

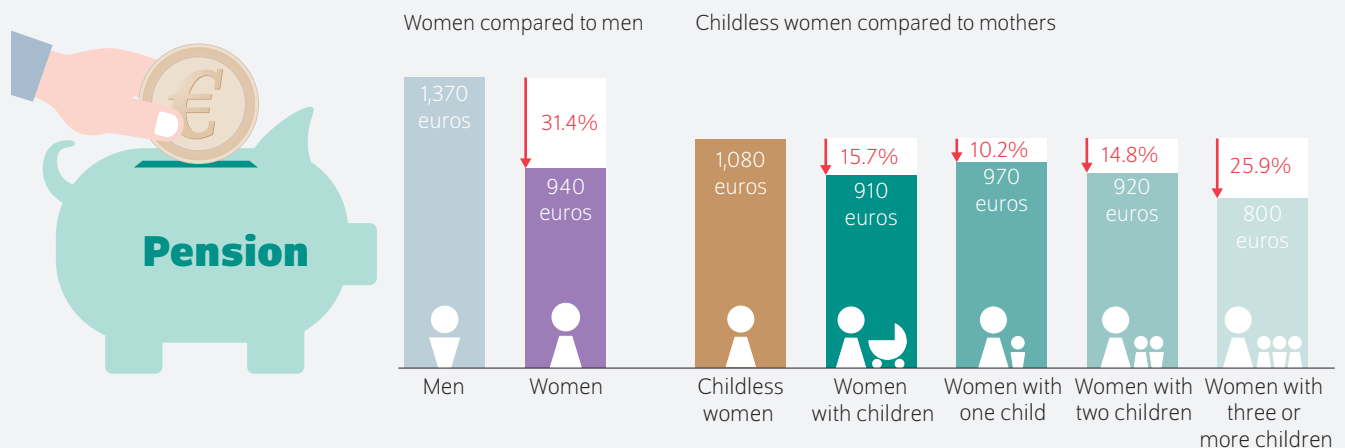
AT A GLANCE

# The gender pension gap grows the more children a woman has

By Peter Haan, Michaela Kreyenfeld, Sarah Schmauk, and Tatjana Mika

- Women's lower earned income leads to lower pension entitlements; mothers in particular have significantly lower entitlements
- Data from the German Pension Insurance on 1952 to 1959 cohorts show differences in pension entitlements at age 60
- The pension-related childcare credits should counteract mothers' low pension entitlements, but generally only do so for the first few years following birth
- Especially in the west, pension entitlements decline considerably as the number of children increases, while in the east, mothers have higher pensions than childless women
- Pension-relevant measures are necessary but not enough; more important to reduce future gender pension gaps are measures that support the compatibility of work and family life

## Women's, and especially mothers', pension entitlements are considerably lower than men's



Source: Authors' calculations using the VSKT 2020. Note: Includes the earned monthly pension entitlements up to age 60 of women (and men) in 2020. © DIW Berlin 2025

### FROM THE AUTHORS

*“Women have less protection from statutory pension insurance than men. Differences in pension entitlements due to past decisions can be partly mitigated by pension-related childcare credits. Additionally, tax and labor law measures are necessary to make it easier for mothers to work.”*

— Peter Haan —

### MEDIA



Audio Interview with Peter Haan (in German)  
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# The gender pension gap grows the more children a woman has

By Peter Haan, Michaela Kreyenfeld, Sarah Schmauk, and Tatjana Mika

## ABSTRACT

The gender pension gap, the difference in pension entitlements between men and women, is 32 percent for 60-year-olds according to data from the German Pension Insurance (*Deutsche Rentenversicherung*). In addition, there is a considerable motherhood pension gap: Statutory pension entitlements for mothers and childless women differ greatly. Pension-related childcare credits, which were introduced in 1986 and have been modified many times since, counteract this gap. Recognition of pension-related childcare credits reduce the difference in pension entitlements between childless women and mothers considerably, albeit only in the immediate years following the birth of a child. For the birth cohorts from 1952 to 1959, the motherhood pension gap for 60-year-olds in western Germany is 26 percent; pension-related childcare credits could not close the gap. Further social and tax policy measures supporting an equal division of care work and paid work are necessary. In addition to expanding public child care, reforms to joint taxation of married couples with full income splitting (*Ehegattensplitting*) and reducing subsidies for jobs with few working hours (*Minijobs*) as well as a restructuring of the workplace to be more caretaker-friendly are required.

