

# **German pension and labour market reforms and the potential rise of social inequality amongst older workers and pensioners**

## **Reformas alemãs das pensões e do mercado de trabalho e o potencial aumento da desigualdade social entre trabalhadores de idade mais avançada e pensionistas**

**Moritz Heß<sup>4</sup>**

University of Bremen, Germany

**Jürgen Bauknecht<sup>5</sup>**

University of Applied Sciences, Germany

**Gerhard Naegele<sup>6</sup>**

TU Dortmund University, Germany

**Philipp Stiemke M. A. <sup>7</sup>**

Institute of Gerontology, TU Dortmund University, Germany

### **Abstract**

Policymakers in all European countries have implemented reforms aimed at delaying retirement and extending working lives mainly to mitigate financial pressure on public pay-as-you-go pension systems and to increase the supply of skilled labour. This could be a reason for an increase of older workers' labour force participation. This increase was particularly strong in Germany.

In the paper at hand, we will answer two research questions: i) how can this steep increase in German

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<sup>4</sup>Postdoc at the University of Bremen. His main research focus are retirement transitions, welfare state comparison and social inequality.

E-mail: [mhess@uni-bremen.de](mailto:mhess@uni-bremen.de).

<sup>5</sup>Professor for social policy and socio-economic framework conditions at Fließner Fachhochschule Düsseldorf / University of Applied Sciences. His main research areas are social policy and employment of older workers.

E-mail: [bauknecht@fliedner-fachhochschule.de](mailto:bauknecht@fliedner-fachhochschule.de).

<sup>6</sup>Professor emeritus. He is a globally known expert in the fields of social policy and ageing. He has published over 100 articles, books and book chapters.

<sup>7</sup>Research assistant at the Institute of Gerontology in Dortmund. His previous research activities have focused on retirement-transitions, employment of older workers, and social inequality.

E-mail: [philipp.stiemke@tu-dortmund.de](mailto:philipp.stiemke@tu-dortmund.de).

older workers' employment rate be explained? And, related to this: ii) have policies for longer working lives fostered inequality? We base our analysis on an extensive literature review and descriptive data analysis.

We conclude that the rise of the employment rate of older workers in Germany has several causes. First, the German labour market has performed very well, so that the policy debate has shifted from unemployment to a lack of (skilled) labour. Second, there is a strong increase of female labour market participation. Third, due to cohort effects, today's older workers are healthier and better skilled than their predecessors. Finally, the pension and labour market reforms aimed at delaying retirement had an effect. However, we also find that low-skilled and low-income workers increasingly have to delay their retirement due to financial reasons. It seems that social inequalities in the retirement transition are increasing in Germany.

**Keywords:** older workers, employment policies, social inequality, Germany

### **Resumo**

Os formuladores de políticas de todos os países europeus implementaram reformas destinadas a atrasar a aposentadoria e a prolongar a vida profissional, principalmente para mitigar a pressão financeira sobre os sistemas públicos de aposentadoria e aumentar a oferta de mão-de-obra qualificada. Isso poderá ser um motivo para o aumento na participação da força de trabalho dos trabalhadores mais velhos. Este aumento foi particularmente forte na Alemanha.

No presente artigo, responderemos a duas perguntas de pesquisa: i) como pode ser explicado esse aumento acentuado na taxa de emprego dos trabalhadores mais velhos da Alemanha? E, relacionado a isso: ii) as políticas para uma vida profissional mais longa promoveram a desigualdade? Baseamos a nossa análise em uma extensa revisão de literatura e análise descritiva.

Concluimos que o aumento da taxa de emprego dos trabalhadores mais velhos na Alemanha tem várias causas. Primeiro, o mercado de trabalho alemão teve um bom desempenho, de modo que o debate sobre políticas passou do desemprego para a falta de mão-de-obra (qualificada). Segundo, há um forte aumento da participação feminina no mercado de trabalho. Terceiro, devido aos efeitos de grupo, os trabalhadores mais velhos de hoje são mais saudáveis e mais qualificados, do que os seus antecessores. Por fim, as reformas de previdência e do mercado de trabalho que tinham o objetivo de atrasar a aposentadoria funcionaram. No entanto, também descobrimos que trabalhadores com baixa qualificação e baixo rendimento têm a necessidade de adiar cada vez mais a aposentadoria devido a razões financeiras. Aparentemente parece que as desigualdades sociais na transição para a reforma estão a aumentar na Alemanha.

