Welcome on board:
A note on gender quotas regulation in Europe

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Abstract

Using a diff-in-diff approach, we compare the impact on board and directors' characteristics of mandatory vs advisory regulations on gender quotas in corporate boards. We focus on the experience of three European countries: France and Italy (mandatory regime) vs UK (advisory regime). Our results show that while the percentage of Women on Boards (WoB) generally increases after the introduction of the regulation, this effect is stronger in mandatory regimes. We also find that the *quality* of the board, measured by several indicators such as size, busyness, qualifications, independence, generally improves more in mandatory regimes. Finally, we also document that gender quotas have had no effect on the likelihood of appointing female executives and board chairwomen in either regime.

Keywords: gender quotas, corporate boards, mandatory, board quality

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1. Introduction

The purpose of this letter is to foster the understanding of the impact of different European regulations on female representation on corporate boards. Over ten years after the pioneering example of Norway, and a subsequent extensive effort by many European countries to put forward proposals that aim to give women better representation on corporate boards, the result is a very heterogeneous regulatory landscape across European countries.

Gender quotas require (some) firms to have a minimum number of female directors on their boards. Most of the regulations have been passed between 2005 and 2011 but companies have been granted relatively long implementation periods to comply with the new laws. Several countries have followed the example of Norway and adopted a *mandatory* regime whereby not-compliant firms will be subject to some sort of sanctions. Other countries have preferred a softer approach opting for *advisory* quotas. This is the case of UK and Spain among others.[1]

The existing research has so far focused on the experience of individual countries, mostly Norway, and have almost exclusively looked at whether an increased female representation on boards enhance the firm's performances and the board monitoring effectiveness, reaching mixed results (Nielsen and Huse, 2010; Ahern and Dittmar, 2012; Bøhren & Staubo, 2015; Eckbo et al. 2016).

At present, there is no paper that presents a comparative cross-country analysis of the different regulatory regimes and their effectiveness, which is the focus of this note. Specifically, in this paper, we compare the experience of France and Italy, which have implemented mandatory quotas, with that of the UK, which has advisory quotas.[2]

More precisely we investigate the impact of the two regulatory regimes on a. the degree of compliance among firms subject to the law; and b. on the quality of the board, which we capture with several board and directors' characteristics, such as board size, network size, qualifications, busyness and level of independence.

One of the main objections to the introduction of quotas, and specifically mandatory quotas, has in fact been based on the alleged scarcity of qualified females, which could translate into a higher risk of "over-boarding" - the few "golden skirts" holding multiple board positions – or more simply the appointment of less qualified directors with an overall detrimental effect on the quality of the board. The lack of qualified females could also potentially lead to a reduction in the board size (Eckbo, 2016).[3]

Another contentious issue about gender quotas is that it has hardly had any positive spill-over on the proportion of female CEOs (FT, 2018; Hamptons Alexander Review, 2019). We examine if this is indeed the case, and if the type of regime plays a role on this.

Our results show that companies in countries with mandatory regimes exhibit faster adjustment to the regulation than those in countries with advisory regimes. The type of regime also impacts the degree of compliance, with the UK exhibiting a much larger number of firms still substantially below the target ratio than France and Italy. We then employ a diff-in-diff

[1] Canada and Australia are two other examples of soft laws on gender quotas in boards.

[2] All of these countries have passed their gender quota regulation in 2011 which allows us to run a clean diff-in-diff test.

[3] Decreasing the board size could also be a "circumvention strategy" (The Economist, 2018) in order to increase the percentage of female representation.

approach to investigate the effect of gender quotas regulation on various indicators of board quality, and find that the board quality generally improves after the introduction of the regulation. This improvement is generally stronger where quotas are mandatory. Finally, we confirm that quotas have not translated in more appointments of female executives and/or chairwomen. This holds true for either regime.

