

EXTENDING WORKING LIVES THROUGH FLEXIBLE PENSION SCHEMES

GERMANY

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1. Contextual Background

The government-subsidised German gradual-retirement scheme ('Altersteilzeit') existed until the end of 2009 when it has been abolished. It had been mainly used in the 'block model' (Dietz/Walwei 2011: 10), so that employees did not work part-time for 6 years but full-time for 3 years and retired after these three years. After abolishment of the subsidies programme at the end of 2009 the number of new cases dropped, whereas a real strong drop in new cases only appeared in 2014 (to 4000 from the peak of 50 000 in 2004).

The 'Teilrente' ('Partial Pension') exists since 1992. Currently from the age of 63 onwards a worker can receive a part of his/her pension benefits and work part-time simultaneously up to the legal retirement age. Part-time work can be either at 33%, 50% or 66%. One calculation shows that an average earner loses about 17% of his/her earnings in case of a 50% working time reduction. The system of maximum income during the Partial Pension is complicated, primarily due to rules concerning additional income. Only about 2000 persons enter the Partial Pension per year (for example, 2176 in 2014 according to Deutsche Rentenversicherung Bund 2015).

As Deutsche Rentenversicherung (Federal German Pension Fund) states, „Normally Partial Pension pays off only if you really use your marginal amounts (Grenzbeträge)“ (authors' translation). The marginal amounts are the maximum amounts of earnings allowed without pension deductions. Therefore additional earnings are necessary (which implies a second job). This, in combination with complicated rules concerning additional income could be the reason for the low take-up figures.

Various options for early labour market exit have been closed or made financially less attractive in Germany in recent years. Minimum age for early retirement has been raised from 60 to 63 between 01/2006 and 12/2011 (Giesecke/Kind 2013: 8), and maximum duration of (higher) earnings-related unemployment benefits has been cut from 32 months to 18 months (55-57) or 24 months (for those 58 or older) (Dlugosz et al. 2009: 6, Arbeitsagentur 2014). After eligibility to earnings-related unemployment benefits expires, means-tested flat-rate benefits step in. In the field of disability pensions entrance has been made more difficult due to the abolishment of the distinction between inability to work and inability to work in the previous job (so that the probability is higher that someone has to accept a different, less attractive job instead of disability pension), also since 2001 workability of 6 hours per day is defined as ability to work (although a normal working day is 8 hours). Before 2001 someone who could work for only 6 hours per days was defined as unable to work. Further, new deductions for disability before 63 were introduced. Another reform of increasing relevance is the stepwise rise of the legal retirement age from 65 to 67 with 1 month per year until 2023 and 2 months per year until 2029. Therefore in 2016 the legal retirement age is at 65 years and 5 months (Bauknecht 2015a: 63ff.).

In contrast to the general trend, the new 'Pension with 63' (introduced) allows earlier retirement without deductions (so the full pension is paid) for those with at least 45 contribution years. The age of 63 applies to the cohorts of 1951 and 1952. For those born later the early retirement age rises stepwise to 65 for the cohort of 1964. Financially, it is highly attractive. Although the pension level rises for those working longer, incentives are too weak and a worker would have to reach about age 100 for actuarial fairness. As the newspaper FAZ writes, the best way (in terms of low workload and low drop of income) is to retire at 63, to get a '450 € (per month) -Job', work just a few hours per week and end up with 82% of the last net income of the regular job during the time of parallel receipt of pensions and earnings from the € 450 – job. Another possibility for those eligible to "Pension with 63" is to reduce working time to two thirds, get a part-time pension (one third of the full pension) and to have nearly the whole work income with only two thirds of work (faz.net 2014). Alone (as seen above) the Teilrente it is only seldomly used, probably since it is not attractive due to complicated regulations

and possibly since it is vastly unknown. In combination with ‚Pension with 63‘ it is only attractive to those who prefer two thirds of work for nearly the whole income to a € 450-job (perhaps one day per week) with 82% of the income.

Therefore, for those eligible ‚Pension with 63‘ can be used as a generous part-time scheme by those with 45 contribution years. Besides paid work, also child-rearing, informal elderly care, sickness/rehab benefit receipt, military service or alternative service and unemployment benefit receipt (up to two years) count as contribution years. In order to avoid older workers becoming voluntarily unemployed two years before early retirement age and bridge the time with earnings-related unemployment benefits, periods of unemployment in the two years before early retirement age do not count (only in case of company shutdown) (Bauknecht/Naegele (2016).

Based on collective agreements, some large companies have developed specific schemes that are described below.

2. Case Studies

2.1 Bayer AG

2.1.1 Bayer AG: Facts and Figures

According to its website, “Bayer is an innovation company with a more than 150-year history and core competencies in the fields of health care and agriculture.” Bayer develops “new molecules for use in innovative products and solutions to improve the health of humans, animals and plants”. Their “research and development activities are based on a profound understanding of the biochemical processes in living organisms. (www.bayer.com)

Following the economic and legal separation of its MaterialScience business, now Covestro, Bayer has charted the course for its development as a Life Science company. In this connection, Bayer has realigned their corporate structure. Since January 1st, 2016, Bayer’s core business has been managed by three divisions: Pharmaceuticals, Consumer Health and Crop Science. Animal Health is a separate reporting segment.

Life Science businesses of Bayer hold leading positions in innovation-driven growth markets.

The previous structure comprising a strategic management holding company and operational subgroups has been replaced by an integrated organisation under the umbrella of the Bayer brand.

Figure 1: Organisation of Bayer



(<http://www.bayer.com/en/working-at-bayer.aspx>, downloaded March 22nd 2016)

The **Pharmaceuticals Division** focuses on prescription products, especially for cardiology and women's healthcare, and on specialty therapeutics in the areas of oncology, haematology and ophthalmology. The division also comprises the Radiology Business Unit, which markets contrast-enhanced diagnostic imaging equipment together with the necessary contrast agents.

The **Consumer Health Division** markets mainly non-prescription products in the dermatology, dietary supplement, analgesic, gastrointestinal, allergy, cold and flu, foot care, sun protection and cardiovascular risk prevention categories. These products include globally known brands such as Claritin™, Aspirin™, Aleve™, Bepanthen™/Bepanthol™, Canesten™, Dr. Scholl's™ and Coppertone™.

The **Crop Science Division** has businesses in seeds, crop protection and non-agricultural pest control. It is organised into two operating units: Crop Protection/Seeds and Environmental Science. Crop Protection/Seeds markets a broad portfolio of high-value seeds along with innovative chemical and biological pest management solutions, at the same time providing extensive customer service for modern and sustainable agriculture. Environmental Science focuses on non-agricultural applications, with a broad portfolio of pest control products and services for areas ranging from the home and garden sector to forestry.