**Palavras-chave:** trabalhadores mais velhos, políticas de emprego, desigualdade social, Alemanha

## **1. Introduction**

Especially industrial nations face a development often summarised under the heading of ‘triple ageing’ with an increase in the absolute number of older people and the relative proportion of older people, and a sharp increase in the number of very old people in the total population. The main reasons are a steep increase in life expectancy and a decline in fertility, both over the last century. The demographic change influences many areas of society and poses challenges for social security systems (Brussig, 2018). The proportion of people paying contributions to the social security systems will decrease in the coming decades, and the proportion of benefit recipients will increase.

Political decisionmakers in most European countries are responding with reforms to prolong working lives. In the course of these reforms, possibilities for early retirement were severely restricted and the statutory retirement ages were gradually raised (Ebbinghaus & Hofäcker, 2013). In addition, active labour market policies were implemented and measures of life-long learning are supported with the aim of increasing older workers’ employability.

These reforms seem to take effect and older workers’ employment rates and also the effective retirement ages are increasing all over Europe. Although the causal link between the reforms and the increase of the employment rate and effective retirement age is only partially proven, these trends can be interpreted as positive. They are resulting in higher taxes and social contributions, as well as slower growth of pension costs, and at the same time, these developments provide the labour market with skilled workers. However, concerns are that advantages are unevenly spread over groups of workers and that in particular low-skilled workers are struggling to meet the requirement of the new credo of late retirement, which in result increases social inequalities within older age groups.

In this article, we will explore and discuss this development in detail taking Germany as a case study. In Germany the policy change was most fundamental and the increase in older workers’ employment rate the steepest. Our main research question is, how these reforms aimed at extending working lives have affected the German labour market, but also older workers. The paper makes three contributions to the existing literature. First, it gives a comprehensive, but also a holistic overview of the developments in Germany, while not narrowing on one policy area but discussing several important aspects. This offers the possibility to retrace the very strong policy

shift in pension and labour market policies. Second, it goes beyond most previous literature by introducing several potential explanations for the steep increase of German older workers' employment rate and discussing their interdependences. Third, the paper does summarize the literature on effects and influences the policy trends in Germany had on older workers and pensioners while differentiating between different groups of older workers. It shows that the policy change has affected miscellaneous workers differently. Thus, it highlights and stresses the importance to not see older workers as one homogenous group.

The method of choice for the paper at hand is that of scoping review, which allows to give an overview of the literature on the topic of interest. "Scoping reviews are able to inform policymakers [...]. They share several characteristics of the systematic review in attempting to be systematic, transparent and replicable" (Grant & Booth, 2009, p. 101). Scoping reviews aim at including all relevant literature and previous findings on the topic of interest.

To this end we will first present how German policymakers have reacted to the maturation of the society. Then we will briefly show the increase of older workers' employment rate and potential explanations for this increase. Finally, we will discuss the consequence of the increase for the heterogeneous groups of older workers and end with a general discussion.

## **2. The reaction of German policymakers to demographic ageing**

### **2.1. The German pension scheme and the policy of early retirement**

Germany has the prototypical Bismarckian pension system so that the level of contributions and (later) benefits depends on the wage level. The public German statutory old age income security is financed on a pay-as-you-go principle and covers about 80 per cent of the employed population (Schulze, 2009). Not included are tenured civil servants and the self-employed (Leifeld, 2013). Currently, there are about 1.7 million tenured civil servants (destatis, 2019) and 4.0 million self-employed (Günther & Marder-Puch, 2019). Public pension benefits are the main source of income in old age (about three quarters), as occupational or private pensions are not mandatory in

Germany (Bridgen & Meyer, 2014), despite political endeavours to strengthen the second and third pillar of old age security.

## **2.2. Pension and labour market reforms**

Financial problems in the public pay-as-you-go scheme, also fostered by policies supporting early retirement, led to a fundamental policy change in labour market and pension politics in Germany from one of early retirement to one of extending working lives. Although shortly interrupted by the German reunification the main intention was to keep older workers longer in employment, to delay retirement and to increase older workers' employment rate to relieve the pensions system from financial pressure and provide the labour market with workers. In the following, several of these efforts are discussed. They are broadly categorised into pension and labour market policies.

### ***Pension policies***

The legal retirement age rises stepwise from 65 to 67 over a period from the year 2012 to 2029 (Bauknecht, 2013), whereas 'retirement with 67' is legally in place in 2029, but the legal retirement year for the cohort of 1964 then will be 2031 instead of 2029. The reform was highly debated and strongly criticised from the left side of the political spectrum and trade unions with the main argument that in some or even many professions 67 is an unrealistic retirement age due to hard working conditions (FAZ, 2019). Due to its late start, the reform cannot account for rising employment or rising inequality between 2004 and 2014.

In addition, retirement before the official retirement age was made less financially attractive by the introduction of pension deductions for early retirement and the closing of other early retirement options (e.g. via long unemployment with high benefits or disability pension). Eligibility criteria for these were tightened and 'bridging' between labour market exit and retirement was shortened. In the following, four main reforms affecting retirement before the official retirement age are discussed.

