*The British Journal of Sociology 2008 Volume 59 Issue 4*

**In search of the glass ceiling: gender and recruitment to management in Norway’s state bureaucracy1**

Aagoth Elise Storvik and Pål Schøne

**Abstract**

There are still fewer female than male managers in Norway’s state bureaucracy. This article asks if there are organizational barriers which prevent women from entering these positions. Is there really a glass ceiling, or must one look outside the organizational environment to find an explanation? Is it rather the case that the scarcity of female managers is caused by women’s own preferences or their life situations outside work? Or do both contribute to the situation? The study shows that female managers are treated just as well as male managers in central parts of the state bureaucracy. Employers give equal shares of respect and attention to both genders. Female managers are encouraged to apply for the same number of jobs as men and are offered an equal number of jobs as men when they apply; in fact, women are offered *more* jobs than men, when one controls for the number of job applications. This indicates that organizational barriers are not the problem. The study also shows that there are no differences in work orientation between male and female managers. Female managers are just as ambitious as male managers. Nor do female managers find it more difficult than male managers to combine work and family life. So, how can one explain the low number of female managers? The study shows that one reason can be that female managers apply for management jobs less often than their male colleagues. The cause of this seems to be anticipated discrimination rather than lack of ambition or self-confidence. However, this slows down women’s movement into higher management positions in the state bureaucracy.

**Keywords:** Norway; gender; management; recruitment; state bureaucracy; glass ceiling

# Introduction

The theme of a 1986 *Wall Street Journal* article was the low proportion of women managers in working life. In the article it was argued that there

Storvik and Schøne (Institute for social Research, Norway) (Corresponding author email: aas@samfunnsforskning.no)

© London School of Economics and Political Science 2008 ISSN 0007-1315 print/1468-4446 online.

Published by Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA on behalf of the LSE. DOI: 10.1111/j.1468-4446.2008.00217.x

appeared to be a glass ceiling somewhere just above the lowest management levels beyond which women did not move. Briefly, it was maintained that women were discriminated against when higher level managers were hired. The main objective of the study we present is to determine whether such a glass ceiling actually exists within central parts of Norway’s state bureaucracy and to ask whether men and women are treated differently by the employer when they aspire to higher management positions.

At the end of 2006 there were still fewer women than men in management in Norway’s state bureaucracy. Only 27 per cent of top managers in the state bureaucracy were women, while at the intermediate level 37 per cent were women. Within the intermediate level the percentages of female managers were highest in the lowest positions. In other words, the proportion of female managers declined from lower to higher levels.

The number of female managers in the state bureaucracy has increased steadily over the last thirty years. Many nevertheless consider that this devel- opment is proceeding too slowly. The government determined that by 1 July 2006, each gender should hold at least 40 per cent of leading positions within the state bureaucracy. It has frequently been maintained by the government that in order to solve the major, complex issues facing Norway’s society, diversity is necessary in governmental management concerning skill, experi- ence, gender, age and so forth.

When one wants to increase the proportion of female managers, understand- ing how this deficiency has arisen would be of interest. It has been claimed that women encounter specific barriers which hinder their careers and as men- tioned, one such set of barriers in working life is the so-called glass ceiling. Another is the problem of meeting both work and family obligations. This is often assumed to be a bigger problem for women than for men. If so, this could potentially explain the low proportion of women in positions demanding extensive workloads. Whilst we look at both sets of barriers in this article, we mostly focus our attention on the glass ceiling. We first investigate the expla- nation that men and women who aspire to higher management positions are treated differently before and after having applied for such positions. Probert (2005) argues that this kind of explanation has been very dominant and that it has not been rigorously scrutinized. The basis of the study is a 2005 question- naire which registers motivation, experience and career patterns among state- sector managers. It includes nearly all the managers within ministries and directorates resulting in 990 responses – a response level of 77 per cent.

# Earlier research on gender and management in Norway’s state bureaucracy

The relatively low percentage of female managers in the state sector compared to men has been the theme for some previous research. However, that research

did not point to any clear conclusions.2 Barth and Yin (1996) did not find any differences in promotion between men and women employees in state orga- nizations, but their study was based on a small part of the sector. Research has shown that men’s career paths cross organizational borders more than those of women (Schøne 2001). To obtain a more comprehensive picture of men’s and women’s career chances, it is necessary to study mobility within the state as an internal labour market. Some earlier studies have shown that male and female applicants have similar chances of being appointed to the positions sought (Lægreid 1989; Teigen and Wiers-Jenssen 1997; Storvik 1999). If we examine appointments to senior civil service positions in the period 1994–2004, we arrive at the same result. Women accounted for 27 per cent of applicants and 30 per cent of appointments, which shows that women are as likely as men to be offered the job (report to the Norwegian Parliament, stortingsmelding 9, 2005). A study of the American state bureaucracy showed the same result (Powell and Butterfield 1997).

The question arising from these earlier studies is why women less frequently than men, apply for management positions in the state bureaucracy. One possible explanation is that women’s career ambitions are not as strong as men’s, and that they are not willing to spend as much time and effort at work. Another possibility is that experiences *prior* to the actual hiring processes may explain why women apply less frequently than men. Both assumptions will be closely examined based on the study’s findings.

We shall be using a broader approach than those used in the research mentioned above. As outlined, previous studies of the glass ceiling hypothesis have largely been based on statistical analysis of promotion, or focused solely on the relationship between applications and appointments. These approaches do not provide insight into processes which occur prior to application and which may discriminate against women and be decisive in who applies for the posts. Nor do previous studies thoroughly research gender differences in pat- terns of job applications, motivation and interests. The following study seeks to fill this knowledge gap.

# Explanations for the low proportion of female managers

The scarcity of women in management positions in society has been explained in various ways. It is possible to distinguish between several main types of explanations (see Alvesson and Billing 1997: 137; Petersen 2002: 445). Our point of departure is to distinguish between explanations which consider the scarcity of female managers resulting from differential treatment in the work- place, and those which account for this scarcity by referring to characteristics of the women themselves or their life conditions outside the workplace. Such a distinction is, of course, an over simplification. Some explanations argue that

it is the combination of the two which causes them to be under-represented at managerial level. The approach presented here does not represent a divide between individual and structural explanations. Differential treatment in working life results from both employers’ actions and the structure of working life. Likewise, explanations which attach importance to women’s choices and career opportunities can attribute these to both the priorities of individual women and to the societal structures which influence their choices. These distinctions, however, are not of prime interest for the essential problem being examined in this article. The following discussion will therefore be based on our own categorization, as outlined above.

# Differential treatment of men and women in working life

Our initial considerations concern explanations which view the low proportion of women in management positions as an expression of unequal treatment (explanation 1). It is argued that women who wish to follow a career encounter a glass ceiling. The ceiling is located above the lowest middle-level manage- ment positions, and prevents women from attaining higher management posi- tions (Glass Ceiling Commission 1995). The barriers which make up the ceiling may be associated with the individual employer’s practice, or be of a more structural character. Further, these barriers may incorporate everything from direct, intentional discrimination, to practices which might also unintentionally block women’s way to the top. Examples of such mechanisms are the gender- ing of occupations and positions, stereotyping, homosocial reproduction and marginalization.

