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THE EQUALITY OF OPPORTUNITIES IN THE LATVIAN LABOUR MARKET: IS ANNA AS EMPLOYABLE AS JĀNIS?

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Abstract

This paper analyzes gender-based access discrimination in the Latvian labour market. The authors perform a field study of sending bogus resumes in response to online job advertisements. A pair of two resumes was sent to 703 job vacancies, and in 155 cases the authors received a positive answer from the potential employer. Only male candidates were invited to the interviews 63 times, only female candidates – 39 times, while both candidates were treated equally 53 times. The study finds no statistically significant evidence for accepting the hypothesis that access discrimination can be observed in the market. Due to data limitations no meaningful analysis could be performed across industries, thus further research is warranted to assess the implications for the society and policy setting.

Keywords: Gender equality, access discrimination, Latvian labour market, correspondence study

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1 Introduction

Equal employment opportunity is a fundamental value in most of the countries. It is widely accepted that potential employees must be evaluated on the basis of merit, job related knowledge, skills and abilities. Decisions are considered to be discriminatory if they are based on demographic criteria which are not related to the job, for example, gender, race, age and nationality (Harcourt, Lam, & Harcourt, 2005).

Wage gap in the Latvian labour market is a substantial and persistent problem, as women earn 13.6% less than men (Hausmann, Tyson, & Zahidi, 2012). Clearly there is no equality of outcomes in the Latvian labour market. But a question remains: is the inequality of outcomes caused by the inequality of opportunities?

The authors of this study conducted a field experiment to determine whether there is access discrimination in the Latvian labour market. The authors tested whether it is more difficult to get a job for females than for males, and whether the differences are persistent across various positions and industries. The results could give a better understanding of the persistent inequality of outcomes (for example, in the form of wage gaps) in the Latvian labour market: if there is access discrimination, then the problem of inequality starts in the recruitment process, while if no statistically significant access discrimination can be observed, then, apparently, the discriminatory treatment starts to appear in the later stages of employment. The findings of the research could imply relevant policy suggestions about whether the gender discrimination should be fought against already at the stage when the females are just trying to access the labour market.

The authors answered two main research questions:

- Do Latvian companies discriminate against women in their recruitment practices by being more likely to call back to a male candidate rather than a female candidate with the same skills and experience?
- Does the level of gender access discrimination differ across various industries in Latvia?

The remainder of the paper is structured as follows. The first section provides a comprehensive review of the literature on the topic. The second section introduces the methodological

framework employed in the study. The third section provides a brief description of the dataset used in the analysis. The fourth section presents the results of the study. The fifth section provides a brief discussion on the possible limitations of the method employed. The sixth section analyzes the implied effects on the society and governmental policy setting. The seventh section concludes the paper.

2 Literature Review

2.1 Discrimination

Two identical candidates should have identical opportunities in the labour market in terms of recruitment, treatment at work, level of salary, probability to be promoted etc. A fair treatment would mean that the employee is evaluated only based on characteristics that are directly linked to the job performance, such as skills, previous experience, productivity and others.

Discrimination is said to exist if the employer is taking into account other factors (Aigner & Cain, 1977; Heckman, 1998; Bendick, Jackson, Reinoso, & Hodges, 1991; Chung, 2001).

2.1.1 Reasons for Discrimination

The most common grounds for discrimination in employment are age (as proven by Gringart and Helmes (2001)), gender (Adam, 1981; Goldin & Rouse, 2000), race and ethnicity (Hoque & Noon, 1999). The results of several field experiments indicate that being a part of the discriminated minority group can worsen your career prospects by up to fifty percent. Bertrand and Mullainathan (2003) analyze the labour market discrimination in Boston and Chicago and find that, keeping the content of the resume constant, a person with a White-sounding name will receive two call-backs while a person with an African-American name will be called only once. Carlson and Rooth (2007) conduct a similar experiment in Sweden and find that an applicant with a distinctly Swedish name is twice more likely to receive a call from the potential employer than a Muslim candidate with the same qualifications. The difference in call-back rates is persistent across both genders.

2.1.2 Types of Discrimination

There are two main types of discriminatory behaviour in the labour market: (1) access discrimination, which can be observed during the process of recruitment (Chung, 2001), and (2) treatment discrimination, which takes place when the employment contracts have been signed, and has an effect on the remuneration, the possibility to be promoted, and the likelihood of being fired (Perry, Hendricks, & Broadbent, 2000; Culbreth, 2006).

2.1.2.1 Access discrimination

Arguably the most important point when discriminatory practices should be particularly measured is the process of recruitment: if the people who are able to enter employment relationship are selected based on discriminatory characteristics, then all consequent measures of unfair treatment underestimate the actual discrimination (Newman, 1978). Equal employment opportunities stipulate that two identical candidates having the same skills and experience should receive the same number of responses when applying for the same position (Harcourt et al., 2005; Newman, 1978). However, discriminatory behaviour during the process of recruitment is particularly difficult to detect on an individual level because the rejected candidate can never verifiably claim that the selected candidate was not better qualified for the job (Bendick et al., 1991).

2.1.2.2 Treatment discrimination

Conventional economic theory suggests that if two individuals or two groups of individuals receive different remuneration for their work, they must contribute differently to the company by having different levels of productivity. However, if the differences in salary can be explained by the employer evaluating concepts like gender, race, and ethnicity, then it can be seen as unfair and discriminatory behaviour in the company (Arrow, 1971). Terborg and Ilgen (1975) find that although two equally competent candidates had the same probability of being hired, the female applicant was treated worse than the male applicant by being asked to do less important duties and consequently receiving lower wage. Cornell and Welch (1996) argue further claiming that even if the applicants are hired and treated fairly during the time of their employment, possible discriminatory behaviour can be observed when the employment contract is being terminated. Therefore, government laws that try to protect employees by making it more difficult and expensive to fire them, indirectly have an effect on discrimination as employers tend not to recruit the subjectively less productive minority.

2.1.3 Discrimination across Different Industries and Positions

The theoretical framework developed by Cornell and Welch (1996) suggests that discrimination should differ across industries and between high-low positions. If a potential mistake of an

employee is very costly to the employer (for example, in the case of doctors, lawyers, employees of the financial sector), then the employer will recruit less of the minority that he sees as worse based on some discriminatory and unrelated-to-work characteristics. Similarly, discrimination is higher in positions where the contribution of the employee cannot be observed immediately (for example, at the top levels of management) compared to low-skilled positions (such as cleaning staff, basic construction workers, crop harvesting etc.) where the productivity of an employee takes instant effect. The theory is partly proven empirically: Bertrand and Mullainathan (2003) do not find statistically significant gender discrimination when looking at each industry as a whole; however, Richardson, Webb, Webber, and Smith, (2013) find that discriminatory practices are prevalent in stereotypically gender-specific positions, such as engineers for males and secretaries for females.