The first pension reform was designed in 1989 and implemented in 1992. The main modification concerned the introduction of actuarial pension reductions by 0.3 per

cent for every month the pensioner retired before the official retirement age, making early retirement financially less attractive (Radl, 2014; Rürup, 2002). This led to later employment exits (e.g. Lüthen, 2014), especially in the case of men. Yet also the time gap between labour exit and retirement entry became wider, indicating that unemployment partly substituted for formal early retirement.

Government subsidised an old-age part-time programme with the aim of delaying retirement. Employees who were at least 55 years old and worked for three out of the last five years could use the scheme to reduce their working hours to 50 per cent of a full-time equivalent. The resulting income from wages was increased by 20 percentage points (to 70 per cent) by subsidies from the Federal Employment Agency and often complemented by additional money from the companies. Additionally, pension contributions for the half-time job were as high as would have been the case with the person working 90 per cent of full-time hours, also financed by the Federal Employment Agency. Amongst those using the scheme, the proportion of those in physically burdensome work was relatively low. Instead, it tended to be used by white-collar workers, while those in physical burdensome work rather used the disability scheme to exit the labour market (Wanger, 2010). Most evaluations of old-age part-time schemes come to the conclusion that the loss of working hours due to the lower number of working hours per week is larger than any gains in working hours due to later retirement, also because positive effects of old-age part-time work on later retirement are weak or absent (for a summary see Bauknecht, Gerling & Hess, 2016; Hess, Bauknecht & Pink, 2018). The abolishment of the scheme raised employment among older people (Brussig, Knuth & Wojtkowski, 2009).

Early retirement via disability schemes became increasingly difficult. In 2001 the distinction between disability (inability to work) and occupational disability (inability to work in the last job) has been abolished. Especially for those born after 1960 status security vanished since employment in a different (lower pay, lower status) job is considered appropriate (Bäcker, 2012). This should increase the employment of older workers. Since 2001 someone able to work for only 6 hours per day is no longer considered disabled (Bäcker, 2012). This shows that a disability pension is an option only for those with severe health problems. If someone applies for disability, medical officers check the documents and decide if rehab could re-establish workability (Bäcker, 2012). Also in 2001 new deductions for disability in the time before 63 were introduced (0.3 per cent per month, as in the 'normal' retirement scheme). This age of 63 will be

raised stepwise to 65 until 2024, yet the maximum of deductions will remain at 10.8 per cent (for three years; cf. Bäcker, 2012).

### *Labour market policies*

In 2005 the unemployment scheme has been reformed. Earnings-related unemployment benefits have been shortened, but duration still partly depends on age and previous employment duration. In addition, after a certain time of earnings-related unemployment benefits (mostly 12 months), benefits drop to a low lump-sum, including means-tests taking into account other household members' incomes and assets. Previously, long earnings-related unemployment benefits have been used to bridge the time between work and retirement (Dlugosz, Stephan & Wilke, 2009). On the one hand, the main argument is that lower and shorter benefits reduce the unemployed workers' reservation wages, that is, they are more willing to accept low-paid jobs, while their reluctance to accept lower-paid jobs is an important barrier to re-employment (Dietz & Walwei, 2011). On the other hand, it is much harder for older people to find their way out of unemployment and back into employment compared to the total population (Brussig, 2015; Radl, 2007; Sieglén, 2016). Further, decreased generosity reduces incentives to use unemployment as an early retirement scheme (Duell & Vogler-Ludwig, 2012). Dlugosz and colleagues (2009) found evidence that shorter durations of earnings-related benefits reduced unemployment, especially for the oldest group (57–64), which exhibited the strongest decline in the duration of earnings-related unemployment benefits. A different study found that effects were small (Krebs & Scheffel, 2010). An explanation can be that the new (early) date of expiration of the higher benefits even is relevant mainly only for those short-term unemployed who do not find work in the first 12 months of unemployment.

Besides the reforms in the unemployment scheme, several active labour market measures aimed at older workers were implemented: different types of subsidies to decrease employers' wage costs, different measures to increase workers' employability and efforts to improve the hiring process. Three are discussed here exemplarily.