2. Institutional background

The UK is one of the few countries that has opted for a soft approach to increase the representation of women in corporate boards. In February 2011, the British government issued the Davies Report which recommended FTSE100 companies to reach a voluntary ratio of women on boards of 25% by 2015. A subsequent review in 2015 raised the voluntary ratio to 33% and extended it also to FTSE250 companies to be achieved by 2020.[4]

In France, gender quotas were implemented in January 2011. The law required all listed companies and non-listed companies with more than 500 employees or revenues above EUR 50 million a minimum of 20% of women on boards by January 2014, raised to 40% by January 2017. Sanctions for non-compliant firms are of two types: the appointment of directors in violation of the law is voided, and the payment of attendance fees is suspended (Prat and Mueller, 2016).[5]

Italy introduced board gender quotas in July 2011. The law came into force one year after on August 2012. The law mandates that all publicly listed companies should have at least 1/5 of either gender on their boards of directors by the time of the first renewal of the board. The ratio should increase to 1/3 by the second renewal of the board.[6][7] If a firm does not comply, CONSOB (the regulatory body of the Italian stock exchange) in the first instance issues a warning to the company, which then has four months to comply. Failure to comply within this period, would trigger fines to the company (ranging from EUR 100,000 to EUR 1,000,000) and, if persisting, could lead to void the appointment of all directors (Ferrari et al. 2016).

3. Data and descriptive statistics

Our sample consists of an unbalanced panel of British, French and Italian listed companies over the period 2004 to 2017. Data on board characteristics are obtained from BoardEX. We keep only the observations that can be matched with CompuStat. The final sample consists of 1,057 firm-year observations for 83 unique British firms under the FTSE 100 index, of 4,179 firm-year observations for 534 French listed companies, and of 1,274 firm-year observations for 154 Italian listed firms. Table 1 presents summary statistics of firm and board characteristics for the firms included in each country sample.

[4] The new guidelines therefore apply to all the FTSE350 firms which combines the FTSE100 and the FTSE250 firms.

[5] http://www.remi-delatte.com/promulguees/Egalite_homme_femme_CA.pdf

[6] Board members in Italy are appointed for 3 years.

[7] http://www.dirittobancario.it/sites/default/files/allegati/comunicazione_consob_die_n._0061499_del_18_luglio_2013.pdf

4. Results

a. Women on Board (WoB) Ratio over time

In this section, we present two charts that illustrate how the ratio of WoB and the percentage of compliant firms have changed since 2004.

[Insert Chart 1 here]

Chart 1 clearly shows that the introduction of the regulation in 2011 has been the main trigger of the increased representation of WoB. However, this adjustment has been much sharper in Italy and France under a mandatory regime than in the UK[8] under a soft law.
This difference becomes strikingly evident if we look at Chart 2 presenting the percentage of firms that have yet to achieve the target quota.[9]

[Insert Chat 2 here]

We next look at the impact of the two regulatory regimes on the board quality.

b. Quotas and Board Quality

As discussed in the introduction, the main argument against the introduction of gender quotas was centred around the relatively small pool of qualified women to cover this role. Therefore, gender quotas could result in a deterioration of the board quality, particularly in mandatory regimes.

We investigate whether this is the case by running the following diff-in-diff regression:

$$y_i = \alpha + \beta_1 Post + \beta_2 FRA + \beta_3 ITA + \beta_4 Post * FRA + \beta_5 Post * ITA + \beta_6 TobinQ_i + \beta_7 logTA_i + Industry\&Year\ FE + \varepsilon_i \quad (1)$$

Where y_i is the percentage of women on board (WoB), the board size, the number of board qualifications, busyness and network size, and finally board independence. *Post* is an indicator variable that takes value 1 if the observation is post 2011 and zero otherwise. We additionally run three probit specifications of equation (1) where the dependent variables are the indicator variables *Comply,* which takes value 1 if the WoB ratio is equal or above the target and zero otherwise and *FemExec* (*FemChair*) which takes value 1 if the firm's CEO and/or CFO (the chair of the board) is a woman.[10] All other variables are defined in Appendix.

