Care or Assert?

The impact of the gender match on wage

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Abstract

Productivity related information like acquired education or working experience is easily accessible during an application interview; other crucial information is not. Gender personality traits are less likely revealed, yielding an applicant-job match according to the sex of the applicant rather than the gender. We disentangle the effect of gender from the effect of the sex of an employee on wages. To do so, we group occupations hold by Dutch higher education graduates according to work orientations and values applicable into three gender domains: A feminine domain, a gender neutral domain and a masculine domain. We show that the sex ratio inside a domain is in line with the gender traits direction, that wage differentials between male and female employees are positively related to the masculinity of the domain and, that female employees can reduce the wage gap by nearly 20% by revealing strong preferences for masculine work values and orientations.

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1. Introduction

The existence of wage differentials between men and women is well documented (see. i.e. Blau and Kahn, 2000). Usually, wage discrimination is measured by a wage decomposition approach (for a good survey, see Altonji and Black, 1999) that combines the estimated coefficients for male wages and the values of the explanatory variables for women (i.e. education, job experience). The difference to what women actually do earn in the labour market is then assigned to discrimination. According to Bovenkerk (1992) the disadvantage of this approach is that it gives "no conclusive proof of discrimination as long as all other possible relevant variables have not been identified". In other words, wage differentials might be driven by unobservable productivity differences.

Standard economic theory often supposes that solely the matching of the human capital required for a job and provided by the applicant is relevant to determine the productivity outcome (see i.e. Hartog, 1992, or Sattinger, 1993). However, research consistently proves that human capital alone does not account for the whole wage differential between men and women (e.g. Bakker, Tijdens and Winke et al., 1999; England, 1992, Tomaskovic-Devey and Skaggs, 1999). Psychological literature can challenge our thinking and extend the assignment theory approach. Heilman (1984), Glick et al. (1988) and Riehle (1996) for instance emphasized that a crucial factor determining who is hired for the job is "the degree of congruence between the gender of the applicant and the sex type of the job" (Glick et al, 1988, p. 178). Of importance is hereby the distinction between the term 'sex' and 'gender'. Even though the two terms are generally used as interchangeable, they have distinct meanings. "While sex refers to the biological state of being male of female, gender points to stereotypical roles and personality traits assigned to men and women by society" (Weichselbaumer, 2004). In line with that, Glick et al, (1995) make a distinction between male chauvinism and masculine chauvinism. The former describes the fact that men are seen as more productive than women purely based on their sex. The later describes the fact that men are seen as more productive based on factors that are related to a man rather than to a woman.

In traditionally male-dominated jobs employees are expected to possess traditionally masculine characteristics (e.g. being ambitious, analytical, assertive, dominant). Schein (1973) documented that managers believe that to be successful in their jobs it takes more of those characteristics typically ascribed to men than to women in general. This stereotypic image of the successful applicant of the job might not be independent of the sex ratio within the job. Moreover, it might even reinforce itself over time. Eagly's (1987) social role of theory of sex-correlated differences in social behaviour maintains the central idea that gender-related ideas are based on observations of men and women in their daily life. Sex-segregation among jobs is seen as a crucial trigger to sex wage differentials. Ruiter et al.

(2003) for instance report large wage penalties in the Netherlands for working in a female-dominated instead of a male-dominated job¹.

The problem of stereotypic imagining is that it gives rise to the belief that all individuals within a particular social category can be viewed as identical, neglecting the heterogeneity within the group. The outcome might be statistical discrimination (see Phelps, 1972, and Arrow, 1973). Statistical discrimination might in particular in a context of uncertainty play a fundamental role in decision-making. Asymmetric and private information in the labour market can thereby be of particular importance. While productivity related information like acquired education or working experience might easily be available during an application interview, other crucial information is not. Gender personality traits are less likely revealed, yielding a matching according to the sex of the applicant rather than the gender.