The gendering of occupations and positions implies that work tasks and gender are defined in such a way that a job appears to be best suited for either men or women. Cockburn (1988) describes this phenomenon in relation to manual occupations, but white-collar occupations are often also gendered this way. Management is one such high status job with a masculine subtext. It has been constructed as a work task which demands characteristics conventionally ascribed to men (Kanter 1977; Schein 1989; Collinson and Hearn 1996; Kvande 2002). Stereotyping refers to a process whereby expectations based on gender, for example, are so strong that they dominate how the individual is perceived (Allport 1958; Valian 1999). The result is that a person can be attributed with an identity on the basis of prejudices rather than on the basis of their actions. If management has a masculine subtext this will – in combination with a tendency towards gender stereotyping – represent a problem for women who aspire to such positions. Kvande and Rasmussen (1990) argue that gender stereotyping especially will be a problem in large bureaucratic organizations such as can be found in the government sector. Here, it will be more difficult for the individual woman to demonstrate her potential than in small network

organizations. This claim receives little support, however, in previous empirical studies.3 Earlier studies of Norway’s state bureaucracy indicate that the man- agement ideal there contains a mix of so-called masculine and feminine traits (Storvik 1999, 2002b). This new and more gender balanced management ideal has also been found in other studies (Kanter 1989; Fondas 1997; Hatcher 2003). Homosocial reproduction refers to a tendency whereby leaders select new leaders who are similar to themselves (Kanter 1977). These similarities may relate to gender, attitudes, values, education or work experience. The cause of this tendency is the employer’s wish to recruit new employees with whom they can co-operate easily. Another cause of homosocial reproduction can be that male-dominated educations and positions are valued more highly and regarded

as more appropriate stepping stones to leading positions (see Storvik 1999).

Gender segregation in working life can have consequences for recruitment to management positions. It implies that men and women are recruited to different types of positions. The point here is that women are primarily recruited to the least prestigious organizations where they are placed in the least prestigious jobs (Kanter 1977; Benschop and Doorewaard 1998; Tienari 1999). Consequently, their career possibilities become more restricted than those of men. Empirical studies have shown that differences in salary and promotion possibilities frequently can be traced back to the initial employ- ment in the organization (Hoel 1997; Barth, Røed and Schøne 2005).

Another phenomenon, marginalization in the workplace, means that an employee is shut out from important networks. Networks play an important role in working life (Hughes 1958) and there is good reason to believe that networks are particularly important in recruiting (Granovetter 1974). That the majority of managers are men can present a problem for women. Both Marshall (1995) and Gherardi (1996) describe how this may affect women in higher positions. If women are excluded from male-dominated networks, they will have more difficulty advancing within the organizational hierarchy.

Several of the theories outlined above illustrate that the barriers hindering women’s career advancement are linked not only to the actual hiring situation, but also to the day-to-day life within the organization. Processes such as exclusion, stereotyping and ignoring or overlooking can start from the very first day in a new workplace. These processes can be decisive for the worker’s social status inside the organization, which in turn has an impact on their future career trajectory (Van Vianen and Keizer 1996; Valian 1999). By *social status*, we mean not only formal positions, but also the *informal regard* or *prestige* enjoyed by an individual within an organization. The result of mecha- nisms mentioned above may be a lower application rate for women than men. It is reasonable to believe that the majority of both men and women avoid seeking management positions which they do not think they will be successful in achieving. This way one avoids wasted effort, disappointment and maybe embarrassment.

# Men and women’s preferences and conditions of life outside the workplace

The second type of explanation we shall examine sees the low proportion of female managers as caused by women themselves and their life situation (explanation 2). Here, importance is attached not only to women’s priorities and choices, but also to the societal structures outside working life which restrict and influence their decisions.

One variant of this type of explanation is based on the assumption that men and women are different, whether due to biology or socialization. Men and women are assumed to have *different values, attitudes and dispositions.* Some theoreticians associate these gender differences to early socialization (Chodorow 1978; Hakim 2002) and others point to women’s experiences with motherhood and subordination (Cockburn 1991). Healy and Havens (1987) actually describe traditional female socialization as the antithesis of leadership as it is conventionally understood. To motivate women to apply for manage- ment positions, Ferguson (1984) maintains that it is necessary to develop new types of organizational structures.

Another variant of this second explanation refers to men’s and women’s *different opportunities and life circumstances outside work*. This explanation makes no assumptions about psychological differences, but refers rather to the fact that women’s life conditions are often different to men’s. An example is Acker (1992) who points to the fact that an implicit assumption in managerial jobs is that one must have a partner who can take full responsibility for the family. This task is conventionally handed over to women, and, as a conse- quence of which, they will not have the same career opportunities as men. Højgaard (2002) argues that marriage patterns promote different possibilities for men and women in working life. She refers to the fact that more male than female managers are married with partners who work part-time and have the main responsibility in the home and she contends that this leads to the differ- ent career opportunities observed for men and women.

Yet another variant of the second explanation emphasizes both women’s choices and the structures of working life. This explanation attaches impor- tance to the interplay between these two factors, but primarily to the first. The proportion of women in management-relevant education decreases the further back in time we go Petersen and Teigen (1997) point out. When we examine those educational cohorts from which top managers are normally selected (i.e. those with twenty years or more experience in working life) their findings reveal the proportion of women has been steadily increasing in many areas of education including engineering, economics, law and political science. As a result, the proportion of women in top management positions has also increased. One observation supporting this is that the proportion of women managers is highest among the youngest age groups of managers (Petersen and Teigen 1997).

# Data and methods

An electronic questionnaire was sent to 1260 managers of which 990 replied, a response rate of 77 per cent. It was sent to nearly *all* managers in nearly *all* ministries and directorates.4 Consequently, the study includes the whole popu- lation, not merely a sample. Among the civil servants in the ministries the three main categories of managers are included, which means that top managers and lower and higher middle-level managers are represented. In other state bodies, managerial posts at all levels are included. Together the 18 ministries and 23 directorates employ about 75 per cent of all employees in the central parts of Norway’s state administration.5

Our study focuses only on those currently holding a leading position and because not all civil servants are included, the survey is not able to say any- thing about the elimination process resulting in appointment to the lowest level of management.6 Nevertheless, as mentioned, promotion from executive officer or counsellor to lower middle-level manager is not thought of as the main hurdle for women. The main hurdle is thought to be from lower level of management to higher level of management. So by examining the respondents from all the three management levels as we here do, it will be possible to study the glass ceiling hypothesis.

Information on the survey was presented on the intranet in the majority of institutions where the survey was to be carried out. In such presentations it was stated that the survey was undertaken on behalf of the Ministry of Modern- ization for the purpose of ‘the acquisition of knowledge with the aim of increasing diversity in management based on skills, experience, gender, age, etc.’. Shortly afterwards managers received the electronic questionnaire via their individual work email address.7 Full anonymity was guaranteed and ensured in the electronic questionnaire. The software program was approved by the Data Inspectorate.8

The survey has been developed on the basis of previous studies of admin- istration (Storvik 1999, 2000, 2002a, b) which include both qualitative inter- views with managers, and a quantitative questionnaire directed towards top managers who are also responsible for hiring new staff. Most results in this study are based on bivariate analyses, but regression analyses are also used.9

# Respondents

In all, 583 male and 392 female respondents answered the questionnaire. Women thus comprised about 40 per cent of those interviewed. They were therefore somewhat over-represented in the study, compared to their actual proportion of employees – about 34 per cent. The reason for this, also found in other studies (see Storvik 2002a), may be that women are more interested in

questions related to gender and management and therefore have a higher response rate than men. Of the replies received, 457 were from ministries and 533 were mainly from directorates (see endnote 4). In total, the survey covered 198 top managers, 441 upper middle-level managers, and 334 lower middle- level managers.

Examining the state sectors the respondents represented, we find that the sectors are in broad agreement with their actual proportions in the state, although there are some exceptions. The environmental sector is somewhat over-represented (see endnote 4). Whereas some male-dominated sectors with few female managers, such as the Ministry of Culture and Church Affairs, and the Ministry of Defence, are somewhat under-represented in the study. However, female managers in these sectors have responded as frequently as women in other sectors surveyed. Analysis of male-dominated and more bal- anced sectors show no significant differences (see results section). In other words, there are no grounds to believe that the under-representation results in systematic distortion that would be of any significance in the discussion of questions raised in this article.

