Gender Differences Within Academia
- A case study on the probability of promotion

Author: Pontus Stolt
Civilekonomprogrammet

Tutor: Jonas Månsson

Examiner: Dominique Anxo

Subject: Economics

Level and semester: Bachelor’s Thesis,
Spring 2012
Abstract

Title: Gender Differences Within Academia – A case study on the probability of promotion

Institution: School of Business and Economics

University: Linnaeus University

Aim: The aim of this thesis is to investigate whether there are differences between men and women in the probability of receiving a promotion and if this is caused by statistical discrimination. Further discussing if quotas are a solution to this bias.

Method: This thesis will attempt to answer the research questions using primary data and testing this in a Linear Probability Model. It will also relate to previous research comparing the outcome to it with support from existing theory.

Conclusion: The four regressions used in the Linear Probability Model, show that there exists differences in the probability of receiving a promotion between men and women. The results both infirm and confirm previous studies, but it is not possible from the research to distinguish if statistical discrimination is the underlying reason, though it might be an explanation to why there are differences. Quotas might be one answer to solve this bias, but further research is necessary.

Keywords: Gender, differences, quotas, probability, promotion, Academia
# Table of Contents

**Abstract** ................................................................................................................................................. 2

1. Introduction ............................................................................................................................................ 4

2. Previous research ................................................................................................................................. 5

3. Theoretical framework ......................................................................................................................... 7

   3.1 Taste-based discrimination ............................................................................................................... 7

   3.2 Statistical discrimination ............................................................................................................... 8

   3.3 The Glass Ceiling ......................................................................................................................... 8

4. Empirical framework .......................................................................................................................... 9

   4.1 The model ....................................................................................................................................... 9

   4.2 The survey .................................................................................................................................... 10

   4.3 The dependent variable ................................................................................................................ 10

   4.4 Independent variables .................................................................................................................. 11

5. Results and discussion ....................................................................................................................... 13

6. Conclusion, concluding remarks and policy recommendations ..................................................... 15

References .................................................................................................................................................. 16
1. Introduction

Women have, throughout history, been seen as the person staying at home, taking care of children, whilst the man has been seen as the worker and provider for the family. Since times are changing and more women are entering the workforce, biases between genders’ and differences between men and women concerning promotion have started to arise. Research suggests that gender differences exist, either in the form of discrimination or systematic excluding of women from reaching the higher rungs of the career ladder. One of the more drastic measures to deal with gender differences has been labelled, in Sweden, quotas. Quotas can be defined, according to Dahlerup and Freidenvall (2008), “... as a targeted recruitment with the aim to quickly correct unwanted biases in society”. A precondition for quotas to work is that the visible differences between genders are based on some type of disinformation. If this were the case it will show systematic differences in different work attributes, such as wages or promotion possibilities, between different groups of individuals (see Ahmed and Hammarstedt, 2010).

This thesis will use a specially collected data set to investigate if there are gender related differences in academic promotion presented by a linear probability model to find whether differences exist or not.

The aim of this thesis is to investigate whether there exist gender related differences in promotion within academia and discuss reasons why it exists.

The research questions used are:

a) Are there differences between men and women regarding chances of getting promoted within academia?
b) If so, can this be caused by discrimination?
c) Can quotas be a way of solving this inequality?
2. Previous research

Previous studies suggest that differences between men and women have existed throughout history. Coltrane (2004) explains how an ideology of women being at home, nursing and raising children. Also Granqvist and Persson (2005) concludes that women tend to spend less time on labour market activities and that this could have a negative impact on their chances on receiving a promotion, on the labour market. In Sweden this could partly be explained by the level and years of education that women had.

Cannings (1988) show, that women had less chance of getting a promotion. The study finds that women, that occupied one third of the managerial jobs, had less than 90 per cent of men’s wages and only 80 per cent chance of getting the same promotion. Even when factors like education and productivity were held constant, the difference was remarkable (see also: Spurr (1990)).

