Fertility Discrimination in Hiring? Evidence from a Field Experiment*

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Abstract

In this paper, we conduct a correspondence testing experiment to examine whether employers discriminate among job candidates in relation to family status (for example, to whether or not children are present in the household and the age of those children). Our experiment relies on the fact that, in German speaking countries (Switzerland, Germany and Austria), cvs routinely include detailed information about the job candidate's personal characteristics. We consider 30-year old job applicants seeking secretarial or accounting positions. Preliminary findings suggest that, when applying for full-time jobs, having a family (indicated by the marriage and the presence of children, or by being married but childless) results in fewer invitations for an interview compared to single, childless individuals. For part-time jobs (females, only), having children raises the chances of getting a job interview.

JEL Codes: C93; J16; J71.

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1 Introduction

As of today, the early 21st century, females and males still have very different experiences in the labor market. These well-known differences in terms of differential pay, tenure track and career paths are documented in a very broad literature aimed at trying to explain the causes of those differences. Recent work by Polachek (2014) documents the fact that, despite equal pay legislation in place for over forty years, women in the UK experience a gender wage gap of 21%, while in France that gap is 17%; and for American women, despite equal pay legislation going back fifty years, the wage pay gap is 22%. While the gender wage gap is perhaps the single most well-known measure of how labor market experiences differ across genders, the process of hiring itself has been subject to scrutiny (see, e.g. Goldin and Rouse for the well-known case of orchestras and how hiring was affected by the lack of knowledge of the applicant's gender on the part of the selecting audition committee). Perhaps more effective in capturing the attention of the general public was *The Economist's* Glass Ceiling Index (2014). This index ranks countries in order to show "where women have the best chances of equal treatment at work. It combines data on higher education, labour-force participation, pay, child-care costs, maternity rights, business-school applications and representation in senior jobs. Each country's score is a weighted average of its performance on nine indicators." Not surprisingly, Norway, Sweden and Finland lead the ranking. The US, however, is only just above the OECD average. Our field study collects data in Switzerland, Germany and Austria. The latter two countries are just below the OECD average and Switzerland takes an unenviable 3rd place from the bottom in this ranking.

Despite the overwhelming evidence supporting the different experiences in the labor market attained by men and women, a clear and unequivocal proof as to whether some of those differences can be traced to discriminatory behavior by employers remains often illusive. For example, differences in pay can usually be explained to a significant degree by taking into consideration differences in human capital, and they essentially vanish when the comparison across genders is restricted to single men and single women. "The gender wage gap is largest (greater than 25%) between married men and married women with children." (Polachek) Thus, it could be that women and men chose different career paths following marriage and child bearing. The topic of discrimination has a long tradition in Economics, dating back to Becker (1957). Economists commonly define discrimination as a situation where individuals of identical productivity are treated differently because of the demographic group to which they belong. Ethnicity, age, gender and sexual orientation are typical examples of dimensions along which employers may discriminate and which have received a great deal of scrutiny in the literature.

Becker was the first to address the disfavorable treatment of particular groups of individuals in the labor market and its triggering causes. At the time of his pioneer contribution, he suggested that employers might have a distaste to work with certain groups, for example individuals with a migratory background (or blacks, at the time of his writing). If profit-maximizing employers have "discriminatory preferences," they will be less likely to hire individuals with a migratory background or will only hire them if they can pay them a lower wage – even if they are equally productive as natives. This form of discrimination is called "taste-based discrimination."

Phelps (1972) and Arrow (1973) proposed that differential treatment based on ethnicity might also be driven by "statistical discrimination." They argued that hiring decisions take place under incomplete information – at this stage the true productivity of an applicant is unknown. Because hiring mistakes can be costly, employers form expectations on the productivity of an applicant. For this they use not only individual information but also group information that may be correlated with productivity. If, for example, men are perceived to be more reliable (and thus more productive) on average than women, an employer will expect a randomly chosen man to be more productive than a randomly chosen woman applicant. Based on this expectation, the employer might grant the man preferential treatment in hiring. We label this differential treatment as "gender discrimination" in hiring.¹

One of the classic examples for statistical discrimination used in textbooks is that employers may abstain from hiring women because they are more likely than men to take maternity leave and hence may not be available for the employer for a substantial time period. Further, mothers of young children may have higher degrees of absenteeism

¹Note that strictly speaking "statistical discrimination" is not "economic discrimination" according to the above definition because, when "statistically discriminating", employers make rational decisions under uncertainty that are correct on average and are not based on discriminatory tastes.

relative to other employees because of child related chores (for example when the child is ill). The question we seek to answer in this study is whether or not discrimination of women at the hiring stage (in the access of candidates to job interviews) occurs primarily because of fertility concerns by employers.

Experiments that examine the hiring probability of women relative to men can be criticized for not necessarily detecting discrimination but possibly just *statistical discrimination* due to women's higher probability of maternity leave and other maternity related costs (Heckman 1998). Given that pregnancy and maternity leave are prime examples for statistical discrimination in hiring, it is surprising that the fertility aspect has hardly been covered by the empirical literature. A potential reason for this is the lack of suitable data. We therefore use correspondence testing as an experimental technique to gather data that allows us to examine whether the probability of pregnancy or the presence of children in the household indeed has a significant influence on the hiring changes of women.

