



International Perspectives on the Gender Gap in Pensions: Methodologies and Policies

Documentation of the European Expert Workshop
TRAPEZ.ANALYSIS
Vienna, 8 and 12 November 2019

Imprint

Owner and Publisher: Austrian Federal Chancellery, Directorate-General for Women and Equality, Minoritenplatz 3, 1010 Vienna

Authors: Francesca Bettio, Katja Gerstmann, Ingrid Mairhuber, Christine Mayrhuber, Michael Reingruber, Simone Scherger, Ann-Charlotte Ståhlberg

Editorial and overall implementation: Katja Gerstmann, BKA
Vienna, 2020 (revised).

Copyright and Liability: Copies may only be made of extracts where there is a reference to the source; all other rights are inadmissible without the written consent of the media owner. This applies in particular to all kinds of reproduction, translation, microfilming, reproduction on television or radio or dissemination and storage on electronic media such as the internet or CD-ROM. Copies may only be made of extracts where there is a reference to the source; all other rights reserved.



This workshop report is part of the project *'TRAPEZ – Transparente Pensionszukunft. Sicherung der ökonomischen Unabhängigkeit von Frauen im Alter'*.

TRAPEZ is co-funded by the Rights, Equality, Citizenship programme (2014-2020) of the European Union.

The contents of this workshop report represents the views of the authors only and is their sole responsibility. The European Commission does not accept any responsibility for use that may be made of the information it contains.

Feedback: If you would like to share nay feedback about this publication, please contact int.frauen@bka.gv.at.

Contents

1 Introduction	5
2 Presenting the speakers	6
Francesca Bettio, Università di Siena (Italy).....	6
Ingrid Mairhuber, FORBA, TRAPEZ project.....	6
Christine Mayrhuber, WIFO, TRAPEZ project.....	6
Michael Reingruber, BMASGK, TRAPEZ project	6
Simone Scherger, Universität Bremen (Germany).....	7
Ann-Charlotte Ståhlberg, Stockholms Universitet (Sweden)	7
3 Resuming the inputs and discussions	8
3.1 Inputs on methodologies: measuring, analysing, monitoring and framing the gender gaps in pensions	8
3.1.1 The Gender Gap in Pensions in Austria: Methodological implications of the Indicator (Christine Mayrhuber)	8
3.1.2 Measuring, analysing, monitoring and framing the Gender Gaps in Pensions in the EU (Francesca Bettio).....	12
3.2 Discussing Methodologies	17
3.3 Inputs on Policies: implementing labour market measures and pension policies to secure women’s pensions.....	20
3.3.1 The Austrian Statutory Pension System – Facts and Figures (Michael Reingruber).....	20
3.3.2 The Gender Gap in Pensions in Austria: State of knowledge, individual perception and women’s opportunities for action (Ingrid Mairhuber)	23
3.3.3 Measures affecting the improvement of women’s pensions in the German pension system (Simone Scherger)	25
3.3.4 The Gender Gap in Pensions. Experiences from Sweden (Ann-Charlotte Ståhlberg)	31
3.3.5 Discussing policies	44
3.4 Food for thought: Trust in public pension systems.....	46
3.5 Lessons learned	47
3.6 Open questions.....	48



4 Reflecting and transferring to the Austrian context.....	49
4.1 Options and fields for action.....	50
4.2 In focus: Information and communication	53
5 References	55
List of Figures.....	55
List of Tables	56
Reference to Chapter 3.1.1	57
References to Chapter 3.3.3.....	57
References to Chapter 3.3.4	58

1 Introduction

The Austrian Federal Chancellery, in cooperation with the Austrian Federal Ministry for Labour, Social Affairs, Health and Consumer Protection, the Working Life Research Centre FORBA and the Austrian Institute for Economic Research WIFO, carries out the EU-co-funded project *TRAPEZ – Transparent pension future. Securing women’s economic independence in old age* from 2019-2020. Part of this project is qualitative and quantitative research on the gender gaps in pensions in Austria.

During an EU Expert Workshop, which took place on November 8 and 12 2019 in Vienna, the (preliminary) results of these analyses were put in a European context. Methods of calculation for these gaps were compared and discussed as well as the factors contributing to the gender gap in pensions, and their differences among European countries, namely via inputs from experts from Sweden and Germany.

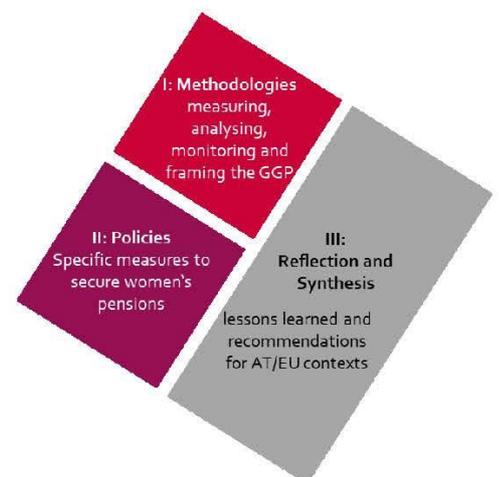
The discussions and reflections of this workshop are documented in this working paper. Recommendations and inputs will also be taken into account in the research report drawn by WIFO and FORBA within TRAPEZ.

In total, the European expert workshop comprised three sessions:

session I on methodologies and framings of indicators for the gender gap in pensions,

session II on labour market measures and pension policies targeting women’s economic independence in old age, and

session III on reflecting and identifying lessons learned and options for improvement among the Austrian stakeholders.



The international experts participated in sessions I and II, providing valuable inputs and insights. Experts from Austrian stakeholders (pension insurance, social partners, PES, women’s counselling services, poverty network) took part in all three sessions.

2 Presenting the speakers

Within the workshop, both the preliminary results from TRAPEZ should be reflected and presented, as well as international perspectives on the topic of the gender gap in pensions should be collected and questioned on their transferability into the Austrian context. Our speakers therefore included three international experts and three members of the TRAPEZ project team.

Francesca Bettio, Università di Siena (Italy)

Francesca Bettio is a professor of economics at the Department for Political Economics and Statistics, and an expert on determinants of gender gaps in pension income. She has a long record of accomplishments at the European Commission, working on matters relating to female labour market and gender equality.

Ingrid Mairhuber, FORBA, TRAPEZ project

Ingrid Mairhuber is a political scientist and senior researcher at FORBA (Vienna, Austria) focusing on gender, labour and social issues with long standing expertise in qualitative and interdisciplinary research for both Austrian and European contexts. She leads the qualitative study project within TRAPEZ.

Christine Mayrhuber, WIFO, TRAPEZ project

Christine Mayrhuber is an economist and researcher at the Austrian Institute for Economic Research in Vienna in the research group *labour market, income and social security*. Her areas of work and profound expertise include labour market, income and social security as well as gender and digitalisation. Additionally, she is member of the Austrian Pension Commission. She leads the quantitative research project within TRAPEZ.

Michael Reingruber, BMASGK, TRAPEZ project

Michael Reingruber is a policy officer for general pension affairs at the Austrian Ministry for Labour, Social Affairs, Health and Consumer Protection. His expertise and areas of work include the Austrian statutory pension system as well as international comparisons of pension systems. He leads the evaluation project within TRAPEZ.

Simone Scherger, Universität Bremen (Germany)

Simone Scherger is a professor of sociology at SOCIUM Research Center on Inequality and Social Policy. Her research and publications deal with questions around life courses and old age, social policy, employment, and the related inequalities. She is a member of the current pension commission of the Federal Government of Germany.

Ann-Charlotte Ståhlberg, Stockholms Universitet (Sweden)

Ann-Charlotte Ståhlberg is a professor of economics at the Swedish Institute for Social Research, Stockholm University and served as expert in a number of public investigations on pensions and welfare state in Sweden and the Scandinavian countries. Her research and teaching also includes the areas of gender and social security.



The speakers: Christine Mayrhuber, Ingrid Mairhuber, Ann-Charlotte Ståhlberg, Francesca Bettio and Simone Scherger (from left to right)

3 Resuming the inputs and discussions

Within this chapter, a short resume of the researchers' inputs in sessions I and II is presented. For further reference, detailed slides of all presentations are available online at www.trapez-frauen-pensionen.at.

3.1 Inputs on methodologies: measuring, analysing, monitoring and framing the gender gaps in pensions

Various indicators on EU and national level are used to measure the gender gap in pensions. Methodological discussions and critique both address valid data sources and composition, as well as the underlying concept of such an aggregated indicator. Two presentations – by **Christine Mayrhuber** and **Francesca Bettio** – aimed at introducing the different methodologies and concepts to inspire further discussions.

3.1.1 The Gender Gap in Pensions in Austria: Methodological implications of the Indicator (Christine Mayrhuber)

(Chapter edited according to the slides presented, see Website www.trapez-frauen-pensionen.at)

WIFO's analysis within the TRAPEZ frameworks follows two main objectives: first, to calculate the gender gap in pensions (*GGP*) in Austria on the basis of longitudinal data for different insurance groups (i.e. employees, self-employed) and for different types of pensions (i.a. old-age, disability pensions); and second, to identify the determining factors for the gap via a decomposition analysis.

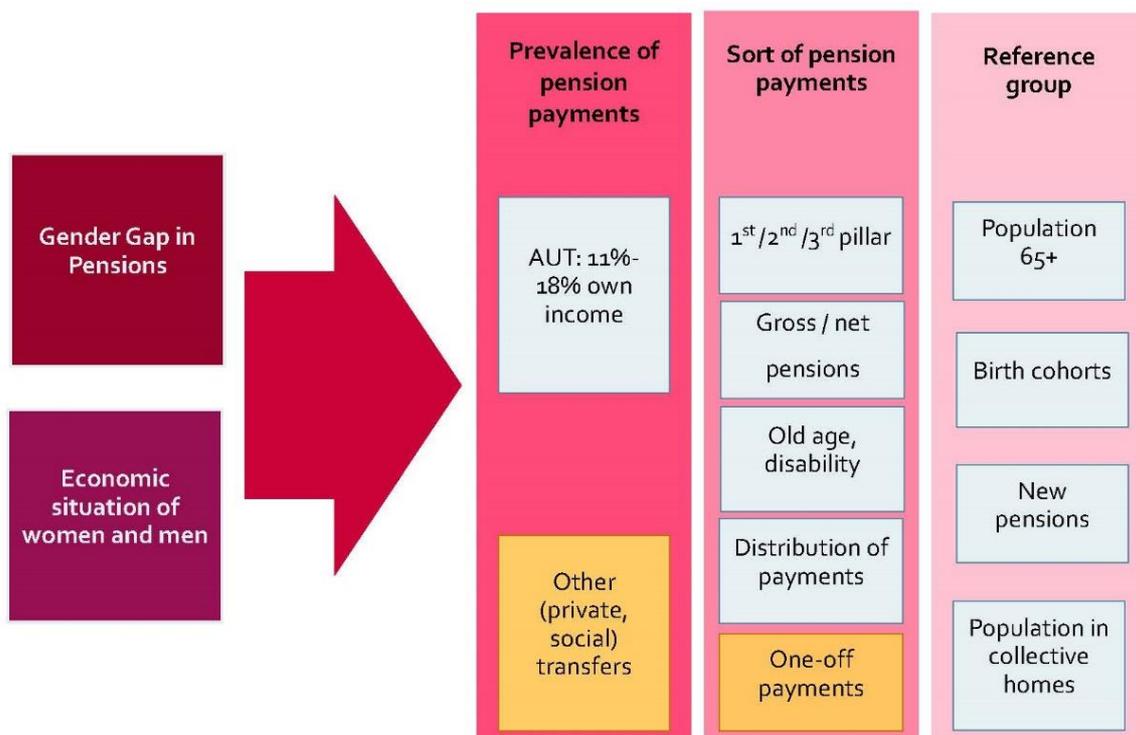
Prima vista, the calculation (and definition) of the gap itself does seem intuitively and easy, since it measures the difference of women's and men's pensions as a proportion of men's pensions:

$$GGP = \left(1 - \frac{\text{womens' pension income}_t}{\text{mens' pension income}_t} \right) * 100$$

However, it is crucial to define the inputs (see figure 1) to this calculation properly since they shape the output – and therefore may answer different questions. Some of the questions, or factors, relevant to determine before calculating a gap are: Is the gap between pensions of interest, or the differences in the overall economic situation of women and men? Is the pension coverage, and receipt of other social transfers to be included? Which sort of pension payments will be accounted in the calculation – public, private, company pensions, one-off payments, types of pensions – and are they included as gross or net values?

In addition, the reference groups, i.e. the 'women' and 'men' require thorough consideration before calculating the gap: are all persons aged 65 and above to be included, only new pension recipients, certain birth cohorts and/or persons living in collective homes?

Figure 1: Factors to determine the GGP and pension income



The prevalence of pension payments is characterised by pronounced differences between women and men.

Within TRAPEZ, WIFO's research and calculations rely on longitudinal data on social security records from the Main Association of Austrian Social Security Institutions. Regarding the first level of factors that need to be accounted for – the prevalence of pension payments to women and men, WIFO's calculations point to a gendered gap in coverage (see table 1). While in 2017, only 0.6% of men aged 65 or older received neither a pension nor any other social transfer, among women of the same age group 11.4% do not receive a pension or social transfer payment. When only direct pensions, i.e. old age and disability pensions, are considered, the gap is even larger: 1.0% of men, but 18.4% of women did not receive direct pension payments. ¹

Table 1: Prevalence of pension payments, indicating the proportion of persons aged 65+ (in %) without pension receipts, Austria

Type of pensions/transfers WOMEN	2011	2013	2016	2017
Old age and/or disability pensions	21.2	20.6	19.8	18.4
Old age, disability, and/or survivors' pensions	16.3	15.4	13.8	13.6
Pensions and/or social transfers	14.6	13.7	11.3	11.4
Type of pensions/transfers MEN	2011	2013	2016	2017
Old age and/or disability pensions	4.1	6.0	2.7	1.0
Old age, disability, and/or survivors' pensions	3.6	5.4	2.7	0.8
Pensions and/or social transfers	3.1	5.1	2.3	0.6

Types of pension payments are largely made up of 1st pillar payments in Austria.

Pensions of the 1st pillar, i.e. the statutory pension insurance, account for 89.2% of all pension payments, while the 2nd pillar, i.e. company pensions, only account for 4.5% and the 3rd pillar, i.e. private pensions, only account for 6.3% of all pension payments.

¹ Note: This difference in coverage is especially noteworthy, as the statutory pension age for women is currently still at 60, while it is 65 for men.

The distribution of gross old age pension payments varies strongly when comparing women and men.

Patterns of distribution of payments are influencing the explanatory power of the chosen data input for the GGP – should the mean (average) or the median pensions of women and men be compared? In the Austrian context, WIFO calculations show a difference of seven percentage points between gender gaps in old age pensions, with the mean value being lower than the median, due to a high share of high pensions for men.

Table 2: Gender Gap in Pensions: old-age pensions in Austria 2018, mean vs. median

parameter	GGP 2018 in old age pensions
Median	49.2%
Mean	42.3%

Gender gaps in pensions vary pronouncedly among different working (insuree) groups in Austria.

Within the statutory pension insurance in Austria, different pension insurances and schemes still exist for employees and self-employed, which is – for now still – different for self-employed farmers and self-employed in trades. If gender gaps in pensions are calculated for these three different insurance schemes, differences of more than twelve percentage points are to be observed: the GGP among farmers stood at 30.3% in 2018, the GGP among self-employed in trades at 31.7% and the GGP among employees was 43.1%.

The GGP is an indicator for the aggregated disadvantages of women compared to men. It is thus an important indicator to measure developments of gender (in)equality.

Therefore, regular monitoring is important, but it will also be necessary to properly define an indicator that is accepted by all stakeholders – and to explore possibilities to formulate clear instructions for action from such a multidimensional indicator.

