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Explaining Gender Differences in Occupational Choice: Do Women Place Relatively Less Weight on Wages and More Weight on Social Prestige Than Men?

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This version: 8/25/2011

Abstract

Despite women's increased educational attainment, occupational segregation by gender remains widespread and explains a significant part of the gender wage gap. In this paper, we examine the explanation that gender differences in the relative importance of social prestige lead to differences in occupational choices of women and men. Women have been found to have stronger preferences for occupations that are valuable to society and to place a more importance on career choices matching their self-image. Hence, we hypothesize that women place a relatively greater weight than men on the social aspect of an occupation, which is reflected by the social prestige of their occupation. Using a unique set from Denmark, we find support for this hypothesis. Specifically, women are more likely to expect to work in an occupation with higher social prestige and lower mean wages than men. Our analysis further shows that a wage gap of 11% can be explained by differential sorting into occupations.

Key words: occupational choice, social prestige, occupational prestige, gender wage gap

JEL Codes: D13, J16

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1. Introduction

Despite the recent increase in women's educational attainment, occupational segregation by gender remains common. Women and men tend to choose different occupations even with the same level and type of education (Shauman 2006). Although this occupational segregation has decreased in last two decades, differences remain economically significant and estimates suggest that it can explain almost half of the gender wage gap (Blau and Kahn 2007; see also Hellerstein et al., 2008 and Bayard et al., 2003). This is especially surprising given the strong increase in women's educational attainment, which is higher than that of men in some countries, including the U.S. (Blau and Kahn, 2000; Goldin, 2006; Goldin et al., 2006). At the same time, social roles have been changing, and young women today expect to be working throughout their lifetimes, albeit with intermittent absences for child bearing and rearing (Goldin, 2006).

In this paper we explore whether women and men choose different occupations because of differences in preferences over attributes of occupations. We focus specifically on differences in how women and men trade off pay and the social prestige associated with a given occupation. We find that these differences can explain some of the observed occupational segregation and that a wage gap of 11% can be explained by differential sorting into occupations.

Women's educational choices have been found to be more influenced by their social identity than men's (Humlum, Kleinjans, and Nielsen, forthcoming), and women also express a stronger preference for occupations that are valuable to society (see, for example, Marini et al., 1996).[2] This together implies that women might place greater weight on the social aspect of their occupation than men. If the social prestige of an occupation is related to the social prestige bestowed on an occupation, women should be more likely to choose occupations with higher social prestige than men. To investigate this hypothesis, we analyze whether there are gender differences in the relative importance of social prestige for occupational choice, and whether this difference can explain (some of) the observed gender wage gap.

In traditional economic models, occupational choice depends on expected wages and the cost of attaining an occupation, as well as on parental background, which might affect ability

[2] Marini et al. (1996) report that in a survey of high school senior on the importance of job attributes, women's share of indicating as very important that a job is "Helpful to others" and "Worthwhile to society" was 66% and 44% higher than men's, respectively, and shares of 59.6% and 54.7% in the latest reported year, 1990-91.

(and hence the cost) through the availability of resources at home. Sociologists - and, more recently, economists - have stressed the importance of other factors for occupational choice (Fershtman and Weiss, 1993 and 1998; Jacobs et al., 2006; Rothstein and Rouse, 2007). These include parental expectations and social norms, and non-monetary benefits, such as the social status and the prestige of an occupation. In addition, Kleinjans (2009) suggests that differences in women's and men's preferences over an occupation's competitiveness can explain some of the observed occupational segregation.

In the sociological literature, the social status and the prestige of an occupation are related but different concepts. Occupational prestige can be defined as the social standing given to those holding a specific occupation (Hauser and Warren 1997). In contrast, social status is generally a composite measure derived from occupational prestige, salaries, and sometimes the educational level of those holding the occupation (for an overview of the sociological treatment of these concepts see Warren, Sheridan, and Hauser, 1998; and Hauser and Warren, 1997). Measures of social status and prestige of an occupation are stable over time and similar across countries and different population subgroups, including gender (Treiman, 1977; Hauser and Warren, 1998; Warren, Sheridan and Hauser, 1997; Winch et al., 1969).

Outside of sociology, social prestige and social status are often used interchangeably. Previous studies in economics have been mostly interested in measures of the relative position in society and its effects on utility and individual behavior, and thus used the relative position in the income or consumption distribution as a proxy for social status (see, for example, Fershtman and Weiss 1998; Hopkins and Kornienko, 2004; Frank, 1985a and 1985b; Truyts, 2010). Here, higher relative wages result in higher social status. Measures of social prestige, such as the Goldthorpe and Hope index, have been rarely used to measure social status. An exception are Dolton, Makepeace and van der Klaauw (1989) who used this index to assess the role of non-pecuniary factors for occupational choice and earnings determination.

In this paper, we abstract from the effect of the relative position in society on occupational choice. Instead, we are interested in examining the role that the absolute level of social prestige plays for occupational choice. We assume that although occupations can be ranked by prestige, it is not the relative ranking compared to others that influences occupational choice but the level of prestige that an occupation provides to an individual.

As mentioned above, there is a lot of agreement on the social prestige of an occupation. Though prestige is highly correlated with wages, ability and educational requirements (Chartrand et al. 1987), social prestige measurements provide additional information. Building on extensive work by Chaim Fershtman and Yoram Weiss on social status,[3] we think of the social prestige of an occupation as reflecting the social rewards resulting from individuals holding that occupation. These social rewards result from positive externalities of certain occupations or their contributions to public goods (such as teachers and nurses). Individuals benefit because individuals with higher social prestige might be treated favorably because of these social rewards or because individuals derive utility from a positive self-image associated with holding such occupations. Recently, economists have studied the importance of social norms and social identity for individual preferences and its impact on individual behavior (Akerlof and Kranton, 2000; Bénabou and Tirole, 2006; Brekke and Nyborg, 2010). In this framework, individuals derive utility from the positive impact of holding an occupation with higher social prestige and, in addition, benefit if this leads to a greater congruence of actual behavior with their self-image. So, for example, one might derive utility from being a physician because of the social prestige awarded to doctors, and because it confirms the self-image that "I am a good person who cares about others".

Empirically, as mentioned earlier, women express stronger preferences for occupations that are valuable to society (Marini et al. 1996). At the same time, social identities not only have been found to differ by gender but also to play a stronger role in educational and occupational choices for women than for men (Humlum, Kleinjans and Nielsen, forthcoming). Hence, women might care more about social prestige than men, because it directly gives them higher utility and because women place greater importance on the congruence of self-image and actual behavior as reflected by their occupation.

[3] Fershtman and Weiss, 1992, 1993 and 1998; Weiss and Fershtman, 1998; and Fershtman, Murphy and Weiss, 1996.

As we show later in this paper, in a competitive labor market occupations with higher social prestige have lower wages for a given skill level if individuals care about prestige.[4][5] Hence, if women derive higher utility from social prestige, women will sort into lower paying but more prestigious occupations, leading to a continuing gender wage gap despite the increased educational achievement of women. Such sorting could also explain that daughters have a lower intergenerational correlation of socioeconomic status than sons (Bowles and Gintis 2002). Parental income has been found to affect men's but not women's expectations of educational achievement when parental education is controlled for (Kleinjans 2010). If more women opt for higher prestige but lower paying occupations than men, their wages have a lower correlation with parental income than men's.

To investigate whether social prestige can explain occupational segregation by gender, we first show some descriptive evidence of the importance of social prestige for occupational expectations and the differences by gender. We then estimate a model of occupational choice where the probability of expecting to work in an occupation depends on occupational characteristics (such as social prestige and wage) and individual characteristics (such as ability). We use a unique data set from Denmark, which combines individual characteristics from survey data, objective and subjective ability measures for the same individuals from the OECD *Programme for International Students Assessment* (PISA) data, occupational information drawn from the Danish population registers, and an exogenous source of the social prestige of occupations.

The richness of this data set allows us to distinguish the importance of social prestige from other correlated occupational and individual characteristics, such as wages and socioeconomic background. Because of the exogenous source of the social prestige data, it

[4] This is similar to the result by Fershtman and Weiss (1998) that in a competitive labor market with endogenously determined wages and social status, occupations with higher social status pay lower wages for a given level of skill.

[5] This is also in line with the result by Brekke and Nyborg (2010) that if self-image is important for some individuals, employers have an incentive to pay lower wages to workers in occupations that yield higher utility from self-image as long as effort is unobservable (such as for nurses) in order to only attract devoted workers.

avoids the potential pitfall of endogeneity of social prestige awarded to an occupation, occupational expectations, and ability.

We assume that the share of women among those holding an occupation does not affect the social prestige awarded to an occupation. Recent research for the case of Sweden has shown, contrary to what the sociological theory of devaluation suggests, that typically female occupations do not have lower occupational prestige (Magnusson 2009).[6]

Our findings indicate, in fact, that women expect to work in occupations with higher levels of socials prestige and with lower wages than men. A simulation of the occupational distribution if women had men's preferences for social prestige and wages - assuming that median wages do not change – shows that the initial sorting into different occupations in our sample results in a gender wage gap of 11%.

In what follows, we first discuss gender differences in education and labor force participation in Denmark. We then describe the data used, followed by a descriptive analysis, the empirical model of occupational choice, and a discussion of the results. A simple of model of a labor market with social prestige shows the effect on wages if individuals care about social prestige. We then explore what the occupational distribution and expected wages would be if women had men's preferences for social prestige and wages. We end with conclusions.

2. Gender Differences in Education and Labor Force Participation in Denmark

As mentioned in the introduction, women's education has been steadily increasing over the past decades in most countries. This is also the case in Denmark. Figures 1 and 2 show the highest completed education of Danish men and women aged 20-39 years for the years 1991-2006[7].

The Danish education system offers educations of varying length and degree of specialization. Mandatory primary and lower secondary schooling is followed by different types

[6] Indeed, the highest prestige according to the survey used in our analysis is given to mixed occupations as defined by having at least 20% of each gender in an occupation. Only 3 out of the top 10 occupations have more extreme gender differences, two of which are majority male (pilots and civil engineers) and one female (midwives).

[7] Constructed using data from Statistics Denmark (www.statistikbanken.dk/HFU1, last accessed 8/24/11).

of voluntary upper secondary and vocational educations. These educations are again followed by academy profession programs, professional bachelor programs and traditional bachelor and master programs. The duration of the academy profession programs is typically two years while the duration of the professional bachelor programs is three and a half years. The duration of the tradition bachelor and master combined is typically five years. Following the usual practice, we label the three types of educations short, medium and long cycle educations respectively.