Older workers' incomes are higher not because they are older, but because they have a longer tenure (de facto seniority wages). Hence, older unemployed people had higher wages before unemployment than younger unemployed. Resulting from this, their wage expectations toward new jobs are comparatively high, which can be a barrier

to re-employment. All of this negatively affects the hiring of older unemployed (Bovenberg, 2008; Keese, Hirsch & Bednarzik, 2006; OECD, 2011). To alleviate this problem, the recruitment of workers over 50 can be subsidised (§421f SGB [social security code] III). The research institutes ZEW, IAB and IAW (2006) assessed the effects of integration subsidies for persons with short unemployment. These subsidies were found to increase the probability of re-employment. The authors stated that this effect was not very high but also not negligible. However, by contrast, Boockmann, Zwick, Ammermüller and Maier (2007) state that due to deadweight effects there is no net effect due to hiring subsidies since subsidised hiring merely substitutes for unsubsidised hiring. Findings on net effects on employment are contradictory. If these effects are positive, such measures also decrease inequality, since the re-employment of unemployed people raises the incomes of the previously unemployed. If these effects are not positive, inequality is not reduced since those not obtaining jobs due to deadweight effects are also unemployed and therefore also belong to the group with low incomes.

The German programme ‘Perspectives 50plus – employment pacts for older workers in the regions’ aimed at reintegrating older long-term unemployed back into the labour market. It included about 78 regional employment pacts with local job centres and lasted from 2005 to 2015. The pacts included further vocational training, job application training, internships and wage subsidies. Individual counselling and coaching were considered crucial parts of the programme (Duell & Vogler-Ludwig, 2012). The programme activated around one-third of the older long-term unemployed workers and placed about one-seventh of them (nearly 25.000) on the regular labour market. Some of these received wage subsidies and only a minority of those leaving unemployment also exited public financial support, partly due to the high share of part-time workers among the re-employed. The high share of part-time workers resulted from the fact that part-time work was more stable since participants in the programme had often reduced capabilities (Duell & Vogler-Ludwig, 2012). Only the phases from 2005 to 2010 were evaluated (Knuth, 2018). Results for the middle of project duration are considered to be positive (Duell & Vogler-Ludwig, 2012) since a high share of older long-term unemployed people were activated. Yet, the share of those older than 60 was low and the mean age at 54, so the programme rather activated the ‘young old’, which is a group ‘easier’ to bring back into work than the ‘normal old’. For methodological reasons, a clear evaluation is difficult but results rather point into a positive direction



(Knuth et al., 2012). An expedient strategy has been a financing model granting resources to official public employment offices based on the number of jobseekers integrated into the labour market. These offices had considerable leeway in terms of how to deploy these financial resources. They could use the funds, for instance, to hire additional staff or to outsource integration tasks to external providers using performance-related payments. The German experience of giving local job centres extensive leeway in terms of how to integrate the unemployed into the labour market and to grant financial benefits on their success appears to be a promising approach. Effects of wage subsidies for newly hired workers are less clear, although targeting those with very low re-employment probabilities reduces deadweight effects (Brown, Merkl & Snower, 2011), that is, the subsidising of employment which would have also happened without subsidies.