3.1.2 Measuring, analysing, monitoring and framing the Gender Gaps in Pensions in the EU (Francesca Bettio)

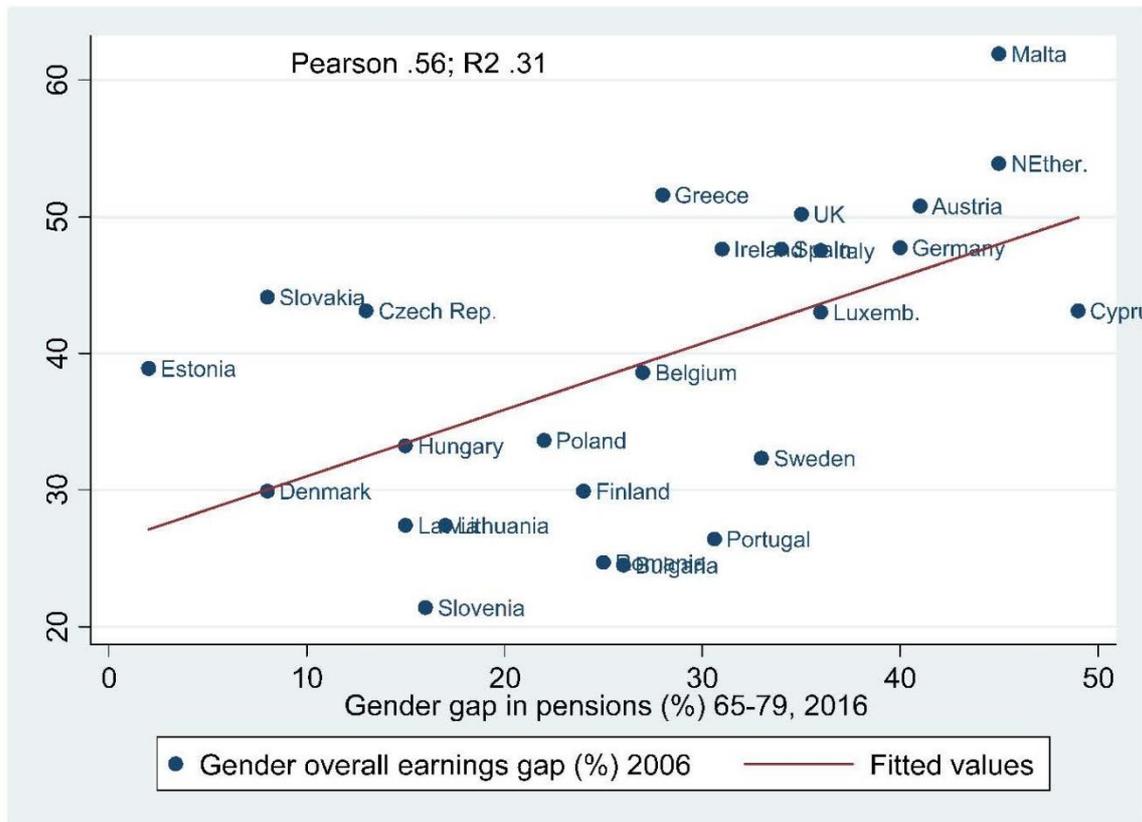
(Chapter edited by the author, according to the slides presented, see [Website www.trapez-frauen-pensionen.at](http://www.trapez-frauen-pensionen.at))

The official mean gender gap in pension income for pensioners aged 65 or above is large – it stood at 34.8% in 2017 for the EU, and 40.1% for Austria. This gap is even higher (35.7% in the EU28) for younger pensioners (between 65 and 79 years), since survivors' pensions reduce the gender equality in several European countries.

Roughly, the gender gap in pensions reflects the overall gap in earnings, although the links between the two are complex.

The mean percentage difference of monthly/annual wages between working-age women and men was 39.6% in the EU28 and nearly 45% in Austria. Although a positive correspondence exists between the two gaps, as one could expect, country specific pension systems features can considerably loosen the correspondence as it can be gauged from Figure 2.

Figure 2: The overall earnings gap and the gender gap in pensions, EU28 (measured ten years apart: 2006 and 2016)



Source: own elaboration on Eurostat data for the overall earnings gap and for the gap in pension income

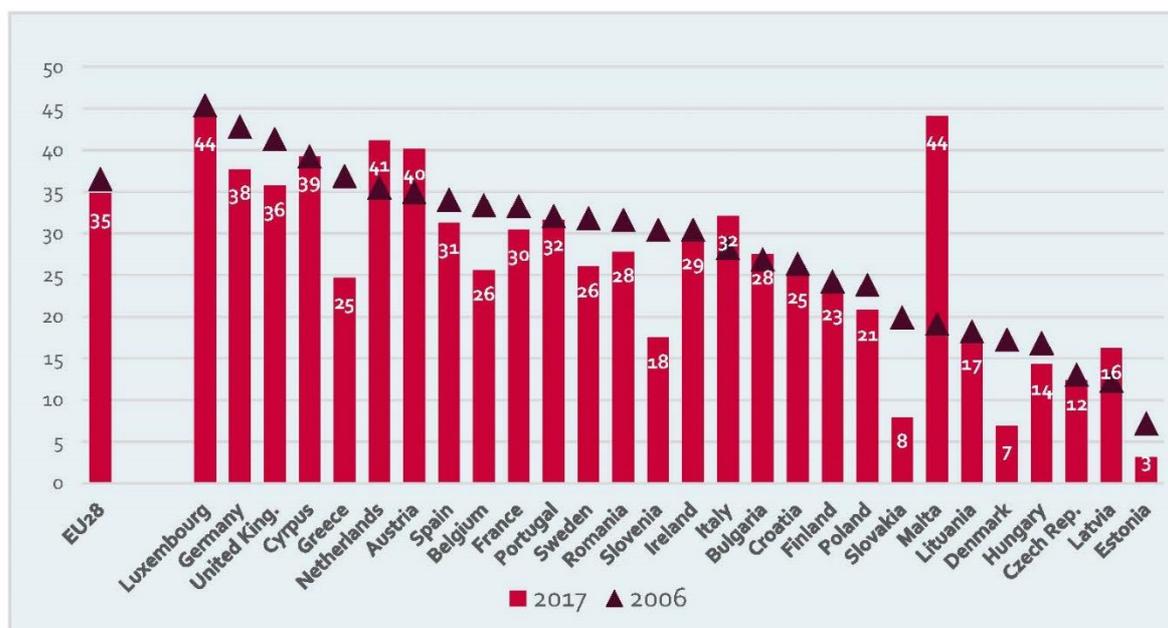
Measuring the gap: two indicators, different options and data source issues.

In the EU, two official headline indicators are used to monitor gender differences in pension income: *the gender gap in coverage rate (in %)* and *the gender gap in pension income (in %)*. Measurement options exist for the age range, specifically including all persons aged 65 and above as opposed to persons between 65 and 79 years. Additional options concern the choice of the reference population – considering the whole population or only pensioners, as well as the choice between mean and median values. Finally, the choice of the data source is especially important, since the extent of the gender gaps in pensions varies with the data source. The EU-SILC survey is used by Eurostat to compute official EU-statistics, while the SHARE survey is an alternative source which is often used for research purposes. The latter source yields smaller gaps and a faster decrease over the past decade.

The gender gap in pension is decreasing slowly, but at a faster pace among younger pensioners.

As shown in Figure 3, the pension gap decreased between less than two and four percentage points during the last decade, depending on the data source, with a faster decrease for younger pensioners. Notably, the gender gap in pensions is lower when all types of pensions are included in the calculation (not only direct or own-right pensions).

Figure 3: Change in in the gender gap in pensions between 2006 and 2017, EU-SILC, pensioners 65+



Source: For 2006: G. Betti, F. Bettio and P. Tinios (2014), "Gender Equality Chapter for the 2015 SPC Pension Adequacy Report (country statistics)" Report by the ENEGE network for the Equal Opportunity Unit, Dg. Justice,

Roma: *Fondazione G. Brodolini*; For 2017: *EU-SILC European Commission "2019 Report on equality between women and men in the EU"*, Luxembourg: *Publications Office of the European Union*.

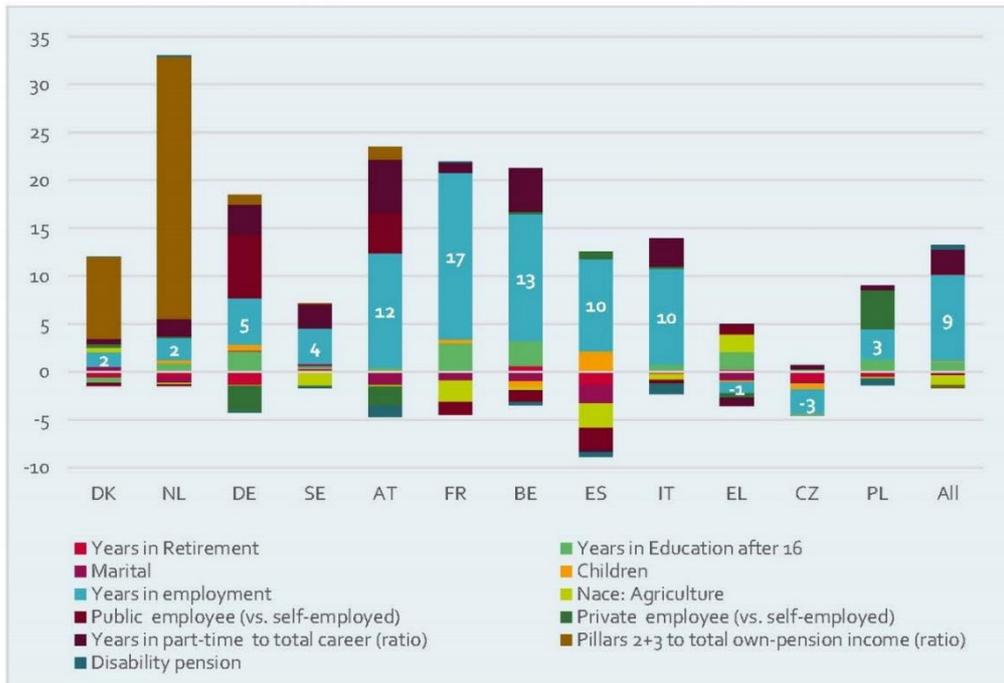
Analysing the Gender Gap in Pensions

To understand today's gap, we must look at what happened in the past on the labour market and in pension policy, although we still have limited understanding of what factors contributed to the current gap in pensions and by how much. Platon Tinios, Thomas Georgiadis and I recently attempted to assess the comparative importance of these factors for 13 European countries (including Austria). The analysis was commissioned to the SAAGE network by the Equal Opportunity Unit of the European Commission's DG Justice and the results can be found in the report *Future risks for Gender Equality in old age income security* (SAAGE 2018). A standard decomposition exercise (based on Oaxaca-Blinder's methodology) was carried out using SHARE data. The exercise relates own-right pension income (excluding survivor pension) in 2013/2015 to:

- ❖ current (same years) characteristics of individuals and countries,
- ❖ life-course individual characteristics drawn from the retrospective SHARELIFE run of the survey (2009).

For the 13 countries aggregate, the results of the decomposition could 'explain' little more than one third of the measured ('raw') gap in 2015. The findings thus call for considerable caution, although they remain salient (see figure 4). In *mature multi-pillar countries* (Denmark, Switzerland the Netherlands): gender differences in the *ratio of pillar 2 and 3 income* to total pensions contribute the most to explaining the gender gaps. The number of years spent in employment also plays a part in these three countries, while the years in part-time work are also important but only for the Netherlands. In *recent multi-pillar countries* (Germany and Sweden), *years in employment* is the most important explanatory variable, while the ratio of part-time work is a significant contributor to the explained gap in Sweden. The same holds for the share of the public sector in Germany. In *other continental countries* (Austria, France and Belgium), the explained part of the gender gap is mostly accounted for by *years in employment*, although *years of education* and *part time working* are also important. In *Southern countries* (Spain, Italy, Greece), the explained component of the gap is smaller than elsewhere; in relative terms, however, gender differences in the duration of the working career play the most important role in Spain and in Italy, *not* in Greece, followed by the characteristics of own occupation as well as part-time work. Finally, the attempt to explain pension gaps is weakest for the *Eastern countries* in the group (Czech Republic and Poland).

Figure 4: Main factors accounting for the explained part of the gender gap in own-pension income (2015; Pensioners 65+, SHARE data)



Source: Bettio et al 2018 (SAAGE report)

Overall, and in order of importance, the three most important factors accounting for the gender gap in pensions in 2015 are:

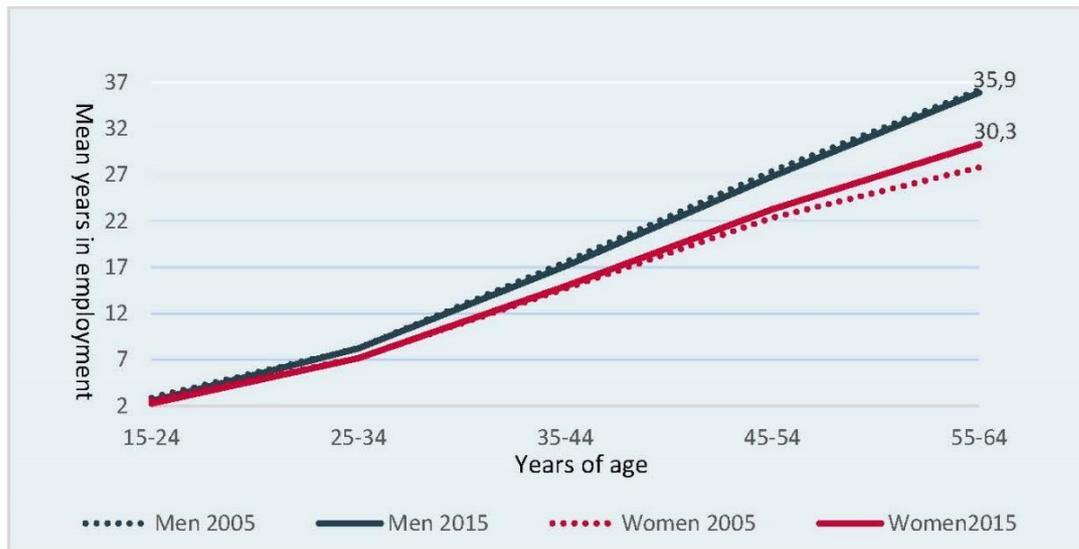
- ❖ Total years in employment, years in part-time employment and public sector employment in non mature multi-pillar countries;
- ❖ the ratio of pillar-2&3-income to total pensions, total years in employment and the years in part-time work in mature multi-pillar countries.

Family-related characteristics like marriage status and number of children appear to play a second-order role, partly because they exercise their influence via labour market choices.

What will matter in the future? Educational attainments and years in employment may be of lesser concern.

As shown in detail in the report mentioned above (SAAGE 2018), the future female pensioners will be as well or better educated than men. The different choices of disciplines may still disadvantage women, but prospects are mixed. Women still in employment are working more years than women in previous cohorts did, but only after childrearing age (see Figure 5). This is partly the effect of reforms that bring the pensionable age forward.

Figure 5: Mean years in employment of age groups, by sex, EU (SILC) countries, 2005 and 2015



Source: Bettio et al 2018 (SAAGE report)

Survivor pensions, non-public pensions and hours of work remain persistent concerns.

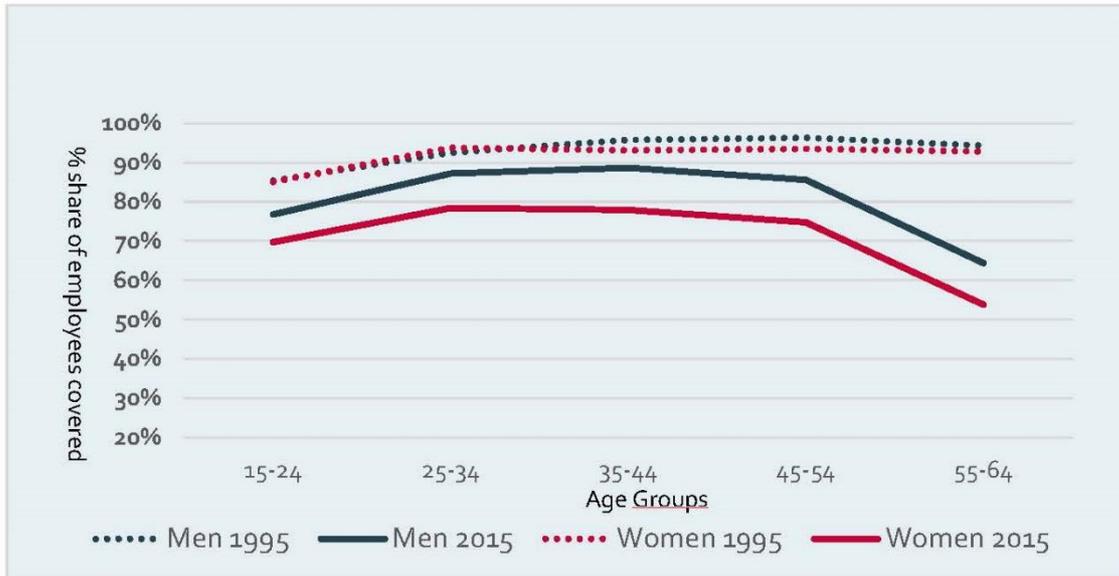
Where transition away from survivor pensions was implemented or planned, the risk of a larger gender gap in pensions had to be faced. The pace and character of the transition are therefore important.

