

Women in top management positions – why so few? And does it matter?

A survey of recent empirical results for Danish companies

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Abstract

In recent years, the reasons for the small share of women on the boards of directors and in top executive positions as CEOs, CFOs, etc., in Danish private-sector companies have been widely discussed. Another important aspect is the relationship between gender diversity and outcomes, i.e. would an increase in the female share of top executive positions or of the boards of directors improve firm performance? The article first surveys recent empirical results from studies on mainly Danish companies and the results found from the Norwegian quota-regulation before it discusses some of the potential implications for Danish companies.

Introduction

About 60% of all graduates from Danish universities are women; and since the 1970s, the majority of female graduates have been full-time members of the labour force. Nevertheless, in Denmark, women seldom occupy top executive positions and boards of directors. In 2012, only 17% of the members of the boards of directors in C20-OMX companies were women. This is the same proportion as the average share of women across the 27 EU countries (EU Commission, 2013a). While Denmark was clearly in the lead with respect to introducing women into the labour force decades ago, Denmark only occupies an average position in relation to women in top positions. If women are as qualified for management positions as men, it may seem strange why they are not recruited to top positions as it may lead to a profit loss for the companies. Furthermore, it may result in a huge loss of talent and educational investment at the macro level. There may, of course, also be fairness and equal opportunity arguments in favour of political regulations and affirmative policies; however, in this article, the focus is restricted to the economic impact of women in top management positions.

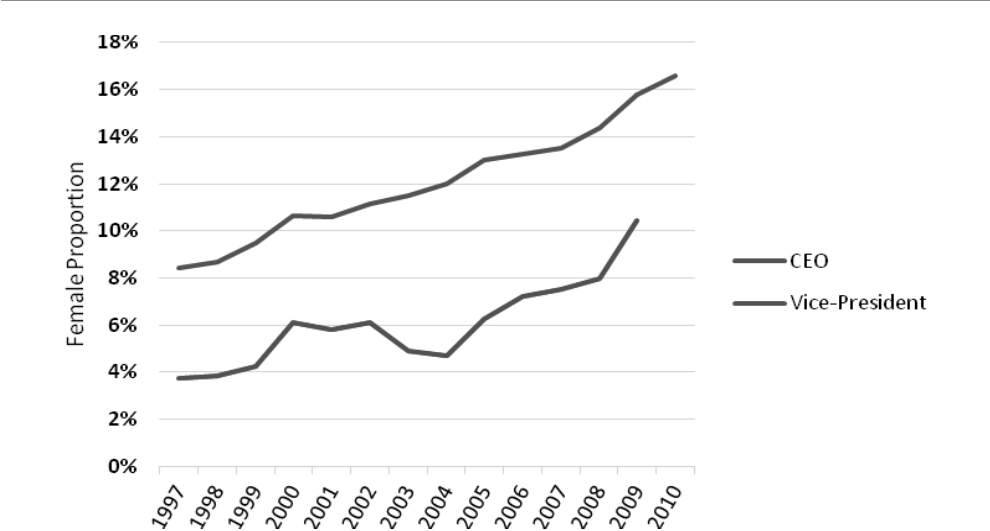
The small percentage of women in top management positions in Denmark and in most other (European) countries has given rise to a heated political debate about the existence of apparent barriers for women, the consequences of women in top management positions and political measures to increase female board representation. In this paper, we first describe the present position of women in top manage-

ment positions in Danish private-sector companies before we make a comparison with international figures. Secondly, we discuss theories and empirical findings that shed light on the reasons for the small share of women in top positions. We discuss whether it is a result of discrimination, old-boys network or of Danish women not wishing to undertake top management responsibilities. Danish, and to some extent international, empirical evidence concerning gender diversity and firm performance is discussed. Furthermore, an overview of international and Danish policy regulations concerning gender diversity in private-sector companies is presented. We discuss whether these policy instruments, quotas, family friendly initiatives, etc., are optimal or effective instruments in ensuring more women in top management positions.