Also Hultin (1998) studied the same case as written above. The findings were that the empirical data indicated the same answers as before, i.e. women have less probability on receiving a promotion. When testing for it, it proved not to hold. The results were that neither men nor women were discriminated by the workplace manager (see also: Mueller, Kuruvilla and Iverson (1994)).

Knights and Richards (2003) made a research on sex discrimination in UK academia and found inequality of opportunities (such as promotion), which, according to the authors, are surprising due to the length of time UK have had legislation on both equal pay and antidiscrimination. The authors write about the patriarchy and standards that have been historically underlying as a fundament, worsening opportunities for women and some men. In a research concerning promotion for doctorates of biochemistry in academia, Long, Allison and McGinnis (1993) found that women are 10 per cent less likely to get promoted than men. Also Kahn (1993,1997) found a bias when comparing promotion between men and women for economists in academia. Ginther (2001) presented results where the wage gap between males and females is persistent over time. Also the probability of promotion differs in terms of gender.

Blau and Devaro (2007) studied the case of promotions and the wage changes attached to these promotions. They found that men tend to have a higher probability on receiving a promotion, but little gender difference on wage changes due to these promotions. Yap and Konrad (2009) explored the likeliness of women and racial minorities of getting a promotion to their counterpart, men. Using a dataset of 22 000 full time workers, they found that women and
racial minorities have a lower probability of receiving a promotion. The disadvantage was clearer in the first stages of the career-ladder, supporting the “sticky floor theory”. The authors’ also discuss the gender difference in preferences and that they cannot rule out that these preferences are an explanation to the findings (see also: Pergamit and Veum (1999)). Yap and Konrad also states that “market forces alone are not effective in removing labour market inequities”, but support more openness rather than quotas.

Chow and Crawford (2004) explain that one reason to why men have a higher rate of promotion might be more years in tenure than women. And that this was significant unlike counterparts such as: education or hierarchical position.

Pekkarinen and Vartiainen (2006) analysed the gender differences and productivity of promoted and non-promoted Finnish metal workers. Their conclusion was that men tend to have a higher promotion rate than women, even if women tend to have equal or higher productivity than men, both among the promoted and non-promoted.

Ahmed (2008) presents a model were two workers are taken into consideration. One of the workers is assumed to be discriminated against and thus will not apply for the same jobs as the other worker. The model does not imply that the firm is discriminating rather that the belief of discrimination exists will be self-fulfilling. Also Pekkarinen and Vartiainen (2006) wrote about this in their article, where women tend to start their careers in a less demanding position, thus having a smaller chance on receiving a promotion than men.

A summary of previous research indicates that gender differences in promotion exist in both academia and in other workplaces. It might still be a gender-discrimination question whether an employee will get a promotion or not. One way of solving this, is to limit the analysed area, such as in this case would be academia in Sweden.

Thus implying that with the correct data, differences in promotion will be identified.
3. Theoretical framework

Economists argue whether discrimination exists in promotion between men and women, or if it is the lack of competent women that makes it difficult for women to climb the career ladder. This thesis’ main objective is to examine the difference, if any, between men and women in the probability of getting a promotion and if discrimination is a factor or not. Thus, a short summary of discrimination theory and “glass ceiling theory” will follow.

There are two main models in economics, the competitive and the collective. Most of the research is done on the competitive model, where agents act individually, rather than the collective model where a group acts as a whole. Hence I will focus this thesis on competitive models, such as labour market discrimination.

Cain (1986) defines discrimination as:

\[ Y = x\beta + aZ + \epsilon, \]

Where \( y \) equals wage, \( x \) is a vector describing the productivity of the worker (which is observable) and \( z \) stands for a variable and equals to 1 if the worker is a member of a minority group. If \( x\beta \) and \( aZ \) are uncorrelated with \( \epsilon \) then discrimination, against the minority group, exists when \( a < 0 \).