# Organizational context

Ministries and their sub-units, directorates, are in many ways homogenous organizations. They have the same laws, regulations, and employee and recruit- ment policies,10 employ the same type of professional staff (see below), and in both places nearly all vacant positions are publicly advertised. Both ministries and directorates are also large organizations with many departments and a hierarchal structure. The organizations studied have between one hundred and several hundred employees. All have at least three levels of management, where the lowest level managers are often in charge of less than a handful of people, while at the next levels the numbers increase considerably. Beside management roles there are also career opportunities as advisors, who have no management responsibility but who undertake tasks often involving a mixture of casework and deliberation (Byrkjeflot 1997). Other parts of the state admin- istration, not included in this study, can be smaller and have a much flatter structure. As mentioned earlier, there is some disagreement on how organiza- tional size and structure may influence women’s career opportunities, and as a consequence it is not certain whether the results from this study would also apply to these other units.

# Independent control variables

The independent control variables in this study have been chosen because they are believed to influence both application behaviour and success in application

processes and, in addition, may have a gender dimension. (For descriptive statistics of the observations used in the regression analyses see Table AI, appendix) Age is of course one variable. Female managers are often younger than male managers (Petersen and Teigen 1997), which is also confirmed by this study. Age is measured by six dummy variables: 35 years or younger; 36–40 years; 41–45 years; 46–50 years; 51–55 years; over 55 years.

Another pair of control variables are type and level of education. Type of education is measured by nine dummy variables: business economist; social economist; political scientist; lawyer; sociologist; other social scientist; human- ist; natural scientist, and others. The most frequent types of education are law and natural science (Table AI, appendix). A slightly higher per cent of female managers are lawyers, while a slightly higher per cent of male managers are natural scientists. Educational level is measured by number of years of post- secondary education. We construct three dummy variables: under 3 years of post-secondary education; between 3 and 4 years; more than 4 years. More than 80 per cent of both male and female managers have a masters degree or higher (more than 4 years post-secondary education). To control for manage- ment level we use three dummy variables: upper middle management; all other middle management; top management. Simple statistics confirm that there are fewer female managers at the highest management level than at the lowest. To control for area of work we include a dummy variable taking the value 1 if the respondent works in the Ministry, and 0 otherwise. Finally, to control for male-dominated/gender-balanced sector we included a dummy variable taking the value 1 if the respondent works in an organization with less than 30 per cent female managers.

# Results

## Explanation 1: The glass ceiling

The first explanation we shall consider assigns the ‘blame’ for the relatively low proportion of women managers to working life. Some argue that employers discriminate against women when they recruit managers (Kanter 1977; Kvande and Rasmussen 1990; Valian 1999). We will now consider, whether this is the case in central parts of Norway’s state bureaucracy. This will be done in several ways. First, we will investigate whether men are more successful in their applications and are offered more management positions than women. If this is found to be the case it may indicate hiring discrimination against women. Second, we will examine whether men more often than women are encouraged by the employer to seek management positions. Should this prove to be so it would seem to explain the higher male application rate. And third, we will also consider if men receive more positive evaluation and feedback than women

regarding their management qualities. This can again be decisive in whether one chooses to seek promotion opportunities in the organizational hierarchy.

## Job offers

The initial question raised was whether men were offered more management jobs than women were. First, respondents were asked how many management positions they had applied for. Second, they were asked how many of these management positions had been offered to them. We shall look at this last question first. The results from the regression analyses are shown in Table I. We present two models. The first model includes controls for age, level of education, type of education, and management level. Results from the first

**Table I:** *Take as your starting point the number of management positions you have applied for in the state sector. How many of these management positions were offered to you? Dependent variable: Number of offers. (Ordinary least square)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Model 1 |  | Model 2 |
| Coefficient | Standard deviation | Coefficient | Standard deviation |
| Intercept | 2.600\*\*\* | 0.149 | 0.480\*\*\* | 0.149 |
| Women | -0.046 | 0.081 | 0.115\* | 0.063 |
| *Age:* |  |  |  |  |
| Under 35 years | -0.471\*\* | 0.195 | 0.275 | 0.153 |
| 36–40 years | -0.224 | 0.137 | -0.001 | 0.106 |
| 46–50 years | 0.104 | 0.129 | 0.075 | 0.100 |
| 51–55 years | 0.429\*\*\* | 0.123 | 0.121 | 0.096 |
| Over 56 years | 0.354\*\*\* | 0.119 | 0.058 | 0.092 |
| *Years of higher education:* |  |  |  |  |
| Under 3 years of higher | -0.469\*\* | 0.190 | -0.064 | 0.149 |
| education |  |  |  |  |
| Between 3 and 4 years of | -0.132 | 0.157 | 0.059 | 0.122 |
| higher education |  |  |  |  |
| *Type of education:* |  |  |  |  |
| Business economist | 0.300\* | 0.170 | 0.067 | 0.131 |
| Social economist | -0.001 | 0.156 | -0.057 | 0.121 |
| Political scientist | 0.132 | 0.144 | -0.130 | 0.112 |
| Sociologist | -0.355 | 0.274 | -0.036 | 0.212 |
| Other social scientist | 0.260 | 0.168 | 0.056 | 0.130 |
| Humanist | 0.125 | 0.178 | -0.162 | 0.138 |
| Natural scientist | 0.082 | 0.127 | 0.060 | 0.103 |
| Other type of education | 0.420\*\*\* | 0.150 | 0.321\*\*\* | 0.117 |
| *Management level:* |  |  |  |  |
| Upper middle management | -0.578\*\*\* | 0.105 | -0.312\*\*\* | 0.082 |
| All other middle management | -1.161\*\*\* | 0.113 | -0.604\*\*\* | 0.091 |
| Ministry |  |  | 0.043 | 0.069 |
| Number of applications |  |  | 0.611 | 0.025 |
| N | 917 |  | 917 |  |
| R2-adjusted | 0.182 |  | 0.514 |  |

*Note*: Group of reference for age is 41–45 years, group of reference for years of education is over 4 years, group of reference for type of education is law and group of reference for management level is top managers. Group of reference for ministry is directorate. \*\*\* Significant at the 1 per cent level, \*\* significant at the 5 per cent level, \* significant at the 10 per cent level.

model show no gender differences. Women are offered just as many manage- ment positions as men and the number of job offers increases with age, level of education and management level.

In model 2 we control for place of work (Ministry) and number of applica- tions submitted by applicants. Place of work does not seem to matter much when explaining job offers, but including information on the number of appli- cations submitted does make a difference, especially for the gender coefficient. After control for the number of applications, we find that, in fact, women are offered more jobs. The estimated coefficient suggests that women receive 0.115 more offers than men. Compared to the mean level of offers for men (2.20), this equals an increase of approximately 5 per cent. The large change in the gender coefficient is explained by a combination of two factors: first, women submit fewer applications than men, and second, there is a positive relation- ship between the number of applications and number of offers. When we control for the gender difference in applications, and thereby comparing men and women with an identical number of applications, women receive more offers.

We see that the explained variation (measured by R2-adj.) is increased considerably after including information on the number of applications, imply- ing that this information explains a considerable part of the variation in the dependent variable. One effect of including the number of applications is that some explanatory variables become insignificant, such as type of education and age (with one exception for the youngest group). Management level is still very significant, however. The number of management positions one has been offered increases with management levels already attained, probably because managers at the highest level are seen as the most competent and suitable ones, and of course since they have reached the top some of their applications necessarily must have been accepted. Separate analyses also show that the positive relationship between number of applications and number of job offers is equally strong for women and men (available upon request).

In Model 2 the explained variation is increased to 0.514. Still, almost half the variation in the dependent variable is unexplained. The remaining variation might be explained by job characteristics. Even at the same management level some jobs are more highly valued than others and appear as better stepping stones to a new management position. Further, the variation might be explained by individual differences in work experience, motivation, work effort or seniority.

Even though there are generally no gender differences, it could be that some such differences exist within the various sectors. To investigate this possibility, parts of the state bureaucracy have been looked at where a low proportion of female managers has been reported. Eight sectors have less than 30 per cent women in management, however the inclusion of a variable for this in the analysis did not make any difference (data available upon request).