Increasing reliance on occupational or private pension schemes (in non-mature 2nd or 3rd pillar countries) is another risk, especially for occupational pensions. Additionally, the rising importance of part-time work, and the 'gig economy' may hinder women's catching up in terms of hours of work.

The (increasingly difficult) access to social security is a new concern for the gender gaps in pensions.

A specific but widespread concern is access to social security provisions in the expanding areas of 'gig economy'. Evidence about lower social security coverage among own account workers and younger cohorts rings an alarm bell. However, factual knowledge is limited and it reveals a gender angle. As the following Figure 6 indicates, the proportion of employees covered by employers' contributions is decreasing, among women even more than among men.

Figure 6: Share (in %) of employees in age groups covered by employers' contribution. Mean for 11 (EHP) countries.



Source: Bettio et al 2018 (SAAGE report)

Pension systems are not designed to entirely redress inequalities 'inherited' from elsewhere.

The premise that pension systems are not designed to make up for past labour market or other inequalities is worth reiterating. It is equally worth acknowledging that there is no *one size fits all* approach to smoothing disparities 'inherited' from the past. Still, a preliminary and succinct assessment can be made in this respect of care credits, non-contributory or basic pensions, survivors' pensions and sharing accounts. Generous non-contributory pensions appear to offset the gender gap in pensions more than childcare credits do, with the further advantage that they also tackle inequalities stemming from factors other than parenting, e.g. new forms of work. Survivors pension are a transition issue, while sharing accounts are a radical remedy that might be backward looking.

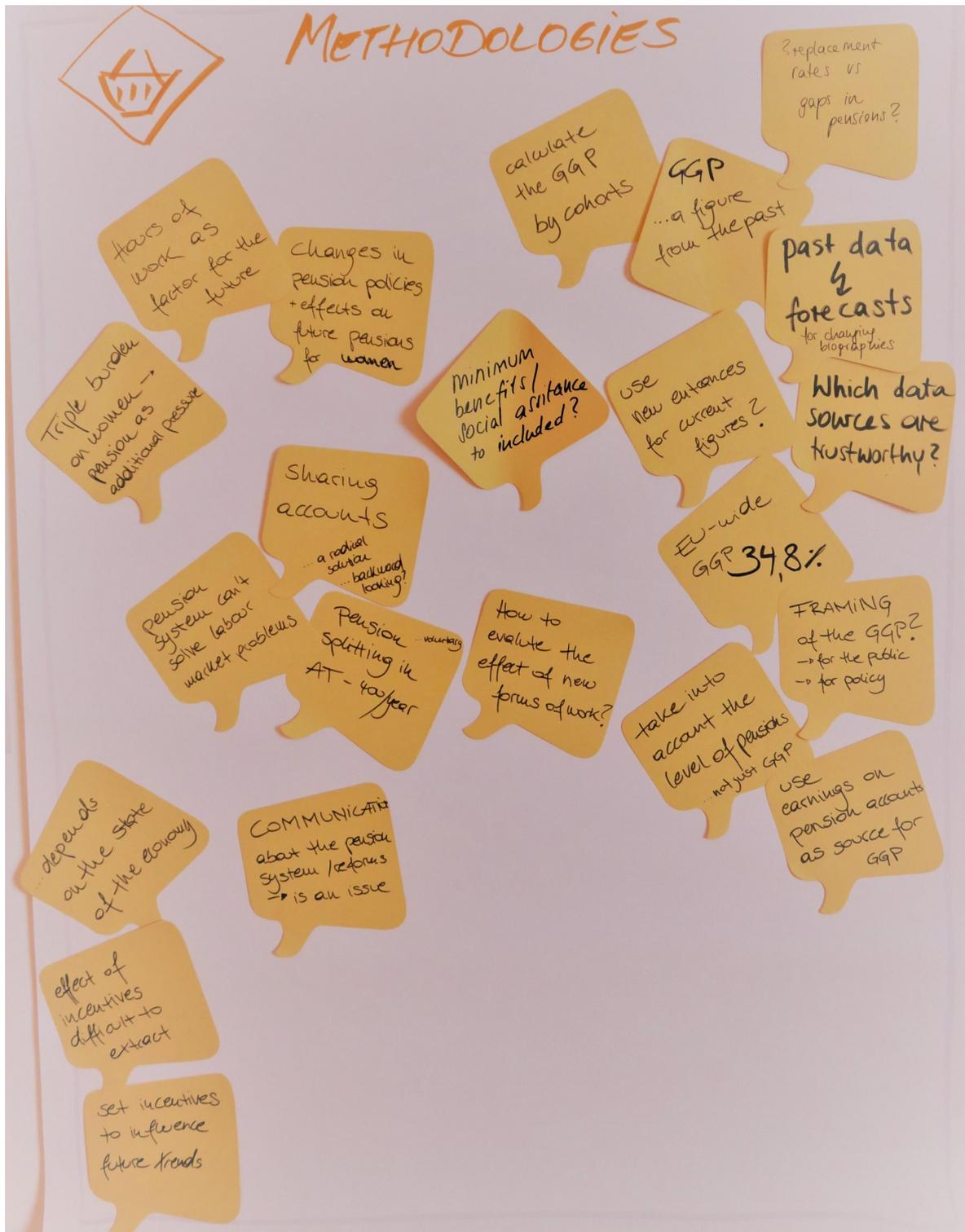
3.2 Discussing Methodologies



Following the inputs sketched out above (for details please also refer to the slides), a discussion among all participants raised some further questions and highlighted issues to be considered when measuring and defining gender gaps in pensions, as well as when using them to inform or shape measures. Key points of the discussion, which centred on aspects of communication and framing, of what to include (i.a. social assistance benefits), of how to

account for future projections when GGP relies on current pensions (and past data), and also whether to rely on survey and/or administrative data, were documented during the session (see figure 7).

Figure 7: Flipchart notes of discussion on methodologies



3.3 Inputs on Policies: implementing labour market measures and pension policies to secure women's pensions

Individual pension entitlements are accrued throughout the life cycle, and depend on labour market participation as well as on measures in the pension system itself, i.a. those designed to mitigate (gendered) differences in the distribution of (unpaid) care work and income. Session II focused on policies to secure women's pensions in Austria, Germany and Sweden, illustrating the respective national pension systems, the role of 2nd and 3rd pillar pensions, and measures in pension systems that have been implemented to (specifically) secure women's pensions.

3.3.1 The Austrian Statutory Pension System – Facts and Figures (Michael Reingruber)

(Chapter edited according to the slides presented, see [Website](http://www.trapez-frauen-pensionen.at) www.trapez-frauen-pensionen.at)

The Austrian pension system is characterised by a dominant 1st pillar designed as a compulsory *pay-as-you-go*-system. It is mainly financed by contributions with some co-payments from the federal budget. The total contribution rate to the statutory pension system is 22.8% of the gross wages (up to a threshold). The pension entitlements are calculated by the defined benefit target formula of 65/45/80 – at age 65 (statutory retirement age), with 45 contributory years, the pension benefit per month will amount to a gross replacement rate of 80% of the average life-time income. The statutory pension system includes old-age, survivors' and invalidity pensions. It does not include a minimum pension, but offers means-tested top-up and bonus payments. All benefits are granted upon fulfilling entitlement conditions, e.g. for old-age pensions a minimum of 15 insurance years with at least seven years of gainful employment, are necessary. The statutory pension age for men is 65, for women currently 60 – but will be increased gradually to 65 years as well between 2024 and 2033.

Within the last decade, the Austrian pension policy was widely reformed.

The pension account system was implemented in 2005 as a harmonisation of the pension systems as well as to ensure the sustainability of the pension system. Additional reform measures i.a. aimed at increasing *de facto* retirement ages by incentivising to work longer and by tightening early retirement schemes.

In 2014, a starting entry was calculated for the pension account system to include and harmonise old and new pension calculation systems. This account is easy to understand and

offers a clear and transparent overview on the future pension and impacts of career interruptions as well as of prolonged working life.

11.3% of women pensioners received the means-tested top up in 2017.

For recipients of low pensions in Austria, the means-tested top up, i.e. the equalisation supplement is granted. It is paid 14 times annually, as are pensions, and tops up the pension up to EUR 933.06 for singles and EUR 1,398.97 for couples.

Table 3: Means-Tested Top-Ups 2017

2017	Women	Men	Women & Men
Recipients of benefit	143,910	68,467	212,377
Share of all pensioners	11.3%	8.7%	10.3%

In 2017, an additional means-tested top up '*bonus*' for long-time insured pensioners was introduced. With 30 years (and from 2020 also with 40 years) of contributions, low pensions are topped up by this bonus. Starting 2020 up to 60 months of child caring periods qualify as contribution months – both for the bonus with 30 contribution years and for the bonus with 40 contribution years.

Care work in the pension account: Credits for child-caring periods, voluntary splitting

Four years of child-care credits are included in the pension account of the mainly responsible parent after the birth of the child. The contribution rate is yearly elevated, for one year of child care credits the monthly pension increases by approximately EUR 28. If a younger child is born within the first four years, the crediting period for the first child ends and a new one starts.

The voluntary splitting of pension credits for parents was introduced in 2005: parents can share their credits for up to seven years per child, to balance the pension entitlements between the parent who is employed and the parent who was on parental leave.

Additional voluntary insurance is possible within the public pension system

This voluntary contribution (up to the double threshold annually) increases the own 1st pillar pension, it offers high security and high flexibility of contributions without fees. Contributions in the voluntary insurance are revaluated annually with a factor reflecting the change of the

total sum of statutory contributions to the pension system (German 'Aufwertungsanzahl'); the benefit is defined by gender-neutral factors and the ages of contribution and of the start of receipt.

The effective retirement ages increased about two years since 2012.

The average retirement age of women (for old-age and invalidity pensions) was 59.4 years in 2018, for men 61.5 years. In 2012, these ages were lower with 57.4 and 59.4 respectively. On average, men receive old-age pensions for about 19.8 years, while women receive them for 24.9 years on average.

Pension expenditure is almost gender-equal.

50.8% of the total pension expenditure are received by men although they are outnumbered by almost 350.000 more female pensioners. Women however receive 93% of survivors' pension expenditure and 63.2% of the expenditure on means-tested pension top-ups. All this reflects their lower average pension compared to men. Contribution distribution is not that gender-equal: men's compulsory contributions account for 62.3% of all compulsory contributions, while 63.4% of substitute contributions (e.g. child-care credits, unemployment credits) are accounted by women. Since 2006, the statement of operations of the pension insurance is additionally expressed in terms of gender:

Table 4: Pension contributions and expenditure by sex

Contributions	Women	Men
Compulsory contributions	37.7%	62.3%
Substitute contributions	63.4%	36.6%
Federal contribution	86.2%	13.8%
Expenditure	Women	Men
Pension expenditure	49.2%	50.8%
Survivors' pension expenditure	93.0%	7.0%
Means-tested pop up (equalisation supplement & bonus)	63.2%	36.1%

Women receive 61.5 % of average men's pension in 2018.

In December 2018, the average old-age pension of women was EUR 997 (14 times annually), while that of men was EUR 1,620. The gender gap narrows for old age pensions with long insurance periods: with EUR 1,703 on average, women receive around 71.4% of men's pension (EUR 2.386).

Table 5: Gross Average Pensions (14 payments/year), December 2018

Gross Average Pensions	Women	Men	Women & Men	Women in % of Men
All pensions	918	1,506	1,146	60.9%
Direct pensions	1,000	1,602	1,274	62.4%
Old age pensions	1,008	1,657	1,289	60.8%
Old age pensions (60/65)	997	1,620	1,258	61.5%
Long insurance periods	1,703	2,386	2,223	71.4%
Invalidity pensions	835	1,217	1,101	68.6%
Widows'/widowers' pensions	747	347	707	215.4%
Orphans' pensions	284	284	284	100%

Statement on pension forecast sent out since 2015 will be evaluated within TRAPEZ.

Originally addressing persons with an option for early retirement, the pension forecast statement was expanded in 2018 to include about 300,000 insured persons near to their statutory retirement age to inform them about their pension prospect and give incentives to remain in the labour market. This forecast statement is to be evaluated within the TRAPEZ.FORECAST project. This evaluation aims at increasing pension literacy for all groups of insured and at exploring possibilities to better inform people about their working career and pension age, to reaching out younger cohorts, part-time workers and women.

3.3.2 The Gender Gap in Pensions in Austria: State of knowledge, individual perception and women's opportunities for action (Ingrid Mairhuber)

(Chapter edited according to the slides presented, see [Website www.trapez-frauen-pensionen.at](http://www.trapez-frauen-pensionen.at))

FORBA conducts qualitative research – via in-depth interviews and focus groups with women – to research women's knowledge of the pension account credit regulations and their own pension entitlements within TRAPEZ. Aims of this research include understanding women's perceptions and interpretations of the regulations and causes for the Gender Gap in Pensions, identifying women's individual opportunities for action and their resources, and reviewing the use and necessary change of women's support measures. The interviewed women vary with regard to several characteristics: they are between 30 and 55 years, living in urban and rural areas in different Austrian federal states, their level of highest formal education spans from compulsory school to university, they are employed between 10 and 40 hours weekly or unemployed as blue- or white-collar workers. Women with and without children, with different family statuses and with and without migrant background have been interviewed. The analysis of interviews and focus groups allows for detailed and wide-ranging findings.

Women are very interested in the pension system and pension regulations, but also have a great need for information.

FORBAs findings indicate a major lack of information regarding the pension systems regulations – many information materials (leaflets, folders) are not known and specific regulations such as child-care credits or credits during unemployment are hardly known. This lack of knowledge leads to little trust in the pension insurance system especially among younger women – while older women perceive the system’s regulation as constantly changing. However, private pension insurance remains only a theoretical alternative, for the interviewed women making ends meet and reconciliation possible now is more important than retirement that still seems far away.

Women want to remain on the labour market for a long(er) time.

Research shows that depending on their state of health and available jobs women would like to work longer, and see part-time retirement as an option. The deductions in case of early retirements are a problem for older women that want to retire sooner due to their health problems or unemployment. Even though the planned increase of women’s statutory pension age from 2024 onwards to 65 years in 2033 is known, only a few interviewed women know their own retirement age.

Women estimate their own future pensions to be very low.

While they were “shocked” about their initial account credit notification ³, women have not reviewed their own pension account since then, but estimate their pensions to be very low. To secure their current life-standard, replacement rates of 75-100% of their current income are deemed necessary. Still, their financial independence in old-age is important for women, for women who own their apartment/house this offers some security.

Women see the Gender Gap in Pensions as a great injustice.

As main causes, the interviewed women identify the gender pay gap and the gendered division of labour. The voluntary splitting of pension credits, however, is seen with some scepticism, not only regarding if men would do this voluntarily, but also since it offers no social compensation for the unpaid work and no financial independence. Also, it then values the care work of women with high-income partners higher than that of women with low-income partners. An obligatory splitting only meets partial approval, especially in cases of separation.

³ Note: this notification about the *Kontoerstgutschrift* was sent out in 2014, see chapter 3.3.1.

Additional insurance is only possible if affordable.

Private pension insurance as well as purchasing of additional education periods are not affordable. The option of voluntary insurance within the public pension system (see above) is met with interest, but must also be affordable to be a *de facto* option.

