

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Bartels, Charlotte; Sierminska, Eva; Schröder, Carsten

Working Paper

Wealth Creators or Inheritors? Unpacking the Gender Wealth Gap from Bottom to Top and Young to Old

IZA Discussion Papers, No. 17324

Provided in Cooperation with:

IZA - Institute of Labor Economics

Suggested Citation: Bartels, Charlotte; Sierminska, Eva; Schröder, Carsten (2024): Wealth Creators or Inheritors? Unpacking the Gender Wealth Gap from Bottom to Top and Young to Old, IZA Discussion Papers, No. 17324, Institute of Labor Economics (IZA), Bonn

This Version is available at: https://hdl.handle.net/10419/305766

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





DISCUSSION PAPER SERIES

IZA DP No. 17324

Wealth Creators or Inheritors?
Unpacking the Gender Wealth Gap from
Bottom to Top and Young to Old

Charlotte Bartels Eva Sierminska Carsten Schröder

SEPTEMBER 2024



DISCUSSION PAPER SERIES

IZA DP No. 17324

Wealth Creators or Inheritors? Unpacking the Gender Wealth Gap from Bottom to Top and Young to Old

Charlotte Bartels

DIW Berlin and IZA

Eva Sierminska LISER and IZA

Carsten Schröder

DIW

SEPTEMBER 2024

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA DP No. 17324 SEPTEMBER 2024

ABSTRACT

Wealth Creators or Inheritors? Unpacking the Gender Wealth Gap from Bottom to Top and Young to Old

There is growing interest in understanding how gender influences the accumulation of wealth. While prior studies focused on labor-related determinants, our research focuses on inheritances and gifts. Using unique survey data that oversamples the top 1% of wealth holders in Germany, we show that the gender wealth gap is small for individuals up to age 40, then widens, and declines for those past retirement age. Transfer amounts and their timing are important drivers of these differences: men tend to inherit larger sums than women during their working life. Women often outlive their male partners, thus receiving larger inheritances at older ages.

JEL Classification: D31, D63, J16

Keywords: wealth accumulation, wealth inequality, gender wealth gap,

inheritances, gender economics

Corresponding author:

Eva Sierminska Luxembourg Institute of Socio-Economic Research Campus Belval 11 Porte des Sciences L-4366 Esch/Alzette Luxembourg

E-mail: eva.sierminska@liser.lu

I Introduction

Private wealth accumulation is a multifaceted lifelong process. Women accumulate less wealth than men because of widely documented gender gaps in earnings, labor market experience, financial literacy, investment choices, as well as gender-specific preferences and the disproportionate rewards for working long hours (Sierminska et al., 2010; Goldin, 2014; Lusardi and Mitchell, 2014; Falk and Hermle, 2018; Schneebaum et al., 2018). In their seminal paper, (Edlund and Kopczuk, 2009) argue that rich women inherit their wealth, whereas rich men create their wealth. This study is the first to comprehensively investigate the role of inter vivos gifts and inheritances in explaining gender differences in wealth, emphasizing not only the amount but also the timing of these transfers.

We use unique micro-data for Germany that oversample the wealthy and provide individual level wealth data, thus informing about "who owns what" within couples. With most studies analyzing *household* level wealth, our study adds to the small literature investigating *individual* wealth, .

We first analyze the gender wealth gap from the bottom to the top of the wealth distribution. We find that the average unconditional gender wealth gap is approximately 40%. Women are slightly over-represented in the bottom 50% of the wealth distribution, but under-represented at the top. The share of women sharply declines in the top percentiles of the wealth distribution, dropping to only 30% in the top percentile. This magnitude is consistent with previous evidence (Schneebaum et al., 2018; Meriküll et al., 2021).

The main contribution of the paper is to show, second, that the gender wealth gap varies with age. Across age cohorts, the average wealth gap is small for younger cohorts, increases to about 100,000 euros from age 40 and on, and declines in later life. We show that transfers – capitalized gifts and inheritances – importantly contribute to this pattern:

The likelihood of receiving a transfer during working age is similar for men and women, but men receive larger sums; women inherit larger sums during retirement, often after their husband's death. Receiving larger sums early in life extends the time horizon for men to invest their initial transfer and accumulate additional wealth. Finally, we show that the gender-specific patterns in inheritances explain the fact that men are more likely to classify as "self-made" or wealth creators and women as wealth inheritors.

II Data

The German Socio-Economic Panel (SOEP) data is a representative household survey that includes information on individual wealth and individual transfers (inheritances/gifts) as well as socio-demographic characteristics, household composition, education, employment, income, etc. Since 2019, a unique sub-sample of high-wealth individuals (SOEP-P) improves the coverage of the top of the wealth distribution. High wealth individuals were sampled using administrative business register data from the ORBIS database.¹

Our analysis focuses on individuals aged 20 years and older. The baseline sample comprises 24,986 individuals, with approximately 10% (2,413 individuals) from the high-wealth sample. Key variables include individual net worth, calculated as assets minus liabilities, and transfers, representing the total value of capitalized inheritances and gifts received over the life time (see Appendix A.2 for details). Online Appendix Table A.1 displays summary statistics for the main variables of our sample by gender and four groups of the individual net wealth distribution.

¹Further details on the sampling strategy and its effectiveness are provided in Schröder et al. (2020).

