DIW Weekly Report 3 2024

AT A GLANCE

Share of women on the executive boards of large companies has increased, but generally is at most one woman

By Virginia Sondergeld, Katharina Wrohlich, and Anja Kirsch

- The largest analysis of its kind, the DIW Berlin Women Executives Barometer contains information on shares of women on the executive and supervisory boards of over 500 companies
- Number of women on executive boards of largest companies in Germany increased considerably; the top 200 companies had a share of around 18 percent in late fall 2023
- Many companies have appointed no more than one woman to their executive board for the first time; 44 percent of the top 200 group still has no women on the executive board
- More commitment needed from companies, both internally and externally, to achieve equal participation of men and women in management positions

Share of women on the executive boards of the top 200 German companies increased in 2023; only very rarely do companies appoint more than one woman

Executive boards

of the **top 200 companies** in Germany

18 trending ↗

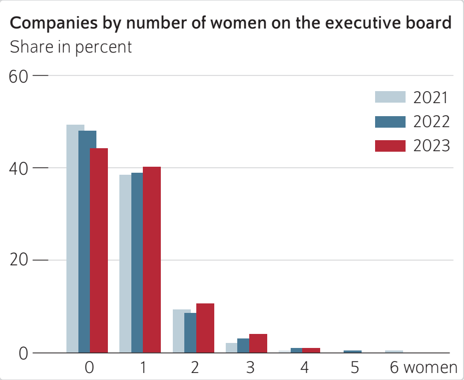
percent of all **executive board members** were women in late fall 2023

110 trending ↗

companies had at least one woman on the **executive board**

9 trending ↘

women were **CEOs**


Companies by number of women on the executive board

Share in percent

Source: DIW Berlin Women Executives Barometer 2024.

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FROM THE AUTHORS

> *"To get more women in management positions, it is important that we all work together: From investors to the public at large, no one should be satisfied with the minimum amount of gender diversity. Rather, they should demand actual equal participation of women and men in management positions."*
>
> — *Katharina Wrohlich* —

MEDIA

Audio Interview with Virginia Sondergeld (in German)

www.diw.de/mediathek

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ABSTRACT

The number of women serving on the executive boards of large companies in Germany once again increased in 2023: Around 18 percent (153 of 875) of executive board members at the 200 largest companies were women as of late fall 2023, two percentage points higher than in 2022. Thus, growth has slightly picked up again. In some of the groups of companies analyzed, the figure was even higher. Around 23 percent of executive board members at the DAX 40 companies, for example, are women. The largest banks and insurance companies, which in the past years have lagged considerably behind other private sector companies and companies with government-owned shares, managed to catch up a bit. In many places, this growth is due to the fact that companies have appointed a woman to their executive board for the first time. Beyond that, there is currently not much progress. In addition, the number of women holding the position of CEO has decreased in many groups of companies. More commitment is needed from companies, both internally (e.g., from the supervisory board) and externally (e.g., from investors) to achieve gender parity in senior leadership positions.

Since 2006, DIW Berlin's Women Executives Barometer has been documenting the share of women[1] on management boards and among managing directors (hereafter referred to as "executive boards") as well as on supervisory, administrative, and advisory boards as well as boards of trustees (hereafter "supervisory boards") of the largest companies in Germany.[2] It is also documented to what extent women hold executive board chair and executive board spokesperson positions (hereafter "CEO") as well as supervisory board chair positions. These shares of women are reported here for the 200 largest companies in Germany (measured by revenue),[3] all DAX companies,[4] all companies with government-owned shares,[5] the 100 largest banks[6] (measured by balance sheet total), and the 60 largest insurance companies[7] (measured by revenue from contributions). Furthermore, the shares of women on executive boards and supervisory boards are reported separately for the companies subject to the gender quota on supervisory boards and for the companies subject to the 2021 inclusion requirement[8] for execu-

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[1] This Weekly Report uses a binary understanding of gender. The gender of the persons analyzed was determined using their first name, pronouns, and picture. This year, there were no cases of a person who could be identified as non-binary. However, the authors of this report are aware that not every non-binary person makes their gender identity publicly known.

[2] Most recently in 2023, cf. Anja Kirsch, Virginia Sondergeld, and Katharina Wrohlich, "Number of women on boards of large companies keeps growing; momentum from inclusion requirement, however, is waning," *DIW Weekly Report*, no. 3+4 (2023): 20–31 (available online. Accessed on December 15, 2023. This applies to all other online sources in this report unless stated otherwise).

[3] The publication "Die 100 größten Unternehmen" from the Frankfurter Allgemeine Zeitung (July 4, 2023) was used to select the 100 and 200 highest-performing companies. Unlike its title suggests, this publication actually contains the 200 largest companies in Germany.

[4] The list of listed companies in the individual DAX groups was taken from the website www.boerse.de (in German; available online. Accessed November 24, 2023).

[5] The list of all companies with government-owned shares was taken from the Federal Government's *Beteiligungsbericht des Bundes 2022*, which was published on February 28, 2023 (in German; available online).

[6] The 100 largest banks (measured by balance sheet total) were selected according to Anja U. Kraus and Harald Kuck, "Die 100 größten deutschen Kreditinstitute," *Die Bank, Zeitschrift für Bankpolitik und Praxis* 7 (2023): 14–25 (in German).

[7] The 60 largest insurance companies (measured by revenue from contributions) were selected based on an analysis by the *Kölner Institut für Versicherungsinformation und Wirtschaftsdienste* (KIVI). Additionally, the largest reinsurance companies according to the 2021 reinsurance statistics (from December 31, 2021) published by the Federal Financial Supervisory *Authority (Bundesanstalt für Finanzdienstlei*stungsaufsicht, BAFIN) in June 2023, were integrated into the group of the 60 largest insurance companies.

[8] The list of companies that were subject to the gender quota on supervisory boards in fall 2023 was kindly provided to us by FidAR e.V.

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Table 1

Women on executive and supervisory boards of Germany’s 200 largest companies[1] (excluding the financial sector)

	Largest 200 companies							Largest 100 companies						
	2006	2011	2016	2020	2021	2022	2023	2006	2011	2016	2020	2021	2022	2023
Executive/management boards														
Total number of companies	200	200	200	200	200	200	200	100	100	100	100	100	100	100
With composition data	195	197	200	193	197	197	197	97	100	100	96	97	98	97
With women on executive board	9	22	61	81	101	104	110	1	11	35	48	60	58	63
Percentage share	**4.6**	**11.2**	**30.5**	**42.0**	**51.3**	**52.8**	**55.8**	**1.0**	**11.0**	**35.0**	**50.0**	**61.9**	**59.2**	**64.9**
Total number of members	953	942	931	878	944	935	875	531	533	498	468	482	479	459
Men	942	914	855	777	805	789	722	530	520	455	404	403	395	370
Women	11	28	76	101	139	146	153	1	13	43	64	79	84	89
Percentage share of women	**1.2**	**3.0**	**8.2**	**11.5**	**14.7**	**15.6**	**17.5**	**0.2**	**2.4**	**8.6**	**13.7**	**16.4**	**17.5**	**19.4**
Total number of chairpersons	195	198	176	183	176	179	181	97	100	94	95	90	90	92
Men	195	197	171	176	162	169	172	97	100	94	91	84	85	88
Women	0	1	5	7	14	10	9	0	0	0	4	6	5	4
Percentage share of women	**0**	**0.5**	**2.9**	**3.8**	**8.0**	**5.6**	**5.0**	**0**	**0**	**0**	**4.2**	**6.7**	**5.6**	**4.3**
Supervisory boards/administrative boards														
Total number of companies	200	200	200	200	200	200	200	100	100	100	100	100	100	100
With composition data	170	163	154	154	160	166	161	87	90	81	83	86	89	87
With women on supervisory board	110	118	138	145	149	156	155	65	68	74	79	81	85	84
Percentage share	**64.7**	**72.4**	**89.6**	**94.2**	**93.1**	**94.0**	**96.3**	**74.7**	**75.6**	**91.4**	**95.2**	**94.2**	**95.5**	**96.6**
Total number of members	2,500	2,268	2,160	2,074	2,183	2,160	2,148	1,389	1,326	1,198	1,252	1,317	1,302	1,326
Men	2,304	1,999	1,671	1,453	1,519	1,493	1,470	1,270	1,178	922	866	910	894	900
Women	196	269	489	621	664	667	678	119	148	276	386	407	408	426
Percentage share of women	**7.8**	**11.9**	**22.6**	**29.9**	**30.4**	**30.9**	**31.6**	**8.6**	**11.2**	**23.0**	**30.8**	**30.9**	**31.3**	**32.1**
Total number of chairpersons	170	167	153	153	160	166	161	87	91	80	83	86	89	87
Men	167	164	150	145	150	155	148	85	88	78	79	81	82	80
Women	3	3	3	8	10	11	13	2	3	2	4	5	7	7
Percentage share of women	**1.8**	**1.8**	**2.0**	**5.2**	**6.3**	**6.6**	**8.1**	**2.3**	**3.3**	**2.5**	**4.8**	**5.8**	**7.9**	**8.0**

1 The figures for 2023 were researched from November 15 to 27, 2023.

Figures for every year since 2006 and the names of all women on the executive boards of the top 200 companies in 2023 are available online: www.diw.de/managerinnen

Sources: Authors' surveys and calculations.

tive boards. Altogether, the DIW Berlin Women Executives Barometer includes information on over 500 companies in Germany. The figures published here were researched from November 15 to November 27, 2023.[9] The data are drawn from online company profiles, 2022 annual reports, financial statements, and the German Federal Government’s 2022 *Beteiligungsbericht*. It also includes information from German Federal Gazette publications as well as specifc data requests made to the companies by DIW Berlin.

Top 200 companies

Share of women on executive boards continues to rise, but number of women CEOs is declining

In the fourth quarter of 2023, the share of women on the executive boards of the 200 largest companies (excluding the financial sector) was nearly 18 percent (Table 1 and Figure 1), an increase of almost two percentage points compared to 2022. Thus, following rather restrained growth in 2022, the share of women has begun to increase again. Since 2018, the share of women on the executive boards of the 200 largest companies has almost doubled.

The development among the top 100 companies was similar: There, the share of women on executive boards also increased by nearly two percentage points and, as of late fall 2023, was over 19 percent. This share has also almost doubled since 2018.

The increase in the share of women on executive boards, however, contrasts with a decline in the share of women CEOs: In both the top 200 and the top 100 companies, the number of women CEOs fell by one person in each case. Only nine (five percent) of the 200 largest companies had a woman CEO as of fall 2023, while only four (a little over four percent) of the 100 largest had a woman CEO.[10]

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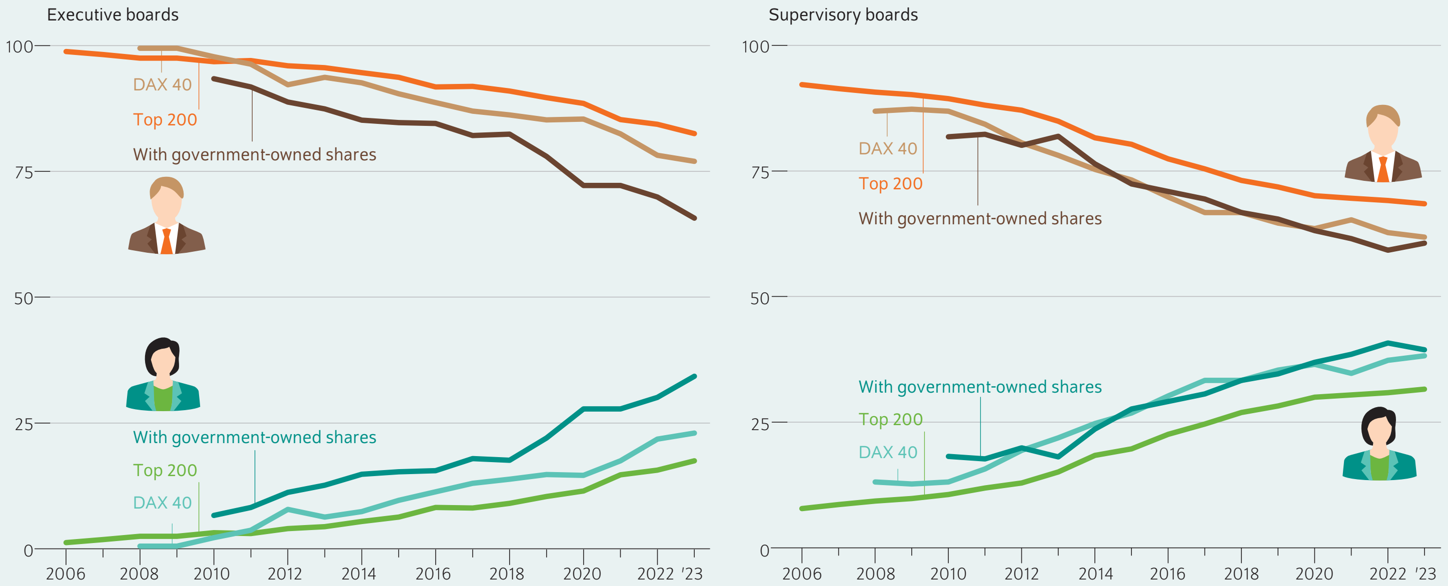
[9] The authors would like to thank Lana Lemke and Alina Meiner for their excellent research support.

[10] Top 100: Aline Seifert (Alliance Healthcare Deutschland AG), Anna Maria Braun (B. Braun Melsungen), Barbara Koch (TD Synnex Deutschland), Belén Garijo (Merck KGaA), Magdalena Weigel (Städtische Werke Nürnberg), Marianne Janik (Microsoft Deutschland GmbH), Nicola Leibinger-Kammüller (Trumpf Gruppe), Sabine Nikolaus (Boehringer Ingelheim), Susanna Zapreva (Enercity AG).

Figure 1

Shares of women and men in selected groups of companies

In percent



Source: Authors' surveys and calculations.

The executive boards of companies with government-owned shares experienced the most growth recently.

Slight growth in the share of women on supervisory boards

The share of women on supervisory boards remains significantly higher than the share of women on executive boards; recently the shares at both the 200 and 100 largest companies increased by nearly one percentage point each to around 32 percent. On average, women have made up almost one third of supervisory board members for several years now. The number of women leading a supervisory board among the 200 largest companies grew from 11 in 2022 to 13, a good eight percent, in late fall 2023.[11] In the fourth quarter of 2023, the 100 largest companies had seven women (eight percent) supervisory board chairs.