Individual possibilities for action in the labour market seem limited.

The lack of childcare, fathers' participation in unpaid work and lack of qualified (higher hours) part-time pose a problem of better reconciling employment and unpaid work. For older women, the unavailability of jobs and/or the impossibility to work full time (also in certain sectors) were also mentioned as problems. Additionally, continuous employment careers are – especially for young people – increasingly difficult and no longer desired, i.a. because of increasing flexibility and mobility.

Compensation for gendered-division of labour within the pension system, and labour market policies to reduce gender pay gap and to improve employment opportunities are possible support measures.

Almost all interviewees suggest compensation within the pension insurance, via higher contributions for childcare and long-term care periods, or via partial credits for years of part-time work due to childcare. Here, also a 30-hours week for parents and a higher share of unpaid work taken up by fathers/partners would be additional supportive measures. Additionally, reconciliation frameworks need to be improved. An individual equalisation supplement (pension top-up; see also Chapter 3.3.1), irrespective of the marital status, is also seen as option. Further efforts to close the gender pay gap, also by ensuring equal pay for work of equal value and higher wages in female-dominated sectors, are as necessary as options to work longer hours (qualified part-time), also in rural areas, and age-appropriate jobs.

3.3.3 Measures affecting the improvement of women's pensions in the German pension system (Simone Scherger)

(Chapter edited according to the slides presented, see [Website www.trapez-frauen-pensionen.at](http://www.trapez-frauen-pensionen.at))

The German pension systems dates back to the 1880s to the Bismarckian pension system with a strong first pillar of public pensions. The pension insurance is a branch of the social insurance and covers the risks of old age, incapacity and the loss of the main earner. Mainly, dependent employees are covered, while most self-employed and civil servants are covered by extra systems. 90% of the population aged 65 and above receive some kind of benefits

from the pension insurance, around 57% of people aged 15-65 are actively insured as employees. Adding other forms of contributions and those passively insured (i. e. having contributed at some point in their lives), a large majority of the population has some kind of claim in the pension insurance (BMAS/TNS 2017: 32; Deutsche Rentenversicherung 2018: 33; 47). The public pensions are financed by income-based contributions from employers and employees in a *pay-as-you-go*-system, and are additionally subsidized with taxes.

The old age pension benefits are calculated according to the *duration* and the *amount of contributions*: one earnings point is awarded for each year of average income; deductions and supplements exist for early and late pension claims. Since 2012, men and women have the same legal general pension age, which is currently being increased from 65 to 67. Five contribution years are necessary as qualifying periods for old age pensions. Low benefits with a strict means test in pension age exist outside the pension insurance, the non-take up rate is high.

Occupational and private pensions are traditionally not very important

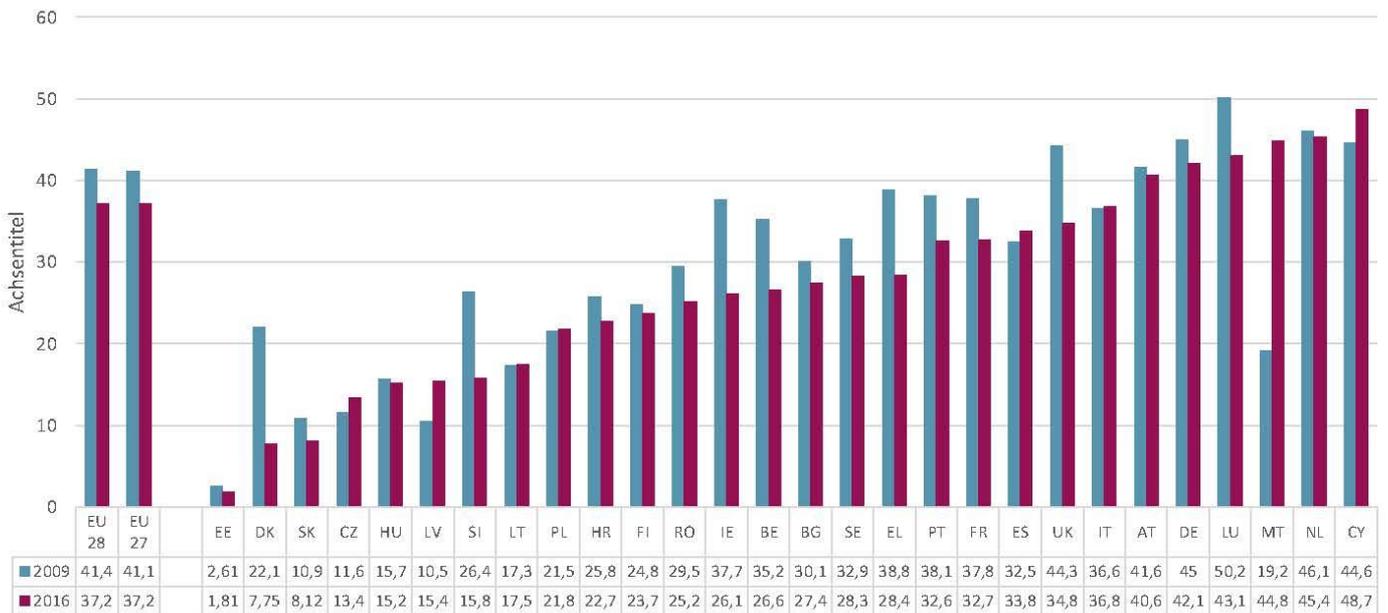
The coverage of occupational pensions is very unequally distributed, and higher in Western Germany, among men and public service employees. Of regular employees, around 57% have occupational pension rights, while 26% of current pensioners have rights to occupational pensions. However, only 9% of all pension benefits stem from occupational pensions (BMAS 2016: 77, including public sector occupational pensions). Private pensions among current pensioners are negligible, due to subsidies since 2001 (the regulated private '*Riester Rente*') coverage increased to around 40-50% among employees, with around 20% of inactive contracts (Börsch-Supan et al. 2016, Kruse & Scherbarth 2019). The private pensions are subject to strong critique.

Germany currently has one of the largest gender gaps in pensions in Europe.

The calculation differs depending on the data and definition. Still, the gender gap in pensions is much lower in Eastern Germany. Three main causes for this can be identified (Grabka et al 2017, Westermaier et al 2017, Frommert & Strauß 2013):

- ❖ The (main) **breadwinner model** dominated in West Germany for a long time: employment interruptions, part-time work, marginal (non-insured) employment of women/mothers – leading to further wage and career penalties and shaping the model of 'derived' social rights; other social policy/tax regulations have further supported or still support this model.
- ❖ The **pension insurance** focuses on **employment career** and is earnings-related.
- ❖ The labour market is characterised by high **gender segregation** and **gender pay gap**.

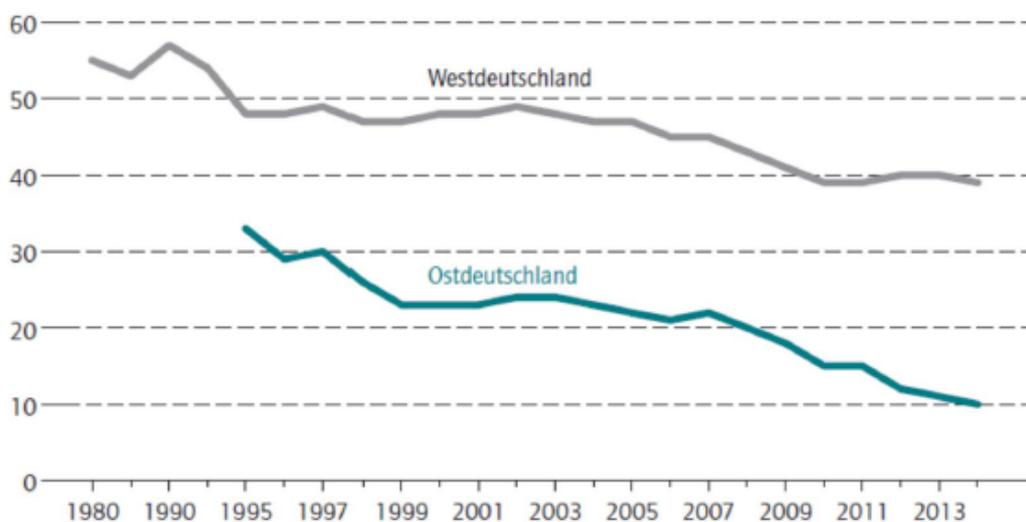
Figure 8: Gender gap in pensions, pensioners aged 65-79, 2009 and 2016 in %



Source: Eurostat, EU-SILC; 2010 data for HR; Pension adequacy report (2018) vol. 1

Beginning discussions and changes are however observable: fewer women become mothers, and women's employment participation increases (Grabka et al 2017; Westermeier et al. 2017); still, mothers often work part-time or marginally with low pension rights (or no pension rights in the past). In Eastern Germany, women aged 40-44 already have higher pension rights than men – here, the gender gap in pensions may disappear soon (Heien & Krämer 2018); but this is also due to the relatively decreasing pension rights of men in East Germany.

Figure 9: Gender Pension Gap among new pensioners, 1980-2014, West and East Germany, without survivors' pensions, in %



Source: Grabka et al (2017)

The risk of poverty in old age is higher for women, and higher in Germany than in Austria.

In 2015, 20.1% of women aged 65 and above were at risk of poverty in Germany, compared to 14.9% of men (Austria: 15.7% and 10% respectively) (Blank & Türk 2017).

Complex system of survivors' pensions is part of the pension insurance. Survivors' pensions are still very relevant for (many) older women's economic situation in old age.

The German system defines the *major* and the *minor widow(er)'s pension*, depending on the years of marriage and age, which result in different amounts and durations of the benefits. The pensions derived from marriage are complicated and inconsistent with regard to the underlying principles and support a persistent dependency of women, since they lose their survivors' pensions in case they remarry.

Settlement of pension entitlements and voluntary splitting.

In case of divorce, the earnings points during the time of the marriage are equally shared among partners within the settlement of pension entitlements, which leads to additional pension rights for the partner with lower pension claims. The model of the *voluntary splitting* was introduced as alternative to widow(er)s' pensions for couples who married after 2001 or who are both born after 1961. In this model, the earnings points are equally shared at the beginning of the pension. In this model, both partners have their own independent pension income that is neither means-tested nor cessated in case of remarriage. However, the partner with higher individual pension rights receives a lower pension, and no widow(er)s pension can be claimed; thus, the voluntary splitting so far is only rarely applied.

Childcare and care credits acknowledge care work in the pension insurance.

For each child born after 1991, three earnings points are credited independently of the employment status, and paid as contributions (see for example Brosius-Gersdorf 2018). They may be changed between partners based on months, but by default are credited to the mother's pension account. They are only credited up to the general contribution ceiling of approximately 2.1 points, which can lead to relatively lower credits (or none) for well-earning (working) mothers. Child-raising periods count as qualifying period up to ten years per child, and may increase the pension, if at least 25 qualifying years apply and several children below ten years of age are raised (raising about 0.3 points) or if the parent was employed with a low salary while raising at least one child under ten years (upward revaluation up to one point).

Informal long-term care also counts as contributory periods (paid by the long-term insurance) under certain conditions (see for example Brosius-Gersdorf 2018): the care must take up a least ten hours weekly, in a private household, while the carer is employed not more than 30 hours weekly and not already in pension age receiving a full old-age pension. Also, the level of care need (at least level two of five) is to be acknowledged by the long-term care insurance. Depending on the level of acknowledged care and the type of care benefit, earnings points of varying value are credited. The credit points for care work have been extended in recent years, and are now relatively generous in international comparison.

In occupational and private pensions, no credits for care work exist, and only limited (or no) survivors' pensions are covered by the 2nd and 3rd pillar. Also, occupational pension receipt is subject to the income tests for the survivors' pensions in the 1st pillar.

The current compensation for care work could result in very good pensions for women – if women worked at least 'good' part-time.

Due to the generous care credits, women's pensions could be improved if their employment interruptions were only short and they worked part-time with medium to high hours (e.g. 75% of regular working time) for ten years, Frommert & Lizon (2017) find in a simulation. However, many German mothers have longer interruptions and lower working hours. International comparisons show that employment careers are more important than care work credits (Möhring 2014, 2018; Hammerschmid & Rowold 2019; see also Bettio in chapter 3.1.2). Although credits for care work are now relatively generous in the German system, improvements in details such as credits for low intensity care or working time conditions are still possible.

Occupational and private pensions tend to increase gender inequality.

When occupational and private pensions are included in the calculation of the gender pension gaps, the gap is higher. This is due to the fact that these pensions are unequally distributed across genders (and other characteristics), even though the *Riester* (3rd pillar) pension is widespread among women, because of the attractive incentives of subsidies for mothers/parents and low income earners. The 2nd and 3rd pillar do not credit care work, often do not have (cost-free) survivors' pensions and do not include other redistributing elements. This increases inequality in the pension distribution.

Current debates and suggestions within the pension insurance: obligatory splitting and guaranteed pension minimum are highly debated.

An automatic obligatory splitting of earnings points during marriage years has been suggested by gender equality reports (Sachverständigenkommission 2017). It would replace survivors' pensions and lead to independent pension rights of women. However, there are still problems and disadvantages, e.g. the fragmented insurance system (pension insurance, civil servants) that would lead to questionable results. Also, the non-simultaneous beginning of the pension of partners poses the question of when to split the points. Currently, in many constellations the survivors' pensions are higher than shared credits – is a more independent, but lower pension claim better? If both partners have low pensions, an obligatory splitting would only be a redistribution of scarcity. Elements of a guaranteed minimum pension after 35 years of contribution time, as currently in the legislation process, is also very contested – should it be means-tested and which precise conditions should apply?

Current debates and suggestions regarding the labour market: increasing mothers' employment participation and supporting a more equal distribution of care work between men and women

Increasing mothers' employment participation regarding continuity of employment, amount of hours worked and payment would strengthen the effectiveness of the care credits – equal participation in 'good' part time and abolishing the marginal (also only marginally insured) employment would be supportive measures. Recent improvements in this area include the extension of infrastructure for day care of children and long-term care, the legal right to return to full-time employment in the '*bridge part-time*' and that paid parental leave is now shorter but with high replacement rates (which implies disadvantages for low-earning mothers in comparison to the old regulation).

To support the dual earner/dual carer model (Fraser 1996) incentives for the unequal division of care work, e.g. tax splitting, should be abolished. Small attempts in this direction have been introduced in family policy by reserving two "father months" in parental leave and by setting incentives for shared part-time parental leave.

The pension inequality between genders will decrease, but will persist for a long time. Inequalities among women, new and growing challenges have to be accounted for.

At least in Western Germany, the gap will only close slowly. To conclude, there is no single good 'solution': the acknowledgement of care work has been improved, and equal participation in paid and unpaid work have been identified as 'new' targets of change. Still,

inequalities among mothers are important – many policies benefit well-earning and better educated women more than others. Among some groups of women migrants, employment rates are very low. In general, increasing international employment biographies, e.g. among female informal or semiformal professional carers, and changing family forms, e.g. single mothers or unmarried parents who divide paid and unpaid work very unequally, pose new and/or growing challenges for pensions and gender relations.

3.3.4 The Gender Gap in Pensions. Experiences from Sweden (Ann-Charlotte Ståhlberg)

(Chapter edited according to the slides presented, see [Website www.trapez-frauen-pensionen.at](http://www.trapez-frauen-pensionen.at))

Principally the Swedish pension systems are gender neutral – the rules are the same for men and women. Yet there is a gender gap in pensions. The pensions reflect the income differences in men and women’s entire working life. The different labor market behavior of men and women lead to different pension income by gender. These differences are predicted to decrease, but women as a group will still receive lower pensions than men in the future. A minimum pension guarantee ensures a social safety net of vital importance for those with low lifetime incomes. In this paper, I give a short review of the national and occupational pension schemes, the gender gap in pensions and causes for the gap.

The Swedish pension systems

The national pension system and the different occupational pension plans have undergone large reforms in Sweden ⁴. The pensions are based on earned income from the entire working life in the labor market and individual investment choices need to be made for parts of national and occupational pensions. Pension contributions to the national pension made 61% of total pension contributions in 2018. Pension contributions to occupational pensions made up 38% and pension contributions to private pension insurances made up 1% of total pension contributions (see table 6).

