Investigating the Gender Wealth Gap across Occupational Classes

Nora Waitkus, Lara Minkus

Working Paper 56

January 2021

LSE International Inequalities Institute

The International Inequalities Institute (III) based at the London School of Economics and Political Science (LSE) aims to be the world's leading centre for interdisciplinary research on inequalities and create real impact through policy solutions that tackle the issue. The Institute provides a genuinely interdisciplinary forum unlike any other, bringing together expertise from across the School and drawing on the thinking of experts from every continent across the globe to produce high quality research and innovation in the field of inequalities.

In addition to our working papers series all these publications are available to download free from our website: www.lse.ac.uk/III

For further information on the work of the Institute, please contact the Institute Manager, Liza Ryan at e.ryan@lse.ac.uk

International Inequalities Institute

The London School of Economics and Political Science

Houghton Street

London

WC2A 2AE

Email: Inequalities.institute@lse.ac.uk

Web site: www.lse.ac.uk/III

🐦 @LSEInequalities

Abstract

This study examines the role of occupational class in the Gender Wealth Gap (GWG). Despite rising interest in gender differences in wealth, the central role of occupations in restricting and enabling its accumulation has received less scrutiny thus far. Drawing on the German Socio-economic Panel, we employ quantile regressions and decomposition techniques. We find explanatory power of occupational class for the gender wealth gap, which operates despite accounting for other labour-market-relevant parameters, such as income, tenure, and full-time work experience at all points of the wealth distribution. Wealth gaps by gender vary between and within occupational classes. Particularly, women's under-representation among the self-employed and over-representation among socio-cultural professions explain the GWG. Our study thus adds another dimension of stratification – occupational class – to the discussion on the gendered distribution of wealth.

Keywords: Gender Wealth Gap; inequality; gender; wealth, occupational class

1. Introduction

The gendered nature of economic inequality is a persistent phenomenon in many countries. Despite extensive research on gender differences in income and pay, the gender wealth gap (GWG) only recently gained more scrutiny from social scientists across various disciplines (Deere/Doss 2006; Grabka et al. 2015; Lersch et al. 2017; Ruel/Hauser 2013; Schneebaum et al. 2018; Sierminska et al. 2010).

Wealth, however, is a central dimension of inequality as it represents current inequalities in income, property, and inheritance, as well as past inequalities over the life-course and across generations. Current levels of wealth are further driving future inequalities, since today's investments in housing or private pensions impact future life and generations (Cowell et al. 2012; Piketty 2014). Therefore, inequalities in wealth can be more persistent than inequalities in income (Killewald et al. 2017) and add another layer to the gendered nature of economic inequalities in contemporary societies (Ruel/Hauser 2013).

Rising interest in the GWG has led to a dynamic interdisciplinary field of research. Studies find that women's lower levels of wealth are mostly attributable to lower lifetime earnings, discontinuous labour trajectories, and family obligations (e.g. Lersch 2017; Sierminska et al. 2010). Our study expands existing research by arguing that next to these well-established determinants, women work in occupations that systematically restrict them from wealth accumulation.

Previous research on the gender pay gap has shown that women cluster in precarious, low prestige and low-income occupations with high shares of part-time employment, which has led to a rise in wage inequalities between men and women (Blau/Kahn 2017; Minkus 2019). Given that the lion's share of wealth is the result of savings from income (Killewald et al. 2017), we reason that women's position in the occupational class structure does not only exacerbate gender wage differentials but also restricts women from wealth accumulation. Hence, the aim of our paper is to pursue an integrative approach studying three dimensions of inequality – gender, wealth, and occupational class – together. We assume that the association between these three dimensions varies along the wealth distribution – given the strong concentration of wealth at the top and the crucial role of gendered occupational segregation in wage dispersion. Therefore, we investigate gender differences in the wealth and their association with occupational classes[i] among the working population at different points of the wealth distribution in Germany.

2. Gender Differences in Wealth

Wealth is usually measured on the household level, therefore most papers investigating the GWG compare female-headed households with male-headed households (e.g. Ruel/Hauser 2013; Schneebaum et al. 2018; see also Deere and Doss 2006) as individual-level data are only available for Australia and Germany.

Existing studies on the GWG follow two overlapping lines of research. The first is concerned with family demographics. Studies pursuing this strand of research show that married women are wealthier than non-married women (Ruel/Hauser 2013) but accumulate less wealth than married men (Lersch 2017; Lersch et al. 2017) and face stronger disruptions when marriages dissolve (Addo/Lichter 2013; Warren et al. 2001). The timing and number of children further influences the GWG (Lersch et al. 2017; Ravazzini/Kuhn 2018; Yamokoski/Keister 2006).

The second line of research points out that women's lower endowment with human capital explains most of the GWG on the individual level (Sierminska et al. 2010; Sierminska et al. 2019) as well as on the household level (Ruel/Hauser 2013; Schneebaum et al. 2018). Discontinuous employment trajectories and lower (lifetime) earnings translate into lower wealth levels (e.g. Lersch et al. 2017; Ruel/Hauser 2013; Sierminska et al. 2010; Sierminska et al. 2019; Warren et al. 2001) but also education and asset ownership impact the GWG (Ravazzini/Chesters 2018; Schneebaum et al. 2018).

However, research on the gender wage gap suggests that both mechanisms are intertwined, such that parenthood and care lead to employment breaks (Ehrlich et al. 2019) that result in lower lifetime earnings (Boll 2011; Ehrlich et al. 2020) as well as lower saving rates and pensions entitlements (Conley/Ryvicker 2004; Sunden/Surette 1998; Warren et al. 2001). According to the permanent income hypothesis (Bewley 1977), individuals compensate for economic fluctuations by saving and dissaving wealth. Hence, wealth inequality between different groups is the result of differences in individual's possibility to self-insure against earning shocks (De Nardi/Fella 2017).[ii]

We believe that occupational classes are a missing link to explain these gender differences in saving wealth, because recent work on the gender wage differential suggests that pay differences between men and women are the result of rising occupational segregation (Blau/Kahn 2017; Minkus 2019; Minkus/Busch-Heizmann 2020). Therefore, by integrating occupations into the analysis of wealth inequality, we propose an approach beyond contemporary research on the GWG.

We argue that occupations aggregate toward something more than single labour market-related components such as skill-level, average job tenure, work experience or income and significantly influence earnings net of job-characteristics or human capital (Blau/Kahn 2017): Occupations capture past as well as future employment and income trajectories as well as associated risks, that are not fully accounted for by measures for current levels of income and employment status.[iii]

Further, occupations differ in power resources that are not directly observable. Latent dimensions such as overall job security[iv], unionization, or strong lobby groups impact gender wealth differences just as much as they influence wage gaps. Occupations where women constitute the majority tend to have lower power resources to secure these latent dimensions, illustrated by e.g. lower levels of unionization (Minkus 2019) or lower additional allowances such as capital-forming benefits (Mohan/Ruggiero 2003) that in turn enable and restrict women to save and/or make long term-investment decisions into e.g. housing or stocks.

3. Occupations and Wealth

There is tentative evidence that occupational positions are important for the gendered accumulation of wealth (Sierminska et al. 2019; Warren 2006). The only quantitative study by Warren (2006) shows for the UK that gender, class, and ethnic differences in pension wealth exist and overlap – making a case for how different dimensions of stratification work together.

Qualitative work shows that sons of elite classes inherit predominantly businesses equity whereas daughters are left with real estate of lower value (e.g. Bessière 2019), resulting in different starting levels for wealth accumulation among male and female heirs (though quantitative studies cannot map such gender difference in wealth, see Szydlik 2004). There is further evidence by Sierminska et al. (2019) that returns to occupational position explain part of the wealth gap and women's increasing participation in white collar work has led to a slight attenuation of the GWG over time.

While occupational positions are just control variables in most studies, we add to the literature by putting occupational class at the forefront of the analysis of gender wealth differences. For example, it is a well-established fact that self-employment is positively associated with wealth levels for both men and women (Sierminska et al. 2010), although self-employment comes with large income risks. However, men are more likely to be self-employed and own a business, and – conditional on self-employment – the gender gap in wealth is especially large with regards to business assets (Edlund/Kopczuk 2009). This is because women are less likely to own and run large companies compared to men (Austen et al. 2014; Bertrand/Hallock 2001; Budig 2006) and use self-employment to substitute for part-time work and its better reconciliation capacities with family work (Georgellis/Wall 2005; Lechmann/Schnabel 2012).

Therefore, women face lower power resource when being self-employed. Lower levels of and returns to self-employment have been explained by differences in risk-taking, however, empirical evidence is inconsistent at best (Schubert et al. 1999). Nelson (2016), for example, has shown in an re-examination of existing studies that the risk-distributions of men and women largely overlap (Nelson 2015).

Next to gender wealth differences in self-employment, wealth gaps might exist in other occupational classes: women have entered higher professions in large numbers (Crompton 1987) but mainly occupy those in the socio-cultural sector and are less found in technical professions like engineers, that are usually higher paid (Oesch 2006: 275). Evidence from Sweden further suggests that women oftentimes cluster in dead-end occupations with lower career prospects (Bihagen/Ohls 2007) and henceforth face restrictions when taking out (secure) mortgages (Baker 2014).

Further research has shown that managerial women report lower wages, are less likely to be paid in stock options, and their bonuses are smaller (Kulich et al. 2011; Mohan/Ruggiero 2003), which directly affects their capital income and wealth accumulation. In contrast, there might be occupational classes where restrictions to accumulate wealth are less pronounced for both men and women, for example, among the working classes with very low levels of wealth (Waitkus/Groh-Samberg 2018). While

it seems straightforward that the lack of power resources (e.g. a higher probability to become unemployed, lower wages) correlates negatively with wealth levels, it could alternatively be the case that – conditional on income – women with lower power resources save at higher rates whilst expecting future income losses (Bewley 1977; De Nardi/Fella 2017), although women's capacities for saving are much more restricted due to their lower levels of income.

We want to know whether occupational classes help us to understand why wealth gaps still exist after controlling for differences in income, labour market experiences, and family obligations. We take the occupational structure at large into account and investigate the GWG across occupational classes among the working population at different points of the wealth distribution using an occupational class scheme.

4. The Oesch Class Scheme

In order to assess the importance of specific occupations for the gender wealth gap, the occupational class scheme chosen must meet two criteria: First, it must differentiate the occupational class structure at the top thoroughly, as wealth accumulation is mostly restricted to upper-middle classes in Germany (Waitkus/Groh-Samberg 2018). Additionally, wage differentials in leadership positions are particularly high (Calanca et al. 2019; Minkus/Busch-Heizmann 2018) which in turn leads to discrepancies regarding saving wealth from income between men and women. Second, the occupational class scheme must capture gender differences that have arisen through the increasing feminization of labour markets (Crompton 1987; 1999) and consequently occupational segregation between men and women.

To the best of our knowledge, the Oesch (2006) class scheme is the only in the class literature that accounts for the rising feminization of the labour force and hence captures those gender differences. What is more, its systematic differentiation of the top of the employment structure enables us to capture wealth differences by differentiating the broader higher professional groups into managerial occupations, technical experts and socio-cultural professionals (see Oesch 2006).

The resulting class scheme (Table A.1) differentiates the self-employed from the employed groups to account for the well-acknowledged and persistently shown employer-employee divide (for a discussion of the role of self-employment in the GWG see paragraph above). Vertically, classes are further differentiated according to the skill levels these jobs require. Horizontally, classes are differentiated according to work logics and the individual role in in the division of labour (Kriesi 1989; Oesch 2006). Following differences in work logics and skill levels between classes, we argue that incumbents of the different classes also face different capabilities to save. Exact mechanisms are laid out in the following.