**Table II:** *How many management positions have you been invited to apply for during your career in the state sector?*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | None | One position | Two positions | Three positions | Four positions | Five positions | Total | N |
| Men | 24% | 28% | 26% | 12% | 5% | 5% | 100% | 583 |
| Women | 23% | 30% | 24% | 11% | 6% | 5% | 100% | 392 |
| All | 23% | 29% | 25% | 11% | 5% | 5% | 100% | 990 |

# Encouragement from the employer to apply for jobs

The encouragement of candidates to apply for jobs is a common practice in Norway’s state administration (Storvik 2002a). In total, 23 per cent of women and 24 per cent of men have never been encouraged by the employer to apply for a management position (Table II). Further, there are equally as many men as women who have been invited to apply for one or two positions. If we look at the most ‘popular’ respondents – the group who have been encouraged to apply for three or more positions – we do not find any significant difference between men and women. Managers who have been encouraged to apply were also asked what type of position they were encouraged to apply for. It emerges that women have been asked to apply for just as many higher level positions as men.11 Evidently, there are no clear differences between men and women regarding their being encouraged to apply.

Even though there are generally no gender differences, it could be that some such differences exist in the various sectors, as mentioned. Within the group with less than 30 per cent female managers, one-fifth of both male and female managers state that they had never been encouraged to apply for a manage- ment position. If we look at the proportions who have been encouraged to apply for two or more such positions, we find that this applies to half of the men and half of the women. This suggests that even within the most male- dominated sectors, differences are small and insignificant.

# Experiences of recognition and appreciation

The next question we consider is whether men and women experience equal appreciation for their managerial abilities. Are men praised and given more credit for their management qualifications than women? To investigate this, managers were asked whether their own organization took sufficient interest in and valued management talents. The assumption is that if men were treated better than women they would also be more satisfied. However, this is not the case. The responses to the question show that half of all men and half of all women are satisfied and happy with the situation in their organizations

**Table III:** *Do you think people with management abilities are encouraged and valued in your organization?*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Yes, very much | Yes, to a certain degree | No, usually not | Do not know | Total | N |
| Men | 4% | 47% | 39% | 10% | 100% | 583 |
| Women | 5% | 45% | 38% | 11% | 100% | 392 |
| All | 5% | 46% | 38% | 10% | 100% | 990 |

**Table IV:** *Do you think others at your workplace see you as a future top manager in the state sector?*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Men | Women | All middle-level managers |
| Yes | 23% | 21% | 22% |
| No | 27% | 28% | 27% |
| Do not know | 50% | 49% | 49% |
| Total | 100% | 100% | 100% |
| N | 449 | 311 | 760 |

(Table III). Further, they were also asked how satisfied they were with the recruitment of new managers in their organizations. More than half of both men and women state that they are satisfied.

A final question was introduced to uncover feelings of acknowledgment and respect. All middle-level managers were asked if they thought that their col- leagues regarded them as potential top managers. The answer to this question tells us about both self- perception and perception of acknowledgment from colleagues. Among male middle-level managers, 23 per cent believe that col- leagues regarded them as potential top managers; this applies to 21 per cent of women (Table IV). This difference is not significant, which suggests that women’s self-image is no worse than that of men and that they experience no less respect in the organization than their male counterparts.

## Explanation 2: Motivation, priorities and private obligations

As has been mentioned earlier, the low proportion of women managers has also been explained by women’s choices and life circumstances. We shall now look at this second main type of explanation which places the ‘blame’ upon the women themselves and their conditions of life outside the workplace. As stated, this type of explanation has many variants and these will be discussed as far as the data permits. We shall begin with explanations which emphasize the difference between men and women regarding motivation, and then look at life circumstances.

Potential differences in motivation will be examined using two approaches. First, we shall examine what managers say about their job goals and second,

what they have done to realize their goals. Their work input will be taken as an indicator of their motivation to build a career. Another indication of career motivation will be their willingness to change jobs. Differences in life circum- stances will be studied in two ways. Total working hours undertaken will be seen as indications of the employee’s intentions towards and opportunities to pursuing a career. Likewise, the reasons middle-level managers give for not wanting to advance to top management will also be seen in this light. Finally, the number of jobs respondents have applied for will be considered.

# Managers’ future job desires

A common assumption has been that for various reasons women are less ambitious than men. If so, then one would expect that fewer women than men desire promotion. All managers were asked what they wanted to do in the future. Comparing male and female managers we find that 26 per cent of men and 18 per cent of women wish to stay in their present position (Table V). In other words, there are more men than women who wish to stay in their current job – exactly the opposite of what was expected. The difference is not large, but nevertheless significant. The reason may be that male managers generally occupy higher level positions (Table AI, appendix). There are also more women than men who wish to advance to a higher management position in their organizations, but the difference is insignificant. Again, this is probably because men already occupy higher positions. Otherwise there are no notable differences. A similar proportion of men and women state that they wish to change to a position without management responsibilities, or to take a man- agement position in local or regional government, or in the private sector.

All middle-level managers were asked if they were interested in becoming top managers. Approximately the same proportion of men and women, 43 and 40 per cent respectively, state that they would. On the other hand, slightly more men than women are absolutely certain that they did not want a top- management position (Table VI). This response distribution shows no signifi- cant differences and therefore suggests that the motivation to become a top manager is very similar among men and women.

**Table V:** *In the future do you want to:*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Remain | Advance | Move to | Move to a | Move to a | Do | Something | Total | N |
| in your | to a | another | position | management | not | else |  |  |
| current | management | management | without | position in | know |  |  |  |
| position | position at a | position at | management | the private |  |  |  |  |
|  | higher level | the same | responsibility | sector or |  |  |  |  |
|  | in the state | level in | in the state | in the local |  |  |  |  |
|  |  | the state |  | public sector |  |  |  |  |
| Men | 26% | 29% | 8% | 8% | 6% | 18% | 5% | 100% | 583 |
| Women | 18% | 34% | 9% | 7% | 6% | 20% | 6% | 100% | 392 |
| All | 22% | 31% | 9% | 8% | 6% | 18% | 6% | 100% | 990 |

**Table VI:** *Would you like to be appointed top manager in the state sector, now or later?*

Men Women All middle-level

managers

|  |  |  |  |
| --- | --- | --- | --- |
| Yes. | 43% | 40% | 41% |
| No. | 36% | 30% | 33% |
| Do not know. | 21% | 29% | 24% |
| Total | 100% | 100% | 100% |
| N | 448 | 318 | 773 |

**Table VII:** *How many hours do you usually work every week? (We here refer to both paid and unpaid time used at activities which are part of the job.)*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Under 37.5 hours | 38–44hours | 45–50hours | 51–55hours | 56–60hours | Over 61 hours | Total | N |
| Men | 1% | 40% | 39% | 12% | 5% | 3% | 100% | 583 |
| Women | 1% | 43% | 35% | 15% | 4% | 2% | 100% | 392 |
| All | 1% | 41% | 37% | 14% | 5% | 2% | 100% | 990 |

# Working hours

What do male and female managers do to achieve their ambitions? First, we look at work input. Managers in the state administration were asked how many hours per week on average they devoted to their jobs. It was emphasized that this related to both paid and unpaid tasks regarded as part of the job.

It emerged that male and female managers work approximately the same number of hours weekly. If we look at the proportion working less than 44 hours weekly, we find that this applies to 41 per cent of men and 44 per cent of women (Table VII; this data is the result of a merger of categories in the table). At the other extreme, we find that only a very small minority of both men and women work more than 55 hours weekly. We can conclude therefore that gender differences in working hours are small and insignificant. This finding also corresponds with the above-mentioned results, where women are found to be just as career oriented as men.