Table 6: Share of total pension contributions, 2018, Sweden

Pension scheme	Share of total pension contributions. Percent
National pension	68
Occupational pensions	38
Private pension insurances	1

Source: Swedish pensions Agency, Orange report 2018.

⁴ For a fuller description of the Swedish pension system, see Könberg et al. 2006, Kruse and Ståhlberg 2013.

The current national pension system in Sweden was launched in 1998. Five out of the seven parties in the Swedish parliament, which represented 85% of the members of parliament, voted in favor of the reform. The old defined-benefit, *pay-as-you-go*, price-indexed plan was not sustainable. The contribution rate had to be adjusted to economic and demographic changes, the incentives to work and save were weak, the redistribution unfair, both between and within generations and the development of costs inversely related to economic growth (Ståhlberg 1990, 1995b).

Transitional rules are used to mitigate the change to the new system. Benefits are paid both from the old and the new system with the part paid from the old system being larger for old cohorts, decreasing for younger cohorts until the new system is fully phased in. People born in 1937 and earlier belong entirely to the old system; those born between 1938 and 1953 belong partly to the old and partly to the new system, while those born in 1954 or later belong entirely to the new system.

The national pension consists of the *guarantee pension*, the *income pension* and the *premium pension*. Everyone is covered by the national pension system. The principles of the *income pension* and the *premium pension* are simple. A share of your earnings each year is set aside in two different personal accounts. The pension is determined of the amount of money you have on your account when you claim your pension, and how many years you are expected to live from that point onwards. The *income pension* is a notional defined contribution scheme (NDC), i.e. a *pay-as-you-go*-system. Worker's contributions are used for benefits for contemporary pensioners. The *premium pension* is a funded defined contribution scheme. 16% of the pension-qualifying income go into the income pension account. This account is indexed by the growth rate in average wages. 2.5% of the pension-qualifying income go into the premium pension account. The individual can choose among about 500 funds in which to invest the money. The rate of return on this part is determined by the investment allocation. For individuals who do not want to pick their own investments, the government provides a default option. Too many choices might hinder rational decision-making. A reduction to 150-200 funds has recently (2019-11-04) been proposed by an official investigation.

There is a ceiling on the income qualifying for pension credits that is changed annually in response to the income index. The current ceiling (2019) corresponds to an annual income of 483 000 SEK (1 euro is about 11 SEK). About half the contribution rate is levied on earnings above the ceiling, as a tax on high-income earners.

In addition to wage from employment, benefits from unemployment insurance, sickness and disability insurance, and remuneration from parental leave are pensionable income. The appropriate contribution is paid from the state budget. Child years, higher education and up until 2010 national service (conscription) also confer pension entitlement.

The personal accounts grow over the years with the inflow of contributions and at the applicable rate of interest. Inheritance gains (the pension balances of those who have died during the year are distributed to those belonging to the same birth cohort as the deceased) are also credited.

Benefits from the NDC system are determined by dividing the pension balance at the date of retirement with an annuity divisor. This is calculated for each cohort and is determined by the expected remaining lifetime at the date of retirement and an advance interest of 1.6%. (The advance interest makes the divisor smaller than the expected remaining lifetime and initial pension therefore higher than it would have been without the interest.) Increases in longevity decrease the annual benefit. The divisor is the same for men and women. Outgoing benefits are indexed by the growth rate in average wages minus the advance interest rate that already has been received.

The account balance in the premium pension (the funded part) is converted to either a fixed or a variable annuity using standard insurance practices. This annuity is nominal and not indexed for inflation. If men and women make different investment choices this may lead to increasing gender inequality. However, the premium pension with individual investment choices has not affected the gender gap so far. The average rate of return between 1995 and 2014 was 5.95% for women and 6.05% for men (Säve-Söderbergh 2014) ⁵. Predictions of the Swedish Social Insurance Inspectorate show that the dispersion of future total pensions are explained mainly by the dispersion of earnings in the labor market (ISF 2017).

Within the premium pension system, pension contributions/rights can be transferred between spouses or registered partners or a survivor's cover can be chosen. Both of them offer income protection when a spouse passes away, but the first one gives, as well, income protection in the event of a divorce or separation.

Income pension and premium pension can be claimed at the earliest from the age of 61, but an increase to age 62 in 2020 has been announced. There is no upper limit for when the pension must start to be drawn. The individual can choose to draw full pension or only a part of a full pension and continue to work.

An automatic balance mechanism is built into the system to guarantee financial stability on an aggregate level. If liabilities exceed assets, the automatic balance mechanism lowers the rate of return on pension accounts as well as on outgoing benefits, reducing pension liabilities until balance is restored. The system is autonomous, that is outside the state budget. The politicians cannot use the system for promises to buy votes and so increases the financial stability of the pension system. An individual does not gain from voting for an expansion. Certainly, this will increase the benefit level, but this will be wholly paid for by the individual.

⁵ During the same period, the average return of the income pension system has been 3.0%.

In order to raise the citizen's awareness of the pension issue, every income-earner and pensioner in the country receives the so-called '*orange envelope*' from the pension authority every year. Describing how the system works, what pension benefits the individual can expect and how the amount varies with her or his choice of retirement age, it helps people decide how long they need to remain income earners and how much they need to save on their own. To make the information about a person's total annual pension more accessible, a website on the internet, minpension.se, delivers a picture of each person's total annual pension (national, occupational and private).

The defined contribution system has well-known advantages. The politicians cannot use the system for promises to buy votes and that strengthens the financial stability of the pension system. It is actuarial fair. Redistribution is made explicit, reveals who really benefits. It is financed by an earmarked 'tax' or contribution. This means that dead-weight losses probably are reduced.

The Swedish system is criticized because of low annual pensions. The replacement rates will be lower than what was promised in the old system. Nevertheless, we shall not forget that the old system was unsustainable. Probably, promised pensions would never have been paid out. The lower replacement rates are mainly due to increases in longevity. Due to increases in expected lifetime, the annuity divisor increases and so the annual pension will be lower. The reduction in benefits can be counterbalanced by delaying retirement. The current system empowers people to choose between consumption and leisure, provided that the labor market is flexible enough to accept older workers. Today, collective labor market agreements and the unwillingness of employers make it difficult for workers to continue working past the age of 67.

The direct link between contributions and benefits increases the incentives to work and to delay retirement. However, the range within this tight connection is effective is rather narrow; the guarantee pension and means-tested housing allowances in the lower part of the income scale and the ceiling in the upper part weaken these incentives.

The *guarantee pension* is a defined benefit system. General tax revenues in the state budget finance it. The pension pays a supplement on the top of the annuities from the notional and funded accounts if their sum falls below a certain level. At low levels of pension benefits, the offset is one-for-one but then declines. The guarantee pension is price-indexed. The pension can be received at the earliest from the age of 65. To receive a full guarantee pension, a person must have lived in Sweden for 40 years between 16 and 64 years of age.

The maximal guarantee pension is SEK 8,254 per month for an unmarried person and SEK 7,363 for a married person (2019). Pensioners with guarantee pension are also eligible for a

means-tested housing allowance. For immigrants arriving in Sweden at an age close to eligibility for a full guarantee pension, a social assistance for the elderly is granted. This is paid by the state.

Practically all employees are also covered by *occupational pensions* (gradually converging towards defined contribution systems from previous defined benefit plans) building on collective agreements between labor unions and employers' associations and drawn up in a very small number of occupational schemes. There are four main schemes: one for private sector white-collar workers, one for private sector blue-collar workers, one for central government employees and one for local authority and county council employees.

Everyone working for an employer who has signed a collective agreement – and thus not only union members – automatically has the coverage that has been agreed upon. Less than 10% of the total workforce works in companies that do not have such an agreement. The occupational pensions raise the level of compensation from the national scheme and are important to high earners in particular, since most of the plans replace earnings above the capped ceiling in the national scheme. Real wages have increased over time and therefore an increasing proportion of workers have wages above the ceiling.

The contribution rate is 4.5% of earnings up to the social insurance ceiling and 30% of earnings above the ceiling. The Swedish wage structure is compressed. An additional levelling takes place by taxes and income transfers. This levelling out is counteracted by designing pension agreements that provide benefits above the ceiling.

Before the year 2015, *private savings in pension insurance* were tax deducted (up to SEK 12, 000 per year). Without tax deduction, the saving has been reduced.

Sweden's government does not provide widows' pensions. New family pension regulations were brought into force in 1990. The *widow's pension* was gradually repealed. The proportion of gainfully employed women had greatly increased. Families had become smaller due to a reduced birth rate. Divorces had become more frequent and cohabitation a more common way of starting up a family. That the growing demand for equality between men and women required a gender-neutral survivors' pension was also evoked as a means to bring about the demise of the widow's pension. Probably reduction of rapidly growing expenditures was the most important motive behind the reform. In any case, to opt for a full and long-lasting cover would not suit the Swedish society where female labor participation is high and both men and women are supposed to support themselves.

The former widow's pension was a defined benefit system financed by general taxes, thus subsidizing married persons and unequal matches, transferring means from single to couples.

In addition, two-earner families subsidized one-earner families that got the same benefit for only one contributive member. Widows' benefits also act as work disincentives.

Social insurance gives economic incentives, causing behavioral changes and adaptation even when the benefit supposedly comes into effect only far into the future. There was a marked increase in the number of couples getting married before the end of 1989. If they had children together, they could secure the right to a widow's pension. Entry into marriage reflects a demand for survivors insurance up to 50 years before expected payout, especially among couples with high husband mortality risks. These responses demonstrate a high degree of forward-looking behavior (Persson 2015).

The gender gap in pensions

The DC design implies a direct link between contributions and benefits resulting in unequal outcomes for men and women as long as differences remain in men and women's working careers. The Swedish Ministry of Health and Social Affairs (2016) has examined the gender gap in national and total pensions. Individual pensions are included in Statistics Sweden's records. It turns out that the gender gap in earnings-related national pension is 34%. The guarantee pension to those who do not have any earnings-related pension or just a low one reduces the gap to 27%. When also housing allowance and widow's pension (the widow's pension was repealed in 1990 and is phasing out) are added, the gap falls to 17%. The occupational pensions increase the gender gap to 27%. That is because more men than women have income above the capped ceiling in the national pension system (see table 7).

Table 7: The gender gap in pension income for persons older than 65, Sweden

Income	Gender gap in percent
National earnings-related pension	34
+ the guarantee pension	27
+ widow's pension	20
+ housing allowance	17
+ occupational and private pension	27

Source: SCB, STAR-material 2013, Swedish Ministry of Health and Social Affairs, 2016.

The percentages reveal the gender gap of *current* pensioners⁶. Mainly they belong to the old pension system and receive benefits that are determined by the old rules. The old national system consisted of a flat-rate benefit and the earnings-related ATP where the benefit was determined by a person's 15 best-paid years up to a ceiling.

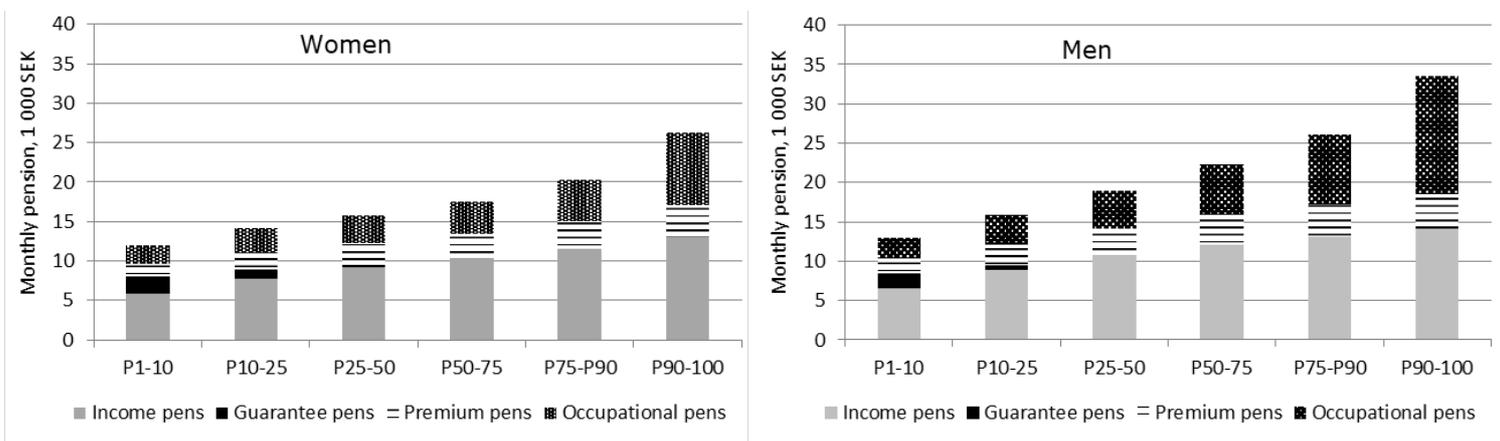
⁶ In 2019 the guarantee pension level was increased and the maximum housing allowance was raised from 5 560 SEK/month to 6 540 SEK/month.

Thirty years of contributions were enough for a full pension. Apart from redistributing from workers with many years in the labor market and flat life-earnings profiles (usually blue-collar workers) to people with fewer working years and steep earnings profiles (white-collar workers), women in typical low-wage occupations got least benefit out of participating in ATP. For each Swedish crown they had paid in to ATP, they got back less than any other group (Ståhlberg 1989, 1995a).

How might pensions evolve in the new system? It is quite straightforward to analyze the gender differences of today's pension payments, as they are included in Statistics Sweden's records. It is much more complicated to analyze future pension payments. Predictions of future outcomes are always uncertain. The Swedish Social Insurance Inspectorate (ISF) has predicted future pensions of persons born between 1985 and 1990 e.g. those who are between 29 and 34 years old today. The study builds on longitudinal register data from Statistics Sweden and the Swedish Pensions Agency. Future pension contributions for national and occupational pensions are based on earnings for persons born between 1938 and 1990. Real wages have increased over time and therefore, an increasing proportion of workers have earnings above the ceiling in the national pension system. Occupational pensions have therefore become more important, as they entitle individuals to pension benefits for incomes above the ceiling. Figure 10 shows estimated pensions for individuals born 1985 – 1990.

The gender differences of the total pensions will be similar to those observed today. The gender gap is predicted to decrease, but women will receive lower pensions than men also in the future. For older cohorts the gender difference in total pensions is mainly explained by the gender differences in national pensions. For younger cohorts it is mainly the occupational pensions that explain the gender difference (ISF 2017, Sjögren-Lindquist and Säve-Söderbergh 2018).

Figure 10: Estimated pensions for individuals born 1985 – 1990. Percentiles, women and men, Sweden



Source: Sjögren Lindquist and Säve- Söderbergh (2018)

What affects the gender gap?

Labor market behavior, the design of national and occupational schemes and individual savings determine the gender gap in pensions. DC pensions reflect the income differences in men's and women's entire working life in the labor market. The guarantee pension, the housing allowance and the social assistance for elderly work as a safety net for those with no or low earnings-related pensions. The national pension contains pension credits for child years, the divisor is sex-neutral and premium pension contributions can be transferred between spouses or a survivor's cover can be chosen within the premium pension.

Different labor market behaviour affects the gender gap.

The Swedish female labor force participation rate is high by international standards and almost as many women as men work. In 2018, the labor force participation rate among men 16-64 years old was 85.9% and among women 82.4%. Individual taxation since early 1970's, a generous parental leave system first introduced in 1974 and then extended through several reforms, together with subsidized high quality childcare and local municipal care for elderly, have facilitated women's participation in the labor market. Employment among married women would have been ten percentage points lower in 1975 if the 1969 statutory income tax system (the average tax rate facing the homemaker was a function of the income of the husband) still had been in place in 1975 (Selin 2014). Parental leave is associated with increases in women's employment, but with reductions in their relative wages at extended durations. Long periods of absence from the workforce might have a negative impact on women's work careers through human capital depreciation or signaling effects, by generating negative expectations among employers about women's career commitment after having children (Evertsson 2014, Albrecht et al. 1997, Ruhm 1998, Waldfogel 1998).