Publicly listed companies

DAX 40 companies have the largest share of women on executive boards, but MDAX and TecDAX companies are catching up

In late fall 2023, the average share of women on the executive boards of the 160 publicly listed companies analyzed here (DAX 40, MDAX, SDAX, and TecDAX) was a good 18 percent, thus nearly three percentage points higher than in 2022. This share is very similar to the shares of women on the executive boards of the 200 and 100 largest companies.

However, this average conceals major differences between the individual DAX groups. The largest publicly listed companies, the DAX 40, have had a larger share of women on their executive boards than the SDAX, MDAX, and TecDAX companies for more than ten years (Table 2 and Table 3). There was a particularly strong increase in the share of women at the executive level in the DAX 40 group between 2020 and 2022 from almost 15 percent to nearly 22 percent. Recently, this momentum has slowed a bit; in the fourth quarter of 2023, the share of women on the executive boards of the DAX 40 companies was 23 percent, only a good one percentage point higher than in 2022. This means that in late fall 2023, 59 of a total of 256 executive board members across the 40 largest publicly listed companies were women.

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[11] Top 200: Anna Borg (Vattenfall Deutschland), Anja Ritschel (Enercity AG), Bettina Würth (Würth-Gruppe), Cathrina Claas-Mühlhäuser (Claas KGaA mbH), Catherine Vandenborre (50Hertz Transmission GmbH), Clara C. Streit (Vonovia), Héloïse Temple-Boyer (Puma SE), Jasmin Staiblin (Rolls-Royce Power Systems AG), Manon van Beek (Tennet TSO GmbH), Petra Hesser (Globus Holding GmbH & Co. KG), Petra Scharner-Wolff (Helm AG), Roswitha Bensching (Vinci Deutschland), Simone Bagel-Trah (Henkel).

Table 2

Women on executive and supervisory boards of DAX 30/DAX 40 and MDAX companies[1]

	DAX 30/DAX 40[2]							MDAX[3]					
	2008	2012	2016	2020	2021	2022	2023	2011	2016	2020	2021	2022	2023
Executive/management boards													
Total number of companies	30	30	30	30	40	40	40	50	50	60	50	50	50
With composition data	30	30	30	29	39	39	40	50	50	60	50	50	50
With women on executive board	1	13	17	21	31	33	38	5	7	24	20	18	30
Percentage share	**3.3**	**43.3**	**56.7**	**72.4**	**79.5**	**84.6**	**95.0**	**10.0**	**14.0**	**40.0**	**40.0**	**36.0**	**60.0**
Total number of members	183	193	195	178	234	243	256	213	206	250	193	189	197
Men	182	178	173	152	193	190	197	208	197	220	170	166	161
Women	1	15	22	26	41	53	59	5	9	30	23	23	35
Percentage share of women	**0.5**	**7.8**	**11.3**	**14.6**	**17.5**	**21.8**	**23.0**	**2.3**	**4.4**	**12.0**	**11.9**	**12.2**	**17.8**
Total number of chairpersons	30	30	30	29	39	39	40	50	48	59	49	49	49
Men	30	30	30	29	38	37	39	50	48	57	47	47	47
Women	0	0	0	0	1	2	1	0	0	2	2	2	2
Percentage share of women	**0**	**0**	**0**	**0**	**2.6**	**5.1**	**2.5**	**0**	**0**	**3.4**	**4.1**	**4.1**	**4.1**
Supervisory boards/administrative boards													
Total number of companies	30	30	30	30	40	40	40	50	50	60	50	50	50
With composition data	30	30	30	29	39	39	39	50	49	60	50	49	50
With women on supervisory board	27	28	30	29	39	39	39	35	45	55	45	47	49
Percentage share	**90.0**	**93.3**	**100**	**100**	**100**	**100**	**100**	**70.0**	**91.8**	**91.7**	**90.0**	**95.9**	**100**
Total number of members	527	494	490	452	544	574	608	581	579	629	527	518	541
Men	458	398	342	287	355	360	376	515	427	420	353	343	346
Women	69	96	148	165	189	214	232	66	152	209	174	175	195
Percentage share of women	**13.1**	**19.4**	**30.2**	**36.5**	**34.7**	**37.3**	**38.2**	**11.4**	**26.3**	**33.2**	**33.0**	**33.8**	**36.0**
Total number of chairpersons	n/a	30	30	29	39	39	39	50	48	60	50	49	50
Men	n/a	29	29	28	36	35	37	50	47	57	49	47	48
Women	n/a	1	1	1	3	4	2	0	1	3	1	2	2
Percentage share of women	**n/a**	**3.3**	**3.3**	**3.4**	**7.7**	**10.3**	**5.1**	**0**	**2.1**	**5.0**	**2.0**	**4.1**	**4.0**

1 The figures for 2023 were researched from November 15 to 27, 2023.
2 Since September 20, 2021, the group of the largest listed companies has included 40 instead of 30 companies.
3 In contrast to the expansion of the DAX 30 to the DAX 40, the MDAX was reduced by ten companies in autumn 2021.

Figures for further years are available online: www.diw.de/managerinnen

Sources: Authors' surveys and calculations.

The MDAX companies, in contrast, experienced considerably more growth: Here, the share of women on executive boards increased by nearly six percentage points and was nearly 18 percent most recently. The TecDAX companies have developed similarly (Table 3): The share of women on executive boards experienced a comparatively strong increase of nearly five percentage points to around 21 percent. The share of women on the executive boards of SDAX companies grew much less: At a good 14 percent, the SDAX companies have the lowest share of women executive board members of all DAX groups. Moreover, the increase was not especially large, at only around two percentage points.

In contast to the growth of women on executive boards, the growth of women CEOs was either negative or stagnated, as is the case at the 200 and 100 largest companies. While two DAX 40 companies had women CEOs in 2022, as of late fall 2023, there was only one: Belén Garijo, the CEO of Merck. One TecDAX company had a woman CEO in 2022, but as of late fall 2023, that is no longer the case. There was no change in the MDAX and SDAX companies, where there were two and five women CEOs, respectively, as of the fourth quarter of 2023, as was the case in 2022. Comparing the DAX groups, the SDAX companies were ahead at just over seven percent women CEOs, which contrasts with their comparatively low share of women among executive board members overall.[12]

Slight increase in the share of women on supervisory boards of all DAX groups

In late fall 2023, the average share of women on supervisory boards at all 160 DAX companies was nearly 36 percent, around two percentage points higher than in 2022.

The DAX 40 and TecDAX companies both had the greatest share of women on supervisory boards at a good 38 percent each. They are followed by the MDAX companies (36 percent) and SDAX companies (a little over 33 percent). MDAX

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[12] MDAX: Claudia Hoyer (TAG Immobilien AG), Helen Giza (Fresenius Medical Care AG & Co. KGaA). SDAX: Britta Giesen (Pfeiffer Vacuum Technology AG), Marika Lulay (GFT Technologies), Petra von Strombeck (New Work SE), Jalin Ketter (PVA TePla AG), Yvonne Rostock (Cewe Stiftung).

Table 3

Women on executive and supervisory boards of SDAX and TecDAX companies[1]

	SDAX						TecDAX					
	2011	2016	2020	2021	2022	2023	2013	2016	2020	2021	2022	2023
Executive/management boards												
Total number of companies	50	50	70	70	70	70	30	30	30	30	30	30
With composition data	50	50	70	70	70	70	30	30	30	30	30	30
With women on executive board	6	11	19	30	31	31	8	2	8	10	11	17
Percentage share	**12.0**	**22.0**	**27.1**	**42.9**	**44.3**	**44.3**	**26.7**	**6.7**	**26.7**	**33.3**	**36.7**	**56.7**
Total number of members	168	178	258	262	276	264	107	107	120	118	121	127
Men	160	167	238	229	242	226	98	103	107	102	102	101
Women	8	11	20	33	34	38	9	4	13	16	19	26
Percentage share of women	**4.8**	**6.2**	**7.8**	**12.6**	**12.3**	**14.4**	**8.4**	**3.7**	**10.8**	**13.6**	**15.7**	**20.5**
Total number of chairpersons	50	49	69	70	70	70	30	30	30	30	30	30
Men	49	49	66	64	65	65	30	29	29	28	29	30
Women	1	0	3	6	5	5	0	1	1	2	1	0
Percentage share of women	**2.0**	**0**	**4.3**	**8.6**	**7.1**	**7.1**	**0**	**3.3**	**3.3**	**6.7**	**3.3**	**0**
Supervisory boards/administrative boards												
Total number of companies	50	50	70	70	70	70	30	30	30	30	30	30
With composition data	50	50	70	70	70	70	30	30	30	30	29	30
With women on supervisory board	21	36	57	60	62	62	19	23	26	27	28	27
Percentage share	**42.0**	**72.0**	**81.4**	**85.7**	**88.6**	**88.6**	**63.3**	**76.7**	**86.7**	**90.0**	**96.6**	**90.0**
Total number of members	346	414	622	612	643	623	207	215	266	269	281	292
Men	309	326	443	418	435	417	174	166	182	176	175	180
Women	37	88	179	194	208	206	33	49	84	93	106	112
Percentage share of women	**10.7**	**21.3**	**28.8**	**31.7**	**32.3**	**33.1**	**15.9**	**22.8**	**31.6**	**34.6**	**37.7**	**38.4**
Total number of chairpersons	50	49	70	70	70	70	30	30	30	30	29	30
Men	50	48	67	66	67	68	29	28	28	27	28	28
Women	0	1	3	4	3	2	1	2	2	3	1	2
Percentage share of women	**0**	**2.0**	**4.3**	**5.7**	**4.3**	**2.9**	**3.3**	**6.7**	**6.7**	**10.0**	**3.4**	**6.7**

1 The figures for 2023 were researched from November 15 to 27, 2023.

Figures for further years are available online: www.diw.de/managerinnen

Sources: Authors' surveys and calculations.

companies recently experienced the most growth, with the share of women on supervisory boards increasing by over two percentage points, while growth in the other DAX groups was around one percentage point each. The share of women supervisory board chairs did not increase, with the exception of the TecDAX companies. In contrast, the number of women supervisory board chairs at DAX 40 companies was halved, from four to two. Thus, in the fourth quarter of 2023, only a good five percent of DAX 40 companies had a woman heading the supervisory board. The number of women supervisory board chairs at MDAX companies remained the same (two women – four percent). Meanwhile, there was a decline among the SDAX companies (from three to two women), and with that, the share of women supervisory board chairs was only barely three percent as of late fall 2023. Compared to 2022, there was an additional woman supervisory board chair in the TecDAX companies. Here, two women (nearly seven percent) were supervisory board chairs in the fourth quarter of 2023.[13]

More women on executive boards of companies with government-owned shares, but no increase in women on supervisory boards

As many companies with government-owned shares are small, they can only be compared to the other groups of companies examined here to a limited extent.[14] In addition, in contrast to the private sector, supervisory board seats in these companies are often tied to a leading position in public administration or to political mandates. The share of women in senior public administration positions and political office affects the share of women on the supervisory boards of these companies due to this fact.

As in past years, companies with government-owned shares had a considerably higher share of women on executive boards than private sector companies. In late fall 2023, over one third (a good 34 percent) of all executive board members

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[13] DAX-40: Simone Bagel-Trah (Henkel), Clara C. Streit (Vonovia). MDAX: Iris Löw-Friedrich (Evotec SE), Héloïse Temple-Boyer (Puma SE). SDAX: Claudia Badstöber (Kontron AG), Ayla Busch (Pfeiffer Vacuum Technology AG). TecDAX: Iris Löw-Friedrich (Evotec SE), Claudia Badstöber (Kontron AG).

[14] Companies with government-owned shares are a very heterogeneous group containing very large companies such as Deutsche Telekom AG and Deutsche Bahn AG, but also some very small cultural or scientifc companies, such as the Wissenschaftszentrum Berlin für Sozialforschung gGmbH (WZB), the Futurium gGMbH, or the Bayreuther Festspiele GmbH.

at companies with government-owned shares were women, four percentage points more than in 2022 (Table 4). In addition, unlike at the large companies in the private sector, the number of women CEOs has also continued to increase, recently from nine to 13 women (26 percent).[15]

In contrast, the share of women on supervisory boards of companies with government-owned shares declined slightly and was recently at 39 percent (minus a good one percentage point). Meanwhile, the share of women supervisory board chairs has increased to over 36 percent (22 women).[16]

Banks and insurance companies: Executive boards catching up while supervisory boards stagnate

The largest companies in the financial sector, the 100 largest banks and 60 largest insurance companies, have been lagging significantly behind other large private sector companies for the past ten years in terms of the share of women on boards. Recently, however, these two groups began to catch up a bit: In late fall 2023, the share of women on the executive boards of the 100 largest banks was nearly 17 percent (an increase of a good two percentage points) and thus similar to the figure in the 200 largest private sector companies (excluding the financial sector) (Table 5). The share of women at the 60 largest insurance companies even increased by almost three percentage points to over 18 percent. There was also growth in the share of women CEOs in the financial sector: The share of women CEOs at banks increased by almost four percentage points to nearly 12 percent (11 women), while the share at insurance companies increased by around three percentage points to a good eight percent (five women). Thus, the figures for banks and insurance companies were significantly higher than the respective figures for the 200 or 100 largest private sector companies.[17]

Table 4

Women on executive and supervisory boards of companies with government-owned shares[1]

	2010	2013	2017	2020	2021	2022	2023
Executive/management boards							
Total number of companies	61	60	61	63	66	69	69
With composition data	60	60	60	63	66	69	68
With women on executive board	9	14	22	32	33	36	36
Percentage share	**15.0**	**23.3**	**36.7**	**50.8**	**50.0**	**52.2**	**52.9**
Total number of members	152	143	140	151	162	186	166
Men	142	125	115	109	117	125	109
Women	10	18	25	42	45	56	57
Percentage share of women	**6.6**	**12.6**	**17.9**	**27.8**	**27.8**	**30.1**	**34.3**
Total number of chairpersons	54	56	41	46	37	37	50
Men	51	51	36	35	30	28	37
Women	3	5	5	11	7	9	13
Percentage share of women	**5.6**	**8.9**	**12.2**	**23.9**	**18.9**	**24.3**	**26.0**
Supervisory boards/administrative boards							
Total number of companies	61	60	61	63	66	69	69
With composition data	54	51	51	56	59	61	61
With women on supervisory board	46	41	50	56	59	61	60
Percentage share	**85.2**	**80.4**	**98.0**	**100**	**100**	**100**	**98.0**
Total number of members	577	553	530	602	626	623	644
Men	472	453	368	380	385	369	390
Women	105	100	162	222	241	254	254
Percentage share of women	**18.2**	**18.1**	**30.6**	**36.9**	**38.5**	**40.8**	**39.4**
Total number of chairpersons	53	47	51	56	59	61	61
Men	45	39	41	42	40	40	39
Women	8	8	10	14	19	21	22
Percentage share of women	**15.1**	**17.0**	**19.6**	**25.0**	**32.2**	**34.4**	**36.1**

1 The figures for 2023 were researched from November 15 to 27, 2023.

Figures for further years and the names of all women on the executive or supervisory boards of companies with government-owned shares are available here: www.diw.de/managerinnen

Sources: Authors' surveys and calculations.