In Correspondence Testing, résumés of applicants that are matched in all relevant qualifications, like schooling and job experience, but which differ with respect to their demographic characteristics, are sent out in response to job advertisements. If one applicant is invited to an interview more often than the other, then this can be assigned to discrimination. The German-speaking labour market – comprised mostly of Germany, Switzerland and Austria – is especially suited for this kind of project since, in those countries, it is typical for candidates to include detailed demographic information in their cvs, such as age, gender, marital status and number of children.

While a few Correspondence Testing studies on sex discrimination have been conducted in the past (see Riach and Rich (2002) for an overview), no such study has so far been able to isolate the effect of potential fertility. For this, we compare women who are at different stages of the maternity cycle. By suitably choosing the demographic characteristics of different women – e.g. one with children already some years in the past whereas the other has no children to date – it will be possible to convey to the employer that the former is very likely to have completed her family planning whereas the latter is as likely to have children as a fertile woman her age. By further tailoring the demographic characteristics appropriately, one will be able to infer the relative importance of the costs of caring for small children vis-a-vis maternity leave in the employability of a female candidate. Finally, the comparison between women whose family planning is likely to be complete and similar men will allows us to ascertain whether there are elements other than fertility that make employers routinely discriminate across genders.

2 Institutional Background

We next describe briefly the institutional background in Germany and Switzerland.

2.1 Maternity Leave

Germany This country provides an ideal setting for analyzing fertility discrimination as it has one of the most generous regulations concerning maternity leave. In fact, women can take up to three years of maternity leave during which they can generally not be laid off; maternity leave is compulsory during the first 8 weeks after birth, and voluntary 6 weeks prior to due date. This 14-week period is called the *maternity protection period*. During the maternity protection period, wages are paid in full. From week 9 after birth, maternity leave is voluntary. A generous "paternity allowance" (ca. 2/3 of previous wage) for 12 months gives strong incentives to stay at home. Under some conditions (including, for example, the company having more than 15 employees and the labor contract being longer than 6 months), there is a right to work part-time during the leave.

Since 2006, there are no more direct costs to the employer in connection with the continued wage payment during the maternity protection period. There are still (direct) costs of advertising for temporary replacement plus disruption costs concerning the organization of the workplace as the employment of the worker is protected for up to three years.

Switzerland In Switzerland, no firing is permitted during pregnancy and during maternity leave. The maternity leave is of 14 weeks and only applies to the mother. During maternity leave, the mother receives 80% of her former salary up to a maximum of CHF 196 per day. The employer can either top up the remaining 20% or extend maternal leave to 16 weeks. Cantons and/or unions can foresee other benefits. According

to the law, the employer is not allowed to ask for pregnancy during hiring process. And, should the employer ask, the woman has the right to lie. In Switzerland, there is no parental leave for the father. If the mother wishes to go back to work but only part-time after birth, this must be agreed to by the employer.

In Switzerland, there are thus seemingly lower organizational costs for the employer, compared to Germany, though there are some financial costs.

2.2 Penalties for Discrimination

Both Switzerland and Germany have bodies of legislation addressing inadequate behavior concerning the equal treatment of individuals. In Germany, for example, this is considered in The General Equal Treatment Act (Allgemeines Gleichbehandlungsgesetz). Though these legislative pieces address multiple instances of discriminatory behavior, gender is explicitly considered. For example, in the General Equal Treatment Act 2006, § 1, it is stated that "The objective of the law is to prevent or remove discrimination on the basis of [...] gender [...]."

The corresponding law in Switzerland is the Federal Act on Gender Equality (Bundesgesetz über die Gleichstellung von Frau und Mann, 1995)). Article 3, titled "Prohibition of Discrimination," states that "Employees must not be discriminated against on the basis of their sex, whether directly or indirectly, including on the basis of their marital status, their family situation or, in the case of female employees, of pregnancy."

The evidence on the low number of suites filed by employees (or job applicants) suggest that antidiscrimination law does play a big role in the labor market. This could be because companies do not discriminate or for other reasons (e.g. the burden of proof demanded from the plaintiff may be too high to realistically meet).

2.3 Job Application Process

German speaking countries provide an ideal setting for analyzing fertility discrimination. This is so since the application process is rather "traditional." There are no employerprovided application forms (as it is the case, for example, in the UK). Instead, typical job application packages consist of a cover letter, the CV, scans of certificates (school, apprenticeships, languages, etc) in response to job advertisements. One crucial feature which we rely on is the fact that personal information, such as marital status, household composition and number of children, is routinely included in the CV. In our field experiment, we explore this possibility and convey information on the cv about the age and number of children as well as on the marital status of the applicant.

3 Correspondence Testing

In this paper, we describe results from a field study which relied on the methodology of Correspondence Testing. As stated earlier, in Correspondence Testing, résumés of applicants that are matched in all relevant qualifications, like schooling and job experience, but which differ with respect to their demographic characteristics, are sent out in response to job advertisements. If one applicant is invited to an interview more often than the other, then this can be assigned to discrimination.

Correspondence studies differ from audit studies in important ways. In audit studies, "actors" go for actual job interviews. Those studies have been criticized because "soft factors" (like looks and personality) are likely to affect the outcomes. On the other hand, one advantage of audit studies is the possibility of going beyond the initial stage of receiving an invitation for an interview – or being turned down for one.