On average, women earn significantly less on the labor market than men. In 2024, the gender pay gap, the difference in the gross hourly wage between men and women, was 16 percent in Germany.<sup>1</sup> As an individual's pension entitlements from the German statutory pension insurance scheme depend directly on their wages, wage differences impact differences in pension entitlements. This difference in pension entitlements is known as the gender pension gap.<sup>2</sup> However, wage differences are only one factor giving rise to the gender pension gap. The frequent employment interruptions of women, for example for childcare or informal care provision, labor market segregation,<sup>3</sup> and differences in part-time work, which can be attributed to gender-specific social norms and stereotypes, are further contributing factors.<sup>4</sup>

Pension-related childcare credits, which were introduced in 1986 and have been expanded through multiple reforms, are meant to increase mothers' individual pension entitlements. In this way, child-raising periods should reduce the gender pension gap as well as the motherhood pension gap, the difference in pension entitlements between mothers and women without children, over the long term.<sup>5</sup>

This Weekly Report uses the *Deutsche Rentenversicherung's* *Versichertenkontenstichprobe* (VSKT, insured persons account sample) to investigate differences in statutory pension

<sup>1</sup> Cf. Statistisches Bundesamt, "Gender Pay Gap 2023: Frauen verdienten pro Stunde 18 Prozent weniger als Männer," press release no. 027 from January 18, 2024 (in German; available online). Accessed on February 18, 2025. This applies to all other online sources in this report unless stated otherwise.

<sup>2</sup> Cf. Markus M. Grabka et al., "Der Gender Pension Gap verstärkt die Einkommensungleichheit von Männern und Frauen im Rentenalter," *DIW Wochenbericht* no. 5 (2017) (in German; available online); Peter Haan, Anna Hammerschmid, and Carla Rowold, "Geschlechtsspezifische Renten- und Gesundheitsunterschiede in Deutschland, Frankreich und Dänemark," *DIW Wochenbericht* no. 43 (2017): 971–977 (in German; available online).

<sup>3</sup> Labor market segregation refers to the concentration of employees with certain characteristics (primarily gender) in specific branches and occupational groups.

<sup>4</sup> Please note that pension entitlements can only be collected up until the upper contribution assessment ceiling. Without this, the gender pension gap would be even higher, as men's gross remuneration is more frequently over the threshold than women's.

<sup>5</sup> One regulation aimed primarily at increasing women's pension entitlements included a subsidy to increase pension entitlements for individuals with low earnings that was introduced in 1973. This provided a supplement to "low" pension entitlements earned up to 1972. Cf. Johannes Steffen, "Instrumente zur Absicherung von Beschäftigungszeiten mit Niedriglohn in der gesetzlichen Rentenversicherung," *Arbeitnehmerkammer Bremen* no. 07 (2011) (in German; available online).

entitlements between men and women as well as between women according to the number of children (Box 1). Moreover, the analyses reveal what role pension-related childcare credits are playing nearly 40 years after their introduction.

### Gender pension gap considerably higher in the west than in the east

Pension entitlements in the German pension system depend heavily on a person’s previous lifetime income and employment history.<sup>6</sup> Thus, other upstream gaps are also always reflected in the gender pension gap, such as the gender pay or gender care gaps.<sup>7</sup>

Cohorts born between 1952 and 1959 have only partially entered retirement, so it is not yet possible to calculate the final gender pension gap for this group. Nonetheless, it is possible to determine the pension entitlements that were earned up to age 60 (Box 1). For these cohorts, the gender pension gap was 32 percent at age 60 (Table 1). However, there are major regional differences.<sup>8</sup> The gender pension gap at age 60 is markedly higher in the west (37 percent) than in the east (ten percent). This difference can be attributed primarily to differing labor market participation and employment structures in the west and east. Eastern German women in the observed cohorts worked full-time more frequently than their counterparts in the west. At the same time, the average earned income of western German men is higher than that of eastern German men. Thus, the average pension entitlements of 60-year-old western German men, based on the 2024 pension points, are 1,420 euros, which is significantly higher than the average of 1,220 euros in entitlements received by men in the east.