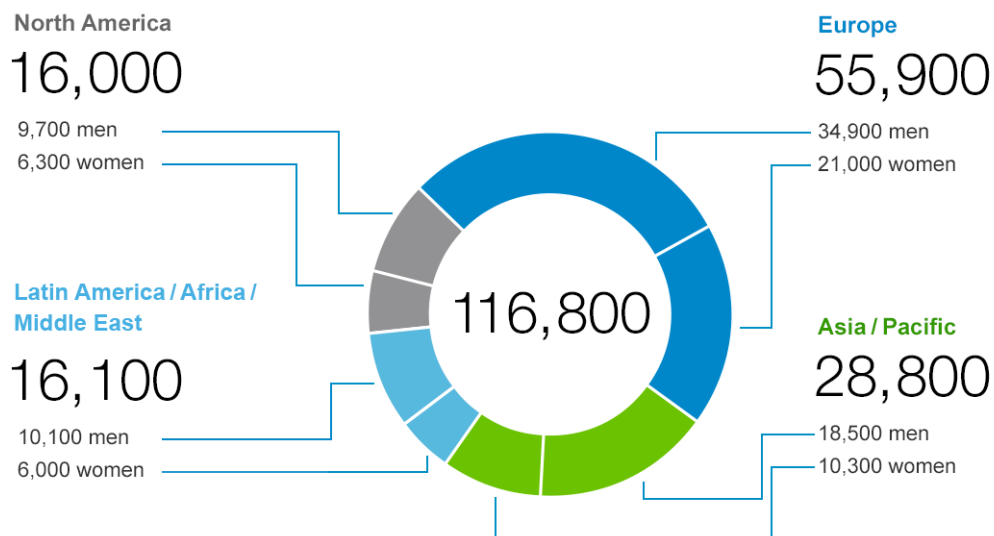
The **Animal Health Business Unit** offers products and services for the prevention and treatment of diseases in companion and farm animals.

Employees

In 2015 Bayer achieved sales of approximately €16 billion in the **European market**. Numerous major production facilities and 55,900 employees (of whom 36,700 are based in Germany) give the company a strong presence in this region.

On December 31, 2015, Bayer had 116,800 employees worldwide.

Figure 2: Employees Worldwide



Number of employees converted into full-time equivalents (FTE)
Values rounded to the nearest hundred

(<http://www.bayer.com/en/working-at-bayer.aspx>, downloaded March 22nd 2016)

2.1.2 Context of Collective Agreements

Bayer belongs to the chemical industry, therefore collective agreements with the trade union IG BCE (Industriegewerkschaft Bergbau, Chemie, Energie; Industrial Union Mining, Chemistry, Energy) are in place.

The collective agreement 2012 („Working Life and Demography“) had been strongly supported by Bayer (both from the sides of the employer and the works council). This collective agreement advanced the collective agreement from 2008 that was also called „Working Life and Demography“.

Main element of the collective agreement from 2008 was the establishment of a so-called Demografiefonds („Demography Fund“) that was financed by employers with an annual contributions of 300 € per full-time worker (increasing annually with wage rises). Generally, five possibilities (and also combinations of these) could be financed with that money:

- Improving old-age part-time work
- Upgrading long-term accounts
- Improving part-time pensions
- Arranging additional disability insurances
- Upgrading old-age provision according to the collective agreement “one-time payments and retirement coverage”.

The implementation of this agreement differed on the level of the companies and was respectively decided by the employer and the works council. Overall, the companies spent most of the amounts of the Demography Fund on upgrading old-age provision.

Main result of the new collective agreement from 2012 was the reduction of working time to be able to adjust to special life phases and to find ways for a gradual transition to retirement. To achieve this goal, the Demography Fund was being extended. From 2013 – 2015 employers had to pay an additional mandatory annual contribution of 200 € per full-time worker, which was paid into the Demography Fund (see below).

A new element is the so-called „RV 80“ („Reduced Full-Time 80%“) which can be used for various reasons, e.g. child-rearing or flexible retirement („life-course oriented working time arrangements“). With that module, working time is reduced by 20 %. If not agreed upon differently by labour relations partners, the full wage is being paid which is leading to a 4 days working week. This module can be combined with the so-called Altersfreizeit („old age spare time“), which is collectively agreed upon by the parties.

The Fund's available resources are being paid into a so-called Langzeitkonto („long-term account“) which should be used later for a better gradual-retirement. (IGBCE 2012)

2.1.3 Implementation of Collective Agreement at Bayer¹

Bayer has developed further the collective agreements of the trade union IG BCE dating from 2008 (Demofonds 1) and 2012 (Demofonds 2) (both called „Lebensarbeitszeit und Demografie“ - „Working Life and Demography“). With several overall agreements (Gesamtbetriebsvereinbarung - GBV), a programme „Demografie Management“ (Managing Demography) has been installed reaching far beyond the collective agreements. The implementation of the programme was supported in equal parts by the HR Management and the works council.

Main overall agreements of the programme Managing Demography comprise:

- 2007: GBV „Langzeitkonto“ (LZK) (overall agreement concerning long-term account)
- 2010: GBV „Lebensarbeitszeit und Demografie“ Demo 1 (overall agreement „Working Life and Demography“)
- 2013: GBV „Gestaltung des demografischen Wandels“ Demo 2 (overall agreement „Working Life and Demography“)
- 2014: GBV „Langzeitkonto“ (further development of the overall agreement concerning long-term account from 2007)
- 2015: GBV „Gestaltung des demografischen Wandels“ Demo 2 Ergänzung (further development of the overall agreement „Working Life and Demography“ from 2013)

¹ Following information is drawn from the interviews and additional material (such as power-point-presentations) that was provided by Mr. Zühlke.

2.1.4 Current Arrangements

Basic prerequisite is a solidarity model financed by the Demography Fund. In 2016, Bayer contributes 550 € per full-time worker which will be increased in 2017 to 750 €.

The budget resources are delivered from year to year and are subject to interest². On the basis of annual calculations Bayer assumes that the programme will be fully funded until 2025 meaning that the last cohorts will become part of the programme in 2020.

On the basis of a collective agreement (Gesamtbetriebsvereinbarung), Bayer has decided to focus on two target groups: (1) employees in continuously shift work aged 55 year and older and (2) employees in day work aged 57 years and older.

GBV "Lebensarbeitszeit und Demografie" Demo 1 (overall agreement „Working Life and Demography“) from 2010 enables shift workers and workers suffering from long-term sickness aged 55 years and older to get up to 20 additional paid free shifts (supplementary to collective agreements on Altersfreizeit³ ("old age spare time").

GBV "Gestaltung des demografischen Wandels" Demo 2 (overall agreement „Working Life and Demography“) from 2013 enables shift workers to reduce load situations in terms of reducing working hours/days (including collective agreements on old age spare time which is 15 days per year) as following:

- Workers aged 55 (two shifts) and workers between 57 and 60 years: 20 so-called demography days per year
- Workers between 60 and 63 years: 25 so-called demography days per year
- Workers aged 63 and older (until retirement): 30 so-called demography days per year

This can lead for the first group (aged 55 years) to a 4 days working week and for the second group (aged 57 years) to a 4.5 days working week.