Becker introduced discrimination in economic theory in his book “The economics of discrimination” (1957). He studied the case of taste-based discrimination, where the individual is considered, both the employer and the employee. Decades later Phelps (1972) developed the second main theory, statistical discrimination and shortly after Arrow (1973) followed in his steps. Further a brief summary of the two will follow.

3.1 Taste-based discrimination

In 1957, Becker introduced his theory of discrimination that, at the time, was ground breaking. He defined employers’ prejudice as a taste for discrimination, where the employer prefers one employee instead of the other even if the productivity is equal.

Becker continues with explaining that the employer sees a cost in hiring the discriminated person and thus giving us an equation of: wage of male = wage of female + the factor of discrimination.

Based on this theory, it is quite clear that employers’ who dislike women will favour men in the probability of promotion.
3.2 Statistical discrimination

The first theory about statistical discrimination was presented by Phelps in 1972 and was supported by Arrow in 1973. The theory describes firms with limited information about workers’ skills and productivity, thus making it hard to observe the marginal product of the worker. Hence firms or employers have incentives to group workers together which have the same characteristics that are easy to observe, such as race, gender and age. Employers then make their assumptions about the individuals’ performance based on the groups’ performance, which the worker belongs to. I.e. two workers with the identical productivity may earn differently because one worker belongs to group with higher productivity and the other not.

Given this theory, asymmetry of information would be the underlying reason for discrimination. Women might be discriminated against because of the employers’ assessment of women as a whole (some women will get pregnant and have higher absence than men). This might favour men in the probability of promotion, even if the productivity of some women is equal to that of men.

3.3 The Glass Ceiling

The theories concerning the glass ceiling express it to be a limitation or a barrier for women to advance in the firms’ hierarchy. Linehan et al (2001) defines the reasons to why the glass ceiling exists as the [mis]perception that women lack the education, skills and behaviour, necessary for leadership, and thus a climb in the career ladder. Van der Boon (2003) states that discrimination, both structural and systematic, influence policies and limit women advancement in the firm. The glass ceiling theories has gained substantial empirical support (see e.g. Albrecht et al., 1999; Albrecht and Vroman, 2003; Kay and Hagan, 1995; Morgan, 1998; Williams, 2005).

It is difficult to measure statistical discrimination but this thesis will examine if there are differences between men and women regarding chances of getting promoted within academia. Does differences exists and can quotas counteract this?
4. Empirical framework

4.1 The model

Since this thesis examines if there are differences between women and men in the likelihood of climbing the career ladder within the academia. Due to data restrictions we only have possibilities to investigate steps from assistant professor (Swedish lector) towards becoming a full professor. The steps from assistant professor to full professor consist in most cases of a middle step - associate professor (Swedish Docent). Further, using the position post-doc as a middle step from assistant professor to associate professor. This ladder would if possible have been analysed using some type of sequential model, i.e. ordered probit or logit. However, due to data limitations discussed later the only ability is to analyse the probability to move from assistant professor level to an aggregate of higher positions. Thus it will end up with two outcomes; staying as assistant professor or moving towards full professor, which includes post-doc positions, associate professor and full professor. Since the outcome is binary, a linear probability model will be used mainly due to the fact that it is easy to interpret the results.\(^1\)

According to Gujarati and Porter (2009) the linear probability model is similar to the ordinary least square (OLS) regression model, but in contrast to an OLS the LPM estimates the probability, \(Y_k\), of an event occurring, given, \(X_k\). The model is based on the probability of an event occurring or not, thus giving us two different outcomes. When \(P_k = Y_k = 1\), the event will occur and \((1-P_k) = Y_k = 0\), the event will not occur.

The model will take a form like:

\[
E(Y_k | X_k) = P_k = \alpha + \Sigma \beta_k X_k,
\]

where \(P\) is the probability that the event occur for individual \(k\). In our case moving on from the assistant professor position.

In the results section a linear probability model is estimated to determine if women and men have different probabilities of being promoted, estimating four different models with the dummy variable position2, which are the three higher positions, as the dependent variable. For each model there is an increase in explainable variables. Model 1 control only for the female dummy variable with more interest. Model 2 controls for the female dummy and family situation.