We intend in this paper to add to the above discussion by further disentangling the effect of gender personality traits from the effect of the sex of an employee on wages. To do so, we analyze the labour market situation of Dutch higher education graduates approximately 5 years after leaving the higher education institute. We start by characterizing and grouping the jobs the graduates hold according to the extent to what work values and orientations apply. Based on earlier literature on gender personality traits, this allows us to group the jobs into three gender domains: A feminine domain, a gender neutral domain and a masculine domain. Second, we show that the sex ratio inside the three domains is in line with the gender traits direction of the domain. Female employees are overrepresented in feminine jobs and underrepresented in the masculine domain. Our analyses further show that wage differentials between male and female employees are positively related to the masculinity of the domain. Finally, we show that female employees, both in the gender neutral and in the masculine domain, are able to reduce the sex wage gap by nearly 20% in case they have strong preferences for masculine work values and orientations.

The structure of the paper is as follows. Section 2 discusses gender personality traits. The data and definitions are given in Section 3. Section 4 looks at the allocation of female and male graduates over jobs in different gender domains. Section 5 analyses the wage rate paid to the employee and asks if it is sex or gender that determines the wage differential between men and women. Finally, Section 6 summarizes the main findings.

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¹ Similar results for the US are for instance reported by England et al., 1996; Tomaskovic-Devey, 1995; Treiman and Hartman, 1981.

2. Gender personality traits

Earlier, we stated that a distinction between the terms 'sex' and 'gender' is important. The latter thereby referring to stereotypical roles and personality traits assigned to men and women by society (see Weichselbaumer, 2004). In this section, we shortly review some of the relevant literature with respect to gender personality traits.

Ridgeway and Correll (2004) provide a thorough review on theoretical perspectives on gender beliefs and social relations. Along a large number of gender scholars they argue that gender is an institutionalized system of social practices for constituting people as two significantly different categories, men and women, and organizing social relations of inequality on the basis of that difference. They further argue that there are in general two dimensions in gender differences believes (see also Fiske et al., 2002; Lueptow et al., 2001; Spence and Buckner, 2000; Eagly et al., 2000), A horizontal dimension of difference - that stereotypically describes women as more communal and men as more agentic and instrumental - and a hierarchical dimension. The latter views men as more status worthy and competent overall ("men are more competent at the things that count"). Women are 'nicer' but less competent in general. Their comparative advantage is seen in communal tasks that are generally less valued.

Similar arguments are found in the regularly cited BEM Sex-Role Inventory (see e.g. Weichselbaumer, 2004). Typical masculine personality traits are: acts as a leader, ambitious, analytical, assertive, competitive, dominant, individualistic, makes decisions easily and strong personality. Opposite to that, feminine personality traits are: affectionate, cheerful, compassionate, eager to soothe hurt feelings, gentle, loves children, sensitive to the needs of others, sympathetic and understanding. Similar, Hofstede (1991) defines the masculine pole by: have opportunities for high earnings, get the recognition you deserve when you do a good job, have opportunity for advancement to higher level jobs, have challenging work, and the feminine pole by: have good working relationship with direct superior, work with people who cooperate well with one another, living in an area desirable to you and your family and have the security that you will be able to work for your company as long as you want to.

Status-shaped expectations on what a person can and can not do according to its sex will affect the person's behaviour and can yield a self-enforcing process in which gender-based differential treating is stimulated (see e.g. Ridgeway and Smith-Lovin, 1999; Wagner and Berger, 1997, Ridgeway and Correll, 2004). The hierarchical dimension of gender differences believes might in particularly shape further gender inequality in the work context. It might affect the manner in which men and women assert themselves, whether their ideas and arguments are heard, and whether they become influential in the context (Ridgeway and Correll, 2004). The hierarchical dimension can thereby not be seen independent of the context in which the work relation takes place. A pre-determined masculine context, as might be regarded in typical masculine jobs, might enforce the hierarchical dimension whereas a

pre-determined feminine context might not. Consequently, even when men and women perform objectively equal, gender beliefs might inflict a differential judgment or treatment (see e.g. Correll, 2004; Foschi, 2000) enforcing women to outperform men to get equally paid. The hierarchical dimension thereby points to the assumption that gender can not be seen independent of sex. This is precisely the point we intend to investigate further in this paper.