3.1 Brief Literature Review

We are aware of only three other corresponding testing experiments that explored the fertility angle. The pioneer study is due to Firth (1982), focussing on the market for accountants in the UK. In response to newspaper job advertisements for accountants, he sent multiple job applications from equally qualified and experienced workers. Job candidates in this study differed in their gender (males and females), ethnic group (blacks and whites), marital status (single and married), and in the number of children (two children versus no children). "The results showed a significant level of discrimination against women and this was enhanced for those who were Colored, and/or those who were married and had children."

The other correspondence testing studies known to us are Petit (2007) and Duguet and Petit (2008), focussing on the French financial sector. They find that "... the access differences to job interviews by women and men are primarily explained by the expectation of a maternity by young women..." [INCOMPLETE.]

3.2 Our Study

Our fertility study focusses on Germany and Switzerland. Over a period of roughly two years, we sent out application packages consisting of a cover letter, a CV, language certificates, reference letters, as well as documents with degree and grade information. In all cases, two applications were sent to each company. We randomized treatment effects (more on this below), but also other elements in the CV such as the picture and name of the candidate as well as the general template of the application. (A template determined the general visual aspect of the application and was additionally tied in to a particular life story – birthplace, names of schools attended and jobs previously held, references, and so on).

The main focus of our study was on the candidates' "fertility types." More specifically, we considered the constellation of personal and demographic attributes that conveyed a particular probability of future pregnancy and/or of chores related to the presence of small children in the household. We conjectured that, if we could devise a way to tell the employer that "fertility is not an issue anymore," the employment probability of such a job candidate should be higher. For example, we expected that, upon receiving an application from a 30 year old woman with 2 kids of ages 7 and 9, the employers would likely think that such a person would no longer be having more children; further, that chores with small children would also not be an issue anymore. This seemed to be an ideal employee from the point of view of fertility related costs.

We further recognized the importance of comparing the employability of job candidates while holding gender constant. In other words, the correct cost of pregnancy – if it exists and is a factor in considering people for employment – must be inferred across fertility types within the same gender (thus across women with varying numbers of children and children's ages as well as marital status; or across men with the same differing demographics). In our study, applications for both men and women were sent out.

Our fertility types were the following:

• No kids, single (default)

- No kids, married
- 2 old kids (ages 7, 9)
- 2 young kids (ages 3, 5)
- No info case (the cv contained no demographic information)

All fertility types indicating the presence of children additionally stated that the job candidate is married as well.

In the context of our study, we applied to secretarial and accounting jobs in Germany (Berlin, Hamburg, Munich, Cologne, Frankfurt and Stuttgart) as well as in Switzerland (Bern, Zürich and Basel). We sent out applications to all suitable job advertisements posted in online job portals (suitability meant that some filtering was previously done to remove, for example, job hunters, likely to keep our profiles in their records at least for some time). Our candidates were 30-year old men and women. We recorded the outcomes of these applications, ranging from no answer to an invitation to attend a job interview, and including requests for additional information in between. Answers from the employers were received by email or mobile phone (rejections always came by email, but invitations sometimes were conveyed in the form of voice messages to our comboxes). Whenever our candidates received a positive answer (invitation for an interview), in order to minimize costs for the employer, these were quickly declined alleging that another offer had materialized in the mean time.

4 Results [Very Preliminary!]

In this section, we outline our results.

Starting Point We start with the comparison of the average unconditional probability of being invited for a job interview across genders.

Probability invite :	СН	DE
Women	16%	20.3
Men	7.8%	11.8%

The simple average of the positive responses (invitation for an interview) indicates that women receive many more positive answers than do men. This is the case for both countries in our sample. A χ -square test shows further that these differences are statistically significant:

Invitation	female	male	
	0	1	Total
+		+	
0	7,944	3,808	11,752
	67.6	32.4	100.00
+		+	
1	1829	431	2,260
	80.93	19.07	100.00
+		+	
Total	9,773	4,239	14,012
I	69.75	30.25	100.00

Pearson chi2(1) = 159.6734 Pr = 0.000

Thus, in our sample, women are by far invited more frequently compared to identical males. Our findings resonate with those in Riach and Rich (2006) concerning discrimination of men in female dominated sectors.

In what follows, we present linear regressions of the 0-1 variable "Invitation for job interview" on the fertility types, company size, quality of the application (reflecting how complete the set of sent documents was), while including sectoral dummies as well. Our default fertility type is "single, no kids." We partitioned our sample according to gender and further ran two different regression types:

- OLS regressions, having restricted the sample to contain only complete pairs (female/female or male/male)
- Fixed Effects (paired applications sent to each company)

All tables are shown at the end of the paper.

4.1 Full-Time Jobs

OLS, Females Table 1 presents the OLS results for women seeking full-time jobs. Different columns are associated with alternative partitions of the sample. Column (1) includes the entire female sample for both countries. Column (3) refers to Germany only, columns (4) and (5) represent subsets of the latter for accounting and secretarial jobs, respectively. Column (6) considers Switzerland, and columns (7) and (8) further split the latter into accounting and secretarial jobs. As mentioned, our default fertility type is "single, no kids." The first four regressors list the remainder fertility types.