The philosophy behind the scheme is that the best way to reduce load situations is to not have load situations at all by simply working less and having time to recover from stressful work situations. The overall goal is to enable these employees to work as long and healthy as possible up to their legal retirement age.

Overall, approx. 1.500 employees under the collective agreement of Bayer AG use this model of paid reduction of load situations (approx. 94%).

Additionally, for employees falling ill for a long time (at least 120 calendar days without interruption) there are regulations in place for a so-called disburdening integration. These employees are entitled to up to 80 hours paid leisure time. Between 80% and 86% of entitled employees at Bayer AG participate in that scheme.

Simultaneously, and since 2007, Bayer has installed a so-called long-term account that is being used by approx. 40% of all employees (see the next paragraph for detailed information). The more qualified (in terms of better earnings) and the older employees are, the more often they use this arrangement.

Since February 2015, the long-term account can be used in combination with demography days which leads to even more reduced load situations in terms of 3 or 4 days working weeks. To be able to use

² This is a regulation set up by Bayer that also goes beyond the collective agreement.

³ Old age spare time ("Altersfreizeit") usually allows 2,5 paid spare hours per week per employee aged 57 working in day shift.

this model, certain preconditions must be fulfilled such as a sufficiently filled long-term account, the usage of a reduction of load situation within Demo 1 or Demo 2, and an application deadline that is in force six months before starting.

Example calculation: If a 57 year old full-time worker (with 37,5 working hours a week) wants to change to a 4-days working week, he or she must only finance 26 days out of the long-term account.

An exemption lasts until legal retirement age. The free position is refilled with substitute employees, first of all by employing apprentices. Thus, if these people work together in a shift, knowledge transfer, also a big challenge for ageing companies, is taken place more or less by itself.

Background of that regulation is the fact that older employees are more affected by restrictions in terms of health and employee performance than younger employees.

2.1.4.1 Long-term Account "BayZeit" (BayTime)

In 2007, a long-term account was installed by Bayer. It was revised in 2014.

Today, this long-term account functions as a life-course oriented working time account. It can be filled during the phase of working with interest-bearing gross pay (such as salaries or bonuses) or time (valued in money) such as remaining vacation days or overtime. In the phase of exemption the long-term account can be used for release (also in part-time) i.e. to care for children or close relatives or to reduce load situations. It can also be used to take part at qualification measures or to stop working earlier before legal retirement. Furthermore, it can be transferred to follow-up employers or it can be paid off to employees or their legal heirs. In the phase of paid leave from work, taxes and social security contributions have to be paid.

If "BayZeit" is being taken to care for children or close relatives additional modules for old age provision will be granted which makes the regulation even more attractive.

Until the end of 2015, approx. 28.000 employees were entitled to use the long-term account and approx. 11.500 employees made use of it (approx. 42%). There are no big differences between men and women. Men tend to use the long-term account a bit more than women which is due to the fact that the scheme was started with shift workers which are more men in general.

According to employee surveys from 2009 and 2015, a rising amount of employees is willing to make use of the long-term account in future times (9% of questioned employees in 2009 vs. 14% in 2015). For employees, the biggest benefit of the long-term account is seen as having the possibility to retire earlier (more than 50% of all questioned employees) or to take care of close relatives (approx. 30%).

2.1.4.2 Healthy Working and Ageing at Bayer

Apart from that, Bayer focuses with additional modules on so-called "healthy working and ageing" which is a holistic company approach from recruitment to retirement. These modules comprise for instance:

- Occupational health management
- Improvement of work station ergonomics
- Modern organisation of shift plans (five-shift-system, short changes of shift, free weekends, predictable and regular regulations)

- Labour organisation adjusted to health situations
- Implementation of new human resources concepts (for instance by taking into account individual employee performances (in terms of age and health related restrictions))

2.1.4.2.1 *Occupational Health Management*

A large catalogue of measures has been installed in the frame of occupational health management. The employees can take part in these activities voluntarily. They contain:

- Preventive examinations for every employee
- Centrally organised seminars in the field of “health” by BBS Training and Change Solution
- Prevention courses in the rooms of the company (§ 20 SGBV), to be paid by employees with the possibility of refunding by health insurances under certain conditions
- Health panel with a derivation of action fields
- Individually organised activities, seminars etc. in the field of “health”
- Health days / Bayer Safety Day
- “Healthy World of Work”
- Annual campaigns (2015: Nutrition Counselling “Mahlzeit! Gewusst genießen” with a bundle of activities)
- Give-aways related to health such as a pedometer
- Counselling “Work Station Ergonomics”
- Reduction of load situations for special target groups
- Influenza vaccination
- Health promotion within the overall agreement „Working Life and Demography“

According to employee surveys from 2009 and 2015, a rising amount of employees is taking part in occupational health management measures within the last two years (2009: 26% of all questioned employees; 2015: 46%) In general, more women than men participate in the offers, especially in preventive examinations.

2.1.4.3 *Ensuring Reconciliation of Family and Work Life*

Furthermore, Bayer offers a bunch of measures to ensure reconciliation of family and work life such as flexible work time models, mobile work, telework and home office, day care centres for young children (approx. 460 places at five locations) or vacation care for children close by where employees live.

According to the employee survey from 2015, 12% of questioned employees with children aged 14 years and younger used vacation care for children and were satisfied with it; additional 3% used the offer although being unsatisfied. 7 % didn't use the offer because they were not satisfied and 46% had other options. 30% were not informed about the offer.

2.1.4.3.1 *Care of Close Relatives*

Additionally, on the basis of an overall agreement dating from April 1st 2014 (Gesamtbetriebsvereinbarung), special arrangements to care for close relatives and terminal care have been implemented (such as advice about nursing care, short-time leave for care activities up to 10 days paid by the employer, long-term leave for up to six months in the frame of an inactive work relationship

and part-time family care financed via a so-called “Pflegezeitkonto” (“care account”).

According to the employee survey from 2015, 8% of questioned employees at Covestro that care for a relative, make usage of measures (9% of questioned employees at New Bayer). Surprisingly, there are no differences between men and women, although women tend to care more hours.

2.1.5 *Evaluation of Measures*

Bayer evaluates all measures yielding at managing demography issues by regular employee surveys that are supported by a scientific institute (Internationales Institut für Empirische Sozialökonomie GmbH - INIFES, Stadtbergen).