2.1.4 Is the Gender Gap Narrowing?

Economic models on discrimination in the labour market usually evaluate the gap in treatment between the members of two groups, for example, African Americans and Whites, or males and females. Part of this gap is attributed to differences in productivity (referred to as “the human capital gap”) while the rest of the gap is a result of characteristics that cannot be linked to productivity and should not affect job performance (“the discrimination gap”). The more of the differences can be linked to productivity, the smaller the discrimination (Darity & Mason, 1998). Modern academic literature states at least three reasons of why the gender gap has been decreasing over the past decades: (1) Gottschalk (1997) shows that over the time period from mid-1970s to mid 1990s the real wage rate decreased for men and increased for women; (2) Blau, Ferber, and Winkler (1998) prove that real working experience that is very highly valued by the employers has been increasing significantly among women; and (3) legal framework has been improved to eradicate discriminatory limitations of opportunities in the labour market for women (Blau & Kahn, 1997). However, two considerable reasons are still observable that could account for the gap between the treatment of men and women in the labour market: (1) young women are still perceived as potential mothers in the future, and pre-assuming that they might go on a maternity leave in the near future, certain employers might not be willing to hire them (Waldfogel, 1998); and (2) certain expectations of how much education a women should have

are still persistent in the society, and those expectations deter females from acquiring university degree and they end up at low-skilled positions (Mason, 1999).

2.1.5 Economic and Social Costs of Discrimination

Discrimination bears significant economic costs for the current business environment. Although theoretically having a heterogeneous group of employees bears a cost of more difficulties in communication (Ioannides, 2010), it is proven empirically that the company actually benefits as people with various skills, opinions and experiences can develop more creative solutions to problems (Page, 2007).

Moreover, there are socio-economic costs associated with the future professional and academic development of the discriminated minority. Firstly, if a candidate is rejected purely due to characteristics not related to job performance, she will not have an opportunity to gain valuable working experience, and the stereotypical expectations of her being a worse applicant will self-fulfil over time (Darity & Mason, 1998). Secondly, if a group faces a labour market where their skills are valued less just because of their race, gender or ethnicity, then they have less incentives than a not-discriminated candidate to invest in, for example, education, as the potential return is lower (Bertrand & Mullainathan, 2003). Moreover, the lack of incentives can be passed also to the next generation, slowing the movement towards more equal opportunities and fair treatment in the labour market (Heckman, 1998).

2.2 Theoretical Framework on Why Discrimination Exists

Many studies suggest that discrimination is harmful not only to the society but for businesses themselves. Worker diversity brings different talents and backgrounds to the company and groups with different viewpoints usually can solve problems more efficiently than homogenous groups (Page, 2007). So why do employers decide to harm the company and deny themselves the opportunity to consider different candidates for the employment position?

The literature offers two general hypotheses that may explain labour market discrimination: (1) taste-based discrimination theory and (2) statistical or informational discrimination theory (Lundberg & Startz, 1983). According to the taste theory, discrimination is a result of the preferences of employers, current employees and customers. As this is an irrational emotion-

based model, it should not be persistent in efficient markets (Becker, 1971). Statistical theory, on the contrary, suggests that discrimination is a rational response to incomplete information about the productivity of the candidate and, therefore, may persist even in competitive markets (Phelps, 1972).

2.2.1 Taste-based Models

More than 50 years ago Becker (1957) was the first to describe discrimination as a result of prejudices. He showed that employers were willing to forgo income in order not to be associated with people of a certain demographic group. He proved that the same can be applied also to other employees and consumers. Other studies have shown that customer and co-worker discrimination theory might be flawed as a significant variance in discrimination cannot be observed in jobs that require more extensive communication with customers or colleagues. However, the lack of variation in discrimination may be consistent with employer discrimination theory (Bertrand & Mullainathan, 2003).

Institutional theory is one of the perspectives supporting the taste-based view. It suggests that companies do not necessarily care only about maximizing their profit. When deciding about employing new people companies do not want to waste resources to make potentially the best economic decisions as the outcome is still to a large extent ambiguous and performing an accurate cost-benefit analysis is nearly impossible (Harcourt et al., 2005). Therefore, companies engage in practices that are not necessarily rational and efficient but are acceptable and legitimate from the perspective of the main stakeholders (Oliver, 1991). Various empirical researches have shown that companies often adopt not the most efficient practices (D'Aunno, Sutton, & Price, 1991; DiMaggio, & Powell, 1983; Scott, 1987). To gain legitimacy, companies from the same industry often implement similar practices and, therefore, some networks may be more discriminatory than others (Fennell, 1980).

However, the taste-based models fail to justify the persistence of discriminating firms and, therefore, discrimination in the long run. As explained before, discrimination should impede the efficiency of companies and, thus, discriminating firms should be less profitable in the longer run. Later theories tried to solve the issue by proposing that there might be some frictions in the taste-based theory. However, other models displayed discrimination as an outcome of

asymmetric information and easily justified the persistence of the phenomenon even in the long run (Siddique, 2011).

2.2.2 Statistical / Information-based Models

The statistical models try to rationalize discrimination by emphasizing the incomplete information the company possesses about individual candidates. To make decisions about employing an individual, organizations need to use generalizations about certain labour force groups to minimize the costs of information acquisition (Richardson et al., 2013). Assuming that the employer possesses information about the average productivity of different easily distinguishable groups, it is economically rational for the decision-maker to screen the candidates on these potentially discriminatory bases (Tomaskovic-Devey, & Skaggs, 1999).

The theory suggests that employers assume that minority groups are less productive “based on probability estimates of turnover, work commitment, and skills from the population at large” (Kirchmeyer, 2002, p.8). Discrimination based on sex appears mostly due to expectations of potential pregnancy and child-care duties (Richardson et al., 2013). Other studies suggest that the constraining factor is different stereotypes and traditional gender roles (Cecil, Paul, & Olins, 1973; Rosen & Jerdee, 1974; Cohen and Bunker, 1975). Clearly, some arbitrary group qualities cannot be applied to every individual and, therefore, many productive individuals who represent some minority group suffer from discrimination (Travis, 2002).

Economists have developed two fundamental groups of statistical models of discrimination. One group of models suggests that decision-makers use demographic criteria as proxies for various unobservable qualities (Phelps, 1972; Arrow, 1973). Other group of models assumes that employers consider the same observable characteristic as more precise and reliable for one group of people than for the other (Aigner & Cain, 1977; Lundberg & Startz, 1983; Cornell & Welch, 1996).