2. Women in top management in Denmark

The female share in top executive positions in Denmark is low. Figure 1 shows the female share of CEO positions and top executive positions just below CEO-level (i.e. CFO, COO, HR etc.), which is here denoted Vice-President (VP)-level. The data set covers the more than 2,000 Danish ‘real’ private-sector companies with at least 50 employees, i.e. it excludes holding companies, etc. These companies are on average much smaller than the OMX companies, which are often used in the statistics on female representation in top management positions. As seen in Figure 1, in 1997, 4% of CEOs were women; a percentage that had grown to about 10% in 2009.¹ At the VP level, the share of women is larger, i.e. 8% in 1997 and 17% in 2010. Thus, the tendency is clear: With time, more women are reaching top executive positions, but the share remains low at the CEO level.

Figure 1. The share of women at the CEO level and the level below CEO (Vice-President) in Danish companies with more than 50 employees

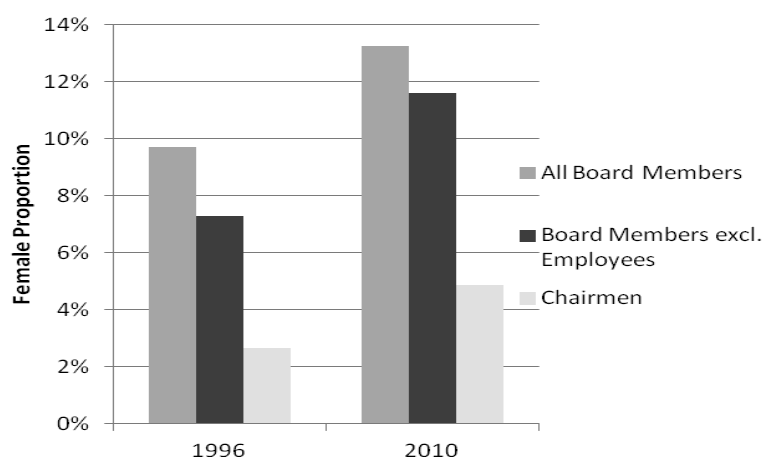


Source: Own calculations based on data from Statistics Denmark.

The picture is the same when looking at the female share on boards of directors (i.e. supervisory boards) in Danish companies with more than 50 employees. In 1997, the female share of board members was 9%, and this share increased to 13%

in 2010. When looking only at women who are elected at the general assembly, i.e. excluding board members who are elected among the staff in the company, the female share is lower as seen by the fact that the share among staff members of the boards is larger than the female share among non-staff board members. However, the share of female board members elected at the general assembly has also increased from 7% in 1997 to 11% in 2010. Finally, 4% of the chairmen of the boards are women; a figure which has doubled during the period.

Figure 2. Female share of board members in Danish companies with more than 50 employees



Source: Own calculations based on data from Statistics Denmark and Experian.

Table 1 shows the number of boards with 0, 1, and 2 or more women in 1997 and 2010, respectively. During the period of 1997-2010, the share of companies with only men on their boards (excl. staff members) fell from 78% to 65%, and the share of companies with one woman elected at the general assembly rose from 17% to 25%. This result may reflect token behaviour among Danish companies as companies who feel pressurised by the public or others to have more diversity with respect to a given characteristic (gender, age, ethnicity, etc.) tend to hire only one individual which is considered a representative for the given minority (see Parrotta and Smith, 2013). However, the share of companies with more than one woman has also increased, from 5% to 10%, which is not in accordance with the token theory. The most interesting factor to note is that the change has mainly taken place in the larger boards with more than six board members (excl. staff members). This may reflect that larger companies, which typically have larger boards, have been more concerned about having a gender-diverse board and complying with good corporate governance guidelines. Alternatively, Table 1 may reflect that the boards have increased in size in order to have space for an additional female board member (implying that no male board members necessarily had to leave the board). However, this hypothesis is not supported by the data since the share of companies with 10 or more board members has not increased during the period.

