their comparative disadvantages in human capital as compared to the younger workforce may have weakened. Nonetheless, institutional change can be attributed a vital role in as far as it

has allowed older workers to actually take up the opportunities opening up on the labour market.

With a multinomial logistic regression we examine the effects of individual-level variables on the timing of retirement (■ **Tab. 1**). Marginal effects based on the model were estimated, treating early retirement as the reference category. Coefficients in ■ **Tab. 1** thus give the change in the likelihood (in percentage points) to work up to (left column) or beyond the normal retirement age of 65 (right column) relative to exiting early (i.e. before age 65). Results for control variables largely confirm findings from earlier research. Men are more likely to work either up to or beyond retirement age. Furthermore, the likelihood to work beyond the age of 65 is around three percentage points higher in western than in eastern Germany, reflecting the more restricted opportunities for later exit in western Germany [6]. Organizational-level differences remain rather modest: we find a slightly higher

likelihood of long working life in smaller firms and in the nonindustrial parts of the economy (services and agriculture) [2, 3]. Receiving an occupational pension, however, suppresses working longer, a finding in line with the ‘pull effects’ of occupational programs that frequently complement public pension incentives for those eligible to it. As for our main hypothesis we find that higher-educated workers show a significantly higher likelihood to continue working up to or beyond the age of 65. This relationship is particularly pronounced for work beyond retirement age: the likelihood that a high-educated person retires after the age of 65 (and not early) is almost six percentage points higher than the likelihood of a low educated person. Moreover, the multivariate analysis supports the emerging trend of work beyond retirement age in Germany. The robustness of the time trend when controlling for individual and organizational covariates suggests that working longer reflects a general trend that cannot be re-

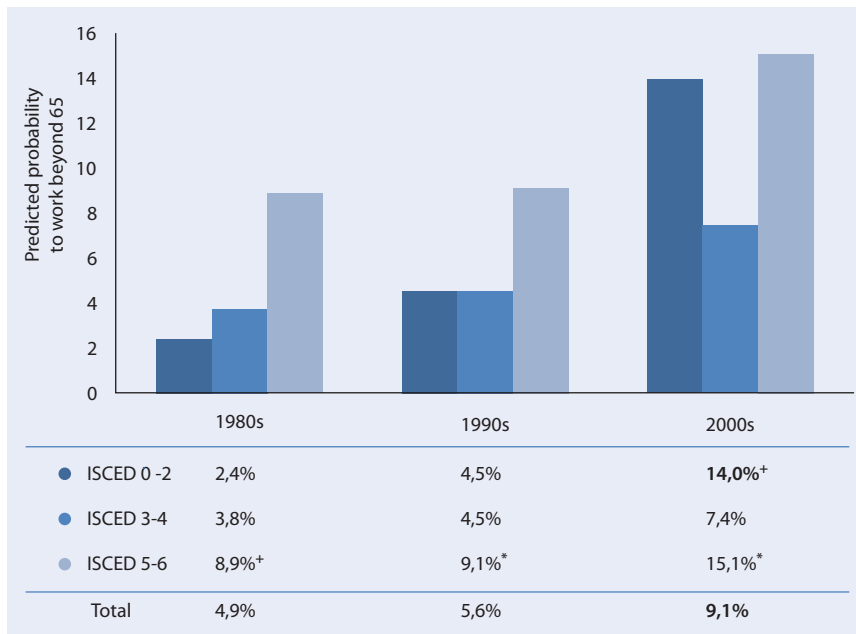


Fig. 2 ▲ Working beyond retirement age over the last decades—predicted probabilities for different social groups based on a multinomial logit model, estimates controlled for other covariates

duced to a changing labour force composition over time.