Comparing the employee surveys from 2009 and 2015⁴ following main results were found:

- **General satisfaction with Bayer as employer:** The overall satisfaction had been already quite high in 2009 (81% of all questioned employees were very satisfied or rather satisfied) and has stayed on just about the same level (2015: 80%). However, there are differences relating to the status. Lower status groups tend to be less satisfied with Bayer as employer. Also, questioned employees of Covestro (former Bayer MaterialScience manufacturing Polymer materials), which is a subsidiary of Bayer AG, are in general less satisfied than questioned employees of New Bayer (Covestro: in 2015, 76% were very satisfied or rather satisfied; New Bayer: 81 %).
- **Possibilities of change:** 15% of all questioned employees in 2009 and even 29% in 2015 did not see the need to change something about their workplaces. However, this differs again between Covestro, where employees are more critical regarding their situation, and New Bayer.
- **Satisfaction with income:** This has improved in general between 2009 (43% of all questioned employees regard their income in relation to their work performance as appropriate) and 2015 (53%). However, employees of Covestro and, in general, lower qualification groups, are less satisfied and more critical.
- **Efforts of work:** In general, the efforts of work have risen between 2009 and 2015. 60% of all questioned employees judge their work as more complicated and demanding than two years ago in 2009 and even 67% in 2015.
- **Job loss:** In general, questioned employees of Bayer feared less to lose their jobs in 2015 than in 2009 (2009, 31% of all employees were afraid to lose their jobs to a high or a very high degree vs. 17% in 2015). Again, fears are higher in less qualified groups and at Covestro.
- **Pace of work and increasing work intensification:** In general, questioned employees have a great demand to reduce their pace of work and their work intensification. This has highly increased between 2009 and 2015 (32% of all questioned employees in 2015 vs. 22 % in 2009). Compared between different working groups, senior managers have a higher demand to reduce their pace of work and their work intensification.
- **Health status:** The older questioned employees are, the more often they report a mere satisfactory or even a bad health status. In the group of questioned employees aged between 60 and 64 there is a slight healthy worker effect. Overall, questioned employees at New Bayer feel healthier than at Covestro.
- **Presenteeism:** Although decreasing slightly, this is a widely spread problem. 47% of all questioned employees reported that within the last 12 months, they held out until the weekend to recover from sickness at least twice. 43% of all questioned employees went to

⁴ Sample: 23,352 employees; response rate: 50% in 2015 and 49% in 2009

work although they felt really sick at least twice over the same period of time.

- **Work and health:** in 2009, 28 % of all questioned employees thought they were not able to work until legal retirement age under the same conditions as today. In 2015, this has slightly decreased to 25%. Differed by age groups, these assessments grow with increasing age and decline with groups being close to retirement. The reason is probably an effect of selection (“healthy worker effect”).
- **Satisfaction with the solidarity model:** For 59% of all questioned employees it is absolutely OK and should be even further expanded that certain employees such as those being older, sicker, working shifts or earn less are more taken into consideration by Bayer in term of managing demography change. 33 % of questioned employees agree with that model but do not think it should be further expanded. Thus, 92% of all questioned employees support the solidarity model.

2.1.6 *Action Fields Based on Employee Surveys*

From these employee surveys the works council has identified the following action fields to further improve working and health conditions:

- Fighting against a “class society”: lower and higher qualification groups should not be played off against each other
- More focus on unskilled and trained workers and (master) craftsmen in the fields of production because in terms of income, work conditions and further education these groups are less satisfied than other groups
- Better communication of qualification supply
- Better communication of long-term account and, where applicable, combination with demands concerning more timely flexibility
- Stopping increasing pace of work and work intensification
- Better work-life-balance
- Developing and better communicating offers for younger age groups in terms of qualification or ensuring reconciliation of family and work life
- Fighting presenteeism

2.1.7 *Initiative “Better Life at Bayer”*

Further more, and in an even broader approach, Bayer has just recently started another initiative called “Better Life at Bayer”. Part of this initiative are the topics working life and demography but also “softer” issues such as working culture, trust in employees, respect and appreciation that contribute to the fact that people work longer and healthier.

2.1.8 *Goals and Personal Assessments of Measures Yielding at Managing Demography Issues*

For Bayer, there were two reasons to set up the programme “Working Life and Demography”. First, this programme aims at self-determination of employees to be able to cope with the different phases of burdens that occur in ones life such as the care of children or parents. Second, due to increasing the statutory retirement age, it aims at supporting employees to grow old and work as healthy as possible. Bayer tries to enable “good work” meaning that work doesn’t make sick, that work guarantees a

sufficient income to live on and that it is fulfilling.

As shown in more details by the results of the employee surveys, the head of the works council assumes that these surveys in general confirm the approach of Bayer.

To extend working lives in general is not a goal of the schemes of Bayer. For Bayer it is more important to enable employees to work until the statutory retirement age at all as employees still retire some years earlier. According to the head of the works council hardly any employee works until the age of 67 in the field of industrial work.

The Head of HR Germany considers the way as the goal. It is too early and too hard to answer whether Bayer has reached its goals. However, he had the feeling that is underlined by both employee surveys that Bayer is on the right track. By setting up different modules for occupational health management employees have been increasingly sensitised for health issues, also in terms of mental health.

2.1.8.1 Need for Optimisation

HR-leader of Germany identifies especially mobile working as a topic with the need for optimisation. Mobile working will further increase in future times. Existing statutory work time regulations have to adapt to that as they were set up in a time, when mobile working did not exist.

2.1.8.2 Challenge for the System of Social Security

The head of the works council sees especially one challenge for future times. In order to better enable employees to continually and flexibly decide what is best for their respective life situations, more flexible systems regarding life-course oriented working time arrangements as well as flexible pension schemes are needed in Germany.

2.1.8.3 Recommended Actions for other Companies

In terms of developing schemes like Bayer has done, the head of the works council gives advice to other companies not to be afraid of being too small. Even small and medium sized companies can develop strategies to cope with demographic challenges. Then, they should not be afraid of solidarity systems as in general people seem to support this approach. Also, companies have to think in a holistic way and they have to include all relevant stakeholders such as the management board, works councils, trade unions, associations etc. by setting up demographic-oriented schemes. And finally, they have to think in the long term reaching beyond the half-life period of management committees.

2.1.9 Awards

In 2013, Bayer has been awarded the „CSR-Preis der Bundesregierung“ (Corporate Social Responsibility Prize of the Federal Government).

2.1.10 Conclusion / Summary

- **Approach:** Based on an already progressed collective agreement from 2008, Bayer has

installed a programme by several overall agreements, that is reaching far beyond the collective agreements. The implementation of the programme was supported in equal parts by the employer and the works council.

- **Cooperation:** Between the works council and the employer has been a very close and consistent cooperation to set up and further expand the programmes mentioned above. Many of the topics are subject to employee participation.
- **Goals:** To extend working lives in general is not a goal of the schemes of Bayer. For Bayer it is more important to enable employees to work until statutory retirement age as employees still retire some years earlier. The programme also aims at self-determination of employees and tries to enable them to stay healthy and work as long as possible. Thus, it is aimed at improving employability in general.
- **Acceptance of employees:** As found out with employees surveys, the general approach of Bayer, especially the solidarity model, is highly agreed upon by employees.
- **Utilisation:** Employees use the different schemes in different ways.

2.2 Deutsche Post DHL Group

2.2.1 Deutsche Post DHL Group: Facts and Figures

Deutsche Post DHL Group

According to their website, "Deutsche Post DHL Group is the world's leading logistics and mail communications company. The Group is focused on being the first choice for customers, employees and investors in its core business areas worldwide.