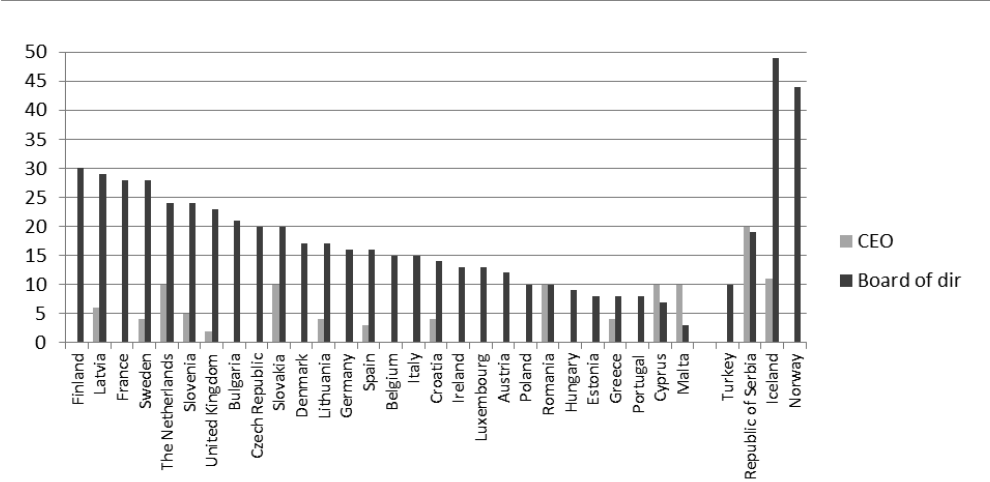
Table 1. Distribution of companies (%) by size of the board and number of (non-staff) women on the board								
	Number of women on the board, only women elected at the general assembly. 1997				Number of women on the board, only women elected at the general assembly. 2010			
Size of board	0	1	2+	All	0	1	2+	All
<=5	78	17	5	100	68	25	7	100
6-9	77	16	7	100	59	25	16	100
>=10	65	32	3	100	38	29	33	100
All	78	17	5	100	65	25	10	100

Source: Parrotta and Smith (2013) and own calculations. Data include all private-sector companies in Denmark with more than 50 employees.

In an international perspective, Denmark is far from being a forerunner with respect to female representation at top management level. In recent years, the EU Commission has collected annual information on the female share of the boards of directors (supervisory boards) and management boards. Figure 3 shows the female share among all boards of directors and CEOs in the largest EU companies (C20-OMX, DAX 30, FTSE 100, etc.), and in companies based in Turkey, Serbia, Norway and Iceland. In Denmark, the share is 17%, which is slightly higher than the share in Germany and the share in a number of Eastern European countries. However, it is lower than in Finland, Sweden, and especially Iceland and Norway where the share exceeds 40%. This percentage is a result of the Norwegian and Icelandic quotas of 40%, which were put fully into force in 2008 and 2013, respectively.

Thus, the overall picture is that more women reach top positions, but the female representation in top executive positions, which may be considered the main pipeline for a seat on the board of directors, is still thin.

Figure 3. Female share (%) on boards of directors (including board members elected by the staff) in the largest companies in EU27 and Turkey, Serbia, Norway and Iceland in 2013



Source: EU Commission (2013a).

3. Why so few women in top management positions? Theoretical considerations

The evidence above invites the obvious question: Why is the female share in top positions so low in Danish private sector companies? Typically, explanations are grouped into four categories: (i) differences between potential male and female top executives and supervisory board members with respect to their choices early in their career, (ii) pure discrimination (i.e. employers may simply pay or promote equally qualified women less than their male peers for different reasons), (iii) statistical discrimination processes and gender stereotyping mechanisms (see below), and (iv) inherent differences between men and women with respect to preferences for competition and risk.

3.1 Gender differences in career choices and allocation of time early in life

One classic explanation of the lack of women in the top positions is that compared with men women remain much more exposed to family responsibilities, housework, childcare and periods out of the labour force due to childbirth. A large number of studies from Denmark and other countries have shown that highly skilled women's maternal leave and parental leave have long-lasting consequences for the gender pay gap, which to a large extent reflects the occupational gap between highly skilled men and women (Nielsen et al., 2004).