Oesch (2006: 55) argues that managers are much more loyal towards their organisation as their job directly depends on the success of the organization they are employed with, resulting in a personal interest in profit maximation. Hence, we would expect managers to be more open towards private wealth accumulation since part of their remuneration may come as capital. In contrast, socio-cultural professionals (such as (university) teachers, journalists, or medical doctors and nurses) rely more on their skills, knowledge, and specialized training applied in a variety of contexts, which makes this group less reliant on a specific employer. Instead, socio-cultural professionals' orientation is towards their professional group and the autonomy of their discipline (Oesch 2006; see also Kriesi 1989). Therefore, we argue that socio-cultural professionals might be less prone to private wealth accumulation and profit maximization and instead rely more on their income-generating skills.[v] Technical experts (such as engineers and computer professionals) could be in an intermediate position between managers and socio-cultural professionals regarding levels of wealth.

Given that women occupy different occupational groups compared to men (they are overrepresented among socio-cultural professions und underrepresented among technical experts) that come with different power resources, payment, and orientations towards wealth accumulation (Crompton 1987; Oesch 2006: 275), we suspect between-class inequalities to moderate the GWG.

Wealth differences between occupational classes could be further stratified by gender differences within occupational classes: as mentioned, female managers are paid less often in stock options (Mohan/Ruggiero 2003), leading to overall lower levels of wealth among female managers compared to male managers. Though women are overrepresented among socio-cultural professions, they might cluster just in these in dead-end occupations with lower career prospects (Bihagen/Ohls 2007), which keep women back from long-term investments such as taking out (secure) mortgages (Baker 2014). In contrast, male socio-cultural professionals might have higher wealth levels than their female counterparts, as they occupy the best-paid positions within this group (e.g. Bertrand/Hallock 2001). The role of occupational class in the GWG is therefore twofold: First, women and men are horizontally allocated within different occupational classes that differ in their inclination to accumulate wealth. Second, gender inequalities exist within occupational classes e.g. when female managers are less likely to be paid in stock options than male managers.

While the Oesch scheme captures differences in gender composition across classes (Table A.1 and Table A.2 include an overview) and explains differences in income and earnings, pension system integration and political orientations (see Gingrich/Häusermann 2015; Oesch 2006; 2008) its capacity to explain wealth differences is yet to be explored (Lambert/Bihagen 2014; but see Waitkus/Groh-Samberg (2018) for descriptive evidence). In what follows, we will investigate to what extent Oesch classes are associated with the GWG. As we suspect the association to vary across the wealth distribution, we will test the association at different wealth quantiles.

5. Analytical Approach

We test the association between gender, wealth, and occupational class using Germany as our case study. Germany remains a crucial case in wealth research as levels of inequality are higher than in any other Eurozone country (Grabka/Westermeier 2014; Pfeffer/Waitkus 2020), due to low average levels of wealth resulting from historically low home ownership rates (Kurz 2004). Additionally, a comparatively encompassing social insurance system renders wealth accumulation less necessary for old-age security than in other welfare states (Pfeffer 2011).

5.1. Data

We employ data from the Socio-economic Panel (SOEP). The SOEP was initiated in 1984 in West-Germany and expanded to East Germany in 1990. All household members 17 years and older are interviewed on a yearly basis. The survey covers more than 30,000 individuals in over 15,000 households (Goebel et al. 2019). including information on socio-economic resources and different components of wealth. A detailed wealth module permits an in-depth analysis of individual (and household) wealth (Frick et al. 2010).[vi] The wealth module includes high-quality data on net wealth and other assets. Individual wealth is provided in five replicates, following extensive and demanding imputation by the SOEP team to account for item non-response and underreporting (Frick et al. 2010). To account for the five replicates and their repeated observations, we employ Rubin's rule (1996) for estimating standard errors using the stata command mi estimate and average coefficients across the imputed samples.

5.2 Sample

We use all available wealth data and pool the respective years (2002, 2007, 2012 and 2017) as levels of wealth inequality have been persistently high (Grabka/Halbmeier 2019). We restrict our sample to the working population between 20 to 64 years, living in private households. Since our central independent variable is occupational class, we restrict our sample to those who do not have missing information on the class measure. Our final sample size consists of 20.462 observations for women (N=12.442) and 20.620 for men (N=12.220) men.

5.3 Variables

Our central dependent variable is individual net wealth, defined as the sum of all financial and real assets minus liabilities. Given that the net wealth can be negative or zero, we apply the inverse hyperbolic sine transformation to our wealth measures (Pence 2006). This transformation allows for the inclusion of zero and negative values (Gale/Pence

2006; Schneebaum et al. 2018). Wealth data are top and bottom-coded at the .1 and 99.9 percentile and inflation adjusted in constant 2015€.

Our central independent measure is occupational class, operationalized as a collapsed version of the Oesch class scheme (Oesch 2006). While Oesch's version includes eight occupational classes (Table A.1), we further collapse the working classes into one group for our main analysis, due to the low levels of net wealth among them (Table A.2). The main model includes six occupational classes, i.e. self-employed, technical professionals, managers, socio-cultural professionals, and workers (Table 2). To account for heterogeneity within self-employed groups (e.g. Müller/Arum 2004), we run an additional robust check with a class scheme that differentiates the self-employed into large employers, self-employed professionals, and the petite bourgeoisie (see Figure A.1). However, numbers of observations are very low (see Table A.2) which is why our main analysis refrains from such a differentiation.

While occupational class is our central concern, we further control for economic indicators that correlate with gender differences in wealth, such as human capital indicators and household characteristics. We control for individual income by including inflation-adjusted (2015€) monthly and ihs-transformed individual income from work, income from pensions (which includes all kinds of occupational and private pensions), and income from transfers (which includes all kinds of social security benefits like child allowances, housing support, or disability allowance). We further account for years of full- and part-time work experience and tenure (years), as well as weekly hours worked. Additionally, unemployment experience and education in years is included. Furthermore, we account for workplace characteristics, such as sectoral structure[vii], working in the public sector, and firm size. Moreover, we account for inheritance by including a dummy indication having received an inheritance or gift[viii]. We further account for the partner's occupational class (measured as self-employed, professionals, (skilled and unskilled) workers, non-working partner, no information for partner. Additionally, we introduce variables indicating family traits. Marital status is categorized into being married and cohabiting, married and separated, non-married, divorced, and widowed. We further add the number of children living in the respondent's household, the number of siblings, as well as the highest parental education to account for the social background (Pfeffer and Killewald 2017). We control for migration background to account for migrants' lower wealth accumulation and we implement a dummy for the region as there is still a considerable economic gap between East and West Germany (Minkus/Busch-Heizmann 2020). Age is included in categories (20-34, 35-49, 50-64 years). Since we work with a pooled sample, we add yearly dummies to control for yearly confounders. Lastly, we control for the imputation using a flag variable. See Table 1 for an overview.

Table 1. Descriptive statistics

	Women		Men		Δ means (men-women)
	Mean	Std dev	Mean	Std dev	
Explained Variable					
Wealth (IHS)	8.087	6.73	8.462	7.031	-0.38***
Explanatory Variables					
Class position					
Self-employed	0.05	0.22	0.087	0.28	0.03***
Technical experts	0.06	0.23	0.16	0.37	0.11***
Managers	0.21	0.41	0.19	0.39	-0.02***
Socio-cultural prof.	0.23	0.42	0.08	0.27	-0.15***
Workers	0.45	0.50	0.48	0.50	0.02***
Class position (Partner)					
Self-employed	0.07	0.26	0.04	0.20	-0.03***
Professionals	0.25	0.43	0.26	0.44	0.02***
Workers	0.24	0.43	0.25	0.43	0.00
Not working	0.08	0.27	0.20	0.40	0.12***
No Info	0.36	0.48	0.25	0.43	-0.11***
Transfers					
No inheritance/gifts	0.90	0.29	0.91	0.29	0.00
Inheritance/gifts	0.04	0.19	0.04	0.19	0.00
Inheritance/gifts not applicable	0.06	0.23	0.06	0.23	-0.00
Human capital and income					
Monthly labour income (IHS)	7.65	0.88	8.31	0.75	0.67***
Monthly transfer income (IHS)	0.79	2.13	0.28	1.31	-0.51***
Monthly pension income (IHS)	0.20	1.23	0.11	0.92	-0.09***
Full-time work experience (years)	11.7	9.97	19.9	11.1	8.18***
Part-time work experience (years)	6.21	7.12	0.77	2.25	-5.44***
Unemployment (years)	0.73	1.97	0.54	1.61	-0.20***
Job Tenure (years)	10.0	9.63	12.0	10.5	1.99***
Weekly work hours	31.5	12.9	43.7	9.94	12.22***
Education (years)	12.9	2.63	12.8	2.79	-0.01
Firm size					
< 20 employees and self-employed w/o employees	0.31	0.46	0.24	0.43	-0.07***
20-199 employees	0.26	0.44	0.26	0.44	0.00
200-1999 employees	0.20	0.40	0.22	0.41	0.02***
> 2000 employees	0.23	0.42	0.28	0.45	0.05***
Sectoral structure					
Public sector(=1)	0.31	0.46	0.21	0.41	-0.10***
Health, social, retail, and hospitality sector	0.50	0.50	0.17	0.38	-0.33***
Bank and insurance sector	0.05	0.22	0.05	0.22	-0.00
Manufacturing sector	0.16	0.37	0.46	0.50	0.30***
Other services	0.29	0.45	0.32	0.47	0.03***
Family					
# children in household	0.80	1.01	0.92	1.13	0.12***
Married and cohabiting	0.60	0.49	0.68	0.47	0.08***

Married and living separately	0.03	0.18	0.02	0.14	-0.01***
Non-married	0.22	0.42	0.23	0.42	0.01
Divorced	0.13	0.33	0.07	0.25	-0.06***
Widowed	0.02	0.15	0.01	0.07	-0.02***
# siblings	1.87	1.56	1.95	1.69	0.08***
Parental education					
No degree/don't know/else	0.11	0.31	0.12	0.33	0.02***
Low education	0.49	0.50	0.50	0.50	0.01
Intermediate education	0.23	0.42	0.21	0.41	-0.02***
Higher education	0.17	0.38	0.17	0.37	-0.01
Controls					
East Germany (=1)	0.23	0.42	0.22	0.41	-0.01**
Migration background (=1)	0.13	0.34	0.15	0.35	0.01***
Age (20 - 34 years)	0.22	0.41	0.21	0.41	-0.00
Age (35 - 49 years)	0.48	0.50	0.47	0.50	-0.01*
Age (50 - 64 years)	0.30	0.46	0.31	0.46	0.01**
Wealth imputation flag (=1)	0.84	0.95	0.77	0.93	-0.07***
Year dummies					
2002	0.19	0.39	0.22	0.41	0.03***
2007	0.22	0.41	0.23	0.42	0.02***
2012	0.30	0.46	0.29	0.45	-0.01**
2017	0.30	0.46	0.26	0.44	-0.03***
Number of person-years	20.462		20.620		
N of persons	12.442		12.220		

SOEP.V35 2002, 2007, 2012, 2017. Not weighted. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

5.4 Methods

We employ pooled unconditional quantile regressions and decompositions at the 25th percentile, the median, the 75th percentile, and the 90th percentile. Following Firpo et al. (2009), unconditional quantile regression assesses the explanatory variable's – here occupational class and gender – association with the quantile of the unconditional marginal distribution of net wealth. In unconditional quantile models, the Recentred Influence Function (RIF) is applied (Firpo et al. 2009; Fortin et al. 2011: 74 ff.) that is defined as:

$$RIF(y; q_\tau) = q_\tau + \frac{\tau - I\{y \leq q_\tau\}}{f_Y(q_\tau)} \quad (1)$$

With τ indicating a quantile of the marginal distribution of wealth and q is the value of wealth at quantile τ. Hence, the coefficient τ estimates how fy reacts to changes in the independent variables. To account for heteroscedasticity, we calculate robust standard errors.