### In the west, mothers have considerably fewer pension entitlements than childless women

Average pension entitlements also differ between women with children and women without children, especially in the west. At age 60, childless western German women who were born between 1952 and 1959 had an average pension income of 1,200 euros, while women with two children had a pension income of only 830 euros and women with three or more children of only 750 euros (Table 2). When comparing pension entitlements of childless women and mothers, regardless of the number of children, at age 60, the motherhood pension gap is 26 percent.

<sup>6</sup> In the German Reunification Treaty of August 31, 1990, it was decided to transfer the statutory pension insurance (*Gesetzliche Rentenversicherung, GRV*) to the acceding territory (Article 30, paragraph 5). The basic idea was to integrate the East German employment histories into the GRV system. To this end, a number of special regulations were included in Book 6 of the Social Code until "uniform income ratios" were established. Cf. Hermann Buslei, Johannes Geyer, and Peter Haan, "Gesetzliche Renten gleichen sich in Ost- und Westdeutschland an – dennoch klaffen Alters-einkommen auseinander," *DIW Wochenbericht* no. 38 (2020): 713–719 (in German; available online).

<sup>7</sup> For more information, see the entry on the gender care gap in the DIW Berlin Glossary (in German; available online).

<sup>8</sup> Allocation to west or east was based on an individual's place of residence in the 2020 reporting year, with Berlin being allocated to eastern Germany.

Table 1

### Monthly statutory pension entitlements at age 60 in the 1952 to 1959 cohorts

Average in euros

	Western Germany	Eastern Germany	Germany
Women	890	1,100	940
Men	1,420	1,220	1,370
Gender pension gap in percent	-37	-10	-32

Note: These are notional pension entitlements based on a fictitious retirement age of 60. Results are rounded. The pension value for 2024 was used to calculate the monthly pension payments. Allocation to east or west was determined using the place of residence in the 2020 reporting year.

Source: Authors' calculations using the VSKT 2020 (number of cases = 163,943).

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Table 2

### Monthly statutory pension entitlements for women at age 60 in the 1952 to 1959 cohorts by number of children

Average in euros

	Western Germany	Eastern Germany	Germany
Women with one child	920	1,120	970
Women with two children	830	1,180	920
Women with three or more children	750	1,030	800
All women with children	830	1,140	910
Childless women	1,120	840	1,080
Motherhood pension gap in percent	-26	35	-16

Note: These are notional pension entitlements based on a fictitious retirement age of 60. Results are rounded. The pension value for 2024 was used to calculate the monthly pension payments. Allocation to east or west was determined using the place of residence in the 2020 reporting year.

Source: Authors' calculations using the VSKT 2020 (number of cases = 84,146).

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In contrast, there is a low correlation between the number of children and women’s pension entitlements in the east. Childless women in the east receive lower average pensions than mothers, giving mothers a pension advantage in this part of the country.

To understand the diverging patterns in both parts of the country, it is important to remember the regional differences in maternal employment and family patterns prior to reunification.<sup>9</sup> Childlessness was not common in East Germany, partially due to social policy measures supporting early parenthood (such as preferred housing for parents or the availability of institutional childcare). Fewer than ten percent of eastern German women born around 1955 are childless; in comparison, childless was high for the same cohorts in the west (around 20 percent). This figure can be attributed to the changes in West German women’s attitudes, values,

<sup>9</sup> Johannes Huinink, Michaela Kreyenfeld, and Heike Trappe, *Familie in Ost- und Westdeutschland: Ähnlich und doch immer anders* (Budrich: Opladen, 2012) (in German).