# Career moves

As indicated by Sennett (1998), career paths in modern societies are often characterized by frequent job switches. Here, we look at managers’ willingness to transfer to a position at another workplace as an indicator of their ambitions. This inclination can be traced through looking at managers’ career plans and their prior jobs. A common assumption has been that women are more concerned with security and stability than men, and therefore change

jobs less frequently. Is this the case for female managers in Norway’s state bureaucracy?

We can see no real difference between male and female managers regarding their career desires – slightly more men than women wish to remain in their current positions (Table V). Similar proportions are interested in a manage- ment position in another organization. The same pattern emerges when one looks at previous jobs held by managers (not shown). Half of the men and women state that their previous positions were in the same organization as their current jobs. The proportions for those whose previous positions were outside central government are also the same for men and women.

# The balance between work and family

As seen earlier, men and women work a very similar numbers of hours. This may be interpreted as indicating that family responsibilities are no more of an obstacle for women than for men. Other interpretations are also possible, though. For example, do men *choose* not to work more hours, while women *lack the opportunity* to work more hours? To answer this question, we examine the reasons given for not wishing to become top managers.

Those employed in middle-level management positions who did not wish to move into top management were asked the reason for this. The most frequent reason given by both men and women is that they are satisfied with their current positions: 28 per cent of men and 19 per cent of women give this reason (Table VIII). Here we see a significant gender difference. On the other hand, an approximately similar proportion of men and women state that they were more interested in their current work than in top management. Slightly more women than men think that they would not fit in at this level socially, but the difference is insignificant.

Equal proportions of men and women say that they do not want more responsibility and that they are satisfied with being middle-level managers. Only a small, but equal, minority of both genders state as a reason that it would

**Table VIII:** *If you do not want to become a top manager in the state sector, what is the reason?*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Men | Women | All |
| 1. Satisfied with my current work tasks | 28% | 19% | 24% |
| 2. Do not want more responsibility | 13% | 14% | 14% |
| 3. I will not fit into the social environment | 13% | 19% | 15% |
| 4. Want to prioritize other work tasks | 13% | 14% | 13% |
| 5. Want to prioritize the family | 11% | 5% | 8% |
| 6. Want to prioritize leisure time | 3% | 8% | 5% |
| 7. Find it difficult to combine work and family | 8% | 6% | 7% |
| 8. Else | 11% | 13% | 12% |
| Total | 100% | 100% | 110% |
| N | 161 | 97 | 262 |

be a problem combining work and family commitments at the top level. Likewise, there are no more women than men wishing to give priority to family life. In fact slightly more men than women state this as a reason, but the difference is insignificant. In other words, family obligations or priorities do not appear to be a greater barrier for women than for men. One cause may be that male managers have more children than female managers. This phenome- non is very common in many other western countries (Alvesson and Billing 1997), but in Norway the difference is much smaller.12 All things considered, men and women give remarkably similar reasons for not wanting to enter top management. As mentioned, the only significant difference is that slightly more men than women wish to remain in their current positions, probably because men already dominate higher management positions.

# Job application strategies

The last subject we look at is managers’ job-seeking strategies. First, we look at how many applications they have sent. Thereafter we look at how encourage- ment from the employer influences their willingness to apply.

The analysis shows that men apply more often than women. This tendency also holds when we control for such factors as age, type of education, level of education, management level and type of organization (Table IX). The esti- mated coefficient suggests that women send in 0.215 fewer applications than men did. This is approximately 7 per cent of men’s total applications, 3.185 (Table AI, appendix). The number of job applications increases with age, level of education, and level of management. There are also some significant differ- ences between educational groups. Business economists apply most and soci- ologists least, which must be understood on the grounds that some areas of education are seen as more appropriate for management than others (Byrkjeflot 1997). R2 is equal to 0.204. To explain the remaining variance one must look at such factors as encouragement from the employer, ambitions, self-confidence and family obligations. As we have seen, the work-family com- bination does not appear to be more problematic for women than men.

We then looked at encouraged and un-encouraged application behaviour separately. First, it becomes clear that very few managers state that they had never followed up the invitations they received. Here there are no gender differences (Table X). If we consider the group which had responded once or twice, this applies to 71 per cent of men and 76 per cent of women (not shown). Thus, the differences are small, although women appear at least as responsive and forthcoming. All in all, one may conclude that women respond equally as often as men do, under these circumstances.

Second, respondents were also asked how many positions they had applied for without prior encouragement from the employer (Table X). Out of those

**Table IX:** *How many management positions in all have you applied for in the state sector (ordinary least squares)*

|  |  |  |
| --- | --- | --- |
|  | Coefficient | Standard deviation |
| Intercept | 3.407\*\*\* | 0.172 |
| Women*Age*:Under 35 years | -0.215\*\*\*-1.194\*\*\* | 0.0890.214 |
| 36–40 years | -0.437\*\*\* | 0.149 |
| 46–50 years | -0.052 | 0.141 |
| 51–55 years | 0.454\*\*\* | 0.135 |
| Over 56 years*Years of higher education*:Under 3 years of higher education | 0.454\*\*\*-0.742\*\*\* | 0.1300.208 |
| Between 3 and 4 years of higher education*Type of education:*Business economist | -0.338\*\*0.431\*\*\* | 0.1720.186 |
| Social economist | 0.023 | 0.171 |
| Political scientist | 0.302\* | 0.158 |
| Sociologist | -0.663\*\* | 0.293 |
| Other social scientist | 0.408\*\* | 0.186 |
| Humanist | 0.505\*\* | 0.197 |
| Natural scientist | 0.056 | 0.146 |
| Other type of education*Management level:*Upper middle management | 0.187-0.462\*\*\* | 0.1670.116 |
| All other middle management | -0.967\*\*\* | 0.126 |
| Ministry | 0.015 | 0.097 |
| N | 946 |  |
| R2-adjusted | 0.204 |  |

*Note*: Group of reference for age is 41–45 years, group of reference for years of education is over 4 years, group of reference for type of education is lawyers and group of reference for management level is top managers. Group of reference for ministry is directorate. \*\*\* Significant at the 1 per cent level, \*\* significant at the 5 per cent level, \* significant at the 10 per cent level.

**Table X:** *How many management positions in the state sector have you applied for with prior invitation from the employer, and how many without prior invitation?*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Never | Once | Twice | Three times | Four times | Five times or more | Total | N |
| *Invited*Men | 8% | 42% | 29% | 14% | 3% | 1% | 100% | 437 |
| Women | 4% | 49% | 27% | 12% | 6% | 1% | 100% | 296 |
| All | 6% | 45% | 28% | 13% | 4% | 1% | 100% | 741 |
| *Uninvited*Men | 24% | 26% | 19% | 12% | 8% | 9% | 100% | 583 |
| Women | 32% | 26% | 19% | 9% | 5% | 6% | 100% | 392 |
| All | 27% | 26% | 18% | 11% | 7% | 8% | 100% | 990 |

who never apply uninvited 24 per cent are men and 32 per cent are women. This is a significant difference showing that men apply more often than women under these circumstances.

One possible explanation for this gender difference in application behaviour may be associated with the practice of open lists of applicants. The employer makes lists of applicants available shortly after the closing date and the lists are

also made public through reports to the Storting (see endnote 10). There is frequently considerable public interest in appointments to the most prominent positions and lists of applicants are even sometimes published in the media. It may be women find it more embarrassing than men to have their names on these lists (Petersen 2002) but if this were the case, one would expect that in particular women at higher levels in the state bureaucracy, would be most reluctant to apply as they would be the group most likely to apply for the positions of most public interest.

To see if this is indeed the case, women’s application behaviour at various management levels was compared (not shown). However, gender difference in application behaviour is found at all levels in the organizations being observed in this study, not just among potential applicants to the highest positions. This suggests that fear of showing ambition is not the problem. Even though this analysis cannot completely rule out this possibility, we should look for other explanations. It is possible that expected discrimination makes women more unwilling to apply, unless encouraged to do so.