3. Data and definitions

To analyze wage differences between male and female higher education graduates in the Netherlands, we make use of the REFLEX data set. The REFLEX data set contains a representative sample of Dutch graduates from ISCED5A who got their degree in the academic year 1999/2000 that has been approached in 2005, i.e. some 5 years after graduation. The data set provides detailed information on both **the application of work values and orientations in the current job** (measured on a 5-point Likert scale: 1 = 'not at all' <-> 5 = 'to a very high extent') **and the importance attached to them by the graduates** (measured on a 5-point Likert scale: 1 = 'not at all' <-> 5 = 'very important'). We use these values and orientations to measure the masculinity of the job and the graduate. We follow in particularly the line of Hofstede (1991) and distinguish between a masculine pole of a job and a feminine pole of a job. To do so, we consider the extent to which, according to the graduate, the following work values and orientations apply to the job:

Masculine pole:

- High earnings
- 2. New challenges
- 3. Good career prospects
- 4. Social status

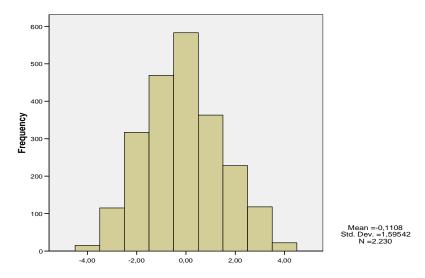
Feminine pole:

- 1. Job security
- 2. Enough time for leisure activities
- 3. Chance of doing something useful for society
- 4. Good chance to combine work with family tasks

For each of these aspects the graduates were asked to indicate the extent to what they apply to the current job. We recoded each of the aspects on the masculinity pole to 1 if the graduate indicated that the aspect applied to a high, respectively very high extent (score 4 or 5) and to 0 if otherwise. Aspects on the femininity pole were coded as -1 if they applied to a high, respectively very high extent (score 4 or 5) and to 0 if otherwise. Finally, we added up the scores of all of the eight aspects. By that, we measure the masculinity of a job along a scale from -4 (strongly feminine job) to +4 (strongly masculine job). Figure 1 shows the histogram of

the jobs hold by the Dutch higher education graduates with respect to the masculinity of the job. On average, the jobs score with -0.11 slightly feminine on the proposed scale.

Figure 1
Histogram: employees along masculinity-femininity index



Given the distribution, we define three job gender domains. First, the *feminine job domain* consisting of jobs that score between -4 and -2 on the masculinity-femininity index; second the *gender neutral job domain* consisting of jobs that score between -1 and +1; third, the *masculine job domain* consisting of jobs that score between +2 and +4. Following this approach, 20% of the jobs are classified as belonging to the feminine domain, 63% to the gender neutral domain and 17% to the masculine domain.

4. Allocation

Earlier, we argued that the stereotypic image of a job can not be seen as independent of the sex-ratio in the job. The idea is that gender-related ideas on work values and orientations are based on observations of men and women in daily life. The figures in Table 1 confirm this. Given that 62% of the considered population is female, female employees are overrepresented in the feminine domain and underrepresented in the masculine domain. Moreover, the sex-ratio in the gender neutral domain is strikingly in line with the sex-ratio of the total population. The sex allocation over jobs seems therefore to be in line with the gender of the jobs.

Table1
The three domains and its sex ratio

	Feminine	Neutral domain	Masculine	Overall
	domain		domain	
% Female employees	70.5	63.1	49.2	62.3

Given the sex allocation, the question arises if the gender allocation is as strong as the sex allocation. In other words, are employees in feminine jobs more feminine in terms of their preferences for certain work values and orientations and employees in masculine jobs more masculine in terms of their preferences for certain work values and orientations? To analyse this, we consider the importance attached by the Dutch graduates to the work values and orientations distinguished in this paper. We follow a similar approach as with the definition of the job, recoding the four masculine pole work values and orientations to 1 if the importance attached to the item is (very) high (score 4 or 5) and 0 if otherwise. The feminine pole work values and orientations are accordingly recoded as -1 if the importance attached to the item is (very) high (score 4 or 5) and 0 if otherwise. We finally added up the scores of all eight items. By that, we measure the gender of an employee among a scale from -4 (very feminine gender) to +4 (very masculine gender) Table 2 shows the average score on this gender scale per job gender domain.