In Denmark, highly skilled women seem to do more household activities than for instance their US peers, who are much more likely to outsource housework to the market. Bonke, Gupta, and Smith (2005) show that even though the division of hours spent on housework is much more even today than it was in the past, Danish women, even highly skilled women in higher positions, still tend to undertake the more time-inflexible housework activities, for instance picking up children early in the afternoon in kindergarten, while men tend to do the more time-flexible activities like garden work or carwash during weekends. According to Bonke et al. (2005), there is a significant negative relation between female careers (wages) and the variable measuring the amount of time-inflexible housework when controlling for a large amount of other variables. There may be several reasons for the large amount of housework among highly skilled women in Denmark. The high Danish tax pressure and tax wedge and a compressed wage structure mean that outsourcing housework activities is relatively expensive for Danish women. More egalitarian norms and low acceptance of outsourcing or having an au pair may add to the explanation of the high level of household work in high-income families in Denmark (see Gupta, Smith, and Verner 2008). Thus, one question discussed in this paper is that the Scandinavian family-friendly welfare states helped women enter the labour market and favoured women in the low end of the wage distribution, but at the same time, the welfare states have unintended negative boomerang effects for highly skilled women.

3.2 Classic discrimination and old-boys' network

Formerly one of the most frequent explanations for the gender gap in wages and occupational positions. The classic discrimination theories, dating back to Becker (1957), explained discrimination as the result of preferences against the minority (women) among employers, colleagues or consumers. However, as later theories

have discussed, these types of classic discrimination preferences cannot exist in the long run because employers with discriminating practices will lose their competitive power if they do not hire the most productive people, i.e. if they discriminate against potential female executives. However, even though the classic pure discrimination theory does not enjoy much support today, much more complex mechanisms may still exist that prevent equally qualified women from getting the same positions as their male peers. These mechanisms are typically categorised as statistical discrimination as described below in (3.3).

3.3 Gender stereotyping and statistical discrimination against women

Even though women do not seem to be much punished individually for having children and a family, see Smith, Smith and Verner (2013), there is still a considerable and significant gender gap in promotion rates into top executive positions, which cannot be explained by some (but not all) companies having discriminatory preferences. This points to a more general explanation of the gender gap, which is not related to the individual company or the individual woman. The theories on gender stereotyping from the sociological and management literature (which is parallel to statistical discrimination theory in economics) may offer an appropriate explanation.

The statistical discrimination theories explain why individuals in a minority group (women) are less often promoted than individuals from the majority group (men) even when they have the same productivity or formal, observable competences. If the supervisors (those who make promotion decisions) are typically men, they may be more culturally attuned to the applicants of their own gender than to female applicants, and, therefore, it is easier for them to understand the signals from male applicants, i.e. they have better information on male (unobserved) productivity. If the supervisors are risk-averse, they will end up having higher hiring standards for female applicants. Furthermore, the supervisors may use gender as a proxy for information. If they know that the majority of women (but only a minority of male applicants) tend to have periods out of the labour market due to childbirth, tend to be more absent due to care days for children and less flexible in their jobs because of responsibilities at home, they may use the gender of the applicant as an information signal. This is rational behaviour for the company because gender is a very inexpensive way of getting information, i.e. gender stereotyping is rational for the company even though they do not have discriminatory preferences, but it may work as discriminatory preferences against a woman who may actually differ from the stereotype and who is just as productive and career-minded as her male peer.

The gender stereotyping mechanisms have given rise to a slightly different hypothesis: the 'Think Manager-Think Male' hypothesis, which argues that there is a close relation between gender role stereotypes and the demanded characteristics of a successful manager (Schein, 1973). Employers, colleagues and potential top executives may have gender stereotype views on which competences are needed in order to occupy a position as a CEO. Besides giving rise to statistical discrimi-

nation effects, this may also have the effect that women do not find it as attractive as their male peers to become a top executive because they may find it too difficult to combine their perception of a good life with a job as a top executive. Women may to a larger extent than men feel that they have to give up a ‘normal life’ or a ‘normal identity’ in order to fill the role as a CEO.

3.4 Do women shy away from competition and are they different from men?

A number of economic and psychological studies have recently posed the question: Are men and women different with respect to the preferences for competition, risk-taking and other behavioural parameters that may be important for the chances of reaching top management positions. One of the most cited studies is the recent study by Niederle and Vesterlund (2007), who used a lab experiment to study university students participating in various experiments or games. They found that women were more reluctant to engage in a competitive tournament incentive scheme than their male peers, including games where the women and men were equally competent. The study also found that women seemed to shy away from competition because they had less self-confidence concerning their own abilities. A large number of experimental studies reached similar conclusions. Since positions as VPs or CEOs often are filled in a highly competitive environment, which may have parallels to a tournament-like process, an additional explanation of the lack of women in top positions could be that they do not fight or apply for the top positions to the same extent as their male peers.