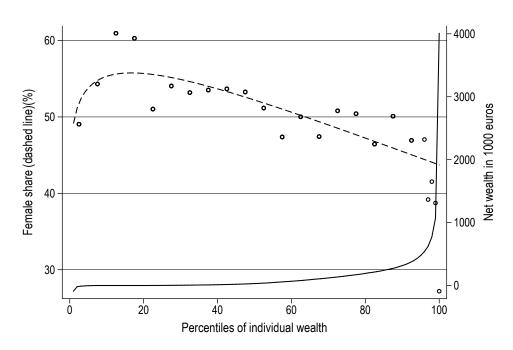
III The gender wealth gap from bottom to top

Figure 1 contrasts the individual wealth distribution and the share of women within each of the twenty quantiles. We rank men and women together by their individual net wealth. Women are slightly overrepresented in the bottom 50% of the wealth distribution. Their share sharply declines toward the top, reaching less than 30% in the richest percentile. The average gender wealth gap of approximately 40% (See Online Appendix Figure A.1) is in line with previous studies, such as Sierminska et al. (2010, 2019). To a large extent, it is driven by the under-representation of women in the top most percentiles of the individual wealth distribution (see also Figure A.2 in the Online Appendix). This finding holds when restricting the sample to ages 20 to 64 and when excluding the high-wealth sample. Across wealth groups, men hold more business assets, other real estate, vehicles, and are more indebted than women. The gender wealth gap at the top is mainly driven by men's higher investments in business assets and other real estate (see Figure A.3 in the Online Appendix).

IV The gender wealth gap from young to old

Figure 2 shows that average wealth is relatively similar for young women and men. For the age groups 40-49, 50-59, and 60-69, the gender wealth gap increases to about 100,000 euros. The gap shrinks for individuals in retirement (age 60-69) and at older ages. Given that women often outlive their husbands, the smaller gender wealth gap at older age groups might be related to deceased husbands passing on their wealth to their wives. In the next section, we shed more light on this channel by investigating the role of transfers.

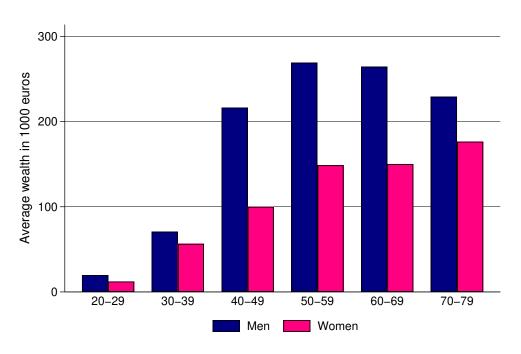
Figure 1: Net wealth distribution and female share



Source: SOEP v36.

Notes: The Figure contrasts the female share in each of twenty quantiles of the individual net wealth distribution (circles) – also using locally weighted scatterplot smoothing (lowess) (dashed line) – with the individual net wealth distribution (connected line). The bin size is 5 percentiles for the bottom 95%, while the top 5% are shown as percentile averages to display the rapidly declining female share toward the very top.

Figure 2: Average wealth by gender and age



Source: SOEP v36.

Notes: Averages in 1,000 euros.

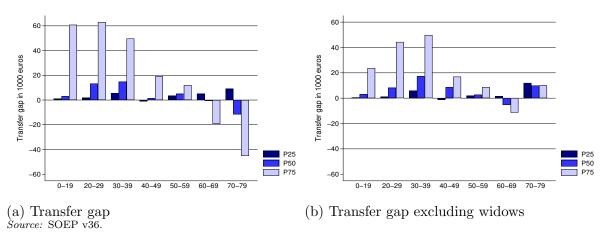
V Wealth creator or inheritor?

Figure 3 depicts the gender transfer gap (inheritances and inter-vivos gifts) at the age the first transfer was received, and at different points of the transfer distribution (25th, 50th, and 75th percentile): including (on the left) and excluding widows from the sample (on the right). For those who received their first transfer before 60, the transfer gap is positive across the transfer distribution, i.e., men receive larger transfers than women. Women are equally likely as men to receive an inheritance or gift while of working age, but men receive a larger share particularly before the age of 40 (see Online Appendix Figure A.3). After age 60, women receive a larger share of the transfers than men. The gap is more pronounced at the top of the transfer distribution (75th percentile) for all ages. In Figure 3b, without widows in the sample, the reversal of the pattern after age 70 disappears. This suggests that men receive more intergenerational transfers during the working-age part of their life-cycle and women receive more within-generation transfers after retirement, possibly once their husband dies.²³

²The surviving spouse usually inherits the entire estate of the deceased spouse. Up to 500,000 euros is tax-free and owner-occupied housing is exempted from the inheritance tax. The inheritance tax allowance is 400,000 euros for children (applied to both inheritances and gifts) and can be claimed once every ten years. To avoid inheritance taxation, larger fortunes are usually transferred from parents to children gradually over several decades.

³Robustness checks in Online Appendix Figure A.5 and A.6 confirm the results.

Figure 3: Difference between men's and women's transfers by age



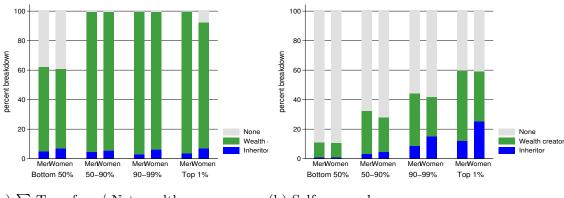
Notes: Total transfers ever received by the individual as recorded in the SOEP questionnaires, grouped by age of first transfer receipt. P75 denotes the gender gap between transfers at the 75th percentile of the transfer distribution of men and women in the respective age group. For example, P75 for age group 0-19 displays the gap at 75th percentile for the group receiving their first transfer at the age of 0-19. Consequently, each individual is counted only once. Online Appendix, Figure A.4 shows the same graph grouped by age when the largest transfer was received.

These differential patterns of transfers have major implications for investment opportunities and the possibility to generate returns on the received transfers. First, Nekoei and Seim (2023) show that large inheritances are more likely to persist over time, while smaller inheritances are most likely to be depleted through increased consumption. Second, the timing of the transfers matters for wealth creation.⁴

Edlund and Kopczuk (2009) argue that rich women tend to inherit wealth, whereas rich men build wealth themselves. We explore their argument by classifying individuals into wealth creators and inheritors using the two definitions defined in Online Appendix Section A.2 labeled as the "sum of transfers divided by net wealth" and "self-assessed." Figures 4a and 4b show that a large majority of both genders from the bottom to the top of the wealth distribution classify themselves as wealth creators rather than inheritors. Women are more likely than men to classify themselves as inheritors across wealth groups and men appear more likely than women to identify as wealth creators.

