

Gender and Board Activeness: The Role of a Critical Mass

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Motivation



There is a recent movement to impose gender diversity on boards:

- **US** – informal pressure and disclosure requirements.
- **Europe** – recent attempts to promote gender quotas for boards.

Primary Research Question

How do **gender-balanced** boards relate to the working of boards, and particularly to board activeness?

*Kanter (1977), Shrader et al. (1997), Rosener (1995), and Kramer et al. (2006)

Minutes Data

- Pertains to Government Business Companies GBCs (GBCs) – **for-profit companies** in which the Israeli government holds a substantial equity interest.
 - >Directors have similar background as in other countries.
- 402 detailed minutes of meetings of 11 GBCs for one year each, in the 2007-2009 period (155 board meetings and 247 board- committee meetings, documented over 4,659 pages).

Advantages of Minutes-data Examined

- Observe the actions directors take. Minutes are significantly more detailed than those of American companies.
- Observe within-firm variation.
- Minutes document relatively gender-balanced boards: 37% women.

Literature

Gender composition and board activeness:

- **Critical mass** Kanter (1977), Shrader et al. (1997), Rosener (1995), and Kramer et al. (2006).
- **Peer monitoring between genders** Adams and Ferreira (2009) Bear and Woolley, 2011; Hoogendoorn et al., 2011.
- **Specialization** Adams and Ferreira (2009) , Adams and Funk (2012).

Mixed results on gender composition and financial performance.

(e.g. Carter et al., 2003, Erhardt et al., 2003, Farrel and Hersh, 2005, +; Shrader et. al, 1997, ~ ;Adams and Ferreira, 2009, -). → women <10%

- **Gender quotas in Norway lead to a decline in firm performance.** Matsa and Miller (2012) and Ahern and Dittmar (2012)

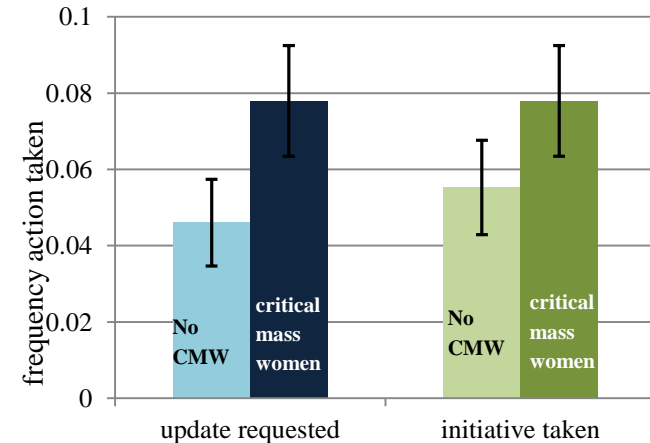
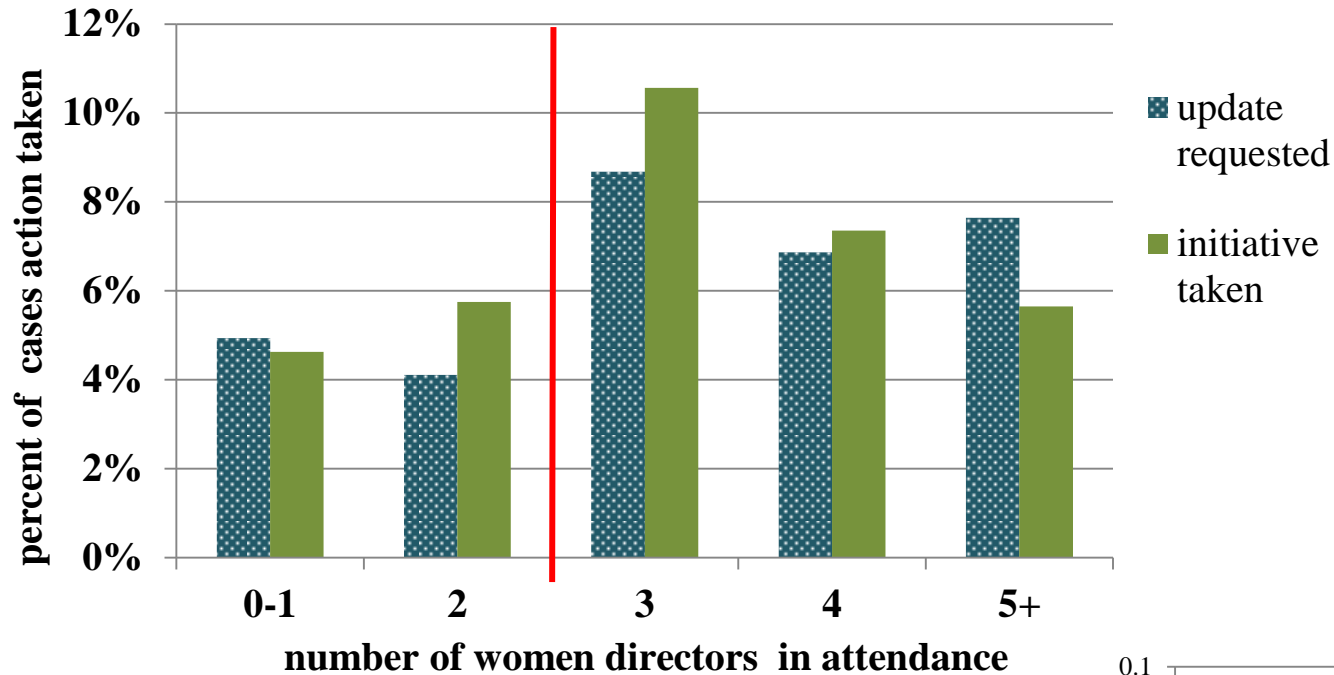
Methodology for Minutes-Data