The crucial question is whether this gender difference found among participants in experimental studies reflects nurture or nature. Are gender differences gene- and chromosome-related or are they a causal effect of early socialisation? This question is difficult to answer, and economic research offers no conclusion. Another interesting question is whether the women top positions are unique and constitute a selected group of women who are more like males with respect to their preferences for competition, risks, etc.? A recent study based on Swedish data indicates that women who succeed in getting into top executive positions are as competitive as men and tend to have typical male values (competitive, result oriented etc.) to the same or even higher extent than their male colleagues (Adams and Funk, 2012). This evidence may either be explained by the fact that female top executives are an extremely select group of women and/or women who succeed in getting into top executive positions tend to change their preferences and values over time.

4. Empirical evidence for the lack of women in top management positions in Denmark

A recent Danish study tested a number of alternative theories on the gender gap in promotion rates for executive positions (see Smith et al., 2013). The study is based on employer-employee register data covering all Danish private-sector companies with more than 50 employees during the years of 1997-2007. Since the study is based on panel data, it is possible to control for unobserved time-constant heterogeneity, for instance differences in unobserved preferences, ambitions and

unobserved abilities among the individuals or unobserved time-constant differences among companies.² The promotion rates into CEO-level and just below CEO level (VP level) are explained by a large number of company- and individual-specific characteristics. After controlling for observed and time-constant unobserved company variables, a significant gender gap in promotion rates remains, especially for promotions into CEO positions. In fact, the company-specific explanation, i.e. the unobserved time-constant variables such as potential discriminatory preferences in some companies against female top executives, explains a very small proportion of the gender gap in promotion rates. Consequently, it is not plausible that the small share of women in top executive positions is explained by a number of companies being more discriminatory than other companies. The gap must be explained by more general factors, which are more or less present in all companies, or there may be explanations relating to the supply side, i.e. gender differences in the career choices of the potential top executives.

According to Smith et al. (2013), there is no significant or only a numerically small relationship between childbirth, maternal leave or number of children born and highly skilled women's chances of being promoted into VP or CEO positions. However, this somewhat surprising result has to be supplemented by the fact that for male executives, having children increases career chances and promotion. However, there is a significant and negative coefficient for fathers who take parental leave. Thus, it seems to benefit fathers' careers to have children, but they should not take too much of the parental leave. On average, Danish fathers do not take much parental leave, except for the two weeks around childbirth, even in families where the mother is highly skilled (see Smith et al., 2013).

These results indicate that for women, even female executives in a career track, the individual penalty related to maternal leave is small. However, for male executives, there is a significant negative effect of taking paternal leave, while there is a positive effect of having children.³ For female executives, the lower chances for promotion rates after controlling for a large number of observed and unobserved factors, i.e. the significant unexplained promotion gap, may be interpreted as the result of general (collective) gender stereotyping or statistical discrimination effects relating to all women, no matter whether they are mothers or not, or whether they take maternal leave or not.

Smith et al. (2013) were not able to investigate these mechanisms further because their study relied on register-based data. However, other empirical studies indicate that gender stereotyping mechanisms seem to be fairly strong among Danish managers and maybe stronger or more persistent than in many other countries (Neergaard et al., 2008). The same tendency is documented in two recent surveys collected by the Eurobarometer (EU Commission, 2012b). Among the 27 EU countries, Denmark is fairly sceptical with respect to women's career ambitions and willingness to take the same responsibilities in their job as their male peers.

5. Do women matter with respect to company behaviour and performance?

Since this article is interested in economic impact, it is relevant to ask whether gender diversity in management teams has an impact on the economic outcomes of the company. There is a fairly large amount of international literature which has studied the theoretical implications of more women in top management, and there is also a large number of international studies on gender diversity and firm performance.