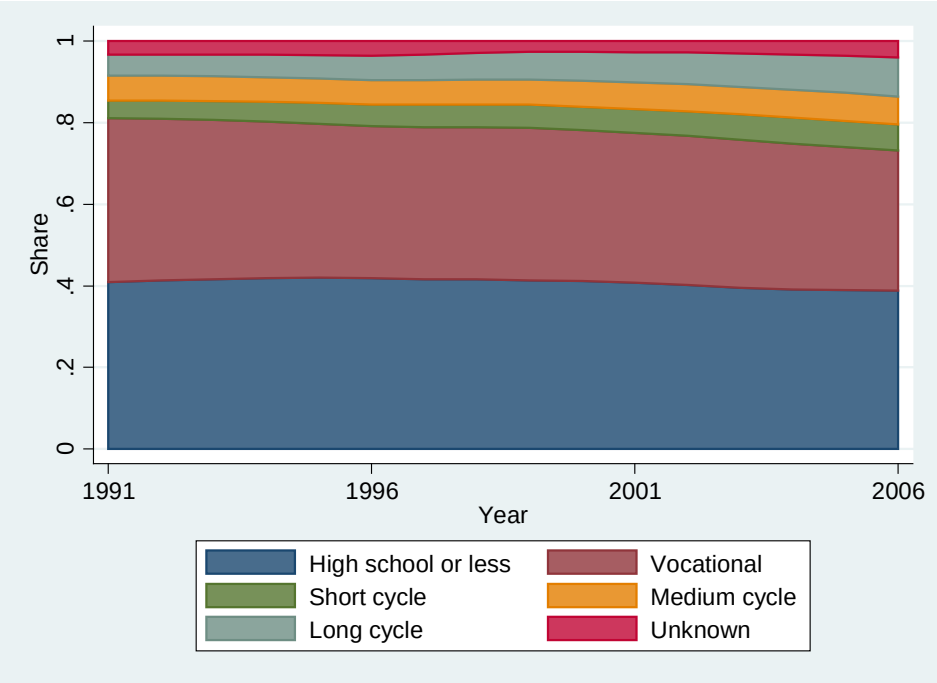
The graphs show that women's education has increased relatively to that of men. At the beginning of this 15 year period in 1991, about the same share of men and women had completed no higher educational level than high school or vocational training. Even though men's educational level increased during the next 15 years, with more men completing higher education and less men completing only vocational training, women's education increased more, with less women only completing high school and vocational training. According to Statistics Denmark, the average years of schooling increased during that same period for men from 12.4 to 12.7 and for women from 12.3 to 13.1 for ages 20 to 39.[8]

In terms of labor force participation, Denmark is similar to other Scandinavian countries with relatively high labor force participation of both men and women (see Figure 3)[9]. According to the OECD, the gender gap in labor force participation at 7.0 percentage points is much smaller than in other countries, such as the U. S. (13.5 percentage points, 2010) and Germany (11.8 percentage points, 2010) [10].

[8] Own calculations based on Statistics Denmark (www.statistikbanken.dk/HFU1, last accessed 8/24/11) Average years of schooling are calculated using levels given by the ISCED97 classification, which generally corresponds to years of schooling. See http://eng.uvm.dk/Uddannelse/Education%20system.aspx (last accessed 8/24/11).

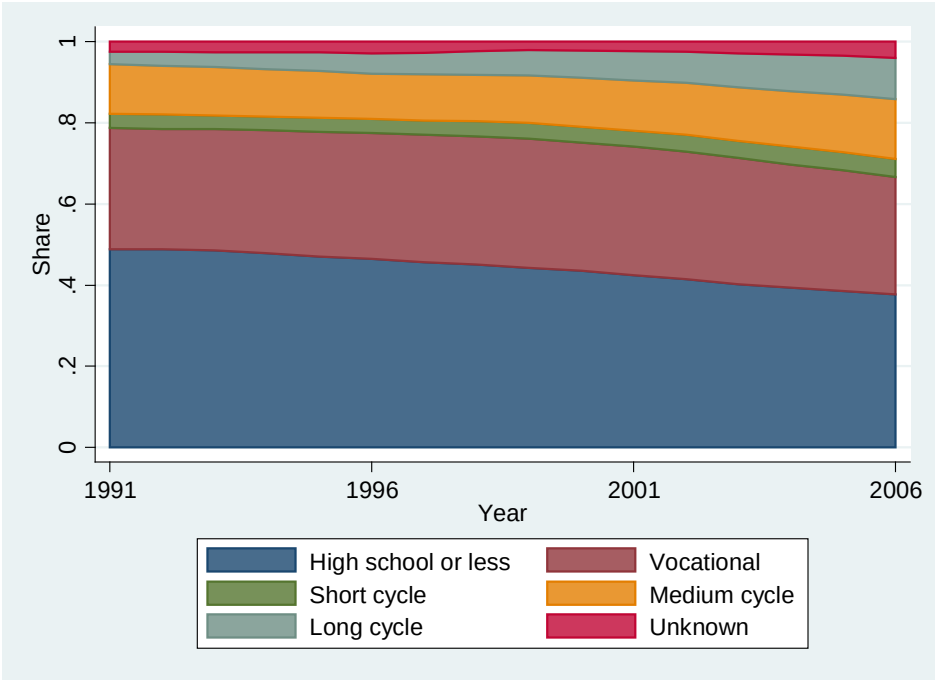
[9] OECD Labour Force Statistics (http://stats.oecd.org/Index.aspx?DataSetCode=LFS_D, last accessed 8/24/11).

[10] Own calculations based on the OECD Labour Force Statistics (http://stats.oecd.org/Index.aspx?DataSetCode=LFS_D, last accessed 8/24/11).



Source: Statistics Denmark

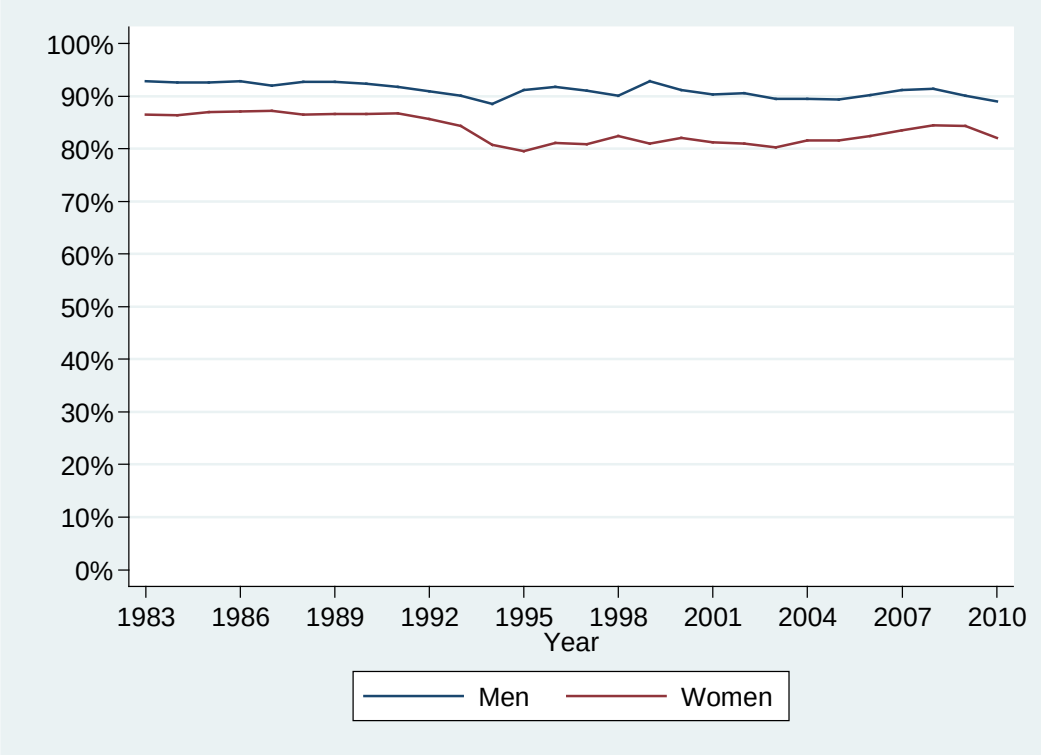
Figure 1: Highest Completed Education, Danish Men ages 20-39



Source: Statistics Denmark

Figure 2: Highest completed education, Danish Women ages 20-39

The gender gap is bigger when considering the share of part-time work among those who are employed (see Figure 4).[11]. In 2010, 24.1% of women worked part time versus 12.0% of men, although the share of men working part time is much higher than in other countries. For example, in the U. S. the share of women working part time is 18.8% and that of men 8.9%[12]. We will come back to the role of part time work in occupational choice when we discuss the results of our analysis in Section 5.

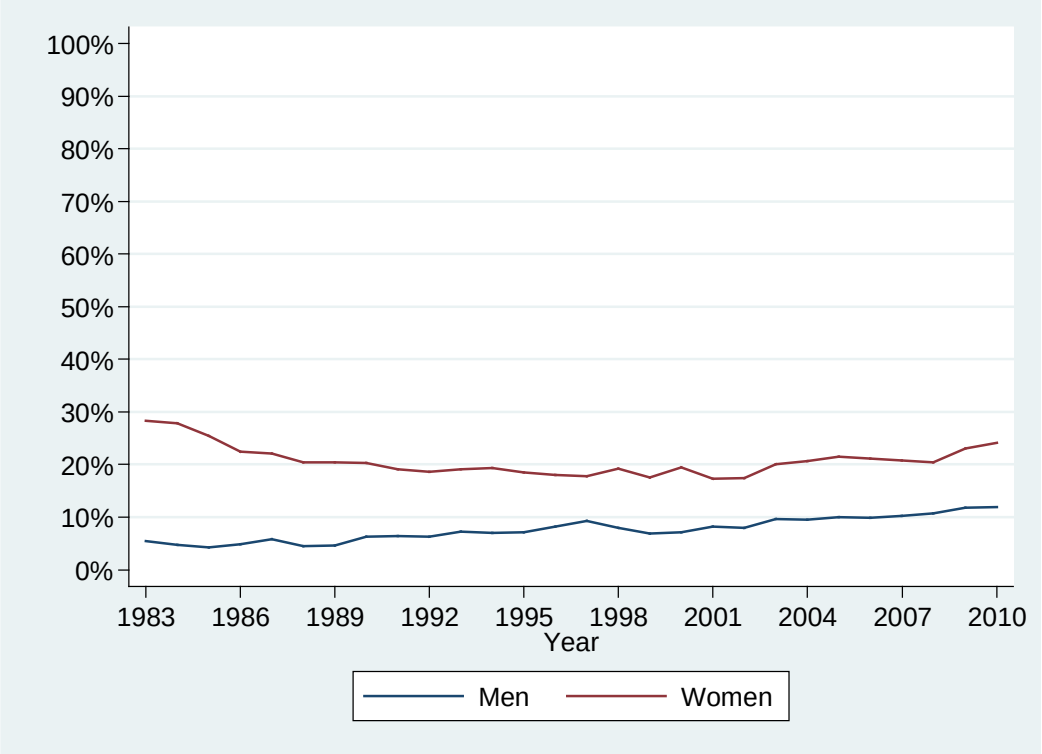


Source: OECD

Figure 3: Danish Labor Force Participation by Gender ages 20-39

[11] OECD Labour Force Statistics (http://stats.oecd.org/Index.aspx?DataSetCode=FTPTC_D, last accessed 8/25/11). Full time employment is a common definition of 30 weekly hours of work in the main job, while part time employment is less than 30 weekly hours of work in main job.