Using the content analysis-methodology, the minutes were coded and transformed to a quantitative database that documents:

- Board composition in attendance (including gender composition)
- Was further information or an update requested?
- Was an initiative taken? (e.g., the board defined which action should be taken)
- What was discussed? (23 topic-subjects, managerial vs. supervisory)

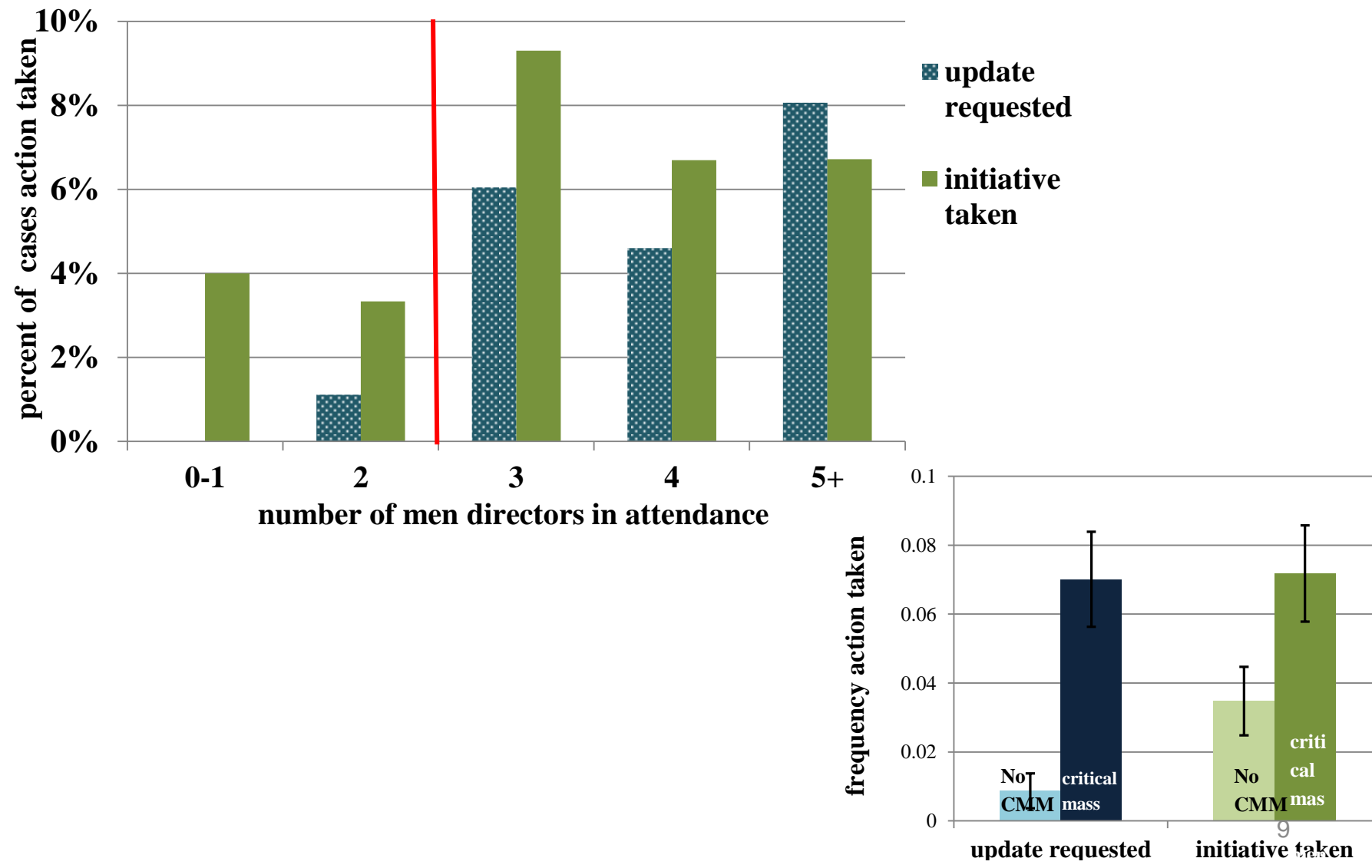
Women Directors and Frequency of Actions

[Figures 1a and 1c in paper]



Men Directors and Frequency of Actions

[Figures 1b and 1d in paper]



Actions Taken by Boards

[Table 4 in paper]

	Action taken		Update	Initiative	Action taken	Action taken
	(1)	(2)	(3)	(4)	(5)	(6)
Fraction of women directors in attendance	-0.268 (.226)	-0.083 (.250)				
Square of fraction of women directors in attendance	0.302 (.255)	0.106 (.307)				
Three or more women directors in attendance			0.044** (.019)	0.092*** (.029)		
Three or more men directors in attendance			0.031 (.021)	0.035 (.025)		
At least three directors of each gender					0.098*** (.032)	2.832*** (.315)
Number of directors in attendance	0.003 (.007)	-0.012 (.017)	-0.007 (.004)	0.001 (.004)	-0.006 (.006)	0.948 (.065)
R-squared	0.075	0.141	0.059	0.077	0.084	
Type of regressions	OLS	OLS	OLS	OLS	OLS	Logit
Type of meeting	Board	Committee	Board	Board	Board	Board