Compared to "single no children," all family types (married no children, young children, old children) are seen as less favorable. We infer this from the fact that the first three rows have negative signs almost everywhere. However, this effect is only statistically significant for Swiss accountants when two young children are present.

Other significant variables in OLS worth mentioning include Ad_bad fit. This variable was coded as a self-assessed measure of how well our fixed candidate profile matched the specifications of the job advertisement. Thus, a high value of this variable indicated that our candidate was not a good fit for the stated job requirements. As expected, the estimated coefficients are negative. The variable Ad_female coded the instances when the job ad specifically asked for a female employee. As expected, this variable significantly raises the chances of women receiving an invitation for an interview in our sample.

FE, Females The flavor of the company fixed-effects regression is similar to those under OLS (Table 2). Here, having old children is also penalized by companies in Switzerland, concerning accounting jobs. Being married but childless is also significant when the whole sample is concerned, adversely affecting the probability of receiving an invitation for an interview; the same is true when two old kids are present.

OLS, Males Table 3 shows the results for men looking for full-time jobs. The columns of the table show sample partitions that resemble those of the female tables above. Our results are now markedly different across countries. We find a significant negative effects of having a family in Germany when accounting jobs are concerned. The pattern of

results is strikingly different for Switzerland: most coefficients associated with having a family are positive, and the one associated with the presence of two young children is significant (at 10%) when the whole Swiss sample is concerned. These results are consistent with a paternalistic view of the family, arguably a characteristic of Swiss society. Thus, one possible interpretation of our results is that companies support fathers of young children by inviting them to a job interview, more favorably so than other fertility types. The underlying rationale for the differences across genders could be routed in the idea that women are more likely to be looking after the children (and thus to suffer from the "costs" that their presence may bring), whereas males are the breadwinners supporting the family and who need to be encouraged and supported themselves.

FE, Males The effects mentioned above all but vanish when we use fixed effects (Table 4).

4.2 Part-Time Jobs

OLS, Females We observe rather different pattern for part-time jobs compared to the earlier results. In Table 5, we now find significant positive effects associated with the presence of children for secretaries in Germany, both for young and old children. Companies may expect that, in part-time positions, everyone has kids, and may try to employ those that are "done" regarding their fertility. An alternative explanation would be that companies may perceive individuals without children wanting to work part-time as showing poor commitment and so disregard them in favor of those with children.

FE, **Females** The pattern described for the OLS results above repeats itself in the FE regressions (Table 6), and the coefficients are now more significant than before.

Other We were not able to gather enough data to analyze male part-time jobs.

4.3 To Do

Our results are still very preliminary. On our immediate task list, we include the following: • Examining whether different partition of responses into "yes" or "no" have an effect

Our left-hand side variable was coded with a 1 whenever there was a clear invitation for an interview; but occasionally companies wrote to our applicants asking for different kinds of additional information (questions about intended salary or documentation). These were clear indications of interest. It would thus appear legitimate to consider alternative codings of the responses into zeros and ones

- We would like to explore additional variables in the data:
 - Control for mention of "family planning completed"
 - We randomly included a sentence indicating "family planning completed" in our data; we would like to assess empirically whether or not this made a difference in the hiring probability of our candidates
 - Control for local labor market data, in particular including local unemployment figures and other indicators of labor market conditions

5 Conclusion

We have run a correspondence testing experiment across several cities in Switzerland and Germany. Our goal was to examine whether any differential treatment given by firms to our applicants could be imputed to the candidate's fertility profiles (specifically, the number and ages of children in the family as well as the candidate's marital status). Our candidates were 30 years of age, had comparable personal histories in terms of education and job experience. They differed in their fertility types: some were single and childless, some were married and childless, and, among the married with children, we considered those with two young or two old children. The age difference was meant to signal the likelihood of children-related chores, more likely to be the case when young children are present in the family.

Our sample reveals the following preliminary findings. Women do significantly better on average in secretarial and accounting jobs relative to men in both countries.

Having a family influences the chances of getting a job interview for both genders, though the pattern of this influence further depends on other attributes (such as whether the occupations are part-time or full-time). Family tends to hurt the chances of being invited for an interview in full-time jobs. Though this is true for both genders, this pattern is clearer for women than for men. In part-time jobs, however, having children can increase the chances of getting an interview. (The latter is only applicable to women as we did not get enough observations for males in part-time jobs).