From a government-controlled, deficit-ridden national agency, Deutsche Bundespost (1990), to a profitable European mail and parcel service provider, Deutsche Post DHL Group became the global logistics market leader, traded on the stock exchange. Deutsche Post AG went public in November 2000 and has been listed on the DAX 30 since March 2001. In September 2013, Deutsche Post AG additionally joined the Euro Stoxx 50 Index.

Deutsche Post DHL Group operates under two brands: Deutsche Post is Europe's leading postal service provider. DHL is positioned in the world's growth markets, with a comprehensive range of international express, freight transportation, e-commerce, and supply chain management services.

Deutsche Post DHL Group employs more than 480,000 employees in over 220 countries and territories worldwide. The Group generated revenues of more than 56 billion Euros in 2014." (www.dpdhl.com)

Deutsche Post (Post - eCommerce - Parcel - PeP)

"Deutsche Post, Germany's only universal provider of postal services, is part of the world's largest logistics group, Deutsche Post DHL. The division is called Post - eCommerce - Parcel (PeP). Deutsche Post with its brands Deutsche Post and DHL delivers mail and parcel in Germany and the world. It is a provider of dialogue marketing and press distribution services as well as corporate communications solutions.

With its E-Post the company offers individuals and businesses a platform for digital communication, transactions and processes. Deutsche Post operates a nationwide drop-off, transport and delivery network in Germany.

The division PeP generated revenue of 15.7 billion euros in 2014. Out of the 201,000 employees of the division, 150,000 operate under the Deutsche Post brand."(http://www.dpdhl.com/en/about_us/at_a_glance.html, downloaded April 15th 2016)

In transport and delivering post, there are approx. 108.000 workers consisting of approx. 30.000 civil servants (stemming from the former national agency, Deutsche Bundespost) and approx. 78.000 'regular' employees (Rohoff 2014).

Figure 3: Organisational Structure of Deutsche Post DHL Group

Deutsche Post DHL Group						
Corporate Center			Divisions			
CEO Board member • Dr Frank Appel Functions • Board Services • Corporate First Choice • Corporate Legal • Customer Solutions & Innovation • Corporate Office • Corporate Development • Corporate Executives • Corporate Heritage & Industry Associations • Corporate Communications & Responsibility • Corporate Public Policy & Regulation Management	Finance, Global Business Services Board member • Lawrence Rosen Functions • Corporate Accounting & Controlling • Corporate Finance • Global Business Services: Procurement, Real Estate, Finance Operations, Legal Services etc. • Investor Relations • Corporate Audit & Security • Taxes	Human Resources Board member • Melanie Kreis Functions • Corporate HR Germany • Corporate HR Standards & Programs • Corporate HR International • HR Post - eCommerce - Parcel • HR Express • HR Global Forwarding, Freight • HR Supply Chain • HR Finance, GBS, CSI, CC	Post - eCommerce - Parcel Board member • Jürgen Gerdes Business units • Post • eCommerce - Parcel	Express Board member • Ken Allen Regions • Europe • Americas • Asia Pacific • MEA (Middle East and Africa)	Global Forwarding, Freight Board member • Dr Frank Appel Business units • Global Forwarding • Freight	Supply Chain Board member • John Gilbert Regions • EMEA (Europe, Middle East and Africa) • Americas • Asia Pacific

(DPDHL Annual Report 2015: 23)

2.2.2 Context of Collective Agreements

For collective agreements, Deutsche Post deals with ver.di (Vereinte Dienstleistungsgewerkschaft (United Services Union), the second largest German trade union. On November 1st 2011, both tariff partners agreed upon a comprehensive package “Generation Contract” (Generationenvertrag) consisting of two collective agreements: (1) Age-appropriate Working (“Altersgerechtes Arbeiten”, No. 159) and (2): Working Time Account (“Zeitwertkonten”, No. 160).

With these collective agreements, both tariff partners aim to pave the way for older employees - especially those who deal with physically demanding work – and enable them to work until statutory retirement age. Thus the programme focuses on the 80 000 mailmen. (Igl 2015)

The so-called “Combi-Modell” is not an instrument for cutting down the workforce as it is aimed at enabling older workers to stay at Deutsche Post AG until statutory retirement age (Teuscher 2011). Crucially, if companies try to enable their workers to work until statutory retirement age, this does not necessarily mean that companies are interested in higher labour participation of older workers in terms of number of working hours. It is possible that HR policies aimed at later retirement are not aimed at a higher number of working hours. Rather, negative effects on the number of older worker working hours due to less weekly hours could be anticipated and possibly welcomed side effects of such HR policies.

The aims if the Generation Contract are:

- Reducing load situations
- Reducing coverage gaps
- Installing a so-called Working Time Account (without negative impact on employment)

- Combination of Old-age Part Time and Working Time Account: positive impact on employment (Rohoff 2014:8)

Background to this is that a high share of workers, especially those delivering mail and parcels, suspects to be unable to work until legal retirement age, as physical burdens are high due to heavy mail and parcels and unfavourable weather conditions (e.g. snow and rain).

2.2.4 Current Arrangements

The "Generation Contract" consist of three elements: (1) Old-age part-time (Altersteilzeit), (2) Working Time Account (Zeitwertkonten) and (3) Demography Fund (Demografiefonds).

With that scheme employees can reduce their working time six years before statutory retirement to 50% of their normal working time and still receive between 79% and 87% of their normal wage: The base value of 79% is supplemented with additional money from the company contribution of € 200 per full-time worker. Since this supplement depends on income, high-income workers get 79% of their prior wage, low-income workers 87% with other workers being located inbetween.

A secondary employment of up to €450/month is allowed. The low earnings ceiling of € 450 implies that the second job is only a marginal one. For example, € 450 per months is about € 105 per week ($450 / 4.3$), so that already with a gross wage of € 13 (which is not high) with 8 hours per week, which is one working day, additional earnings are at € 450. Therefore working time is still reduced, not from 5 days to 2.5 days but to 3.5 days. Nevertheless this partly contradicts the idea of old-age part-time work.

The Generation Contract is being financed by (1) the employees by saving up a value account in their working time account (up to 30% of annual gross income), (2) the employer by an increase of old-age part-time income summing up to 79% of the employees' previous net income and (3) by the Demography Fund that is being financed solidary between employers and employees.

(1) Old-age part-time (Altersteilzeit)

The old-age part-time scheme at Deutsche Post / DHL can be taken from employees aged 59 lasting between at least 24 and maximal 72 months. Between 79% and up to 87% (for low-earners) of net income is being paid from the employer and from the demography funds (for low-earners). There is no obligation for the earliest possible retirement without pension deductions, so that someone who could take 'Pension at 63' does not have to end his/her working career (and use of the scheme) at Deutsche Post / DHL at 63. For employees the old-age part-time ends at the latest when they reach the statutory retirement age.

In contrast to older regulations (block model), this model of old-age part-time is a continuity model, because employees have to work part-time over the whole period. Employees are also protected to stay in their work area; changes are not allowed because of using old-age part-time.