⁴The wealth gap decomposition analysis performed using a RIF regression analysis detailed in Online Appendix Section A.4 confirms that transfers received before age 60 contribute significantly to explaining wealth differences between men and women.

Figure 4: Wealth inheritors vs. wealth creators by gender and individual wealth group



(a) $\sum_{Source: SOEP v36.}$ Transfers / Net wealth

(b) Self-assessed

Notes: Individuals classified as none include individuals with zero or negative net wealth and individuals who reported having received an inheritance/gift, but did not report the value of the inheritance/gift.

To what extent could the age at first transfer be linked to being classified as a wealth creator? For answering this question, we estimate the following regression equation by OLS:

Wealth-creator_i =
$$\alpha + \beta_1 \text{transferage}_i + \beta_2 \text{transferage}_i \times \text{women}_i + \mathbf{X}_i \gamma + \epsilon_i$$
, (1)

where the outcome variable Wealth-creator_i is equal to one if person i reported being a wealth creator and 0 otherwise. Our coefficient of interest, β_1 , measures the association with the age when the first transfer was received, β_2 measures any gender specific effect. Individual control variables \mathbf{X}_i include net household income, secondary school and university degree, risk preferences, and business ownership.⁵

Table 1 shows results for the two wealth creator measures: share of transfers in net wealth (columns (1) and (2)) and respondents' self assessments (columns (3) and (4)). For each measure, we first use only gender, age at first transfer, and their interaction as controls (columns (1) and (3)), and then add additional individual control variables, \mathbf{X}_{i}

⁵Our sample in this exercise is restricted to those who received a transfer and ticked the value +5 in our wealth creator/wealth inheritor categories. Setting the threshold to the value +4 does not change our conclusions (see Online Appendix A.7). As additional information, Table A.8 provides sample size of age at first transfer groups by gender.

(columns (2) and (4)). All results confirm that classifying an individual as a wealth creator is associated with having received transfers during their working age, independently of gender. The fact that women receive smaller transfers during their working life (Figure 3) is one reason why they are less likely to appear as wealth creators than men. Results from RIF quantile regressions also confirm that transfers before age 60 contribute significantly to widen the gender wealth gap (see Appendix Section A.4).

Table 1: Wealth creator and age of first transfer, robustness of categories

	\sum Transfer	rs / Net wealth	Self-as	ssessed
	\sim (1)	(2)	(3)	(4)
1st Transfer 20-29	0.052	0.032	0.027	0.021
	(0.040)	(0.039)	(0.091)	(0.091)
1st Transfer 30-39	0.092**	0.063*	0.168*	0.155*
	(0.038)	(0.038)	(0.087)	(0.087)
1st Transfer 40-49	0.139***	0.117***	0.198**	0.186**
	(0.039)	(0.038)	(0.089)	(0.089)
1st Transfer 50-59	0.156***	0.149***	0.163*	0.164*
	(0.039)	(0.039)	(0.089)	(0.089)
1st Transfer 60-69	0.136***	0.131***	0.181*	0.180*
	(0.043)	(0.043)	(0.099)	(0.099)
1st Transfer 70-79	0.108	0.116	0.042	0.059
	(0.071)	(0.070)	(0.203)	(0.203)
Women	-0.081*	-0.072	-0.189*	-0.180*
	(0.046)	(0.046)	(0.109)	(0.109)
1st Transfer 20-29 \times Women	0.038	0.055	0.033	0.044
	(0.053)	(0.053)	(0.124)	(0.124)
1st Transfer 30-39 \times Women	0.052	0.076	-0.024	-0.004
	(0.051)	(0.051)	(0.120)	(0.120)
1st Transfer 40-49 \times Women	0.004	0.022	-0.016	0.004
	(0.052)	(0.051)	(0.122)	(0.123)
1st Transfer 50-59 \times Women	0.027	0.034	-0.052	-0.047
	(0.053)	(0.052)	(0.123)	(0.123)
1st Transfer 60-69 \times Women	0.035	0.051	0.003	0.017
	(0.058)	(0.057)	(0.139)	(0.140)
1st Transfer 70-79 \times Women	0.092	0.108	0.022	0.041
	(0.095)	(0.094)	(0.260)	(0.260)
Further Controls		✓		√
R-squared	0.02	0.04	0.07	0.07
Observations	5904	5904	1308	1308

Notes: The sample includes individuals that have received a transfer and classify as either wealth inheritors or wealth creators according to either of the two approaches. The self-assessed indicator is based on ticking at least +5 in the respective categories. The base category is the first transfer between the ages of 0 and 19. * p<0.1, *** p<0.05, *** p<0.01.

VI Conclusion

Using unique individual level data that oversamples wealthy individuals in Germany in 2019, we find that women and men accumulate wealth differently. Transfer amounts and their timing are an important driver of these differences: men tend to inherit larger sums than women during their working life, which allows them to create more wealth. Women often outlive their male partners and receive larger inheritances in old age. Yet, these transfers come too late for them to be used for further accumulation and to start a business. Against this backdrop, the average gender wealth gap underestimates the inequality of opportunity that men and women have during the active, wealth-creating phase of their respective life courses.