# Is the glass ceiling imagined?

As shown, women apply less often for management positions than men. The cause for this could be that women are both better and worse at judging their chances of getting the job. Neither possibility can be totally confirmed or ruled out by the present study. We do not know what would happen if women were to apply as often as men. As per a finding in this study, the number of job offers clearly increases with the number of applications (which we have seen is true for both men and women), it appears logical that women should apply more. Women’s reluctance to apply for management positions, unless encouraged, may be due to an imagined glass ceiling. Studies have shown that many state employees think that gender discrimination exists at their workplace. Among top managers responsible for recruitment, 50 per cent of women and 30 per cent of men think that career-oriented women encountered more obstacles than men. Furthermore, they frequently specify this as involving discrimina- tion at work; a minority refer to barriers at home in the form of time-pressure problems (Storvik 2002a). When these top managers, themselves responsible for hiring, think that gender discrimination exists, there is good reason to believe that employees further down the organizational ladder think the same. Managers at other levels are likely to be less familiar with what happens in recruitment processes. What they primarily know is what they observe – that there are far fewer women at the top in the state bureaucracy. To conclude that this results from some form of discrimination is far from unreasonable when seen from a historical viewpoint.13 It is therefore not surprising that women are less optimistic than men regarding their own chances of obtaining a

management position, and consequently apply less often on their own initia- tive which in turn slows down their progress up the career ladder.

# Conclusions

The first main type of explanation considered that the low proportion of female managers resulted from differential treatment in working life. As we have seen, this does not appear to be the situation in central parts of Norway’s state bureaucracy. This applies both when we look at appointments in isola- tion, and also when we consider preceding processes over a longer period of time. Female applicants have a slightly better chance than men of being appointed to the positions they apply for. These findings are mainly in harmony with earlier research which shows that women have just as good or even better opportunities than men of getting the jobs for which they apply (Lægreid 1989; Teigen and Wiers-Jenssen 1997; Storvik 1999). Furthermore, male and female managers are equally as often encouraged to apply for management jobs. Both male and female managers express similar satisfaction with the manner in which the organization took care of leadership potential and with recruitment policy in general. The same numbers of men and women in middle-level management consider that others in the organization regard them as potential top managers. This indicates that women experience just as much positive feedback as their male colleagues. Hence, male and female managers seem to receive equal treatment. The study does not therefore support the idea that a glass ceiling exists, and moreover, that there is any sign of processes such as marginalization, segmentation or homosocial reproduc- tion, to hinder women’s upward mobility at management level (Hughes 1958; Kanter 1977; Reskin and Padavic 1994). In addition there is no indication that management has a masculine subtext, rather, the findings suggest a gender- balanced management ideal, something earlier studies have demonstrated to be the case in Norway’s state administration (Storvik 2002b).

The study does not support the hypothesis that large bureaucratic organi- zations are particularly problematic for women, as Ferguson (1984), and Kvande and Rasmussen (1990) have maintained. On the contrary, the research findings support the claims by Reskin and Padavic (1994: 90), that large orga- nizations are good for women (and men) because they offer better opportu- nities for upward mobility. The limits of the study are that it does not tell us about the recruitment to management from other positions, nor does it tell us what happens in smaller organizations in the state bureaucracy.

Considering the strong focus that Norway’s state bureaucracy places on the objective to increase the proportion of female managers, the equality in treat- ment is not surprising. However, it is not possible from this study’s findings to decide whether the state’s gender equality programmes have been successful.

The equal treatment we see today might be caused by other factors, and it is not known whether or not women were discriminated against before these programmes were introduced. Nevertheless, it is interesting to note that the proportion of female managers in the private sector is much lower.

As mentioned, the second main type of explanation for the low proportion of women in management positions attaches importance to possible gender differences in motivation and the significance of family responsibilities. The study suggests that this explanation cannot account for the low proportion of female managers in the state bureaucracy. Female managers are equally as career minded as their male counterparts. They are equally interested in moving up the career ladder, and among middle-level managers both genders are equally interested in acquiring top positions. In other words, women hold the opinion that managerial jobs are just as suitable for them as for their male colleagues. This can again be related to the fact that management ideals are gender balanced rather than one-sidedly masculine, as already mentioned.

The fact that there is little difference in motivation is also reflected in work input and willingness to change jobs. Men and women work equally long hours and followed equal career ladders. This is contrary to popular stereotypes which portray women as less dedicated workers or as less willing to take risks. It also breaks with the assumption that women have different values and other priorities than men, such as Healy and Heavans (1987) and Cockburn (1991) argue. However, these findings are in harmony with Kanter’s (1977) proposal, namely that male and female workers who are in similar positions and are treated equally also behave equally. Against this, it is possible to argue that female managers are a highly select group of women (Alvesson and Billing 1997). This implies that the similarities which the study shows do not neces- sarily apply to other groups of men and women. Hakim (2002) also argues along these lines and claims that highly educated women, as is the case here, are different from other women regarding work commitment. Hakim argues that these women have an orientation to work which resembles that of their male colleagues. Nevertheless, if we look at highly educated groups we find that women spend less time than men on paid work (Abrahamsen and Storvik 2002). This suggests that what really matters here might be the specific position they are employed in rather than their education.

Apparently, family obligations do not create more barriers for women than men. If we look at middle-level managers who state that they did not wish to become top managers, we find no gender difference in reasons given. Respon- sibilities at home do not seem to limit women’s ambitions any more than is the case for men. On the contrary, there are more men – although not significant in number – who state that they wish to give priority to the family. Thus, we do not find any evidence here that men and women have different priorities or that women are hindered more by family responsibilities such as Petersen argues (2002). This may, of course, be related to the fact that the survey

includes men and women who already hold leading positions and have chosen to follow a career. As earlier mentioned, more male than female managers have children in Norway, but the difference is much smaller than in other countries. A long parental leave, mainly used by women, as is the case in Norway, can make it easier to combine work and family. On the other hand this can cause women to spend more time at home, and therefore can be a career hindrance. According to Birkelund and Sandnes (2003), such welfare policy differences in relation to parental leave can explain why there is a lower percentage of female managers in Norway than in the USA.

One of the few differences this study shows is that women apply for fewer management positions than men. The study also shows that when invited by the employers to apply for a position, women apply equally as often as men. However, female managers on their own initiative apply for fewer positions than men, and in general they apply for fewer management jobs. Seen in relation to what female managers say about their own ambitions, work input and attitudes, this seems surprising. This seems even more surprising if we also consider that female managers generally are placed in lower positions than their male colleagues. This should make them even more eager to climb up the career ladder, and one would expect that they would therefore apply for more jobs, not fewer. One possible explanation discussed is that women are more reluctant to make their ambitions public, unless they are virtually guaranteed the job. If this were the case, then one could expect that it would first and foremost affect women’s applications for the top positions in the state. However, this is not so; the tendency is found at all levels. Finally, women’s relative reluctance to apply for positions may be caused by both a more and a less accurate judgment of potential opportunities. Seen in light of the finding that the number of job offers increases with the number of applications, it seems that women should apply more often. It is possible that women’s reluc- tance to apply uninvited may be due to an imagined glass ceiling.

Even though an imagined glass ceiling may slow down women’s movement into management positions in Norway’s state administration, it is not the main cause for the low proportion of female managers. Rather, the scarcity must be attributed both to women’s choices and to life conditions earlier on. The low proportion of female managers today is the result of processes in place thirty to forty or more years ago. If we look at the proportion of female managers within various age groups, we find that it is highest among the younger age groups. This indicates that those processes resulting in gender differences have clearly declined in recent years. The nature of such processes can vary. Petersen and Teigen (1997) emphasize that the proportion of women in management- relevant education decreases the further back in time we go. The fact that few women undertook these forms of education previously implies that employers had relatively few female applicants from which to choose and, as a conse- quence, few were hired. Economics, law and political science were all areas

with a low proportion of women students twenty or more years ago. Moreover, it was then more common for women to work part time or stay at home, which made the pool of possible candidates even smaller.14

The fact that there continues to be few women in higher managerial posi- tions in Norway’s state administration has to be viewed against the back- ground described above. Women’s previous choices of education and employment, and their relative reluctance to apply for management jobs are all causes for the scarcity of women managers. The relative reluctance to apply for positions at this level, unless encouraged, may be caused by their expecta- tion of discrimination. The imagined glass ceiling thus appears to have the same consequence as a real set of barriers – it slows down women’s entry into higher management positions.