5.1 Theories on gender diversity

Carter, Simpkins, and Simpson (2003) list a number of arguments from a 'business case perspective' for gender diversity: Diverse boards of directors (or executive boards) are able to make qualitatively better decisions than more homogenous boards because female directors may have different experiences from their working life and non-working life than men. More gender-diverse boards may improve the image of the company, which may be important if customers or shareholders find that this is a relevant company characteristic. Gender-diverse boards may have a greater collective talent pool than boards only with men because they are selected from the top of both male and female talent distributions (assuming that the talent pools for males and females have the same distributions). A potentially negative consequence of more gender-diverse boards is that these boards may experience more conflicts, or the discussions may be more time-consuming than for more homogenous boards. If the company is dependent on being able to react quickly to market shocks, this may be a serious problem. If the CEO and the executives of the company are reluctant to share key information with demographically dissimilar directors, this may also reduce board efficiency.

Adams and Ferreira (2009) are critical of the classic diversity management arguments. Based on management theory, economic theory and their own empirical studies, they argue that board members must be powerful individuals who are able to match the competences of the CEO and the management board in order to be able to fill the roles which board members are supposed to fill as monitors of and advisors to the management board: 'For gender diversity to have an impact on board governance, it is not sufficient that female directors behave differently than male directors. Their behaviour should also affect the working of the board' (Adams and Ferreira, 2009, p. 297).

5.2 Empirical results on diversity, firm performance and risk behaviour in Danish companies

Only a few studies exist on the relationship between women on boards of directors and firm performance in the Danish context.⁴ Using four alternative performance measures, Smith et al. (2006) conclude that women on boards of directors who are elected at the general assembly, i.e. they are not elected among the staff, have no significant effect on firm performance. When excluding board members who are elected among the staff, Smith et al. identify both insignificant and in some cases significantly negative performance coefficients of the female board member variable. In a sample of Danish listed companies in the period of 1998-

2001, Rose (2007) finds no significant effect of female representation on the boards of these companies.

For CEOs and VPs, the results in Smith et al. (2006) are quite different. The female share among CEOs and VPs is found to be positively (and significantly) related to firm performance.

A crucial question in the empirical literature is whether the statistical methods applied control for potential endogeneity, i.e. whether there is a spurious correlation between women on the boards and firm performance, either because of reverse causality (companies with good performance may 'run the risk' of hiring a female board member) or unobserved factors which affect both firm performance and female representation on the board of directors or management board. The study by Smith et al. (2006) controls for these potential endogeneity problems by applying panel and instrumental variable estimators. However, the identification of causal relations in such studies is difficult because of lack of exogenous variation. Therefore, the Danish empirical evidence may be supplemented with the results found in a number of recent studies from Norway.

5.3 The Norwegian quota experience

Norway is relevant to this study, partly because of many similarities with Denmark, and partly because in 2002 the politicians decided to implement a large 'natural experiment' by implementing a 40% quota of women on supervisory boards of all listed Norwegian companies within a 5-year period. In 2002, Norway and Denmark had similar female board representation, i.e. around 10% of the board members were women. In January 2008, all publicly listed companies in Norway (ASA companies) had 40% female board members. In this sense, the Norwegian quota law has, of course, been a success since it increased the share of women on the boards of directors dramatically within a few years. The crucial question is whether this has had any positive or negative side effects?

The answer is not simple and the research on the impact of the quota gives mixed results. Some studies find a negative impact on the economic performance of the companies subject to the quota law (Ahern and Dittmar, 2012), partly because the boards which had to recruit a relatively large number of new female board members in order to comply with the law seem to get more board members with less experience as directors or top executives. Furthermore, the companies which are subject to the quota law seem to be more reluctant with respect to adjusting the size of the workforce of the company to negative demand shocks. Contrary to these studies, Dale-Olsen et al. (2013) find no significant effect on firm performance, except for the poorest performing companies where female board members seem to be tougher monitors.

The results of the existing research on the Norwegian quota should be considered short-term effects, which may be different from long-term effects. The pipeline of qualified women may increase over time since the female board members become

more experienced with time. However, until now, there has not been a notable change in the female share of top executive positions, i.e. the quota law has not yet spread from the supervisory boards via role model effects or effects from female-led or potentially more female-friendly nomination committees.