Unlike the development on the executive boards, the share of women on supervisory boards in the financial sector barely increased; however, as in the other groups of companies, the increases occurred at a markedly higher level. The share of women on the supervisory boards of the 100 largest banks grew by a good half percentage point to around 27 percent. The share of women on the supervisory boards of the 60 largest insurance companies in the final quarter of 2023 was around 29 percent, an increase of one percentage point. However, compared to 2022 there were fewer women supervisory board chairs in these two groups: Among the 100 largest banks, there was a decline from 11 women to nine, resulting in a share of women of nearly ten percent. Among the 60 largest insurance companies, there was only one woman supervisory board chair in late fall 2023 (a share of nearly two percent) compared to four women in 2022.[18]

Share of women on boards of the largest publicly listed companies in Germany above EU average

A European comparison shows that the share of women on the supervisory boards of the largest publicly listed companies in Germany has been above the EU average since the

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[15] It should be noted that scientific directors of companies focused on research were counted as CEOs in this edition of the Women Executives Barometer, as they have a greater influence on the company's content strategy than administrative directors. Due to this, the number of CEOs counted increased compared to 2022.

[16] See the DIW Berlin Women Executives Barometer Online Supplement (in German; available online).

[17] Insurance companies: Katja de la Viña (Allianz-Lebensversicherungs-AG), Claudia Andersch (R+V Lebensversicherung AG), Nina Klingspor (Allianz Private Krankenversicherungs-AG), Zeliha Hanning (Württembergische Versicherung AG), Isabella Martorell Naßl (Bayrische Beamtenkrankenkasse AG). Banken: Marion Höllinger (Unicredit Bank AG), Nikola Steinbock (Landwirtschaftliche Rentenbank), Edith Weymayr (Landeskreditbank Baden-Württemberg-Förderbank), Sabine Barthauer (DZ Hyp AG), Silvia Carpitella (Citigroup Global Markets Europe AG), Isabelle Chevelard (Targobank AG), Kathrin Kerls (BMW Bank GmbH), Karin-Brigitte Göbel (Stadtsparkasse Düsseldorf), Eva Wunsch-Weber (Frankfurter Volksbank), Katrin Leonhardt (Sächsische Aufbaubank), Aysel Osmanoglu (GLS Gemeinschaftsbank).

[18] Banks: Mona Neubaur (NRW.Bank), Mónica López-Monís Gallego (Santander Consumer Bank AG), Dagmar Kollmann (Citigroup Global Markets Europe AG), Silke Torp (Investitionsbank Schleswig-Holstein), Katrin Lange (Investitionsbank des Landes Brandenburg), Anke Beckemeyer (Sparda- Bank West eG), Gitta Wild (Sparda-Bank Südwest eG), Tamara Bischof (Sparkasse Mainfranken Würzburg), Irene Reifenhäuser-Karnath (GLS Gemeinschaftsbank eG). Versicherungen: Bettina Bornmann (Zurich Deutscher Herold Lebensversicherung AG).

Table 5

Women on the executive and supervisory boards of large banks and insurance companies in Germany[1]

	Banks							Insurance companies						
	2006	**2011**	**2016**	**2020**	**2021**	**2022**	**2023**	**2006**	**2011**	**2016**	**2020**	**2021**	**2022**	**2023**
Executive/management boards														
Total number of companies	100	100	100	100	99	100	99	63	59	59	60	60	60	60
With composition data	100	100	100	100	99	100	99	63	59	59	59	60	60	60
With women on executive board	10	12	30	33	39	42	49	10	14	31	32	32	40	44
Percentage share	**10.0**	**12.0**	**30.0**	**33.0**	**39.4**	**42.0**	**49.5**	**15.9**	**23.7**	**52.5**	**54.2**	**53.3**	**66.7**	**73.3**
Total number of members	442	404	404	392	403	418	423	394	385	357	338	348	392	359
Men	431	391	371	351	350	358	352	384	370	322	298	302	331	293
Women	11	13	33	41	53	60	71	10	14	35	40	46	61	66
Percentage share of women	**2.5**	**3.2**	**8.2**	**10.5**	**13.2**	**14.4**	**16.8**	**2.5**	**3.6**	**9.8**	**11.8**	**13.2**	**15.6**	**18.4**
Total number of chairpersons[2]	100	100	98	98	95	96	95	63	59	59	59	60	60	60
Men	98	99	94	88	87	88.5	84	63	59	58	57	55	57	55
Women	2	1	4	10	8	7.5	11	0	0	1	2	5	3	5
Percentage share of women	**2.0**	**1.0**	**4.1**	**10.2**	**8.4**	**7.8**	**11.6**	**0**	**0**	**1.7**	**3.4**	**8.3**	**5.0**	**8.3**
Supervisory boards/administrative boards														
Total number of companies	100	100	100	100	99	100	99	63	59	59	60	60	60	60
With composition data	100	100	98	99	97	98	92	63	59	59	58	60	58	69
With women on supervisory board	89	88	95	97	94	95	90	46	45	52	51	52	49	52
Percentage share	**89.0**	**88.0**	**96.9**	**98.0**	**96.9**	**96.9**	**97.8**	**73.0**	**76.3**	**88.1**	**87.9**	**86.7**	**84.5**	**75.4**
Total number of members	1,633	1,567	1,520	1,585	1,428	1,459	1,406	812	689	639	588	605	618	597
Men	1,387	1,307	1,194	1,206	1,074	1,083	1,033	720	599	498	445	453	448	427
Women	246	260	326	379	354	376	373	92	90	141	143	153	170	170
Percentage share of women	**15.1**	**16.6**	**21.4**	**23.9**	**24.8**	**25.8**	**26.5**	**11.3**	**13.1**	**22.1**	**24.3**	**25.3**	**27.5**	**28.5**
Total number of chairpersons	100	100	98	99	97	98	92	63	59	59	58	60	58	59
Men	97	98	91	92	90	87	83	63	58	58	54	54	54	58
Women	3	2	7	7	7	11	9	0	1	1	4	6	4	1
Percentage share of women	**3.0**	**2.0**	**7.1**	**7.1**	**7.2**	**11.2**	**9.8**	**0**	**1.7**	**1.7**	**6.9**	**10.0**	**6.9**	**1.7**

1 The figures for 2023 were researched from November 15 to 27, 2023.
2 In cases of dual leadership, the chairperson is counted as two half positions.

Figures for further years and the names of all women on the executive boards of the largest banks and insurance companies in 2023 are available online: www.diw.de/managerinnen

Sources: Authors' surveys and calculations.

beginning of the 2010s.[19] In 2023, the EU-wide average for the share of women on the supervisory boards of the largest publicly listed companies was nearly 36 percent (Figure 2). Thus, it was more than two percentage points below the share for Germany (nearly 38 percent).

However, the share of women on executive boards or among members with executive functions was considerably lower than the share of women on supervisory boards across all EU countries. In Germany, the share was below the EU average until 2021. It is only since 2022 that Germany has caught up and recorded a share of women on executive boards of the largest publicly listed companies of a good 23 percent in 2023, thus slightly higher than the EU average of 22 percent. This catching-up process is in part related to the introduction of the inclusion requirement for women on executive boards.

Legal requirements for appointing women to supervisory boards and executive boards has increased share of women

In 2015, the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors Act (*Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst*, FüPoG I) became law in Germany and stipulated a statutory gender quota of 30 percent for supervisory boards. This quota applies to publicly listed companies that also have employee representation on their supervisory boards (full co-determination). As of fall 2023, 101 companies were subject to the quota. Mandatory requirements for the gender composition of executive boards were not introduced until six years later in 2021 with the Second Equal Participation of Women and Men in Leadership Positions in the Public and Private Sectors Act (*zweites Gesetz für*

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[19] The figures are based on data from the Gender Statistics Database of the European Institute for Gender Equality (EIGE), *Women and men in decision making/Business and finance: Largest listed companies: CEOs, executives and non-executives* (available online; accessed on November 29, 2023.) This database contains the share of women on the executive boards (executive board members) as well as on the supervisory boards (non-executive board members) of the largest publicly listed (blue chip) companies in each country.

die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst, FüPoG II). This law states, among other things, that publicly listed companies with full co-determination whose executive board has at least four members must have at least one executive board position filled by a member of the underrepresented gender. [20] As of late fall 2023, 63 companies are required to comply with this regulation. These companies had, on average, a share of a good 21 percent women on their executive boards (Table 6). Thus, this group of companies is behind companies with government-owned shares (34 percent) and just behind the DAX 40 companies (23 percent), but is ahead of the rest of the groups examined here. The companies subject to the gender quota for supervisory boards had an average share of women supervisory board members of nearly 38 percent, thus putting this group slightly behind the companies with government-owned shares (a solid 39 percent) and the DAX 40 companies (just over 38 percent), but ahead of all other groups of companies.

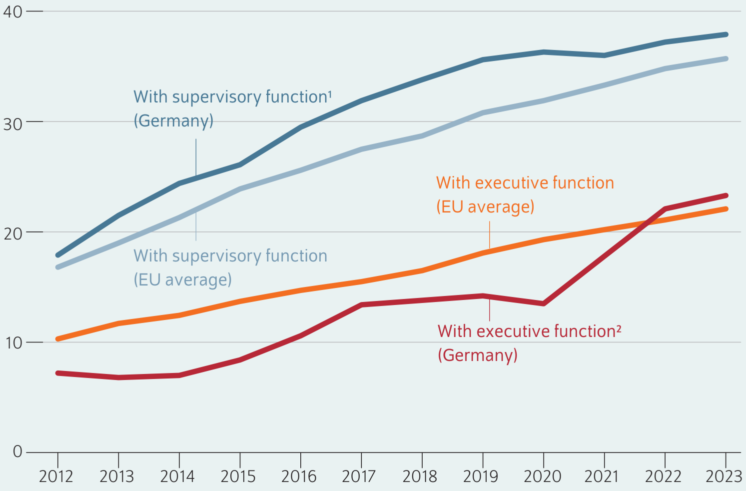
The positive effects of the legal requirements for women on these boards are becoming visible over time as the shares of women grow: Within the 200 largest companies, a comparison of the companies that are subject to the supervisory board quota with the companies not subject to it shows that there has been a signifcantly stronger increase in the share of women in the "quota companies," especially from 2014 to 2019 as well as since 2021 (Figure 3). Since 2014, the share of women on the supervisory boards of the companies subject to the quota (quota companies) among the 200 largest companies has increased by over 17 percentage points (from around 20 to nearly 37 percent). Among the companies in the top 200 group not subject to the quota, the share of women on supervisory boards only increased by around 12 perentage points (from almost 16 to around 28 percent) in the same period of time and was, as of late fall 2023, nearly ten percentage points lower than the share of women in the quota companies. There has been barely any growth in the non-quota companies over the past years, while the quota companies have clearly continued to strive for gender parity even after reaching the legal minimum of 30 percent.

The inclusion requirement for executive boards introduced in 2021 is also clearly having an impact: From 2017 to 2020, the share of women on executive boards of the companies in the top 200 group that would later be subject to the requirement as well as those that would not be subject to the requirement developed at the same pace (Figure 4). Since it became known in 2020 that an inclusion requirement for executive boards was coming, the companies that would become subject to the requirement increased the share of women on their executive boards much more quickly than companies in the top 200 companies that were not subject to the requirement

Figure 2

Share of women on top boards of the largest publicly listed companies in Germany and on an EU average

In percent



1 In Germany, this corresponds to a supervisory board.
2 In Germany, this corresponds to an executive board.

Source: European Institute for Gender Equality (EIGE).

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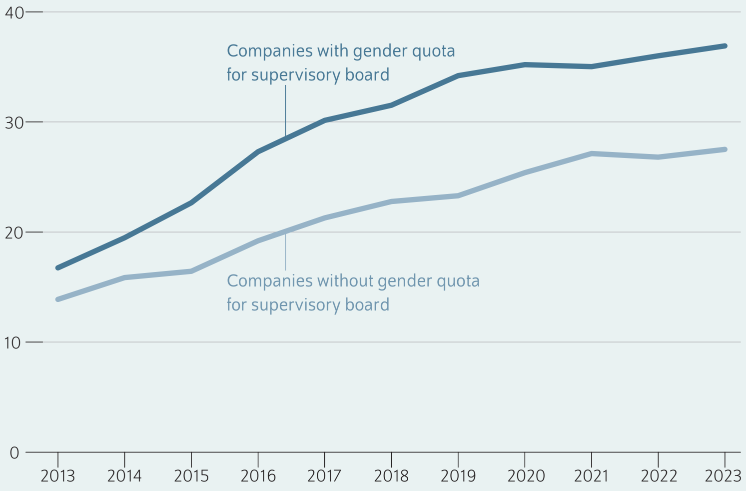
The share of women on supervisory boards in Germany has long been above the EU average. Recently, the share of women on executive boards in Germany has also been above the EU average.

Figure 3

Share of women on supervisory boards of the top 200 companies with and without a supervisory board quota

In percent



Source: Authors' surveys and calculations.

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The share of women on the supervisory boards of the quota companies has increased more strongly over the years.

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[20] A more detailed description of the FüPoG II can be found in Anja Kirsch, Virginia Sondergeld, and Katharina Wrohlich, "While Gender Quotas for Top Positions In the Private Sector Differ across EU Countries, They Are Effective Overall," *DIW Weekly Report*, no. 3+4 (2022): 32–39 (available online).