## Box 1

## Data and Methods

This study uses data from the German Pension Insurance (VSKT 2020)<sup>1</sup> that contain monthly information about individuals' earned pension entitlements in the statutory pension insurance system. Data on certain groups of people and occupational groups (such as civil servants and the self-employed) are not included. The target variables of the analyses are the pension points based on which pension entitlements are calculated. For the analyses, the pension points earned by individuals in their accounts at the German pension insurance system by age 60 are converted into pension payments. The cohorts analyzed are age 60 or older but have not all yet reached the regular retirement age. Thus, the amounts shown reflect the pension entitlements acquired up to that point in time and not the overall final pension entitlements. The pension value for 2024 (39.32 euros) was used to convert the pension points into pension payments (pension points x pension value). The pension payments were calculated according to age, year of birth, gender, and (for women) the number of children.

To quantify the impact of the pension-related childcare credits, two scenarios are compared:

1. **Including pension-related childcare credits:** The pension points earned through pension-related childcare credits are included in the pension entitlements.
2. **Not including pension-related childcare credits:** When calculating pension entitlements, it is assumed that no pension points were earned through pension-related childcare credits.

This comparison illustrates the impact of pension-related childcare credits on a woman's later pension amount and shows how much this regulation contributes to the financial security of mothers.

<sup>1</sup> Forschungsdatenzentrum der Deutschen Rentenversicherung, *FDZ-Biografiedatensatz für die Biografiedaten der Versicherten (VSKT) 2020. Codeplan (VSKT 2020)* (Deutsche Rentenversicherung: 2022) (in German).

and employment patterns.<sup>10</sup> Childlessness was high for these cohorts primarily because what the women wanted often clashed with the social framework, which still assumed that it was the woman's job to raise children and run the household and thus not pursue employment, especially not full-time.

<sup>10</sup> Michaela Kreyenfeld and Dirk Konietzka, *Childlessness in Europe: Contexts, Causes, and Consequences* (Springer: 2017) (available online).

## High gender pension gap in the west despite pension-related childcare credits

Pension entitlements are determined not only by a person's employment history and pension contributions, but also by any pension-related childcare credits. Pension-related childcare credits were introduced as a part of the major pension reform in 1986 (Box 2). The hope behind the reform was that pension-related childcare credits, together with rising employment figures for women, would increase the individual pension entitlements of women and, in the long term, close both the gender pension as well as the motherhood pension gaps. Over time, the duration of pension-related childcare credits and thus the resulting entitlements were increased through further reforms. According to current law, a mother<sup>11</sup> generally receives one pension point for children born in 1992 or later each year for the three years immediately after the birth, with one pension point equivalent to the average income of all insured persons.<sup>12</sup> With the introduction of the "mother's pension" (*Mütterrente*) in 2014, the pension-related childcare credits for children born before 1992 were increased.

Without pension-related childcare credits, the pension entitlements of mothers who were born between 1952 and 1959 are always lower than childless women's entitlements (Figure 1). The average motherhood pension gap would be 31 percent for 60-year-old women if the pension-related childcare credits were not included. When pension-related childcare credits are included, mothers' entitlements rise and the motherhood pension gap closes during the initial years of starting a family.<sup>13</sup> However, this effect is only short-term: Following this period, the motherhood pension gap widens significantly. The reason for this pattern is simple: Pension-related childcare credits are only considered in the three years immediately following a child's birth. Yet western German women's careers are negatively impacted beyond the first three years of the child's life, as most mothers do not return to full-time employment.<sup>14</sup> Thus, pension-related childcare credits only have a minor impact on the motherhood pension gap. Including pension-related childcare credits, the motherhood pension gap is 26 percent, five percentage points smaller than the gap when pension-related childcare credits are not considered. The impact on the gender pension gap is of similar size: At age 60, the gap has shrunk from 41 to 37 percent.

<sup>11</sup> In principle, the points from pension-related childcare credits can be credited to the father. However, this has not happened often so far.

<sup>12</sup> However, the points from pension-related childcare credits can only be credited up to the contribution assessment ceiling. If, for example, the sum of the pension points from income and pension-related childcare credits is above the ceiling, the credits that are above the ceiling are capped.