To investigate in how far different compositions as opposed to different point estimates for different coefficients to these characteristics between men and women drive the GWG, we employ Kitagawa-Oaxaca-Blinder decomposition at different points of the unconditional wealth distribution (Blinder 1973; Jann 2008; Kitagawa 1955; Oaxaca 1973). Equation 2 displays the decomposition that includes two components:

$$\Delta_{m-f} = \left(\bar{Y}_m - \bar{Y}_f\right) = \left(\bar{X}_m - \bar{X}_f\right)\hat{\beta}_m + \bar{X}_f\left(\hat{\beta}_m - \hat{\beta}_f\right), \quad (2)$$

where Δ_{m-f} refers to the average (RIF) wealth difference between men and women. This wealth difference is decomposed into the "explained" $\left(\left(\bar{X}_m - \bar{X}_f\right)\hat{\beta}_m\right)$ and "unexplained" term $\overline{X_f}\left(\hat{\beta}_m - \hat{\beta}_f\right)$.

The "explained" term refers to the part of the gender wealth gap that is relegated to different endowments between men and women (i.e., if self-employment is associated with a wealth penalty and women are less often self-employed than men; how does this difference affect the GWG?). The "unexplained" term refers to differences in coefficients between men and women (i.e., if self-employment poses higher wealth penalties for women compared to men, how does that affect the wealth gap?). Since coefficients of the unexplained part contain all sorts of unmeasured attributes and henceforth might reflect spurious effects due to the omitted variable bias (c.f. Blau/Kahn 2017), we are predominantly interested in the explained part of the decomposition. Men's coefficients serve as the benchmark for the decomposition. We also run robustness checks to test if our results hold when women are the reference for the decomposition (Figure A.5).

Although a decomposition across the wealth distribution largely resembles the logic of a regular decomposition, there is one peculiarity: for the estimation, the same descriptive differences are used across the wealth distribution. This means if, for instance, on average men are more often self-employed in our sample than women, the decomposition will use this difference to estimate the explained part of the decomposition across all the points of the wealth distribution. Hence, it does not consider that the difference in self-employment might be diverging across the wealth distribution. Thus, differences in the explained part of the decomposition are driven by diverging coefficients form the pooled benchmark model at different parts of the wealth distribution. Additionally, we account for the fact that categorical coefficients depend on the choice of the reference group , by using the categorical option provided by the oaxaca stata command (Jann 2008). We normalize coefficients by estimating them in terms of deviation from the grand-mean rather than deviations from the omitted base category and can thereby circumvent the problem of the omitted base category.

6. Results

6.1 Descriptive Results

We start with simple descriptive results. Table 2 shows that median wealth is higher for men than for women across the occupational class structure, and these differences are significant in all occupational classes.

Table 2. Wealth Gap within classes

Oesch-classes	Wealth median men (Euro)	Wealth median women (Euro)	Wealth Gap (Euro)	N (men)	N (women)
Self-employed	165,196	80,314	84,881[***]	1800	1075
Technical experts	70,997	58,093	12,904[*]	3326	1182
Manager	90,166	41,189	48,977[***]	3976	4278
Socio-cultural prof.	58,744	36,204	22,539[***]	1605	4623
Worker	15,864	12,394	3,470[***]	9877	9304

SOEP.v35 2002, 2007, 2012, 2017. Not weighted. [*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$.

However, there are important differences in size: While the wealth gap amounts to 85,000€ among the self-employed, the gap becomes smaller in lower occupational groups and is only around 3,500€ among workers. The second-largest gap is found among managers, where women report less than half of the levels of wealth than men – although more than a half of all managers are female. In contrast, among technical professionals the wealth gap is comparably low (13.000€). Hence, those few women who are technical experts report median levels of wealth that are not too distant from men's median levels of wealth – at least compared to other occupational classes. The picture is very different among socio-cultural professionals: while women mark the large majority in this occupational class (73%) their median levels are almost 23.000€ lower compared to men within the same occupational group.

While these descriptive results suggest that gender wealth differences exist across all occupational classes, these insights do not reliably tell us whether these differences persist when we control for human capital indicators, family structure, and other confounders. We run unconditional quantile regression to understand if occupational class is associated with the wealth distribution for men and women, net of relevant controls.

6.2 Unconditional Quantile Regression

Unconditional quantile ("rifreg") regressions are displayed in Figure 1 (full regression results are depicted in Table A.3) describing the association between occupational class with the unconditional wealth distribution at the 25th percentile, the median, the 75th, and the 90th percentile for men and women[ix].

Figure 1 illustrates a clear positive association between self-employment and wealth for women and men at all points of the wealth distribution (reference is workers)[x]. The Figure also illustrates that men seem to profit slightly more from being self-employed than women do. Still, gender differences are only statistically different at the 75th and 90th percentile (see respective confidence intervals). In contrast, gender differences are not significantly different at the bottom and middle of the distribution (25th and 50th percentile, as indicated by overlapping confidence intervals)[xi].

Figure 1. Results from unconditional quantile regressions (only occupational classes)
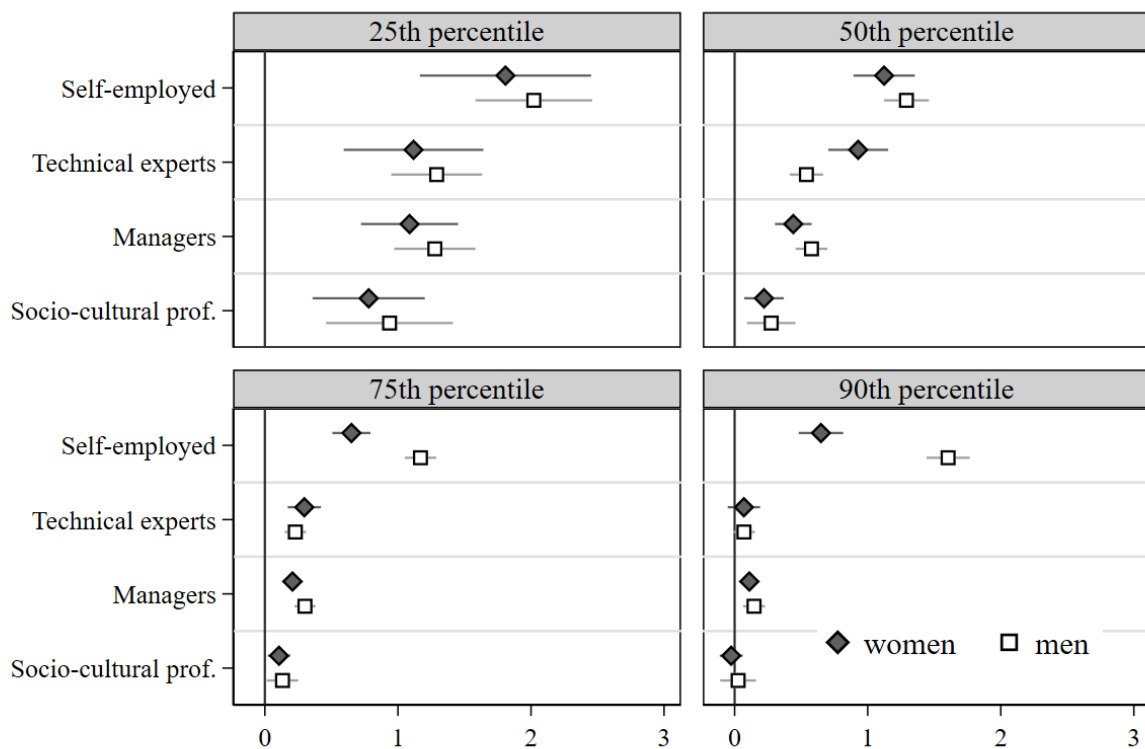
Note: SOEP.v35 2002, 2007, 2012, 2017. (cf. Table A.3). Not weighted

Investigating other occupational classes, we observe a significant positive association between being technical experts and wealth for women and men at the 25th percentile, the median, and the 75th percentile of the wealth distribution. Only at the median, however, the association for female technical professionals is statistically different from

the coefficient for men, indicating that being a technical expert is more positively associated with wealth for women compared to men.

Being a manager is positively associated with wealth across the entire wealth distribution for men and women alike. Coefficients, however, do not significantly differ for men and women, therefore, men and women seem to profit equally from being a manager compared to the reference group (workers) at all points of the wealth distribution. Lastly, socio-cultural professionals yield significant positive associations with the unconditional wealth distribution – compared to workers – in all but the 90th percentile. Overall, men and women seem to profit equally in terms of wealth from being a socio-cultural professional compared to being a worker.

Investigating the control variables (we only discuss results at the median, see Table A.3), regression results reveal that partner's class is associated with the wealth distribution for women and men. We also find that women experience wealth losses when they have a partner who is not in employment, for men this association is not significant. These results thus indicate the lasting importance of the male breadwinner model, i.e., men working full-time and women being the secondary earner or homemaker. Inheritance is also positively associated with wealth for both, men, and women. Labour income and full-time work experience, as well as unemployment experience, education, and job tenure are positively associated with men's and women's wealth accumulation. In contrast, compared to working in the banking and insurance sector, working in health, retail, and hospitality sector or other services is negatively associated with wealth while manufacturing is positively associated with the wealth distribution for men and women. Having children is positively associated with wealth for men and women alike, whereas, compared to being married and cohabiting, being divorced or not married is detrimental for women's and men's wealth. A higher number of siblings negatively influences wealth accumulation for men and women. Parents not having any degree is negatively associated with wealth levels, and so is being from East Germany and having a migration background, while being older than 20-34 years and wealth are positively associated.

6.3 Decompositions

Turning to the decomposition analysis, we see that the explanatory capacity of our occupational class covariates varies across the distribution (Figure 2 and Table 3). However, occupational class adds to explaining the GWG at all points of the wealth distribution, though with different sizes and in different directions.

Figure 2 depicts the explained part of the decomposition for occupational classes. Overall, occupational classes explain between 7-18% of the wealth gap, depending on the percentile of the distribution in the explained part of the decomposition investigated. Different occupational class coefficients for men and women explain between 5 and -45% of the overall GWG (unexplained part of the decomposition).