Table 6

Women on the executive and supervisory boards of companies subject to the inclusion and quota requirements[1]

	Companies subject to the supervisory board quota[3]								Companies subject to the executive board inclusion requirement	
	2016	2017	2018	2019	2020	2021	2022	2023	2022	2023
Executive/management boards										
Total number of companies	106	105	104	105	107	103	102	101	62	63
With composition data	106	105	104	105	107	103	102	101	62	63
With women on executive board	26	33	34	42	50	57	59	73	49	58
Percentage share	**24.5**	**31.4**	**32.7**	**40.0**	**46.7**	**55.3**	**57.8**	**72.3**	**79.0**	**92.1**
Total number of members	447	495	483	494	485	476	468	478	348	361
Men	446	456	442	443	424	405	389	382	282	285
Women	31	39	41	51	61	71	79	96	66	76
Percentage share of women	**6.5**	**7.9**	**8.5**	**10.3**	**12.6**	**14.9**	**16.9**	**20.1**	**19.0**	**21.1**
Total number of chairpersons[2]	103	104	104	105	107	103	102	101	62	63
Men	102	101	102	101.5	104	97	98	97	61	63
Women	1	3	2	3.5	3	6	4	4	1	0
Percentage share of women	**1.0**	**2.9**	**1.9**	**3.3**	**2.8**	**5.8**	**3.9**	**4.0**	**1.6**	**0**
Supervisory boards/administrative boards										
Total number of companies	106	105	104	105	107	103	102	101	62	63
With composition data	105	105	104	105	107	103	102	101	62	63
With women on supervisory board	105	105	104	105	107	103	102	101	62	63
Percentage share	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Total number of members	1,562	1,597	1,511	1,577	1,621	1,552	1,546	1,551	999	1,036
Men	1,134	1,116	1,016	1,027	1,045	1,002	979	967	640	650
Women	428	481	495	550	576	550	567	584	359	386
Percentage share of women	**27.4**	**30.1**	**32.8**	**34.9**	**35.5**	**35.4**	**36.7**	**37.7**	**35.9**	**37.3**
Total number of chairpersons	104	105	104	105	107	103	102	101	62	63
Men	100	101	100	99	102	99	98	98	61	62
Women	4	4	4	6	5	4	4	3	1	1
Percentage share of women	**3.8**	**3.8**	**3.8**	**5.7**	**4.7**	**3.9**	**3.9**	**3.0**	**1.6**	**1.6**

1 The figures for 2023 were researched from November 15 to 27, 2023.
2 In cases of dual leadership, the chairperson is counted as two half positions.
3 According to *Frauen in die Aufsichtsräte* (FidAR) e. V.

Sources: Authors' surveys and calculations.

in fall 2021.[21] Of the companies in the top 200 group that are subject to the inclusion requirement, the share of women on executive boards was recently 22 percent, which is an over eight-percentage-point increase since 2020. The rest of the 200 largest companies not subject to the requirement had a considerably lower share of women on executive boards at a good 17 percent in fall 2023. Since 2020, it has increased by around six percentage points, making the gap between the two groups a little over five percentage points (instead of under three percentage points in 2020).

Overall, 58 of the 63 companies subject to the inclusion requirement for the executive board had at least one woman on the executive board in late fall 2023 (Table 6). The share of companies in this group that do not have a single woman on the executive board decreased from 29 percent in 2021 to eight percent in the fourth quarter of 2023 (Figure 5). Nearly 70 percent of these companies recently had exactly one woman on the executive board. In late fall 2023, just one fifth of the companies in this group had two or more women on the executive board.

A comparison of the companies subject to the inclusion requirement for the executive board with all of the companies in the top 200 group shows that there are still a considerable number of companies—44 percent as of the fourth quarter of 2023—in the top 200 group that do not have a single woman on their executive board. Around 40 percent had exactly one woman on the executive board, while only 16 percent had two or more women.

Conclusion: Companies need more committment to gender parity internally and externally

From 2022 to 2023, the share of women on the executive boards of the largest companies in Germany increased in all groups of companies analyzed. In particular, companies

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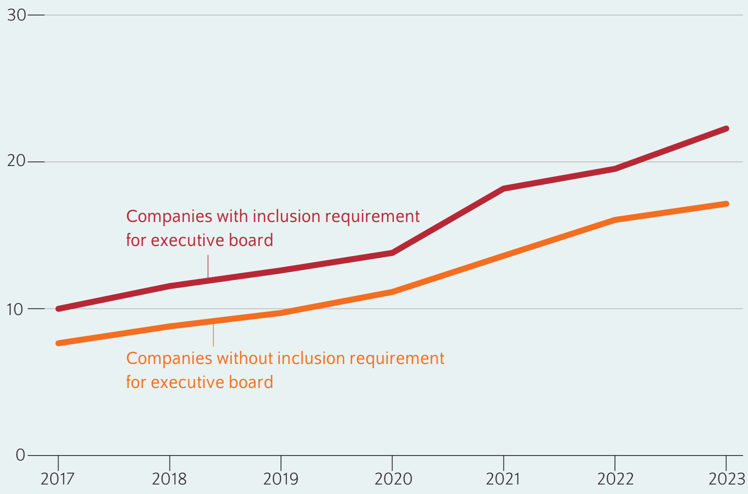
[21] For more on the anticipation effects of the FüPoG II, see Virginia Sondergeld and Katharina Wrohlich, "Mindestbeteiligung von Frauen in Vorständen: Einige Unternehmen sind neuem Gesetz bereits zuvorgekommen," *DIW aktuell*, no. 65 (2021) (in German; available online); as well as Kirsch, Sondergeld, and Wrohlich, "While Gender Quotas for Top Positions In the Private Sector Differ across EU Countries, They Are Effective Overall."

subject to the 2021 inclusion requirement that had no woman on the board in 2022 have become active and appointed women board members. However, in this group of companies, as in most of the others, the number of women remains at one. Among the 200 largest companies, for example, there is still a significant share of executive boards without a single woman, around 44 percent. Moreover, the position of CEO remains heavily dominated by men: Only nine women were the CEO of a top 200 company as of late fall 2023; among the DAX 40 companies, only one woman had this position. Not only is the share of women CEOs still negligible, there is not even an upward trend discernable—rather the opposite.

Much suggests that the introduction of an inclusion requirement for executive boards has led to the establishment of a new social norm. The target of zero women on the executive board set by many companies a few years ago[22] has apparently been replaced by a target of one woman on the executive board. Media coverage and public debate contribute to the formation of such an implicit quota as a social norm.[23] While boards consisting only of men are no longer considered

Figure 4

Share of women on executive boards of the top 200 companies with and without an inclusion requirement[1]
In percent



1 In each case, the companies considered were those that were subject to or would have been subject to the inclusion requirement in 2021 and those that were part of the top 200 group every year from 2017 to 2023.

Source: Authors' surveys and calculations.

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Since the passing of the inclusion requirement for executive boards in 2021, the share of women executive board members in the companies subject to the requirement has increased more quickly.

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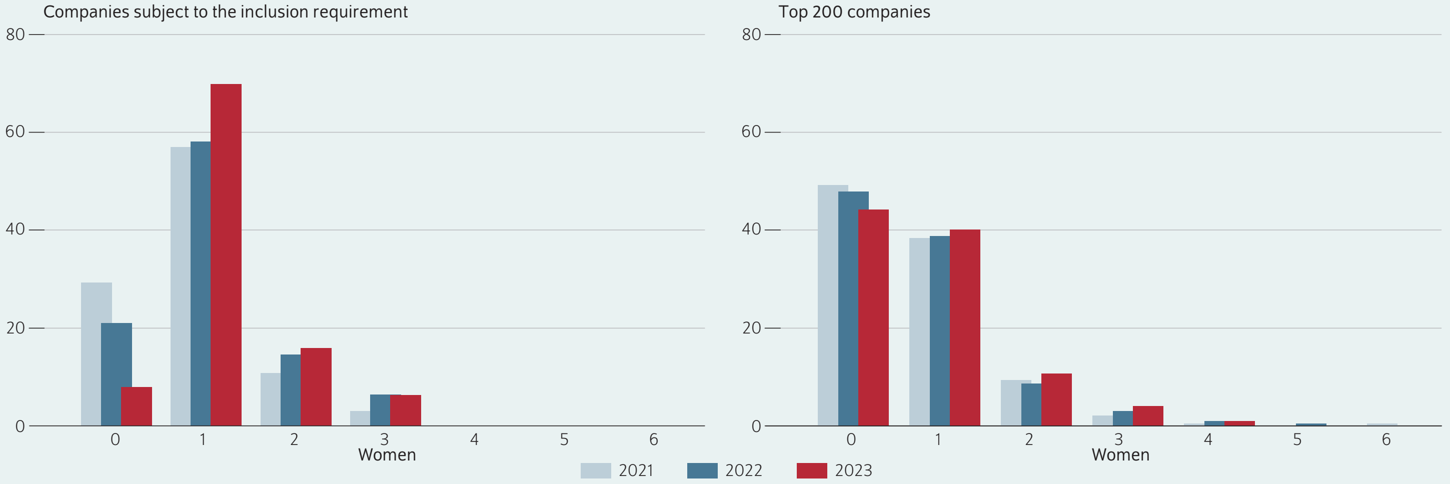
22 AllBright Stiftung, *Zielgröße: Null Frauen. Die verschenkte Chance deutscher Unternehmen* (2016) (in German; available online).

23 Studies on US American companies have shown such an implicit quota has become established there too, see Cristian L. Dezső, David Gaddis Ross, and Jose Uribe, "Is there an implicit quota on women in top management? A large-sample statistical analysis," *Strategic Management Journal* 37, no. 1 (2016): 98–115 (available online); as well as Edward H. Chang et al., "Diversity thresholds: How social norms, visibility, and scrutiny relate to group composition," *Academy of Management Journal* 62, no. 1 (2019): 144–171 (available online). In addition, an implicit quota seems to be emerging in other contexts such as science, cf. Lena Janys, "Testing the presence of implicit hiring quotas with application to German universities," *Review of Economics and Statistics* (2022) (available online).

Figure 5

Companies by number of women on the executive board
Shares in percent



Source: Authors' surveys and calculations.

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Of the companies subject to the inclusion requirement for executive boards, the majority have since appointed at least one woman. However, only a few companies have more than one woman on their executive board.

adequate, there is a danger that the new social norm will legitimize boards with a low share of women. Companies may have little motivation to appoint more women once they have reached a minimum level of gender diversity, and thereby keep women underrepresented on executive boards.

To achieve equal participation of women and men on executive boards, more commitment is required, both within companies and without. When filling executive board positions via executive search firms, which play an important role as gatekeepers, supervisory boards can require them to search specifically for women candidates. Furthermore, supervisory boards can demand that their executive boards implement leadership development measures to ensure that enough women are available for executive board positions on companies' internal labor markets.[24] Meanwhile, those observing women's representation on executive boards, such as investors and the public at large, should no longer be satisfied with a bare minimum of gender diversity, but rather demand the actual equal participation of men and women in executive board positions.

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[24] Michael C. Withers et al., "Upper echelon employment: A review of the fundamental questions related to the executive labor market," *Journal of Management* 50, no. 1 (2024): 71–121 (available online).

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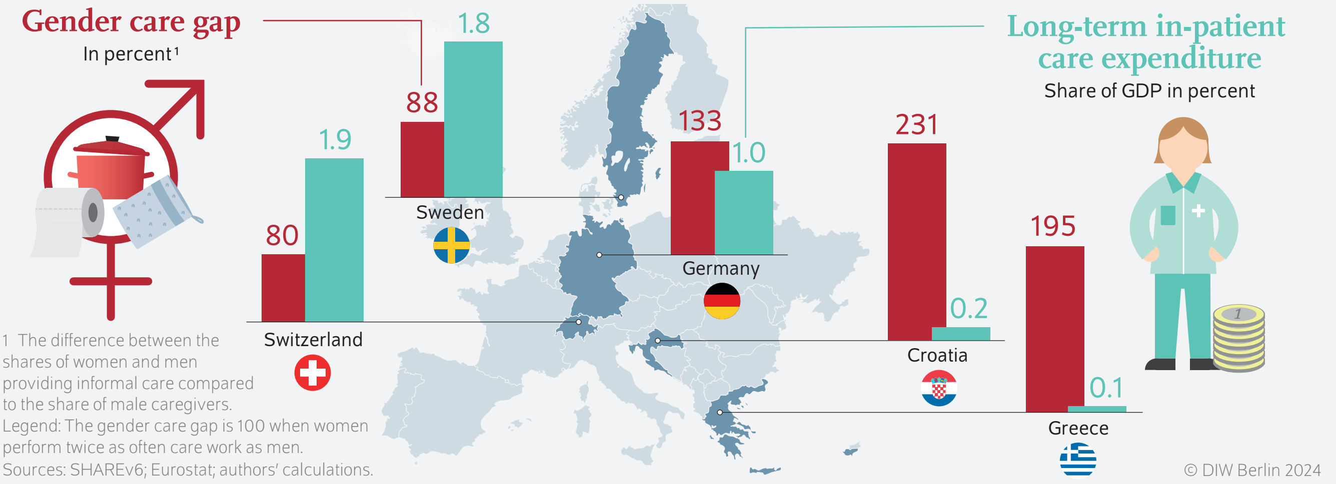
AT A GLANCE

Expanding long-term care insurance could reduce the gender care gap in Germany

By Johannes Geyer, Peter Haan, and Mia Teschner

- Study analyzes the correlation between gender care gaps and individual European care systems as well as gender inequality and labor markets
- Gender care gap varies within Europe and is associated with the percentage expenditure on formal long-term care
- Gender inequalities and differences in employment are associated with a higher gender care gap
- To improve care quality and to relieve caregiving relatives, Germany should invest more in long-term care quality
- Tax and family policy incentives can help reduce inequality between men and women on the labor market

A well-financed care system relieves caregiving relatives, especially women, and significantly reduces the gender care gap



1 The difference between the shares of women and men providing informal care compared to the share of male caregivers.
Legend: The gender care gap is 100 when women perform twice as often care work as men.
Sources: SHAREv6; Eurostat; authors' calculations.

FROM THE AUTHORS

> *"Women often work less hours and earn less, which is why it is more often women than men who reduce their hours or quit their job to care for relatives. Social norms also play a role here."*
>
> *— Mia Teschner —*

MEDIA

Audio Interview with Mia Teschner (in German)
www.diw.de/mediathek

Expanding long-term care insurance could reduce the gender care gap in Germany

By Johannes Geyer, Peter Haan, and Mia Teschner

ABSTRACT

In many European countries, men and women differ significantly in the amount of informal care work they provide for relatives, with women acting as caregivers far more frequently than men. This difference, known as the gender care gap, varies considerably between European countries, with Germany somewhere in the middle of the distribution. This Weekly Report analyzes the institutional, societal, and labor market factors that are related to the gender care gap across European countries. The results show that the gap is smaller in countries that spend more on the formal care system. In addition, they show that the gender care gap tends to be larger in countries that exhibit high gender inequality and high inequality in labor market participation between men and women. Thus, the results emphasize that the gender pay gap correlates with government investments in health care, the care system, and the labor market structure.
To reduce the gender care gap, expenditure on formal care should be increased to relieve informal caregivers and improve the quality of care in professional facilities. At the same time, policymakers should use tax and family policy incentives to increase women's workforce participation so that paid work and care work are more evenly distributed.