\(^1\) Alternative models for studying binary outcomes are the logit and the probit model (see e.g. Gujarati 2009)
Model 3 adds the school characteristics and finally model 4 also adds the job characteristics. The standard errors are presented in the brackets and statistical significance are shown as either italic=10 per cent, bold=5 per cent and bold+italic=1 per cent.

The hypotheses that will be used are:
H$_0$: There is no difference between men and women in the probability of being promoted.
H$_1$: There is difference between men and women in the probability of being promoted.

4.2 The survey

The data set is a unique primary data, compiled from a survey sent out 2003 to academics that had taken their doctoral degree in the previous five years. The survey was sent to 1 513 academics, of whom 950 answered, yielding a response rate of 63 per cent. As this thesis examines the probability of getting a promotion within academia, the sample had to be controlled for persons still working in the academia, reducing the sample to 505 persons, or 33 per cent. Of those who answered 52 per cent were men and 48 per cent were women. The survey was originally used in Jonnergård and Elg (2011), who made a similar study to this one, but regarding how men and women establish themselves in the audit industry and in academia.

4.3 The dependent variable

As the purpose of this thesis is to examine if there are differences between men and women in getting a promotion, the dependent variable seems obvious to be the career ladder (i.e. the three higher positions). The number academics that have been promoted to these higher positions are 67 persons in this sample. Since there are only a small part of females in the sample that are becoming associate professors or full professors we also include individuals that holds a post-doc position. The motivation for including these are that post-doc is a position where the ambition is that those entering such position will be our future associate professors and full professors.
Table 1. Frequencies of positions

<table>
<thead>
<tr>
<th>Title</th>
<th>Freq.</th>
<th>Per cent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lector</td>
<td>438</td>
<td>86.73</td>
<td>86.73</td>
</tr>
<tr>
<td>Docent</td>
<td>48</td>
<td>9.50</td>
<td>96.24</td>
</tr>
<tr>
<td>Professor</td>
<td>1</td>
<td>0.20</td>
<td>96.44</td>
</tr>
<tr>
<td>Post doc</td>
<td>18</td>
<td>3.56</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>505</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Titles distributed by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Lector</th>
<th>Docent</th>
<th>Professor</th>
<th>Post doc</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>223</td>
<td>8</td>
<td>0</td>
<td>10</td>
<td>241</td>
</tr>
<tr>
<td>Male</td>
<td>215</td>
<td>40</td>
<td>1</td>
<td>8</td>
<td>264</td>
</tr>
<tr>
<td>Total</td>
<td>438</td>
<td>48</td>
<td>1</td>
<td>18</td>
<td>505</td>
</tr>
</tbody>
</table>

As seen from table 2, men possess 73 per cent of the higher positions.

4.4 Independent variables

There are many factors depending on whether an employee will get a promotion or not. The variables used will try to explain differences, if any.

One of the first variables is if the employee is Swedish or not. Even if this thesis’ main purpose is to examine gender differences we need to control for the origin of birth since this might have an impact. The second variable is whether the person is married or having a partner.

Partnership indicates that the person is planning ahead, such as settling down in a certain area or starting a family. Even though the variable “married” is less reliable these days, it is necessary to take into consideration, because marriage can be interpreted as an indicator of planning ahead, settling down and moving to a permanent area (Månsson et al., 2010).

Variables that highly affect promotion are children and childcare. Crittenden (2004) argues that having children lead to higher responsibility, both at home and at work and therefore we can

\[ \frac{49}{67} = 73 \text{ per cent} \]
expect that the variables children and childcare have a positive influence on the probability of receiving a promotion. However, previous studies also suggest that the number of children will have a negative impact on women’s possibilities to reach a certain (higher) position (Albrecht et al., 1999).