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Treatment I	Effect – OLS w	ith sample res	tricted to com	plete pairs –	Females – F	ull-Time	
2 I I	(1)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	All countries	DE	DE Acc	DE Sec	CH	CH Acc	CH Sec
				12.000		10 STREET	
indv_married_nokids	-0.02457	-0.02691	0.00276	-0.04211	-0.02549	-0.04347	-0.01727
	(0.023)	(0.032)	(0.054)	(0.038)	(0.037)	(0.063)	(0.047)
indv_2oldkids	-0.00335	-0.01052	-0.00817	-0.02385	-0.01164	-0.01480	-0.04355
	(0.025)	(0.033)	(0.053)	(0.042)	(0.040)	(0.065)	(0.047)
indv 2youngkids	-0.02511	-0.01343	-0.00417	-0.03461	-0.04505	-0.14483**	0.02088
	(0.024)	(0.033)	(0.057)	(0.041)	(0.036)	(0.060)	(0.044)
indv noinfocase	0.00069	0.02752	0.03698	0.01143	-0.04325	-0.11895	0.01518
	(0.025)	(0.035)	(0.058)	(0.045)	(0.042)	(0.073)	(0.046)
app quality low	-0.02955				-0.03219		
	(0.046)				(0.047)		
app quality average	0.00204	-0.00240	-0.00730	-0.00285	-0.00317	-0.01562	0.00949
	(0.011)	(0.015)	(0.022)	(0.020)	(0.019)	(0.030)	(0.023)
ad averagefit	-0.01319	-0.03981	-0.01402	-0.04677	0.02390	-0.00372	0.08644**
	(0.021)	(0.028)	(0.050)	(0.034)	(0.034)	(0.054)	(0.042)
ad badfit	-0.08921***	-0.10577***	-0.13057***	-0.06502	-0.06521*	-0.09057	0.02506
_	(0.022)	(0.030)	(0.050)	(0.040)	(0.037)	(0.056)	(0.046)
app sentencekids	-0.03596*	-0.03901	-0.00993	-0.05279	-0.02483	-0.02713	0.00092
· · _	(0.020)	(0.028)	(0.046)	(0.033)	(0.032)	(0.051)	(0.042)
indv picture alissa	0.02106**	0.01468	-0.00367	0.02861	0.00653	0.01640	0.00864
_1 _	(0.009)	(0.013)	(0.019)	(0.018)	(0.015)	(0.025)	(0.020)
firm employees 501 1000	-0.08552**	-0.13352***	-0.11109	-0.15444**	0.03846	0.07278	-0.07459
_ 1 5	(0.037)	(0.051)	(0.088)	(0.065)	(0.070)	(0.112)	(0.055)
firm antidiscrimination	-0.00430	0.00030	0.21417^{*}	-0.11205**	-0.04078	0.00339	-0.14973**
	(0.048)	(0.060)	(0.129)	(0.054)	(0.073)	(0.100)	(0.061)
ad female	0.07435**	0.26597	0.73678***	0.14555	0.08569**	-0.01528	0.14443***
	(0.033)	(0.217)	(0.086)	(0.235)	(0.034)	(0.054)	(0.042)
Constant	0.08274	0.38753***	0.17697	0.18502*	0.01152	0.40523**	-0.00157
	(0.139)	(0.128)	(0.230)	(0.109)	(0.233)	(0.183)	(0.097)
	()	()	()	()	()	()	()
Observations	3,280	1.890	834	1.042	1.042	472	506
R-squared	0.051	0.052	0.060	0.059	0.084	0.134	0.092
*	P	chust standar	d owners in per	anthosos	and a real for the star of	1000 100 100 100 100 100 100 100 100 10	100 00 00 00 000 000 000 000 000 000 00

	Tre	atment Effect	: – FE – Fema	ales – Full-Ti	me		
VARIABLES	(1) All countries	$\stackrel{(3)}{ ext{DE}}$	$\overset{(4)}{ ext{DE}}$ Acc	(7) DE Sec	(10) CH	(11) CH Acc	(14) CH Sec
indv_married_nokids	-0.04836^{**} (0.022)	-0.03937 (0.030)	-0.02795 (0.046)	-0.04769 (0.039)	-0.03967 (0.034)	-0.08296 (0.057)	${0.01048 \atop (0.041)}$
indv_2oldkids	-0.05103^{**} (0.024)	-0.06223* (0.032)	-0.08213 (0.052)	-0.05535 (0.041)	-0.06237 (0.039)	-0.14657** (0.065)	$\begin{array}{c} 0.02192 \\ (0.047) \end{array}$
indv_2youngkids	$-0.03690 \\ (0.023)$	-0.02615 (0.030)	-0.05106 (0.049)	-0.01121 (0.039)	-0.05328 (0.038)	-0.15584*** (0.060)	${\begin{array}{c} 0.04453 \\ (0.050) \end{array}}$
indv_noinfocase	-0.01059 (0.025)	-0.02423 (0.033)	-0.03771 (0.051)	-0.02404 (0.044)	$\binom{0.01905}{(0.044)}$	-0.05404 (0.069)	${\begin{array}{c} 0.08222 \\ (0.057) \end{array}}$
app_quality_low	-0.07772 (0.081)				-0.08453 (0.084)		
app_quality_average	$\begin{array}{c} 0.00032 \\ (0.011) \end{array}$	-0.01561 (0.015)	-0.01478 (0.021)	-0.01606 (0.020)	$\begin{array}{c} 0.01708 \\ (0.017) \end{array}$	0.01599 (0.027)	$\begin{array}{c} 0.01967 \\ (0.020) \end{array}$
app_sentencekids	$\begin{array}{c} 0.00629 \\ (0.019) \end{array}$	$\binom{0.01941}{(0.025)}$	$\substack{0.06212^{*}\\(0.035)}$	-0.02386 (0.035)	-0.00742 (0.030)	-0.00993 (0.050)	$\substack{-0.01662 \\ (0.041)}$
indv_picture_alissa	0.02086** (0.009)	${ 0.01470 \atop (0.013) }$	-0.00508 (0.018)	$\begin{array}{c} 0.02819 \\ (0.018) \end{array}$	$\begin{array}{c} 0.00618 \\ (0.015) \end{array}$	0.01180 (0.024)	$\begin{array}{c} 0.00930 \\ (0.019) \end{array}$
template	$\begin{array}{c} 0.00909 \\ (0.009) \end{array}$	$\begin{array}{c} 0.01576 \\ (0.013) \end{array}$	$\substack{0.03650^{**}\\(0.018)}$	-0.00325 (0.018)	$\substack{-0.00425 \\ (0.015)}$	-0.00608 (0.025)	$\substack{-0.01045 \\ (0.020)}$
Constant	0.20196*** (0.021)	0.21451*** (0.028)	${\begin{array}{c} 0.24260^{***}\\(0.042)\end{array}}$	$0.20094^{\ast\ast\ast} \\ (0.037)$	$\begin{array}{c} 0.19107^{***} \\ (0.035) \end{array}$	$0.30594^{***} \\ (0.057)$	$\substack{0.08633^{*}\\(0.049)}$
Observations R-squared Number of pair	4,709 0.009 3,069	2,795 0.009 1,850	1,246 0.020 829	$1,526 \\ 0.014 \\ 1,005$	1,379 0.020 858	656 0.054 420	631 0.019 378