6. Policy regulations on gender diversity in private-sector companies

The EU Commission has proposed, but not yet decided, a binding quota of 30% women in 2015 and 40% in 2020. In many countries around the world, governments have implemented or are discussing quota regulations for boards of directors in large companies; and in a number of countries, the soft law regulation on good corporate governance now includes guidelines concerning more gender-diverse boards, see Table 2.

Denmark has decided not to implement a binding quota for private-sector companies. Instead, a more flexible regulation was decided in 2012 and came into force during spring 2013 covering the 1,100 largest companies in the private sector. The companies are supposed to set individual targets for the proportion of the under-represented gender on the board of directors and for the highest levels of top executives in the company, and they must have a policy describing how to reach the goals. The goals and progress reports on how the gender balance develops must be publicly available information according to the law (reported in the annual report of the company). If companies do not comply, they may be subject to sanctions (fees). However, the crucial question concerning the implications of the law is whether the behaviour of the companies in the recruiting process with respect to board members and top executives will actually change and whether the law will induce companies to set ambitious goals which they actually strive to fulfil. During the latest decades, a number of the large Danish companies (e.g. TDC, Nykredit, Carlsberg) have experimented with different types of mentoring programmes, female fast-career tracks, etc., in order to improve the gender balance at the higher executive levels in the organisation. Some of these companies have joined the initiative 'Charter for more women in management'.⁵ The charter encourages companies to inspire more women to take up management positions and to evaluate their initiatives every second year. Since 2010, the Danish Ministry of Equal Opportunities has also initiated the 'Recommendation for more women on supervisory boards' (Operation Chain Reaction), according to which the companies that have signed the recommendation promise to work at recruiting more female managers to their supervisory boards. Figure 1 indicates that the share of women in top executive positions, both at CEO and VP levels, and the share of female chairmen on the boards have actually increased. When looking at the largest listed companies only, the most recent figures from 2013 also indicate an increasing female share of board members elected at the general assembly.

7. Implications for national policies and management

An important question is whether more women actually want to enter the executive boards. Those who support the quota regulation or other legislative initiatives would probably confirm that a large share of the large group of highly qualified

Table 2. Countries which have decided to implement quota regulations or soft law regulations on gender diversity in the official guidelines for good corporate governance			
	Compliance year for quota	Quota companies (private-sector companies)	Gender diversity in guidelines for good corporate governance (GCG) or other regulation
Norway	2008	40% binding	GCG 2009
Iceland	2013	40% binding	
Spain	2015	40% not binding	GCG 2006
France	2014, 2017	20%, 40% binding	GCG 2010
Belgium	2017-19	33% binding	GCG 2009
The Netherlands	2015	30% not binding	GCG 2010
Italy	2015	30% binding	
Finland	2010	>= 1 woman, binding	GCG 2010
Denmark			GCG 2008 2013: Flexible regulation of 1100 largest companies
Sweden			GCG 2004
Germany	2016 (agreement between CDU and SPD, Nov. 2013)	30% binding	GCG 2009
UK	2015	25% not binding	GCG 2010
Austria, Poland			GCG 2010
Luxembourg, Australia, USA			GCG 2009

Source: Ahern and Dittmar (2012), Smith (2014) and EU Commission (2013a,b).

women leaving the universities or business schools want to get access to the boardrooms. However, a potential problem may be that in order to get into the boardroom or to reach top executive positions, it is typically a condition to have a fairly steep career path during the first years in the labour market. This requirement obviously interferes with childbirth and long maternity and parental leave periods out of the labour market and the need to have flexible and somewhat limited working hours during the childbearing and child-caring period. The extension of the maternity and parental leave schemes to a full year in 2002 has probably increased these problems because one consequence was that women, including the highly educated and career-oriented women, now tend to stay out of the labour force for 2-3 full years during the child bearing period. In many households, the allocation of time between the parents continues after the childbirth period because the parents tend to specialize in either a career or the responsibilities at home and a career at a lower level (Gupta, Smith, and Stratton, 2007).