Necessary requirements:

- A value credit of at least 55 value credit points (one value credit points equates to one per cent of a yearly gross income)

- Tenure of Working Time Account for at least 5 years
- Unlimited employment contract
- Application at least 6 months before old-age part-time

For the cohorts born between 1953 and 1957 special regulations are in force. The value credit of at least 55 value credit points is not mandatory. Instead, workers born 1953 must have at least 11 value credit points, workers born in 1954 must have at least 22, workers born in 1955 at least 33 and workers born in 1956 at least 44 value credit points.

(2) Working Time Account (Zeitwertkonten)

Employees can install a working time account whenever they wish to do so. Deposits can only be made in terms of gross remuneration not in form of overtime. The working time account functions as a credit account. One value credit points equates to one per cent of the yearly gross income. To be able to use old-age part-time one has to have at least 55 credit points. On the credit account interest is being paid and it is protected against bankruptcy.

The working time account serves as an instrument for age-appropriate working as it allows the employee at the end of his or her old-age part-time to stop working by paying off their credits.

The point system works with percentages from the gross income and not with an absolute sum. Thus, low-earners can profit from the scheme in the same way.

(3) Demography Fund (Demografiefonds)

A Demography Fund has been installed on November 1st 2011 by Deutsche Post AG that was initially remunerated with € 20 Mio. Since 2013, the company contributes an annual amount of € 200 per full-time worker. Employees contribute 0.5 %points of the wage increase of 2012, which also leads to lower wages and sustainable contributions to the Fund after 2012

Utilisation:

The working time account is being used by approx. 21.000 employees and mostly (90%) by delivery workers (by March 2016).

Old-age part-time is being used by approx. 3 600 workers (also by March 2016). (Igl 2016)

The age of employees using the Generation Contract differs between those born in 1950 and those born in 1995. Thus, also younger age groups are being reached.

2.2.5 *Employee Needs*

Based on a survey by the trade union ver.di focussing on members working in the field of post delivery, especially those workers who have to deal with physically demanding work, such as mailmen, are very critical concerning their own employability. 75% of asked mailmen don't expect to be able to work until statutory retirement age (versus e.g. 53% of employees in sales and 52% of drivers). (Rohoff 2014)

2.3 Deutsche Bahn

Demografie-Tarifvertrag

Deutsche Bahn: The programme 'besondere Teilzeit im Alter' ('special part-time in old age') has been established in July 2013. This partial retirement scheme allows older workers to use 45 additional free working days per year, reducing working time to 81% of full-time. Wage is reduced, but not proportionally: in the beginning to 90% of full-time wage (87.5-88.5% until 2015). To be entitled, workers should be at least 59 years old (down from 60 until 2015) and work for Deutsche Bahn over 20 years. As can be seen, in 2015 the programme, which has been rather ungenerous compared to programmes at other companies, has been made a little bit more generous.

They should also have worked recently for 10 years in rotating shifts, or regularly at night (80 hours between 20:00 and 6:00 per year) or on-call, or could not do any of this type of work due to an assessment by a company doctor, or (since 2014) have recently for at least 10 years worked for 80 hours per year with a hardship allowance, or (since 2014) are severely disabled. Therefore, the comparatively tight eligibility rules had been slightly relaxed in 2014.

The programme is also open to people who already work part-time. Workers have to apply at least four months prior to the start of their partial retirement. Working time reductions can be taken in one of three forms: a) as 45 additional holidays, which can be used for example by taking full weeks; b) regular free days, usually in the form of a 4-day working week; c) as an exception it may also be agreed that the worker continues working full-time at the beginning and then retiring early. The programme is financed by the employer. An employee contribution via longer working times was agreed, yet partially revoked in a later agreement. The trade union argues that financing of the programme did not reduce the general wage rise (of over 5% in each the last two years).

Deutsche Bahn: Of about 12,000 workers would be entitled to enter the scheme, there were 924 partial retirees in April 2016, up from 317 at the beginning of 2015. The trade union argues that possible reasons for people not to use the scheme are: a) the 'Pension with 63 reform' allowing for an early exit, b) an employer-initiated 'old-age part-time scheme' is still used, which in practice is used often to as a 'block model', i.e. a period of full-time work followed by early retirement, c) a psychological barrier to work part-time, as the partial retirement scheme contains real part-time work; in contrast to the old-age part-time scheme the use of a 'block model' for early retirement is only rarely available, d) in the period shortly after the scheme's establishment in July 2013, there the trade union argues the employer showed lack of enthusiasm and invested little in promotion of the scheme at the local level, since it feared aggravation of lack of skilled labour, e) the planning of working shifts were unclear (who works when etc.).

Concerning Deutsche Bahn, assessment is hard because the programme is new, but the design of the scheme as such can be compared to the alternative older part-time scheme. The trade union states that the number of working hours are higher in the new scheme, providing for 5 years of 1,649 working

hours (8,245 hours in total), compared to 2.5 years of 2,039 working hours (5,097.5 hours in total) in the old one. The new scheme is sometimes used as an early retirement (block model) scheme, but not as often as the old scheme. It is the case for 135 (15%) of the 924 partial retirees. The result is that people stay attached longer to the company, even if working part-time.

The part-time model by Deutsche Bahn is less generous than other companies' programmes, especially when compared with 'RV 80'. It is possible that it is primarily used by those really needing a reduction in working time, while e.g. with 'RV 80' it may be expected that the generous programme is used by everyone eligible. It is possible that the low generosity of the Deutsche Bahn model provides some targeting on those who would be unable to work full-time, with positive effects on labour supply, especially when compared to 'RV 80'.

2.4 Concluding remarks concerning company case studies

If old-age part-time work prolongs working lives and therefore raises older worker employment rates (extensive margin), total effects on the number of working hours is only positive if

Gain in working hours due to later retirement

> (is larger than)

loss of working hours due lower number of weekly working hours

For example, full-time work from 60 to 64 implies more working hours than half-time work from 60 to 66.

Effects of part-time work on the total amount of working hours depend on what part-time workers would have done instead if (attractive) part-time schemes would not have been available. If workers would have retired otherwise, effects of part-time schemes on the total number of working hours are positive, if they would have worked full-time instead, effects are negative. This implies that especially programmes targeted at those who would retire otherwise lead to a higher number of working hours or at least have the weakest negative effect on this number.

Companies' programmes depicted above are targeted at workers with high work burden. This applies to Bayer with partly shift workers in the chemical industry, to Deutsche Post/DHL with the highly burdened delivery persons (who are the main users of the programme) and Deutsche Bahn, where preconditions related to high work burdens have to be fulfilled in order to enter the scheme. In every case preconditions are based on work circumstances and/or work history and not on the respective worker's health situation. Possibly access to programmes based on health situation and therefore on a company doctor's assessment would seem not transparent to workers and yield dissatisfaction. Further, programmes differ in their generosity.