Figure 2. Explained part of the decomposition, only Oesch classes and explained percentages depicted.
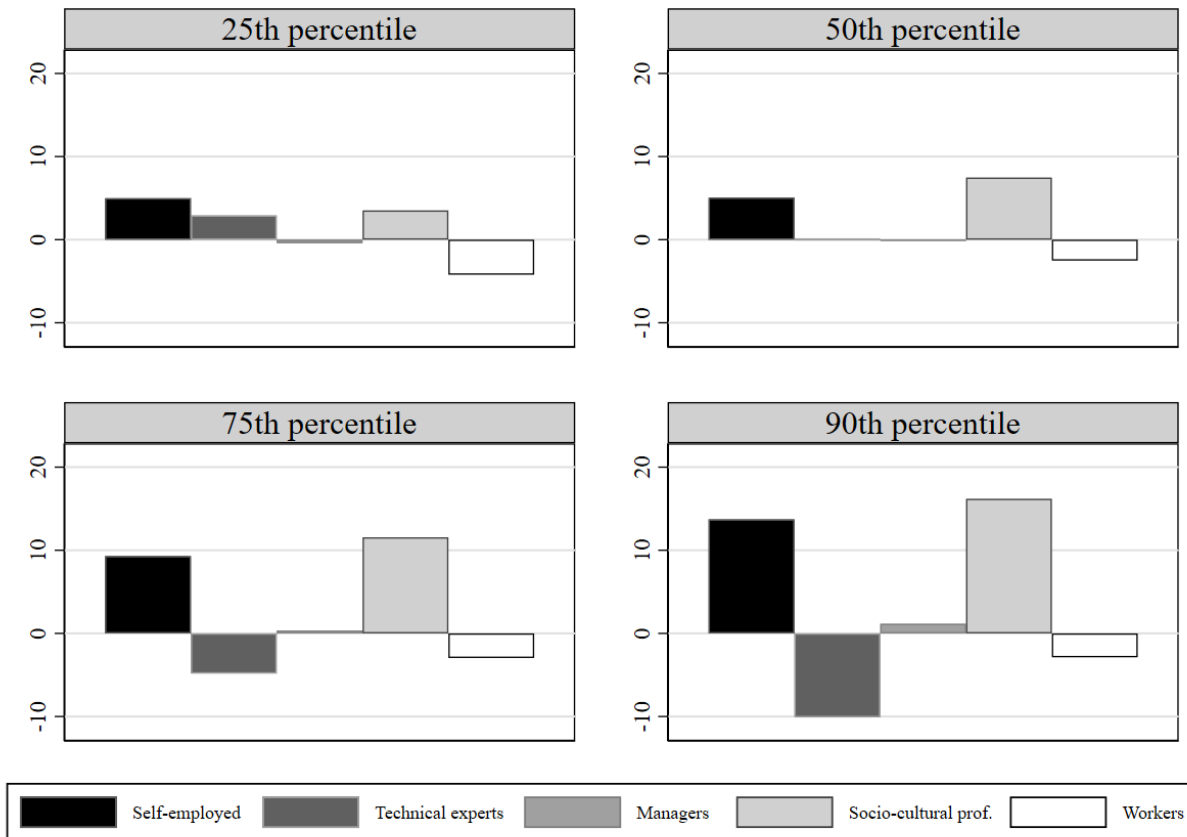
Note: SOEP.v35 2002, 2007, 2012, 2017 (cf. Table 3). Not weighted.

We first turn to the explained part of the decomposition. We find that the explanatory capacity of self-employment is largest at the top of the wealth distribution. In fact, the gendered composition of self-employment explains about 18% of the GWG between men and women at the 90th percentile and about 13% at the 75th percentile.

In contrast, the composition of technical experts does not significantly influence the GWG at the 25th and 50th percentile, while at the 75th and the 90th percentile this occupational class attenuates the GWG by about 5 and 10%, respectively. Men are more often employed as technical experts than women, which depresses the GWG since the association between wealth and being a technical expert turn negative at the upper two points of the wealth distribution investigated (results not shown, obtained using the categorical option of the *oaxaca* command[xii] (Jann 2008). Hence, if women were as often technical experts than men, the gap would be bigger at the upper-middle and top of the distribution.

Table 3. Kitagawa-Oaxaca-Blinder-Decompositions

	25th percentile			50th percentile			75th percentile			90th percentile		
Men	8.933***	(0.056)		11.404***	(0.022)		12.601***	(0.013)		13.311***	(0.015)	
Women	8.289***	(0.070)		10.881***	(0.026)		12.302***	(0.014)		12.998***	(0.013)	
Difference	0.644***	(0.089)		0.523***	(0.034)		0.300***	(0.020)		0.313***	(0.020)	
Explained	1.966***	(0.157)		0.922***	(0.056)		0.475***	(0.033)		0.429***	(0.039)	
Unexplained	-1.322***	(0.174)		-0.399***	(0.063)		-0.175***	(0.036)		-0.116**	(0.041)	
Explained												
Class	*0.044*	*(0.036)*	*6.8*	*0.052*	*(0.014)*	*9.9*	*0.040*	*(0.010)*	*13.4*	*0.057*	*(0.011)*	*18.1*
Self-employed	0.032***	(0.006)	5.0	0.026***	(0.003)	5.1	0.028***	(0.003)	9.3	0.043***	(0.004)	13.7
Technical experts	0.019	(0.012)	2.9	0.000	(0.005)	0.1	-0.014***	(0.003)	-4.8	-0.032***	(0.004)	-10.1
Manager	-0.003	(0.002)	-0.4	-0.001	(0.001)	-0.1	0.001	(0.001)	0.4	0.004***	(0.001)	1.2
Socio-cult. prof.	0.023	(0.027)	3.5	0.039***	(0.010)	7.5	0.035***	(0.007)	11.6	0.051***	(0.008)	16.2
Workers	-0.027***	(0.006)	-4.2	-0.013***	(0.003)	-2.5	-0.009***	(0.002)	-3.0	-0.009***	(0.002)	-2.9
Partner's Occ. Class	*-0.065**	*(0.024)*	*-10.1*	*-0.045***	*(0.009)*	*-8.5*	*-0.015*￼	*(0.006)*	*-5.1*	*-0.014*￼	*(0.007)*	*-4.4*
Human capital	*1.653***	*(0.154)*	*257*	*0.782***	*(0.054)*	*150*	*0.387***	*(0.031)*	*129*	*0.345***	*(0.037)*	*110*
Workplace	*0.301***	*(0.055)*	*46.8*	*0.067**	*(0.021)*	*12.8*	*0.031*￼	*(0.013)*	*10.2*	*0.024*	*(0.014)*	*7.7*
Family	*0.121***	*(0.023)*	*18.9*	*0.078***	*(0.009)*	*14.8*	*0.026***	*(0.006)*	*8.7*	*0.006*	*(0.007)*	*2.0*
Controls	*-0.089***	*(0.018)*	*-13.8*	*-0.012*￼	*(0.006)*	*-2.3*	*0.006*	*(0.004)*	*2.1*	*0.011**	*(0.003)*	*3.4*
Unexplained												
Class	*-0.048*	*(0.074)*	*-7.4*	*0.028*	*(0.029)*	*5.4*	*-0.065*	*(0.018)*	*-21.6*	*-0.140*	*(0.20)*	*-44.7*
Self-employed	0.003	(0.016)	0.5	0.010	(0.006)	1.9	0.021***	(0.004)	7.0	0.039***	(0.005)	12.6
Technical experts	0.001	(0.014)	0.1	-0.022***	(0.006)	-4.2	-0.010**	(0.003)	-3.5	-0.012**	(0.004)	-3.9
Manager	0.009	(0.035)	1.4	0.029*	(0.014)	5.6	-0.004	(0.009)	-1.3	-0.036***	(0.011)	-11.5
Socio-cult. prof.	0.005	(0.053)	0.8	0.013	(0.020)	2.5	-0.020	(0.013)	-6.7	-0.035*	(0.015)	-11.3
Workers	-0.066	(0.078)	-10.2	-0.002	(0.030)	-0.4	-0.052**	(0.017)	-17.2	-0.096***	(0.018)	-30.6
Partner's Occ. Class	*-0.083*	*(0.062)*	*-12.9*	*-0.010*	*(0.024)*	*-2.0*	*0.001*	*(0.015)*	*0.4*	*0.012*	*(0.019)*	*4.0*
Human capital	*2.042*	*(1.280)*	*317*	*2.393***	*(0.433)*	*458*	*1.869***	*(0.270)*	*623*	*1.612***	*(0.337)*	*515*
Workplace	*0.057*	*(0.096)*	*8.8*	*0.007*	*(0.039)*	*1.4*	*-0.008*	*(0.025)*	*-2.6*	*-0.018*	*(0.027)*	*-5.8*
Family	*-0.040*	*(0.240)*	*-6.3*	*0.050*	*(0.096)*	*9.6*	*0.015*	*(0.056)*	*5.1*	*0.007*	*(0.065)*	*2.2*
Controls	*-0.465*￼	*(0.200)*	*-72.2*	*-0.013*	*(0.077)*	*-2.6*	*0.015*	*(0.044)*	*4.9*	*0.031*	*(0.047)*	*9.9*
Constant	*-2.785*￼	*(1.394)*		*-2.854***	*(0.471)*		*-2.003***	*(0.290)*		*-1.620***	*(0.357)*	
Number of person-years	41.082			41.082			41.082			41.082		
Number of persons	24.662			24.662			24.662			24.662		

SOEP.V35; 2002, 2007, 2012; robust standard errors in parentheses. Not weighted. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Categorical option employed (mean over occupational class categories).

The explanatory capacity of managerial occupations is virtually non-existent: only at the 90th percentile being a manager significantly explains as little as 1.2% of the GWG. This is not surprising given that women and men are equally often managers (Table 2), and the association with the wealth distribution does not differ significantly (Figure 1).

Working in socio-cultural professions exacerbates the GWG across the distribution but particularly at the top by as much as 16% and even at the 75th percentile about 12%. Thus, working in a socio-cultural profession does not only come about with penalties to wealth accumulation (i.e., the benchmark coefficient in the decomposition), but the over-representation of women significantly widens the gender gap in wealth at the top of the wealth distribution. In contrast, low-wealth occupational classes such as workers seem to – slightly – attenuate the GWG, indicating that the association between wealth and being a worker is negative. This gives the marginally underrepresented women a slight advantage in wealth accumulation in this group.

Overall, occupational class does add to explaining the GWG: Particularly, the underrepresentation of women among the self-employed and their overrepresentation among socio-cultural professions add to explaining the GWG. In contrast, the gendered composition of technical experts attenuates the GWG, whereas managers do not add any explanatory power for the GWG.

Briefly investigating the unexplained part of the decomposition analyses (Table 3), shows that the association between wealth and occupational class is further stratified: self-employment seems to be particularly beneficiary at the top of the unconditional wealth distribution for men, hence, if women would profit equally, the gap would be smaller. For socio-cultural professionals, we see the negative association for women depresses the GWG. In fact, women's penalties are not as high as men's, which is leading towards closing the GWG. This could reflect a general devaluation of socio-cultural professions that depresses wealth levels for men and women alike. Given, however, that women are overrepresented in this occupational class, being a socio-cultural professional is particularly detrimental for their wealth. In contrast, technical experts stand out with a different direction of the association: women have lower penalties for being a technical expert compared to men as the unexplained coefficient is negative and significant at the 25th, the median, and the 90th percentile. The same holds true for being a worker.

Overall, class adds to explaining the overall GWG. Investigating other confounders, however, illustrates that the explanatory capacity of class is smaller than the pooled human capital variables (i.e., income from work, transfers, pensions, unemployment, full-time and part-time work experience, weekly working hours, education, inheritance/gifts, and tenure, see Table 3). Nonetheless, Table 3 shows that at the 75th percentile, gender composition of occupational classes accounts for about 13% of the explained GWG, which is more than workplace characteristics (10%, i.e., firm size, public sector, and sectoral structure), partner's class (-5%) and family traits (9%, i.e. marital status, parental education, number of siblings, children). Given that occupational class further correlates with human capital indicators, some of the

explanatory power of occupational class is already taken up by other control variables emphasizing how important the role occupation class in the GWG is irrespective of human capital indicators.

6.4 Robustness Checks

To test the robustness of our results, we ran four additional estimations.

First, we excluded business equity from the dependent variable to check whether this alters the results, i.e., we analyze the importance of portfolio structure on the gender wealth gap (Figure A.2). Except for the 25th percentile, results are similar. However, there is one crucial difference: The association with self-employment for men drops sharply in the 90th percentile and attenuates a bit for women as well, meaning that self-employed men tend to accumulate more wealth through business equity compared to women.

Second, we checked whether SES could serve as an informative proxy for occupation. SES is a measure for occupational status that varies between 16 (e.g. cleaners) and 90 (judges) (Ganzeboom et al. 1992) and is usually divided into three equally sized groups (high SES, middle and low SES) which – compared to the Oesch class scheme – is an artificial and not a theoretically grounded difference. Figure A.3 further illustrates that SES is not a useful proxy, as results are not significantly different for men and women. Hence, SES measures masks important differences in the association between gender, wealth, and occupations.

Third, we checked whether our results hold for non-married men and women compared to married individuals (Figure A.4). We find that the positive association of self-employment and wealth at the 75th and 90th percentile is not statistically different for unmarried individuals, while it is for the married.