(Date accepted: August 2008)

# Appendix

**Table AI:** *Descriptive statistics for included variables (Mean values and standard deviations).*

Women Men

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Mean | Standard deviation |  | Mean | Standard deviation |
| *Age:*Under 35 years | 0.052 | 0.222 |  | 0.047 | 0.212 |
| 36–40 years | 0.158 | 0.366 |  | 0.122 | 0.327 |
| 41–45 years | 0.243 | 0.430 |  | 0.201 | 0.401 |
| 46–50 years | 0.169 | 0.376 |  | 0.152 | 0.360 |
| 51–55 years | 0.191 | 0.394 |  | 0.200 | 0.400 |
| Over 56 years | 0.186 | 0.389 |  | 0.278 | 0.448 |
| *Years of education after secondary school:*Under 3 years of higher education | 0.055 | 0.228 |  | 0.053 | 0.223 |
| Between 3 and 4 years of higher education | 0.068 | 0.253 |  | 0.087 | 0.282 |
| More than 4 years of higher education | 0.877 | 0.329 |  | 0.860 | 0.347 |
| *Type of education*: Lawyer | 0.210 | 0.408 |  | 0.167 | 0.373 |
| Business economist | 0.071 | 0.257 |  | 0.083 | 0.277 |
| Social economist | 0.063 | 0.243 |  | 0.116 | 0.321 |
| Political scientist | 0.120 | 0.326 |  | 0.122 | 0.327 |
| Sociologist | 0.038 | 0.192 |  | 0.013 | 0.112 |
| Other social scientist | 0.093 | 0.291 |  | 0.071 | 0.257 |
| Humanist | 0.082 | 0.275 |  | 0.056 | 0.231 |
| Natural scientist | 0.172 | 0.378 |  | 0.214 | 0.411 |
| Other type of education | 0.150 | 0.358 |  | 0.158 | 0.365 |
| *Management level:*Upper middle management | 0.459 | 0.499 |  | 0.454 | 0.498 |
| All other middle management | 0.363 | 0.482 |  | 0.325 | 0.469 |
| Top level | 0.178 | 0.383 |  | 0.221 | 0.416 |
| Ministry | 0.462 | 0.499 |  | 0.486 | 0.500 |
| Number of applications | 2.817 | 1.391 |  | 3.185 | 1.375 |
| Number of offers | 2.072 | 1.259 |  | 2.221 | 1.331 |
| N |  | 366 |  |  | 551 |

# Notes

1. We express our gratitude to Erling Barth, Gunn Birkelund, Anne Krogstad, Karl Henrik Sivesind and three anonymous referees for comments. We also wish to thank Anne Kristoffersen and Turid Semb in the Ministry of Modernization for assistance with planning and executing the project.
2. Similar studies have also been carried out in other sectors in Norway and within other Western nations. Studies of promotion in semi-public and private activities in Norway differ substantially in their findings. In two organizations women advance to a lesser extent than men, while in three other organizations only small differences in pro- motion were found between men and women (Hoel 1997; Mastekaasa 1997). In a study of recruitment to higher positions in a large Norwegian bank, it emerged that men and women had an equal chance of attaining the positions to which they had applied (Togstad, Høgsnes and Petersen 2002). Petersen (2002: 452–53) refers to corre- sponding studies in other Western countries which also show little difference in appoint- ment and promotion.
3. In accordance with Ferguson (1984), Kvande and Rasmussen (1990) maintain that large bureaucratic organizations are particularly problematic for women. Empirical studies suggest that this is not the case in Norway (see Note 2), or in the USA (Powell and Butterfield 1997; Reskin 2000). Nor is this claim supported by the fact that there are far fewer women manag- ers in the private sector than in the public sector.
4. From the ministries the director gener- als and manager in the two most common subordinated categories, deputy director general and assistant director general, are included in the study. The management posi- tions in the ministries which are excluded are marginal positions, such as head of com- munication, principal officer, IT manager etc. In other state bodies, managerial posts at all levels are included. Temporary positions such as project manager are also excluded

both places. Two directorates, the Director- ate of Taxes and the Directorate of Defence, did not have Internet access because of safety reasons. Because of this they were not contactable and two other government orga- nizations, the Norwegian Pollution Control Authority and the Norwegian Polar Insti- tute, both inspectorates, were included in the survey in their stead. They were chosen mainly because the Ministry of Moderniza- tion, who initiated the study, was interested in this sector.

1. The remaining 25 per cent are mainly employed in inspectorates. State organiza- tions outside the central administration, such as courts, documentation centres, schools and enterprises are not included in the study.
2. Previous managers who are now placed in non-management positions are not included in the survey. Consequently, it is not possible to study exit processes from the management level. Colbjørnsen et al. (2004) found that more women than men prefer to leave managerial jobs.
3. In the email, an Internet link made it possible for respondents to access their own questionnaires. This was not a problem for most, but in some organizations technical problems arose resulting in a lower response level from these organizations.
4. The programme was developed by Questback.
5. All important findings have been analysed using both bivariate and regression analyses. The regression analyses used the same independent variables as in Table I. The results from the different analysis methods were in accordance with each other.
6. See the publication called *Statens per- sonalhåndbok* (2004: 48) where these prin- ciples are stated.
7. Not all the tables on which this article is based are presented here. These tables can, however, be found in a paper on the Internet [(www.samfunnsforskning.no/page/](http://www.samfunnsforskning.no/page/publications/Menu-Publlications/7982/8093) [publications/Menu-Publlications/7982/8093)](http://www.samfunnsforskning.no/page/publications/Menu-Publlications/7982/8093)

or found in a Norwegian article (Storvik 2006).

1. In a representative study of both private and public managers in Norway, Drake (2002) found that 10 per cent more male than female managers had children living at home.
2. Up until 1906, female employees in the public sector were dismissed when they

married, while already married women were not hired at all. An attempt was made to reintroduce this practice in the 1920s (Hagemann 1994).

1. The employment rates for women and men have been similar in Norway in recent years. However, nearly half of all women work part time according to official statistics (SSB 2007).

**Bibliography**

**Abrahamsen, B. and Storvik, Aa.** 2002 ‘Hvem opplever tidsklemma? Barnefami- lienes lønnsarbeid og foreldrenes yrke’, *Søkelys på arbeidsmarkedet* 19: 253–58.

**Acker, J.** 1992 ‘Gendering Organisational Theory’ in A. Mills and P. Tancred (eds) *Gendering Organisational Analysis*, London: Sage.

**Allport, G.** 1958 *The Nature of Prejudice*, Garden City: Doubleday.

**Alvesson, M. and Billing, Y.D.** 1997 *Under- standing Gender and Organisations*, London: Sage Publications Ltd.

**Barth, E., Røed, M. and Schøne, P.** 2005 ‘Lønnsforskjeller mellom kvinner og menn i privat sektor: Betydningen av yrke og virk- somhet’, *Søkelys på arbeidsmarkedet*, 2: 211–

216.

**Barth, E. and Yin, H.** 1996 *Opprykk og kar- rieremuligheter i staten*, ISF-rapport 96 (22)., Oslo: Institutt for samfunnsforskning.

**Benschop, Y. and Doorewaard, D.** 1998 ‘Covered by Equality: The Gender Subtext of Organisations’, *Organisation Studies* 19(5): 787–805.

**Birkelund, G. and Sandnes, T.** 2003 ‘Para- doxes of the Welfare States and Equal Opportunities. Gender and Managerial Power in Norway and USA’, *Comparative Social Research* 21: 201–41.