References

- Cordova, K., M. M. Grabka, and E. Sierminska (2022). Pension Wealth and the Gender Wealth Gap. European Journal of Population 38(4), 755–810.
- Corneo, G., T. Bönke, and C. Westermeier (2016). Erbschaft und Eigenleistung im Vermögen der Deutschen: eine Verteilungsanalyse. *Perspektiven der Wirtschaftspolitik* 17(1), 35–53.
- DiNardo, J., N. Fortin, and T. Lemieux (1996). Labor market institutions and the distribution of wages, 1973-1992: A semiparametric approach. *Econometrica* 64, 1001–1044.
- Edlund, L. and W. Kopczuk (2009). Women, wealth, and mobility. *American Economic Review* 99(1), 146–78.
- Falk, A. and J. Hermle (2018). Relationship of gender differences in preferences to economic development and gender equality. *Science* 362(6412), eaas9899.
- Firpo, S., N. M. Fortin, and T. Lemieux (2009). Unconditional quantile regression. *Econometrica* 77(3), 953–973.
- Fortin, N., T. Lemieux, and S. Firpo (2011). Chapter 1 decomposition methods in economics. Volume 4 of *Handbook of Labor Economics*, pp. 1–102. Elsevier.
- Goldin, C. (2014). A grand gender convergence: Its last chapter. American Economic Review 104(4), 1091–1119.
- Jordà, Ö., K. Knoll, D. Kuvshinov, M. Schularick, and A. M. Taylor (2019). The rate of return on everything, 1870–2015. The Quarterly Journal of Economics 134(3), 1225– 1298.
- Lusardi, A. and O. S. Mitchell (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature* 52(1), 5–44.

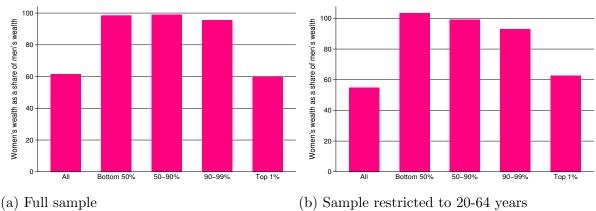
- Meriküll, J., M. Kukk, and T. Rõõm (2021). What explains the gender gap in wealth? evidence from administrative data. Review of Economics of the Household 19, 501–547.
- Nekoei, A. and D. Seim (2023). How do inheritances shape wealth inequality? Theory and evidence from Sweden. *Review of Economic Studies* 90(1), 463–498.
- Piketty, T., G. Postel-Vinay, and J.-L. Rosenthal (2014). Inherited vs. self-made wealth: Theory and evidence from a rentier society (Paris 1872-1927). Explorations in Economic History 51, 21–40.
- Schneebaum, A., M. Rehm, K. Mader, and K. Hollan (2018). The gender wealth gap across european countries. *Review of Income Wealth* 64(2), 295–331.
- Schröder, C., C. Bartels, M. M. Grabka, J. König, M. Kroh, and R. Siegers (2020). A novel sampling strategy for surveying high net-worth individuals a pretest application using the Socio-Economic Panel. *Review of Income and Wealth*, 66(4), 825–849.
- Sierminska, E., J. Frick, and M. Grabka (2010). Examining the gender wealth gap. Oxford Economic Papers 62(4), 669–690.
- Sierminska, E., D. Piazzalunga, and M. Grabka (2019). Transitioning towards more equality? Wealth gender differences and the changing role of explanatory factors over time.

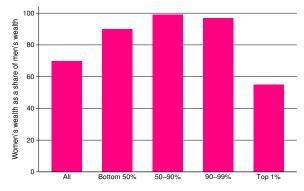
 IZA Discussion Papers 12404.

Online Appendix for: Wealth creators or inheritors? Unpacking A the gender wealth gap from bottom to top and young to old

Additional descriptive evidence

Figure A.1: Relative gender wealth gap in %



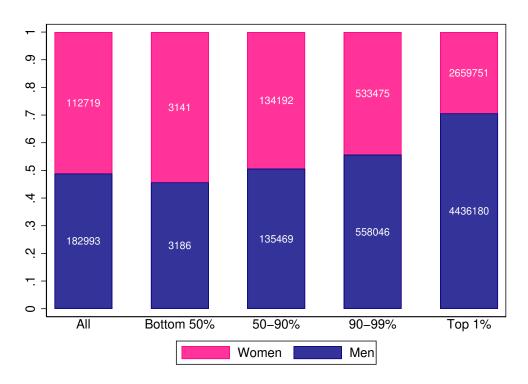


(c) Excl. high-wealth sample (SOEP-P)

Source: SOEP v36.

Notes: The figure shows women's average net wealth as a share of men's average net wealth by individual wealth group. The differences between the share and the 100%-line marks the relative gender wealth gap. The first bar shows the average gender wealth gap for the whole population, which is approximately 40%. Note that women are not equally represented across the wealth groups, being particularly rare in the top 1% conditioning on the working age population (20-64). Hence, the overall relative gender wealth gap might be even lower than suggested by the wealth groups.

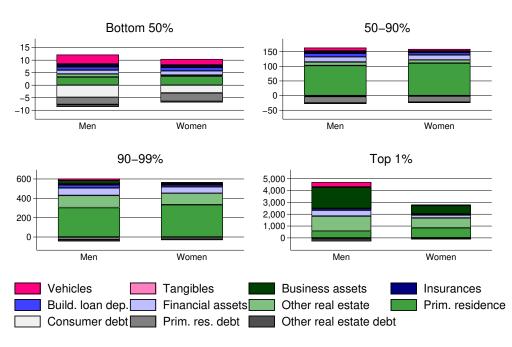
Figure A.2: Wealth levels and women's and men's shares by wealth group



Source: SOEP v36.

Notes: Values in the boxes denote individual average net wealth by gender and wealth group in euros.

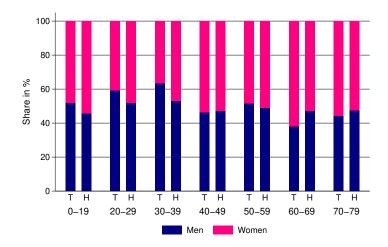
Figure A.3: Portfolio composition by gender and wealth group in 1,000 euros



Source: SOEP v36.

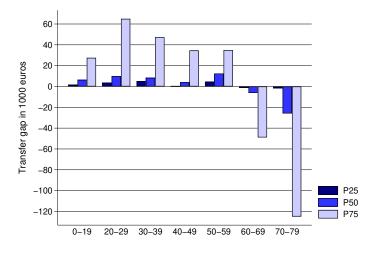
Notes: Panel (b) average net wealth by wealth group. Net wealth in 1,000 euros.