One of the key future social and health policy challenges is the increasing amount of people requiring care as society ages. Currently, around five million people receive benefits from long-term care insurance in Germany and according to current estimates, this figure will increase over the coming decades.[1] The majority of people requiring care receive care at home (83 percent). Nearly 14 percent of this majority belong to *Pflegegrad I* (long-term care level I, "minor restriction of independence") and only receive minimal additional benefits from long-term care insurance. Around 60 percent of people receiving care at home only receive a care allowance (*Pflegegeld*), meaning they organize informal care without professional assistance.[2] The other 25 percent of people requiring care in their own home organize their care with the help of outpatient nursing and care services, which usually also includes informal care provided by relatives.

Informal care, especially without professional help, is time consuming and frequently results in the caretaking relatives reducing or giving up paid employment or ending their search for paid employment. Like childcare, it is mainly women who provide informal care, interrupting their careers to do so.[3] The difference between the amount of informal care work performed by men and women is known as the gender care gap in long-term care.[4] In this Weekly Report, the shortened term *gender care gap* is used.[5]

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[1] In a current estimate, the Federal Statistical Office reports that the number of people receiving benefits will increase to 6.8 million by 2055 if prevalence rates remain the same. If the prevalence rates continue to trend upward, the number will be much higher. Statistisches Bundesamt, *Statistischer Bericht – Pflegevorausberechnung – Deutschland und Bundesländer* (2023) (in German; available online. Accessed on December 13, 2023. This applies to all other online sources in this report unless stated otherwise.).

[2] Statistisches Bundesamt, *Pflegestatistik – Pflege im Rahmen der Pflegeversicherung* (2021) (in German; available online)

[3] Johannes Geyer, Axel H. Börsch-Supan, Peter Haan, and Elsa Perdrix, "Long-term Care in Germany," *NBER Working Paper*, no. 31870 (2023) (available online)

[4] This term does not include other unpaid care work, such as childcare or housework and thus differs from other definitions of the gender care gap. For more, see the DIW Berlin Glossary (in German; available online).

[5] The large share of women performing care work is reflected in the formal care sector as well. According to OECD evaluations, the average share of women working in professional long-term care in OECD countries is around 90 percent. This frequently includes jobs with poor working conditions and comparatively low wages (OECD, "Women are well-represented in health and long-term care professions, but often in jobs with poor working conditions," (2019) (available online)).

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The gender care gap is a significant factor contributing to employment and income inequality between men and women.[6] This does not only apply to current income possibilities, but also to the amount of future pension entitlements, as they directly depend on how much remuneration subject to pension insurance a person has earned.[7] The differences in pension entitlements between women and men are often linked to gender differences in employment histories.[8]

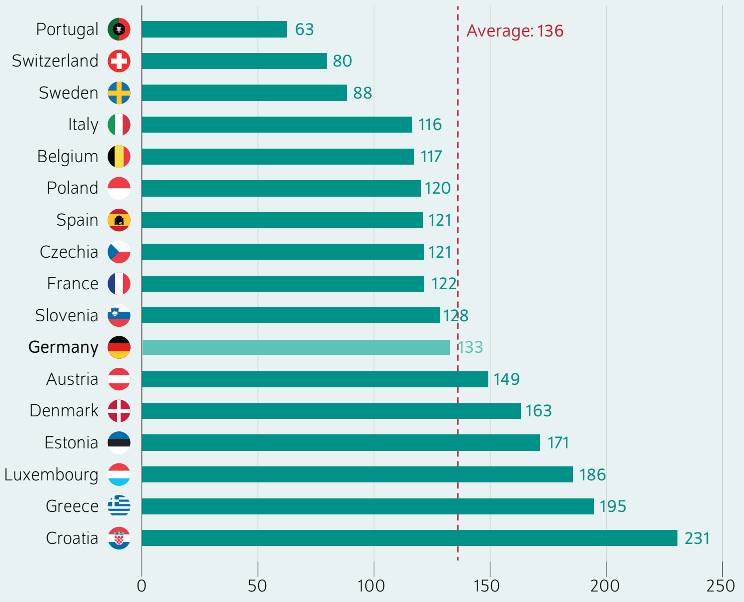
The above-average number of women caring for relatives is often explained by labor market differences between the genders: Women frequently earn less and work fewer hours than their partner, so reducing their hours or quitting their job to perform caretaking duties reduces the household income less than if their partner were to work fewer hours or quit. Social norms that regard care work as women's work also contribute to the gap. Moreover, the underlying care system may be reinforcing the differences in informal care provided by women and men. For example, a strong welfare state that spends a significant amount on formal care offers, such as outpatient care services, adult daycare, or in-patient nursing homes, can mitigate gender differences in informal care, as generally less informal care is needed.

This Weekly Report investigates how the gender care gap in Germany differs from the gap in other European countries.[9] It also shows how the gender care gap correlates with government spending on care as well as with the societal and labor market inequality between men and women. The analysis uses data from the Survey of Health, Ageing and Retirement in Europe (SHARE), which includes people aged 50 or older in 17 European countries. In addition to key socio-demographic indicators, the data contains detailed information on informal care provided (Box on data and sample).[10]

Figure 1

Adjusted gender care gap in different European countries

In percent[1]



1 The gender care gap is the difference between the shares of women and men performing care work compared to the share of men performing care work.

Source: SHAREv6; authors' calculations.

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Women are more likely than men to perform care work in all countries. In Germany, women are a little over twice as likely as men to perform care work.

Women perform more care work than men in all countries analyzed

This Weekly Report only considers informal care work performed for someone *outside* of one's own household—such as help with getting dressed, bathing or showering, eating meals, getting in or out of bed, or using the toilet—when calculating the gender care gap. Caretaking duties performed for one's partner in one's *own* household are not considered here. The absolute difference between the shares of men and women acting as informal caregivers is adjusted for age and level of education to make the statistics more comparable (Box).[11] These adjusted absolute differences are divided by the country-specific share of men acting as caregivers in order to calculate the respective relative gender care gaps.

Although the gender care gap differs between countries, a clear trend emerges: In all countries, women perform more informal care work than men (Figure 1). The gap is smallest in Portugal, Switzerland, and Sweden, where it is around 60 to 90 percent. This means that women are 60 to 90 percent more likely than men to provide care, i.e., slightly less than twice as often. The adjusted relative gender care gap is 200 percent or higher in the countries with the highest gaps, Luxembourg, Greece, and Croatia. Here, the share of women caregivers is three times as high as the share of men caregivers. The gender care gap is 133 percent in Germany, meaning women are twice as likely to care for relatives as men. Thus, Germany is in the middle of the distribution of the countries observed here.

Most countries also have distinct gender differences in regard to the regularity and frequency with which men and

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[6] Clara Schäper, Annekatrin Schrenker, and Katharina Wrohlich, "Gender Care Gap and Gender Pay Gap Increase Substantially until Middle Age," *DIW Weekly Report*, no. 9 (2023): 83–88 (available online; accessed on January 30, 2024).

[7] Informal care provided by caregivers who have not yet fully retired is now credited with pension entitlements and these periods also count as compulsory insurance periods. At the end of 2021, this applied to nearly one million insured persons, 86 percent of them women.

[8] Anna Hammerschmid and Carla Rowold, "Gender Pension Gaps in Europa hängen eindeutiger mit Arbeitsmärkten als mit Rentensystemen zusammen," *DIW Wochenbericht*, no. 25 (2019): 439–447 (in German; available online; accessed on January 30, 2024).

[9] This Weekly Report is part of the PENSINEQ research project, which is funded by the Joint Project Initiative: More Years Better Lives (JPI-MYBL).

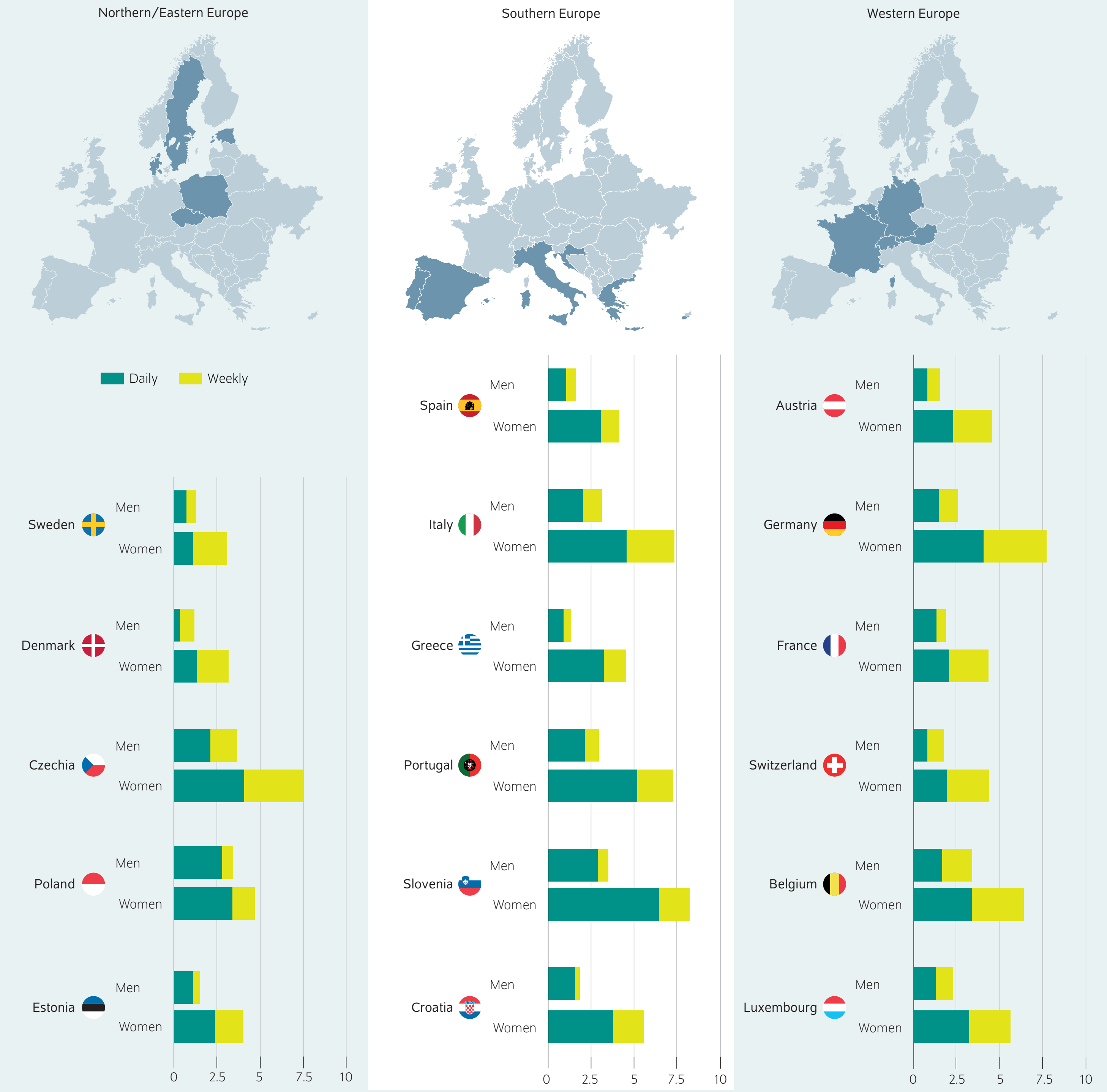
[10] Axel Börsch-Supan, "Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 6. Release version: 8.0.0," SHARE-ERIC (2022) (available online; accessed December 7, 2023).

[11] This refers to the age and level of education of the caregiver. The results of this Weekly Report are similar to analyses in which the difference between women and men is not adjusted for age and level of education.

Figure 2

Frequency of informal care work by country and gender

In percent



Source: Sharev6.

Women are considerably more likely to perform care work on a daily and weekly basis, although there are differences between the individual countries.

women perform care work (Figure 2). In many countries, women are significantly more likely to provide daily care than men. In Portugal, Greece, and Denmark, women are around three times as likely as men to provide care on a daily basis. The considerable gender differences in these countries are often also evident in terms of weekly care. The share of women and men who provide care on a daily basis is about the same in only a few countries, such as Sweden, France, or Poland. However, gender differences in weekly care are often significantly higher in these countries, resulting in a positive gender care gap (see Figure 1). In Germany, women are around twice as likely as men to provide care on a daily basis and around three times as likely to provide care on a weekly basis.

The care system influences the gender care gap

Taking a closer look, systematic regional differences are noticeable: While informal care is performed less frequently overall in Northern and Eastern European countries (Figure 2, left), it is performed more frequently overall in Southern and Western European countries (Figure 2, center and right), where the gender care gap is often larger. In the countries where a lot of informal care is provided, women are frequently performing the care work. This suggests that women perform a large share of private, informal care work. Germany is in the middle of the distribution here as well.

To capture country-specific differences in the care systems, this Weekly Report considers the respective expenditure on long-term care, both overall as well as on in-patient care in professional facilities (Table in Box). Higher proportional expenditure on care is interpreted as an indicator of a better care system. In particular, expenditure on inpatient care indicates a pronounced formal care sector that can relieve caregiving relatives.

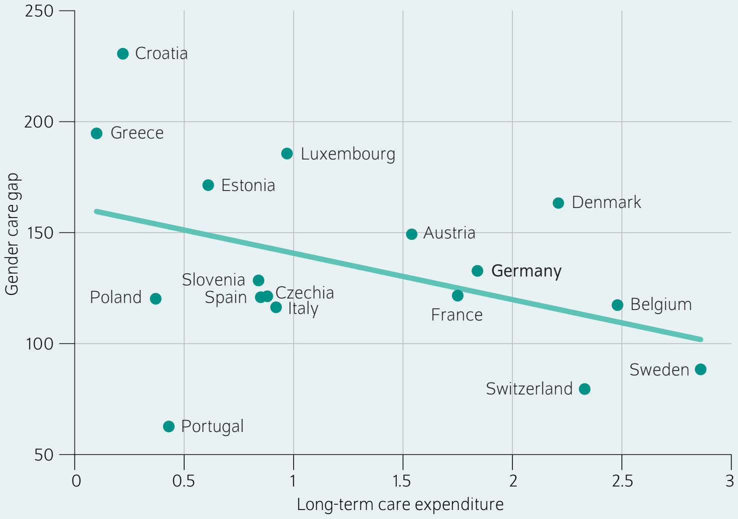
Countries with higher care expenditure have lower gender care gaps

The results of the analysis (Figure 3) show that the gender care gap is smaller in countries that spend more overall on formal long-term care, such as Sweden, Belgium, or Switzerland. In contrast, countries with comparatively larger gender care gaps, such as Croatia or Greece, spend less on long-term care. Germany is again in the middle in both dimensions. This correlation becomes even more clear when only viewing expenditure on long-term *in-patient* care instead of total expenditure on long-term care. While nearly two percent of GDP is spent on in-patient care in Sweden and Switzerland, Greece and Croatia spend only 0.07 and 0.15 percent each. Germany spends around one percent of its GDP on long-term in-patient care, again landing it in the middle of the distribution compared to other European countries.