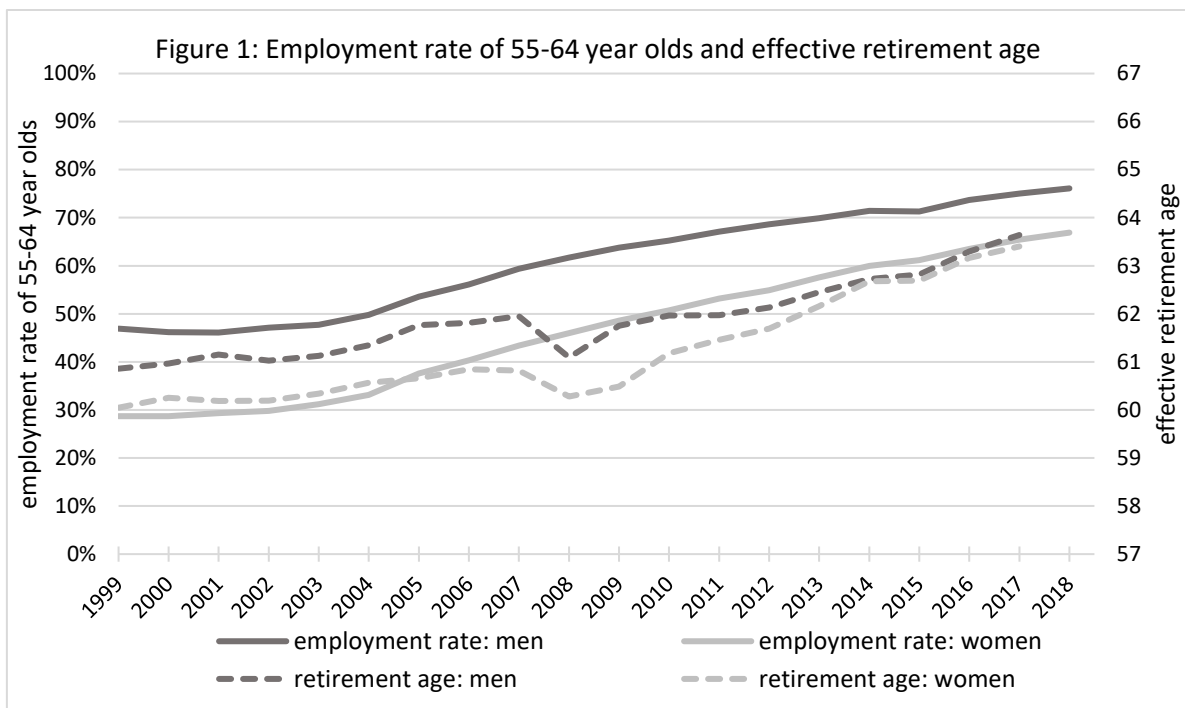
German policymakers have recognised the need to increase older workers' employability. Besides paying wage subsidies they also strive to train older workers and establish the idea of life-long learning (Hess, 2017). An example is the pilot project 'Training of low skilled older workers (WeGebAU)' that funds training costs for older low-skilled workers (Duell & Vogler-Ludwig, 2012). In 2009, a total of 102,000 older workers used this programme (Lott & Spitznagel, 2010). Its effectiveness is however under discussion as Singer and Toomet (2013) found that participating in training financed by the 'WeGebAU' did not improve older workers' job stability and long-term chance of staying in employment. Although being essential for the employability of older workers, education and life-long learning do still not play a major role for German policymakers. This leaves considerable room to further improvements of the employability of older workers and, thus, to further increases of their employment rate. Especially in smaller companies and trades, older workers rarely participate in any kind of training measures (Goebel & Zwick, 2010). Furthermore, when looking at the participation rate of older employees in training measures, initial education is found to constitute a decisive factor: Almost 70 per cent of older workers with tertiary education participated in some kind of further training, whereas the respective rate for workers without a formal education ranges below ten per cent (Schmidt, 2009).

### **3. The increase of older workers' employment rate and actual retirement age**

The employment rate of older workers (55-64 years) and the average retirement age have shown an impressive increase from a few years after the turn of the millennium on (Figure 1). Especially the employment rate has undergone substantial changes and can be separated in three general periods: From the 1970s until the early 1990s, the average employment rate decreased from over 50 to under 40 per cent. This overall development, however, was mainly determined by the male employment rate, which fell rapidly from just less than 80 to 50 per cent. The rate of women remained stable at a low level of 25 per cent. The second phase are the 15 years between the German reunification in 1990 and 2005. During this period, the employment rate staggered around 40 per cent. In 2003/2004 a steep increase started that is still ongoing (Hess, 2016). Between 2003 and 2018 it rose from just under 40 per cent to over 70 per cent, which is an increase of 78 per cent<sup>8</sup>. Separated by gender, the rise was stronger for the females' employment rate but is still lagging behind males'. In 2018 it is at about 67 per cent for woman and approximate 76 per cent for men. The development of the employment rate is mirrored in the average effective retirement age (Figure 1).

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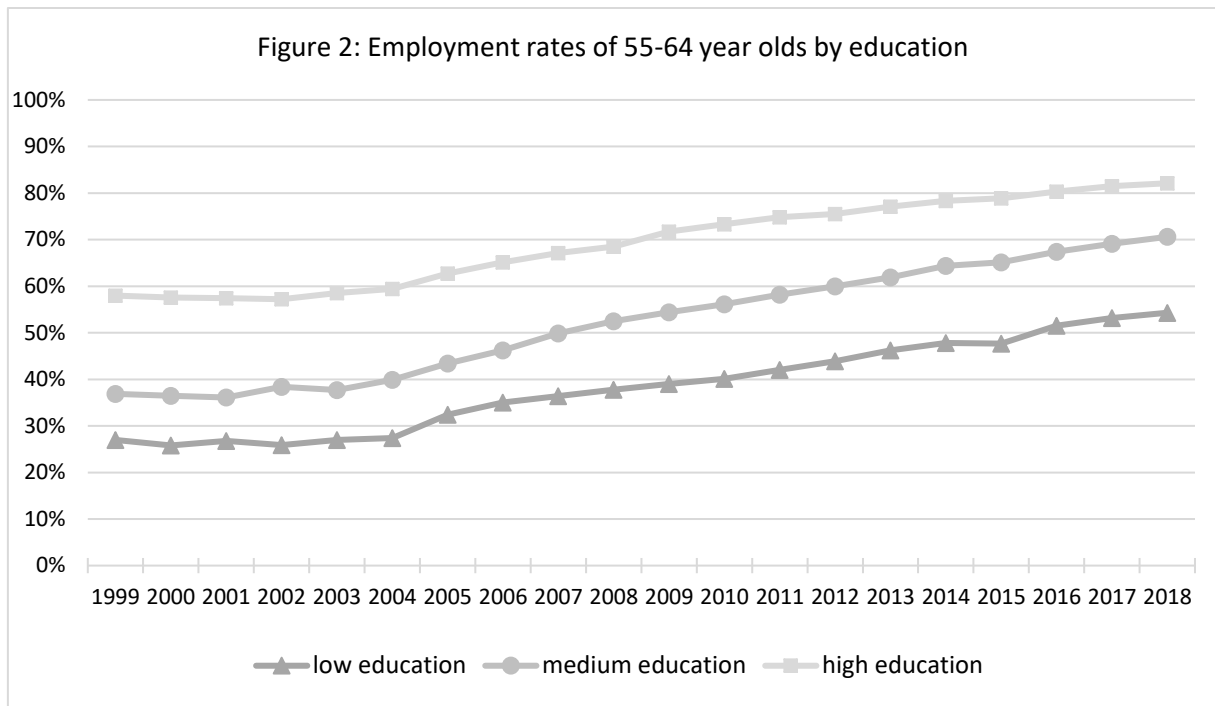
<sup>8</sup> Older workers' employment rates should be seen in comparison to the whole workforce (20-64 year olds). The latter increased between 2003 and 2018 by about 17 per cent from 68.4 to 79.9 per cent (Eurostat, 2019).