Results are reported in Table 2:

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[8] To depict a more complete picture of the level of female representation on corporate boards, chart 1 and chart 2 show figures of British firms under the FTSE 100 index as well as British firms under the FTSE 250 index. However, in the remainder of our paper we will exclude from the analysis British firms under the FTSE 250 index.
[9] The chart is drawn with respect to the final target for all three countries: 33% in the UK and Italy, and 40% in France.
[10] We employ the target ratios introduced in 2011 to construct the variable *Comply* to be consistent with our definition of *Post*. However, our results are robust if we define our variables *Post* with respect to 2015 and *Comply* with respect to the final targets set by each country (see note 9) instead.

[Insert Table 2 here]

The results confirm that quota regulation have had a significant impact on the proportion of women on board, increasing it by 20%. The impact has been significantly stronger in mandatory regimes. The same result holds for the probability of complying with the target. There is evidence of a reduction in the board size after the introduction of the quota but this effect is smaller in mandatory regimes. With respect to the other board characteristics our findings show that post-quotas board qualifications and network size significantly decrease but this effect is much smaller (if not positive) in mandatory regimes. Similarly, busyness significantly decreases while board independence significantly improves post-quotas. These effects also appear to be slightly stronger in mandatory regimes.

Columns 3 and 4 of table 2 document instead that the introduction of the quotas have not had positive spillover on the appointment of female executives and/or chairwomen, and this is irrespective of the regime.

5. Conclusions

The paper employs a diff-and-diff strategy to compare the impact of different gender quotas regulation, i.e. mandatory vs advisory. We focus on the UK (advisory regime), France, and Italy (mandatory).

Our findings document very clearly that these regulatory efforts have been effective in increasing the representation of WoB, and the effectiveness appear to be stronger in mandatory regimes.

On the other hand, we do not find any evidence that quotas regulation has deteriorated the quality of the boards as opposers to the regulation argued. In fact, several indicators of board quality significantly improved after the introduction of the quota regulation. This improvement is not adversely affected by mandatory regimes. On the contrary, some indicators of board quality show stronger improvement in mandatory regimes.

In conclusion, our finding suggests that mandated gender quotas have been generally successful.

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Web Links

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https://wearethecity.com/hampton-alexander-review-2019-ftse-women-leaders/

Appendix

Variable definitions

Variable	Definition
WoB	The ratio of female directors to the total number of directors sitting in the board
Board size	The number of directors sitting on the board
Comply	Equal to one if WOB is equal or above the country specific target ratio, and zero otherwise
Qualifications	The number of qualifications held by the board measured as the average number of qualifications held by the firm's directors
Busyness	The busyness of the board measured as the average number of other board positions held by the firm's directors
LogNetwork	The log of the size of the board network measured as the average network size of the firm's directors
Independence	The ratio of independent directors over the total number of directors sitting on the board
Post	Equal to one if the observation is post 2011, and zero otherwise
FemExec.	Equal to one when either the CEO and/or the CFO of the firm is a woman, and zero otherwise
FemChair.	Equal to one when the chair of the board is a woman, and zero otherwise
LogTA	The log of firm's total assets
TobinQ	The ratio of the firm's market value to its book value. The market value is the book value of assets minus the book value of equity plus the market value of equity.

Chart 1: Women on Board ratio over time

This chart shows the average Women on Board ratio by country (UK, France, and Italy) over the 2004-2017 period.