Figure 3

Adjusted gender care gap and relative long-term care expenditure

Gender Care Gap in percent, expenditure in percent of GDP



Note: The line shown indicates the correlation between the adjusted gender care gap and relative expenditure on long-term care (measured as a percentage of GDP) based on a regression analysis. The correlation is significant at the ten percent level.

Legend: There are significant gender differences in private informal care in countries in which the relative amount spent on long-term care is low, such as Croatia or Greece.

Sources: SHAREv6; Eurostat; authors' calculations.

The gender care gap is smaller in countries where the relative expenditure on long-term care is higher.

When comparing the differences in in-patient care expenditure to the gender care gaps in the respective countries, a clear, statistically significant negative correlation emerges: On average, smaller gender differences in privately provided informal care can be observed in countries with more expenditure on long-term in-patient care (Figure 4). At the country level, this result reflects the fact that a stronger formal care system relieves caregiving relatives, especially women. However, it is questionable if this contributes to general gender equality, as there is a large share of women working in the professional care sector, where careers are frequently comparatively low paid.[12]

Gender care cap is lower when gender inequality is low

The Gender Inequality Index (GEI) is used to investigate the correlation between the gender care cap and general gender inequality in the countries analyzed (Table in Box). The GEI includes different domains of inequality that are summarized into a single index between 1 (total inequality) and 100 (total equality). The results show that the gender care gap is smaller in countries with higher gender equality across the different domains (Figure 5).[13] This correlation is clear in countries

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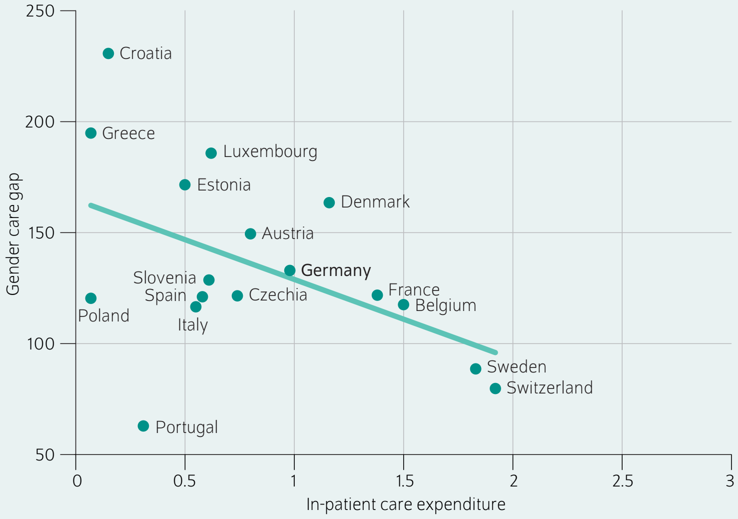
[12] OECD, "Women are well-represented in health and long-term care professions."

[13] This negative difference is not statistically significant, which could also be related to the small number of countries. The Gender Equality Index is available for all countries in Figure 1 except for Switzerland, bringing the total number of countries to 16.

Figure 4

Adjusted gender care gap and relative long-term in-patient care expenditure

Gender Care Gap in percent, expenditure in percent of GDP



Note: The line shown indicates the correlation between the adjusted gender care gap and relative expenditure on long-term care (measured as a percentage of GDP) based on a regression analysis. The correlation is significant at the ten percent level.

Legend: On average, there are fewer gender differences in privately provided informal care in countries where the relative expenditure on long-term in-patient care is higher.

Sources: SHAREv6; Eurostat; authors' calculations.

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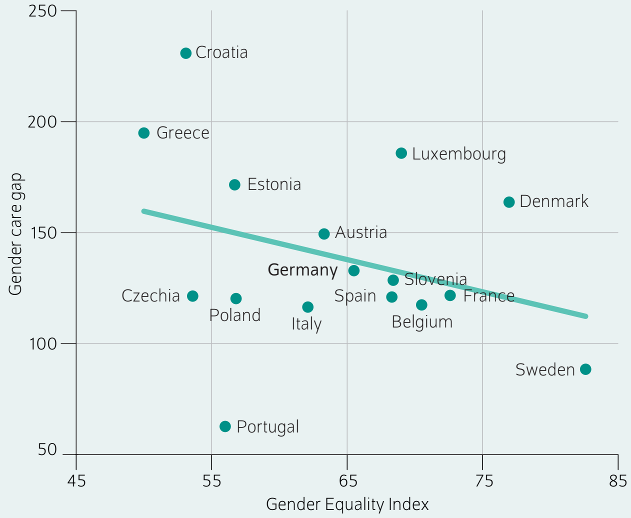
A stronger formal care sector relieves informal caregivers, especially women.

Figure 5

Adjusted gender care gap and the Gender Equality Index

Gender care gap in percent, Gender Equality Index of 1 (complete inequality) to 100 (complete equality)



Note: The line shown indicates the correlation between the adjusted gender care gap and the Gender Equality Index based on a regression analysis. The correlation is not statistically significant.

Legend: Croatia, Greece, and Estonia each have a Gender Equality Index of around 50, which indicates high gender inequality compared to the other countries. These three countries have a gender care gap of over 170 percent. Sweden, in contrast, has the highest Gender Equality Index (83) and the third-smallest gender care gap (88 percent).

Sources: SHAREv6; European Institute for Gender Equality; authors' calculations.

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The gender care gap is lower in countries that have more gender equality across various domains.

such as Croatia, Greece, and Estonia: Each country's GEI is around 50, which indicates high gender inequality compared to the other countries. In these three countries, the gender care gap is over 170 percent. The counterexample is Sweden: It has the highest GEI (83) together with the third smallest gender care gap (88 percent). Germany, again, is in the middle of the distribution with a GEI of 66 and a gender care gap of around 133 percent. However, there are also exceptions to this correlation. For example, Portugal has a smaller gender pay gap but a lower Gender Equality Index. Such exceptions show that inequality in informal caretaking duties between men and women can also be driven by other factors that are not included in the GEI (Table in Box).

One other important gender difference is employment rate inequality. The correlation between the gender care gap and differences in employment patterns between men and women are thus illustrated separately (Figure 6).

Women's labor market participation depends on informal care work

The lower the number of women employed in a country, the larger the gender care gap. A positive difference in the employment rate means that the labor market participation of men is proportionally higher than that of women (Table in Box). This fact correlates positively with care work: The larger the relative difference in the employment rate between men and women, the larger the gender care gap. This correlation is especially clear when looking at Greece, Sweden, Portugal, and Switzerland. In Greece, the gender employment rate gap is 30 percent. At the same time, women in Greece are three times as likely as men to perform informal care work, which is a gender care gap of nearly 200 percent. In contrast, women are less than twice as likely to perform care work as men—a gender care gap of less than 100 percent—in Sweden, Portugal, and Switzerland, where the difference in the employment rate is a maximum of 11 percent. Again, Germany is in the middle of the distribution here: The relative gender difference in the employment rate is around ten percent with a gender care gap of around 133 percent. These results confirm, as expected, that gender differences in the labor market are reflected in gender differences in informal care work and that these two factors can be mutually dependent.

Box

Data and sampling

This Weekly Report is based on Wave 6 (survey year 2015) of the Survey of Health, Ageing and Retirement in Europe (SHARE).[1] The sample is limited to respondents of at least 50 years of age.[2] This is done in order to investigate long-term care for adults and to distinguish it from childcare.

Definition of care work

In this study, only personal care (e.g., help with getting dressed, bathing or showering, eating meals, getting in or out of bed, using the toilet) provided outside a person's household and within the last twelve months prior to the survey is considered care work. Care work provided within one's own household is not considered as care work here, as both forms are captured differently in the data and are thus not comparable.[3] Care provided by partners living in the household is therefore not included. Other types of help provided for relatives or acquaintances, such as assistance with gardening or administrative matters, are not captured. On the one hand, this delineation clearly defines care as personal care support for another person and, on the other, ensures comparability with formal care services, such as care provided by an outpatient care service. The gender care gap is often calculated in the literature based on the number of hours spent caring for relatives daily.[4] The underlying database does not contain any information on the daily use of time (hours) spent on providing personal care. This Weekly Report therefore measures whether the respondent states that they provide personal care for relatives (outside their household). The SHARE data also records whether personal care is provided daily, weekly, or less frequently.

Methodology

The gender care gap describes the relative difference in the shares of women and of men providing informal care. In the first step, country-specific, cross-sectionally weighted regressions are used to calculate the absolute differences in the shares of men and women providing informal care, controlling for age and the level of education. These are then divided by the country-specific, weighted share of all men providing care in order to calculate the relative gender care gap. The larger this gender care gap, the greater the gender inequality in the provision of informal care.

In the second step, this relative gender care gap is regressed individually on the various country characteristics to investigate the respective statistical correlations between the gender care gap and various indicators of the national labor market and care system (Table in Box). As with the SHARE data, information from 2015 is used for the indicators.

Table

Care system and gender inequality indicators

Indicator (year used)	Description and notes
Relative expenditure on long-term care (2015)	· Total expenditure on long-term care · Percentage share of expenditure of GDP
Relative expenditure on in-patient long-term care (2015)	· Total expenditure on long-term in-patient care (care in-patient facilities) · Percentage share of expenditure of GDP
Gender Equality Index (2017)	· Index measures gender inequalities in different domains (work, money, knowledge, time, power, and health) and summarizes these domains into one index · Index value is between 1 (total inequality) and 100 (total equality) · Low value = high gender inequality · High value = low gender inequality · Index from 2017 based on data from 2015
Relative gender differences in the employment rate (2015)	· Absolute difference in employment rate between men and women compared to the employment rate of men · Positive gap = average employment rate of men is higher than that of women · Employment rate = share of employed persons in the entire population (from ages 15 to 64)

Sources: Eurostat; European Institute for Gender Equality; OECD.

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[1] Axel Börsch-Supan, "Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 6. Release version: 8.0.0," SHARE-ERIC (2022) (available online; accessed December 7, 2023). This Weekly Report uses data from the survey year 2015 because the following survey years are not suited for this report due to methodological reasons.

[2] Around 98 percent of the respondents in SHARE (Wave 6) are 50 or older.

[3] Care work provided outside the household includes assistance with personal care within the last 12 months regardless of frequency, while care work provided in one's own household only includes care on a regular basis (daily or almost daily over the last three month).

[4] Nina Klünder, *Differenzierte Ermittlung des Gender Care Gap auf Basis der repräsentativen Zeitverwendungsdaten 2012/13* (Berlin: Institut für Sozialarbeit und Sozialpädagogik e. V., Geschäftsstelle Zweiter Gleichstellungsbericht der Bundesregierung, 2017) (in German; available online).

Conclusion: Investing more in the care system and more men performing care work could reduce inequality

Women perform significantly more informal care work than men in all European countries investigated in this Weekly Report using SHARE data. However, there are important differences between the countries that are related to both expenditure on the formal care system and gender inequality: The more spent on formal care, the smaller the gender care gap, and countries with low gender inequality have a small gender care gap.

Germany can learn from its neighbors with lower gender care gaps: In an international comparison, it is in the middle of the distribution when it comes to expenditure on formal care, gender inequality, and the gender care gap.

Germany should invest more in formal care to increase the number and quality of care offers as well as to reduce the amount of informal care that relatives must provide. Currently, baby boomers are providing most informal care. This will change in the future and in the medium term when baby boomers stop acting as caregivers and begin requiring care themselves. Irrespective of the specific care work

Figure 6

Adjusted gender care gap and relative gender employment gap

In percent

Note: The line shown indicates the correlation between the adjusted gender care gap and the gender differences in the employment rate. The correlation is not statistically significant.

Legend: In Greece, the difference in the employment rate between men and women compared to the labor market participation of men is 30 percent. Women are three times as likely as men to provide care work in Greece. In Sweden, in contrast, the relative difference in the employment rate is less than five percent and women are less than twice as likely to perform informal care work as men.

Sources: SHAREv6; authors' calculations.

The larger the relative difference in the employment rate between men and women, the larger the gender care gap.

performed, inequality could be reduced by further expanding the care system. One current issue is the growing shortage of skilled workers in the formal care sector. According to Federal Statistical Office projections, the expected number of care workers in 2049 will be at least 280,000 fewer than the expected demand.[14] A shortage of skilled workers causes the quality of care provided to suffer. Sufficient personnel at care facilities is also a condition for relieving informal caregivers and thus decreasing the gender care gap.

It is important to mobilize more men for informal care to reduce inequality in care work. However, this is likely a very long-term goal, as can also be seen, for example, with parental benefits (*Elterngeld*), where resounding success in increasing parity in childcare has still not occurred. For more equality in long-term care, it is crucial to reduce labor market inequality between men and women. There are prominent proposals for achieving this goal, for example reforming *Ehegattensplitting* (joint taxation of married couples with full income splitting) or improving childcare so that both parents can work full time. These instruments could be conducive to the long-term goal of equal division of paid work and care work between men and women.

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[14] Statistisches Bundesamt, "Bis 2049 werden voraussichtlich mindestens 280,000 zusätzliche Pflegekräfte benötigt" press release from January 24, 2024 (in German; available online; accessed on January 30, 2024).