Source: retirement age: OECD 2019; employment rates: Eurostat 2019, Labour Force Survey (EU-LFS), own depiction.

A closer look at the employment rates divided by educational level<sup>9</sup> (Figure 2) shows that the increase was particularly strong for people with medium education, followed by low-educated. The medium-educated group was able to reduce the gap to the highly educated; the gap to the low-educated increased parallel. Overall, female labour force participation increased stronger, but also offered more potential for growth due to the baseline situation.

<sup>9</sup> Using the International Standard Classification of Education (ISCED 2011): low education = ISCED 0-2; medium education = ISCED 3-4; high education = ISCED 5-8.



Source: Eurostat 2019, European labour force survey (EU-LFS), own depiction.

## 4. Alternative explanations for the increases

### 4.1. General labour market development

Although it can be assumed that the policy shift from ‘early retirement’ to ‘extending working lives’ is an important driver of the steep increase of the employment rates of older workers in Germany, other explanations must be considered and discussed as well. In a European comparison, the German labour market has improved remarkably since 2000, despite the 2008/2009 financial and economic crisis. This is reflected in the general employment and unemployment rate of German workers aged 15 to 64. Men’s employment rose from slightly less to slightly more than 80 per cent, while that of women has increased by almost 10 percentage points from just over 60 to over 70 per cent. The unemployment rate increased until 2004, then it declined strongly from eleven to four per cent. The decline only stopped during the 2008/2009 crisis but the trend did not reverse, showing the robustness of the Germany labour market in the last 15 years.

Parts of the increase of older workers' employment rate can be attributed to the general good long-term development of the German labour market and its demand for workers, which is partly related to the labour market reforms depicted earlier in this article. However, the increase of employment rates amongst older people is much stronger than in the general population in the employment age, so that other reasons than just the general labour market development account for the development of the older workers' employment rate.

#### **4.2. Employers' new actions**

The rather good economic development and the robustness of the labour market in Germany in combination with the demographic ageing lead to lack of labour and in particular qualified labour. "Simultaneous to the last economic upturn, beginning in 2006 a clear lack of skilled labour was revealed, which surprised companies as well as policymakers" (BMFSFJ, 2010, p. 176, authors' translation). One could assume that this lack of skilled labour will be exacerbated with the retirement of the baby-boomers around 2025/2030. It should be emphasised here that not the complete economy is concerned, but particular sectors like high-technology as well as the health and care sector, and since about five years also the crafts sector. In addition, one finds also strong regional differences in Germany. In the economically prosperous South, due to high labour demand, the lack of skilled labour is stronger. For different reasons, that is, structural change and out-migration, the lack of skilled labour is also strong in parts of Eastern Germany. In this context companies are increasingly relying on older workers as a pool of qualified and experienced workforce and, thus, are investing in older workers. Age-friendly or life-course oriented human resources measures are being offered to older workers. Using quasi-register IAB data Göbel & Zwick (2010) find that almost 50 per cent of German older workers have had access to one human resources measure in the last year, whereas such measures are far more widespread in larger companies than in medium-sized or smaller companies. In addition, high-skilled specialists – the ones the companies want to retain – have much better access to human resources measures than low-skilled older workers.