It can be assumed that higher generosity (low income drops and high drops in working hours) attracts workers who could continue to work full-time to a higher degree than lower generosity. In this respect the model at Deutsche Bahn with its high preconditions (age, shift work) and low generosity (88% of the previous wage for 81% of the previous working hours) has the most positive / the least negative effects on the total number of working hours.

It is not clear to which degree companies are interested in a high number of working hours by their older workers. Possibly the goal is to enable employees to work until legal retirement age so that they can enter the pension scheme without deductions. Yet this motivation from the companies' side would be necessary for stronger targeting on those who would retire otherwise. For example, at Deutsche Post the explicit goal is "to shift work from older workers to younger workers", possibly since the company knows that gains in numbers of working hours due to later retirement are smaller than losses due to lower numbers of working hours per week. On the other hand, the company's old-age part-time scheme is a continuity model and not a block model, so that real early retirement in order to shift work to the young is not conducted in this model.

The programmes – mainly based on collective agreements – partly seem to be rewards for older workers for their long working lives and their long tenure at the company, partly financed via demography funds agreed on in collective agreements. Possibly motivation and effects are stronger related to the respectable goal to increase older workers' well-being, and partly to the goal of longer working lives understood merely as later retirement, and far less to the goal of a higher number of working hours amongst older workers. Further developments of old-age part-time programmes should take into account if there are different interests between policymakers, scientists, trade unions and companies. Possibly only in the case of workers who are hard to replace due to their special skills employers are strongly interested in a higher number of working hours until retirement, and trade unions are oriented towards older workers' well-being.

3. Report on Secondary Analyses

To complement the company case studies two additional secondary data analyses were conducted. The first investigates the preferred amount of total working until retirement, while the second uses panel data analysis technique to researches the effect of shifting from full-time to part-time work in the last phase of the career onto the retirement timing

3.1 Preferred working hours until retirement

Based on data from European Social Survey V (2010, 27 countries) Bauknecht (2015b) analysed effects on the number of preferred working hours until retirement.

The dependent variable was calculated by the multiplication of the number of years until preferred retirement (preferred retirement age – current age) with the number of preferred weekly working hours (priced question, respondents were told that their wage would rise or fall accordingly).

Several independent variables were included (results see below).

Nine linear regression were run, one for all employees between 45 and 64 and two (45-54 and 55-64) for four sectors: NACE (Nomenclature statistique des activités économiques dans la Communauté européenne, Statistical Classification of Economic Activities in the European Community) Rev. 2 category C (manufacturing), G (trade, yet car repair jobs had been erased due to different tasks), P (education) and Q (health and social sector). Multicollinearity was low (low VIF values far below 5).

The main result was: Those with a high number of weekly working hours – all else equal – have a higher number preferred working hours until retirement, whereas overwork had negative (assuming causality, which can be presumed at least partly due to the chronological order of events from current conditions to preferences for the future). Other associations (or effects assuming causality) were in expected directions:

- Negative e.g. feeling that job endangers health, feeling that very hard work is demanded and age. The latter not due to preferences for a low number of working hours, yet to the low number of years left until a certain age. ESS V data show that at 60+ the group is considerably smaller, so that due to self-selection effects circumstances at 60+ cannot be clearly compared to circumstances until 59. For example, it is possible that workers 60+ prefer less weekly working hours yet due to self-selection into early labour market exit primarily those preferring higher numbers of working hours remain in the sample so that there seems to be no age effect when in fact there is one.
- Positive e.g. good health, gender male, high wage level, subjectively fair wage, influence in company, control work pace, further learning required, feeling that job is secure

No clear differences between sectors had been found.

Further analyses have shown that – besides the number of working hours and overtime with very strong associations – age positively affects the probability of subjective overwork, as well as female gender, work/family conflicts, and effort put into the job in order to keep job (in contrast, motivation from hope for higher wage or career advantages leads to low feeling of overwork).

Disadvantage of the calculations by Bauknecht (2015b)

- Stable preferences until retirement are assumed, whereas preference concerning the number of working hours and retirement age may change and be interdependent. For example. After downward adjustment a preference for a higher number of working hours

may arise. Further, respondents stated both their preferred retirement age and their preferred number of working hours, yet it is possible that preferred retirement age is higher after the number of working hours has been decreased.

- The study refers to employees' preferences, whereas they do not necessarily translate into a decrease of weekly working hours if employers do not allow for it. Yet, earlier labour market exit cannot be prevented by the employer.

Further analyses by Bauknecht in 2015 have shown that on sector level number of working hours and subjective overwork are only weakly correlated. In some sectors (e.g. health and social sector) subjective overwork is comparatively low despite a high number of reported working hours, whereas e.g. for education the opposite applies. This suggests that in some sectors a high number of weekly working hours is unproblematic in terms of subjective overwork, whereas in other sectors (e.g. education) already a low number of (reported) weekly working hours coexists with the feeling of working too many hours per week. This should be considered in the issue of part-time schemes.

3.2 Effect of shifting from full-time to part-time work in the last phase of the career onto the retirement timing

To supplement the company case studies from the report at hand we in addition conducted secondary data analysis with data from the Survey of Health, Ageing and Retirement in Europe (SHARE). The aim was to investigate first how flexibility in working hours affects retirement timing and second if flexibility in working hours leads to an increase of the net working hours. The investigation focused only on European averages and included no country specific sample analysis. The results should be seen as a complement to the company case studies and give an outlook on how flexibility in working hours in the late career phase might influence retirement timing in Europe. Previous country studies on effects of part-time work on the total amount of working hours until labour market exit is mixed yet vastly negative (Cahill et al., 2014; Gielen, 2009; Graf et al, 2011). The analysis tried to go beyond these quantitative country studies and applied an international perspective. The main ratio behind this was to research the connection between working hours flexibility independent of specific national retirement and labour market systems, hence, the analysis was based on European data.

The analysis tested the assumption that decreasing weekly working hours delays retirement and extends working life. The main idea being that as an older employee shifts from full time to part time contract his/her work related stress will decrease and, hence, a prolonging of work life is more likely. Earl and Talyor (2015, p.1) comment "In the context of managing older workers, flexibility usually refers to reduced hours and part-time work patterns that enable them to maintain their employment and achieve a work/life balance by having greater control over their time (Earl & Taylor, 2015)". Following this argument one could expect that the effect of flexibility in working hours on retirement timing should be stronger amongst those workers who suffer most from a work/life conflict and have less control over their life. Thus, the analysis sample was first split gender and second education. The reason being that women still have much more non-work obligations and struggle more to balance these with their work life, and that "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, labor market chances) (Hofäcker & Naumann 2015, p.476).

Date Analysis

Data Set, Variables, Method of Analysis

Data for analysis were derived from SHARE, which is an ongoing cross-national panel database of micro data on health, socio-economic status and social and family networks of approximately 123,000 individuals in European countries aged 50 or older. Countries include in SHARE are Denmark, Sweden, Austria, France, Germany, Switzerland, Belgium, and the Netherlands, Spain, Italy and Greece, Ireland, Czech Republic, Poland, Estonia, Hungary, Portugal Slovenia, and Luxembourg. Four waves - one, two, four and five - were included into the analysis resulting in an observational period of nine years ranging from 2004 to 2013.