<sup>13</sup> For the cohorts investigated here, a woman's average age at the birth of her first child for is 22.7 for eastern German women and 24.9 for western German women.

<sup>14</sup> Cf. Annekatri Schrenker and Aline Zucco, "The gender pay gap begins to increase sharply at age of 30," *DIW Weekly Report* no. 10 (2020): 137–146 (available online); Boryana Ilieva and Karathina Wrohlich, "Gender Gaps in Employment, Working Hours and Wages in Germany: Trends and Developments Over the Last 35 Years," *CESifo Forum* no. 2 (2022): 17–19 (available online).

Box 2

**Pension-related childcare credits**

Pension-related childcare credits have been a part of the German pension system since 1986. Pension-related childcare credits are booked to the account of the parent who takes over the main child-raising and childcare duties, generally the mother. When applying, parents can also decide to give the pension-related childcare credits to the father. However, this has not happened often (in less than five percent of the cases) so far.

Pension-related childcare credits entail that the respective parent receives one pension point per year each year in the three years immediately following the birth of a child. One pension point is equal to the average income of all insured workers that year. Since July 1998, it has been possible to top up pension-related childcare credits with pension entitlements from gainful employment up to the contribution assessment ceiling, which is around twice the average earnings (7,550 euros per month in 2024).

The number of points received during child-raising periods depends on the child's year of birth. Women receive three pension points for children born after January 1, 1992. Before the legislative reforms in 2014 and 2019 (*Mütterrente I and II*), mothers who gave birth to their children before 1992 were only credited with one pension point for the year immediately following the birth of their child.

With the data available, we can only determine the gender pension and motherhood pension gaps for cohorts that will retire soon or already retire. However, the gender pension and motherhood pension gaps will still be quite large even for younger cohorts. Generally, the share of mothers working full-time in western Germany has increased over the past decades. Although the gender pension and motherhood pension gaps may close slightly, they will not close completely in the foreseeable future, even when pension-related childcare credits are accounted for. The gender differences in care and paid work are still too large, even for younger cohorts, which results in persistent and substantial differences in pension entitlements between men and women.

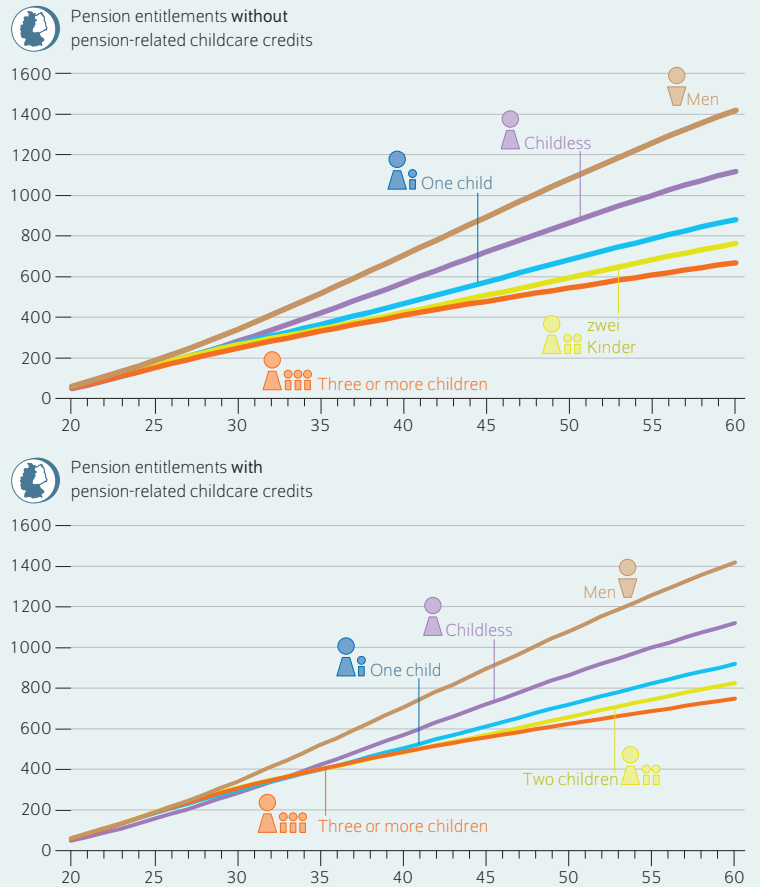
**Mothers have more pension entitlements than childless women in the east**