[12] Own calculations based on OECD Labour Force Statistics (http://stats.oecd.org/Index.aspx?DataSetCode=FTPTC_D, last accessed 8/25/11)



Source: OECD

Figure 4: Share of Part Time work in Denmark ages 20-39

To summarize, the data shows that in Denmark for the age group under 40, women's educational level has surpassed that of men, and that women's and men's labor force participation has become more similar, both in terms of overall labor force participation as well as in terms of the share of part time work.

3. Data

We draw upon data from four sources. The first two sources are from the Danish PISA-Longitudinal data base.[13] The first is the 2000 OECD *Programme for International Students Assessment* (PISA) survey conducted on nationally representative ninth graders. The second is a PISA follow-up survey named *Young people in job or education – values, choices and dreams for the future*, which re-interviewed the then 19-years old PISA respondents in 2004. From the

[13] See Jensen and Andersen (2006) for more information on this data set.

first survey we have data on both objective and subjective ability measures while we use data on occupational expectations from the latter (see more below). The third data source is registry data from the entire Danish population in 2003, from which we draw occupation-specific measures. The final source is a survey conducted by *Analyse Denmark*, a Danish market research institute, in which a representative sample of 2,155 Danes was asked to rate occupations according to their prestige by assigning a number from 0 (lowest) to 10 (highest).

3.1 Outcome variable

Occupational choice is derived from answers to a question in the PISA follow-up survey. Respondents were asked in which occupation they expect to work at age 30. The respondents gave open answers, which we used to construct our outcome variable of occupational expectations.

Teenagers' expectations have been found to be predictive of outcomes (Fischhoff et al. 2000) and occupational expectations are predictive for professionals (Schoon 2001). Moreover, since occupational expectations reflect plans and intentions they are a good measure of the effect of social prestige and wages on occupational choice.

3.2 Occupation-specific variables

Table A1 in the appendix shows descriptive statistics for all occupation-variables. The social prestige scores are drawn from the survey conducted by *Analyse Denmark*, which includes 99 occupations. The social prestige of an occupation is measured as the mean score given by the respondents of the survey. Because there are some (albeit small) differences in the mean scores given by age of the respondents, we use the scores given by the youngest respondent category (ages 18-29). We conduct robustness checks using overall scores, discussed in Section 5.3. Table A1 shows that the lowest scoring occupations are *advertising matter delivery man*, *unemployment benefit recipient*, and *welfare recipient*. Expected occupations with the highest social prestige are pilots, physicians, and lawyers, followed by other occupations requiring college degrees, such as architects and engineers. Most but not all of the occupations in the top 20 require a college degree, and not all occupations requiring a college degree are among the top 20.

We match the expected occupation to these scored occupations. In our sample, individuals do not expect to work in all occupations that are not scored and not all expected occupations are scored. In addition, some respondents gave vague descriptions of their occupational expectations, making them unclassifiable (e.g. "*something with people*"). If a respondent answered more than one occupation we use the first one mentioned. In total, we are able to match 74 occupations. We elaborate on the sample selection below.

We extract salary and wage information for each occupation from registry data for the entire Danish population for the year 2003 (also shown in Table A1). The highest paying occupations in our sample are pilots, physicians, and lawyers, and among the lowest paying are movers and sales assistants. We use median gross hourly wages and median annual salaries of full-time employed individuals. Hourly wages are calculated by Statistics Denmark using mandatory pension payments to measure hours worked. Hourly wages are divided by five to allow a rough comparison to US dollars, and annual salaries are divided by 50,000, which is approximately comparable to a salary measure in US $10,000. In our main analysis we will use hourly wages as a more accurate measure of remuneration, but we conduct robustness checks using annual salaries (discussed in Section 5.3).

The variable linking wages and occupations in the data contains a four digit DISCO code,[14] which we link to the occupations in the ranking. This is generally straightforward but some issues persist. In some cases we are not able to distinguish occupations in the DISCO classification implying that multiple occupations are coded with the same occupation-specific characteristics. This is the case for, e.g., hospital doctors and general practitioners, and for journalists and authors. [15]

[14] DISCO is the official Danish version of the International Standard Classification of Occupations (ISCO) by the International Labour Organisation (ILO).

[15] Another side of this problem could have been that ranked occupations often share DISCO codes with non-ranked and in some cases quite different occupations. This is, for instance, the case with soccer players, which share a DISCO code with all other athletes and their trainers. Another potential problem with the link between the ranked occupations and the DISCO codes could have been that some ranked occupations are defined too loosely to be matched with one or more DISCO codes. This is the case for the occupations *researcher in a private company* and *politician*.

The social prestige scores and the median hourly wage of an occupation are highly correlated at 0.72. This is consistent with an interpretation that occupations have greater positive externalities if the overall productivity is greater.

In some of our analyses we also include a variable that proxies for the availability of part time employment to account for the fact that Danish women are more likely to work in part time employment than men. Since this might be related to gender differences in preferences for occupations and is likely to lead to lower wages, we include the share of part time employment in each occupation as a proxy for the availability of part time work. Furthermore, since occupations with high social prestige should be more likely to be found in public employment if indeed the prestige is related to social rewards, we also use a variable measuring the share of publicly employed in each occupation in some analyses.

Even though we do not use this information in the analyses because of resulting small sample sizes, Table A1 in the appendix show the required education for all occupations used. This gives an idea of how education and social prestige are related. In Denmark, individuals who want to work in a specific occupation need to fulfill rather specific educational requirements, so that a matching of education and occupation is generally possible.

3.3 Individual specific variables

The individual-specific variables include a reading test score as an objective measure of ability[16]. The PISA reading score is a continuous variable constructed to have a mean of 500 and a standard deviation of 100. We transform this measure into three dummy variables corresponding to the first quartile, the second plus the third quartile, and fourth quartile.

In robustness checks, we also include whether the respondent considers herself as good at math as a subjective measure of ability, a measure we do not have available for all individuals in our working sample.

[16] This variable is provided by the OECD within the PISA data set ("wleread") and is a standardized Warm estimate.

In robustness checks, we also include a dummy of whether the respondent lives in Copenhagen and one for whether the respondent lives in an urban area other than Copenhagen. Urban areas other than Copenhagen are defined as municipalities with a town of at least 10.000 inhabitants.

Table A2 in the appendix shows summary statistics of all variables included in the estimation by gender. Women have significantly higher reading scores than men while men consider themselves better at math. Women expect to work in occupations with both lower wages and lower prestige. As mentioned earlier, social prestige and wage of an occupation are highly correlated, so that the lower raw data-values for women are not surprising.

3.4 Sample selection

Table A3 in the appendix summarizes the sample selection. A total of 3,073 individuals participated in both the PISA 2000 survey and the 2004 follow up survey. Two observations are dropped due to missing information on reading scores leaving 3,071 observations. The sample is significantly reduced because of missing or unusable occupational expectations or responses that are not classifiable in accordance with the occupations in the social prestige ranking. For some ranked occupations we are not able obtain valid wage data which implies that a further 7 individuals are dropped. In total we have a sample of 1,807 individuals. The reshaped data containing one record for all individuals and occupations contains 133,718 observations.

Overall, the sample selection decreases our sample by 41%, mostly because of a lack of match between expected and the scored occupations. This would affect our results if there is a difference in the way the dropped women and men value prestige and wages. Even though it is not possible for us to assess this, there is no compelling reason why this might be the case. We can, however, assess how dropped and retained individuals differ in terms of reading ability and self-reported ability in math (please see Table A4 in the appendix). Dropped men do not differ from retained men. Dropped women are of slightly higher ability than retained women, but even though the differences are statistically significant they are very small with reading scores being less than 3% higher. The difference in self-reported ability in math is greater, where 14.9% less of the dropped women disagree with the statement that they are good in math compared to those retained. This implies that the sample likely to contain relatively more women with lower ability,

which should make them more similar to men in terms of reading ability and less similar to men in terms of subjective math ability.

4. Descriptive Analyses

When comparing median wages and social prestige scores, we find that women have 8.1% lower median) wages in their expected occupation as well as 4.8% lower social prestige scores (0.516 versus 0.541) than men. This can also be seen in Figures 5 and 6, which show the median wages and social prestige distributions by gender. As expected, wages and social prestige have a high correlation with 0.72. When we look at the joint distribution of wages and social prestige, however, we find a pattern that is consistent with the hypothesis that women value social prestige relatively higher than men. Figure 7 shows a scatter plot of men's and women's social prestige and median hourly wages, including a fitted fractional polynomial line. The graph shows that, for any wage, women's expected occupation tends to have higher social prestige. Figure 8 shows the same scatter plot without the highest prestige occupation (pilot), which was expected by a total of only eight individuals, all of which were men.

As a reference, Figure A1 in the appendix displays the distribution of wages sorted by prestige for men and women combined, which shows the median wages sorted by social prestige, and also shows that there is no monotonous relationship between these two variables.