Figure A.4: Men's and women's transfer shares by age at first transfer



Source: SOEP v36. Notes: Age when first transfer (inheritance/gift) was received. Inheritances and gifts ever received by the individual as recorded in the SOEP questionnaires in 2001, 2017, and 2019. Inheritances and gifts capitalized with real bond rates to the year 2019 in 1,000 euros. Individuals are counted multiply if they received multiple transfers at different ages. T denotes the gender share of total transfers received by the age group; H denotes the share of men and women who received the transfer at this age. For example, in the group inheriting younger than age 30 (30-39) women received ca. 40% of total transfers (T) while representing ca. 50% of the heirs (H). In the group inheriting during retirement (70-79) women receive 57% of total transfers (T), while representing 55% of all heirs (H).

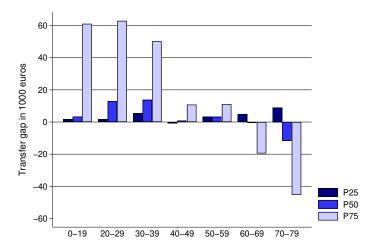
Figure A.5: Difference between men's and women's transfers by age (largest transfer)



Source: SOEP v36.

Notes: Total transfers ever received by the individual as recorded in the SOEP questionnaires grouped by age when the largest transfer was received. P75 denotes the gap between transfers at the 75th percentile of the transfer distribution of men and women in the respective age group. For example, P75 for age group 0-19 displays the 75th percentile of total transfers received by those individuals who received their largest transfer aged 0-19. Consequently, each individual is counted only once.

Figure A.6: Difference between men's and women's transfers by age (without SOEP-P)



Source: SOEP v36.

Notes: Total transfers ever received by the individual as recorded in the SOEP questionnaires grouped by age when the first transfer was received, excluding the high wealth sample SOEP-P. P75 denotes the gap between transfers at the 75th percentile of the transfer distribution of men and women in the respective age group. For example, P75 for age group 0-19 displays the 75th percentile of total transfers received by those individuals who received their largest transfer aged 0-19. Consequently, each individual is counted only once.

Table A.1: Summary statistics of main variables

	Botton	m 50%	Middl	e 40%	90-9	99%	Top	1%
	Men	Women	Men	Women	Men	Women	Men	Women
Married	0.38	0.38	0.68	0.65	0.70	0.55	0.62	0.47
Divorced	0.13	0.17	0.09	0.11	0.09	0.14	0.16	0.18
Widow(er)	0.03	0.11	0.04	0.12	0.07	0.18	0.05	0.32
Age	44.55	48.13	55.70	57.37	59.89	61.95	57.06	64.31
Primary educ.	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00
Secondary educ.	0.72	0.74	0.58	0.68	0.38	0.61	0.30	0.58
Tertiary educ.	0.22	0.20	0.40	0.30	0.60	0.38	0.69	0.42
East German	0.18	0.19	0.19	0.20	0.09	0.06	0.04	0.01
Risk preference	5.45	4.71	5.28	4.42	5.46	4.40	6.57	5.35
Monthly earnings	1619.33	1109.20	2774.73	1548.22	3875.42	1612.78	14186.08	1963.83
Full-time years	16.07	10.89	27.50	16.18	30.38	16.56	28.73	18.77
Part-time years	1.57	5.61	1.29	8.36	1.49	9.50	0.71	8.41
Manager	0.16	0.11	0.26	0.15	0.35	0.18	0.56	0.37
Business owner	0.02	0.01	0.05	0.02	0.16	0.08	0.59	0.34
Landlord	0.04	0.05	0.15	0.15	0.44	0.44	0.68	0.69
Net wealth in 1,000	3.19	3.14	135.47	134.19	558.05	533.47	4435.97	2659.55
Heir	0.07	0.10	0.25	0.26	0.39	0.46	0.42	0.59
Transfers in 1,000	3.43	3.69	23.42	25.13	99.27	115.59	277.76	433.85
N	4972	6712	4588	4930	1715	1223	644	202

Source: SOEP v36.

Notes: Weighted averages by wealth group and gender for our analysis sample. East German is defined as living in East Germany in 1989. Monthly earnings in euros. Full-time and part-time working experience in years. Manager means supervising others at work. Business owners record positive business wealth and landlords report receiving rental income. Net wealth in 1,000 euros. Risk preference is the self-assessed willingness to take risks from 0 (risk averse) to 10 (risk loving). Heir indicates if the individual ever received a transfer (inheritance or gift) and total individual transfers is the sum of transfers capitalized with CPI-adjusted bond-rates in 1,000 euros.

A.2 Data description

Net wealth is the sum of assets less liabilities. Assets include the primary residence, other real estate, financial assets, building-loan contracts, life and private pension insurance, tangible assets, vehicles, and unincorporated businesses. Respondents are asked what share of jointly owned houses or firms they own individually. The information on liabilities includes outstanding debt on the primary residence, outstanding debt on other real estate, consumer debt, and education debt. For an analysis of net wealth, which includes public pension wealth, see Cordova et al. (2022).

Transfers the sum of inheritances and gifts ever received. In the SOEP questionnaires in 2001, 2017, and 2019, individuals are asked to state the year, the value, and asset type (real estate, securities/bonds/shares, cash/deposits, business, other) of a maximum of three inheritances or inter-vivos gifts in each of the questionnaires. To harmonize the transfers received in different years, we capitalized their values using CPI-adjusted bond rates for Germany provided by Jordà et al. (2019). Thus, our measure of individual inheritances and gifts is the sum of all capitalized inheritances and gifts ever received by the individual, grouped by age of first transfer receipt.⁶

Wealth creators and inheritors We classify wealth creators and wealth inheritors based on two definitions. First, based on an individual's self-assessment in response to the question "To what extent have the following factors affected the development of your current assets,?" where values range from -5 to +5. We categorize an individual as a wealth creator if she/he ticked at least +4 in the categories: "Self-employment/Entrepreneurship," "Financial investments," "Employment," "Real estate," or "Marriage" and as a wealth in-

⁶We removed double entries from the data.

heritor if she/he ticked at least +4 in the categories "Inheritance" or "Gift." ⁷ Second, we display an alternative categorization following Piketty et al. (2014), which is applied by Corneo et al. (2016) for Germany using the Household Finance and Consumption Survey (HFCS) data. According to this method, the share of inherited wealth is calculated as b^*/w , where b^* denotes the sum of capitalized individual inheritances and gifts and w denotes individual net wealth (including cases if zero inheritances/gifts). If the share is larger than one (b^* exceeding w), then the individual is classified as a wealth inheritor. If the share is smaller than one, then the individual is classified as a wealth creator.