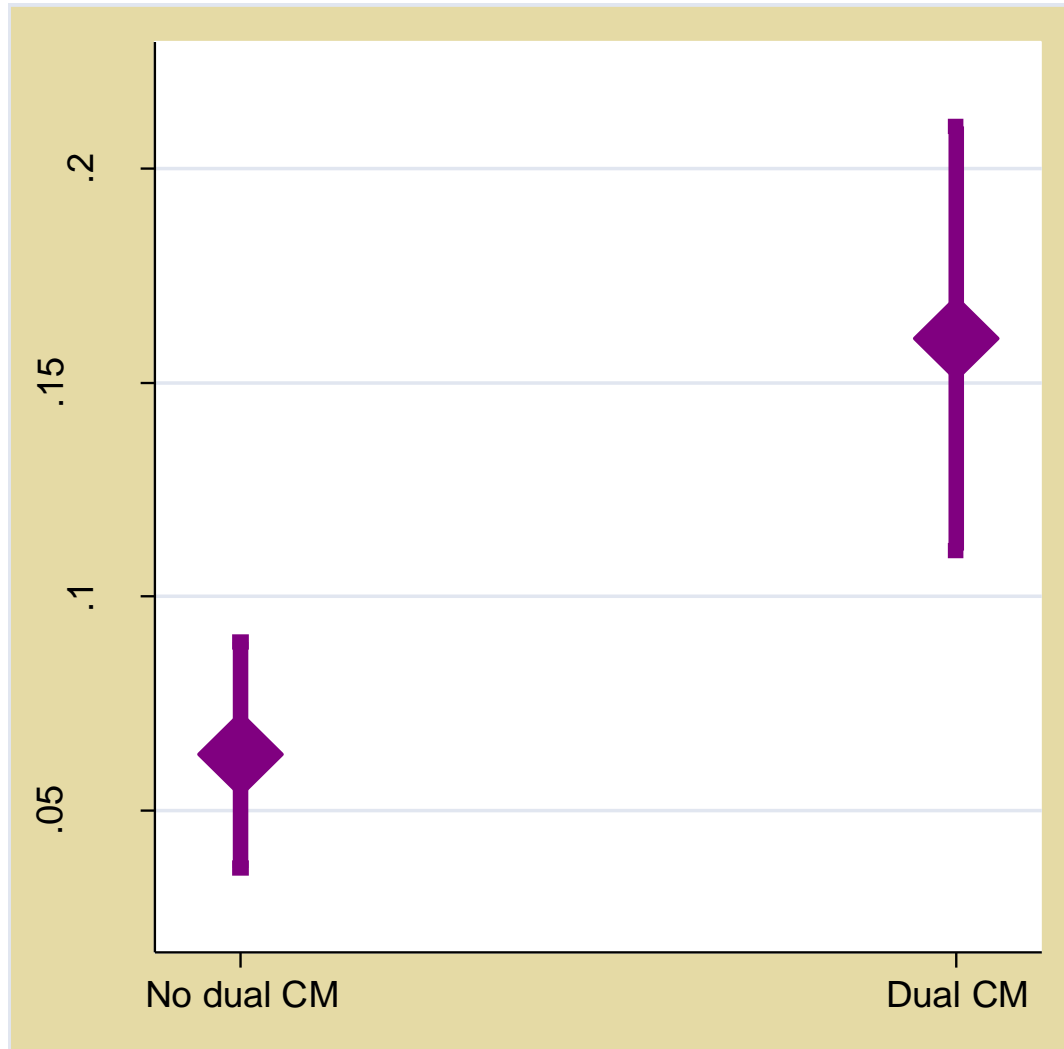
Economic magnitude:
approximately +79%

Odds ratio:
+2.83

N= 1313. Additional control variables included (not reported on slide): fraction of attending outsiders, number of attending directors, fraction of boards with executive experience, fraction with MA/MBA, and a dummy controlling for whether no CEO was serving. Firm, year, and topic-subjects dummies are included.

Predictive Likelihood that Action is Taken

[Figure 2 in paper]



The prediction reported is based on the logit model from the previous slide. The predicted probabilities are evaluated at the mean of the covariates.

Board Activeness and Critical Masses

- Boards with at least three directors of each gender (dual critical mass), were at least 79% more active compared to boards with no such dual critical mass.

Critical Masses and Activeness of Individual Directors

- How does the gender composition of the board relate to the extent to which individual directors are active?
 - For each case in which a single director took an action, the action taken was attributed to the specific director. This is possible for 69% of the actions.