The pension entitlements of eastern German women born between 1952 and 1959 differ significantly from the pension entitlements of their counterparts in the west (Figure 2). Without accounting for pension-related childcare credits, the entitlements for women with one or two children are similar and higher than the entitlements for childless women. Once pension-related childcare credits are included, eastern German mothers even have higher pension entitlements than childless women at every point in the life course.

Figure 1

**Effects of pension-related childcare credits on pension entitlements in western Germany**

Earned pension entitlements in euros per month from the ages of 20 to 60



Notes: The figures show pension entitlements with and without the inclusion of pension-related childcare credits. The pension value from 2024 was used to calculate the monthly pension. Allocation to east or west was determined using the place of residence in the 2020 reporting year.

Source: Authors' calculations using the VSKT 2020.

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Pension-related childcare credits only even out the pension entitlements of mothers in the west in the first few years after birth.

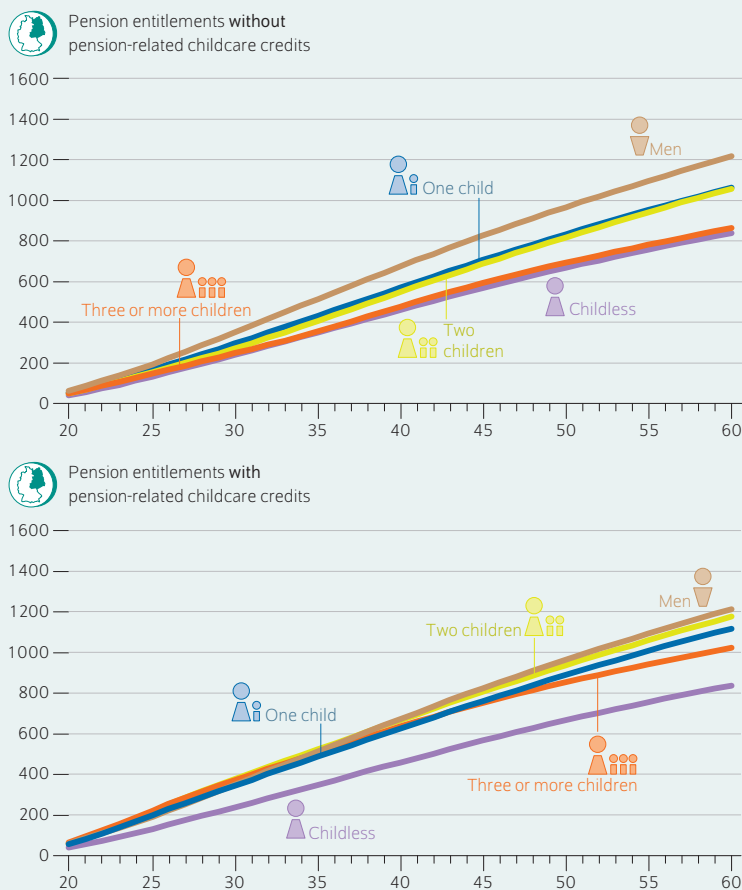
Furthermore, gender-specific differences are considerably lower in the east compared to the west, resulting in a very low gender gap in the east between men and mothers of two once pension-related childcare credits are accounted for. It must be noted that childlessness, as mentioned previously, was not common in the east for these cohorts. Quite often, childlessness was due to health issues, which may have also influenced earned income.

Although the motherhood pension gap is currently still low in the east, it can be assumed that it will grow in the future, as the share of mothers in the younger eastern German cohorts working part-time as well as childlessness have grown toward the higher western German level.