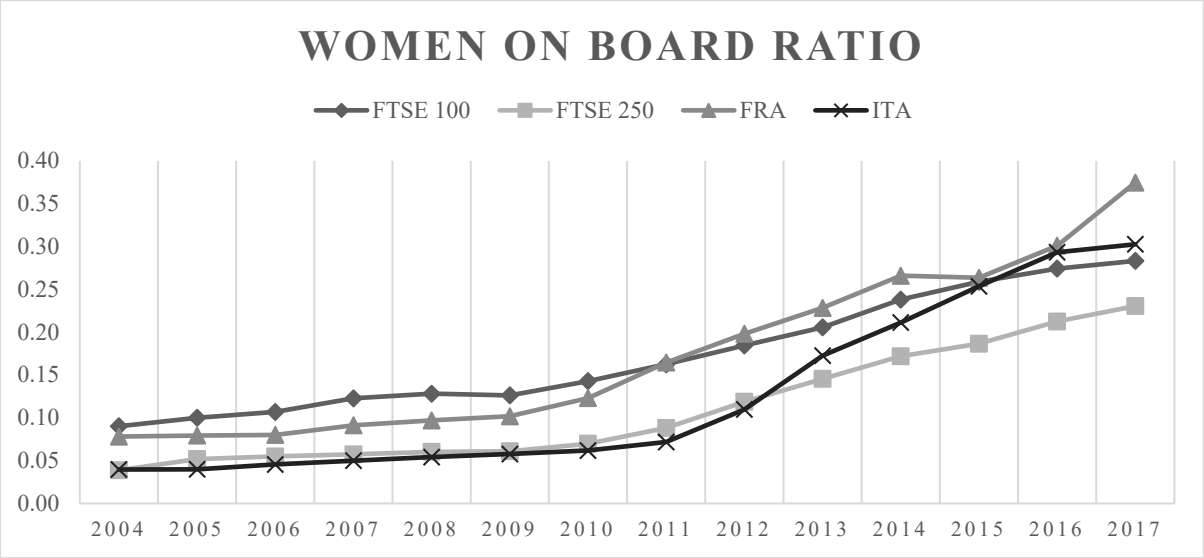

Chart 2: Percentage of non-compliant firms over time

This chart presents the proportion of firms by country (UK, France, and Italy) with a Women on Board ratio below the target ratio set in each country over the 2004-2017 period.

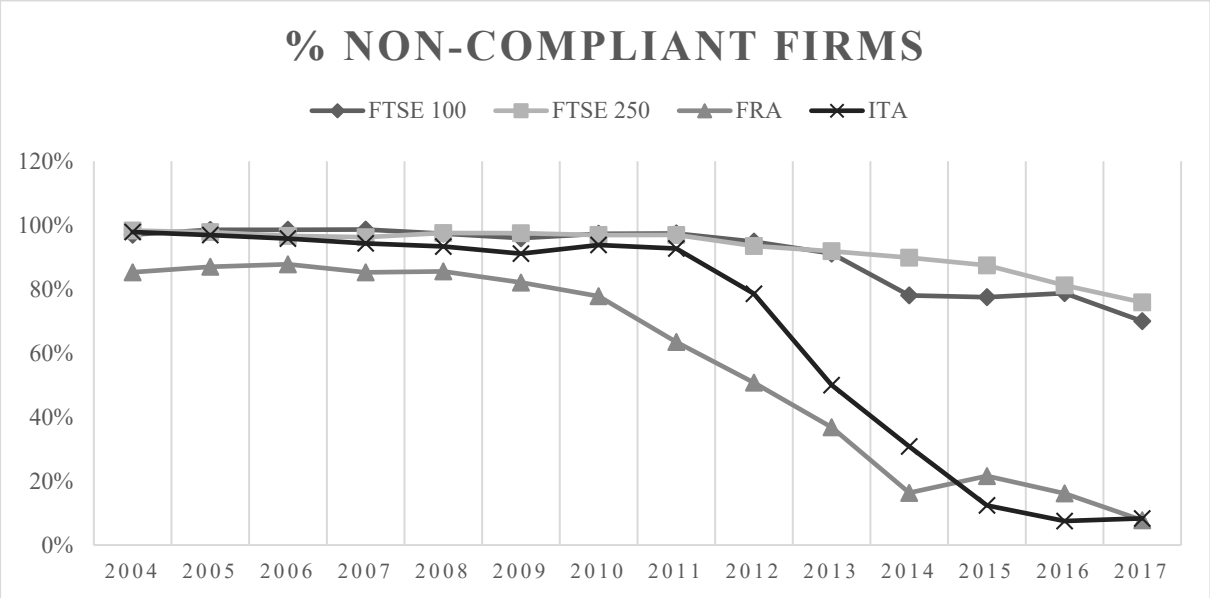

Table 1:
Descriptive statistics for 6,510 British, French and Italian listed companies over the period 2004-2017.