Table 3. Summary of independent variables: observations, means, standard deviations and missing values

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Nb. Of missing values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>505</td>
<td>.477</td>
<td>.499</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Age</td>
<td>503</td>
<td>47.795</td>
<td>9.594</td>
<td>30</td>
<td>71</td>
<td>2</td>
</tr>
<tr>
<td>Age squared</td>
<td>503</td>
<td>2376.245</td>
<td>928.956</td>
<td>900</td>
<td>5041</td>
<td>2</td>
</tr>
<tr>
<td>Non-Swedish</td>
<td>484</td>
<td>.095</td>
<td>.294</td>
<td>0</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Married</td>
<td>505</td>
<td>.629</td>
<td>.483</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Children</td>
<td>499</td>
<td>.804</td>
<td>.398</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Nursing</td>
<td>505</td>
<td>.204</td>
<td>.403</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Study abroad</td>
<td>476</td>
<td>.521</td>
<td>.500</td>
<td>0</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Career possibility</td>
<td>463</td>
<td>.726</td>
<td>.447</td>
<td>0</td>
<td>1</td>
<td>42</td>
</tr>
<tr>
<td>Tenure</td>
<td>451</td>
<td>14.732</td>
<td>11.512</td>
<td>0</td>
<td>40</td>
<td>54</td>
</tr>
</tbody>
</table>

The variables seen from table 3 all relate to the probability of getting a promotion.

As this thesis examines the difference between men and women, the variable female is included. The second variable is Age and we expect that the older you get, the more likely you are to receive a promotion. This variable is also used in quadratic form. The variable Non-Swedish is included since this could have a negative influence on promotion probability. As mentioned before, variables denoting marriage, children and nursing are included. These variables have high involvement in the employers’ assessment of the person. Career possibility is the academics own assessment on whether he or she sees the future. Tenure contributes to human capital and also experience in the working field.
5. Results and discussion

Table 4. Linear probability estimates on differences between men and women

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-0.11 (0.029)</td>
<td>-0.092 (0.03)</td>
<td>-0.077 (0.033)</td>
<td>-0.072 (0.034)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.068 (0.019)</td>
<td>-0.063 (0.02)</td>
<td>-0.064 (0.02)</td>
<td></td>
</tr>
<tr>
<td>Age squared</td>
<td>0.001 (0.000)</td>
<td>0.001 (0.000)</td>
<td>0.001 (0.000)</td>
<td></td>
</tr>
<tr>
<td>Non Swedish</td>
<td>0.186 (0.051)</td>
<td>0.179 (0.052)</td>
<td>0.223 (0.054)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-0.016 (0.033)</td>
<td>-0.022 (0.034)</td>
<td>-0.058 (0.036)</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>0.017 (0.043)</td>
<td>0.010 (0.044)</td>
<td>-0.035 (0.046)</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>0.041 (0.039)</td>
<td>0.048 (0.042)</td>
<td>-0.022 (0.044)</td>
<td></td>
</tr>
<tr>
<td>Study abroad</td>
<td></td>
<td>0.047 (0.031)</td>
<td>0.035 (0.032)</td>
<td></td>
</tr>
<tr>
<td>Career possibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td></td>
<td>0.014 (0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_cons</td>
<td>0.185 (0.02)</td>
<td>1.894 (0.447)</td>
<td>1.751 (0.466)</td>
<td>1.791 (0.477)</td>
</tr>
<tr>
<td>Adj-R²</td>
<td>0.025</td>
<td>0.088</td>
<td>0.089</td>
<td>0.104</td>
</tr>
</tbody>
</table>

Note italic indicates statistical significance at 10 per cent, bold at 5 per cent, and bold+italic at 1 per cent. N = 505 in model 1, N = 478 in model 2, N = 452 in model 3 and N = 403 in model 4. The standard errors are given in the brackets.

From table 4, insignificant estimates dominate the models. This means that the null hypothesis for these variables cannot be rejected. In model 1, the result is that females have 11 per cent lower probability than males of getting promoted and it is also significant at the one per cent level.