	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	All countries	DÉ	DE Ácc	DÈ Sec	ĊΉ	CH Ácc	CH Sec
indy married nokids	-0 09780**	-0 15652**	-0 22470**	-0.08953	0.01560	0 11063	-0.06642
	(0.043)	(0.064)	(0.105)	(0.056)	(0.066)	(0.127)	(0.059)
indy 20ldkids	-0.05442	-0 07459	-0 21502**	0.04202	0 02473	0.05167	-0.03405
	(0, 0.39)	(0.062)	(0.107)	(0.059)	(0.049)	(0.088)	(0.061)
indy 2voungkids	-0.07810*	-0 14674**	-0 25506**	-0.04081	0 12887*	0 14621	0 04548
	(0.040)	(0.059)	(0.101)	(0.057)	(0.065)	(0.116)	(0.065)
indy noinfocase	-0.07209*	-0.08738	-0 22480*	-0.00066	-0.03332	-0.05538	-0.04891
	(0.044)	(0.069)	(0.121)	(0.065)	(0.049)	(0.102)	(0.048)
app quality low	0.03060	()		()	-0.01576	()	()
	(0.181)				(0.179)		
app quality average	0.00871	0.00694	0.03176	-0.02013	-0.02741	-0.03693	-0.02997
11_1 0_ 0	(0.018)	(0.028)	(0.054)	(0.033)	(0.023)	(0.037)	(0.035)
ad averagefit	0.01877	0.04663	0.09918	-0.01170	-0.04714	0.11008	-0.06892
	(0.032)	(0.047)	(0.071)	(0.053)	(0.037)	(0.068)	(0.043)
ad badfit	-0.01052	-0.04069	-0.04734	-0.09803*	0.09148*	0.27649*	0.09273*
	(0.034)	(0.048)	(0.080)	(0.052)	(0.054)	(0.143)	(0.054)
firm employees 501 1000	-0.03885	-0.06754	-0.45883***	0.14722**	-0.01661	-0.22827	-0.04747
	(0.051)	(0.073)	(0.161)	(0.072)	(0.061)	(0.228)	(0.067)
firm_employees_1000plus	0.03441	0.07517	-0.20428	0.19283**	-0.05591	0.02694	-0.22974**
	(0.052)	(0.083)	(0.184)	(0.086)	(0.086)	(0.135)	(0.096)
firm antidiscrimination	-0.03026	-0.01392	0.09409	-0.07677	-0.15929*	-0.18966	
. — .	(0.070)	(0.097)	(0.164)	(0.096)	(0.085)	(0.129)	
indv_picture_yashar	0.00222	0.00128	-0.04984	0.03787	-0.00918	0.00053	-0.00912
	(0.016)	(0.025)	(0.044)	(0.029)	(0.021)	(0.026)	(0.040)
ad_male	0.25775				0.16968	0.10159	0.31298**
	(0.179)				(0.160)	(0.202)	(0.149)
Constant	0.48035^{*}	0.20121	0.40751^{*}	-0.26425	0.40473	-0.47226*	0.16872
	(0.246)	(0.127)	(0.225)	(0.161)	(0.337)	(0.277)	(0.111)
Observations	746	456	204	250	212	106	96
R-squared	0.105	0.124	0.223	0.159	0.278	0.336	0.472

Treatment Effect - OLS with sample restricted to complete pairs - Males - Full-Time