A.3 Descriptive statistics

Online Appendix Table A.1 displays summary statistics for the main variables of our sample by gender and for four groups of the individual net wealth distribution: bottom 50%, middle 40% (P50-90), 90-99%, and top 1%.

Average net wealth, the share of inheritors, and average transfers increase sharply moving to the top of the wealth distribution. In the bottom 50%, average net wealth is about 3,000 euros for both genders, and average transfers are around 4,000 euros. Business ownership and renting out real estate are important for the richest percentile: 59% of men and 34% of women are business owners, and about 70% of both men and women are landlords. In the bottom 50%, only 7% of men and 10% of women have received a transfer in this group. Meanwhile, in the top 1%, 42% of men and 60% of women have received a transfer.

⁷We leave aside the following categories: dependent employment, financial business, property ownership, lottery/gambling, because these less clearly belong to one of the two categories. As a robustness check, we classify individuals if ticking at least 5+ in the respective categories with similar results.

A.4 Explaining the gender wealth gap using RIF regressions

We use an Oaxaca-Blinder decomposition to decompose the unconditional gender wealth gap along the wealth distribution into explained and unexplained parts. The former part captures the share of the gender wealth gap explained by differences in the characteristics of men and women, such as their marital status or education; the latter the share that originates from different (unexplained) returns on variables, for example, full-time working men accumulating more wealth than full-time working women. For summary statistics of the control variables, see Online Appendix Table A.1. The note of the Table includes further information on the definition of the variables.

The decomposition relies on unconditional quantile regressions suggested by Firpo et al. (2009). Using unconditional quantiles rather than conditional quantiles or reweighting has two advantages. First, unlike the conditional quantile regression, the unconditional quantile regression allows for an interpretation of the estimated coefficient as the effect of changes in characteristics \mathbf{X} on the unconditional quantile Q_{τ} (Fortin et al., 2011, p.9). As with conditional quantile regressions, the regression coefficients can have different effects across the distribution. Second, unlike the inverse propensity reweighting method developed by DiNardo et al. (1996), unconditional quantile regression allows a path-independent decomposition (Fortin et al., 2011, p.81). The dependent variable of interest, individual net wealth (w_i) , is replaced by the recentered influence function, that is, of quantiles, which can be written as

$$RIF(w_i; Q_{\tau}) = Q_{\tau} + \frac{\tau - 1\{w_i \le Q_{\tau}\}}{f_W(Q_{\tau})}$$
(A.1)

where $RIF(w_i; Q_\tau)$ is the recentered influence function of individual i's net wealth

⁸Note that we rank men and women separately for the RIF regression analysis so that we compare equally sized groups of the genders and what gives higher wealth differences for lower wealth groups. This contrasts with our strategy in the main paper, where we rank men and women together.

at quantile Q_{τ} , Q_{τ} is the population τ -quantile of the unconditional distribution of W, $\mathbb{1}\{\cdot\}$ is an indicator function, and $f_W(\cdot)$ is the density of the marginal distribution of W.

In the second step, we estimate OLS regressions using RIF as a dependent variable to get the effect of explanatory variables on the τ th quantile:

$$RIF(w_i; Q_\tau) = \alpha_{0,\tau} + \sum_{k=1}^K \alpha_{k,\tau} x_{i,\tau}^k + \varepsilon_{i,\tau}$$
(A.2)

where $\alpha_{k,\tau}$ captures the effect of explanatory variable x^k on the τ th quantile of net wealth; $\alpha_{0,\tau}$ denotes the intercept at the τ th quantile of net wealth and $\varepsilon_{i,\tau}$ is the error term. Given that the gender wealth gap is comparably small for the bottom of the wealth distribution and widens at the top, we perform the estimates for the 50th, 75th, 90th, 95th, and 99th quantile. We then use the Oaxaca-Blinder decomposition based on the RIF regressions for men and women at the τ th quantile to decompose the unconditional gender wealth gap into an explained part and an unexplained part:

$$\overline{W}_{m,\tau} - \overline{W}_{f,\tau} = \underbrace{(\overline{X}_m - \overline{X}_f)\alpha_{m,\tau}}_{explained} + \underbrace{\overline{X}_f(\alpha_{m,\tau} - \alpha_{f,\tau})}_{unexplained}$$
(A.3)

where $W_{m,\tau}$ and $W_{f,\tau}$ denote male and female net wealth at the τ th quantile. X_m and X_f denote the average values of explanatory variables for men and women and $\alpha_{m,\tau}$ and $\alpha_{f,\tau}$ are the coefficients from the separate regressions for men and women for the τ th quantile, respectively.

Table A.4 provides the RIF regressions and Table A.6 the decomposition results at different quantiles. Because sample sizes are small for high age groups, Tables A.2 and A.3 provide the corresponding estimates for a restricted sample of individuals from age 20 to 64. Both samples yield consistent results.

Our discussion of the gender wealth gap and its explanatory variables focuses on the

restricted sample. The gender wealth gap shown as "difference" in Table A.3 is the gender ratio of the hyperbolic sine-transformed wealth and is positive at all selected quantiles. A difference of ca. 0.8 at the 50th quantile means that average wealth of men is two times the average wealth of women. The difference of ca. 1.2 at the 99th quantile translates into a factor of three.