Only the effects of covariates for the entire (i.e. pooled) sample are presented in **Tab. 1**. To test our hypothesis that the effect of education changed over time, **Fig. 2** graphically presents the predicted probabilities for educational groups to work beyond the age of 65 for the three time periods separately (1980s, 1990s and 2000s), controlling for all other covariates in **Tab. 1**.¹ The results reveal a shift from an almost linear to a U-shaped effect of educational attainment over the three decades. In the 1980s lower-educated workers were least likely to work beyond retirement age. Over the last three decades this changed considerably. Notably, in the 2000s the likelihood to work beyond retirement age even surpasses that of medium-skilled workers (significant at the 10% level) and almost approximates that of the higher educated.

A more detailed decomposition of those working beyond retirement age also points to the salience of our hypothesis that reasons for retirement differ by education. As additional analyses reveal, among postretirement workers with lower education, it is those with breaks in

their work career (and thus the financial need to acquire more pension contribution years) that are overrepresented (56% as compared to 43% for all respondents of the same educational group). In contrast, those with higher education seem to enjoy more choice in their retirement decision, reflected in a disproportional share of late retirees with younger partners, pointing to a more self-sustained preference for coupled retirement.²

Conclusion and discussion

Our results indicate that the political paradigm shift from early retirement to activation has had noticeable implications for the employment behaviour of older German workers. As demonstrated, they increasingly extend their working lives up to and past the age of 65. This trend is particularly pronounced in the last decade. As our multivariate analysis reveals, this trend has been strongest among lower educated workers, who—deprived of their previous early exit opportunities through early public pensions—show a higher likelihood to work longer nowadays. Yet, our results suggest that—in contrast to the higher educated who tend to voluntari-

ly desire late exit—lower-educated workers may rather be driven by a financial need to remain employed. While the likelihood of both educational groups to work beyond retirement age converges in quantitative terms, the reasons for continuing to work possibly differ. If this assertion true inequalities in the *choice* to continue working are rising [14].

» Increased work beyond retirement age but rising social inequalities

Previous research has provided detailed descriptions of postretirement workers in Germany at single (and often rather recent) time points [8, 16, 22]. Our study extends this perspective by tracing back the trends from the heydays of early exit to the current activation phase and demonstrates how the composition of those working beyond retirement age has changed over time. Even though the reversal of early exit took place at a time when labour market prospects were improving, institutional changes may have played a vital role by *enabling* older workers to take up new opportunities on the labour market. Yet, our results also suggest that the repercussions of institutional reform may not be unanimously positive, indicated by a rise in social inequality in retirement decisions, suggesting that particularly lower-educated workers may not be able to meet the demands of or even benefit from activation policies.

Due to the time series perspective, we had to restrict our analyses to time-invariant variables. Future analyses may allow for a more detailed examination of the individual reasons for late career dynamics throughout the political paradigm shift. In this respect quantitative research possibly reaches its analytical limits and would benefit from qualitative approaches that seem better able to capture the complexity of the retirement decision and in particular psychological reasons. For example, individuals' understanding of policies play an important role in this respect [28].

¹ Results are not shown here, but available from the authors upon request.

² Again, results are not shown here, but are available from the authors upon request.

Practical implications

Our findings support concerns that recent policy developments which are positively viewed in both public and academic discourse may simultaneously create new employment risks, particularly for low-skilled workers [26]. As a result of anticipated benefit cuts for early exit, these workers feel increasing pressure to continue working, even if their chances to find an adequate job is low—either because of their health or of their labour market position. Radl's ([19] p. 654) question of whether “early retirement is a privilege” or an “exclusion from gainful employment and identity-enhancing, productivity activity” thus may only apply to parts of the society. For low skilled people, early retirement may be turning into a privilege they can no longer afford, while continued employment might be far from being gainful or identity-enhancing. Future pension and labour market reforms will need to develop solutions for labour market ‘outsiders’ that find it difficult to remain in the labour market, yet need to extend their employment lives to secure a reasonable standard of living.

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Compliance with ethical guidelines

Conflict of interest. D. Hofäcker and E. Naumann state that there are no conflicts of interest. The accompanying manuscript does not include studies on humans or animals.

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