	UK - FTSE 100			France			Italy		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
WoB	17.48	0.00	50.00	19.34	0.00	75.00	13.63	0.00	57.10
Board size	10.64	7.00	15.00	10.03	4.00	18.00	11.87	7.00	20.00
Qualifications	2.09	0.58	4.09	1.42	0.00	3.71	1.39	0.00	3.14
Busyness	3.94	2.27	6.75	4.95	1.67	10.37	4.24	1.60	8.33
LogNetwork	7.31	6.29	7.96	5.55	3.17	7.11	5.76	4.46	6.92
Independence	0.62	0.22	1.00	0.36	0.00	1.00	0.47	0.00	1.00
TobinQ	1.81	0.85	5.20	1.39	0.80	3.07	1.32	0.78	3.02
LogTA	9.41	6.48	13.38	6.98	3.26	10.86	8.23	5.36	11.85
N		*1,057*			*4,179*			*1,274*	

Table2:
OLS regression (column 1 and columns 5 to 9) and probit regression (columns 2 to 4) as described in Equation (1). All dependent and independent variables are defined in the Appendix. Numbers in parentheses are *t*-statistics based on Huber-White standard errors. Significance on a 10% (*), 5% (**), or 1% level (***) is indicated.

	WoB	Comply	FemExec.	FemChair	Board size	Qualifications	Busyness	LogNetwork	Independence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post	22.651***	2.372***	0.161	-0.037	-1.578**	-0.242***	-1.303***	-0.243**	0.117***
	(11.80)	(6.14)	(0.58)	(0.09)	(3.17)	(2.59)	(4.12)	(2.06)	(3.25)
France	-0.188	0.575***	-0.174	0.239*	2.308***	-0.422***	1.937***	-1.044***	-0.202***
	(0.40)	(6.79)	(1.15)	(1.78)	(20.35)	(17.83)	(25.84)	(37.87)	(26.71)
Italy	-6.236***	-0.186	0.044	0.335**	2.614***	-0.639***	0.638***	-1.139***	-0.124***
	(12.31)	(1.59)	(0.23)	(2.26)	(16.79)	(24.26)	(7.25)	(33.71)	(12.95)
Post *France	6.021***	0.458***	-0.224	-0.164	0.683***	0.255***	-0.293***	0.134***	0.010
	(9.57)	(4.24)	(1.07)	(0.90)	(4.52)	(7.85)	(3.03)	(3.49)	(1.06)
Post *Italy	6.370***	0.957***	-0.467*	0.093	0.309	0.381***	0.212*	0.236***	0.025**
	(8.79)	(6.82)	(1.79)	(0.45)	(1.54)	(10.38)	(1.84)	(5.07)	(2.08)
TobinQ	0.616***	0.082***	-0.027	-0.107**	0.277***	0.127***	0.098***	0.218***	0.006*
	(2.96)	(2.58)	(0.47)	(2.07)	(6.36)	(10.72)	(2.59)	(13.22)	(1.80)
LogTA	0.917***	0.100***	-0.127***	-0.008	1.154***	0.145***	0.336***	0.330***	0.034***
	(10.81)	(8.22)	(5.01)	(0.37)	(53.74)	(31.82)	(22.25)	(53.58)	(22.61)
Constant	-10.668***	-3.652***	-0.733	-1.992***	-0.206	-0.198	4.000***	3.037***	0.093
	(4.26)	(7.47)	(1.33)	(3.54)	(0.19)	(1.19)	(4.99)	(13.65)	(1.46)
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Model	OLS	Probit	Probit	Probit	OLS	OLS	OLS	OLS	OLS
R-squared	0.47	0.37	0.08	0.07	0.53	0.37	0.28	0.57	0.33
N	6,510	6,478	5,406	5,147	6,510	6,510	6,510	6,510	6,510