For the interpretation of the explanatory results, we must look at both the coefficients and the average gender differences. The explained part of the gender wealth gap is measured as $(\overline{X}_m - \overline{X}_f)\alpha_{m,\tau}$ (see Equation A.3). Table A.5 provides the average difference of the main variables between genders. Education and labor market status play a dominant role in explaining the wealth gap. For the bottom 90%, years working full-time contribute significantly to the gender wealth gap. The role of part-time work is ambiguous with the coefficient being positive but the average difference negative (women work more part-time than men). Being a firm owner plays a larger role in explaining wealth differences at the top. Moreover, being a manager has a significant positive effect on explaining the gap throughout the distribution. Tertiary education has a strong effect in favor of men at the bottom of the distribution, but not at the top. Being married increases the gap at the bottom of the distribution (favors men) but favors women past the 90th percentile. Having experienced a divorce tends to narrow the gender wealth gap except for the top, while widowhood narrows it exactly at the top of the distribution. Finally, owning a firm, renting out real estate and having received transfers before age 60 explains the gender wealth gap in favor of men for all selected quantiles. In contrast, the coefficient for transfers received after age 60 is small and not significant throughout the distribution.

Table A.2: RIF regression: Explanatory factors for the gender wealth gap, selected quantiles, 20-64

		0th (1)	7	75th (2)		0th (3)	9	9th (4)
	explained	unexplained	explained	unexplained	explained	unexplained	explained	unexplained
Married	0.019***	-0.493***	-0.002	-0.366***	-0.005*	-0.196***	-0.004	-0.202
Divorced	0.036***	-0.012	0.019***	-0.020	0.004	-0.008	-0.031*	-0.002
Widow(er)	-0.004	-0.002	-0.002	-0.010	-0.004	-0.007	0.016***	-0.027*
Age	0.117***	-0.232	0.013*	-1.431*	-0.004	-0.799	-0.036	-0.630
Age^2	-0.131***	-0.034	0.002	0.693	0.017	0.465	0.047*	0.570
Secondary education	-0.028***	-0.273**	0.006	-0.113*	0.004	0.032	0.015	-0.244*
Tertiary education	0.133***	-0.024	0.045***	-0.012	0.010	-0.030	-0.021	0.040
East German 1989	0.005*	-0.015	0.006*	0.013	0.002	0.057***	-0.002	0.047
Risk preference	-0.004	0.138	0.019**	0.106*	0.066***	0.331***	0.064***	-0.042
Monthly gross earnings	0.002	-0.371***	0.001	-0.194***	0.005	-0.173***	0.043***	-0.821***
Years working full-time	0.838***	0.170	0.149***	0.009	-0.019	-0.060	-0.018	0.155
Years working part-time	-0.035	-0.536***	0.095**	-0.334***	0.163***	-0.246***	0.153**	0.022
Manager	0.141***	0.061**	0.103***	0.060***	0.102***	0.069***	0.055***	0.069*
Firm owner	0.137***	0.034***	0.205***	0.047***	0.366***	0.095***	0.233***	-0.258***
Landlord	0.057***	-0.047***	0.055***	-0.005	0.058***	0.020	0.018**	-0.038
Transfer before age 60	0.017***	-0.032***	0.021***	-0.029***	0.042***	-0.015	0.070***	-0.182***
Transfer after age 60	0.000	-0.001	0.000	-0.001	0.000	0.000	0.000	-0.005

Notes: Including individuals above age 20 and up to age 64. Net wealth transformed to inverse hyperbolic sine. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors.

Table A.3: RIF regression: Wealth gender gap, selected quantiles, 20-64 years

	50th (1)	75th (2)	90th (3)	99th (4)
overall				
Men	11.463***	13.016***	14.145***	16.334***
Women	10.613***	12.494***	13.370***	15.133***
Difference	0.851***	0.521***	0.775***	1.202***
Explained	1.299***	0.736***	0.805***	0.603***
Unexplained	-0.449***	-0.215***	-0.031	0.599***

Notes: Including individuals above age 20 and up to age 64. Net wealth transformed to inverse hyperbolic sine. * p<0.1, *** p<0.05, **** p<0.01. Robust standard errors.

Table A.4: RIF regression: Explanatory factors for the gender wealth gap, selected quantiles

		60th (1)		75th (2)		00th (3)	S	99th (4)
	explained	unexplained	explained	unexplained	explained	unexplained	explained	unexplained
Married	0.037***	-0.535***	-0.006*	-0.275***	-0.014***	-0.168***	-0.010	-0.208*
Divorced	0.028***	0.009	0.013***	0.003	0.003	-0.003	-0.020*	0.004
Widow(er)	-0.023***	-0.010	-0.013**	-0.004	-0.002	-0.020	0.012	-0.050
Age	0.175***	-0.056	0.062***	-1.067*	0.037***	0.091	-0.027	2.584
Age^2	-0.163***	-0.537	-0.051***	0.250	-0.026**	-0.069	0.034	-1.300*
Secondary education	-0.040***	-0.341**	0.007	-0.163*	0.008	-0.023	0.016	-0.161
Tertiary education	0.163***	-0.106	0.051***	-0.062	0.014	-0.034	-0.028	0.023
East German 1989	0.012***	-0.064***	0.009***	0.029**	0.004**	0.046***	-0.002	0.039
Risk preference	0.023**	0.229***	0.031***	0.143***	0.060***	0.262***	0.049**	-0.067
Monthly gross earnings	0.002	-0.320***	0.001	-0.135***	0.004**	-0.123***	0.039***	-0.609***
Years working full-time	0.577***	0.223***	0.170***	0.110**	-0.000	-0.023	0.016	-0.037
Years working part-time	0.033	-0.420***	0.039	-0.165***	0.122***	-0.188***	0.119	-0.104
Manager	0.103***	0.026	0.070***	0.038***	0.085***	0.067***	0.070***	0.085***
Firm owner	0.120***	0.027***	0.162***	0.034***	0.296***	0.067***	0.253***	-0.236***
Landlord	0.059***	-0.057***	0.057***	-0.005	0.056***	-0.006	0.017***	-0.063**
Transfer before age 60	0.013***	-0.033***	0.015***	-0.027***	0.032***	-0.008	0.062***	-0.123***
Transfer after age 60	-0.001	-0.004	-0.001	-0.000	-0.001	0.004	-0.000	-0.025***

Notes: Including individuals above age 20. Net wealth transformed to inverse hyperbolic sine. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors.