Existing studies still have not reached a consensus on which model describes the source of the discrimination in the labour market the best. However, the common idea of all approaches is that the decision-makers have an underlying belief that people with different demographic characteristics possess different unobservable characteristics.

2.3 Methods for Detecting Discrimination

It is complicated to examine discrimination in the labour market because data about the potential employees that is accessible to the researchers is limited and not consistent with the information available to the employers. Even if two people seem comparable to the researchers, they might look totally different from the perspective of the employer (Bertrand & Mullainathan, 2003). Therefore, every observed difference in the labour market that might seem to be based on demographic criteria cannot be fully attributed to discrimination.

Most of the existing researches try to detect discrimination by investigating publicly available data (for example, wages) and looking for different outcomes between the groups that cannot be explained by job-related characteristics. However, by using this type of methods the authors can only observe unexplained wage differentials. The differentials could easily be caused by some objective but unobservable characteristics and, therefore, would not indicate discrimination (Weichselbaumer, 2002).

Because of the disadvantages associated with this type of methodology more and more researchers have used experimental techniques to examine the existence of discrimination. These studies try to understand whether equally qualified candidates, who are differentiated only by the demographic characteristic of interest, have equal opportunities to become employed. The experimental methods are employed both in laboratory experiments and real life settings.

2.3.1 Conventional Household and Labour Force Surveys

Researchers try to measure labour market discrimination using survey data by comparing the performance of workers with similar set of skills. In these surveys, the authors try to assess characteristics that correlate with the productivity of the worker and, therefore, determine the individual performance in the labour market. The central notion of the method is that people with the same productivity should reach the same outcome in the labour market (Siddique, 2011).

One of the commonly used methods is a regression that tries to assess the dependence of wage levels or occupational status on the previously described characteristics (for example, education and experience) and the demographic variables of interest (for example, gender and race). If the coefficients on the dummy variables describing demographic characteristics are statistically

significantly negative, the authors conclude that the discrimination can be observed (Darity & Mason, 1998).

Another extensively used model is the Blinder-Oaxaca decomposition procedure (Darity & Mason, 1998). The method identifies the underlying causes of existing differences in the labour market outcomes by allowing sorting between the effects of the qualities representing productiveness and the demographic characteristics. The method captures the gap by creating a reference group and a comparison group (Fairlie, 2005).

However, the obtained results most likely represent not only the existing discrimination but also the differences in productivity which are not observable to the researcher (Siddique, 2011).

When an employer makes a decision of hiring or setting a wage for an employee, he takes into account various qualities that cannot be detected by a standard survey (Bertrand & Mullainathan, 2003). These qualities include not only theoretically measurable abilities but also intangible features like calmness, punctuality, openness and willingness to work (Arrow, 1972). Moreover, there is almost no survey data on hiring decisions, which makes it nearly impossible to examine the access discrimination (Siddique, 2011). These drawbacks have led researchers to increase the reliance on gathering evidence by various experimental techniques.

2.3.2 Laboratory Studies

Laboratory experiments are used to specifically and directly detect existing discrimination. It is usually done in an unrealistic laboratory environment with a casted recruiter or students who are acting as recruiters. The participants need to imagine a hypothetical situation where a choice between potential employees differing in the quality of interest has to be made (Newman, 1978).

The first laboratory experiment investigating discrimination in the labour market was performed by Fidell (1970). She tried to determine the impact of sex on the evaluation of hypothetical applicants. She found that men received preferential treatment. Others have performed the experiments in more realistic settings (for example, by examining the outcomes of blind auditioning for orchestras (Goldin & Rouse, 2000)).

The problem with laboratory studies is that the obtained results cannot be reliably transposed from laboratory settings to reality. The actions of the participant of the experiment are costless

for the particular person, meaning that the test person does not have to live with the consequences of the decision. If there is no requirement to follow-through on the decisions made, the participants of the experiment cannot be expected to act in the same way they would in actual decision-making situation (Newman, 1978). Moreover, there are no monetary incentives to act against the widely accepted social norms and, therefore, the recruited person is likely to give a socially acceptable response. Thus, it is impossible to apply the results of the study as the real life situation might diverge substantially (Weichselbaumer, 2002). Due to these reasons the researches rely heavily on the evidence obtained from naturally occurring situations.

2.3.3 Field Experiments

Field experiments are used to examine whether equally qualified candidates have equal access to the first phase of the hiring process (correspondence testing) and the employment position as such (audit studies) (Weichselbaumer, 2002).

2.3.3.1 Audit Studies

Employment auditing is a method that allows overcoming the previously described measurement difficulties. The studies attempt to analyse the actual labour market settings by using comparable potential employees who differ only by the demographic characteristic of interest. The candidates apply for the same employment position simultaneously. As both of the potential employees have comparable qualities and qualifications affecting their productivity, any difference in the treatment of those candidates can be considered to be discrimination (Bendick et al., 1991). In general, the employment auditing suggests that minorities tend to receive worse treatment (less invitations to interviews and less likely to become employed) (Bertrand & Mullainathan, 2003).

Audit studies have been applied in various settings trying to detect discrimination based on different demographic characteristics. The method has been used to examine racial discrimination (Turner, Fix, & Struyk, 1991), ethnic discrimination (Cross, Keeney, Mell, & Zimmerman, 1990) and sex-based discrimination (Neumark, Bank, & Van Nort, 1995). The studies have been used to detect differences between high-paying and low-paying jobs (Neumark et al., 1995).

Although employment auditing provides rather clear evidence on labour market discrimination, the technique has quite substantial weaknesses (Heckman & Siegelman, 1992). One of the main challenges of the study is the fact that it is almost impossible to find candidates that are identical in all relevant dimensions for the employer. Even if the participants of the study are visually similar and trained to act in the same way, it is nearly impossible to eliminate all differences between the potential employees (Bertrand & Mullainathan, 2003). Therefore, the results generated by these studies are based on fundamental assumptions about what are the qualities and qualifications important to the employer and how the labour market operates (Heckman, 1998). Another drawback of the method is the fact that the participants of the audit study know the purpose of the study and they might be consciously or subconsciously motivated to generate certain results. It is hard to ensure that the auditors will not try to confirm their own views or general beliefs in the society (Turner et al., 1991). Finally, these studies are very expensive and, therefore, the analysed sample is too small to generalize the results and understand the nuances and mitigating aspects of discrimination (Bertrand & Mullainathan, 2003).