It is often argued that the maternity and parental leave periods only cover a few years of a long working life and that the first years of a career cannot be such an important explanation of the small share of women in top executive positions and on supervisory boards. However, a number of theoretical and empirical studies may explain why the early years of male and female careers are extremely important and why it may be very difficult for women to catch-up their career later in life if they made the choice to have more children, take full parental leave and maybe work less than full time during the years following childbirth; see for instance Landers et al. (1996) and Gicheva (2013). These studies, which build on ‘in-

complete information mechanisms', explain that working hours and willingness to work long hours are very often considered important signals for the employer of being a highly able and motivated individual (important characteristics on which the employer has incomplete information). The empirical analyses document that working hours early in a career end up being a very important determinant for future promotions and the steepness of the career profile. In this way, the very Danish gender-biased long parental leave periods and other family-friendly schemes may end up being have serious boomerang effects for women's careers.

The political signals from the EU indicate that the politicians may take action if the private companies do not succeed in getting more women on their supervisory boards. In many companies, the challenge of getting more women to the top of the organisation has been addressed for many years, in most cases with fairly limited success. These companies have introduced many alternative measures to recruit women into top-level positions, and these companies will probably already to a large extent fulfil the Danish 2012 law on gender diversity in supervisory boards and management boards. As first movers, they may have a clear advantage over companies which have been reluctant to introduce talent programmes for potential female top executives or to hire women on the supervisory board (and this is the case for about 65% of all Danish companies). If the EU regulations result in a binding quota of 30 or 40% women on the supervisory boards, there may be a clear excess demand for highly skilled women who can fill the boardrooms of Danish companies. Even though the qualified women probably will benefit from getting many offers, may accept to join more boards than their male peers and may end up being board members on more boards than today, there may be fierce international competition on the female competences. From this perspective, it may be an important and valuable strategy to be voluntary first movers in this area (jointly with other European countries which have already announced legal regulations) in order to have a sufficient and skilled supply of female board members who can join the future supervisory boards.

8. Conclusion

This paper offers a survey of recent research and discusses why it may not be easy to change the patterns and behaviour of companies, the career choices of men and women and whether gender diversity matters for firm performance. Even though it is not obvious from research that more females in top management may, in the short term, improve firm performance, there may, of course, be much more positive long-term effects from getting a larger pool of highly skilled women who are able to fill supervisory boards or top executive positions. According to the talent pool argument, i.e. if men and women are equally qualified for top management positions, mainly recruiting from the male distribution results in a loss of talent. However, in practice, it may be more complicated and the talent pool argument assumes that male and female careers and choices are very similar. This is not yet the case in Denmark, and the question is whether career choices currently are converging or diverging. Here, it may be important to look at the family

policy instruments that politicians have at hand in the form of reserving part of the parental leave period for fathers.

A number of countries have decided on more or less binding quotas for women on the boards of larger companies. Even though the EU Commission did not succeed in their first trial of implementing a binding 40% quota in all EU countries for large listed companies, there seems to be a movement outside Denmark in that direction. More and more countries introduce binding quotas in one form or another at the national level. Lately, in the autumn of 2013, Germany, which formerly was one of the major countries against quotas, decided to introduce a binding quota of 30%. In this light, it seems to be highly important from a management and economic perspective to succeed in getting more women into the pipeline of potentially qualified board members since a binding quota of 40% at the EU-level may have negative consequences for the economic performance and competitiveness of Danish companies.

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1. See Smith et al. (2013) for a more detailed description of the sampling criteria. The data set used in this article has been updated with information for the more recent years than included in Smith et al. Due to data break in 2009, the female share of CEOs can only be calculated for the period 1997-2009. The data set stems from the firm registers of Statistics Denmark and information from the private data register Experian has been merged with the data set from Statistics Denmark.
2. The estimation methods are fixed and random effects (company level or individual level) estimations. Furthermore, the study applies control for potential endogeneity problems due to time variant unobservables.
3. The term 'effect' should be interpreted as a 'correlation' after control for a large number of observed and unobserved factors. The study cannot claim to identify causal effects.
4. Results from international empirical studies on gender diversity and firm performance are rather mixed for many reasons. Institutions vary across the world, outcome measures vary in different studies, statistical specifications vary, and there may be genuine country differences; see Smith (2014) for a survey of the international results.
5. See http://www.kvinderiledelse.dk/chartier_paa_engelsk.asp and http://miliki.dk/fileadmin/ligestilling/PDF/Kaedereaktion/Operation_Kaedereaktion_DK_aug.pdf