Parental leave consists of 16 months of paid leave out of which 13 months are given at 80% wage replacement rate and three months at a flat rate. Three months are earmarked for each parent, the so-called daddy quotas, as means for increasing fathers' involvement in raising children. If not taken, this leave period cannot be transferred to the other parent. There is a maximum level of compensation from the social insurance. Nevertheless, employers top up the level to 90 or 100% of the wage, also if the employee's earnings exceed the cap level in the social insurance. Parents can enroll their child in childcare from the day the child turns one and the municipalities are required by law to offer a place at a daycare center. Elderly care has been a municipal task for many decades.

Since the introduction of the pension reform, more than 20 years ago, men's and women's work lives have been more equal but women's earnings and pensions are still lower. Men and women make different educational and occupational choices. Women use more time for

cares for children and elderly parents and thus more often experience interrupted working careers and more often work shorter hours in paid work. 30% of all employed women work part-time compared to 12% of men (those with less than 35 contracted hours per week are classified as part-time workers). "Family or personal activities" are the most frequently reported reason for working part-time among women (Eurostat, Wennemo Lanninger and Sundström, 2014). Women take 72% of the parental leave (93% in 1989) (Swedish Social Insurance Agency, 2018). Having children hurt women's careers. It turns out from empirical studies that the career of husband and wife is quite similar until the arrival of children. Women experience significant reductions in labor market following the birth of children, while their male partners experience no such income drops. This '*child penalty*' has recently been documented in a variety of countries such as Denmark, Norway, Sweden, the United States and the United Kingdom (Angelov et al 2016, Lundborg et al. 2017, Kleven et al. 2018). Andresen and Nix (2019) show results that suggest that subsidized early childcare reduces the child penalty for mothers whereas paternity leave use shows no such impact.

The Swedish labor market is segregated (Jonung 1998). Women work in lower paid occupations as compared to men. After controlling for gender differences in observed individual and job characteristics, women's hourly earnings are about 95% of men's.

The design of national and occupational schemes affects the gender gap.

DC pensions reflect the income differences in men and women's entire working life in the labor market. The guarantee pension, in particular, contributes to level out gender differences in total pensions. Women are the majority of those who receive a guarantee pension or some part of it. About half of the female pensioners get this in comparison with 15% for men (Swedish pensions Agency, 2018). 6% of women and 2% of men have only the guarantee pension from the national pension system (The Ministry of Health and Social Affairs, 2016).

Indexation of the guarantee pension plays an important role in determining the welfare of women. The guarantee pension is price-indexed. Outgoing benefits from the NDC pension are indexed by the growth rate in average wages (with a deduction for the 1.6%). If the growth rate is positive, price indexation makes the guarantee pension fall behind the standard of living of the working generation and those with earnings-related pensions. If the object is to avoid poverty, price indexation meets that purpose. However, if poverty is defined in relative terms, wage-indexation is needed. The construction of the basic cover is a balance between an adequate pension level and the incentives to work in the labor market. There are high marginal effects in the lower part of the income scale.

The housing allowance is means-tested. 75% of those who get a housing allowance are women. About 20% of women and 8% of men receive housing allowance. Just a very small part (1%) gets social assistance for the elderly.

Table 8 shows average monthly incomes for current men and women older than 65. The basic cover (guarantee pension, housing allowance and social assistance for the elderly) together with the income tax reduce the differences in total pension incomes. (See also table 8 and figure 10). Guarantee pensions, widow's pension (is phasing out) and housing allowance provide a substantial decrease in gender difference.

Table 8: Average monthly pension incomes for men and women, Sweden, in SEK

Monthly pension incomes	Men	Women	Men - Women
Income-related national pension	13,200	8,700	4,500
Occupational and private pensions	6,200	3,100	3,100
Capital income	4,800	3,000	1,800
Wage income	2,300	1,200	1,100
Total	26,400	16,100	10,300
Housing allowance	200	500	-300
Guarantee pension	200	1,100	-900
Widow's pension	0	900	-900
Income tax	-6,900	-3,900	-3,000
Disposable income	19,900	14,700	5,200

Source: The Ministry of Health and Social Affairs (2016).

Parents with young children are apportioned a fictive income for the calculation of pension credits according to one of three options, from which the custodian, who can be either the mother or the father, may choose the one that is most advantageous to her or him. The credit is paid also if the parent continues to work in the labor market. The three options are: (1) the income of a parent having young children is topped up to 75% of the average pension qualifying income of all those insured. (2) The income determining parental leave pay becomes the pension qualifying income. (3) The parent is credited with a minimum pension credit equal to one income base amount (SEK 64,400). Credits for having children are paid until youngest child is four years old, max four years per child.

The impact of part-time work on pensions appears to be moderate as long as the duration of part-time work is moderate. In studies based on a comparison of typical cases, the total pension is just a few percent lower for a woman who works part-time for ten years (when having small children) and full time the remaining years than for a woman who works full-time all her working life (Wennemo Lanninger and Sundström 2014, Ministry of Health and Social Affairs 2016). Broadly speaking, parental leave pay and pension credits for children

mainly compensate for loss of income during the years with small children. However, wages are affected in the long run by part-time work. More work experience leads to higher wage growth whereas time away from work has the opposite effect.

Within the premium pension (FDC) system, you are free to transfer pension contributions to your spouse or registered partner or to choose a survivor's cover reducing the gender gap in pension incomes. Both can offer income protection when a spouse passes away. Transfer of pension contributions gives, as well, income protection in the event of a divorce or separation. Both choices are associated with an economic cost in terms of a reduction of the pension income by 6%, the argument being that most transfers will be from men to women, who on average live longer. The choices would lead to a deficit for the premium pension system if the reduction were not made. The 6% are redistributed as inheritance gains.

To transfer pension contributions or choose a survivor's cover have turned out not to be that popular. So far, very few have done so. 99.5% do not transfer their premium pension contributions to their spouse regardless of own income, income difference between the spouses or age. 65% of men and 83% of women who are married or cohabiting do not choose a survivor's cover (Säve-Söderbergh 2017).

According to the Ministry of Health and Social Affairs (2016), 9,171 couples have chosen to transfer pension contributions. 98% went from men to women and the average amount was just over SEK 7,800 (see table 9).

Table 9: Number of persons transferring premium pension rights and average amount, 2013, Sweden

persons transferring premium pension rights	Number	Average amount, SEK
Man to woman	8,975	7,854
Woman to man	186	7,580
Man to man	6	8,953
Woman to woman	4	9,641
Total	9,171	7,841

Source: The Ministry of Health and Social Affairs (2016)

It could be that the small enthusiasm for sharing has to do with information problem. However, there are factors speaking against voluntary sharing. No clear evidence exists that altruism is a dominant characteristic of real-world families. It is less likely that people will voluntarily opt to share during their working careers in a society with a high divorce rate (Sweden). When individuals are offered tax-financed income-tested elderly care or special allowances for pensioners with very low incomes, many would opt not to share – not as long as part of the costs to support the elderly involve third-party payments. Nor would couples

with significantly different ages and earnings; sharing risks their ability to finance their retirement. This is most clear in the case of a one-earner couple. When the oldest and highest paid earner retires only half of the benefits is available until the younger partner has reached retirement age. The premium pension only constitutes a small source of income for many persons but is expected to become more important for future generations.

Klerby et al. (2013) have simulated sharing in NDC pension schemes using Swedish data and present support in favor of the claim that policy-makers should consider mandatory sharing. Sharing can ensure a degree of redistribution within the family and does not burden others. However, it will not reduce the gender differences in educational choices, occupational choices or working hours what is the most pronounced impact in terms of attaining a lower gender gap in pensions. With sharing married women's motivation to take paid work might be lower.

Mandatory sharing may well become a disincentive to marriage and result in more singles and as a consequence perhaps fewer children, or result in other forms of cohabiting and more of premarital settlements.

Various pension outcome for women with varying behaviour profiles in relation to the outcome for full career men.

Pension benefits based on defined contributions with individual accounts result in unequal outcomes for men and women as long as real differences remain in the paid work of men and women. The Swedish DC plan from 1998 has retained special redistributive features favoring women reducing the gender gap in pension outcomes: the minimum pension guarantee, the pension credits for child rearing and mortality rates calculated across genders. The effects of the new pension system's design on the outcome for women and men with different labor force participation and earnings have been quantified in Ståhlberg et al. (2005) and table 10 gives a comprised result of that analysis. It shows the outcome for women compared to that of men. Four measures of outcome are used: annual annuity, lifetime annuities, replacement rate, defined as annual benefit in relation to final wage, and rate of return on lifetime contributions, calculated as present value of expected lifetime benefits divided by present value of lifetime contributions.

The following table shows the outcome of the national pension for four groups of women with different education and labor market behavior compared to a man working full-time throughout all his life. The four types of careers are chosen so that they represent a majority of women: (1) the full-time career woman with the same labor force participation (apart from parental leave) and retirement age as men; (2) the full-time/part-time career woman, who works full-time until having children, alternates between parental leave and part-time as long as the children are small and then returns to full-time work; (3) the woman who participate in

the labor force during ten years early in life, before marriage and birth of children. The 10-year woman is an exception in Sweden. The case is chosen to illustrate how those with no pension of their own fare in the new system; (4) the part-time career woman who works part-time for most of her career. All women are assumed to have two children and to stay home with parental leave. For each case, a wage profile is constructed using earnings data from Statistics Sweden for five levels of education; no upper secondary school, upper secondary school, undergraduate education two years or less, undergraduate education of more than two years, and postgraduate education. The same calculations are made for a man working full time and are produced for the five levels of education.

Table 10: Various national pension outcome for women with varying behavior profiles in relation to the outcome for full career men, Sweden

Various national pension outcome	Full career woman / Full career man	Full time / Part time woman / Full career man	10-year woman / Full career man	Part time woman / Full career man
Annual own annuities	80-100	80*	35-40	60-70
Lifetime annuities	95-105	90-95	40-45	70-75
Replacement rate	100-120	100-120	120-145	100-125
Rate of return	115-130	120*	310-400	120-130

Note: The first figure in the interval shows those with no upper secondary school education, the last figure those with postgraduate education.

*The outcome is the same for all educational groups.

Source Ståhlberg et al. (2005)

Outcome varies between the four measures. It turns out that women receive lower annual benefits than men. When it comes to lifetime annuities the gender ratio are higher because of women's longer life span. The outcome for the '10-year-woman' shows the result of the guarantee pension. Any pension system having a tight link between contributions and benefits is likely to produce lower benefits for women. Despite their lower annuities, women have higher replacement rate and higher rates of return on lifetime contributions than men. The ceiling on benefits but not on contributions (nearly half the contribution rate is paid on income above the ceiling) means that high-income earners (more men than women) pay an extra tax and get a lower replacement rate and a lower rate of return than those with income below the ceiling.

Concluding remarks

- ❖ The most essential cause of the gender gap in pensions today as well as tomorrow is the differences in men and women's labor market behavior.
- ❖ The social insurance safety net with a minimum pension guarantee levels out and so is of vital importance for those with low or no earnings-related pensions.
- ❖ Parental leave pay and pension credits for child rearing mainly compensate for loss of income during the years with small children.
- ❖ Sharing can ensure a degree of redistribution within the family without third-party payments. So far, extremely few have done so.
- ❖ Tax and social insurance systems give rise to incentives that affect decisions about paid work, care activities and leisure.

3.3.5 Discussing policies

Participants were invited to discuss in depth the Swedish and German experiences, and focused on the characteristics and conditions that made successful measures possible. For the Swedish system, it seemed especially noteworthy that the survivor's (widow's) pension had been phased out already since 1990. It was then discussed that the context – an individual minimum pension as well as a political consensus – influenced this policy. The question remained if pension systems should compensate or reflect the unequal patterns of labour distribution. Possibly, more incentives within the labour market to share work more equally could improve the pension incomes of women. Wage-indexed pensions were seen as better than price-indexed. In view of the German experiences, both the pension credits for care for dependents and the automatic splitting in case of divorce for the marriage years were discussed as potentially good examples for reducing the gender gap in pensions. Occupational pension provisions and the private pension system play a less important role for women than men in Germany.

3.4 Food for thought: Trust in public pension systems



One aspect was repeatedly mentioned by researchers and experts, even before but also during the workshop: trust in the state pension system seems to be low, especially for younger people, who often think they will not even get a pension. To secure own independence in old age in employment-dependent pension systems however, contributions throughout the life cycle are needed. Therefore, participants of the workshop were invited to reflect on two questions during the working lunch break:



- ❖ How can we include young and sceptical persons better in communication of and in old-age security?
- ❖ How can we strengthen trust in public pension systems?

The collected inputs span from individual young and old peer counsellors to unconventional awareness campaigns to counter myths and disinformation and inform on the financial sustainability of the system and the individual possibilities to secure one's own pension.

Figure 12: Documentation of inputs to "food for thought" questions

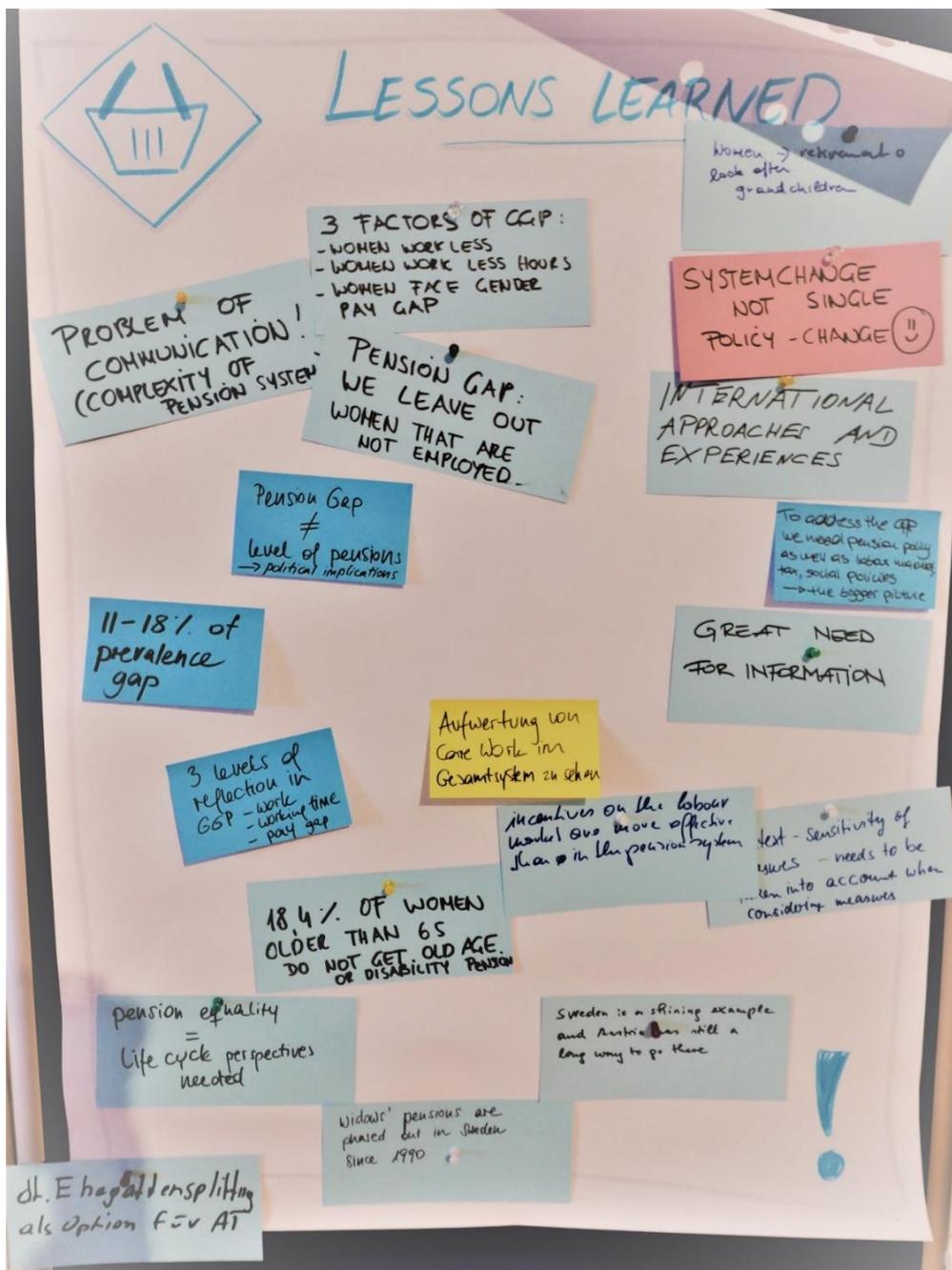


3.5 Lessons learned



Throughout sessions I and II, participants were invited to take notes of eye-opening, new or important insights. These were collected and are documented on the following figure. The need for communication and information, the gaps in pension amounts and pension coverage, the valorisation of care work in the pension system and incentives in the labour market were some of the key insights.