Also interesting to note is that at the lower end of social prestige, wages are almost flat, and for men even flatter than for women, although part of that is due to the low social prestige of the occupation of farm assistants

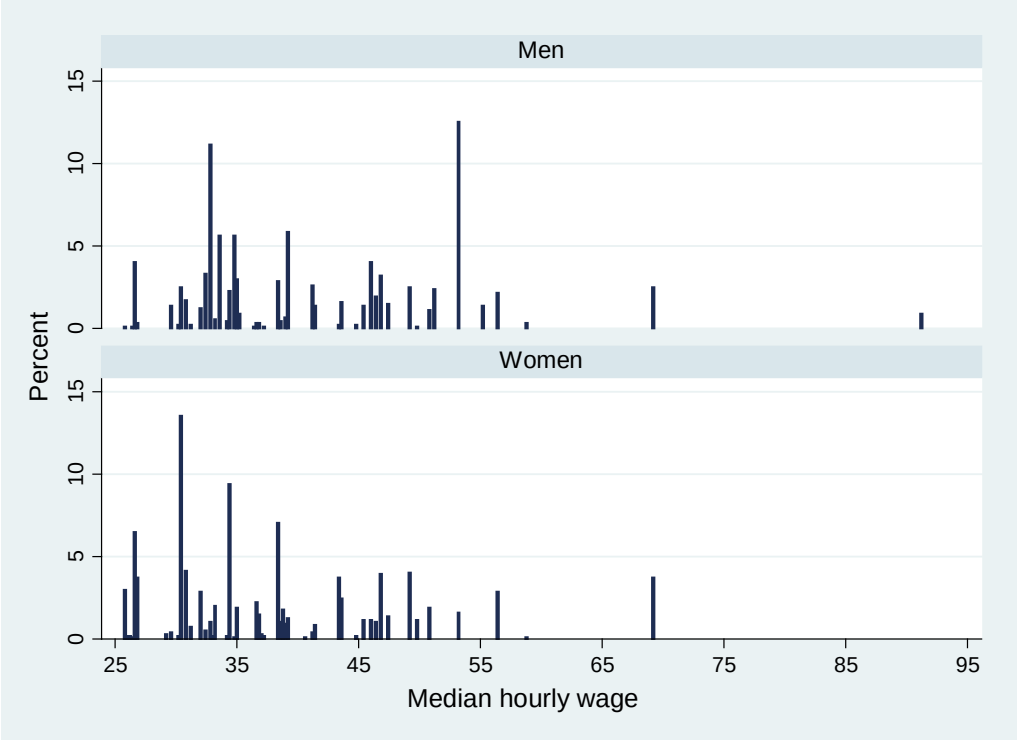


Figure 5: Distribution of Median Hourly Wages of Expected Occupations, by Gender

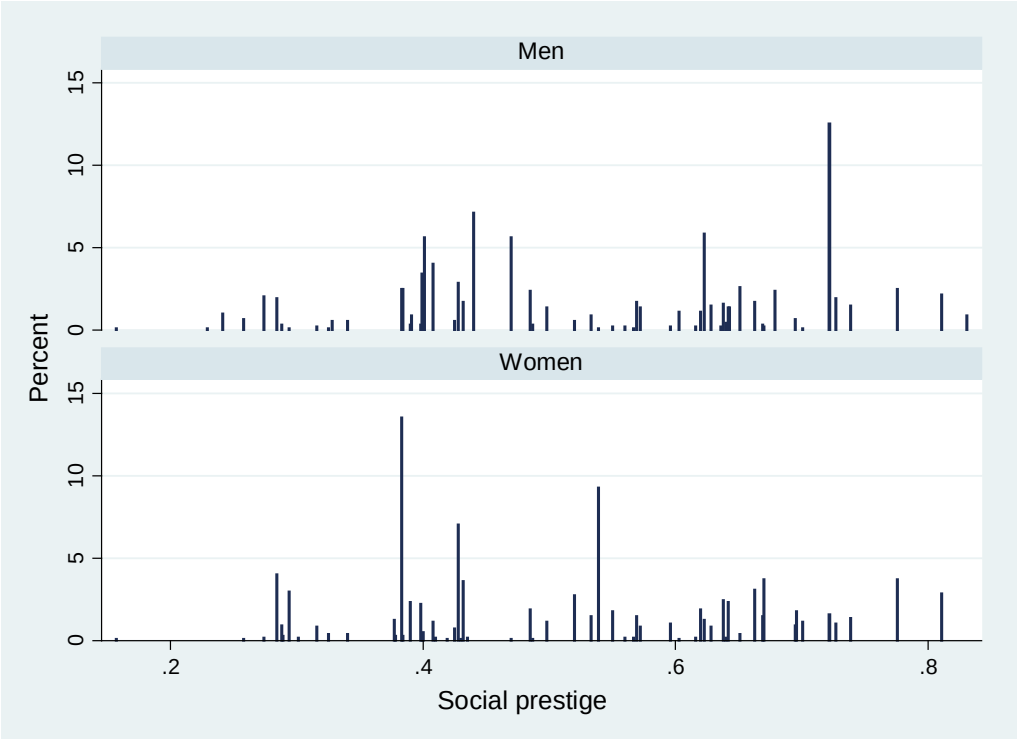


Figure 6: Distribution of Social Prestige of Expected Occupations, by Gender

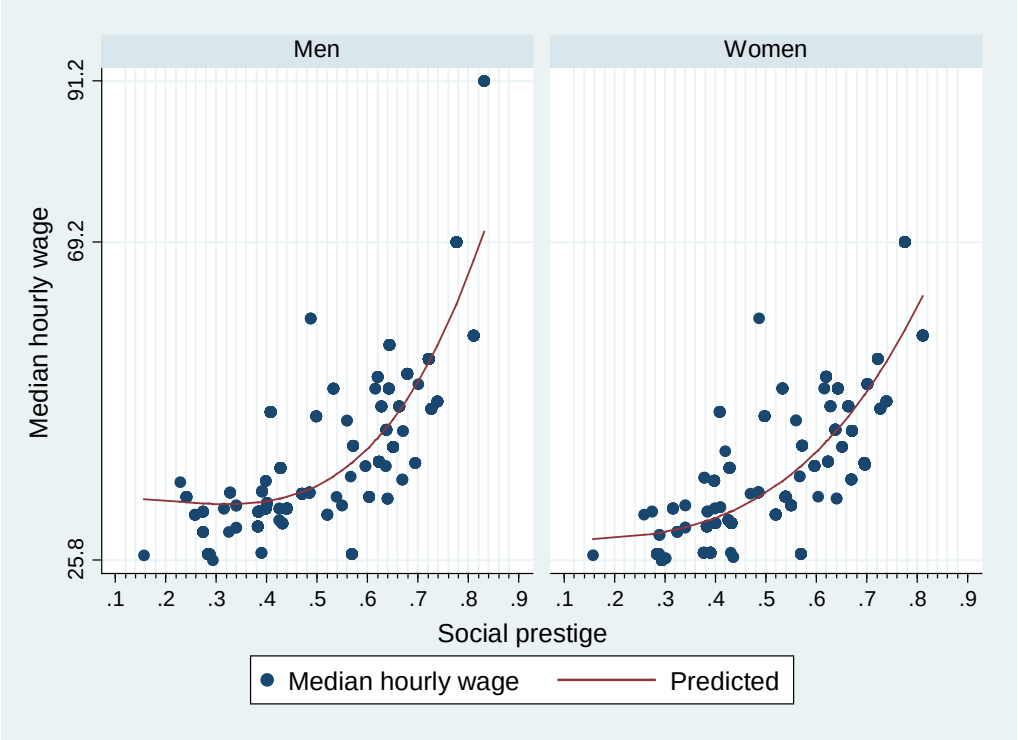


Figure 7: Scatter Plot of Median Hourly Wage and Social Prestige by Gender

Figure 8: Scatter plot of Median Hourly Wage and social prestige (without pilots)

For a first look at the relationship between gender, social prestige, and wages, Table 1 column (1) shows the results of a simple OLS regression of wage on the social prestige of the expected occupation. The high R^2-reflects the strong correlation between wages and social prestige of an occupation. Column (2) shows the same regression with the added variables of gender and reading score quartiles, and column (3) adds a dummy for agreeing to being good at math. As hypothesized, women are more likely than men to expect to work in an occupation with higher social prestige when controlling for wages.

Table 1: OLS Regressions of Social Prestige of Chosen Occupation

	(1)	(2)	(3)
Wage	0.027***	0.026***	0.026***
	(0.001)	(0.001)	(0.001)
Wage squared	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)
Female		0.016***	0.015***
		(0.004)	(0.004)
PISA reading score <25th percentile		-0.012**	-0.014**
		(0.005)	(0.006)
PISA reading score >75th percentile		0.012**	0.009*
		(0.005)	(0.005)
Good at math			0.007^
			(0.005)
Constant	-0.254***	-0.252***	-0.243***
	(0.021)	(0.024)	(0.025)
R^2	0.680	0.686	0.685
Observations	1,807	1,807	1,695

Standard errors are shown in parentheses.

^ p<0.15, * p<0.10, ** p<0.05, *** p<0.01

Please note that the wage variable is the median hourly wage.

5. The Effect of Social Prestige on Occupational Choice

To analyze gender differences in the importance of social prestige and wages for occupational choice, we estimate a conditional logit model explained in the next subsection. Results are presented and discussed subsequently, followed by a presentation of the results from robustness checks.

5.1 Econometric Model

Since we are interested in the effect of occupations-specific characteristics on the likelihood of an occupation being chosen, we maximize the conditional likelihood where the conditional probability is as follows (Greene 2003):

$$Prob\left(Y_i = j \middle| z_{i1,} z_{i2}, \dots, z_{iJ}\right) = \frac{e^{\beta' z_{ij}}}{\sum_{j=1}^{J} e^{\beta' z_{ij}}} \quad \text{, where}$$

j is the chosen occupation, and z_{ij} are the occupation-specific characteristics as well as interaction terms of occupation- and individual-specific characteristics, such as gender and the social prestige of an occupation. All models are estimated using robust standard errors. Since the interpretation of the coefficients in such a non-linear model is not always intuitive, we will also present odds ratios.

5.2. Results and Discussion

The results of our main estimation are presented in Table 2 (coefficients) and Table 3 (odds ratios). The results are shown for models with cumulatively added covariates when moving from left to right. The qualitative interpretation of the coefficients is straightforward. A negative coefficient implies that a higher value of the variable decreases the likelihood of the occupation being chosen.

Columns (1) and (2) in Tables 2 and 3 show that adding social prestige as a covariate significantly decrease the positive effect of the log of the median wage on occupational choice. This picture changes, however, once we allow for the effects of wages and social prestige to differ by gender (shown in Columns (3)). As we hypothesized, women are much more influenced

by the social prestige of an occupation than men, and much less, by wages. In Columns (4) we show the results with added controls for reading ability. This reduces the gender differences but does not change the overall picture.

For the size of the effects consider the odds ratio reported in Table 3, column (4) for the most extensive specification. The odds ratios can be interpreted as follows (Long and Freese 2006): For the occupations-specific variables, the odds ratio is the multiplicative effect of a unit change on the odds that a given occupation is chosen. Hence, a one unit increase in social prestige (about two thirds of a standard deviation, and the equivalent of moving in terms of social prestige from a physiotherapist to a police officer, for example) increases women's probability of choosing an occupation 3.8 times more than men's.

5.3 Robustness Checks

To assure that our results do not depend on the exact specification and variable definitions, we conducted a variety of robustness checks. The results are shown in Table 4. Column (1) repeats the regression results from Table 2, column (4).