Descriptive Statistics on Activeness of Individual Directors

[Table 5 in paper]

	Total percent of cases action is taken	Percent of cases supervisory action taken	Percent of cases managerial action taken	N	Average percentage of supervisory actions of all actions taken
	(1)	(2)	(3)	(4)	(5)
<u>Board meetings</u>					
Women directors	0.80%	0.65%	0.16%	3,865	80.6%
Men directors	0.92%	0.60%	0.32%	6,723	61.7%
<u>Committee Meetings</u>					
Women directors	4.56%	4.07%	0.49%	2,038	89.2%
Men directors	4.05%	3.16%	0.90%	3,009	77.9%

Women and Men Directors Taking Action

[Table 6 in paper]

	Action taken by director					
	(1)	(2)	(3)	(4)	(5)	(6)
Woman director	-0.0011 (.002)	0.0468** (.020)	-0.0018 (.002)	-0.0334** (.016)		
Fraction of women	-0.0586** (.026)	-0.1236** (.055)				
Square of fraction of women directors in attendance	0.0624** (.032)	0.1751** (.068)				
Three or more women directors in attendance			0.0072** (.004)	0.0035 (.004)	0.0144** (.006)	0.0044 (.005)
Three or more men directors in attendance			0.0048 (.004)	0.0064 (.005)	0.0033 (.005)	0.006 (.008)
Woman director and critical mass women in attendance				0.0132*** (.005)		
Man director and critical mass men in attendance				-0.0215 (.016)		
Number of directors in attendance	-0.0009* (.001)	-0.0105*** (.003)	-0.0015*** (.001)	-0.0014*** (.001)	-0.0002 (.001)	-0.0022*** (.001)
Meetings examined	Board	Committee	Board	Board	Board	Board
Gender examined	Both	Both	Both	Both	Women	Men
N	10588	5047	10588	10588	3865	6723

Women and Men Directors Taking Action

- Conclusion: a critical mass of women directors significantly increases the likelihood that individual women directors will be active at board meetings.

Do Different Genders Focus on Different Types of Issues?

- Women directors are more likely to be appointed to monitoring committees, while men directors are more likely to be appointed to the managerial ones (e.g. Adams and Ferreira, 2009).
- However, directors are not necessarily appointed to the committees they prefer.
- Here I examine if each gender is likely to take actions pertaining to supervisory versus managerial issues at board and at board-committee meetings.

Descriptive Statistics on Activeness of Individual Directors

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The Gender of Directors and the Type of Issues for Which They Are Active

[Table 7 in paper]

	Action taken on supervisory issue					
	(1)	(2)	(3)	(4)	(5)	(6)
Woman director took action	0.320*** (.101)	1.712*** (.535)	0.110*** (.027)	1.690*** (.223)		
Fraction of women directors in attendance	1.064 (.994)	5.139 (4.076)	-0.453 (.602)			
Square of fraction of women	-1.317 (1.295)	-6.53 (5.603)	0.495 (.531)			
Three or more women directors in attendance				0.139 (.144)	-0.308* (.155)	0.361** (.144)
Three or more men directors in attendance				-0.117 (.152)	-0.14 (.189)	1.034*** (.199)
Woman took action, at least three women in attendance				-0.561** (.217)		
Man took action, at least three men in attendance				0.890*** (.144)		
Meetings examined	Boards	Boards	Committees	Boards	Boards	Boards
Genders included	Both	Both	Both	Both	Women	Men
Type of regression	OLS	Logit	OLS	OLS	OLS	OLS
N	101	101	225	101	33	68

+38.2%

+58.8%

The Gender of Directors and the Type of Issues for Which They Are Active

- Women directors have, relative to men directors, a stronger inclination to focus on supervisory issues.
- However, gender-balanced boards mitigate the penchant of women directors to focus on supervisory issues and vice versa.

Gender and CEO turnover

- Firing and hiring the CEO, and bridging the gaps between CEOs are among a board's most important functions (Weisbach, 1988).
- **Question: Does the gender composition of boards play a role with respect to CEO turnover?**
- Data for the universe of the 34 GBCs for the years 2000-2009.