Table 2
How feminine are you (-4 very feminine ...+4 very masculine)

	Feminine	Neutral	Masculine	Total
	domain	domain	domain	population
Female employee	-1.91	-0.86	0.24	-0.95
Male employee	-1.13	-0.30	0.90	-0.16
All employees	-1.68	-0.65	0.57	-0.65

The results (see Table 2) show that the average employee considered possesses a slight feminine gender in terms of his or her preferences for certain work values and orientations (-

0.65). Not surprisingly, male employees (-0.16) are in this sense significantly less feminine than female employees (-0.95). Furthermore, we see that for both sexes, the gender varies between the three job domains. (Fe)male employees in the feminine domain are significantly more feminine with respect to their preferences for certain work values and orientations than (fe)male employees in the gender neutral domain and the later are significantly more feminine than (fe)male employees in the masculine domain. The gender of an employee seems to match on average the gender of the job. Female employees in the masculine domain are even more masculine with respect to their preferences for certain work values and orientations than the average male graduate.

To conclude this section, we can state that

- (1) the sex-ratio inside the three job gender domains strongly resembles the gender orientation of the job domain;
- (2) female employees in the masculine job domain are from a gender perspective more masculine with respect to the importance attached to certain work values and orientations than female employees in one of the other two job gender domains;
- (3) that (2) holds vice versa for male employees in the feminine job domain;

5. The wage gap: is it sex or gender?

The multivariate analyses of the gross hourly wage rates are conducted by ordinary least squares (OLS) regressions. The dependent variable is the logarithm of the gross hourly wage rate. We only use the data of employees that work at least 33 hours a week and hence employees that might be characterised as working fulltime. By that we circumvent the problem that female employees work significantly more part-time than male employees. Table 4 presents a first series of results. Model 1 only includes a dummy for the sex of the employee. Model 2 adds the age of the employee and characteristics for the type (university versus higher vocational education) and field of education, the job and the match between education and job (match in level and field). Model 3 adds the gender domain of the job and Model 4 adds the femininity and the masculinity of the employee in terms of their preferences for certain work values and orientations (as discussed in Table 2).

Model 1 reveals a significant difference in the wages between male and female employees. The sex wage gape is approximately 10% in advantage of the male employees. Sex accounts thereby for about 3% of the variance in the wages (R-squared = 0.027). When adding in Model 2 the characteristics with respect to the education followed and the job the employee works in, the sex wage gap is reduced to around 7%.

The results with respect to the characteristics of the job and education are in line with similar approaches in the literature. Graduates from the university type of education earn significantly more than graduates from the higher vocational type of education. Moreover, working in a job that requires at least the educational level of the employee pays more than working in a job that requires a lower educational level. Having followed any work-related training in the last 12 months increases the productive value the employer ascribes to the employee which is revealed in a higher wage rate, and holding a supervisory job gives a wage bonus of around 8.5%. In Model 3 we add the dummies for the gender domain the job is practised in. The results reveal that, if controlled for the other characteristics of the job and education, the gender domain does not show up any significant impact on the wage rate. Finally, we add in Model 4 the masculinity and the femininity of the employee as explanatory factor. The results reveal that the more masculine an employee is with respect to his or her preferences for certain work values and orientations, the higher his or her wage. On the other hand, the more feminine the employee is with respect to his or her preferences for certain work values and orientations, the lower the wage. However, the latter effect is not significant different from zero.