In Column (2) we show results with added interactions between self-reported ability in math and wages and social prestige and find that care more about social prestige than those with lower math ability. There is no change in the gender differences of interest. Column (3) shows that wage is more important for individuals who live in (more expensive) urban areas or in Copenhagen, but its effect does not induce changes in the relative importance of wage and social prestige by gender.

More interestingly, adding a control for the share of people in an occupation working part time – shown in Column (3) – plus an interaction with gender – shown in Column (4) shows that men are not more likely to expect to work in occupations with higher shares of part time work but that women are. Again, this does not affect the gender differences in the relative importance of wages and social prestige.

Table 2: Conditional Logit Regressions of Occupational Choice – Coefficients

	(1)	(2)	(3)	(4)
Wage	0.068***	0.026**	0.104***	0.124***
	(0.009)	(0.010)	(0.016)	(0.021)
Wage squared	-0.001***	-0.000***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Social prestige		1.625***	0.821***	0.949***
		(0.189)	(0.278)	(0.343)
Wage * female			-0.149***	-0.177***
			(0.020)	(0.022)
Wage squared * female			0.001***	0.001***
			(0.000)	(0.000)
Social prestige * female			1.567***	1.330***
			(0.375)	(0.381)
Wage * 1.quartile reading score				-0.078**
				(0.035)
Wage squared * 1.quartile reading score				0.000
				(0.000)
Social prestige * 1.quartile reading score				-1.129**
				(0.455)
Wage * 4.quartile reading score				0.131***
				(0.027)
Wage squared * 4.quartile reading score				-0.001***
				(0.000)
Social prestige * 4.quartile reading score				1.494***
				(0.491)
Pseudo R^2	0.004	0.007	0.012	0.031
Log Likelihood	-7746.97	-7721.33	-7685.28	-7534.64
Observations	133,718	133,718	133,718	133,718

Standard errors are shown in parentheses.^ p<0.15, * p<0.10, ** p<0.05, *** p<0.01

Please note that the wage variable is the median hourly wage.

Table 3: Conditional Logit Regressions of Occupational Choice – Odds Ratios

	(1)	(2)	(3)	(4)
Wage	1.071***	1.026**	1.110***	1.132***
	(0.010)	(0.010)	(0.018)	(0.023)
Wage squared	0.999***	1.000***	0.999***	0.999***
	(0.000)	(0.000)	(0.000)	(0.000)
Social prestige		5.079***	2.273***	2.582***
		(0.958)	(0.633)	(0.885)
Wage * female			0.862***	0.838***
			(0.018)	(0.019)
Wage squared * female			1.001***	1.001***
			(0.000)	(0.000)
Social prestige * female			4.793***	3.780***
			(1.798)	(1.440)
Wage * 1.quartile reading score				0.925**
				(0.032)
Wage squared * 1.quartile reading score				1.000
				(0.000)
Social prestige * 1.quartile reading score				0.323**
				(0.147)
Wage * 4.quartile reading score				1.141***
				(0.031)
Wage squared * 4.quartile reading score				0.999***
				(0.000)
Social prestige * 4.quartile reading score				4.454***
				(2.186)
Pseudo R^2	0.004	0.007	0.012	0.031
Log Li.	-7746.97	-7721.33	-7685.28	-7534.64
Observations	133718	133718	133718	133718

Exponentiated coefficients; Standard errors in parentheses. ^ p<0.15, * p<0.10, ** p<0.05, *** p<0.01. Please note that the wage variable is the median hourly wage.

Table 4: Robustness Checks for Main Model (coefficients shown)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wage	0.124***	0.113***	0.117***	0.112***	0.078***	0.108***	0.048*
	(0.021)	(0.029)	(0.021)	(0.020)	(0.020)	(0.020)	(0.027)
Wage squared	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Social prestige	0.949***	0.701*	0.949***	0.999***	1.179***	1.421***	1.296***
	(0.343)	(0.412)	(0.343)	(0.344)	(0.352)	(0.345)	(0.421)
Wage * female	-0.177***	-0.172***	-0.179***	-0.178***	-0.118***	-0.146***	-0.089***
	(0.022)	(0.024)	(0.023)	(0.022)	(0.022)	(0.023)	(0.025)
Wage squared * female	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Social prestige * female	1.330***	1.357***	1.330***	1.288***	1.127***	-0.032	-0.119
	(0.381)	(0.403)	(0.381)	(0.382)	(0.388)	(0.399)	(0.426)
reading score interactions	yes	yes	yes	yes	yes	yes	yes
Wage* good at math		0.040					0.048*
		(0.029)					(0.029)
Wage squared * good at		-0.000					-0.000
math		(0.000)					(0.000)
Social prestige * good at		0.855**					0.846*
math		(0.432)					(0.445)
Wage* Urban area			0.019***				0.021***
			(0.006)				(0.006)
Wage * Copenhagen area			0.023***				0.025***
			(0.007)				(0.007)
Share working part time				-1.330***	-5.842***		-5.211***
				(0.465)	(1.127)		(1.152)
Share working part time *					6.898***		6.146***
female					(1.213)		(1.261)
Share publicly employed						-0.612***	-0.528***
						(0.113)	(0.112)
Share publicly employed						1.975***	1.872***
* female						(0.144)	(0.145)
Pseudo R^2	0.031	0.036	0.032	0.032	0.035	0.049	0.057
Log Likelihood	-7534.64	-7035.92	-7526.43	-7530.68	-7507.83	-7395.79	-6881.50
Observations	133718	125430	133718	133718	133718	133718	125430

Standard errors in parentheses, ^ p<0.15, * p<0.10, ** p<0.05, *** p<0.01.

For the last robustness check shown in Columns (6) and (7) we include a measure of the share of publicly employed in an occupation. In line with our interpretation of social prestige as resulting from positive externalities of an occupation or their contribution to public goods, we would expect that occupations with higher social prestige for any given wage have higher shares of public employees. The raw correlation between social prestige and this share is relatively low with about 0.7, but this does not take into account the effect of wages on prestige and public employment. Adding the share of public employees and its interaction with gender renders the women's coefficient of social prestige statistically insignificant and decreases the negative coefficient on wages. This lends support to the hypothesis that public sector jobs have higher social prestige and lower wages.

An alternative interpretation of this result might appear to be that women do not care about social prestige but instead about the characteristics of public sector jobs, such as shorter work hours. In our sample, however, women do not express a greater preference for jobs with shorter or more flexible work hours (results not shown) so that this is likely not the explanation. We will address this issue more in the future.

6. Why Women's Preferences for Social Prestige Explains Part of the Gender Wage Gap

In this section, we develop a model that shows that in a competitive labor market with heterogeneous preferences for social prestige, which shows conditions under which higher prestige jobs will have lower wages in equilibrium. This is followed by an investigation of a counterfactual: What would women's occupational distribution be if they had the same preferences for prestige and wages than men? This is compared to the predicted distribution of occupations and median wages from our estimation.

6.1 A Model of the Labor Market with Social Prestige

To understand the implication of gender differences in preferences for social prestige, we develop a simple equilibrium model of the labor market with social prestige. We use the model to identify minimal sufficient conditions for which these differences lead to a wage gap across worker types (e.g. gender).

A worker is characterized by the value $\gamma \sim U[0,1]$, which represents the relative preference for social prestige. There are two professions, $i = 1,2$, which pay a wage w_i and possess an exogenous level of social prestige, π_i. Assume that profession 2 is the one with a higher social prestige: $\pi_1 < \pi_2$. Worker γ obtains utility from a profession *i*, as expressed:

$$U_i(\gamma) = w_i + \gamma\pi_i .$$

The worker $\bar{\gamma}$ is indifferent to the professions if $w_1 + \bar{\gamma}\pi_1 = w_2 + \bar{\gamma}\pi_2$, or equivalently,

$$\bar{\gamma} = \frac{w_2 - w_1}{\pi_1 - \pi_2}.$$

Thus, workers with $\gamma > \bar{\gamma}$ choose the high social prestige profession, profession $i = 2$. Otherwise, workers choose profession 1. Both professions have employed workers in equilibrium if and only if $0 < \bar{\gamma} < 1$.

Observation 1: *In an equilibrium with employment in both professions, the high-prestige profession must have a lower equilibrium wage:* $\pi_1 < \pi_2 \Rightarrow w_1^* > w_2^*$.

Now suppose there is a representative firm in each profession who chooses to hire $x \geq 0$ workers. Let $F(x,\pi)$ be the firm's productivity of labor for the profession with a level π of social prestige and *x* workers employed. We assume that $f(x,\pi) = \frac{dF(x,\pi)}{dx}$ is the marginal productivity of worker *x* and that it is positive and decreasing. The firm in profession *i* hires such that $f(x,\pi_i) = w_i$. Thus, for both professions to hire in equilibrium, we must have

$$0 < \bar{\gamma} \equiv \frac{f(\bar{\gamma},\pi_1) - f(1-\bar{\gamma},\pi_2)}{\pi_2 - \pi_1} < 1$$

or equivalently,

$$0 < f(\bar{\gamma},\pi_1) - f(1-\bar{\gamma},\pi_2) < \pi_2 - \pi_1 .$$

The first condition requires that the employer's (private) marginal productivity of labor in the low prestige profession exceeds that of the high-prestige profession. Since workers are compensated by social prestige at a greater amount in profession 2, there is a greater supply of workers. If this condition is violated, then the low-prestige profession cannot offer a sufficiently attractive wage to attract even the worker indifferent to social prestige ($\gamma = 0$). The second condition states that the

professions are differentiated by their social prestige benefits to a greater degree than the differences in marginal productivity of labor. Without this condition, all workers are attracted to the high-wage profession.

Observation 2 *In an equilibrium with employment in both professions, the marginal productivity of labor of the low-prestige profession exceeds that of the high-prestige profession. The difference in the professions' social-prestige exceeds the difference in the marginal productivity of labor.*

This model illustrates the implication of differences in professions' social prestige component on wages and hiring. In particular, the model demonstrates two conditions for differential pay as a result of workers preference differences. First, there is sufficient heterogeneity in workers' tastes for social prestige. Second, there is sufficiently little heterogeneity in employers' marginal productivity across the professions. Under these two conditions, workers with a high taste for social prestige choose lower paying professions.

6.2 Counterfactual: What if women had men's preferences for prestige and wages?

In our sample, women's expected wages are 8.1% lower than men's. To investigate how much of this difference can be explained by gender differences in preferences for social prestige and wages, we simulate women's occupational distribution using men's preferences – that is, men's estimated coefficients on wages and social prestige. We then predict women's wage distribution and compare this to the expected wage distribution of men and of women using their own coefficients.