Table A.5: Averages of main variables by gender, 20-64

	Men	Women	Difference
Married	0.50	0.51	-0.02
Divorced	0.11	0.15	-0.04
Widow(er)	0.01	0.03	-0.02
Age	43.41	43.73	-0.32
Secondary education	0.62	0.66	-0.04
Tertiary education	0.33	0.28	0.04
East German 1989	0.17	0.17	0.00
Risk preference	5.54	4.75	0.79
Monthly gross earnings	3240.20	1817.05	1423.14
Years working full-time	17.66	10.35	7.31
Years working part-time	1.35	6.28	-4.94
Manager	0.29	0.18	0.11
Firm owner	0.06	0.03	0.03
Landlord	0.12	0.11	0.01
Transfers before age 60	21401.45	17376.44	4025.00
Transfers after age 60	337.03	318.91	18.11

Source: SOEP v36.

Notes: Weighted averages by wealth group and gender for our analysis sample. East German is defined as living in East Germany in 1989. Monthly earnings in euros. Full-time and part-time working experience in years. Manager means supervising others at work. Business owners record positive business wealth and landlords report receiving rental income. Net wealth in 1,000 euros. Risk preference is the self-assessed willingness to take risks from 0 (risk averse) to 10 (risk loving). Heir indicates if the individual ever received a transfer (inheritance or gift) and total individual transfers is the sum of transfers capitalized with CPI-adjusted bond-rates in 1,000 euros.

Table A.6: RIF regression: Wealth gender gap, selected quantiles

	50th (1)	75th (2)	90th (3)	99th (4)
overall				
Men	11.734***	13.099***	14.118***	16.299***
Women	10.868***	12.628***	13.440***	15.141***
Difference	0.865***	0.471***	0.678***	1.159***
Explained	1.117***	0.616***	0.677***	0.597***
Unexplained	-0.251***	-0.144***	0.002	0.561***

Notes: Net wealth transformed using the inverse hyperbolic sine. Including individuals above age 20. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors.

A.5 OLS regression: wealth creator and age of first transfer

As a robustness check to the results in the main body, Table A.7 provides the results when the critical cutoff is set to +4 in our wealth creator/wealth inheritor categories.

Table A.8 provides the gender-specific unweighted numbers of observation units in our sample receiving the first transfer at a certain age.

Table A.7: Wealth creator and age of first transfer

	\(\sum_{\text{Transfer}} \)	rs / Net wealth	Self-as	ssessed
	- (1)	(2)	(3)	(4)
1st Transfer 20-29	0.052	0.032	0.120	0.116
	(0.040)	(0.039)	(0.074)	(0.074)
1st Transfer 30-39	0.092**	0.063*	0.224***	0.209***
	(0.038)	(0.038)	(0.070)	(0.070)
1st Transfer 40-49	0.139***	0.117***	0.225***	0.204***
	(0.039)	(0.038)	(0.072)	(0.071)
1st Transfer 50-59	0.156***	0.149***	0.253***	0.259***
	(0.039)	(0.039)	(0.072)	(0.071)
1st Transfer 60-69	0.136***	0.131***	0.248***	0.246***
	(0.043)	(0.043)	(0.080)	(0.080)
1st Transfer 70-79	0.108	0.116	0.107	0.137
	(0.071)	(0.070)	(0.155)	(0.154)
Women	-0.081*	-0.072	-0.045	-0.014
	(0.046)	(0.046)	(0.087)	(0.086)
1st Transfer 20-29 \times Women	0.038	0.055	-0.120	-0.125
	(0.053)	(0.053)	(0.099)	(0.099)
1st Transfer 30-39 \times Women	0.052	0.076	-0.144	-0.136
	(0.051)	(0.051)	(0.096)	(0.095)
1st Transfer 40-49 \times Women	0.004	0.022	-0.115	-0.100
	(0.052)	(0.051)	(0.097)	(0.097)
1st Transfer 50-59 \times Women	0.027	0.034	-0.160	-0.167*
	(0.053)	(0.052)	(0.098)	(0.097)
1st Transfer 60-69 \times Women	0.035	0.051	-0.082	-0.072
	(0.058)	(0.057)	(0.110)	(0.110)
1st Transfer 70-79 \times Women	0.092	0.108	-0.029	-0.026
	(0.095)	(0.094)	(0.202)	(0.201)
Further Controls		✓		√
R-squared	0.02	0.04	0.05	0.07
Observations	5904	5904	2147	2147

Notes: The sample includes individuals that have received a transfer and classify as either wealth inheritors or wealth creators according to either of the two approaches. The self-assessed indicator is based on ticking at least +4 in the respective categories. This leads to more observations classifying as either wealth inheritors or wealth creators so that the sample size increases compared to +5 categories in Table 1. The base category is the first transfer between the ages of 0 and 19. * p<0.1, ** p<0.05, *** p<0.01.

Table A.8: Sample size of age at first transfer groups by gender

	Men	Women	Total
0-19	143	186	329
20-29	473	515	988
30-39	743	713	1,456
40-49	621	726	1,347
50-59	530	596	1,126
60-69	269	294	563
70-79	45	58	103
Total	2,824	3,088	5,912

 $\frac{-2.5022 - 3.5020}{Source: SOEP v36.}$ Notes: The sample includes individuals that have received a transfer and classify as either wealth inheritors or wealth creators according to either of the two approaches.