In model 2 women still have a lower probability of getting a promotion than men at the one per cent level, even when controlling for family situation. The variable age indicates that women over all are younger than men with about seven per cent. The variables married, children and nursing are all insignificant values and have no particular influence on the probability. The variable Non-Swedish has an 18.6 per cent age unit’s positive influence on the probability, statistically significant at the one per cent level.
In the third model, the variable study abroad is added. Here women still have a tendency of lower probability, now at roughly seven per cent. The values generated are dominated with insignificant values, and family situation tend to have no relation to the probability.

The fourth model adds the job characteristics, generating even smaller values. Females still have lower probability than men, significant at the five per cent level. Most of the variables show an insignificant value, having no relation to the probability of promotion. In all four models the constant has a positive influence and is statistically significant at the one per cent level, respectively.

The estimate for non-Swedish is a little problematic and has to be interpreted with great caution. According to previous research we would expect a negative sign, i.e. that non-swedes has a disadvantage. The results shown here is positive and strongly significant. However as also showed in table 3 the number of non-Swedish is quite few which might cause a bias of the estimate.

The adjusted R-squared, which shows, the goodness of fit of the model, changes from 0,089 to a higher 0,104 in comparison from model 3 to model 4. This might be a problem of endogeneity, where the variables are correlated with the errors and is a problem with the linear probability model.
6. Conclusion, concluding remarks and policy recommendations

To summarize, the four regressions provided some insight in the differences between men and women regarding probability in promotion. Women, in this survey, tend to have some disadvantage in being promoted. Surprisingly, there are a lot of insignificant values generated from these tests. Variables like marriage, children and nursing show no significance from the three tests. And should, according to theory, have some interference with the outcome.

The results both confirm and infirm with previous research. As the results are confirming both, Ginthers’ (2001) and Knight and Richards (2003) research, that women have less probability than men in getting a promotion. As infirming previous research, these tests find no particular evidence on women having less probability because of historical view of women being at home taking care of children and nursing. But these results showed no significance and should therefore not be considered.

As for the research question 2, it is not possible from this research to conclude that discrimination is the underlying reason to these differences, it might be one explanation to why there are differences. Regarding the third question whether quotas could solve this bias, the answer is still open. On one hand the results indicate systematic differences between males and females. If this is due to statistical discrimination quotas might be one way of equalising opportunities between males and females. From another perspective this research is based on a fairly small sample, the promotion is crudely measured and one cannot, from the analysis, conclude that statistical discrimination is the cause for the observed differences. Saying that, the observed differences also give argument that further research is needed: there are differences but why are there differences? To answer this question we could use regression methods on large sample data, or using for example experimental methods as done in e.g. Ahmed, Andersson and Hammarstedt (2010).
References


Jonnergård, K and Elg, U. eds. (2011), To enter a profession – on how males and females establish themselves in the audit industry and in academia. Lund University Press, Lund


Knights, David and Richards, Wendy. (2003), Sex Discrimination in UK Academia, Gender, Work & Organization, Vol. 10 Issue 2, pp. 213-238


Yap, Margaret and Konrad, Alison M. (2009), Gender and Racial Differentials in Promotions: Is There a Sticky Floor, a Mid-Level Bottleneck, or a Glass Ceiling? *Relations Industrielles / Industrial Relations*, Vol. 64 Issue 4, pp. 593-619.
Linnaeus University – a firm focus on quality and competence

On 1 January 2010 Växjö University and the University of Kalmar merged to form Linnaeus University. This new university is the product of a will to improve the quality, enhance the appeal and boost the development potential of teaching and research, at the same time as it plays a prominent role in working closely together with local society. Linnaeus University offers an attractive knowledge environment characterised by high quality and a competitive portfolio of skills.

Linnaeus University is a modern, international university with the emphasis on the desire for knowledge, creative thinking and practical innovations. For us, the focus is on proximity to our students, but also on the world around us and the future ahead.

Lnu.se
Linnaeus University
SE-391 82 Kalmar/SE-351 95 Växjö
Telephone +46 772-28 80 00