Dependent variables of the data analysis was the respondents' retirement timing, while the explanatory variable was constructed from a variable that measures the weekly working hours. It had to two categories 1(always worked full time) and 2 (Shift to part time). Those individual that had decreased their working time from over 30 to fewer than 30 hours in the observational period and before retirement were coded into the second category. In the multivariate models the control variables gender, education (Low (ISCED 0-2, Medium 3-4, and High (5-6)), age, children (having children yes vs. no), and the occupational status (blue vs. white collar) were included.

Results

Descriptive Results

Table 1 show the average retirement timing of older workers who worked full time up until their retirement and those who shifted to part-time. On average those who shift from full- to part time retire about 1.5 months earlier.

Table 1: Descriptive Results

Always Full Time	Shift to Part Time	Delta	Always Full Time	Shift to Part Time	Delta	Always Full Time	Shift to Part Time	Delta
Total			Men			Women		
61.7	61.6	-0.1	62.0	62.2	0.2	61.3	61.1	-0.2
Low Education			Medium Education			High Education		
61.9	61.9	0	61.5	61.3	-0.2	61.8	62.2	0.4

Multivariate Results

After this descriptive overview now the results of the multivariate analysis are presented. Multilevel linear regression models were used, that allowed controlling for country composition effects and biases related to differences in the country sample sizes (Table 2). The first model shows even when controlling for potential confounding effects of other co-variables the effect of shifting to part-time work on retirement age becomes negative and is significant. This means workers who shift from full time to part-time in their late career retire earlier than those who work full time all the time. The effects of the co-variables are also in line with previous literature: women retire later than men (Radl, 2013), the older cohorts retired (Hofäcker et al., 2015) early than the younger one and education is positively related with retirement age (Buchholz et al., 2013). Model 2 and 3 show the interaction effects of gender respectively education with shifting from full to part-time work. The interaction term

for gender is not significant, this means the effect does not differ between men and women. For education the strength of the effect does vary significantly: it is the weaker for the high educated than for those with medium or low education. A more illustrative description of the multivariate results is show in Figure 4 where the predicted average retirement ages from the models are depicted.

Table 2: Multilevel-Linear Regressions on the Retirement Age

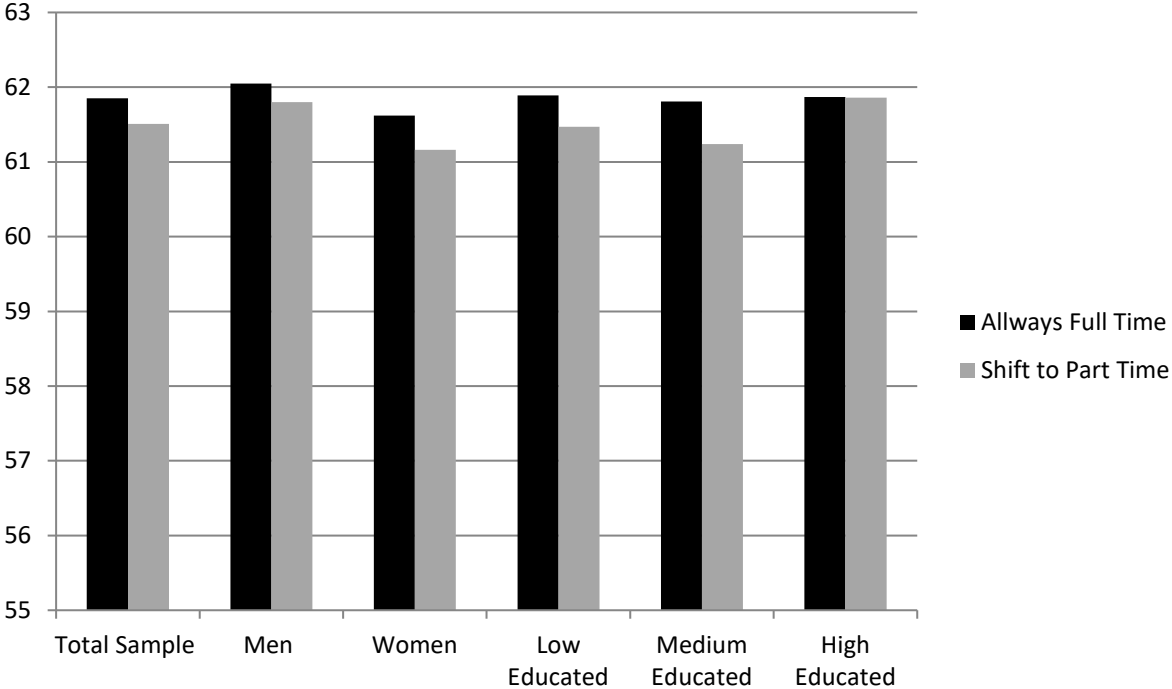
	Model		
	1	2	3
Shift to Part Time	-0.346*** (0.0914)	-0.251* (0.122)	-0.415* (0.170)
Female	-0.523*** (0.0878)	-0.435*** (0.116)	-0.510*** (0.0879)
Year of Birth	-0.248*** (0.00858)	-0.248*** (0.00858)	-0.248*** (0.00858)
Medium Education	-0.147 (0.114)	-0.145 (0.114)	-0.0804 (0.144)
High Education	0.181 (0.128)	0.179 (0.128)	-0.0134 (0.164)
Has Children	-0.0164 (0.0342)	-0.0165 (0.0342)	-0.0139 (0.0342)
Blue Collar	0.496*** (0.0978)	0.493*** (0.0978)	0.501*** (0.0978)
<i>Interaction Effects</i>			
Interaction Gender * Shift		-0.202 (0.174)	
Interaction Medium Education * Shift			-0.146 (0.215)
Interaction High Education * Shift			0.403* (0.228)
N		5797	
ICC			

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

SHARE data offers not satisfying solution to estimate if the delay of retirement by shifting to part time increased the actual amount of working hours and not only the age of the labor force exit, since the working hours were measured only every two year (between wave 2 and 4 there even is a gap of 4 years). Thus, no accurate analysis is possible in this case. However based on the average working hours in each wave for the two groups (Always Full Time and Shift to Part Time) and the Predicted Average Retirement Ages a rough proxy calculation is possible. Shifting from full-time to part-time work on average reduced total amount worked hours by about 300 hours per respondent.

Figure 4: Predicated Average Retirement Age



Predicated Average Retirement Age based on the Multilevel Regression Models from Table 2; Estimates are controlled for Co-variables

Discussion

Working hours flexibility is promoted as one tool of delaying retirement and extending working lives. However, the analysis of this study in line with early country studies finds no or even a negative effect of shifting from full to part-time work at the end of the career onto the overall working hours. Further research with SHARE data should in detail into country differences and difference between groups of older workers.

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