2.3.3.2 Correspondence Studies

Correspondence studies allow overcoming most of the weaknesses of audit studies (Darity & Mason, 1998). The method involves sending out bogus resumes in response to job ads. The resumes must be the same in all aspects of human capital that affect productivity and might be important to the employer except for the demographic characteristic of interest. To ensure that no unintended differences are introduced the authors of such studies rotate the resumes and randomly assign them to different fake personalities (Riach & Rich, 2006). The key concept of the method is the strict control over all potentially relevant characteristics and if that is ensured the authors can conclude that any preferential treatment for one or another candidate is attributable to the difference in the demographic characteristic and, therefore, can be considered discrimination (Riach & Rich, 2002).

The first experiment involving bogus pairs of resumes was performed by Jowell and Prescott-Clarke (1970) examining racial discrimination. The method was later applied by Frith (1982) and Riach and Rich (1995) to measure sex-based discrimination (Weichselbaumer, 2002). Since then several studies using this technique have tried to measure access discrimination in various

countries like the USA, the UK, France, Germany and Australia (Riach & Rich, 2004). Other studies have tried to detect discrimination based on age (Bendick, Jackson, & Romero, 1997; Gringart & Helmes, 2001), disability (Ravaud, Madiot, & Ville, 1992) and sexual orientation (Adam, 1981). An influential research by Bertrand & Mullainathan (2003) investigating racial discrimination again sparked interest about the methodology in the academic community and several replicating studies have been developed in the recent years (Åslund & Skans, 2012).

This method is superior to the previously described techniques because it allows exercising strict control over all relevant characteristics and it ensures that the candidates are almost identical in all qualities except for the demographic characteristic of interest. As no real people are involved in the study, it is possible to ensure complete comparability of the resumes (Bertrand & Mullainathan, 2003). The demographic characteristic is randomly assigned to the different resumes which minimizes any unintended biases and clearly exhibits the objectivity of the study (Riach & Rich, 2006). Moreover, the written resumes allow eliminating any demand-side effects as written protocols do not allow divergence from the defined procedures. Finally, the marginal costs of sending out the resumes are relatively low and, therefore, a larger sample can be generated and discrimination can be analysed more thoroughly (Bertrand & Mullainathan, 2003).

It must be noted that correspondence studies do not allow analysing the whole hiring process. Only the initial labour-hiring stage (selection for interviews) can be examined and the full degree of discrimination might not be measured (Riach & Rich, 2006). However, majority of the field experiments that involve a two-stage examination suggest that most of the discrimination is observed exactly in the first phase of the hiring process as it leaves the rejected candidate with no evidence of discrimination (Riach & Rich, 2002; Riach & Rich, 2006).

Moreover, it can be argued that the correspondence studies involve deception of the potential employer due to lack of informed consent and, therefore, are ethically unacceptable (Riach & Rich, 2004). However, American Psychological Association Committee on Ethical Standards for Psychology (1967) suggests that it is necessary to analyse three aspects of the study to determine whether it is ethically acceptable: (1) the harm on the subject, (2) the importance of the study, and (3) the existence of alternatives (McIntyre, Moberg, & Posner, 1980). Firstly, the harmful effects of the study are minimized as the invitations are usually rejected as soon as received.

Moreover, this type of interaction is quite frequent in the labour market as the potential employees apply to many jobs and need to turn down some offers (Riach & Rich, 2006). Secondly, deceptive studies detecting discrimination in the labour market are justified because of the considerable social and economic harms of discrimination on the society (Newman & Krzystofiak, 1979). Finally, as shown before, alternative procedures (surveys, laboratory researches and audit studies) are flawed and accurate data cannot be gathered (McIntyre et al., 1980). Therefore, even if the study involves deception it is ethically justifiable as the generated societal benefits are substantially larger than the marginal harms imposed on every individual decision maker.

2.3.4 Existing Research in Latvia

The studies about gender discrimination in Latvia can be divided in two fundamentally different groups. A part of these researches tries to assess the formal discrimination in the labour market by analysing the impact of the existing legislation on discriminatory practices (Feldhūne & Mits, 2001). The studies show that gender equality formally exists and it is ensured by both the national legislation and the binding international treaties (Factum & Biss, 2006; Kavasa, 1999; Neimane, 1999; Dimitrovs, 2012).

However, the other group of studies, which analyses the actual discrimination in the labour market, has found many imperfections in the real situation of the implementation and maintenance of legislative principles. One of the most obvious inconsistencies is the persistent and obvious wage gap as well as the differences in the proportion of each gender in different professions (Factum & Biss, 2006).

The problem with the existing studies about discrimination in the Latvian labour market is the fact that the analysis is performed on publicly available data (like wage rates and employment ratios) (Sabiedrības integrācijas fonds, 2005; Factum & Biss, 2006; Nurdinova, 2013) or on data gathered in conventional labour force surveys (Zake, 2007; Kaņejeva, 2001; Putniņa & Zīverte, 2004). The studies analyse discrimination retrospectively by looking at the consequences of potentially existing discrimination or by trying to assess people's understanding of the discrimination in the Latvian labour market.

However, as shown before, it is almost impossible to measure discrimination by using publicly available data and labour force surveys. The problem lies in the fact that researchers possess far less data on workers than employers do. Even if two candidates appear similar to researchers, they may look completely different to employers. It is so because standard surveys do not contain all the characteristics that employers observe. For example, by comparing two resumes we cannot assess the charisma and confidence of a candidate and, therefore, eliminate a very important comparative factor from the analysis. Therefore, any “observed discrimination” in the labour market can be easily caused by some unobserved differences and not by discrimination based on demographic criteria (Siddique, 2011).

3 Methodology

3.1 *Creation of Resumes*

Two fictitious job applications were created for each advertisement: one female and one male. Both candidates were assigned a set of skills and experiences that may appear relevant from the perspective of the potential employer in order to increase the likelihood of a call back. The main challenge is to balance two aspects: (1) both CVs have to be very similar so that the authors can attribute any differences in call back rates solely to the differences in gender that are implied by the name of the applicant; however, (2) the resumes cannot be entirely identical as it would expose the experiment when a recruiter receives applications from two people who appear to be the same except for their name.

Undoubtedly the most important information that the recruiters look at in a CV is the education and the past work experience of the candidate. Firstly, the authors analyzed the rankings of high schools and universities in Latvia that is available on the home page of the Ministry of Science and Education. Based on this data educational institutions with a comparable quality that might seem relevant for a particular job position were chosen and randomly assigned to the resumes of the candidates. Secondly, the authors assigned past work experience in a similar position to the one in the job advertisement to increase the likelihood that the recruiter sees the candidate as a good fit for the position. The previous employer was a fictitious small private company with a likely yet not unique name (for example, shop “Pārtika un Dzērieni” which means “Food and Drinks” in Latvian). If the resumes would contain unique and existing company names, the recruiter might be contacting the actual company and asking for recommendation or other comments about the candidate. The obvious lack of such data would then ruin the chances of the candidate being selected. For some resumes the authors also used very popular company names (such as the most popular retail shop chains Maxima and Rimi), since it would be highly unlikely that the company would be able to provide an extensive background information about the previous employee.