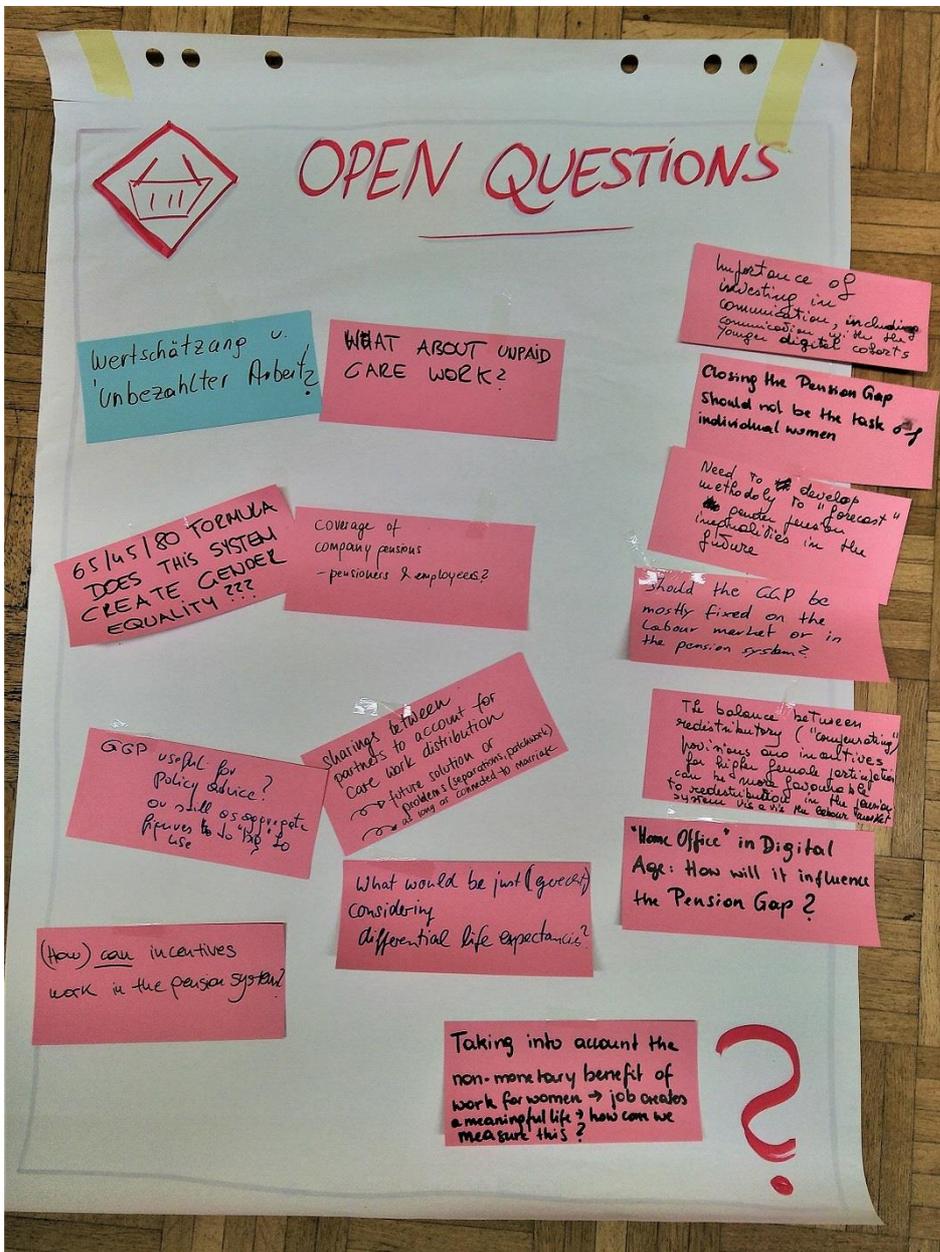
Figure 13: Flipchart Documentation of participants' lessons learned



3.6 Open questions

Participants were also invited to take note of their open questions, which are documented on the following picture. These aspects, that call for further reflection, research and strategies, include methods to forecast future pension (inequalities), the shift of responsibility away from individual women, the coverage of 2nd pillar pensions, the valorisation of (unpaid) care work, sharing accounts and pension systems in light of changing family forms, growing (and different) life expectancies and work patterns.

Figure 14: Flipchart documentation of participants' open questions



4 Reflecting and transferring to the Austrian context

Session III of the expert workshop took place on November 12, and included the Austrian stakeholders who participated in sessions I and II. It aimed to further reflect on the international perspectives while focusing on the transferability to the Austrian context in an interactive workshop format. The first round of discussion strived for a comprehensive collection of all ideas and inputs from all stakeholder on the following two questions **7**:

Which challenges and examples could be identified and be transferable to the Austrian context? What could be improved in the Austrian system?

A wide range of inputs were collected and noted, with every input being included in the collection. This first, open round of discussion documented all possibilities that the participants identified, without taking into account if they seemed practical or agreeable to all other participants. The inputs therefor stretch among a wide range of topics and suggestions (including two “*red lines*”, or anti-recommendations), showing varying level of detail and/or impact. As a broad collection, they served as groundwork for the following work, and also illustrate the multidimensional aspects of both the problem of and the possible solutions for reducing gender gaps in pensions (see figure 15 for the complete first round of collection).

7 *Note:* The second question was suggested by the participants of session III, since not all of them were able to participate in sessions I and II. To focus on recommendations and options for Austria, this second question was introduced to the discussion. Consequentially, the collection of options and recommendations includes not only direct transferables from the international examples, but were also inspired by the discussions around these as well as other international examples introduced by the national experts.

Figure 16: Clustering the topics

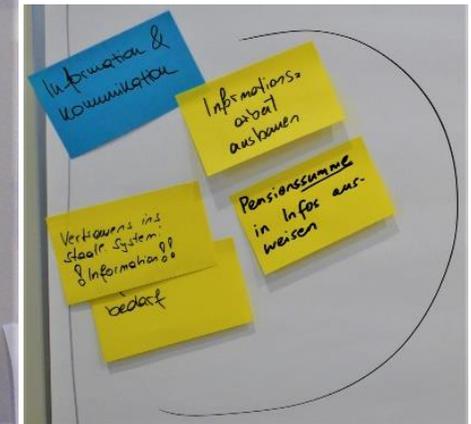
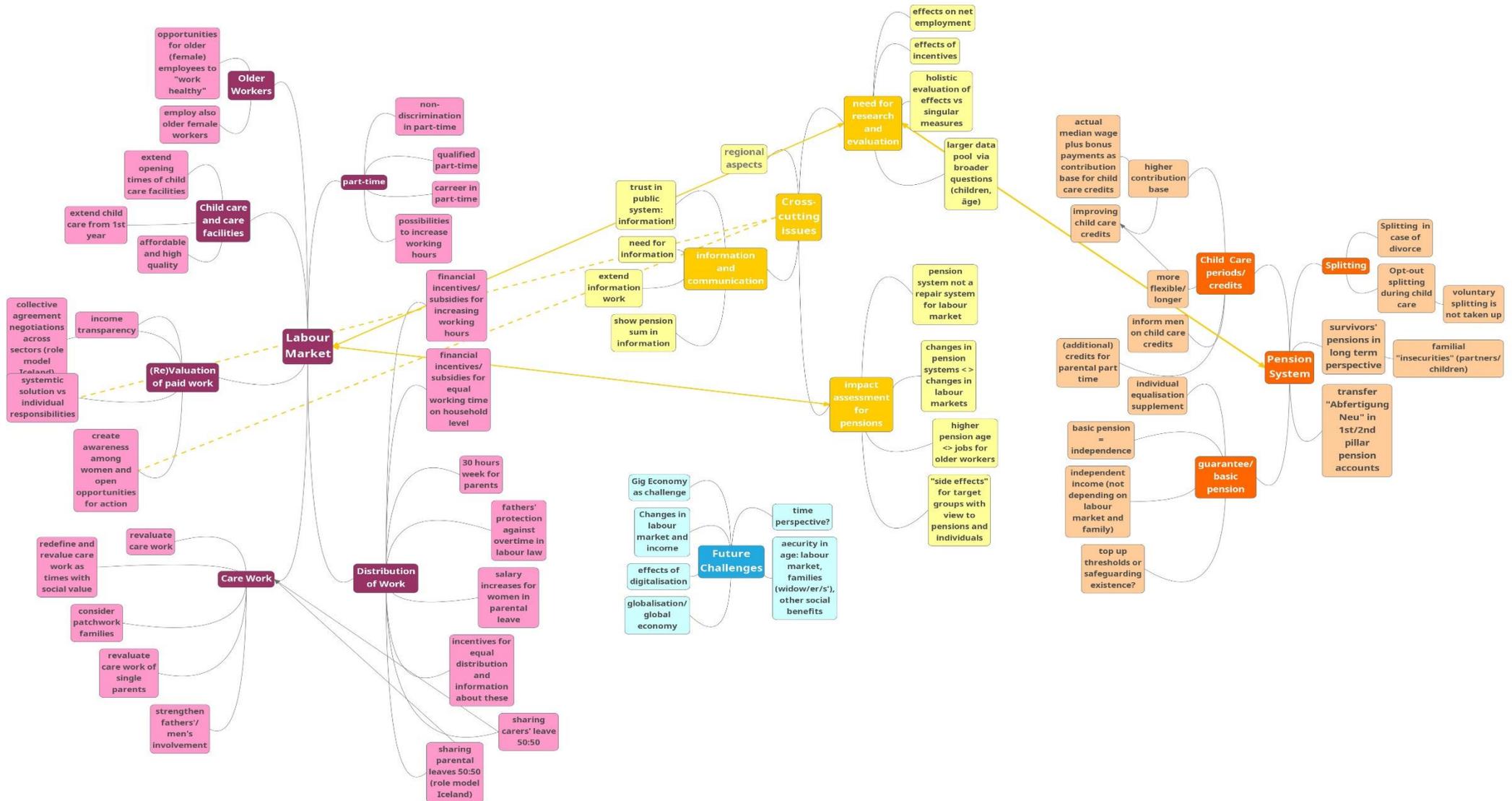


Figure 17: Clustered topics and possibilities for action to reduce the gender pension gap in Austria (translated)





4.2 In focus: Information and communication

After the clustering, the participants identified one cluster that seemed important and crucial to all of them. This cluster – information and communication – was then put to an in-depth reflection on which concrete options for actions could be identified to improve information and communication, which measures could have a short- or long-term perspective, and which potential stakeholders could be identified.

Figure 18: Documentation of the in-depth discussion on information and communication

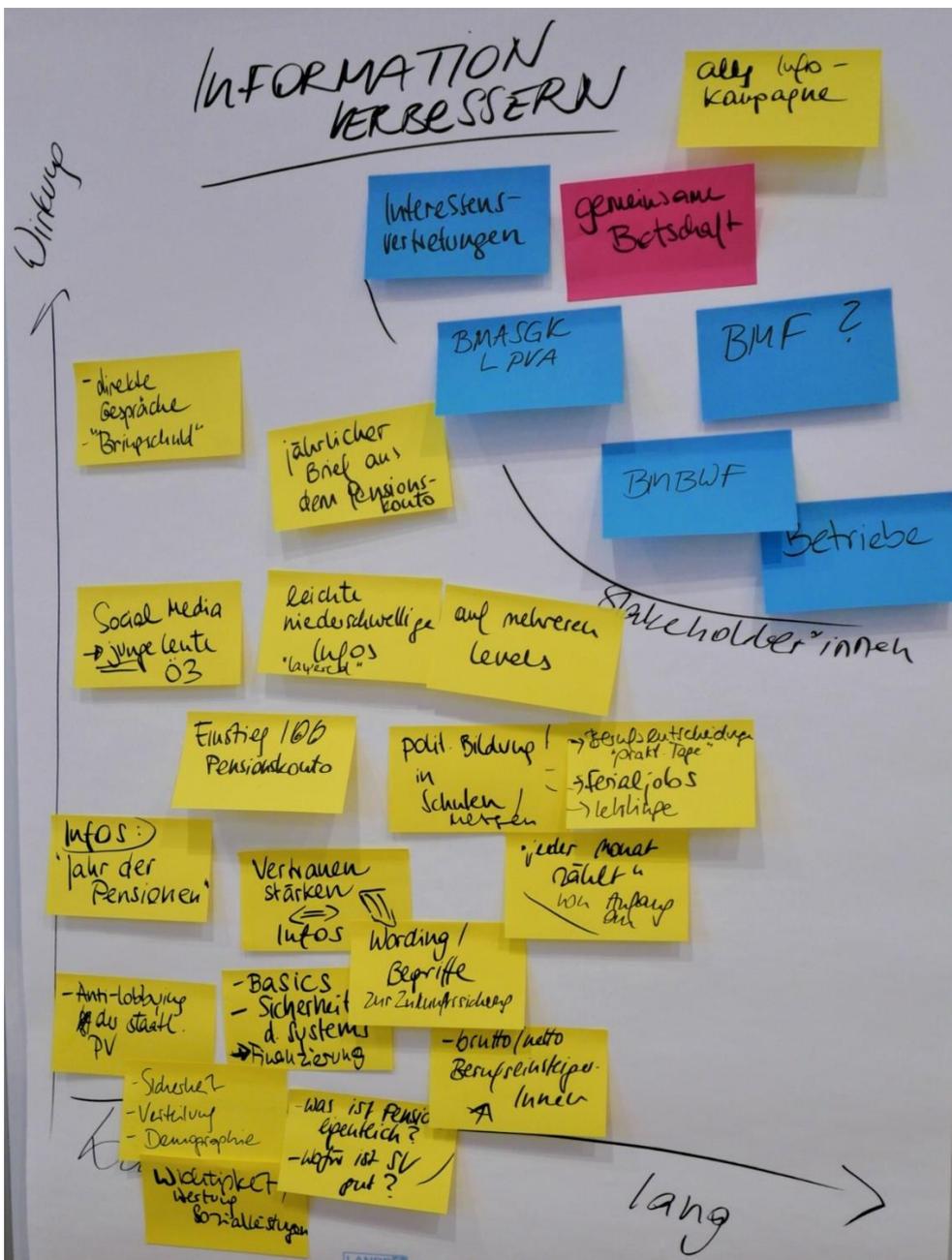
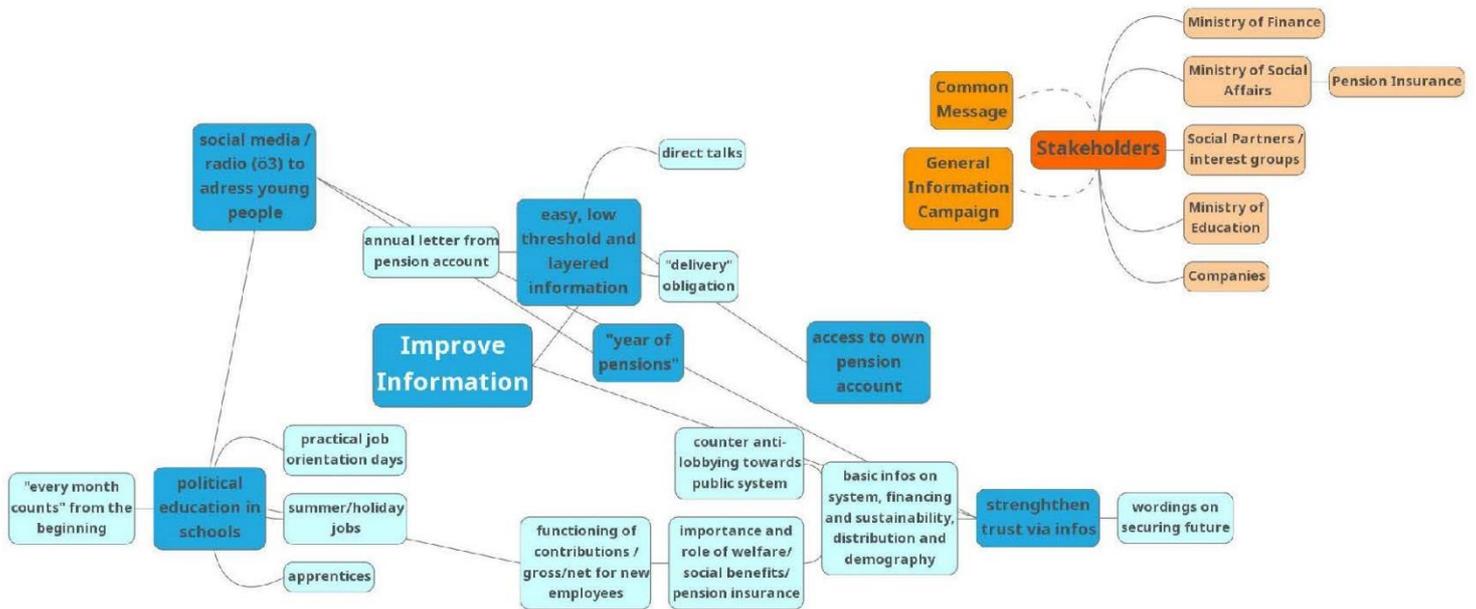


Figure 19: Possibilities for action to improve information (*translated*)



Improving information and communication, especially on the public pension insurance, was identified as one potential field for action to improve women’s pension and financial independence in old age. Improving information could include addressing young people in schools and at the beginning of their employment careers, by providing easy to understand information – in layers for more details – that is “*delivered*” rather than actively collected. Direct talks to inform and take a look into one’s own pension account but also strengthening the trust in the system were identified as possible measures, too. A general information campaign, e.g. “*a year of pensions*” with a common message of all stakeholders and in different media outlets, could be another part of improving communication.

