

College of the Holy Cross

The Effect of Gender Quotas on the Composition of the Board of Directors

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Abstract

Introduction and Background

found that this quota increased the percentage of women directors from 18% to 40%. The quota system has been observed in other different European countries too, mainly France and Spain.

The first time this quota system has been observed in the United States is California. California is introducing the quota system that has been seen in other European countries. It is valuable that California is putting in this quota as it has the third highest number of headquarters in the United States (Boss, 2019). California amended their state Corporation Code in September of 2018. This required all publicly traded corporations that had their headquarters in California to

cause a trickle-down effect and balance out the rest of the company. It can break certain stereotypes and allow for change that is not happening quickly enough. Women board members also tend to hire more females. In a recent paper, Matsa and Miller (2011) shows the effect of having more females on the board will positively affect the female numbers of the rest of the firm and increase the firm's performance.

When looking at different industries, we would expect that each industry has different gender compositions. For example, if we look at the fashion industry we could expect that they have more female CEOs than the engineering and oil industry. Communication services, real estate, and health care have the largest percentage of women on the board while finance and information technology have the lowest. A recent paper by Donna Bobbitt researches the effect of gender stereotypes and women's experiences in the workplace. They collected and researched cases of sex discrimination filed with the OCRC. They found that there were more accounts of discrimination when there were fewer policies in place and this occurred in settings where it was more male-dominated. A possible reason for this is that men in male-dominated settings feel as if women are 'invaders'. This gender inequality is a big problem and has been going on for a long time but, will the laws passed and quota systems put in place promote change and allow for women to have a fair chance to be represented as board members regardless of the industry? An example of a study done, Martínez (2016), explains the advantages of having women on the board and how it affects the overall performance of a firm. It found that women will increase the firm's performance until it reaches a certain threshold of women on the board. When the percentage of women reaches the threshold, they start to have a negative effect on the firm's value. This can be a result of pressure-resistant female institutional directors. It also looks at the advantages of having women on the board and this is because women are more likely to ask

more questions, increase the overall firm's performance and women genuinely go for the low-risk options.

Many different countries have put quota systems in place and tried to fix the gender imbalance of board members. Many European countries put the quota system in place in the early 2000s while countries like Australia only put them in place in 2018. In a paper by Melanie Huges (2011), she explains the variation in quota systems put in place in different countries and how each of them has adopted them respectively. We can see that different countries have put quota systems in place but the enforcement varies and the effectiveness depends on what type of enforcement they put in place. For example, Norway's quota was more successful than the quota put in Spain as the company would be dissolved if they did not add female directors to the board and in Spain there was no punishment. In a paper by Antoine and Gwenael (2019), they researched if the quota put in place in France in 2011 was successful. They found that there was an increase in the number of female board members when the quota was put in place. The quota was put in place in France in 2011, by 2017 each company would have to have at least 40% of each gender represented on the board.

Adam and Frank (2012), found that the diversity of the board has a positive effect on the firm's performance however the experience in Norway is different. Norway is a country that has been recognized for its effects in changing the diversity of the board of directors and many different studies have been done on the quota that was fully enforced in 2008. Two papers by Ahern and Dittmar (2012) and Matsa and Miller (2013), found that there was a negative effect on the firm's performance when there was more diversity on the board. It suggests that the link between a firm's performance and diversity is not straightforward as it may seem and could be hard to calculate. My application for my paper is very similar to Matsa and Miller (2013), which

researched the effect of the gender quota on corporate decision-making in Norway. Their estimate approach relied on a triple difference-in-difference strategy across Nordic countries, and listed and non-listed companies. They found that the short-run profitability decreased when the quota was adopted but that the number of females on the board doubled from 18 to 40%. The firms were more likely to increase labor force and employment levels which negatively affected their profitability. There were many mixed results found in Norway with gender diversity and firm performance. The quota will affect different countries differently depending on the economy and social standards.

In this paper, I researched the effect of the quota system in the state of California and if it was able to change the diversity of the board by putting a quota system in place. California made it mandatory for firms, if their principal executive office is based in California, to have a certain number of female board members depending on the size of their company. If a company has 6 or more board members then 3 have to be female, 5 board members then 2 have to be female and if less than 5 then 1 has to be female. The goal of my paper is to see if firms complied with the requirements or if they moved their executive office to a different state to not comply with the requirements. And, if putting the quota system in place would cause corporations to increase the

literature we have looked at different countries as a whole but it is much easier to move headquarters between states than countries so California will give us a different perspective.

Below I have included a summary statistic of each variable and regression:

Variable

Empirical Study

My empirical strategy for this paper consists of two different regression models. I will first run a regression for the Location of the Executive Offices and then I will run a difference-in-difference regression for the change of women and men across the board of

non-california corporations which could indicate that it was because of the law. Although, this could be a sign of external validity.

Change in the women directors on the board

Table 2 represents the results from the difference-in-difference model. This regression measures the effect of the quote system on the change in female directors on the board. The r-squared value in the table is equal to 0.1393. The coefficient on the effect variable is positive and equal to

Discussion and Conclusion

California's law amended the State Corporation Code (Chapter 954, §§ 301.3 and 2115.5) in hopes to change the gender composition of the board of directors. Even though the law was struck down during 2022, it was interesting to see if amending the State Corporation Code was effective in creating more gender equality throughout the board of directors.

Through my regressions I was able to find that there was an increase in both women and men directors on the board. For the change of female directors, there was a higher increase after the quota was put in place. Although there was an increase in male directors, a possible reason for this is that corporations did not want to get rid of their male directors that had been on the

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Table 1: Example of Data

Company's Name	Year	Women	Men	Location	Post
CVX	2010	0	0	1	0

Table 2: Change in Women Directors

Source	SS	df	MS
Model	79.2059819	13	6.09276784
Residual	489.20965	1,918	.255062382
Total	568.415631	1,931	.294363351

Women	Coef.	Std. Err.	t	P > t	[95% Conf.	Interval]
location	-0.398207	.0269228	-1.48	0.139	-.0926218	.0129804
_Iyear_2011	.0807453	.0562892	1.43	0.152	-.0296492	.1911399
_Iyear_2012	.0621118	.0562892	1.10	0.270	-.0482827	.1725063
_Iyear_2013	.1180124	.0562892	2.10	0.036	.0076179	.2284069
_Iyear_2014	.1180124	.0562892	2.10	0.036	.0076179	.2284069
_Iyear_2015	.2049689	.0562892	3.64	0.000	.0945744	.3153635
_Iyear_2016	.1987578					

Table 3: Change of Male Directors

Source	SS	df	MS
Model	110.497795	13	8.49983037
Residual	1286.45045	1,918	.670724945
Total	1396.94824	1,931	.723432543

Men location	Coef.	Std. Err.	t	P > t	[95% Conf. Interval]
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Table 4: Switched Locations

Source	SS	df	MS
Model	.39408867	1	.39408867
Residual	7.23809524	172	.042081949
Total	7.63218391	173	.04411667

switched Coef. Std. Err. t P > |t|