Table 4 OLS estimations on the natural logarithm of the gross hourly wage

		1		2		3		4
	B.	Std. err.						
Constant	2.671***	0.011	1.637***	0.122	1.624***	0.123	1.601***	0.123
Male	0.104***	0.016	0.069***	0.016	0.068***	0.016	0.057***	0.016
Age			0.019***	0.004	0.019***	0.004	0.018***	0.004
University			0.173***	0.018	0.172***	0.018	0.176***	0.018
Field of education								
Education			0.088**	0.042	0.094**	0.043	0.118***	0.042
Arts & Humanities			Ref.		Ref.		Ref.	
Social sciences, Business and Law			0.198***	0.036	0.201***	0.036	0.205***	0.035
Science, Mathematics and Computing			0.114***	0.042	0.117***	0.042	0.132***	0.041
Engineering, Manufacturing and Construction			0.134***	0.040	0.138***	0.040	0.156***	0.039
Agriculture and Veterinary			0.117	0.066	0.122	0.066	0.156**	0.065
Health and Welfare			0.267***	0.039	0.272***	0.039	0.274***	0.039
Services			0.106**	0.045	0.110**	0.045	0.116***	0.045
Job characteristics								
Working on own level			0.172***	0.025	0.168***	0.025	0.149***	0.025
Working in own domain			0.009	0.020	0.009	0.020	0.014	0.019
Has followed training			0.037**	0.021	0.035**	0.016	0.034**	0.016
Private sector			0.010	0.016	0.006	0.017	0.005	0.016
Supervisory job			0.085***	0.016	0.082***	0.016	0.073***	0.016
Permanent contract			0.083***	0.019	0.085***	0.019	0.083***	0.019
Tenure			0.000	0.001	0.000	0.001	0.000	0.001
Tenure^2			0.000	0.000	0.000	0.000	0.000	0.000
Gender domain								
Neutral domain					Ref.		Ref.	
Feminine domain					-0.006	0.022	0.017	0.022
Masculine domain					0.029	0.019	0.008	0.019
Masculinity of employee							0.045***	0.008
Femininity of employee							-0.012	0.007
N-cases	1456		1456		1456		1449	
R^2 adjusted	0.027		0.214		0.215		0.232	

In a next step, we re-estimate Model 4 for each of the three gender domains separately. By that, we analyse the extent to what the sex wage gap depends on the gender domain in which the job is practised. Table 5 reveals some interesting results. First of all, the sex wage gap seems to be strongly depending on the masculinity of the job. Whereas, controlling for job and education characteristics, we do not find a significant wage gap in the feminine domain, the wage gap in the gender neutral domain is around 5% and in the masculine domain even 8%. In other words, the more masculine the job the higher the wage disadvantage of female employees. Second, we also find that the impact of the masculinity or the femininity of the employee with respect to his or her preferences for certain work values and orientations, depends on the gender domain the employee works in. Having preferences for more masculine or feminine work values and orientations than others does not influence the wage rate in the feminine domain. In the gender neutral domain however, we see that more masculine preferences have a positive effect and a more feminine preferences a, although not significant, negative effect on the wage rate. Finally, we find that in the masculine domain having masculine preferences improves the wage rate, whereas feminine preferences reduce it. The impact of the masculine attitude is thereby around twice as high as the impact in the gender neutral domain. Concluding so far, we can state that in both the gender neutral and the masculine domain, sex as well as gender preferences determine the wage rate.

Given that gender preferences influence the wage rate in both the gender neutral and the masculine domain, we can next ask the question if female employees can reduce the sex wage gap by changing their preferences towards more masculine preferences with respect to work values and orientations. For that, we first re-estimate the equations separately for men and women, and second, we decompose the wage regression models according to the Blinder-Oaxaca wage decomposition (Blinder, 1973; Oaxaca, 1973). Table 6 reports the central results of the models re-estimated separately for men and women. Table 7 reports on the wage decomposition.

Table 5
OLS estimations on the natural logarithm of the gross hourly wage, per gender domain