### **4.3. Cohort and demographic effects**

The labour market effect might be reinforced by a demographic effect. In Germany, in particular, the generation of the baby-boomers (especially those born between 1960 and 1967) is important. They profited from the massive educational expansions in the 1960s and 1970s and have considerably higher shares with tertiary education than earlier generations. Today they are older workers and their retirement might reinforce the lack of skilled labour as they will leave the labour market in substantial numbers within the next years. In addition to the mentioned higher education of today's older workers, also other cohort effects can be identified as drivers for the increase of older workers' employment rate. For example, the new older workers are not only better educated but also healthier than their predecessors. Further, there is an especially strong cohort effect regarding female employment, which will be discussed now.

### **4.4. Female labour market participation**

German labour market policies were characterised by the credo of the male breadwinner. Regarding not individuals, but families as the relevant smallest economic units, this conservative approach expects a clear division of labour between the husband (paid full-time work) and wife (domestic tasks, care for children and the elderly, part-time work if at all).

However, there has been a recent trend of increasing female employment rates as can be seen in Figures 1. One reason for this development is the slowly but steadily growing importance of the service sector (from 60 per cent in 1990 to 74 per cent of the employed in 2016, cf. destatis, 2017a), in which the share of female employees is higher. Further, due to cohort effects younger women entering the relevant age brackets substitute older women leaving these age brackets. These younger cohorts' skills and attitudes enable and encourage paid work. Women's disadvantage in formal education has declined; in parts even reversed to their favour. Further, and partly related to this, the share of women who can/must rely on their husband's income has also declined, since the net marriage rate (marriages minus divorces) per 1000 inhabitants declined from 4.1-4.2 between 1980 and 1983 to 2.6-2.9 between 2010 and 2013 (destatis,

2017b). Although this neglects different age profiles, it clearly shows changing circumstances. In addition, also fewer women getting married and having children results in less labour market drop-outs due to childbirth. Further, due to the introduction of legal entitlements to public childcare facilities, this sector has been expanded strongly, enabling mothers to re-enter paid work after childbirth sooner. Counterintuitively, the quick re-entering of paid work has also been encouraged by the introduction of a parent's money.

Another factor accounting for rising female employment rates are changing demands within sectors, with a constant decline of physical demands due to the mechanisation and automatisisation of work. Due to these factors, female employment rose and is expected to rise further, and younger female cohorts with higher employment rates substitute for older female cohorts with lower employment rates.

While all four developments – the reforms, employer's new actions, cohort and demographic effect and the rising female employment rate – seem reasonable explanations for the steep increase of older workers' employment rate, no causal inferences can be made.

#### **4.5. Reforms and inequality**

On the one hand, the increase of older workers' employment rate can be considered positive from an economic perspective as it relieves financial pressure from the social security system. Employees pay contributions for longer periods of time and at the same time have shorter pension entitlement periods. If it is assumed that income from employment is generally higher than income from pensions, tax revenues will also rise. Additionally, more (experienced and skilled) workers are available on the labour market, alleviating a sector-dependent and regional shortage of skilled workers (Vollmer, 2015).

On the other hand, the concern is that not all older workers benefit from the increase in employment participation. The development might benefit already privileged groups and, thus, exacerbate already existing inequalities. High-skilled workers with good wages and accordingly high pension claims are profiting from the reforms and the new attitudes of the employers. They have the personal resources and the workplace

environment to delay retirement and due to high identification with their occupation, they also want to do so. If they still want to retire earlier, they have enough pension entitlements and high coverage with occupational and private pension to afford early retirement. As they are highly skilled and have the qualifications companies are searching for, making them the main target group of the new age-friendly human resource measures. In contrast, low-skilled workers with interrupted careers and only low pension entitlements are increasingly worn down by the financial pressure to delay retirement on the one hand and only limited opportunities due to the labour market and their health situation on the other hand. While in the past, they often used different early retirement pathways to exit the labour market early with comparably small pension deductions, they now are facing the need to work longer to accumulate enough pension claims for a sufficient pension above the poverty limit. They are also strongly dependent on the public pension, as they only have limited access to second and third pillar old age security, as well as less savings and other forms of property, as e.g. real estate. At the same time, their chances on the labour market are limited as they do not have the skills and qualifications employers are in need of.

Investigating the effect of the new credo of late retirement, Buchholz, Rinklake and Blossfeld (2013, p. 881) come to the conclusion “[...] that the recent reversal of early retirement in Germany has been at the price of growing social inequalities in old age”. They show an increasing gap in retirement income and pension wealth between educational groups and that in particular spells of unemployment increasingly reduce pension income. This finding is supported by Heisig (2015) who finds that occupational differences in pension income for German men have increased significantly; Rinklake and Buchholz (2012) come to similar conclusions. The development of social inequality in retirement income and pension wealth is also apparent in the reasons for older workers to delay their retirement or even to work beyond the official retirement age.