**Byrkjeflot, H.** 1997 *Fra styring til ledelse*, Bergen: Fagbokforlaget.

**Chodorow, N.** 1978 *The Reproduction of Mothering: Psychoanalysis and the Sociol- ogy of Gender*, Berkeley CA: University of California Press.

**Cockburn, C.** 1988 *Machinery of Domi- nance*, Boston: Northeastern University Press.

**Cockburn, C.** 1991 *In the Way of Women*, London: Macmillan.

**Colbjørnsen T.** 2004 *Ledere og leder- skap: AFFs lederundersøkelser*, Bergen: Fagbokforlaget.

**Collinson, D. and Hearn J.** 1996 *Men as Managers*, Managers as Men, London: Sage Publications.

**Drake, I.** 2002 *Sjef og kvinne. Myter og fakta om kvinner i ledelse*, Rapport fra Likestillingssenteret.

**Ferguson, K.** 1984 *The Feminist Case Against Bureaucracy*, Philadelphia: Temple Univer- sity Press.

**Fondas, N.** 1997 ‘Feminization Unveiled: Management Qualities in Contemporary Writings’, *Academy of Management Review* 22(1): 257–87.

**Gherardi, S.** 1996 ‘Gendered Organisational Cultures: Narratives of Women Travelers in a Male World’, *Gender, Work and Organisa- tion* 4(3): 187–201.

**Glass Ceiling Commission** 1995 *Good for Business: Making Full Use of the Nation’s Human Capital*, Washington D. C.: Depart- ment of Labour.

**Granovetter, M.** 1974 *Getting a Job – A Study of Contacts and Careers*, London: Harvard University Press.

**Hagemann, G.** 1994 *Kjønn og industrialiser- ing*, Oslo: Universitetsforlaget.

**Hakim, C.** 2002 ‘Lifestyle Preferences as Determinants of Women’s Differentiated

Labour Market Careers’, *Work and Occupa- tion* 4(29): 428–59.

**Hatcher, C.** 2003 ‘Refashioning a Passionate Manager: Gender at Work’, *Gender, Work and Organisation* 10(4): 391–412.

**Healy, L.M. and Havens, C.M.** 1987 ‘Femi- nist Leadership Styles as a Force for Humanizing the Workplace’, paper for The Third International Interdisciplinary Con- gress of Women, Dublin, 6–10 July.

**Hoel, M.** 1997 *Fra stat til marked. En analyse av kjønnsforskjeller i lønns- og karriereløp i tre større selskaper*, ISF-rapport 4, Oslo: Institutt for samfunnsforskning.

**Højgaard, L.** 2002 ‘Tracing Differentiation in Gendered Leadership. An Analysis of Differences in Gender Composition in Top Management Business, Politics and the Social Services’, *Gender, Work and Organi- sation* 1: 15–39.

**Hughes, E.** 1958 *The Sociological Eye, Selected Papers*, New Brunswick: Transac- tion Books.

**Kanter, R.B.** 1977 *Men and Women of the Corporation*, New York: Basic Books.

**Kanter, R.M.** 1989 ‘The New Managerial Work’, *Harward Business Review* 67(6): 85–92.

**Kvande, E. and Rasmussen, B.** 1990 *Nye kvinneliv. Kvinner i menns organisasjoner*, Oslo: AdNotam.

**Kvande, E.** 2002, ‘Kvinnelige mellomlederer i grådige organisasjoner’ in A. Ellingsæter and J. Solheim (eds) *Den usynlige hånd? Kjønnsmakt og moderne arbeidsliv*, Oslo: Gyldendal Akademiske.

**Lægreid, P.** 1989 *Rekrutteringspolitikk i sen- traladministrasjonen*, Bergen: LOS-senteret. **Mastekaasa, A.** 1997 *Kjønn og yrkeskar- riere. Resultater fra tre private og statlige bedrifter*, Rapport 10, Oslo: Institutt for sosi- ologi og samfunnsgeografi.

**Marshall, J.** 1995 *Women Managers Moving On: Exploring Career and Life Choices*, London: Routledge.

**Petersen, T.** 2002 ‘Likestilling i arbeids- markedet’, *Tidsskrift for samfunnsforskning* 4: 443–477.

**Petersen, T. and Teigen, K.** 1997 ‘Struk- turelle betingelser for kvinner i ledelse’, *Søkelys på arbeidsmarkedet* 14: 113–119.

**Probert, B.** 2005 ‘Just Couldn’t Fit In: Gender and Unequal Outcomes in Aca- demic Careers’, *Gender,Work & Organiza- tion* 12: 50–72.

**Powell, G. and Butterfield, D.** 1997 ‘Effects of Race and Gender on Promotions to Top Management in a Federal Department’, *Academy of Management Journal* 40(1): 112–128.

**Reskin, B.** 2000 ‘The Proximate Causes of Employment Discrimination’, *Contempo- rary Sociology* 29(2): 319–28.

**Reskin, B. and Padavic, I.** 1994 *Women and Men at Work*, London: Pine Forge Press.

**Schøne, P.** 2001 *Konjunkturendringer, mobi- litet og kjønssegregering*, ISF-rapport 96, Oslo: Institutt for samfunnsforskning.

**Schein V.** 1989 ‘The Relationship Between Sex Role Stereotyping and Requisite Man- agement Characteristics among College Stu- dents: A Cross Cultural Look’, *Sex Roles*, 20(1–2): 103–110.

**Sennett, R.** 1998 *The Corrosion of Charac- ter*, New York: W.W. Norton & Co.

**SSB** 2007 [http://www.ssb.no/emner/06/01/](http://www.ssb.no/emner/06/01) aku/tab-2008-04-30-06.html

**Statens personalhåndbok** 2004 *Arbeids- og administrasjonsdepartementet*, Oslo: Gyl- dendal Norsk Forlag AS.

**Stortingsmelding (governmental report)**

2005 (9), Embetsutnemningar m. m. 1. juli

2003–30. juni 2005.

**Storvik, Aa.** 1999 *Hvem passer som topple- der i staten? Lederutvelgelse, kjønn og kompetanse*, ISF-rapport 6, Oslo: Institutt for samfunnsforskning.

**Storvik, Aa.** 2000 *Mellomledere på karrier- ens vei*, ISF-rapport 5, Oslo: Institutt for samfunnsforskning.

**Storvik, Aa.** 2002a *Topplederrekruttering i staten. Betydningen av kvalifikasjoner, nettverk og kjønn*, ISF-rapport 5, Oslo: Insti- tutt for samfunnsforskning.

**Storvik, Aa.** 2002b ‘Ledelse revidert – Kjønn ekskludert. En studie av ledelsesidealer i

staten’, *Tidsskrift for samfunnsforskning*

43(2): 219–43.

**Storvik, Aa.** 2006 ‘Glasstaket – metafor med utilsiktede virkninger? Kjønn, ledelse og rekruttering i staten’, *Sosiologisk tidsskrift* 14: 219–53.

**Teigen, M. and Wiers-Jenssen, J.** 1997 *Anset- telsesprosesser i tre statlige virksomheter. Betydningen av kvalifikasjoner, kjønn og intern praksis*, ISF-rapport 19, Oslo: Institutt for samfunnsforskning.

**Tienari, J.** 1999 ‘The First Wave Washed up on Shore: Reform, Feminization and

Gender Resegregation’, *Gender, Work and Organisation* 6(1): 1–19.

**Togstad, T., Høgsnes, G. and Petersen, T.** 2002 ‘Kjønnsforskjeller i ansettelsespros- esser’, *Søkelys på arbeidsmarkedet* 1: 85–93. **van Vianen, A. and Keizer, W.** 1996 ‘Gender Differences in Managerial Intention’, *Gender, Work and Organisation* 3: 103–14. **Valian, V.** 1999 *Why So Slow? The Advance- ment of Women*, Cambridge: The MIT Press.