	Feminine domain		Neutral domain		Mascu	Masculine domain	
	B.	Std. err.	B.	Std. err.	B.	Std. err.	
Constant	1.851***	0.344	1.633***	0.140	1.388***	0.383	
Male	0.045	0.039	0.048**	0.020	0.085**	0.44	
Age	0.012	0.010	0.019***	0.004	0.020	0.012	
University	0.184***	0.046	0.171***	0.021	0.176***	0.046	
Field of education							
Education	0.057	0.103	0.058	0.051	0.311**	0.152	
Arts & Humanities	Ref.		Ref.		Ref.		
Social sciences, Business and Law	0.166	0.095	0.152***	0.044	0.301***	0.085	
Science, Mathematics and Computing	0.195	0.109	0.066	0.050	0.242**	0.102	
Engineering, Manufacturing and Construction	0.168	0.105	0.102**	0.048	0.274**	0.097	
Agriculture and Veterinary	0.325	0.265	0.166**	0.074	-0.018	0.173	
Health and Welfare	0.208**	0.101	0.218***	0.048	0.436***	0.105	
Services	0.094	0.118	0.072	0.054	0.221**	0.112	
Job characteristics							
Working on own level	0.188***	0.047	0.147***	0.030	0.101	0.090	
Working in own domain	0.036	0.048	0.016	0.023	-0.017	0.057	
Has followed training	0.038	0.038	0.038**	0.018	0.053	0.047	
Private sector	-0.060	0.042	-0.005	0.019	0.072	0.048	
Supervisory job	0.162***	0.046	0.071***	0.019	0.031	0.042	
Permanent contract	0.037	0.056	0.084***	0.022	0.077	0.053	
Tenure	-0.003	0.004	0.000	0.000	0.002	0.002	
Tenure^2	0.000	0.000	0.000	0.000	-0.000	0.000	
Masculinity of employee	0.010	0.019	0.042***	0.009	0.088***	0.022	
Femininity of employee	0.008	0.023	-0.011	0.008	-0.038**	0.017	
N-cases	208		918		303		
R^2 adjusted	0.215		0.227		0.213		

In Table 6 we report on the results with respect to the impact of the masculinity and the femininity of the employee in terms of preferences for certain work values and orientations. The results are thereby extracted from a comparable model as the models reported on in Table 5. We see that in both domains and for both sexes, the more masculine the preferences for certain work values and orientations, the higher his or her wage rate is. The impact is for female employees approximately three times higher in the masculine domain and for male employees around 50% higher in the masculine domain. Moreover, we see that female employees are not punished for having feminine preferences. Male employees on the other hand are punished in case they prefer feminine work values and orientations. The wage punishment is around twice as high in the masculine domain than in the feminine domain. These results seem to indicate that feminine preferences for certain work values and orientations are expected from a female employee whereas employers do not want their male employees to have such preferences.

Table 6
Impact of masculinity/femininity of wage, per sex and gender domain

	Female er	nployee	Male employee		
	В	Std. Err.	В	Std. Err.	
Gender neutral domain					
Masculinity of employee	0.031***	0.012	0.052***	0.013	
Femininity of employee	0.002	0.012	-0.025**	0.012	
Masculine domain					
Masculinity of employee	0.094**	0.047	0.079***	0.023	
Femininity of employee	-0.020	0.034	-0.056***	0.015	

Given that the masculinity and the femininity play an important role, we conclude this section by discussing the results of a wage-decomposition. The idea is thereby to reveal the percentage of the sex wage gap that can be closed by having preferences with respect to certain work values and orientations similar to the ones of the opposite sex. To do so, we decompose the wage as follows:

(1)
$$\log w_m - \log w_f = \beta_m (A_m - A_f) + \beta_m (E_m - E_f) + \beta_m (J_m - J_f) + \beta_m (G_m - G_f) + (\beta_m - \beta_f) X_f$$

With $logw_m$ and $logw_f$ the average log wage rate paid to male and female employees. Taking the results of the regressions, we decompose the wage gap on the right hand side into (1) age differences, (2) education differences, (3) job differences, (4) gender differences with respect to work values and orientation preferences and (5) differences in average return on those characteristics. (5) represents the unexplained sex wage gap and is sometimes taken as measure of discrimination. However, this is misleading as it also captures the impact of

omitted variables. Moreover, the choice of reference for any dummy included in the model affects the intercept, which is included in (5). This can cause problems with identification of the contribution of differences in return on each separate dummy variable (Oaxaca and Ranson, 1999). Table 7 reports on the percentage that each of the five aspects adds to the explanation of the sex wage gap in both the gender neutral and the masculine domain.