5 References

List of Figures

Figure 1: Factors to determine the GGP and pension income	9
Figure 2: The overall earnings gap and the gender gap in pensions, EU28 (measured ten years apart: 2006 and 2016)	12
Figure 3: The decrease in the gender gap in pensions 2006-2017, EU-SILC	13
Figure 4: Main factors accounting for the explained part of the gender gap in own-pension income (2015; Pensioners 65+, SHARE data)	15
Figure 5: Mean years in employment of age groups, by sex, EU (SILC) countries, 2005 and 2015	16
Figure 6: Share (in %) of employees in age groups covered by employers' contribution. Mean for 11 (ECHP) countries.	17
Figure 7: Flipchart notes of discussion on methodologies	19
Figure 8: Gender gap in pensions, pensioners aged 65-79, 2009 and 2016 in %	27
Figure 9: Gender Pension Gap among new pensioners, 1980-2014, West and East Germany, without survivors' pensions, in %	27
Figure 10: Estimated pensions for individuals born 1985 – 1990. Percentiles, women and men, Sweden	37
Figure 11: Documentation of discussion German and Swedish policies	45
Figure 12: Documentation of inputs to "food for thought" questions	46
Figure 13: Flipchart Documentation of participants' lessons learned	47
Figure 14: Flipchart documentation of participants' open questions	48
Figure 15: Flipchart documentation of possible transferabilities and improvements	50
Figure 16: Clustering the topics	51
Figure 17: Clustered topics and possibilities for action to reduce the gender pension gap in Austria (<i>translated</i>)	52
Figure 18: Documentation of the in-depth discussion on information and communication	53
Figure 19: Possibilities for action to improve information (<i>translated</i>)	54

List of Tables

Table 1: Prevalence of pension payments, indicating the proportion of persons aged 65+ (in %) without pension receipts, Austria	10
Table 2: Gender Gap in Pensions: old-age pensions in Austria 2018, mean vs. median	11
Table 3: Means-Tested Top-Ups 2017	21
Table 4: Pension contributions and expenditure by sex	22
Table 5: Gross Average Pensions (14 payments/year), December 2018	23
Table 6: Share of total pension contributions, 2018, Sweden	31
Table 7: The gender gap in pension income for persons older than 65, Sweden	36
Table 8: Average monthly pension incomes for men and women, Sweden, in SEK	40
Table 9: Number of persons transferring premium pension rights and average amount, 2013, Sweden	41
Table 10: Various national pension outcome for women with varying behavior profiles in relation to the outcome for full career men, Sweden	43

Reference to Chapter 3.1.1

Betti, Gianni; Bettio, Francesca and Platon Tinios (2014): *Gender Equality Chapter for the 2015 SPC Pension Adequacy Report (country statistics)*. Report by the ENEGE network for the Equal Opportunity Unit, DG Justice. Roma: Fondazione G. Brodolini.

Bettio, Francesca; Tinios, Platon and Thomas Georgiadis (2018): *Future risks for gender equality in old age income security. Final SAAGE report*. Roma: Fondazione G Brodolini for the European Commission.

References to Chapter 3.3.3

Blank, Florian; Türk, Erik (2017): *Niedrigrenten, Mindestsicherung und Armutsgefährdung Älterer. Ein Vergleich zwischen Österreich und Deutschland (Teil 2)*. Soziale Sicherheit, 2017(9), S. 328-333.

BMAS (Bundesministerium für Arbeit und Soziales) (2016): *Ergänzender Bericht der Bundesregierung zum Rentenversicherungsbericht 2012 gemäß § 154 Abs. 2 SGB VI (Alterssicherungsbericht 2016)*. Berlin.

BMAS (Bundesministerium für Arbeit und Soziales), TNS Infratest Sozialforschung (2017): *Alterssicherung in Deutschland 2015 (ASID 2015)*. Endbericht. (Forschungsbericht 474/Z). München: TNS Infratest Sozialforschung.

BMAS (Bundesministerium für Arbeit und Soziales) (2019): *Sozialbudget 2018*. Berlin.

Börsch-Supan, Axel; Bucher-Koenen, Tabea; Goll, Nicolas Goll; Maier, Christina (2016): *15 Jahre Riester – eine Bilanz. Expertise für den Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung*. München: Munich Center for the Economics of Aging (MEA).

Brosius-Gersdorf, Frauke (2018): *Ausgleich in der gesetzlichen Rentenversicherung für Zeiten außerhalb von Beschäftigung, insbesondere bei Kindererziehung und Pflege von Angehörigen*. In Deutsche Rentenversicherung Bund (Hrsg.): *Die Angemessenheit der Altersrentensysteme*. Konferenz anlässlich der 40-jährigen Anwendung des deutsch-polnischen Abkommens über die Renten- und Unfallversicherung am 24. und 25. April 2017 in Warschau (DRV-Schriften, Band 114). Berlin: DRV.

Sachverständigenkommission zum Zweiten Gleichstellungsbericht der Bundesregierung (2017): *Erwerbs- und Sorgearbeit gemeinsam neu gestalten. Gutachten für den Zweiten Gleichstellungsbericht der Bundesregierung*. Berlin.

Deutsche Rentenversicherung (2018): *Versichertenbericht*. Berlin.

Deutsche Rentenversicherung Bund (2019): *Hinterbliebenenrente: Hilfe in schweren Zeiten*. Berlin.
https://www.deutscherentenversicherung.de/SharedDocs/Downloads/DE/Broschueren/national/hinterbliebenenrente_hilfe_in_schweren_zeiten.html

Fraser, Nancy (1996): *Gender equity and the welfare state. A postindustrial thought experiment*. Pp. 218-41 in *Democracy and difference: contesting the boundaries of the political*, edited by Seyla Benhabib. Princeton: Princeton University Press.

Frommert, Dina; Lizon, Marcel (2017): *Teilzeitarbeit neben Kindererziehung – Auswirkungen auf die gesetzliche Rente*. Deutsche Rentenversicherung, 72(3), 273-291.

Frommert, Dina; Strauß, Susanne (2013): *Biografische Einflussfaktoren auf den Gender Pension Gap – Ein Kohortenvergleich für Westdeutschland*. *Journal for Labour Market Research*, 36(2), S. 145-66.

Grabka, Markus M.; Jotzo, Björn; Rasner, Annika; Westermeier, Christian (2017): *Der Gender Pension Gap verstärkt die Einkommensungleichheit von Männern und Frauen im Rentenalter*. DIW Wochenbericht, 84(5), S. 87-96.

Hammerschmid, Anna; Rowold, Carla (2019): *Gender Pension Gaps in Europa hängen eindeutiger mit Arbeitsmärkten als mit Rentensystemen zusammen*. DIW Wochenbericht, 86(25), S. 440-47.

Hans-Böckler-Stiftung (2017): *Altersarmut muss nicht sein*. Böckler Impuls, 2017(18), S. 9.

Heien, Thorsten; Krämer Marvin (2018): *Lebensverläufe und Altersvorsorge der Personen der Geburtsjahrgänge 1957 bis 1976 und ihrer Partner (LeA)* (DRV Schriften, Band 115 und BMASForschungsbericht, Band 519). Deutsche Rentenversicherung Bund und Bundesministerium für Arbeit und Soziales. Berlin.

Möhring, Katja (2014): *Der Einfluss von Kindererziehungszeiten und Mütterrenten auf das Alterseinkommen von Müttern in Europa*. *Vierteljahreshefte für Wirtschaftsforschung* 83(2):139-55.

Möhring, Katja (2018): *Is there a motherhood penalty in retirement income in Europe? The role of lifecycle and institutional characteristics*. *Ageing & Society* 38(12):2560-89.

Türk, Erik; Blank, Florian; Logeay, Camille; Wöss, Josef; Zwiener, Rudolf (2018): *Den demografischen Wandel bewältigen: Die Schlüsselrolle des Arbeitsmarkts (IMK Report 137)*. Düsseldorf: Institut für Makroökonomie und Konjunkturforschung (IMK) der Hans-Böckler-Stiftung.

Westermeier, Christian; Grabka, Markus M.; Jotzo, Björn; Rasner, Annika (2017): *Veränderung der Erwerbs- und Familienbiografien lässt einen Rückgang des Gender-Pension-Gap erwarten*. DIW Wochenbericht, 84(12), S. 235-43.

References to Chapter 3.3.4

Albrecht J W, Edin P A, Sundström M and S B Vroman (1997): *Kvinnor och mäns löner – förvärvsavbrottens betydelse*. in Persson I and E Wadensjö (eds), *Kvinnor och mäns löner – varför så olika?* *Kvinnomaktutredningen*, SOU 1997:136, Stockholm.

- Andresen M E and Nix E (2019): *What causes the child penalty? Evidence from same sex couples and policy reforms*. Working paper, Statistics Norway, University of Southern California..
- Angelov N, Johansson P and E Lindahl (2016): *Parenthood and the Gender Gap in Pay*. Journal of Labor Economics, 34 (3): 545-579.
- Evertsson M (2014): *Föräldraledighet och karriär – kvinnors och mäns lön efter en föräldraledighet*. in Boye K and M Neremo (eds), *Lönsamt arbete- familjeansvarets fördelning och konsekvenser*, SOU 2014:28, Stockholm
- ISF. The Swedish Social Insurance Inspectorate (2017): *Kvinnor och mäns pensioner. En analys av skillnader och spridning i pensionsinkomster i dag och i framtiden* (Women's and men's pensions: An analysis of gender differences and pension dispersion today and in the future), Rapport 2017:8, Stockholm.
- Jonung C (1998): *Occupational segregation by sex and changeover time*. in Jonung C and Persson I (eds), *Women's Work and Wages*, Routledge research in gender and society.
- Klerby A, Larsson B and E Palmer (2013): *To share or not to share: That is the question*. in Holzman R, Palmer E and D Robalino (eds), *Nonfinancial Defined Contribution Pension Schemes in a Changing Pension World*, Volume 2, World Bank.
- Kleven H and Sögaard, J E (2018): *Children and gender inequality: Evidence from Denmark*. Tech. rep., National Bureau of Economic Research.
- Kruse A and Ståhlberg A (2013): *Welfare Economics. Theory, empirical results and the Swedish experience*. Studentlitteratur, Lund.
- Könberg B, Palmer E and A Sundén (2006): *The NDC reform in Sweden: The 1994 Legislation to the Present*. in Holzmann R and Palmer E (eds) *Pension Reform*, World Bank.
- Lundborg P, Plug E and A Wurtz Rasmussen (2017): *Can women have children and a career? IV evidence from IVF treatments*. American Economic Review 107(6): 1611-1637.
- Persson P (2015): *Social Insurance and the marriage market*. Journal of Political Economy. Accepted in November 2018.
- Ruhm C (1998): *The economic consequences of parental leave mandate: Lessons from Europe*. Quarterly Journal of Economics, 113(1): 285-317.
- Selin, H (2014): *The rise in female employment and the role of tax incentives: an empirical analysis of the Swedish individual tax reform of 1971*. International Tax and Public Finance, 21(5), 894-922.
- Sjögren Lindquist G and Säve-Söderbergh J (2018): *Kvinnors och mäns livsval relaterade till ojämlikhet i pensioner – problembild och lösningar*. Ekonomisk Debatt, 46 (4),54-66.
- Ståhlberg A (1995a): *Women's Pensions in Sweden*. Scandinavian Journal of Social Welfare, 4 (1): 19-27.

Ståhlberg A (1995b): *Pension reform in Sweden*. Scandinavian Journal of Social welfare, 4 (4): 267-273.

Ståhlberg A (1990): *ATP-systemet från fördelningspolitisk synpunkt*. in Allmän pension. Expertrapporter. Huvudbetänkande av pensionsberedningen, SOU 1990: 78. Stockholm 1990.

Ståhlberg A (1989): *Redistribution Effects of Social Policy in a Lifetime Analytical Framework*. in Gustafsson B and A Klevmarcken (eds), *The Political Economy of Social Security*, Amsterdam: North-Holland.

Ståhlberg A, Kruse A and A Sundén (2005): *Pension design and gender*. European Journal of Social Security, 7(1): 57-80.

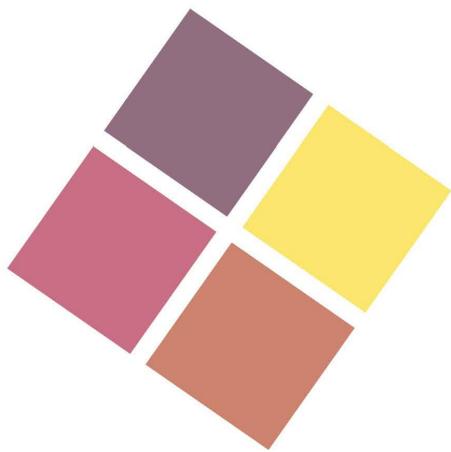
Swedish Pensions Agency (2018): *Orange Report*. Stockholm.

Säve-Söderbergh J (2017): *Makar som delar på kakan – en ESO-rapport om jämställda pensioner*. Rapport till Expertgruppen för Studier i Offentlig. Ekonomi, 2017:6, Ministry of Finance, Stockholm.

The Ministry of Health and Social Affairs (2016): *Jämställda pensioner?* Ds 2016:19, Stockholm.

Waldfoegel J (1998): *Understanding the "family gap" in pay for women with children*. Journal of Economic Perspectives 12(1): 137-156.

Wennemo Lanninger A and Sundström M (2014): *Part-time work, gender and economic distribution in the Nordic countries. A descriptive report to NIKK*.



TRAPEZ

Transparente Pensionszukunft

Sicherung der ökonomischen
Unabhängigkeit von Frauen im Alter

Ein Kooperationsprojekt des Bundeskanzleramts,
des Bundesministeriums für Arbeit, Soziales, Gesundheit und Konsumentenschutz,
der Forschungs- und Beratungsstelle Arbeitswelt und
des österreichischen Instituts für Wirtschaftsforschung.
Ko-finanziert durch das Programm „Rechte, Gleichstellung und Unionsbürgerschaft“
(2014-2020) der Europäischen Union.

 **Bundeskanzleramt**
Bundesministerin für Frauen,
Familien und Jugend

 **Bundesministerium**
Arbeit, Soziales, Gesundheit
und Konsumentenschutz

FORBA

WIFO