Figures 9 and 10 show the predicted occupational choice of women and the counterfactual ones, where Figure 9 has occupations sorted by social prestige and Figure 10 sorted by wage. Figures 11 and 12 show the corresponding changes in predicted probabilities, also sorted by social prestige and wage, respectively. As expected given the size of the gender differences, wages and social prestige of women's occupation changes rather drastically. As a summary, Table 5 shows the mean and median differences of predicted wages and the counterfactual for women. Women's wages increase by 11% or more, with median wages of the counterfactual being the same as men's median wages, and the mean wages of women with men's preferences being higher than men's.[17]

[17] All differences are statistically significant at the 1% level.

Figure 9: Predicted Women's Occupational Choice – Occupations sorted by Social Prestige

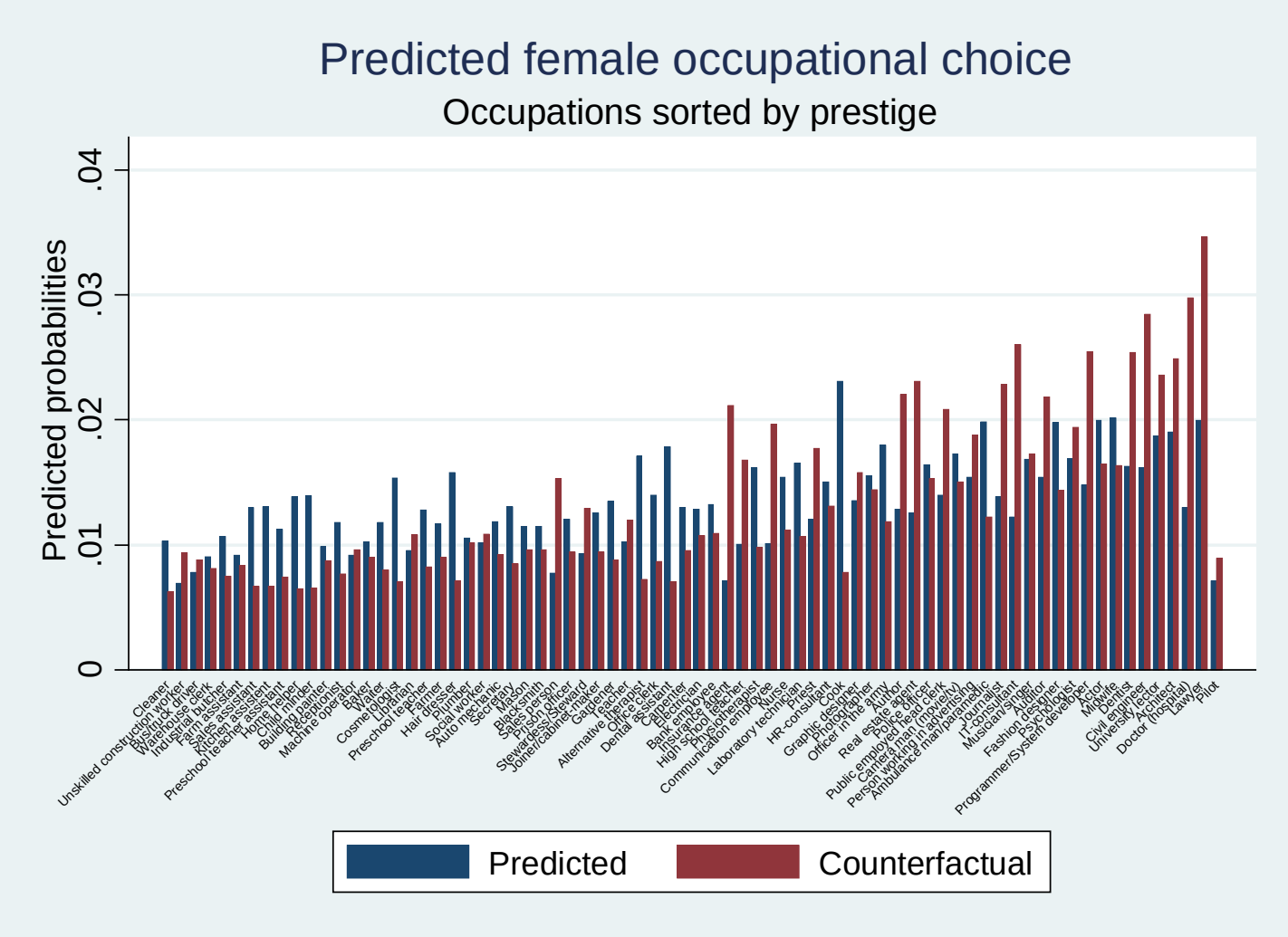


Figure 10: Predicted Women's Occupational Choice – Occupations sorted by Wage

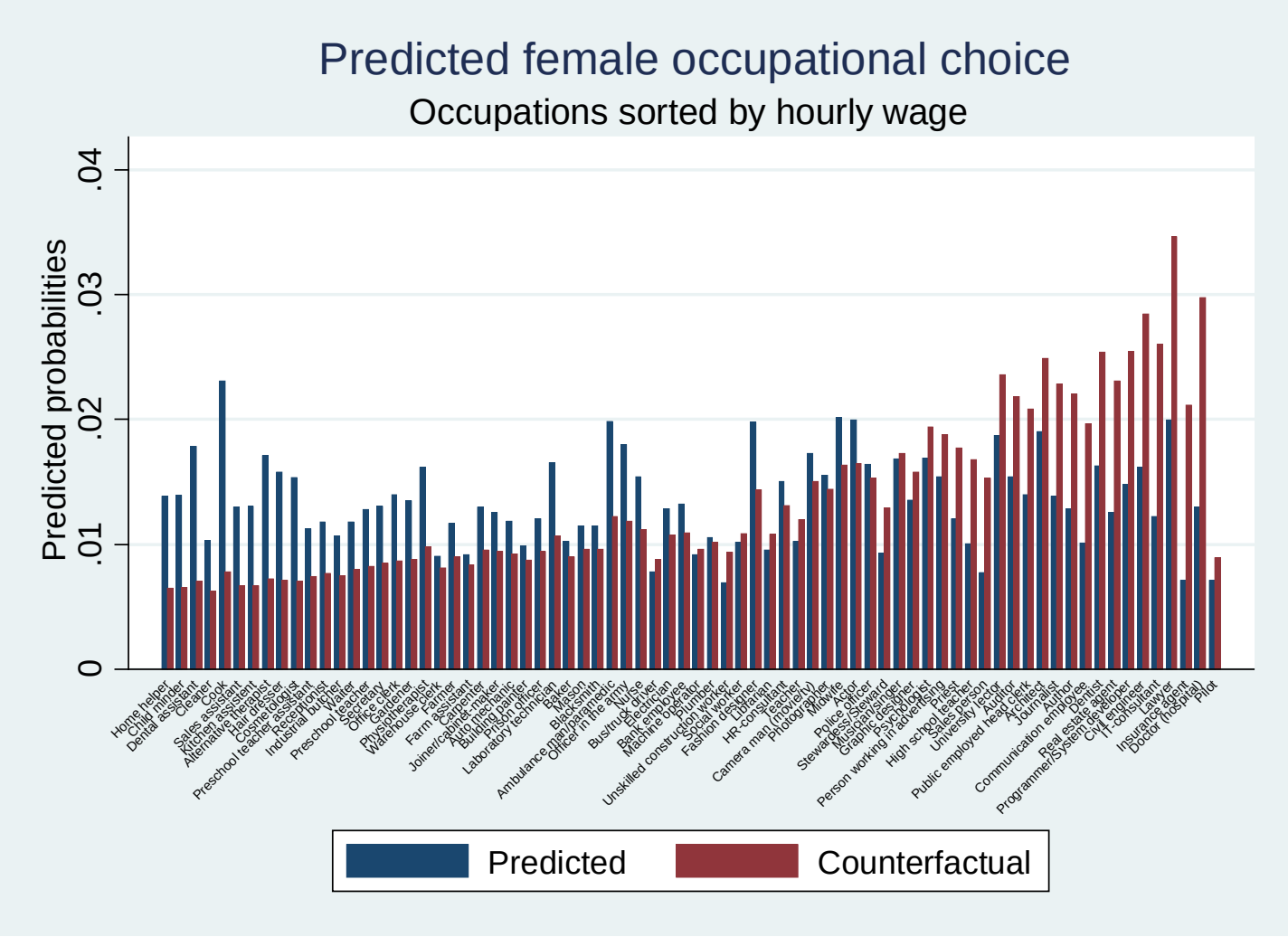


Figure 11: Percentage Change in Predicted Probabilities from Counterfactual

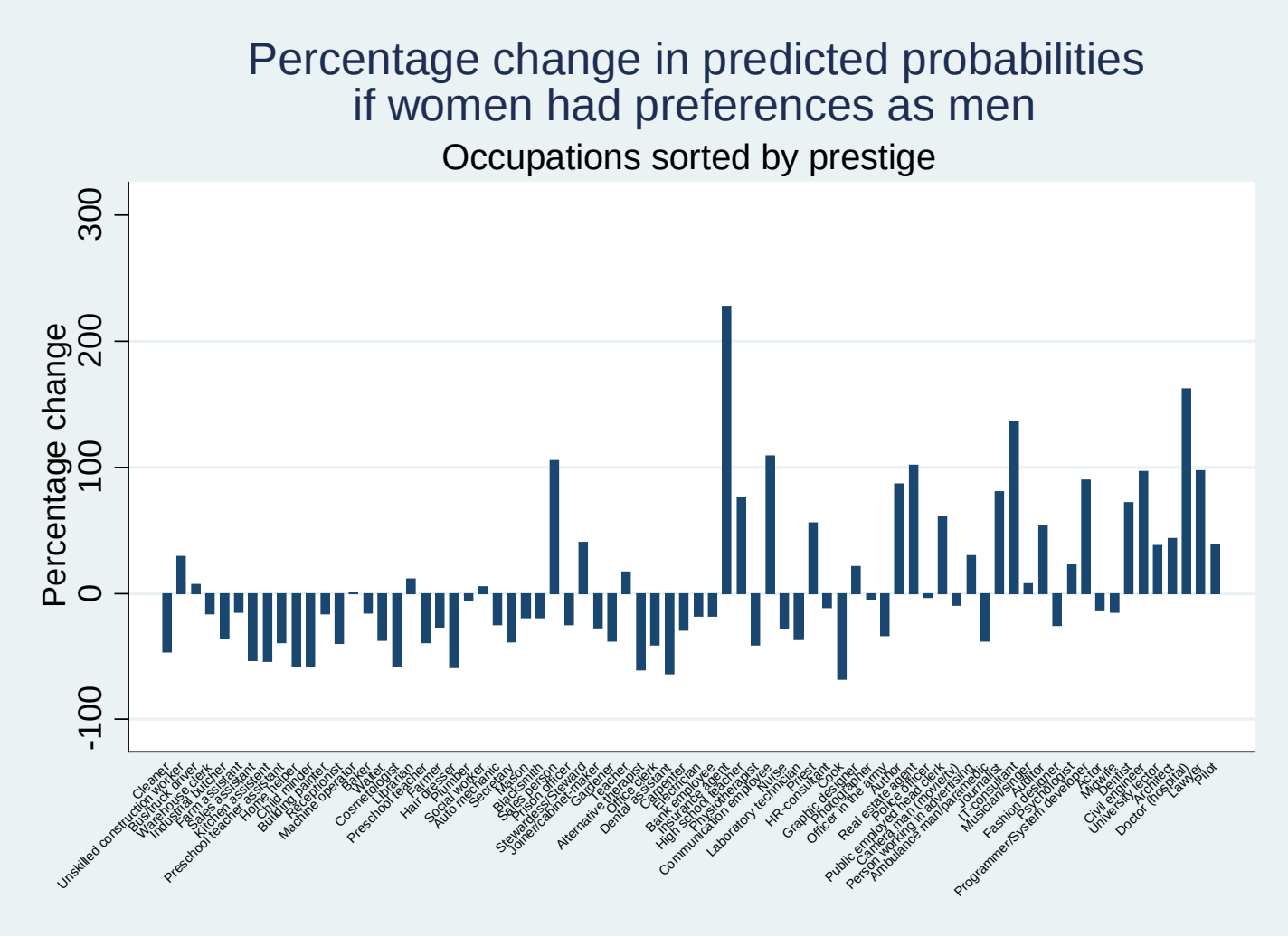


Figure 12: Percentage Change in Predicted Probabilities from Counterfactual

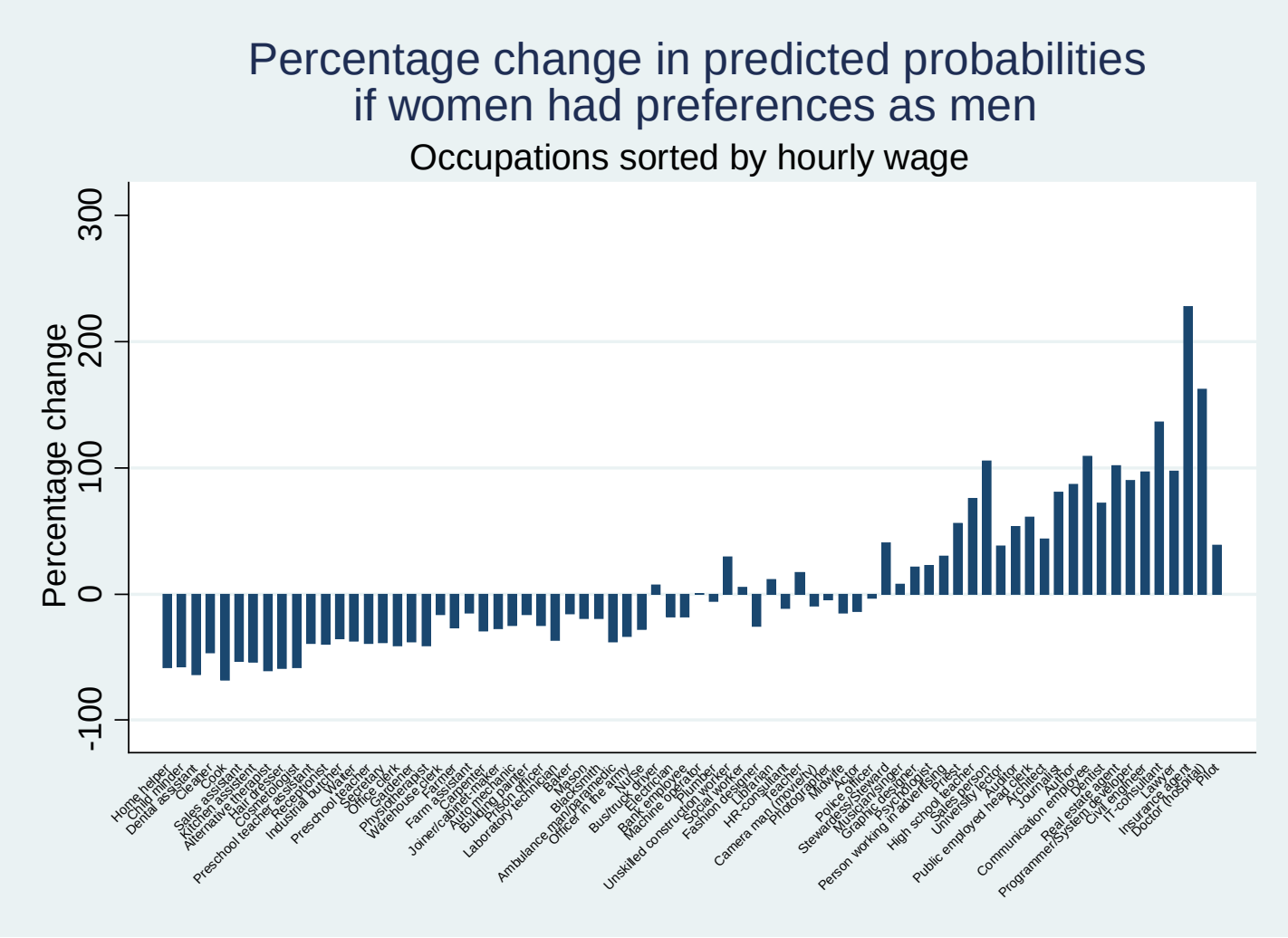


Table 5 Predicted Wages by Gender

	Men	Women	
	Predicted	Predicted	Counterfactual
Mean	41.493	38.144	42.342
Sd	3.889	3.409	3.773
Median	42.282	37.677	42.282
N	870	937	937

7. Conclusions

Women and men often still work in different occupations. This can explain about one half of the raw gender pay gap, but it is not well understood why such segregation persists despite the increased educational achievement of women. In this paper, we investigate an explanation that is based on preferences, and more precisely, the idea that women place a greater weight on the social prestige of an occupation than men. Women have been found to not only value social preferences more than men, but also to place greater weight on acting according to their social identity. If social prestige gives benefits to holders of occupations, and if these benefits vary by gender, differences in occupational choices might be partly explained by these differences.