Fourth, to account for the fact that we chose men's benchmark coefficients in the decomposition, we ran another decomposition in which we used women's coefficients as the reference (Figure A.5). Not surprisingly, we find that the association between self-employment and socio-cultural professionals with wealth at the 75th and 90th percentile is smaller compared to our main model (Figure 2).

7. Summary and Discussion

The aim of this paper was to investigate the Gender Wealth Gap taking occupational class into account. The results illustrate that integrating a class perspective in the study of gendered wealth inequalities yields interesting insights, and we show that classes explain more of the gender wealth gap at different points of the wealth distribution, than e.g., family attributes or workplace characteristics.

We conclude with two main takeaways. First, the GWG varies substantially across occupational groups and is largest among the self-employed and managers. This is because women run smaller companies and are making less wealth from this, indicating lower power resources in self-employment compared to men. Further, although women are equally often managers, they tend to occupy lower wealth-generating positions. However, even in female-dominated occupational classes such as socio-cultural professions the gap is large and profound pointing to large differences in power resources and possibly indicating that men hold the more attractive positions among the socio-cultural professions compare to women that turn into differences in wealth. In sum, particularly women's under-representation among the self-employed and over-representation among socio-cultural professions add to explain the GWG in Germany.

Second, despite this additional explanatory capacity of occupational class, the largest impact on the GWG still comes from income and work experience. The decomposition analysis revealed that lower full-time work-experience and income are the main drivers of the overall GWG, results that are well in line with previous research (Ruel/Hauser 2013; Sierminska et al. 2010). This is not surprising, given that income becomes wealth when it is saved (Killewald et al. 2017), and we assume that part of the association between wealth and occupational class is already taken up by our control variables, as occupational classes differ and are constituted by e.g. income, education, or tenure.

Clearly, our analysis comes with some limitations. We follow the big-class tradition, and we cannot account for intra-class differences. Additional analysis using occupations might show how specific occupations drive the GWG. This could particularly pertain to socio-cultural professionals, where a diverse set of occupations are grouped together that vary in power resources towards their employer. However, we leave this to future research.

Further, given the cross-sectional character of this study, we cannot state anything about the association's direction between occupational class and wealth accumulation. More specifically, selection into self-employment could be the result of previous levels of wealth (Fairlie/Krashinsky 2012). Future research should further tackle the gendered nature of self-employment and the devaluation of female occupations such as socio-cultural professions. Women are less likely to become self-employed in the first place, and when they are, businesses are smaller, and wealth levels are lower (Austen et al. 2014; Georgellis/Wall 2005).

What is more, women's lower levels of wealth are further the result of the systematic devaluation of female occupations, restricting women from accumulating as much wealth as men do. Though women are oftentimes key workers – as currently exemplified in the COVID-19 pandemic – the systematic devaluation and lack of power resources restrict women from keeping up with male levels of income and wealth. When gender differences in labour markets and pay are overcome, we are one significant step closer to ending gender differences in wealth.

Bibliography

Addo, Fenaba R, and Daniel T Lichter. 2013. "Marriage, marital history, and black–white wealth differentials among older women." *Journal of Marriage and Family,* 75(2): 342-62.

Austen, Siobhan, Therese Jefferson, and Rachel Ong. 2014. "The gender gap in financial security: What we know and don't know about Australian households." *Feminist Economics,* 20(3): 25-52.

Baker, Amy Castro. 2014. "Eroding the wealth of women: Gender and the subprime foreclosure crisis." *Social Service Review,* 88(1): 59-91.

Bertrand, Marianne, and Kevin F Hallock. 2001. "The gender gap in top corporate jobs." *ILR Review,* 55(1): 3-21.

Bessière, Céline. 2019. "Reversed accounting: legal professionals, families and the gender wealth gap in France." *Socio-Economic Review,* Forthcoming.

Bewley, Truman. 1977. "The permanent income hypothesis: A theoretical formulation." *Journal of economic theory,* 16: 252-92.

Bihagen, Erik, and Marita Ohls. 2007. "Are women over-represented in dead-end jobs? A Swedish study using empirically derived measures of dead-end jobs." *Social Indicators Research,* 84(2): 159-77.

Blau, Francine D, and Lawrence M Kahn. 2017. "The gender wage gap: Extent, trends, and explanations." *Journal of Economic Literature,* 55(3): 789-865.

Blinder, Alan S. 1973. "Wage discrimination: reduced form and structural estimates." *Journal of Human Resources,* 8(4): 436-55.

Boll, Christina. 2011. "Mind the gap—German motherhood risks in figures and game theory issues." *International Economics and Economic Policy,* 8(4): 363-82.

Borah, Bijan J, and Anirban Basu. 2013. "Highlighting differences between conditional and unconditional quantile regression approaches through an application to assess medication adherence." *Health Economics,* 22(9): 1052-70.

Budig, Michelle J. 2006. "Intersections on the road to self-employment: Gender, family and occupational class." *Social Forces,* 84(4): 2223-39.

Calanca, Federica, Luiza Sayfullina, Lara Minkus, Claudia Wagner, and Eric Malmi. 2019. "Responsible team players wanted: an analysis of soft skill requirements in job advertisements." *EPJ Data Science,* 8(1): 1-20.

Conley, Dalton, and Miriam Ryvicker. 2004. "The price of female headship: Gender, inheritance, and wealth accumulation in the United States." *Journal of Income Distribution,* 13(3/4): 41-56.

Cowell, Frank, Eleni Karagiannaki, and Abigail McNight. 2012. "Mapping and Measuring the Distribution of Household Wealth: A Cross-Country Analysis." *LWS Working Paper Series,* 12.

Crompton, Rosemary. 1987. "Gender, status and professionalism." *Sociology,* 21(3): 413-28.

Crompton, Rosemary. 1999. "The gendered restructuring of the middle classes: employment and caring." *The Sociological Review,* 47(2): 165-83.

De Nardi, Mariacristina, and Giulio Fella. 2017. "Saving and wealth inequality." *Review of Economic Dynamics,* 26: 280-300.

Deere, Carmen Diana, and Cheryl R Doss. 2006. "The gender asset gap: What do we know and why does it matter?" *Feminist Economics,* 12(1-2): 1-50.

Edlund, Lena, and Wojciech Kopczuk. 2009. "Women, wealth, and mobility." *American Economic Review,* 99(1): 146-78.

Ehrlich, Ulrike, Lara Minkus, and Moritz Hess. 2020. "Einkommensrisiko Pflege? Der Zusammenhang von familiärer Pflege und Lohn." *Zeitschrift für Gerontologie und Geriatrie,* 53(1): 22-28.

Ehrlich, Ulrike, Katja Möhring, and Sonja Drobnič. 2019. "What comes after caring? The impact of family care on women's employment." *Journal of Family Issues,* Online first.

Fairlie, Robert W, and Harry A Krashinsky. 2012. "Liquidity constraints, household wealth, and entrepreneurship revisited." *Review of Income and Wealth,* 58(2): 279-306.

Firpo, Sergio, Nicole Fortin, and Thomas Lemieux. 2009. "Unconditional quantile regression." *Econometrica,* 77(3): 953-73.

Fortin, Nicole, Thomas Lemieux, and Sergio Firpo. 2011. "Decomposition Methods in Economics." In *Handbook of Labour Economics*, edited by Orley Ashenfelter and David Card, pp. 1-102. Amsterdam: Elsevier.

Frick, Joachim R, Markus M Grabka, and Jan Marcus. 2010. "Editing und multiple Imputation der Vermögensinformation 2002 und 2007 im SOEP." *SOEP Survey Papers,* 146.

Gale, William G, and Karen M Pence. 2006. "Are successive generations getting wealthier, and if so, why? Evidence from the 1990s." *Brookings Papers on Economic Activity,* 2006(1): 155-234.

Ganzeboom, Harry BG, Paul M De Graaf, and Donald J Treiman. 1992. "A standard international socio-economic index of occupational status." *Social science research,* 21(1): 1-56.

Georgellis, Yannis, and Howard J Wall. 2005. "Gender differences in self-employment." *International review of applied economics,* 19(3): 321-42.

Gingrich, Jane, and Silja Häusermann. 2015. "The decline of the working-class vote, the reconfiguration of the welfare support coalition and the consequences for the welfare state." *Journal of European Social Policy,* 25(1): 50-75.

Goebel, Jan, Markus M Grabka, Stefan Liebig, Martin Kroh, David Richter, Carsten Schröder, and Jürgen Schupp. 2019. "The German Socio-economic Panel (SOEP)." *Jahrbücher für Nationalökonomie und Statistik,* 239(2): 345-60.

Grabka, Markus M, and Christoph Halbmeier. 2019. "Vermögensungleichheit in Deutschland bleibt trotz deutlich steigender Nettovermögen anhaltend hoch." *DIW Wochenbericht,* 86(40): 735-45.

Grabka, Markus M, Jan Marcus, and Eva Sierminska. 2015. "Wealth distribution within couples." *Review of Economics of the Household,* 13(3): 459-86.

Grabka, Markus M, and Christian Westermeier. 2014. "Persistently high wealth inequality in Germany." *DIW Economic Bulletin,* 4(6): 3-15.

Hipp, Lena, Janine Bernhardt, and Jutta Allmendinger. 2015. "Institutions and the prevalence of nonstandard employment." *Socio-Economic Review,* 13(2): 351-77.

Jann, Ben. 2008. "The Blinder–Oaxaca decomposition for linear regression models." *The Stata Journal,* 8(4): 453-79.

Killewald, Alexandra, Fabian T Pfeffer, and Jared N Schachner. 2017. "Wealth Inequality and Accumulation." *Annual review of sociology,* 43: 379-404.

Kitagawa, Evelyn M. 1955. "Components of a difference between two rates." *Journal of the American statistical Association,* 50(272): 1168-94.

Kocka, Jürgen. 1980. "The study of social mobility and the formation of the working class in the 19th century." *Le mouvement social,* 111: 97-117.

Kriesi, Hanspeter. 1989. "New social movements and the new class in the Netherlands." *American Journal of Sociology,* 94(5): 1078-116.

Kulich, Clara, Grzegorz Trojanowski, Michelle K Ryan, S Alexander Haslam, and Luc DR Renneboog. 2011. "Who gets the carrot and who gets the stick? Evidence of gender disparities in executive remuneration." *Strategic Management Journal,* 32(3): 301-21.

Kurz, Karin. 2004. "Home ownership and social inequality in West Germany." In *Home ownership and social inequality in comparative perspective*, edited by Karin Kurz and Hans-Peter Blossfeld, pp. 21-60. Stanford, CA: Stanford University Press.

Lambert, Paul S, and Erik Bihagen. 2014. "Using occupation-based social classifications." *Work, Employment and Society,* 28(3): 481-94.

Lechmann, Daniel SJ, and Claus Schnabel. 2012. "Why is there a gender earnings gap in self-employment? A decomposition analysis with German data." *IZA Journal of European Labour Studies,* 1(6): 1-25.

Lersch, Philipp. 2017. "The Marriage Wealth Premium Revisited." *Demography,* 54(3): 961–83.

Lersch, Philipp M, Marita Jacob, and Karsten Hank. 2017. "Parenthood, gender, and personal wealth." *European Sociological Review,* 33(3): 410-22.

Minkus, Lara. 2019. "Labour market closure and the stalling of the gender pay gap." 1049.

Minkus, Lara, and Anne Busch-Heizmann. 2018. "Gender Wage Inequalities Between Historical Heritage and Structural Adjustments: A German–German Comparison Over Time." *Social Politics,* 27(1): 156-86.

Minkus, Lara, and Anne Busch-Heizmann. 2020. "Gender Wage Inequalities Between Historical Heritage and Structural Adjustments: A German-German Comparison Over Time." *Social Politics: International Studies in Gender, State & Society,* 1(27): 156 - 86.