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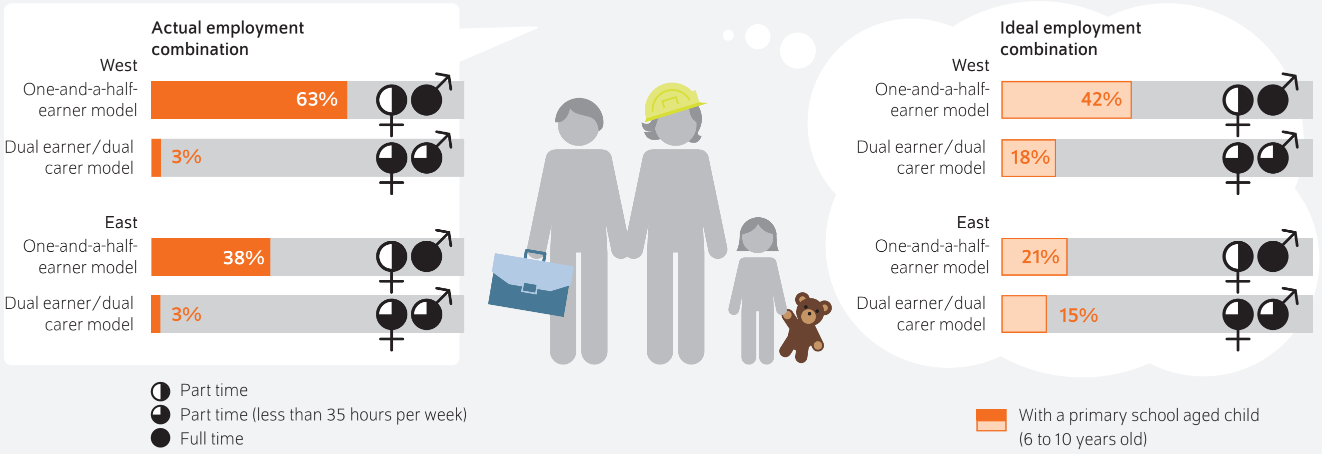
AT A GLANCE

Division of paid and care work between parents: Reality often differs greatly from the ideals

By Ludovica Gambaro, Annica Gehlen, C. Katharina Spieß, Katharina Wrohlich, and Elena Ziege

- Mothers and fathers in Germany still have a very unequal division of paid and care work
- Analysis of FReDA data shows that attitudes toward the ideal division of paid work between couples with children under 12 are more egalitarian than couples' actual behaviors
- One reason for this discrepancy is the German tax and transfer system, in particular the interplay of *Ehegattensplitting* and mini-jobs
- Insufficient childcare infrastructure and a high gender pay gap also create incentives for the one-and-a-half-earner model and the male breadwinner model
- To make an equal division of paid and care work more attractive for couples, the tax and transfer system needs to be modernized and daycare offers expanded

The division of paid and care work: a large gap between ideals and actual behavior



Sources: German Family Demography Panel Study (FReDA), wave 1, 2021, weighted; authors' calculations.

FROM THE AUTHORS

> *"The ideal and the reality of the division of paid work and care work between couples sometimes diverge considerably. One major reason for this discrepancy is the tax and transfer system, especially the interplay of Ehegattensplitting and mini-jobs as well as non-contributory dependents' health insurance."*
> — *Katharina Wrohlich* —

MEDIA

Audio Interview with K. Wrohlich (in German)
www.diw.de/mediathek

Division of paid and care work between parents: Reality often differs greatly from the ideals

By Ludovica Gambaro, Annica Gehlen, C. Katharina Spieß, Katharina Wrohlich, and Elena Ziege

ABSTRACT

On average, mothers and fathers in Germany divide paid work and care work very unequally. Mothers often only work part time, which results in further gender inequalities in the labor market. A current analysis of data from the German Family Demography Panel Study (FReDA) shows that the population's attitudes toward the ideal division of work between couples with children under 12 are considerably more egalitarian than the actual behavior of couples with young children of different ages. This discrepancy is due in part to the financial incentives of the German tax and transfer system for married couples, which arise from the interplay between income splitting (*Ehegattensplitting*) and the tax treatment of mini-jobs. In addition, childcare infrastructure is insufficient and a very high gender pay gap persists in Germany. If policymakers want to dismantle inequalities in the labor market, the tax and transfer system must be modernized and childcare options expanded to make a more equal division of paid work and care work between parents more appealing.

In recent years, labor market gender inequalities have increasingly become the focus of public attention and thus also of policy discussions. At the same time, there are few measurable advances in tackling these inequalities in Germany. For example, the gender pay gap has remained at 18 percent[1] for many years and is very high in a European comparison.[2] Empirical labor market research shows that parenthood exacerbates labor market gender inequalities considerably. Countless studies on what is known as the "child penalty" have shown that the gender differences in gross hourly wages and hours worked— and thus gross yearly wages— increase considerably following the birth of a couple's first child and remain relatively constant at an older age.[3]

A major reason for the increase in labor market gender inequalities is due to paid work and care work: Following the birth of a couple's first child, the couple divides paid and care work less equally. For example, there are major differences between mothers and fathers when it comes to parental leave. Although the share of fathers taking parental leave has risen considerably over the past 15 years, not least in thanks to the introduction of parental benefits (*Elterngeld*) in 2007, the majority still do not take parental leave. Fathers who do take parental leave take it for significantly shorter periods than mothers.[4] Following parental leave, mothers primarily work part time when they reenter the labor market, even if they had worked full time previously. This is almost never the case for fathers.[5]

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

[2] Cf. Julia Schmieder and Katharina Wrohlich, "Gender pay gap in a European comparison: positive correlation between the female labor force participation rate and the gender pay gap," *DIW Weekly Report* no. 9 (2021): 65-70 (available online).

[3] Cf. for example Henrik Kleven, "Child penalties across countries: Evidence and explanations," *American Economic Association, Papers and Proceedings* vol. 109 (2019): 122–126 and Jonas Jessen, "Culture, children and couple gender inequality," *European Economic Review* vol. 150 (2022): 104310 (available online).

[4] Cf. Uta Brehm, Mathias Huebener, and Sophia Schmitz, "15 Jahre Elterngeld: Erfolge, aber noch Handlungsbedarf," *Bevölkerungsforschung aktuell* no. 6 (2022): 3–7 (in German; available online) as well as Katharina Wrohlich and Aline Zucco, "15 Jahre Elterngeld: Auswirkungen und Reformoptionen," *Working Paper Forschungsförderung* no. 281 (2023) (in German; available online).

[5] Cf. Annekatrin Schrenker and Aline Zucco, "The gender pay gap begins to increase sharply at age of 30," *DIW Weekly Report* no. 10 (2020): 75-82 (available online).

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Majority of couples with children in western Germany live according to the one-and-a-half-earner model

In western Germany, the one-and-a-half-earner model, in which the father is employed full time and the mother is employed part time or marginally, is the most common pattern of labor market behavior of couples with children. More than 60 percent of all western German couples whose youngest child is of preschool (three to five years old) or primary-school age (six to ten years old) divide paid work according to this model (Figure 1), as do nearly fifty percent of couples whose youngest child is younger than three. However, among couples with children in this age group, over 20 percent follow the male breadwinner model, in which the father is employed full time and the mother does not work at all. In contrast, couples with older children are significantly less likely to opt for the male breadwinner model at around only ten percent. These figures are based on data from the German Family Demography Panel Study (FReDA), which is representative of the population in Germany aged 18 to 50 (Box 1).

Around 12 to 16 percent of all western German couples with children are, depending on the age of the youngest child, both employed full time. Parents choose the adult worker model, in which both parents work full time, considerably more often than the dual earner/dual carer model, in which both parents work part time with around 30 hours a week each: Only three to five percent of all couples in western Germany follow this model.

In eastern Germany the dual earner/dual carer model is also not very widespread. There, both parents work full time much more frequently than in the west: More than 40 percent of couples whose youngest child is three or older follow the adult worker model, more than twice the number of couples in western Germany. However, for couples whose youngest child is youngest than three, the one-and-a-half-earner model is most widespread in both the east and west.

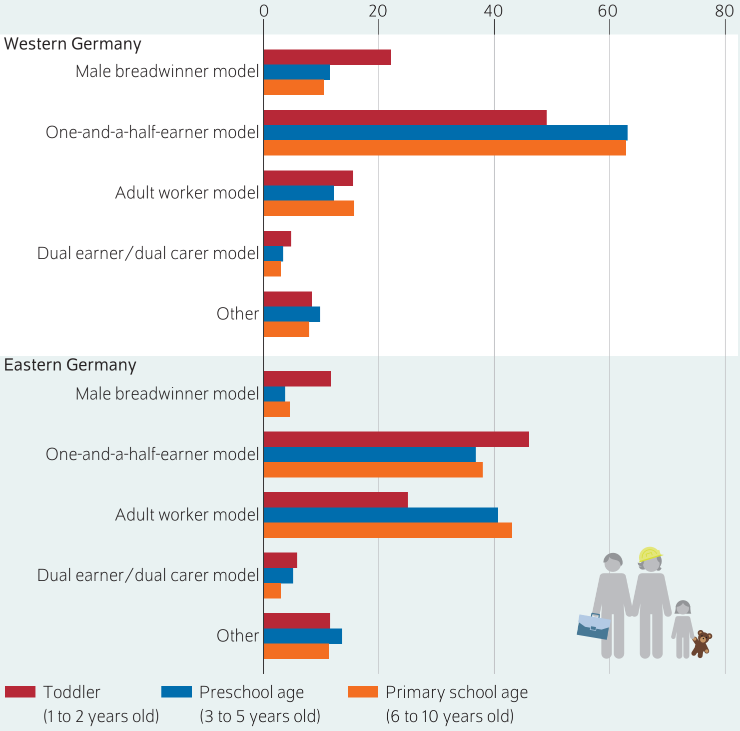
Population attitudes toward the division of paid and care work are more egalitarian than reality

Current surveys indicate that the one-and-a-half-earner model and the associated unequal division of paid work and care work between mothers and fathers is not viewed as ideal by a significant share of young families. For example, the German Federal Government's 2023 Report on Fathers cites survey results according to which around half of all fathers state that fathers and mothers should ideally each take on half of childcare duties. However, this is only actually the case in 21 percent of families. The same survey determined that more than 40 percent of the fathers surveyed would like to take on a larger share of childcare than they actually do.[6]

Figure 1

Actual employment arrangements of parents with children in Germany

In percent



Notes: In the male breadwinner model, the father works full time and the mother is not employed. In the one-and-a-half-earner model, the father works full time and the mother works part time or marginally. In the adult worker model, both parents work full time. In the dual earner/dual carer model, both parents work around 30 hours per week.

Sources: German Family Demography Panel Study (FReDA), wave 1, 2021, weighted; authors' calculations.

Both parents work full time much more frequently in eastern Germany than in western Germany.

Using the FReDA data, we can analyze in more detail how many hours of parental employment, depending on the age of the youngest child, the population theoretically believes is ideal. All FReDA participants are asked, regardless of whether or not they have children, about their attitude toward this topic. Participants are surveyed about a hypothetical couple whose youngest child in the household is two, four, or eight years old.[7] These attitudes reflect the average social norms that parents face when deciding on the division of paid work and care work.

Analyzing data from 2021 reveals that the one-and-a-half-earner model is most frequently viewed as the ideal division of labor between parents. More than 40 percent of respondents in western Germany think that the one-and-a-half-earner model is the ideal division of paid work for couples with

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[6] Cf. Bundesministerium für Familie, Senioren, Frauen und Jugend, *Väterreport 2023: Entwicklungen und Daten zur Vielfalt der Väter in Deutschland* (2023) (in German; available online).

[7] Cf. also Martin Bujard and Leonie Kleinschrot, "Wieviel sollten Mütter und Väter arbeiten? Idealvorstellungen variieren in und nach der Rushhour des Lebens," *Bevölkerungsforschung aktuell* no. 1 (2024) (in German; online verfügbar); as well as Ludovica Gambaro et al., "Should Mama or Papa Work? Variations in Attitudes towards Parental Employment by Country of Origin and Child Age," *Comparative Population Studies* no. 48 (2023): 339–368. .

Box 1

FReDA: German Family Demography Panel Study

The analyses in this Weekly Report use data from the first wave of FReDA, the German Family Demography Panel Study[1] FReDA is a new panel survey that began in 2021. It is a representative survey of people living in Germany aged 18 to 50 years old and thus focuses on young and middle-aged adults. As part of FReDA, data on partnerships and family life is collected twice a year. An "anchor person" in the household as well as their partner are surveyed. Overall, more than 30,000 interviews were conducted in fall 2023. FReDA includes questions on numerous demographic, psychological, economic, and sociological aspects of life. Special attention is paid to family planning and forms of cohabitation. Depending on the respondents' family situation, parent-child relationships or intergenerational relationships are also addressed. The FReDA survey makes it possible to make international comparisons with numerous other countries in Europe and worldwide, as every three years the questionnaire corresponds to that of the Generations and Gender Survey (GGS).[2] In 2022, the German Family Panel (pairfam) study was integrated into FReDA and continues on in this form. So far, data from the first two waves, conducted from 2021 to 2023, are available.

The analyses are based on statements of the anchor person on their own employment, the employment of their partner, and their own attitudes toward the employment of parents from the first wave in 2021. The question about their own employment was "To what extent are you employed? Are you...?" Answer options are:

- Employed full time
- Employed part time
- Marginally employed, in a mini-job, or a one-euro job

The question about the partner's employment is: "Has your partner performed paid work in the past weeks?" with the following answer options:

- Yes, paid work
- Yes, paid work, but they are on vacation, parental leave, or similar
- No, no paid work, but looking for work
- No, no paid work and not looking for work
- I don't know

The question "How many hours does your partner normally work per week in this job or in this company, including overtime?" is used for people in paid employment to differentiate between full-time and part-time employment. Full-time employment is defined as working 35 hours or more per week.

To find out attitudes toward parental employment, the following question was asked: "Consider a family with a mother, father, and two children where the youngest child is two years old. Should the mother work full time, part time, or not work at all?"

The question is repeated for the father and in two other scenarios in which the youngest child is four or eight years old. FReDA is a joint project of the Federal Institute for Population Research (*Bundesinstitut für Bevölkerungsforschung*, BiB), GESIS – *Leibniz-Institut für Sozialwissenschaften*, and the University of Cologne. BiB is responsible for the overall project coordination.

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[1] FReDA stands for Family Research and Demographic Analysis.

[2] Cf. the information on the Genations and Gender Survey (GGS) on the website of the Federal Institute for Population Research (*Bundesinstituts für Bevölkerungsforschung*) (in German; available online).

children aged two, four, or eight. These figures are lower in the east, where only around one third of the respondents think that this arrangement is ideal for couples with a two-year-old child. Only 20 percent of the respondents in the east believe this arrangement is ideal for couples with older children (four or eight) (Figure 2).