To investigate this hypothesis, we use a unique Danish data set, which includes rich information on individuals' expected occupations, ability, socioeconomic background, and on occupational characteristics. The raw data shows a clear difference in the social prestige of expected occupations by women – at the same wages, women's expected occupations have higher social prestige. We find that women expect to work in an occupation that is higher in social prestige and lower in mean wage than that of men. This is consistent with the hypothesis that part of the gender wage gap can be explained by the occupational segregation caused by women's stronger preference for social prestige – these occupations have, in an equilibrium setting, lower wages. This is also consistent with the observation that women's increased education has not led to a drastic reduction in the gender wage gap. If women use their higher

education to work in occupations with higher social prestige, this will drive down wages in those occupations because of the increased supply.

The gender wage gap of expected occupations in our sample is 8.1%. Because wages are measured using median wages in each occupation, this gap does not reflect potential wage differences due to differences in experience, time away from the labor force, or reduced work hours. A simulation of the counterfactual that women have the same preferences for wages and social prestige than men leads to an increase of women's wages of 11%. We conclude from this that it is possible – and maybe even likely – that an important fraction of the gender wage gap results from different choices that women and men make that are based on differences in preferences.

In this paper, we do not directly address the fact that women tend to have a lower labor force participation at the extensive and intensive margin. Women tend to work fewer hours and spend more time out of the labor force, even in Scandinavian countries. This could explain some of the observed differences in preferences. The social prestige given to holders of certain occupations does not depend on the number of hours worked. Hence, if fewer hours are worked (and wages are correspondingly lower) social prestige is likely to be more important when choosing an occupation. However, since most women now expect to work full time during most of their adult years, this is likely to not be a sufficient explanation for the observed gender differences in preferences. The origins of these differences remain to be explored in future work.