Mohan, Nancy, and John Ruggiero. 2003. "Compensation differences between male and female CEOs for publicly traded firms: a nonparametric analysis." *Journal of the Operational Research Society,* 54(12): 1242-48.

Müller, Walter, and Richard Arum. 2004. "Self-employment dynamics in advanced economies." In *The reemergence of self-employment: A comparative study of self-employment dynamics and social inequality*, edited by Richard Arum and Walter Müller, pp. 1-35. Princeton: Princeton University Press.

Nelson, Julie A. 2015. "Are women really more risk-averse than men? A re-analysis of the literature using expanded methods." *Journal of Economic Surveys,* 29(3): 566-85.

Nelson, Julie A. 2016. "Not-so-strong evidence for gender differences in risk taking." *Feminist Economics,* 22(2): 114-42.

Oaxaca, Ronald. 1973. "Male-female wage differentials in urban labour markets." *International economic review,* 14(3): 693-709.

OECD. 2017. *The Pursuit of Gender Equality-An Uphill Battle*. Paris: OECD Publishing.

Oesch, Daniel. 2006. *Redrawing the Class Map. Stratification and Institutions in Britain, Germany, Sweden and Switzerland*. New York: Palgrave Macmillan.

Oesch, Daniel. 2008. "The Changing Shape of Class Voting. An individual-level analysis of party support in Britain, Germany and Switzerland." *European Societies,* 10(3): 329-55.

Palier, Bruno, and Kathleen Thelen. 2010. "Institutionalizing dualism: Complementarities and change in France and Germany." *Politics & Society,* 38(1): 119-48.

Pfeffer, Fabian T. 2011. "Status Attainment and Wealth in the United States and Germany." In *Persistence, Privilege and Parenting. The Comparative Study of Intergenerational Mobility*, edited by Timothy M. Smeeding, Robert Erikson, and Markus Jäntti, pp. 109-37. New York: Russell Sage Foundation.

Pfeffer, Fabian T., and Nora Waitkus. 2020. "The Wealth Inequality of Nations." *LWS Working Paper Series,* 33.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Harvard University Press.

Ravazzini, Laura, and Jenny Chesters. 2018. "Inequality and wealth: comparing the gender wealth gap in Switzerland and Australia." *Feminist Economics,* 24(4): 83-107.

Ravazzini, Laura, and Ursina Kuhn. 2018. "Wealth, Savings and Children Among Swiss, German and Australian Families." In *Social Dynamics in Swiss Society*, edited, pp. 161-74: Springer.

Rubin, Donald B. 1996. "Multiple imputation after 18+ years." *Journal of the American statistical Association,* 91(434): 473-89.

Ruel, Erin, and Robert M Hauser. 2013. "Explaining the gender wealth gap." *Demography,* 50(4): 1155-76.

Schneebaum, Alyssa, Miriam Rehm, Katharina Mader, and Katarina Hollan. 2018. "The gender wealth gap across European countries." *Review of Income and Wealth,* 64(2): 295-331.

Schubert, Renate, Martin Brown, Matthias Gysler, and Hans Wolfgang Brachinger. 1999. "Financial decision-making: are women really more risk-averse?" *American Economic Review,* 89(2): 381-85.

Sierminska, Eva M, Joachim R Frick, and Markus M Grabka. 2010. "Examining the gender wealth gap." *Oxford Economic Papers,* 62(4): 669-90.

Sierminska, Eva, Daniela Piazzalunga, and Markus Grabka. 2019. "Transitioning Towards More Equality? Wealth Gender Differences and the Changing Role of Explanatory Factors Over Time." *SOEPpapers on Multidisciplinary Panel Data Research,* 1050.

Sunden, Annika E, and Brian J Surette. 1998. "Gender differences in the allocation of assets in retirement savings plans." *The American Economic Review,* 88(2): 207-11.

Szydlik, Marc. 2004. "Inheritance and inequality: Theoretical reasoning and empirical evidence." *European Sociological Review,* 20(1): 31-45.

Waitkus, Nora, and Olaf Groh-Samberg. 2018. "Beyond Meritocracy. Wealth accumulation in the German Upper Classes." In *New Directions in Elite Studies*, edited by Olav Korsnes, Johs Hjellbrekke, Johan Heilbron, Felix Bühlmann, and Mike Savage, pp. 198-220. London: Routledge.

Warren, Tracey. 2006. "Moving beyond the gender wealth gap: On gender, class, ethnicity, and wealth inequalities in the United Kingdom." *Feminist Economics,* 12(1-2): 195-219.

Warren, Tracey, Karen Rowlingson, and Claire Whyley. 2001. "Female finances: Gender wage gaps and gender assets gaps." *Work, Employment and Society,* 15(3): 465-88.

Yamokoski, Alexis, and Lisa A Keister. 2006. "The wealth of single women: Marital status and parenthood in the asset accumulation of young baby boomers in the United States." *Feminist Economics,* 12(1-2): 167-94.

Yu, Wei-hsin. 2017. "Tradeoff or Winner Take All? Relationships between Job Security and Earnings in 32 Countries." *Sociological Perspectives,* 60(2): 269-92.

Appendix

Figure A.1. Unconditional Quantile Regression with different self-employed groups
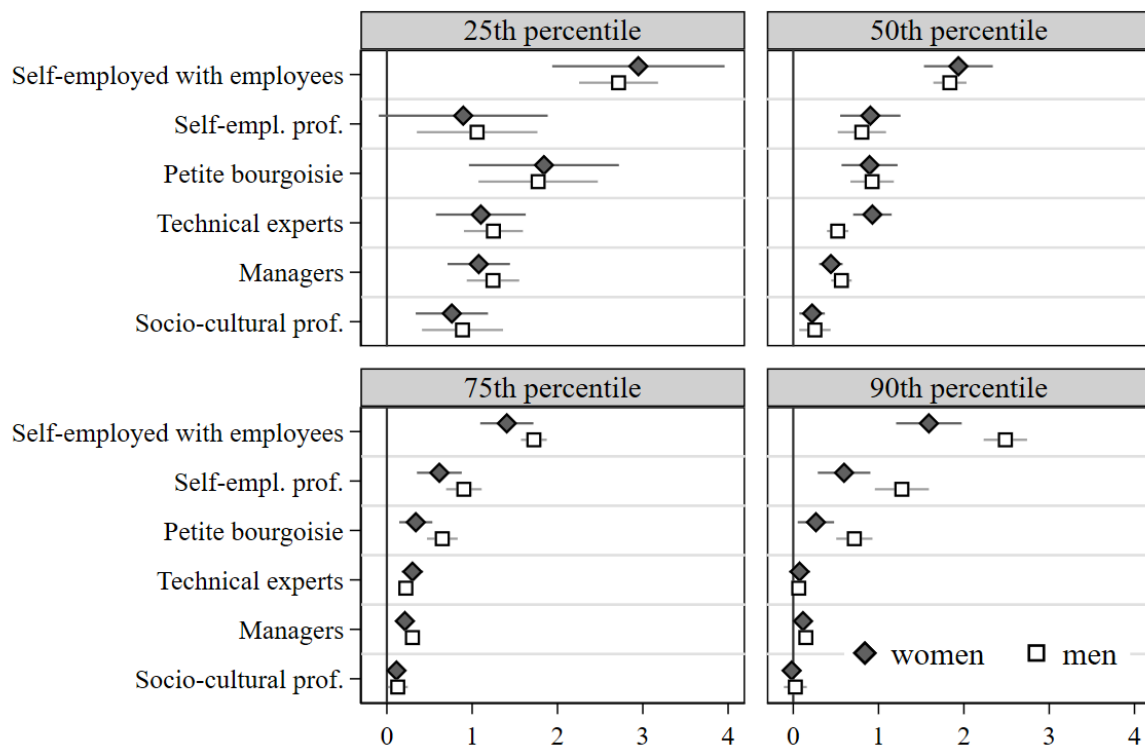
Note: SOEP.v35 2002, 2007, 2012, 2017. Reference is workers. Not weighted.

Figure A.2. Unconditional Quantile Regression excluding business equity from net wealth measure
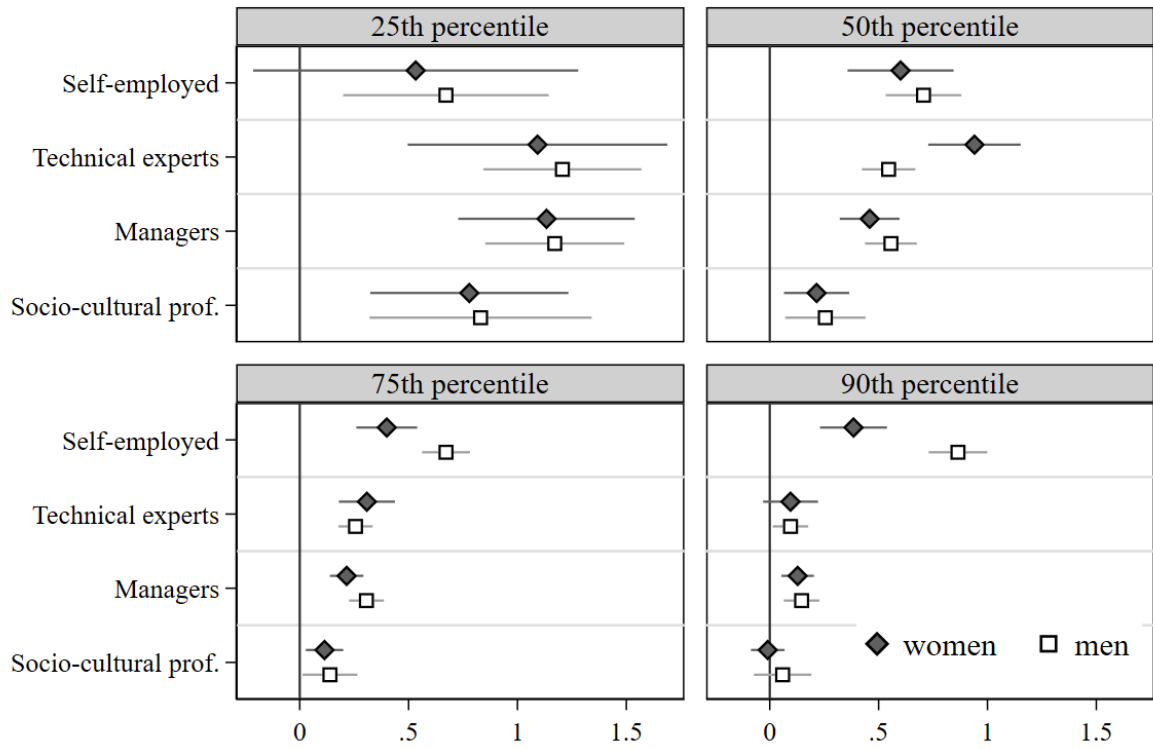
Note: SOEP.v35 2002, 2007, 2012, 2017. Reference is workers. Not weighted.