A very important challenge is not to imply other characteristics than the gender of the candidate that the potential employer could infer from the information in the CV and afterwards use as a reason for discrimination. Firstly, the recruiter might infer some information about the

socioeconomic background of the candidate from the postal address mentioned in the CV. In order to limit such bias the address was not indicated. Moreover, the increasing reliance on mobile phones and the Internet as means of communication makes it not seem suspicious if a company receives a CV without an address in it. Secondly, the age of the candidate might give additional grounds for discriminating: employer might be unwilling to hire too young candidates as they might lack valuable experience and skills, while at the same time the employer might not want to invest in candidates that are too old as they would soon retire. Therefore, both of the candidates in this study were nearly thirty years old (born in 1984) as it is the median age of the most economically active age group in Latvia.

Lastly all the other information that has to be included in a typical CV and does not imply anything specifically about the candidate was the same for both candidates. Both of them had Latvian as their native language, had good knowledge of English and were fluent in Russian. The candidates had a driving licence of category B, and they both had the basic computer skills in Microsoft Office. The authors believe that all of those aspects are quite common in resumes and, therefore, the fact that both of the applicants had identical information in these parts should not seem suspicious and the experiment should not get exposed.

Finally the CVs were formatted according to guidelines posted on job advertisement and employment centre sites such as www.cv.lv. Five different design styles were randomly assigned to each CV sent out. One of the pairs of resumes that were used in the study is included in Appendix A for illustrative purposes.

3.2 Creation of Identities

Undoubtedly employers do not want to hire only the qualifications and skills. Companies are searching for people that are suitable for the existing working environment. Therefore, the next stage of the methodology was to create identities for the fictitious candidates. To assess the fit of the person, recruiters very often check out the social networking profiles and other online activities of the potential employees. As it is impossible to construct a convincing online presence for each randomly constructed candidate, the choice of names and surnames was critical for the research. To reduce the possibility of the detection of the bogus candidates and eliminate the non-response due to non-existent online presence, the authors used very common

names and surnames. The authors used the data available at the Office of Citizenship and Migration Affairs of Latvia.

For example, there are 55150 men named Jānis and 24155 women named Anna registered in Latvia. Moreover, there are 1135 profiles for a person named Jānis Bērziņš and 475 profiles for a person named Anna Liepiņa registered on the most popular social networking site in Latvia *www.draugiem.lv*. Given the information available for the recruiter, it is impossible to differentiate between those profiles to assess the needed information about the potential employee. Therefore, the authors are fairly sure that by choosing very popular names and surnames, the problem of non-existent online presence can be mitigated. To eliminate any ambiguity in interpreting the results, the authors chose typical Latvian male and female names. It was done to eliminate any potential effects caused by differences in the perceived nationality of the candidates as it could also serve as grounds for discrimination.

Moreover, the identity is necessary to facilitate the opportunity for the recruiter to establish contact with the potential employee. After receiving a resume of a promising candidate, the most common ways of proceeding with the recruitment process and invite the applicant to an interview is to communicate with the person via phone or email. Therefore, an email account with an officially sounding user name was created on Gmail for each constructed identity (name.surname@gmail.com). Two pre-paid SIM cards were purchased and the authors ensured that one Latvian female and one Latvian male can always be reached via the phone number provided in the resumes.

3.3 Responding to Job Advertisements

The authors sent bogus resumes in response to job advertisement. Two CVs representing one Latvian female and one Latvian male were sent to each potential employment position. Two resumes corresponding to the required qualifications of the position were generated and the gender of the applicant was randomly assigned to one of the created CVs. In some cases, the authors slightly adjusted both CVs to increase the probability that any response was received. For example, the knowledge of a certain software program was added to the resume to make both candidates more suitable for a certain analyst position. The candidates responded to the advertisement by sending an email message that states that the applicant is applying to a certain

vacant position and a resume is attached to this letter. An example of the email is included in Appendix B.

The authors needed to take into account that the timing involves a trade-off between being detected and maintaining equivalence. In a perfect study, the applications should be sent out simultaneously to create equivalent circumstances and ensure that the only decisive factor is the gender of the applicant. However, the coinciding arrival of very similar applications may seem suspicious and it might result in a detection of the performed study. Therefore, the applications were sent with a twenty four hour difference. The sending order of CVs was rotated randomly so that there was an equal likelihood that a male or female application was received first.

There is no comprehensive list of current employment opportunities available in Latvia. Nevertheless, advertisements in job search websites account for most of the job vacancies. Therefore, the most popular online job sites in Latvia, such as, *www.cv.lv*, *www.cvmarket.lv*, *www.mekledarbu.lv* and *www.visidarbi.lv*, were used to identify open employment positions to which the previously created candidates applied.

The authors responded to offers that require candidates to apply for the position through email. Diverse pool of positions was analyzed because job demand for certain positions in Latvia is not sufficiently high to ensure satisfactorily large sample for the analysis. Moreover, by not limiting the analysis to certain positions, the authors were able to compare the differences in access discrimination between professions that are female-dominated (for example, secretary), male-dominated (for example, engineer) and mixed.

However, the correspondence testing was performed on a maximum of four job offers from each company. To ensure no repetition, upon review of the employment ads, the authors registered the following details of each position: (1) name of the company; (2) contact information of the company; (3) the position advertised; (4) deadline of submitting applications and (5) additional specific requirements of the chosen vacancy.

3.4 Measuring Responses

The responses of the recruiters were measured by monitoring the created email addresses and the mobile phones of the fictitious candidates. For each email and phone reply, the authors used the

content of the message to match the answer to the relevant resume-advertisement pair. The received responses were recorded as a dichotomous outcome: if the candidate is invited for an interview or receives a job offer, it was documented as a positive response while no response was marked as a negative outcome. The authors never encountered a case when the potential employer would call or write an email saying that the applicant was not selected. This is consistent with the common practice in Latvia to contact only successful applicants during the first stage of the recruitment process.

The results were compiled in four groups. If both applicants received a response, it was treated as equal treatment and, thus, no discrimination was discovered. If only the male candidate was contacted, it was registered as discrimination towards women. Similarly, if only the female applicant was contacted, it was treated as a case of discrimination towards men. If none of the applicants received a response, it was considered to be a non-observation as it told nothing about the access discrimination.