However, in both eastern and western Germany, the share of families actually following the one-and-a-half-earner model is considerably higher than the share of FReDA respondents with and without children who think this model is ideal. While, for example, 63 percent of couples in western Germany whose youngest child is between six and ten live according to the one-and-a-half-earner model, only 42 percent of western German respondents think this division of work is ideal for couples with children in this age group. In eastern Germany, too, significantly more couples with children choose the one-and-a-half-earner model than corresponds to the attitudes of young and middle-aged adults: Thirty-eight percent of couples whose youngest child is of primary school age follow this arrangement, but only 21 percent of eastern German respondents view it as ideal.

Respondents in eastern Germany predominantly consider the adult worker model with two parents working full-time to be ideal as long as the youngest child is older than three. Sixty-two percent of eastern German respondents believe that this division of work is ideal for couples with an eight-year-old child. The share of western German respondents who consider it as ideal is much lower, at 38 percent. However, the share of couples that put the adult worker model into practice is significantly smaller in both parts of the country: only 16 percent and 43 percent in western and eastern Germany, respectively.

Yet the largest discrepancy between general attitudes and actual behaviors can be observed in relation to the dual earner/dual carer model. This arrangement, in which both parents work around 30 hours per week, is practiced by three to six percent of all couples in western and eastern Germany, depending on the age of the child. However, it is viewed as ideal by a significant share of respondents: Around 30 percent of respondents in eastern and western Germany think that this is the ideal division of paid work for couples whose youngest child is two years old. If the youngest child is four years old, more than 20 percent still consider it best. In the case of an eight-year-old child, 18 percent of respondents in western Germany and 15 percent of respondents in eastern Germany consider the dual earner/dual carer model as ideal.

Overall, the analysis shows that the share of respondents who find an egalitarian division of paid work (either in the adult worker model or the dual earner/dual carer model) to be ideal is considerably higher in eastern Germany, regardless of the age of the youngest child, compared to the share of respondents who prefer an unequal division. It is somewhat different in western Germany, where respondents think the male breadwinner model or one-and-a-half-earner model are the ideal arrangement for couples whose youngest child is either two or four years olds. However, if the youngest child is eight years old or older, the majority of western German respondents also think that an egalitarian division of paid work is ideal.[8]

Tax and transfer system make the one-and-a-half earner model in particular financially attractive

There are countless individual reasons why the actual division of paid and care work within couples deviates so much from the ideal. There may be working conditions that make it impossible to work the desired number of hours or there may be structural restrictions, such as a lack of childcare spots. In addition, the financial incentives from the tax and transfer system in Germany and the different average wages of men and women influence couples' employment decisions. To illustrate these financial incentives, we simulate the net household income of five different employment combinations for married couples. We assumed average gross hourly wages for men (25.30 euros) and women (20.80 euros)[9] for the simulations (Box 2).

The simulated models are the male breadwinner model (father working full time, mother unemployed), two versions of the one-and-a-half-earner model (father working full time, mother working either 20 hours or only marginally with six hours), the adult worker model (both parents working full time), and the dual earner/dual carer model (both parents working 30 hours a week).

Figure 2

Employment arrangements viewed as ideal for couples with children in Germany

In percent

Notes: In the male breadwinner model, the father works full time and the mother is not employed. In the one-and-a-half-earner model, the father works full time and the mother works part time or marginally. In the adult worker model, both parents work full time. In the dual earner/dual carer model, both parents work around 30 hours per week.

Sources: German Family Demography Panel Study (FReDA), wave 1, 2021, weighted; authors' calculations.

The one-and-a-half-earner model is the most ideal model in western Germany, while it is less popular in eastern Germany.

Monthly net household income is highest when both parents work full time

As expected, the net household income is highest (4,861 euros per month) in the case of the adult worker model in which both parents work full time (Figure 3). The one-and-a-half-earner model yields the second-highest monthly income (3,953 euros per month), slightly higher than the income from the dual earner/dual carer model (3,832 euros per month), despite the fact that the parents work the same total number of weekly hours in both. However, because the assumed gross hourly wage of men is 18 percent higher than that of women (the current gender pay gap), the one-and-a-half-earner model yields a higher net income. If the mother is in employment only marginally for six hours a week, there is a significantly lower net income of 3,440 per month. As expected, the net household income is lowest with the male breadwinner model: only 2,941 euros per month.

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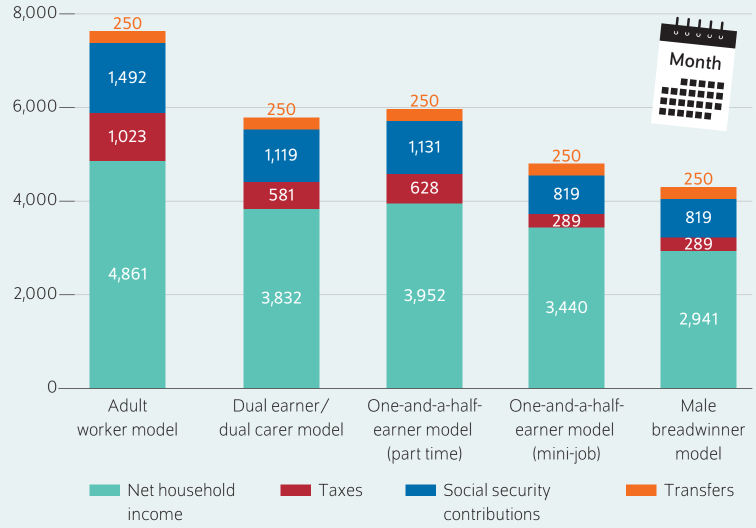
[8] Interestingly, men and women's attitudes toward paid and care work are very similar, regardless of the age of the youngest child. However, a larger share of women prefer the dual earner/dual carer model compared to men, who tend to prefer the adult worker model.

[9] These values represent the average gross hourly wages of men and women in 2023. Cf. Statistisches Bundesamt, "Gender Pay Gap 2023: Frauen verdienten pro Stunde 18 Prozent weniger als Männer."

Figure 3

Net household income, taxes, social security contributions, and transfers by employment combination



Notes: In the male breadwinner model, the father works full time and the mother is not employed. In the one-and-a-half-earner model, the father works full time and the mother works part time or marginally. In the adult worker model, both parents work full time. In the dual earner/dual carer model, both parents work around 30 hours per week.

Source: Authors' calculations using the micro simulation model GETTSIM.

The male breadwinner model yields the lowest monthly net household income.

Box 2

Methodology

We calculated the net incomes of stylized households for different employment combinations using the GETTSIM software. GETTSIM (GErman Taxes and Transfers SIMulator) is a program that was jointly developed by researchers at several research institutes and universities in Germany, including DIW Berlin.[1] The program is an open-source project and freely available to the public.[2]

GETTSIM can be used for any household situation, employment situation, and income situation to simulate relevant parameters of the German tax and transfer system. This includes, for example, households' tax burden, individual social security contributions, and transfer payments such as unemployment, child benefits, housing benefits, minimum income benefits (*Bürgergeld*), and pension entitlements.

In this Weekly Report, we simulate the income situation of five households consisting of a married couple with one child each with a different parental employment combination. Using GETTSIM, the social security contributions, tax burden, and transfer payments such as child benefits are calculated for these households for 2023 to determine the net disposable income. The analyses did not include housing benefits.

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[1] Other participating institutes include the Institute for Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung*, IAB), the Institute of Labor Economics (*Institut zur Zukunft der Arbeit*, IZA), the ifo Institute – Leibniz Institute for Economic Research at the University of Munich, the Leibniz Center for European Economic Research (*Zentrum für Europäische Wirtschaftsforschung*, ZEW), and universities in Berlin, Bonn, Mannheim, Munich, and Kassel.

[2] The documentation as well as the GETTSIM source code are available online.

One-and-a-half-earner model most financially attractive per hour worked

However, the ranking is quite different when looking at married couples' net income per hour worked rather than per month. If we divide the net household income by the total number of hours worked by both parents, the income from the one-and-a-half-earner model in which the mother is marginally employed (six hours a week) is the highest at 17.30 euros net per hour. This is closely followed by the male breadwinner model at 17 euros per hour. In the one-and-a-half-earner model in which the mother is employed part time (20 hours per week) or in the dual earner/dual carer model, in which both parents work 30 hours per week, the net income per hour worked is significantly lower at 15.20 euros and 14.70 euros per hour, respectively. It is the lowest, 14 euros per hour, when both parents are employed full time (Figure 4).

When using the adult worker model as a reference model and comparing the total work hours of both parents and the net household income with the other models, it becomes evident: The one-and-a-half-earner model with the mother employed in a mini-job (six hours a week) results in the household earning 71 percent of the net income of the reference household, while only having to work 57 percent of the total hours worked by the reference household. For the one-and-a-half-earner model with the mother in part time work (20 hours a week), the household earns 81 percent of the net income with 75 percent of the work time; for the dual earner/dual carer model (both parents working 30 hours per week), the household earns 79 percent of the income, also with only 75 percent of the work time. For the male breadwinner model, the household earns 61 percent of the reference household income from 50 percent of the work hours. Thus, the relation between the parents' combined number of hours worked and net income is most attractive in the one-and-a-half-earner model with the mother in marginal employment.

Conclusion: Tax and transfer system reforms could increase appeal of a more equal division of paid and care work

General attitudes toward the division of paid and care work between couples with children deviate considerably from reality. In addition to personal reasons, there are also some structural reasons that the one-and-a-half-earner model in particular, in which the father works full time and the mother part time or marginally, is so common.[10] Some of

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[10] If the mother earns more per hour than the father, the one-and-a-half-earner model with the roles reversed (the mother working full time and the father working part time or a minijob) is also financially appealing. However, this model is empirically very rare.

these structural reasons are not analyzed in this Weekly Report and concern the childcare infrastructure, including a lack of daycare spots for children below three, whole-day spots for preschool-aged children,[11] and an underdeveloped supply of whole-day spots for primary school-aged children.[12]

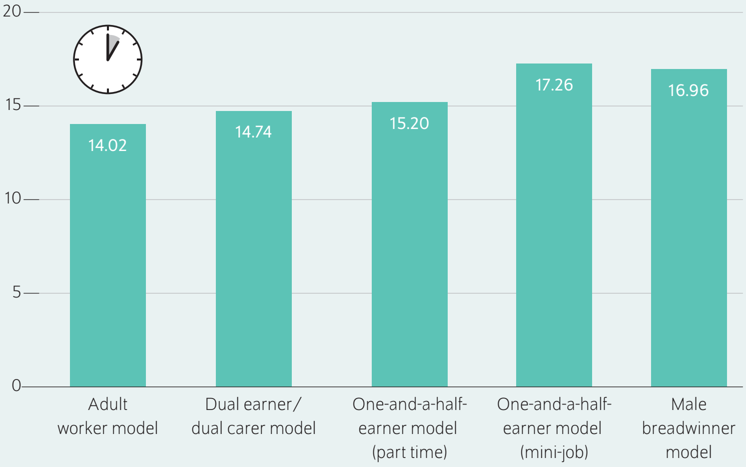
In addition, the German tax and transfer system is set up so that the one-and-a-half-earner model is the most financially attractive option for married couples. This is due to the interplay of *Ehegattensplitting* (joint taxation of married couples with full income splitting), the tax treatment of income from mini-jobs, and non-contributory dependents' insurance, where spouses can be insured for free on statutory health insurance. Moreover, the gross hourly wage of men, which is 18 percent higher on average, also makes an unequal division of paid work more attractive in the short term.

If policymakers want to combat labor market gender inequalities and the unequal division of unpaid care work, reforms to the tax and transfer system need to be initiated. Proposals for reforms to *Ehegattensplitting*, for example in the form of de facto income splitting with a transfer amount, have been on the table for some time.[13] Alternatives to non-contributory dependents' insurance should also be discussed.[14] It would also be important to abolish mini-jobs, at least for people of working age, while retaining them for students and pensioners. In light of growing labor shortages, subsidizing marginal employment in the form of mini-jobs, and thus promoting a highly unequal division of paid and care work among couples, does not seem to be helpful. Instead, what is required is a needs-based childcare infrastructure for children aged one to 12 as well as a modernized tax and transfer system that makes paid work more attractive, in particular for mothers. This could reduce the discrepancy between the ideal division and actual division of paid and care work, and make a larger volume of work available on the labor market, especially by women.

Figure 4

Net income per hour worked by employment combination

In euros



Notes: In the male breadwinner model, the father works full time and the mother is not employed. In the one-and-a-half-earner model, the father works full time and the mother works part time or marginally. In the adult worker model, both parents work full time. In the dual earner/dual carer model, both parents work around 30 hours per week.

Source: Authors' calculations using the micro simulation model GETTSIM.

The net income per hour worked is higher if the mother works little or not at all.

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[11] Sophia Schmitz et al., *Bundesweite Standards für bedarfsgerechte Angebote, insbesondere Ganztagsangebote, in der Kindertagesbetreuung für Kinder bis zum Schuleintritt. Expertise* (Bundesinstitut für Bevölkerungsforschung: 2023) (in German; available online).

[12] Twenty-one percent of families in Germany with a child between one and three years old do not have a day care spot for their child although they need one. Cf. Mathias Huebener et al., *Frühe Ungleichheiten: Zugang zu Kindertragesbetreuung aus bildungs- und gleichstellungspolitischer Perspektive* (Frederich-Ebert-Stiftung: 2024) (in German; available online). More than two thirds of three-year-olds are cared for full time until they begin school. However, only half of school-aged children under 11 are in whole-day care. This means that nearly half of the children are cared for in school for a maximum of 25 hours per week. Cf. Autorengruppe Bildungsberichterstattung Bildung in Deutschland 2022. Ein indikatorengestützter Bericht mit einer Analyse zum Bildungspersonal (2022) (in German; available online).

[13] In such a tax model, both partners are taxed individually, but the partner with the higher income can transfer an amount equal to the basic tax-free allowance to their partner. For more, cf. Björn Fischer et al., "Reform proposal for marriage taxation in Germany: de facto income splitting with a low transferable amount," *DIW Weekly Report* no. 41/42 (2020): 423-432 (available online).

[14] Kai-Uwe Müller et al., "Evaluationsmodul: Förderung und Wohlergehen von Kindern: Endbericht. Studie im Auftrag der Geschäftsstelle für die Gesamtevaluation ehe- und familienbezogener Maßnahmen und Leistungen in Deutschland, Prognos AG, für das Bundesministerium für Familie, Senioren, Frauen und Jugend und das Bundesministerium der Finanzen," *DIW Politikberatung kompakt* no. 73 (2013) (in German; available online).

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