Figure 2

**Effects of pension-related childcare credits on pension entitlements in eastern Germany**

Earned pension entitlements in euros per month from the ages of 20 to 60



Notes: The figures show pension entitlements with and without the inclusion of pension-related childcare credits. The pension value from 2024 was used to calculate the monthly pension. Allocation to east or west was determined using the place of residence in the 2020 reporting year.

Source: Authors' calculations using the VSKT 2020.

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In the east, mothers' pension entitlements are higher than those of childless women when pension-related childcare credits are included.

**Conclusion: Pension-related childcare credits require accompanying reforms to compensate for the pension disadvantages of care work**

Pension-related childcare credits were introduced in 1986 with the hope that, as women's labor market participation grew, their individual pension entitlements would improve and that the gender pension and motherhood pension gaps would close in the long term.<sup>15</sup> Nearly 40 years later in 2025,

**15** At the time, similar considerations were behind the pension based on the minimum wage. It was also time limited in the expectation that "low wages could be ruled out as a potentially permanent structural problem in the future." Cf. Steffen, "Instrumente zur Absicherung von Beschäftigungszeiten mit Niedriglohn in der gesetzlichen Rentenversicherung."

it can be seen that pension-related childcare credits have only been a partial success: Mothers in the west still have considerably lower pension entitlements than men and childless women. These results indicate that pension-related childcare credits only function as intended if women have the opportunity to return to full-time or near-full-time employment soon after the birth of their child.

In the east, in contrast, there were barely any differences between women without and with children and between men and women for the cohorts investigated (born between 1952 and 1959). In addition to the strong labor market participation by women in the east, the lower gender pension gap can also be explained by the relatively low wages earned by men living in the east.

The large gender pension gap and the low pension entitlements of mothers were often accepted in the west on the unspoken assumption that women would be adequately supported in the household context or through "derived entitlements," such as survivors' pensions. However, in light of increasingly diverse family forms, it would be negligent to ignore the fact that mothers have low individual pension entitlements. In addition, women in general often have less access to other forms of pension provision than men, such as private pensions (with the exception of the Riester pension), assets (gender wealth gap), or occupational pensions.<sup>16</sup>

Today's pension entitlements always reflect an individual's past employment and income patterns. Many mothers who are approaching retirement age do not have sufficient individual pension entitlements for a secure retirement. At the same time, they cannot undo their earlier labor market decisions. Pension-relevant measures are still required to counteract this situation today, which has arisen from the gender-specific distribution of care and paid work. Pension-related childcare credits are a helpful tool: They represent a subsequent (ex post) compensation that is necessary if other measures have failed during the employment phase. Policymakers must therefore continue to provide such measures to reduce social hardship and gender inequalities,<sup>17</sup> such as the basic pension (*Grundrente*) introduced in 2021.<sup>18</sup>

The solution for closing the gender pension and motherhood pension gaps, however, lies undoubtedly in a forward-looking family policy that promotes an equal division of care and paid work between parents, the establishment of a flexible care infrastructure, and modernizing the workplace and social institutions to be more sensitive to the needs of care-giving employees. Thus, it is also necessary to increase incentives to work in the tax system by reforming joint taxation of

**16** Ute Klammer, "Alterssicherung von Frauen revisited. Aktuelle Entwicklungen und zukünftige Perspektiven," *Sozialer Fortschritt* 5, no. 66 (2017): 359–375 (in German; available online).

**17** Cf. Maximilian Blech et al., "Abschaffung der Mütterrente würde Altersarmut erhöhen," *DIW Wochenbericht* no. 31/32 (2024): 495–502 (available online) (in German).

**18** Cf. Johannes Geyer, Peter Haan, and Michelle Harnisch, "Zur Wirkung der Grundrente und der Mütterrente auf die Altersarmut Gutachten für den Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung," working paper no. 7 (Wiesbaden: 2020) (in German; available online).

married couples with full income splitting (*Ehegattensplitting*) and reducing subsidies for jobs with few working hours (*Minijobs*).<sup>19</sup>

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**19** Ludovica Gambaro et al., "Division of paid and care work between parents: Reality often differs greatly from the ideals," *DIW Weekly Report* no. 29/30/31 (check) (2024): 459–466 (available online).

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