Table 7
Wage decomposition

	Gender neutral domain	Masculine domain
$\log w_m - \log w_f$	0.076	0.184
Difference in age	14.3%	8.1%
Difference in education	-11.4%	4.6%
Difference in job	5.1%	16.8%
Difference in gender	18.0%	19.9%
Unexplained	73.5%	50.6%

Table 7 shows that the wage decomposition indicates that in the gender neutral domain 73.5% and in the masculine domain 50.6% of the sex wage gap remains unexplained. Furthermore, we see that in both domains the difference in the gender preferences for certain work values and orientations between the two sexes explains nearly 20% of the sex wage gap. In other words, by having preferences for certain work values and orientations similar to men, female employees might reduce the sex wage gap by 18% in the gender neutral domain and by 19.9% in the masculine domain. The often provided argument for the sex wage gap that female employees earn less in particular for having chosen the wrong education (level and type) is not supported by our results. In the gender neutral domain the different choice of education by male and female students as a matter of fact reduces the sex wage gap, whereas for employees in the masculine domain the differences in education can only explain 4.6%. However, these results might be strongly influenced by the fact that graduates from particular fields of education are more likely allocated to a particular gender job domain. The sex wage gap is further relatively strong influenced by the difference in age of the employees (14.3% in the gender neutral domain and 8.1% in the masculine domain) and by job differences (5.1% in the gender neutral domain and 16.8% in the masculine domain).

6. Conclusion

Most wage surveys reveal that women earn less than men, even controlled for relevant background characteristics. The question remains to what extent the lower wage of women is explained by their biological state of being female (sex) on the one hand, and by preferences for certain work values and orientations that society assigns rather to women (gender) - and hence the (expected) lower productive value employers ascribe to female employees - on the

other hand. Because our data set provides information on both the application of work values and orientations in the current job and the importance attached to them by the employees, we are able to use these values and orientations to position both the jobs and the employees on a masculinity-femininity scale.

As for the allocation of employees over jobs, we found that both the gender allocation (allocation of the employees' masculine-feminine preferences for certain work values and orientations) and the sex allocation (allocation of male and female employees) over jobs is in line with the gender character (masculine-feminine character) of the jobs.

As for the wages we found that male employees earn some 6% more than female employees, and that the more masculine the preferences for certain work values and orientations of the employee (regardless of being male or female) the higher the wage is. However this impact of sex and gender only affects the wage in gender-neutral and masculine jobs. Furthermore, we found that female employees can reduce the sex wage gap in gender-neutral jobs by 18% and in masculine jobs by 20% by revealing masculine preferences with respect to certain work values and orientations, while male employees are punished (a lower wage) in these jobs for revealing feminine preferences for certain work values and orientations.

References

Altonji, J.G., Blank, R.M., 1999, Race and Gender in the Labor Market, in *Handbook of Labor Economics*, Volume 3C, Ashenfelter, O., Card, D. (eds.), New York: Elsevier, pp. 3143-3259.

Arrow, K.J., 1973, The theory of discrimination, in Ashenfelter, O., Rees, S. (eds.), *Discrimination in labor markets*, Princeton University Press, pp. 3-33.

Bakker, B.F.M., Tijdens, K.G., Winkels, J.W., 1999, Explaining gender wage differences, *Netherlands Official Statistics*, 14, pp. 36-41.

Blau, F.D., Kahn, L.M., 2000, Gender differences in pay, *NBER working paper 7732*, New York: NBER.

Blinder, A.S., 1973, Wage Discrimination: Reduced Form and Structural Estimates, *Journal of Human Resources*, Fall, pp. 436-455.

Bovenkerk, F., 1992, Testing Discrimination in Natural Experiments. A Manual for International Comparative Research on Discrimination on the Grounds of "Race" and Ethnic Origin: Geneva: International Labour Organisation.

Correll, S.J., 2004, Constraints into preferences: Gender, status, and emerging career aspirations, *American Sociological Review*, 69, pp. 93-113.

Eagly, A.H., 1987, Sex differences in social behavior: A social-role interpretation, Hillsdale NJ: Lawrence Erlbaum.

Eagly, A.H., Wood, W., Diekman, A.,B., 2000, Social role theory of sex differences and similarities: A current appraisal, in Eckes, T., Trautner, H.M. (eds.), *The developmental psychology of gender,* Mahwah NJ: Lawrence Erlbaum.

England, P., 1992, Comparable Worth: Theories and Evidence, New York: Aldine de Gruyter.