The second variable measured by the authors was the timing differences in company responses to the potential candidates. The authors took into account the date when the application was submitted, and the date the response was received. This variable allows adding another dimension to the study. Even if the replies for both candidates were equally favourable, the difference in timing may depict the uncertainty of the company about whether the applicant should be invited to the interview.

When a response from a recruiter was received, the candidates punctually and respectfully declined invitations to job interviews by saying that they have already found another job. It was done to diminish any inconveniences for the recruiter and the company. The authors were very cautious to retain documentation of the replies to each application. The responses indicating specific company names will be kept strictly confidential to the authors of the study.

4 Description of the Dataset

The first stage of the study was sending resumes only to entry-level jobs in front office, administration, sales and customer service as these positions had the lowest requirements and generic resumes could be used. The resumes were sent out for four weeks from January 2 to February 2, followed by a two week period when to receive all remaining answers. The authors sent resumes to 703 job vacancies, and 1406 CVs in total (2 matching resumes for each position – one male and one female) were sent out. Four different online job search websites were used in the study: www.cv.lv, www.cvmarket.lv, www.mekledarbu.lv and www.visidarbi.lv. The authors sent applications to the positions via e-mail.

During the second stage of the research (from mid-February to mid-March) the authors sent applications to high-level positions. Overall applications were sent to 297 vacancies, so that the overall sample size would be 1000 job advertisements. However, the response rate was significantly lower than expected (only 7%). Therefore, the authors did not include these results in further analysis. This was done due to the fact that no meaningful conclusions about the general situation can be made from such a small sample of responses.

The last stage of the research was gathering information about the companies to which the applications were sent. The authors gathered data on the turnover and the number of employees for every company from the Amadeus database, website Firmas.lv and publicly available information on the homepages of the companies. The information represents the situation in 2012 for most of the companies; however, due to data limitations in some cases statistics from 2011 were used as it was the latest information available.

5 Results and Analysis

The general description of the results of the study can be found in Table 1. To depict and interpret the results the authors used a format which has been employed in various field experiments in Europe (for example, Riach and Rich (2002)).

Table 1. Summary of the results of the study

| | | Amount | % of total | % of usable test |
|-----------------|---------------------------|--------|------------|------------------|
| Neither invited | | 548 | 77.95% | |
| Usable test | | 155 | 22.05% | |
| Of which: | Both invited | 53 | 7.54% | 34.19% |
| | Only man invited | 63 | 8.96% | 40.65% |
| | Only woman invited | 39 | 5.55% | 25.16% |
| | <i>Net discrimination</i> | 24 | 3.41% | 15.48% |
| Total | | 703 | | |

Source: Created by the authors

The company representatives (sometimes a Human Resource manager, but sometimes the employer) used both the provided e-mail and the mobile number details to contact the potential candidates while the authors prudently recorded these answers. If one or both applicants received a positive answer from the potential employer, the application was documented as a usable test. If both applicants received a positive answer, the occasion was documented as equal treatment. If only the male candidate received a positive response, the occasion was documented as discrimination against the female. If only the female candidate received a favourable response, the occasion was documented as discrimination against the male. Net discrimination was calculated by subtracting discrimination against different genders from one another (here, discrimination against female minus discrimination against male).

From the 703 positions to which the authors sent bogus resumes, at least one answer was received in 155 cases (22.05%). As shown in Appendix C, the overall response rate for female

applicants (summing up the cases when both candidates received a response and when only the female applicant was contacted) was 13.09% while the response rate for male applicants was 16.50%. Based on the obtained results male applicant has a 26.08% higher probability to be invited to an interview. In other words, while a male applicant needs to send out on average 6.06 applications to get invited to one interview, a female applicant needs to respond on average to 7.64 job openings to get to the next recruitment stage.

The authors also performed an analysis of access discrimination across various industries (see Appendix D). However, no meaningful conclusions can be drawn due to relatively small number of responses in certain industries. New job advertisements appeared with a relatively low frequency and, thus, not many new applications could be sent out. This finding indicates an opportunity for further researcher in this area: employing the same method over an extended time period (for example, a year), in order to gather a sufficient number of responses.

As described in the review of the literature, there might be differences in discriminatory practices between large and small companies. Therefore, the authors analyzed the response rate when accounting for different firm sizes. However, the analysis proved to be statistically insignificant when the size of the company was proxied by both turnover (See Appendix E) and the number of employees (See Appendix F).

Another interesting difference in the treatment of the applicants was the variation in the length of time it took for the employers to respond to job applications. Variation between different companies may be explained by different work culture and practices. However, variance was observable also within the same organization when both of the applicants received a positive response.

The authors took a look at all the 53 cases when both candidates received a positive answer from the company and analysed what were the differences in the response time between the male and female applicant. A graphical illustration of the findings can be found in Appendix G. Although the 53 cases are insufficient to make valid conclusions about the conditions in the Latvian labour market, the results present a strikingly unusual trend: in 44% of the cases the female received the positive response first, while the male applicant was contacted first in only 28% of the cases. However, it was not possible to determine the causal factor of this differentiation. A long delay

may indicate not only discrimination against a certain candidate, but also indicate company's effort to find a suitable opening for the certain applicant.

Finally, the field study allows assessing not only statistical discrimination in the labour market, but also seeing some practices used in the initial stage of the job application process. From the following case studies one can easily observe that discriminatory activities are not always observable to the candidate due to the vague nature of rejection letters. For example, a pair of applications was sent to a position in customer service in a clothing shop. The resume of the male candidate was sent first and the female application was sent after one day. On the day when the female application was sent to the company, the woman received an email with an invitation to an interview. On the same day the same company replied to the male applicant with an apology that there are no free vacancies for a candidate with this type of job experience. Alarmingly, both candidates had totally comparable job experience (job in a grocery shop and a café) and education (degree in the same field from Ventspils University College and Liepaja University). In another situation, the female candidate got a rejection letter two days after applying to the position while the male candidate received a call from the same company offering the position 10 days after the application was sent. These two out of around 10 similar situations indicate that the discrimination might be left unnoticed because of the limited amount of information each candidate receives.

6 Potential Drawbacks of the Experiment

The first drawback is the fact that the resume suggests that the only difference between the two candidates is their gender. The authors cannot gain access to the actual list of criteria on how the recruiter will choose whom to call back or not. Although the authors have put in the maximum effort to account for every single thing in the resume, there might be some other features or rules of thumb that the employers use during the initial stage of the recruitment but that are unknown to the authors.