Gender Composition and CEO Turnover [Table 8 in paper]

	CEO turnover				
	(1)	(2)	(3)	(4)	(5)
Fraction of women directors	0.259 (.272)	-0.77 (.505)			
Fraction of women*ROE	-0.591 (1.691)	11.065** (4.194)			
Square of fraction of women directors		1.579** (.618)			
Square of fraction of women*ROE		-18.284*** (5.737)			
At least three women directors			0.088 (.067)	0.128* (.070)	
Three or more women*ROE				-1.752* (.913)	
At least three men directors			0.005 (.133)	0.018 (.134)	
Three or more men*ROE				-0.695 (.852)	
At least three directors of each gender					0.172** (.084)
At least three directors of each gender*ROE					-2.027** (.883)
R-squared	0.193	0.21	0.181	0.188	0.009
N	222	222	244	244	244

Additional control variables included (not reported on slide): ROE, fraction of outsiders, number of directors, tenure of CEO, dummy for gender of CEO.

Gender Composition and CEO Turnover

- Gender-balanced boards respond actively to poor financial performance by enhancing CEO turnover. Consistent with Adams and Ferreira, (2009).

Boards in the Absence of CEO

- Are Boards more Active in times the CEO is replaced?
 - Four of the firms examined replaced their CEO during the year examined, and all these firms had periods, in which they were literally “between” CEOs.
 - Gap periods – start when boards are aware that CEO is departing, end when new CEO steps is; lasted between 3-7 months.

Actions Taken by Boards

[Table 4 in paper]

	Action taken				Action taken	
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Three or more men directors in attendance			0.031 (.021)	0.035 (.025)		
At least three directors of each gender					0.098*** (.032)	2.832*** (.315)
Number of directors in attendance	0.003 (.007)	-0.012 (.017)	-0.007 (.004)	0.001 (.004)	-0.006 (.006)	0.948 (.065)
Between CEO period	0.053 (.051)	0.052 (.057)	0.009 (.033)	0.049* (.025)	0.06 (.044)	1.577 (.347)
R-squared	0.075	0.141	0.059	0.077	0.084	
Type of regressions	OLS	OLS	OLS	OLS	OLS	Logit
Type of meetings	Board	Committee	Board	Board	Board	Board

Board Activeness in Absence of CEO [Table 9 in paper]

	Action taken			
	(1)	(2)	(3)	(4)
Fraction of women directors in attendance	-0.278 (.272)	0.057 (.229)		
Fraction of women directors and between CEOs	0.373 (.415)	-0.56 (.370)		
Square of fraction of women directors in attendance	0.255 (.359)	-0.019 (.270)		
Square of fraction of women directors and between CEOs	-0.245 (.504)	0.472 (.430)		
Three or more women directors in attendance			0.077* (.041)	
Three or more women directors and between CEOs			0.112* (.058)	
Three or more men directors in attendance			0.024 (.043)	
Three or more men directors and between CEOs			0.160* (.094)	
At least three directors of each gender				0.067** (.032)
At least three directors of each gender and between CEOs				0.120** (.052)
Meetings examined	Board	Committees	Board	Board
R-squared	0.075	0.148	0.087	0.089
N	1313	1145	1313	1313

Additional control variables included (not reported on slide): fraction of attending outsiders, number of attending directors, fraction of boards with executive experience, fraction with MA/MBA, and a dummy controlling for whether no CEO was serving. Firm, year, and topic-subjects dummies are included.

economic magnitude: +75.8%

Board Activeness in Absence of CEO

- The critical mass effect is especially pronounced in situations in which boards are particularly needed – during periods the CEO is replaced.

Summary and Conclusions

- Gaining access to the working of boards behind the closed doors of the boardroom.
- In a steady state, gender-balanced boards may be valuable particularly when a company is in need of the board's involvement.

Thank you