England, P., Reid, L.L., Kilbourne, B.S., 1996, The effect of sex composition of jobs on starting wages in an orgnisation: findings from the NLSY, *Demography*, 33, pp. 511-521.

Fiske, S.T., Cuddy, A.J., Glick, P., Xu, J., 2002, A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competence, *Journal of Personality and Social Psychology*, 82, pp. 878-902.

Foschi, M., 2000, Double standards for competence: Theory and research, *Annual Review of Sociology*, 26, pp. 21-42.

Glick, P., Zion, C., Nelson, C., 1988, What Mediates Sex Discrimination in Hiring Decisions, *Journal of Personality and Social Psychology,* August, pp. 178-186.

Glick, P., Wilk, K., Perrault, M., 1995, Images of occupations: Components of gender and status in occupational stereotypes, *Sex roles*, 32, pp. 565-582.

Hartog, J., 1992, Capabilities, allocation and earnings, Dordrecht: Kluwer Academic Publishers.

Heilman, M.E., 1984, Information as a Deterrent Against Sex Discrimination: The Effects of Applicant Sex and Information Type on Preliminary Employment Decisions, *Organizational Behavior and Human Performances*, April, pp. 174-186.

Hofstede, G., 1991, *Cultures and Organizations: Software of the Mind,* London: McGraw-Hill UK.

Lueptow, L.B., Garovich-Szabo, L., Lueptow, M.B., 2001, Social change and the persistence of sex typing: 1974-1997, *Social Forces*, 80, pp. 1-36.

Oaxaca, R., 1973, Male-Female Wage Differentials in Urban Labor Markets, *International Economic Review,* October, pp. 693-709.

Oaxaca, R., Ranson, M.R., 1999, Identification in the Detailed Wage Decomposition, *The Review of Economics and Statistics*, 81(1), pp. 154-157.

Phelps, E., 1972, The Statistical Theory of Racism and Sexism, *American Economic Review*, Vol. 52 (September), pp. 659-661.

Ridgeway. C.L., Smith-Lovin, L., 1999, The gender system and interaction, *Annual Review of Sociology*, 25, pp. 191-216.

Ridgeway, C.L., Correll, S.,J., 2004, Unpacking the Gender System: A Theoretical Perspective on Gender Beliefs and Social Relations, *Gender & Society*, Vol. 18 No. 4, August, pp. 510-531.

Riehle, D., 1996, Personalbeurteilung vor dem Hintergrund sozialer Kategorisierungsprozesse, Lengerich: Pabst Science Publishers.

Ruijter de, J.M.P., Doorne-Huiskes van, A., Schippers, J.J., 2003, Size and Causes of the Occupational Gender Wage-gap in the Netherlands, *European Sociological Review*, 19 (4), pp. 345-360.

Sattinger M., 1993, Assignment Models of the Distribution of Earnings, *Journal of Economic Literature*, Vol. 31 (June), pp. 831-880.

Schein, V.E., 1973, Between Sex Role Stereotypes and Requisite Management Characteristics, *Journal of Applied Psychology,* pp. 95-100.

Spence, J.T., Buckner, C.E., 2000, Instrumental and expressive traits, trait stereotypes, and sexist attitudes: What do they signify?, *Psychology of Women Quarterly*, 24, pp. 44-62.

Tomaskovic-Devey, D.,1995, Sex composition and gendered earnings inequality: a comparison of job and occupational models, in Jacobs, J.A. (ed.), *Gender Inequality at Work,* Thousand Oaks: Sage, pp. 25-56.

Tomaskovic-Devey, D., Skaggs, S., 1999, An establishement-level test of the statistical discrimination hypothesis, *Work and Occupation*, 26, pp. 422-445.

Treiman, D.J., Hartmann, H.I., 1981, Women, Work and Wages: Equal Pay for Jobs of Equal Value, Washington DC: National Academy Press.

Wagner, D.G., Berger, J., 1997, Gender and interpersonal task behaviors: Status expectation accounts, *Sociological Perspectives*, 40, pp. 1-32.

Weichselbaumer, D., 2004, Is it Sex or Personality? The impact of sex-stereotypes on discrimination in applicant selection, *Eastern Economic Journal*, 30 (2), Spring, pp. 159-186.