Another important limitation of the research is the use of only one channel for job search. Although online job advertisements are very popular means for the employers and the employees to find each other, there are multiple other methods for doing so, for example, newspaper ads, networks of friends and family etc. There might be a disproportional use of certain channels between males and females that could skew the results; however, such information is unavailable to the authors and thus cannot be accounted for. Moreover, the companies themselves might be using different recruitment channels differently: for example micro companies might be relying more on their network of friends in the search of a new employee since the relative cost of screening multiple applications is higher than that for large companies that have a separate Human Resource department dealing with these situations.

Lastly, the application process often requires sending also a letter of motivation. However, the authors excluded this part as it would be too time-consuming to create a unique letter for each candidate for each respective job advertisement. Moreover, the content and the style of writing can be interpreted in several ways thus there would be significant problems of making the letters of both candidates appear to be similar. However, since both candidates did not send a motivational letter, the relative differences remain the same. Furthermore, as can be seen in Appendix G, there is no fundamental difference in the relative difference between the response rates for job advertisements where a motivational letter was required (but was not sent) and the advertisements where such requirements were not indicated. Thus, the authors are strongly convinced that the lack of motivational letters did not affect the results of this study.

7 Implications for the Society and Policy Setting

Although the results of the study imply that the discrimination against females in the Latvian labour market is not statistically significant, the results should be treated with caution.

Firstly, the situation of no discrimination is created in a laboratory environment assuming that both of the applicants have the same opportunities of acquiring the same education and work experience before applying to a job opening. However, as described earlier, the existing literature suggests that there are several reasons why, for example, females might not gain access to the same set of skills and knowledge as males: (1) there exist pre-set views in the society of how much education a woman should have, and, thus, in reality the candidates might not have the same academic background; (2) females might have received discriminatory treatment in the previous years, and, thus, they also could not include the same level of professional experience in their resumes as males could.

Secondly, the study only measures access discrimination. Gender-related hiring practices might appear to be non-existent in the initial stage of the recruitment process; however, the employer might go through a discriminatory decision making process, for example, during the interviews. Moreover, not only it is important to find out whether a person can get a job, but also it is sometimes even more important to find out on what conditions the job position is offered. The information that is very relevant for the person, such as the initial level of salary, working hours and conditions, and the amount of social security benefits, cannot be measured in such research settings.

Therefore, although the results indicate that there is no statistically significant access discrimination in the Latvian labour market, the authors of the study would like to emphasize that this in no way implies that the authorities should terminate any anti-discriminatory legislative measures. Instead the focus should shift towards establishing equal opportunities for both genders to gain the same academic and professional background, so that the reality would be closer to this laboratory setting that results in no statistically significant discrimination.

8 Conclusion

The authors of the thesis examined access discrimination based on the gender of the applicant in the Latvian labour market by conducting a correspondence study: sending out bogus resumes in response to job advertisements. In total 703 resume pairs were sent out, of which in 22% cases at least one of the candidates received a response.

The authors tried to answer two research questions in this study:

- Do Latvian companies discriminate against women in their recruitment practices by being more likely to call back to a male candidate rather than a female candidate with the same skills and experience?
- Does the level of gender access discrimination differ across various industries in Latvia?

The obtained results do not provide sufficient evidence for rejecting the hypothesis that there is no gender discrimination in the Latvian labour market. Although initially the results might seem to undermine the ongoing discussions in the society of the need to advance the legislation fighting discrimination in employment practices, the authors would like to emphasize that the study is conducted in laboratory settings where both of the candidates have been able to acquire the same level of experience and knowledge. The government and the society should still strive for establishing such a level playing field also in the reality.

Due to data limitations, the analysis of discrimination across various industries does not yield meaningful results and, therefore, the authors are not able to answer the second research question. However, the authors believe that further researcher in this area is required.

Since this is the first employment audit study performed in Latvia, the authors believe it would be worthwhile to perform a similar study over a longer timeframe. Moreover, a cross-country analysis including the assessment of the situation in the neighbouring countries could be performed: if a similar pattern can be found also in Lithuania and Estonia, it adds to the credibility of the results of this study.

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Appendix A

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 Restorāns „Jautrā Bite”

2006 – 2008 **Brīvprātīgais darbs**
 Nevalstiskais sektors

2003-2007 **Augstākā izglītība**
 Rēzeknes Augstskola

1991-2003 **Vispārējā vidējā izglītība**
 Rīgas 51.vidusskola

Dzimtā valoda **Latviešu**

Citas valodas

| | SAPRATNE | | RUNĀŠANA | | RAKSTĪŠANA |
|--------|-------------|----------|----------|----------|------------|
| | Klausīšanās | Lasīšana | Dialogs | Monologs | |
| Krievu | C2 | C1 | C2 | C2 | C1 |
| Angļu | B2 | B2 | B1 | B1 | B1 |

Līmeņi: A1/2: Pamatlīmenis - B1/2: Vidējais līmenis - C1/2 Augstākais līmenis
 Eiropas kopīgās pamatnostādnes valodu apguvei

Dzimums Sieviete | **Dzimšanas datums** 12/01/1984 | **Pilsonība** Latvijas

Transportlīdzekļa vadītāja
 apliecība

- B kategorija

Intereses

- Peldēšana
- Galda futbols

Appendix B

Labdien!

Nosūtu pieteikumu vakancei uz projektu vadītājas amatu. Pielikumā pievienoju savu CV.

Ceru drīzumā sagaidīt Jūsu atbildi!

Ar cieņu,

Anna Liepiņa

Appendix C

Table 2. Chi-square test for the overall results

| | Amount | % of total | Expected value (Null hypothesis) |
|---------------|--------|------------|-------------------------------------|
| Man invited | 116 | 16.50% | 104 |
| Woman invited | 92 | 13.09% | 104 |
| Total | 703 | | |