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APPENDIX

Table A1: Social Prestige and other occupation-specific characteristics

Social Prestige Rank	Occupation	Social Prestige Score (18-29 year olds)	# of men expecting occupation	# of women expecting occupation	Education Required	Median hourly wage	Medi an salary	Share publicly employed	Share working part time
1	Pilot	0.83	8	0	Long-cycle	91.2	14.9	0.00	0.01
2	Lawyer	0.81	19	27	Long-cycle	56.4	9.5	0.02	0.03
3	Doctor (GP)	0.79	0	0	Long-cycle	69.2	11.7	0.73	0.05
4	Doctor (hospital)	0.78	22	35	Long-cycle	69.2	11.7	0.73	0.05
5	Researcher in private company	0.75	0	0	Long-cycle	.	.	.	.
6	Architect	0.74	13	13	Long-cycle	47.4	7.9	0.30	0.02
7	University lector	0.73	17	10	Long-cycle	46.4	7.8	0.89	0.11
8	Civil engineer	0.72	109	15	Long-cycle	53.2	8.7	0.10	0.01
9	Soccer player	0.72	0	0	Basic or High School	37.0	6.2	0.03	0.30
10	Dentist	0.70	1	11	Long-cycle	49.8	8.1	0.47	0.08
11	Midwife	0.70	0	17	Medium-cycle	38.8	6.5	0.97	0.03
12	Actor	0.69	6	9	Medium-cycle	39.0	6.5	0.18	0.11
13	Programmer/System developer	0.68	21	0	Long-cycle	51.2	8.4	0.10	0.02
14	Psychologist	0.67	2	35	Long-cycle	43.4	7.2	0.93	0.02
15	Fashion designer	0.67	3	14	Long-cycle	36.8	5.7	0.05	0.06
16	Auditor	0.66	15	29	Long-cycle	46.8	7.7	0.07	0.02
17	Politician	0.66	0	0	Long-cycle	.	.	.	.
18	Musician/singer	0.65	23	4	Long-cycle	41.2	6.8	0.61	0.11
19	IT-consultant	0.64	12	0	Long-cycle	55.2	9.1	0.05	0.05
20	Journalist	0.64	12	22	Long-cycle	49.2	8.0	0.08	0.04
21	Ambulance man/paramedic	0.64	4	2	Vocational	34.2	5.6	0.10	0.06
22	Person working in advertising	0.64	14	23	Medium-cycle	43.6	6.9	0.07	0.07
23	Camera man (movie/TV)	0.64	2	0	Vocational	38.6	6.3	0.22	0.09
24	Public employed head clerk	0.63	13	8	Long-cycle	46.8	7.7	0.49	0.02
25	Police officer	0.62	51	12	Medium-cycle	39.2	6.6	0.99	0.02
26	Real estate agent	0.62	10	18	Short-cycle	50.8	8.6	0.01	0.03
27	Author	0.62	2	2	Long-cycle	49.2	8.0	0.08	0.04
28	Officer in the army	0.60	10	1	Long-cycle	34.4	5.7	0.90	0.17
29	Photographer	0.60	2	10	Vocational	38.6	6.3	0.22	0.09
30	Graphic designer	0.57	12	8	Medium-cycle	41.4	6.7	0.05	0.02
31	Cook	0.57	15	14	Vocational	26.6	4.2	0.45	0.13
32	HR-consultant	0.57	1	2	Long-cycle	37.2	6.1	0.55	0.03
33	Priest	0.56	2	2	Long-cycle	44.8	7.6	0.94	0.01
34	Laboratory technician	0.55	2	17	Short-cycle	33.2	5.3	0.32	0.03
35	Nurse	0.54	1	87	Medium-cycle	34.4	5.5	0.89	0.10
36	Communication employee	0.53	8	14	Long-cycle	49.2	8.0	0.08	0.04
37	Physiotherapist	0.52	5	26	Medium-cycle	32.0	5.2	0.81	0.07
38	High school teacher	0.50	12	11	Long-cycle	45.4	7.5	0.94	0.02
39	Insurance agent	0.49	3	1	Vocational	58.8	9.7	0.00	0.02
40	Business high school teacher	0.49	0	0	Long-cycle	45.4	7.5	0.94	0.02
41	Bank employee	0.48	21	18	Vocational	35.0	5.6	0.00	0.09
42	Electrician	0.47	49	1	Vocational	34.8	5.6	0.02	0.04
43	Carpenter	0.44	62	0	Vocational	32.8	5.2	0.01	0.03
44	Dental assistant	0.44	0	2	Vocational	26.2	4.1	0.54	0.11
45	Office clerk	0.43	15	34	Vocational	30.8	5.0	0.58	0.10
46	Alternative therapist	0.43	0	1	Short-cycle	26.8	3.9	0.04	0.08
47	Teacher	0.43	25	66	Medium-cycle	38.4	6.4	0.82	0.07
48	Joiner/cabinet-maker	0.43	2	7	Vocational	31.2	5.1	0.30	0.04
49	Gardener	0.43	3	0	Vocational	32.8	5.2	0.01	0.03
50	Stewardess/Steward	0.42	0	1	Basic or High School	40.6	6.4	0.01	0.09
51	Prison officer	0.41	0	2	Vocational	33.0	5.6	0.99	0.01
52	Sales person	0.41	35	11	Vocational	46.0	7.5	0.01	0.02
53	Nursing aide in a hospital	0.41	0	0	Vocational	29.2	4.7	0.95	0.06
55	Blacksmith	0.40	33	0	Vocational	33.6	5.5	0.04	0.03
54	Mason	0.40	16	0	Vocational	33.6	5.3	0.03	0.02
56	Secretary	0.40	0	5	Vocational	30.8	5.0	0.58	0.10
57	Auto mechanic	0.40	30	2	Vocational	32.8	5.3	0.03	0.02
58	Social worker	0.40	3	21	Medium-cycle	36.6	6.1	0.89	0.02
59	Glazier	0.40	0	0	Vocational	45.4	7.5	0.94	0.02
60	Teacher on a vocational school	0.40	0	0	Vocational	31.8	5.2	0.01	0.03

61	Plumber	0.39	8	0	Vocational	35.2	5.6	0.01	0.02
62	Hair dresser	0.39	3	22	Vocational	26.8	3.9	0.04	0.08
63	Farmer	0.38	22	3	Vocational	32.4	5.4	0.04	0.10
64	Preschool teacher	0.38	22	127	Medium-cycle	30.4	4.9	0.90	0.08
65	Train driver	0.38	0	0	Vocational	40.0	6.7	0.88	0.00
66	Librarian	0.38	0	3	Long-cycle	37.0	6.1	0.91	0.06
67	Cosmetologist	0.38	0	12	Vocational	26.8	3.9	0.04	0.08
68	Security guard	0.37	0	0	Vocational	31.8	5.2	0.44	0.31
70	Baker	0.34	2	2	Vocational	30.2	4.6	0.02	0.37
69	Waiter	0.34	3	2	Vocational	33.2	5.3	0.01	0.07
71	Machine operator	0.33	5	0	Vocational	35.0	5.7	0.04	0.01
72	Receptionist	0.32	1	4	Vocational	29.6	4.6	0.05	0.17
73	Building painter	0.32	2	8	Vocational	32.8	5.1	0.02	0.03
74	Hospital porter	0.31	0	0	Basic or High School	29.2	4.7	0.95	0.06
75	Mailman	0.31	0	0	Basic or High School	29.4	5.0	0.56	0.25
76	Child minder	0.30	0	2	Basic or High School	26.0	4.2	0.86	0.22
77	Home helper	0.29	1	28	Vocational	25.8	4.1	0.92	0.14
78	Preschool teacher assistant	0.29	0	3	Basic or High School	29.2	4.7	0.95	0.06
80	Fisher	0.29	0	0	Vocational	28.2	4.4	0.02	0.14
79	Kitchen assistant	0.29	3	9	Vocational	26.6	4.2	0.45	0.13
81	Sales assistant	0.28	17	38	Vocational	26.6	4.2	0.02	0.31
82	Farm assistant	0.27	11	0	Vocational	29.6	4.7	0.01	0.05
84	Scaffolder	0.27	7	2	Vocational	32.4	5.4	0.04	0.10
83	Industrial butcher	0.27	0	0	Basic or High School	38.8	6.0	0.02	0.03
85	Nursing home assistant	0.27	0	0	Basic or High School	29.2	4.7	0.95	0.06
86	Road worker	0.27	0	0	Basic or High School	31.2	5.2	0.70	0.03
87	Warehouse clerk	0.26	0	0	Basic or High School	31.4	5.0	0.03	0.08
88	Window cleaner	0.26	6	1	Basic or High School	32.0	5.1	0.06	0.16
89	Taxi driver	0.25	0	0	Basic or High School	34.4	5.6	0.05	0.03
90	Trash collector	0.25	0	0	Basic or High School	33.8	5.5	0.03	0.03
91	Mover	0.25	0	0	Basic or High School	32.0	5.1	0.06	0.16
92	Bus/truck driver	0.24	9	0	Vocational	34.4	5.6	0.05	0.03
93	Unskilled construction worker	0.23	1	0	Basic or High School	36.4	5.8	0.02	0.06
94	Parking attendant	0.22	0	0	Basic or High School	31.8	5.2	0.44	0.31
95	Cashier	0.19	0	0	Basic or High School	26.6	4.2	0.02	0.31
96	Cleaner	0.16	1	1	Basic or High School	26.4	4.1	0.48	0.27
97	Advertising matter delivery man	0.13	0	0	Basic or High School	29.6	4.8	0.13	0.35
98	Unemployment benefit recipient	0.07	0	0	.	.	.	.	.
99	Welfare recipient	0.04	0	0	.	.	.	.	.

Median hourly wage is divided by 5 to approximate the dollar value while median salary is divided by 50,000 to approximate salary in 10,000 dollars

Table A2: Summary statistics of individual specific characteristics

	Men			Women			P-value (t-test)
	Mean	**sd**	**N**	**Mean**	**sd**	**N**	
Social Prestige of expected occupation (18-29 years)	0.541	0.152	870	0.516	0.147	937	0.000
Median hourly wage of expected occupation	41.493	10.781	870	38.144	10.084	937	0.000
Median annual salary of expected occupation	6.794	1.843	870	6.218	1.779	937	0.000
Reading score	489.710	99.996	870	510.438	93.524	937	0.000
Reading score <25th percentile	0.292	.	870	0.209	.	937	0.000
Reading score between 25th and 75th percentile	0.494	.	870	0.502	.	937	0.755
Reading score >75th percentile	0.213	.	870	0.285	.	937	0.000
Good at math – disagree/disagree somewhat	0.182	.	803	0.288	.	892	0.000
Good at math – agree somewhat	0.364	.	803	0.364	.	892	0.976
Good at math – agree	0.455	.	803	0.348	.	892	0.000
Copenhagen area	0.137	.	870	0.139	.	937	0.904
Urban area	0.411	.	870	0.445	.	937	0.150
Country area	0.449	.	870	0.412	.	937	0.108
Share working part time in expected occupation	0.051	0.054	870	0.077	0.061	937	0.000
Share publicly employed in expected occupation	0.261	0.348	870	0.539	0.383	937	0.000
Social prestige of expected occupation (main ranking)	0.547	0.129	870	0.522	0.131	937	0.000

Table A3: Sample selection

Sample restriction	Individuals dropped			Occupations dropped	Number of observations
	Men	**Women**	**Total**		
*Initial sample of individuals in Danish PISA Longitudinal Data Base **					3,073
Reading score missing	1	1	2		3,071
Occupational expectations					
- No answer recorded	52	37	89		2,982
- Respondent answered "don't know"	141	122	263		2,719
- Respondent answered "nothing"	20	15	35		2,684
- Respondent gave a vague answer impossible to match with a specific occupation	69	106	175		2,509
- Occupation not in survey on prestige	348	348	696		1,814
- Occupation has no wage data	4	3	7		1,807
Number of individuals					1,807
Reshape of data: 1,807 · 99					*178,893*
Occupations no one expect to work in				25	133,718
Estimation sample					133,718

** Only individuals who were tested in PISA and answered the follow-up survey are included.*

Table A4: Comparison of sample and dropped observations

	Sample			Dropped			p-value (t-test)
	Mean	**sd**	**N**	**Mean**	**sd**	**N**	
All							
Reading score	500.458	97.221	1807	510.134	93.714	1264	0.006
Good at math							
– disagree/disagree somewhat	0.238	.	1695	0.218	.	1203	0.206
– agree somewhat	0.364	.	1695	0.371	.	1203	0.711
– agree	0.398	.	1695	0.411	.	1203	0.475
Men							
Reading score	489.710	99.996	870	496.849	96.800	633	0.164
Good at math							
– disagree/disagree somewhat	0.182	.	803	0.191	.	598	0.676
– agree somewhat	0.364	.	803	0.353	.	598	0.677
– agree	0.455	.	803	0.457	.	598	0.941
Women							
Reading score	510.438	93.524	937	523.461	88.608	631	0.005
Good at math							
– disagree/disagree somewhat	0.288	.	892	0.245	.	605	0.061
– agree somewhat	0.364	.	892	0.388	.	605	0.346
– agree	0.348	.	892	0.367	.	605	0.443

Figure A1: Distribution of Hourly Wage – Occupations sorted by Prestige