	Treatn	nent Effect -	FE - Male	es – Full-T	ime		
VARIABLES	(2) All countries	(3) DE	(4) DE Acc	(7) DE Sec	(10) CH	(11) CH Acc	(14) CH Sec
indv_married_nokids	-0.07157* (0.042)	$-0.03391 \\ (0.062)$	-0.03234 (0.088)	$\substack{-0.04522 \\ (0.085)}$	-0.10352* (0.059)	$\substack{-0.04217 \\ (0.039)}$	$\substack{-0.14930 \\ (0.097)}$
indv_2oldkids	-0.00219 (0.045)	$\substack{0.04807 \\ (0.070)}$	$\begin{array}{c} 0.00666 \\ (0.122) \end{array}$	$\begin{array}{c} 0.07471 \\ (0.078) \end{array}$	-0.06595 (0.046)	$\substack{-0.07766 \\ (0.078)}$	$\substack{-0.06729 \\ (0.052)}$
indv_2youngkids	-0.00885 (0.037)	$\substack{0.02638 \\ (0.060)}$	$\substack{-0.01659 \\ (0.099)}$	$\begin{array}{c} 0.05494 \\ (0.074) \end{array}$	-0.02735 (0.037)	$\substack{-0.04880 \\ (0.056)}$	$\substack{-0.00964 \\ (0.047)}$
indv_noinfocase	-0.01985 (0.038)	$\substack{0.01921 \\ (0.066)}$	$\substack{-0.00516 \\ (0.108)}$	$\substack{0.02813 \\ (0.085)}$	-0.05304* (0.032)	$\substack{-0.03911 \\ (0.061)}$	$\substack{-0.07161 \\ (0.055)}$
app_quality_low	0.00768 (0.047)				$\binom{0.05818}{(0.057)}$		
app_quality_average	-0.00020 (0.017)	$\begin{array}{c} 0.00314 \\ (0.027) \end{array}$	${\begin{array}{c} 0.03546 \\ (0.048) \end{array}}$	$\substack{-0.02644 \\ (0.032)}$	-0.01051 (0.010)	$\begin{array}{c} 0.01159 \\ (0.021) \end{array}$	$\substack{-0.01504 \\ (0.022)}$
template	-0.00549 (0.016)	$\substack{-0.01351 \\ (0.023)}$	$\begin{array}{c} 0.00270 \\ (0.037) \end{array}$	$\substack{-0.01921 \\ (0.027)}$	$\binom{0.00777}{(0.018)}$	$\substack{-0.00896 \\ (0.037)}$	${\begin{array}{c} 0.01513 \\ (0.033) \end{array}}$
indv_picture_yashar	0.00440 (0.016)	$\substack{0.00961 \\ (0.025)}$	$\substack{-0.03323 \\ (0.044)}$	$\substack{0.04249 \\ (0.028)}$	-0.00148 (0.018)	$\substack{-0.00496 \\ (0.019)}$	$\substack{-0.00565 \\ (0.036)}$
Constant	0.13634*** (0.036)	$\substack{0.12593^{**}\\(0.060)}$	${\begin{array}{c} 0.19709^{*}\\ (0.107) \end{array}}$	$\substack{0.06573 \\ (0.063)}$	$\substack{0.13244^{***}\\(0.040)}$	$\substack{0.17987^{**}\\(0.084)}$	${0.09242 \atop (0.059)}$
Observations R-squared Number of pair	$2,175 \\ 0.013 \\ 1,802$	1,361 0.012 1,133	616 0.017 514	734 0.056 609	549 0.064 443	290 0.039 237	221 0.152 173

Treatment Effect – OLS with sample restricted to complete pairs – Females – Part-Time							
VARIABLES	(1) All countries	(3) DE	$\overset{(4)}{\text{DE Acc}}$	(5) DE Sec	(6) CH	(7) CH Acc	(8) CH Sec
indv_married_nokids	-0.02118 (0.034)	$-0.09091 \\ (0.075)$	$\substack{-0.20529 \\ (0.139)}$	$\substack{-0.01956 \\ (0.079)}$	$\substack{-0.00439 \\ (0.040)}$	$\substack{-0.00354 \\ (0.079)}$	-0.00601 (0.047)
indv_2oldkids	0.07172* (0.043)	${\begin{array}{c} 0.07488 \\ (0.088) \end{array}}$	$\substack{-0.18767 \\ (0.147)}$	${\begin{array}{c} 0.19598^{*}\\ (0.108) \end{array}}$	$\begin{array}{c} 0.05851 \\ (0.055) \end{array}$	$\substack{0.03909 \\ (0.085)}$	0.09124 (0.071)
indv_2youngkids	0.04144 (0.039)	$\begin{array}{c} 0.06557 \\ (0.079) \end{array}$	$\substack{-0.17706 \\ (0.138)}$	${\begin{array}{c} 0.19630^{*} \\ (0.101) \end{array}}$	${\begin{array}{c} 0.02908 \\ (0.050) \end{array}}$	$\substack{-0.02142 \\ (0.088)}$	$\begin{array}{c} 0.08784 \\ (0.061) \end{array}$
indv_noinfocase	-0.01233 (0.043)	$\substack{-0.05473 \\ (0.079)}$	$\substack{\textbf{-0.11021}\\(0.156)}$	$\substack{-0.00883 \\ (0.092)}$	$\begin{array}{c} 0.01473 \\ (0.059) \end{array}$	$\substack{-0.08426 \\ (0.095)}$	$\begin{array}{c} 0.10170 \\ (0.072) \end{array}$
app_quality_average	0.01103 (0.016)	$\substack{-0.00222\\(0.032)}$	$\substack{-0.00655 \\ (0.051)}$	$\begin{array}{c} 0.00124 \\ (0.039) \end{array}$	$\begin{array}{c} 0.01266 \\ (0.020) \end{array}$	$\substack{-0.02709 \\ (0.032)}$	$\begin{array}{c} 0.04277 \\ (0.027) \end{array}$
ad_averagefit	-0.01265 (0.033)	$\substack{-0.04206 \\ (0.064)}$	$\begin{array}{c} 0.03273 \\ (0.118) \end{array}$	$\substack{-0.03319 \\ (0.072)}$	$\substack{-0.02372 \\ (0.042)}$	$\substack{-0.10790 \\ (0.068)}$	-0.00534 (0.053)
ad_badfit	-0.05619 (0.041)	$\substack{-0.07084 \\ (0.083)}$	$\substack{-0.03290 \\ (0.147)}$	$\substack{-0.04831 \\ (0.095)}$	$\substack{-0.04797 \\ (0.051)}$	$\substack{-0.05696 \\ (0.079)}$	-0.06351 (0.065)
indv_picture_alissa	0.02632^{*} (0.014)	${\begin{array}{c} 0.03189 \\ (0.028) \end{array}}$	${0.06946 \atop (0.047)}$	$\substack{-0.01109 \\ (0.038)}$	${0.01943 \atop (0.017)}$	${\begin{array}{c} 0.04483 \\ (0.030) \end{array}}$	$\begin{array}{c} 0.00539 \\ (0.025) \end{array}$
Constant	0.09058 (0.248)	$\begin{array}{c} 0.04476 \\ (0.192) \end{array}$	${\begin{array}{c} 0.49619 \\ (0.535) \end{array}}$	${\begin{array}{c} 0.12076 \\ (0.245) \end{array}}$	$\begin{array}{c} 0.10201 \\ (0.277) \end{array}$	$\substack{0.25462 \\ (0.227)}$	$ \begin{array}{c} 0.09030 \\ (0.157) \end{array} $
Observations R-squared	$1,216 \\ 0.094$	386 0.150	156 0.337	228 0.196	710 0.087	326 0.186	352 0.097