Research shows that amongst those working beyond official retirement age, those with high socio-economic status stay in the labour market because of a high identification with their occupation, while for those with low socio-economic status again financial reason are more important (Hess, 2017; Hochfellner & Burkert, 2013; Naegele, 2013). This is supported by the finding that high-skilled workers assume to be able to synchronise their expected to their preferred retirement age, while low-skilled workers expect to have to work much longer than they would like to do so (Hess, 2016; Hess & Landmann, 2015).



Additionally, relative income poverty (<60 per cent of median income, adjusted for household size) in Germany rose from 14.7 per cent in 2005 to 15.5 per cent in 2018. Among older people (aged 65 and over) it rose from 11.0 per cent to 14.7 per cent over the same period (Statistische Ämter des Bundes und der Länder, 2018). For the 50 per cent poverty threshold, Ebbinghaus, Nelson and Nieuwenhuis (2019) show a similar rise between 2000 and 2015 (yet point out that in comparison to 1985 poverty in old age is still low). Although poverty amongst older people is still below the average of the entire population, it has experienced an increase within a few years. Further, the average of the entire population is partly boosted by a strongly risen number of young people entering tertiary education. Albeit their outlook is positive, 35.3 per cent of students officially count as poor (der Paritätische, 2018). Analytical predictions by Haan and colleagues (2017) also show that the risk of poverty in old age will continue to rise in the future and may reach around 25 per cent in the second half of the 2030s; also Ebbinghaus et al. (2019, p.15) point out that “trends of more precarious work and in-work poverty” could lead to problematic contribution histories. In addition, Haan and colleagues (2017) point out that the risk of old-age poverty is particularly high for people with low education, single woman and people who have been affected by long-term unemployment or who have a migrant background.

## **5. Discussion**

Faced with the progressive ageing of society and the resulting financial pressure on the welfare state in general and the public old-age security in particular policymakers in Germany implemented several reforms aimed at delaying retirement and extending working lives. It seems as if the reforms are taking effect and older workers' employment rate is increasing rapidly. Generally, the recent development in older workers' employment rate is a positive development as it leads to higher tax and social security revenues and relieves the welfare state from monetary pressures as well as provides the labour market with skilled and experienced workers.

However, it might also have an unintended consequence: a re-emergence of social inequality in the transition from work to retirement. Already privileged workers from high socio-economic status are profiting more than low-skilled workers. The latter used

different early retirement options in the past, yet now they are facing a tough choice; between retirement due to bad health or later retirement for financial reasons. If they retire early they face large pension losses and might even face poverty in old age. If they delay retirement, however, they do so often in harsh and physically and psychologically demanding working conditions, which can further worsen their health status. In addition, they are not the main target group of the age-friendly human resources measures as they normally do not have the skills and qualification companies need. The high-skilled in contrast have clearly benefited from the recent development. Their working conditions are also superior to those of their low-skilled peers and as employers want to maintain them in the companies, they are even improving. In addition, due to higher contributions they also have higher pension claims in the public pension and are more often covered by occupational and private pensions, and, thus, have a comparably high overall pension income. So for them retirement before the official retirement age is not as problematic from a monetary point of view. To summarise, the increase of older workers' employment rate in Germany indeed had some unintended negative consequences.

When interpreting the implications and conclusion made in the paper, two caveats have to be acknowledged. First, as the topics presented and discussed here are so large it is an impossible task to include all previous literature. Second, one has to be careful when claiming causality. The literature review method used in the paper at hand does not allow for causal interpretation and although some of the trends discussed are very likely to stand in causal relation, this cannot be proven.

However, even, when considering these limitations the paper makes three contributions to the literature. It gives a holistic overview, considering different potential explanations for the steep increase of older workers' labor force participation. In addition, it acknowledged the heterogeneity of older workers and the potentially different effects the pensions and labour market reform have had on them. From a societal view it seems that that current pensions and labour market policies in Germany are not appropriate and sufficient to face all challenges stemming from population ageing. German policymakers, employers, trade unions and other stakeholders first have to acknowledge the potential (re)emergence of social inequalities in the retirement process. They have to acknowledge that not all older workers are benefiting from the development. Second, they have to develop and implement measures to mitigate existing problems in the late-career and retirement process and prevent the evolution of

new ones. They should strive to enable all workers to work until the official retirement age and provide those who cannot work longer due to health or labour market reasons with the possibility to leave the labour market earlier with sufficient pension income or part-time work. In addition, they should abolish all barriers that prevent older workers to work longer if they want to do so.

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