Figure A.3. Unconditional Quantile Regression with SES instead of Oesch classes
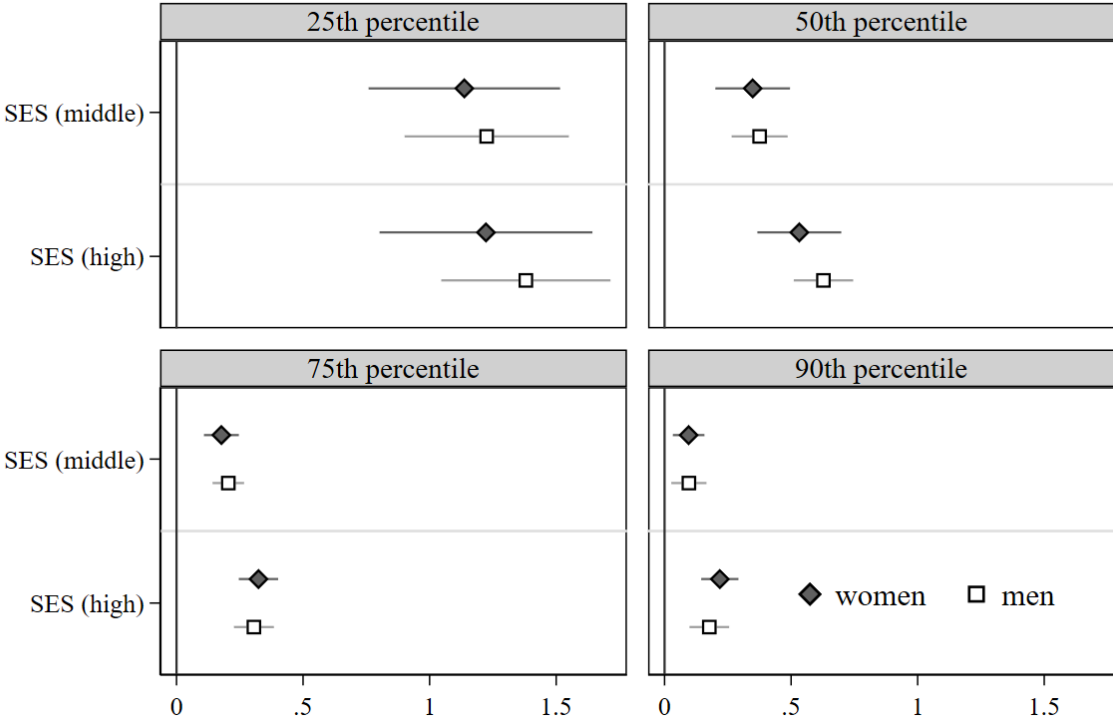
Note: SOEP.v35 2002, 2007, 2012, 2017. Reference is low SES. Not weighted

Figure A.4. Unconditional Quantile Regression, married vs. non-married individuals
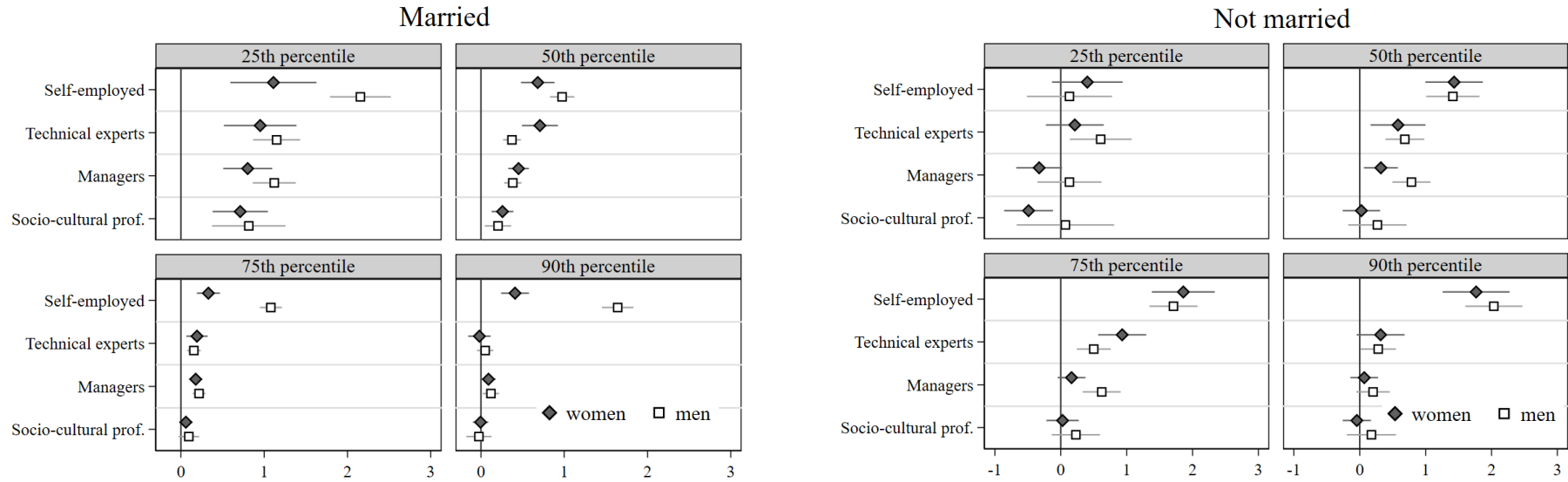
Note: SOEP.v35 2002, 2007, 2012, 2017. Reference is workers. Not weighted.

Figure A.5. Explained part of the decomposition, only Oesch classes and explained percentages depicted (women as benchmark coefficients)
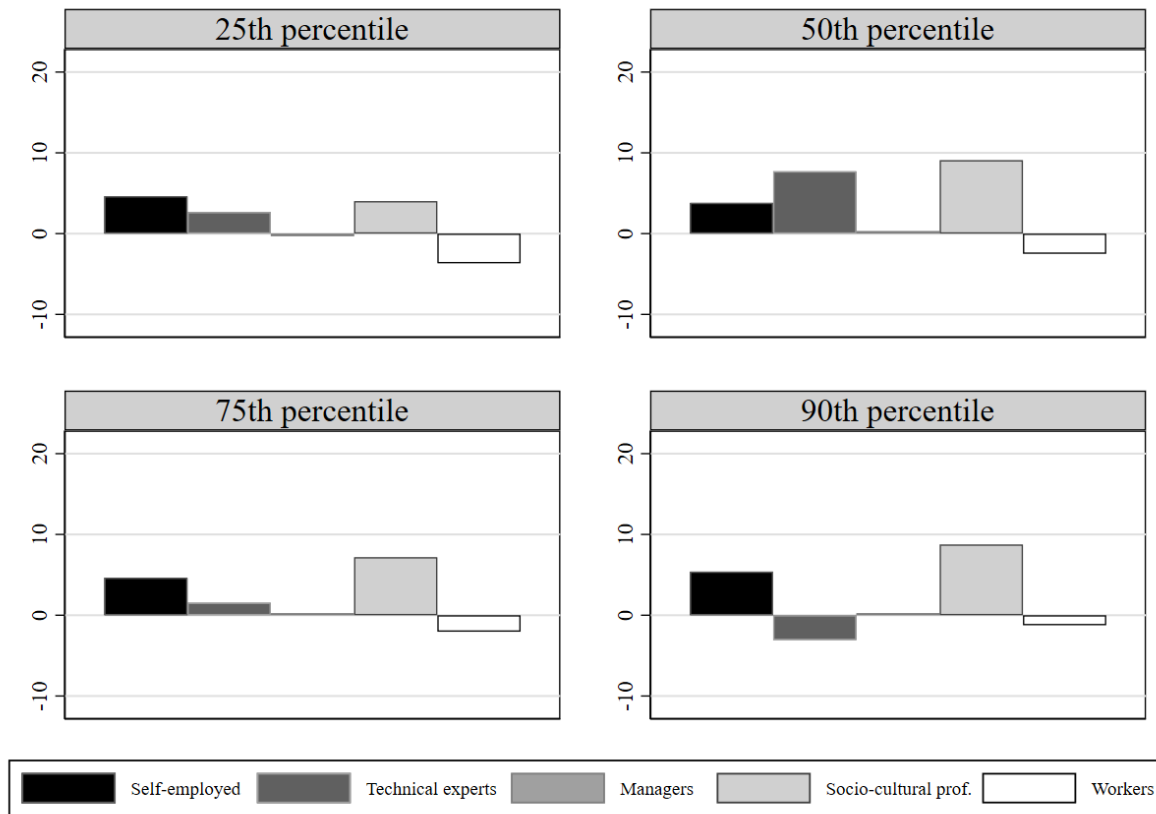
Note: SOEP.v35 2002, 2007, 2012, 2017. Categorical option employed (grand-mean over occupational class categories). Not weighted.

Table A.1. Oesch 8-Class Scheme with example occupations

Self-employed	Employees			Skill level
Independent work logic	*Technical work logic*	*Organizational work logic*	*Interpersonal work logic*	*Skill level*
Large employers & self-employed professionals	**Technical experts** *(computer experts, engineers)*	**Manager** *(administrators, managers, bookkeepers)*	**Socio-cultural professionals** *((university) teachers, nurses, doctors)*	*Professional/Associate*
Petite bourgeoisie *(small shop owners)*	**Manual workers** *(mechanics, carpenters)*	**Office workers** *(clerks)*	**Service workers** *(cooks, waiters)*	*General/ vocational and*

Note: Dashed lines indicate where we collapse the class scheme for the empirical analysis. Based on Oesch (2006: 68).

Table A.2. Wealth Gap within detailed Oesch classes

Oesch-classes	Wealth median men (Euro)	Wealth median women (Euro)	Wealth Gap (Euro)	N (men)	N (women)
Large employer & self-employed professions	263,635	109,417	154,217***	621	368
Petite bourgeoisie	133,500	62,956	70,544***	1179	707
Technical experts	70,997	58,093	12,904*	3362	1182
Managers	90,166	41,189	48,977***	3976	4278
Socio-cultural professions	58,744	36,204	22,539***	1605	4263
Manual workers	15,520	8,674	6,846**	6659	1340
Office workers	37,451	31,521	5,929	1399	3204
Service workers	7,419	6,309	1,110	1819	4760

SOEP.v35 2002, 2007, 2012, 2017. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Not weighted.