	Trea	atment Effect	- FE - Fema	les – Part-Tu	me	(11)	
VARIABLES	(1) All countries	(3) DE	$\overset{(4)}{\text{DE Acc}}$	DE Sec	(10) CH	$^{(11)}_{CH Acc}$	(14) CH Sec
indv_married_nokids	-0.06946^{**} (0.034)	-0.08058 (0.079)	-0.11478 (0.120)	-0.03365 (0.098)	-0.06141 (0.038)	-0.08130 (0.073)	-0.04615 (0.051)
indv_2oldkids	0.04835 (0.040)	0.11539 (0.080)	-0.04247 (0.141)	$\substack{0.28082^{***}\\(0.097)}$	-0.00363 (0.044)	-0.02866 (0.075)	$\begin{array}{c} 0.01701 \\ (0.053) \end{array}$
indv_2youngkids	-0.01526 (0.039)	0.04418 (0.080)	-0.15395 (0.120)	0.25739^{**} (0.104)	-0.02155 (0.044)	-0.05123 (0.080)	$\frac{0.00572}{(0.050)}$
indv_noinfocase	-0.01730 (0.039)	-0.02416 (0.073)	-0.04170 (0.127)	-0.01789 (0.085)	$\begin{array}{c} 0.00119 \\ (0.050) \end{array}$	-0.10473 (0.082)	0.08199 (0.063)
app_quality_low	$\substack{0.02317 \\ (0.059)}$				-0.00952 (0.063)		
app_quality_average	0.00690 (0.016)	-0.01381 (0.031)	-0.01664 (0.042)	$\frac{0.01365}{(0.037)}$	$\begin{array}{c} 0.01699 \\ (0.019) \end{array}$	-0.01651 (0.030)	0.03888* (0.023)
app_sentencekids	-0.02991 (0.029)	-0.07999 (0.056)	$\begin{array}{c} 0.01438 \\ (0.075) \end{array}$	-0.18773** (0.078)	$\substack{0.00966\\(0.030)}$	$\begin{array}{c} 0.01094 \\ (0.050) \end{array}$	0.00911 (0.040)
indv_picture_alissa	0.02877** (0.014)	0.03262 (0.028)	$ \begin{array}{c} 0.06582 \\ (0.041) \end{array} $	-0.01690 (0.037)	$\binom{0.02266}{(0.017)}$	${0.04931^{st}\over (0.027)}$	$\begin{array}{c} 0.00837 \\ (0.024) \end{array}$
template	-0.00059 (0.014)	-0.01818 (0.028)	$\begin{array}{c} 0.02693 \\ (0.042) \end{array}$	$\substack{-0.08491^{**}\\(0.037)}$	$\binom{0.01546}{(0.017)}$	$ \begin{array}{r} 0.02905 \\ (0.026) \end{array} $	-0.00256 (0.024)
Constant	0.19687*** (0.032)	$0.26019^{***} \\ (0.074)$	$\begin{array}{c} 0.34051^{***} \\ (0.129) \end{array}$	$\substack{0.22319^{***}\\(0.085)}$	$\begin{array}{c} 0.14129^{***} \\ (0.037) \end{array}$	$0.20495^{\ast\ast\ast} \\ (0.070)$	0.08777* (0.046)
Observations R-squared Number of pair	$1,666 \\ 0.027 \\ 1.058$	585 0.060 392	257 0.101 179	325 0.177 211	922 0.019 567	438 0.044 275	$435 \\ 0.041 \\ 259$