Chi-square (P-value) 0.096092

Source: Created by the authors

Appendix D

Table 3. Analysis across different industries

| | Sent | Neither invited | Usable test | Of which: | | | <i>Net discrimination</i> |
|-----------------------------|------|-----------------|-------------|--------------|------------------|--------------------|---------------------------|
| | | | | Both invited | Only man invited | Only woman invited | |
| Administrative positions | 58 | 48 | 10 | 3 | 4 | 3 | 1 |
| Banking, Insurance | 18 | 15 | 3 | 2 | 0 | 1 | -1 |
| Real estate, Construction | 12 | 8 | 4 | 2 | 1 | 1 | 0 |
| Human resources | 13 | 9 | 4 | 1 | 1 | 2 | -1 |
| Telecommunications | 13 | 10 | 3 | 2 | 1 | 0 | 1 |
| Energy | 4 | 3 | 1 | 1 | 0 | 0 | 0 |
| Pharmaceuticals | 6 | 5 | 1 | 0 | 1 | 0 | 1 |
| Finance, Accounting | 9 | 7 | 2 | 0 | 1 | 1 | 0 |
| IT | 7 | 4 | 3 | 1 | 2 | 0 | 2 |
| Education, Science | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| Culture, Art, Entertainment | 4 | 4 | 0 | 0 | 0 | 0 | 0 |
| Marketing, Advertising | 38 | 31 | 7 | 4 | 2 | 1 | 1 |
| Media, PR | 11 | 9 | 2 | 0 | 1 | 1 | 0 |
| Services | 34 | 26 | 8 | 2 | 5 | 1 | 4 |
| Manufacturing | 78 | 63 | 15 | 9 | 5 | 1 | 4 |
| Short-term positions | 27 | 21 | 6 | 0 | 2 | 4 | -2 |
| Technical sciences | 33 | 21 | 12 | 3 | 8 | 1 | 7 |
| Trade | 118 | 93 | 25 | 8 | 10 | 7 | 3 |
| Transportation, Logistics | 86 | 65 | 21 | 5 | 9 | 7 | 2 |
| Tourism | 52 | 40 | 12 | 4 | 4 | 4 | 0 |
| Governmental sector | 11 | 9 | 2 | 1 | 0 | 1 | -1 |

Source: Created by the authors

Appendix E

Table 4. Analysis across different company groups (sorted by turnover)

| | Sent | Neither invited | Usable test | Of which: | | | <i>Net discrimination</i> |
|------------|------|-----------------|-------------|--------------|------------------|--------------------|---------------------------|
| | | | | Both invited | Only man invited | Only woman invited | |
| Upper 25% | 176 | 140 | 36 | 12 | 17 | 7 | 10 |
| Middle 50% | 349 | 262 | 87 | 34 | 29 | 24 | 5 |
| Bottom 25% | 178 | 146 | 32 | 7 | 17 | 8 | 9 |

Source: Created by the authors

Table 5. Chi-square test for Upper 25%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|----------------------------------|
| Man invited | 29 | 24 |
| Woman invited | 19 | 24 |

Chi-square (P-value) 0.148915

Source: Created by the authors

Table 6. Chi-square test for Middle 50%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|----------------------------------|
| Man invited | 63 | 60.5 |
| Woman invited | 58 | 60.5 |

Chi-square (P-value) 0.649436

Source: Created by the authors

Table 7. Chi-square test for Bottom 25%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|-------------------------------------|
| Man invited | 24 | 19.5 |
| Woman invited | 15 | 19.5 |

Chi-square (P-value) 0.149541

Source: Created by the authors

Appendix F

Table 8. Analysis across different company groups (sorted by the number of employees)

| | Sent | Neither invited | Usable test | Of which: | | | <i>Net discrimination</i> |
|------------|------|-----------------|-------------|--------------|------------------|--------------------|---------------------------|
| | | | | Both invited | Only man invited | Only woman invited | |
| Upper 25% | 176 | 138 | 38 | 15 | 16 | 7 | 9 |
| Middle 50% | 345 | 267 | 78 | 26 | 30 | 22 | 8 |
| Bottom 25% | 182 | 143 | 39 | 12 | 17 | 10 | 7 |

Source: Created by the authors

Table 9. Chi-square test for Upper 25%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|----------------------------------|
| Man invited | 31 | 26.5 |
| Woman invited | 22 | 26.5 |

Chi-square (P-value) 0.216367

Source: Created by the authors

Table 10. Chi-square test for Middle 50%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|----------------------------------|
| Man invited | 56 | 52 |
| Woman invited | 48 | 52 |

Chi-square (P-value) 0.432768

Source: Created by the authors

Table 11. Chi-square test for Bottom 25%

| | Actual amount | Expected value (Null hypothesis) |
|---------------|---------------|----------------------------------|
| Man invited | 29 | 25.5 |
| Woman invited | 22 | 25.5 |

Chi-square (P-value) 0.326989

Source: Created by the authors

Appendix G

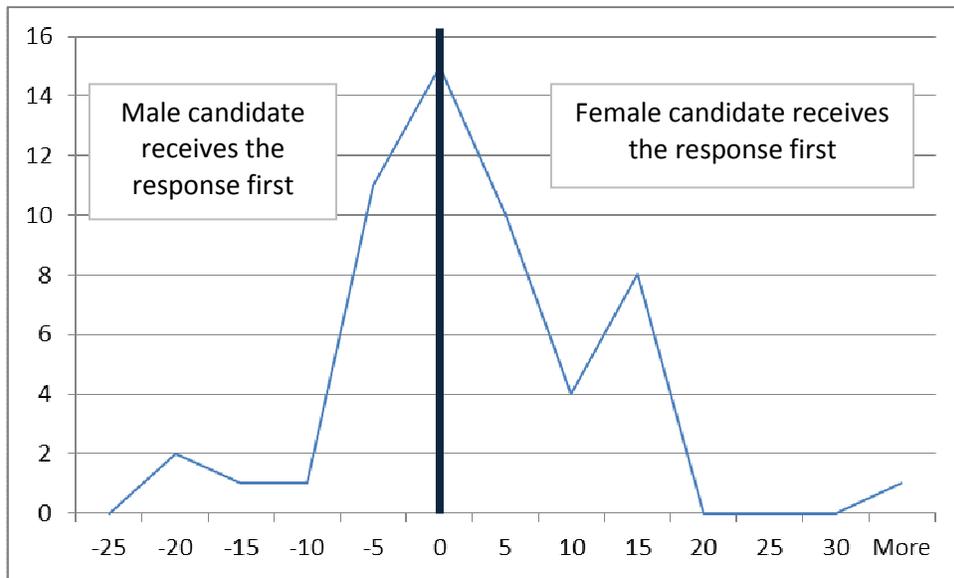


Figure 1 Difference in the response time between male and female applicants
Source: Created by the authors

Appendix H

Table 12. Analysis of how the requirement to send a motivational letter affects the results

| | Motivational letter required (amount) | Motivational letter required (%) | Motivational letter not required (amount) | Motivational letter not required (%) | All applications (Amount) | All applications (%) |
|---------------------------|---------------------------------------|----------------------------------|---|--------------------------------------|---------------------------|----------------------|
| Neither invited | 333 | 77% | 215 | 80% | 548 | 78% |
| Both invited | 36 | 8% | 17 | 6% | 53 | 8% |
| Only man invited | 41 | 9% | 22 | 8% | 63 | 9% |
| Only woman invited | 23 | 5% | 16 | 6% | 39 | 6% |
| <i>Net discrimination</i> | 18 | 4% | 6 | 2% | 24 | 3% |
| Total | 433 | | 270 | | 703 | |

Source: Created by the authors