Table A.3. Results from Unconditional Quantile Regressions

	25th percentile				Median				75th percentile				90th percentile			
	Women		Men		Women		Men		Women		Men		Women		Men	
Class position																
Workers							(ref)									
Self-employed	1.81***	(0.32)	2.02***	(0.22)	1.12***	(0.12)	1.30***	(0.09)	0.65***	(0.07)	1.17***	(0.06)	0.65***	(0.09)	1.60***	(0.08)
Technical experts	1.12***	(0.27)	1.29***	(0.17)	0.93***	(0.11)	0.54***	(0.06)	0.30***	(0.06)	0.23***	(0.04)	0.07	(0.06)	0.07	(0.04)
Managers	1.09***	(0.19)	1.28***	(0.15)	0.44***	(0.07)	0.58***	(0.06)	0.21***	(0.04)	0.30***	(0.04)	0.11**	(0.04)	0.15***	(0.04)
Socio-cult. prof.	0.78***	(0.21)	0.94***	(0.24)	0.22**	(0.08)	0.28**	(0.09)	0.11*	(0.04)	0.13*	(0.06)	-0.03	(0.04)	0.03	(0.07)
Class position (Partner)																
Workers							(ref)									
Self-employed	0.31	(0.28)	0.23	(0.24)	0.43***	(0.10)	0.37***	(0.10)	0.61***	(0.06)	0.29***	(0.07)	0.64***	(0.07)	0.33***	(0.09)
Professionals	1.32***	(0.20)	0.56***	(0.14)	0.65***	(0.07)	0.34***	(0.06)	0.43***	(0.04)	0.11**	(0.04)	0.20***	(0.04)	0.03	(0.04)
Not working	-1.19***	(0.28)	-0.37*	(0.15)	-0.38***	(0.10)	-0.08	(0.06)	0.03	(0.06)	0.08*	(0.04)	0.03	(0.06)	0.09*	(0.04)
No Information	-0.08	(0.24)	0.20	(0.18)	0.06	(0.08)	0.26***	(0.07)	0.28***	(0.04)	0.15***	(0.04)	0.21***	(0.04)	0.13*	(0.05)
Transfers																
No inheritance/gifts							(ref)									
Inheritance/gifts	1.11**	(0.32)	1.10***	(0.22)	0.75***	(0.13)	0.50***	(0.09)	0.26***	(0.07)	0.10	(0.06)	0.13	(0.08)	0.12	(0.08)
Inheritance/gifts n.a.	0.84**	(0.29)	0.33	(0.23)	0.27*	(0.11)	0.12	(0.09)	0.11	(0.06)	0.06	(0.06)	0.05	(0.07)	-0.04	(0.06)
Human capital and income																
Monthly labour inc. (IHS)	0.63***	(0.11)	0.89***	(0.11)	0.17***	(0.04)	0.41***	(0.04)	0.11***	(0.02)	0.23***	(0.03)	0.09***	(0.02)	0.27***	(0.03)
Monthly transfer inc. (IHS)	-0.11**	(0.04)	-0.10*	(0.04)	-0.03*	(0.01)	0.01	(0.01)	-0.01	(0.01)	0.00	(0.01)	0.00	(0.01)	0.01	(0.01)
Monthly pension inc. (IHS)	0.01	(0.07)	0.27***	(0.06)	-0.02	(0.02)	0.08***	(0.02)	-0.02	(0.02)	0.05**	(0.02)	-0.01	(0.02)	0.01	(0.02)
Full-time work exp. (years)	0.09***	(0.01)	0.12***	(0.01)	0.03***	(0.00)	0.06***	(0.00)	0.01**	(0.00)	0.03***	(0.00)	0.01	(0.00)	0.01***	(0.00)
Part-time work exp. (years)	0.13***	(0.01)	0.03	(0.03)	0.05***	(0.01)	0.01	(0.01)	0.02***	(0.00)	0.01	(0.01)	0.02***	(0.00)	0.01	(0.01)
Unemployment (years)	-0.48***	(0.04)	-0.43***	(0.04)	-0.11***	(0.01)	-0.08***	(0.01)	-0.03***	(0.01)	0.01	(0.01)	-0.00	(0.01)	0.02**	(0.01)
Job Tenure (years)	0.05***	(0.01)	0.07***	(0.01)	0.03***	(0.00)	0.03***	(0.00)	0.02***	(0.00)	0.02***	(0.00)	0.02***	(0.00)	0.02***	(0.00)
Weekly work hours	-0.02**	(0.01)	-0.00	(0.01)	-0.01***	(0.00)	0.00	(0.00)	-0.01***	(0.00)	0.00*	(0.00)	-0.01***	(0.00)	0.01**	(0.00)
Education (years)	0.46***	(0.03)	0.41***	(0.03)	0.19***	(0.01)	0.16***	(0.01)	0.08***	(0.01)	0.09***	(0.01)	0.08***	(0.01)	0.06***	(0.01)
Firm size																
200-1999 employees							(ref)									
< 20 employees and self-employed w/o employees	0.59**	(0.18)	-0.15	(0.16)	0.21**	(0.07)	0.08	(0.06)	0.11**	(0.03)	0.05	(0.03)	0.08*	(0.04)	0.08*	(0.04)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
20-199 employees	0.46*	(0.19)	-0.06	(0.16)	0.03	(0.07)	-0.06	(0.05)	-0.05	(0.04)	-0.11***	(0.03)	-0.02	(0.04)	-0.09*	(0.04)
> 2000 employees	0.16	(0.20)	-0.07	(0.14)	-0.06	(0.07)	-0.05	(0.05)	-0.01	(0.04)	0.01	(0.04)	0.03	(0.04)	0.05	(0.04)
Sectoral structure																
Public sector (=1)	0.30	(0.17)	0.10	(0.15)	0.11	(0.06)	-0.07	(0.06)	0.01	(0.04)	-0.14***	(0.04)	-0.06	(0.03)	-0.20***	(0.04)
Bank and insurance sector								(ref)								
Health, social, retail, and hospitality sector	-1.43***	(0.22)	-0.98***	(0.17)	-0.43***	(0.08)	-0.24***	(0.06)	-0.18***	(0.04)	-0.08*	(0.04)	-0.09*	(0.04)	-0.04	(0.04)
Manufacturing sector	0.49	(0.30)	0.43*	(0.21)	0.45***	(0.13)	0.38***	(0.08)	0.24**	(0.08)	0.18**	(0.06)	0.14	(0.08)	0.12	(0.08)
Other services	-0.92***	(0.22)	-0.67***	(0.13)	-0.42***	(0.09)	-0.30***	(0.05)	-0.19***	(0.05)	-0.14***	(0.03)	-0.12**	(0.04)	-0.08*	(0.03)
Family																
# children in household	-0.05	(0.08)	-0.12*	(0.05)	0.13***	(0.03)	0.13***	(0.02)	0.08***	(0.02)	0.09***	(0.01)	0.05**	(0.02)	0.09***	(0.02)
Married and cohabiting								(ref)								
Married - living separately	-2.49***	(0.44)	-1.95***	(0.40)	-1.21***	(0.15)	-0.89***	(0.14)	-0.51***	(0.07)	-0.28***	(0.08)	-0.19**	(0.07)	-0.14	(0.10)
Non-married	-1.54***	(0.22)	-0.41*	(0.19)	-1.29***	(0.09)	-0.54***	(0.07)	-0.51***	(0.04)	-0.03	(0.04)	-0.20***	(0.04)	0.05	(0.05)
Divorced	-3.00***	(0.27)	-2.07***	(0.24)	-1.60***	(0.09)	-0.96***	(0.09)	-0.63***	(0.05)	-0.32***	(0.05)	-0.27***	(0.05)	-0.11	(0.06)
Widowed	-0.93	(0.58)	-1.31	(0.71)	-0.17	(0.21)	-0.42	(0.29)	0.19	(0.13)	-0.01	(0.20)	0.35*	(0.15)	0.35	(0.27)
# siblings	-0.18***	(0.04)	-0.12***	(0.03)	-0.08***	(0.02)	-0.05***	(0.01)	-0.05***	(0.01)	-0.05***	(0.01)	-0.04***	(0.01)	-0.05***	(0.01)
Parental education																
Low education								(ref)								
No degree/don't know/else	-1.30***	(0.25)	-1.45***	(0.21)	-0.25**	(0.08)	-0.44***	(0.07)	-0.08	(0.04)	-0.17***	(0.04)	-0.02	(0.04)	-0.07	(0.04)
Intermediate education	-0.35*	(0.17)	-0.29*	(0.15)	-0.02	(0.06)	-0.12*	(0.05)	0.00	(0.04)	-0.03	(0.03)	0.09**	(0.03)	0.04	(0.04)
Higher education	-0.22	(0.20)	0.15	(0.14)	-0.11	(0.07)	-0.04	(0.06)	0.06	(0.04)	0.02	(0.04)	0.17***	(0.04)	0.13**	(0.04)
Controls																
East Germany (=1)	-0.49**	(0.17)	-0.44**	(0.14)	-0.71***	(0.06)	-0.58***	(0.05)	-0.61***	(0.03)	-0.58***	(0.03)	-0.52***	(0.03)	-0.48***	(0.03)
Migration Background (=1)	-1.53***	(0.24)	-0.94***	(0.18)	-0.37***	(0.08)	-0.33***	(0.06)	-0.26***	(0.04)	-0.19***	(0.04)	-0.13**	(0.04)	-0.14***	(0.04)
Age (20 - 34 years)								(ref)								
Age (35 - 49 years)	1.91***	(0.24)	1.47***	(0.21)	1.16***	(0.08)	0.60***	(0.07)	0.43***	(0.04)	0.09*	(0.04)	0.16***	(0.04)	-0.03	(0.04)
Age (50 - 64 years)	2.04***	(0.33)	0.36	(0.31)	1.69***	(0.12)	0.50***	(0.11)	0.96***	(0.07)	0.33***	(0.07)	0.62***	(0.07)	0.34***	(0.08)
Wealth imput. flag (=1)	2.27***	(0.07)	1.47***	(0.05)	0.47***	(0.03)	0.33***	(0.02)	0.17***	(0.01)	0.12***	(0.01)	0.08***	(0.01)	0.04*	(0.02)
Year dummies	✓		✓		✓		✓		✓		✓		✓		✓	
Constant	-5.27***	(0.94)	-7.52***	(0.80)	5.80***	(0.27)	3.64***	(0.29)	9.76***	(0.16)	8.14***	(0.20)	10.8***	(0.18)	9.09***	(0.26)
Number of person-years	20.462		20.620		20.462		20.620		20.462		20.620		20.462		20.620	

SOEP.V35 2002, 2007, 2012, 2017. Robust standard errors in parentheses. Not weighted. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

i Note, that we understand occupational classes as families or individuals who share the same economic position and have latent or manifest interests resulting from this position (Kocka 1980; Oesch 2006). We are not engaging with social classes that further share collective identities through the formation of organizations, class consciousness, and solidarity (Kocka 1980).

ii Next to earnings dynamics, differences in saving and therefore wealth inequality are the results of intergenerational transmission of bequests and human capital, differences in preferences, rates of returns, entrepreneurship, and medical expense risk (De Nardi/Fella 2017: 281).

iii We thank an anonymous reviewer for this argument.

iv By job security we mean all kinds of job characteristics that are particularly prevalent among precarious or atypical work arrangements, such as low-wage employment, temporary employment, part time or marginal employment. In all these categories women constitute the majority in Germany, as the male-breadwinner model and tax breaks incentivize them to take up this kind of work. Hence, we conclude that women have lower job security than men (Hipp et al. 2015; OECD 2017; Palier/Thelen 2010). Whether women trade job security for lower wages has been debunked by recent comparative research (for example Yu 2017),

v Although the lower reliance on a specific employer could also result in more power resources for women (and thereby lowering their income risk), the opposite seems more likely as illustrated by indicators such as lower average earnings and pension integration (see Oesch 2006).

vi SOEP oversamples migrant households, low-income households, high income households, households with children, and east German households (Goebel et al. 2019).

vii To take the sectoral structure into account, we introduce industry categories. We differentiate between typically male industries (manufacturing sector), mixed industries (banking and insurance sector), and female industries (health, care, retail, and hospitality sector) and other sectors (c.f. Minkus and Busch-Heizmann 2020).

viii The SOEP does not ask for inheritance in 2017. Therefore, people who entered the survey after 2012 were coded as "not applicable". If we had earlier information on inheritance and gifts, we imputed that information from earlier years to 2017.

ix It is particularly noteworthy that confidence intervals and standard errors at the 25th percentile are large compared to the other points of the wealth distribution, indicating that coefficients are not estimated as efficiently as in the other percentiles. Therefore, we interpret our findings for the 25th percentile with caution throughout the rest of the paper.

[x] The covariate at quantile πth indicates a marginal effect of a small location shift in the distribution of covariates, keeping everything else constant (see Borah/Basu 2013: 9).

xi Differentiating the self-employed into those who own large companies, self-employed professionals, and the petite bourgeoisie (e.g. small shop owners) (Appendix Figure A.1), reveals that wealth gap exists for employers with employees, the self-employed professionals as well as the petite bourgeoisie. But only at the 90th percentile, these differences are statistically significant for men and women across different forms of self-employment.

xii To circumvent problem of the omitted base category, we transformed categorical variables in the decomposition in order to interpret them with reference to their grand mean and not to the base category "workers". Thus, corresponding rif-coefficients of men's point estimates from Table A.3 still serve as the benchmark but need to be transformed when calculating results of the decomposition for categorical variables. For example, with regard to self-employed in the 50th quantile, men's rif-coefficient (1.3024404) needs to be subtracted from the grand mean of the Oesch rif-coefficients ([1.3024404+0.54480372+0.58540863+0.27858174+0] +/5=0.5422469). Therefore, the coefficients of self-employed in the 50th quantile serving as benchmark in the decomposition amounts to 0.7601935 (1.3024404-0.5422469). Correspondingly we calculate the decomposition estimate depicted in the explained part in Table 2 at the 50th percentile by carrying out the following estimation: (0.0872939-0.0525364) x (0.7601935) = 0.02642243.