

All on board?

New evidence on board gender diversity from a large panel of firms

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 - ▶ **Disentangling decision-makers own resentment from perception of customers/shareholders tastes**

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- ▶ **Test Adams & Kirchmaier (2016) intuition on the role of “cultural” drivers**

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Exact names of board(s) members

- ▶ Heuristics to identify gender
 1. H1: in some languages gender directly identifiable
e.g. vowel ending names in some Slavic languages, *-ova* in Czech, etc.
 2. H2: the books of names
e.g. dedicated lists for each of the Scandinavian languages
- ▶ Resolving conflicts & dropping “impossible” countries
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- ▶ Resolving conflicts & dropping “impossible” countries
e.g. the Netherlands
- ▶ Manipulation check: 2010 & 2014 waves of Amadeus have salutations → compare our gender assignment to salutations

total name-type-observations assigned: 16,254,928;

total with Amadeus confirmed gender: 15,371,479;

total men attributed as men: 10,074,034;

total women assigned as women: 4,048,932;

total men assigned as women: 10,963;

total women assigned as men: 10,626 **so I think we are ok**

Exact names of board(s) members

Year	% men in Amadeus attributed as		% women in Amadeus attributed as		
	men	women	men	women	unassigned
2000	0.826	0.002	0.004	0.815	0.18
2001	0.824	0.002	0.005	0.808	0.187
2002	0.824	0.002	0.004	0.812	0.184
2003	0.823	0.002	0.004	0.809	0.187
2004	0.825	0.003	0.005	0.809	0.186
2005	0.825	0.002	0.005	0.810	0.185
2006	0.824	0.003	0.005	0.806	0.188
2007	0.835	0.003	0.005	0.815	0.179
2008	0.898	0.001	0.002	0.890	0.107
2009	0.990	0	0	0.985	0.015
2010	0.990	0	0	0.980	0.02
2011	0.989	0	0	0.981	0.019
2012	0.980	0	0	0.979	0.021

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- ▶ **This study:** no use of financial data → all available firms

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How to measure gender board diversity?

- ▶ a firm level **share of women** on board (unweighted average)
e.g. Matsa and Miller (2011); Ahern and Dittmar (2012); Adams and Kirchmaier (2016)

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e.g. Wolfers (2006); Adams and Ferreira (2009)
- ▶ fraction of firms **that do not have women** on board
novel indicator

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	Full set	
	People	Firms
Total #	141,364,816	112,010,296
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Management boards		18.8%
Supervisory boards		19.5%

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Supervisory boards		28.2%

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	Unweighted average	
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	Weighted average	
Management boards		15.8%
Supervisory boards		28.2%
	% of firms w/o women	
Management boards		80.4%
Supervisory boards		99.3%

Measurement

	Full set		Trusted set		Reduced set	
	People	Firms	People	Firms	People	Firms
Total #	141,364,816	112,010,296	116,440,950	92,505,280	27,805,441	8,203,535
Unique	19,488,701	18,610,968	18,233,902	16,900,260	7,609,661	1,338,729
In firms which should have a supervisory board						
Total #	86,989,026	55,401,550	76,290,029	49,257,023	19,390,571	6,112,430
Total unique	10,774,244	8,360,777	10,333,102	7,983,919	3,035,300	1,001,916
Unweighted average						
Management boards	18.8%		19.3%		16.9%	
Supervisory boards	19.5%		19.7%		18.8%	
Weighted average						
Management boards	15.8%		15.8%		29.6%	
Supervisory boards	28.2%		28.8%		29.8%	
% of obs of firms with no women on boards						
Management boards	80.4%		80.6%		68.2%	
Supervisory boards	99.3%		99.2%		95.7%	

Sources of heterogeneity: supervisory boards

Contribution to variance	Full set	Trusted set	Reduced set
	Uweighted average		
country	20.90%	28.00%	35.70%

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Contribution to variance	Full set	Trusted set	Reduced set
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country	20.90%	28.00%	35.70%
sector (broad)	9.20%	14.10%	8.20%

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sector (broad)	9.20%	14.10%	8.20%
sector (2 digits)	18.60%	30.60%	20.90%
country and sector	36.50%	46.80%	47.60%

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year	7.70%	9.50%	10.00%

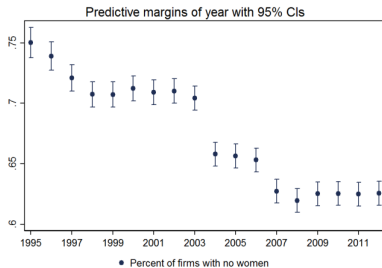
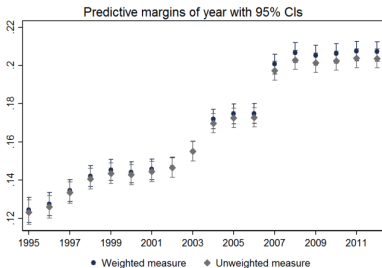
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year	7.70%	9.50%	10.00%
all	46.30%	64.60%	63.70%

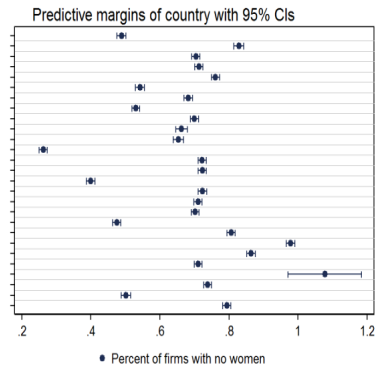
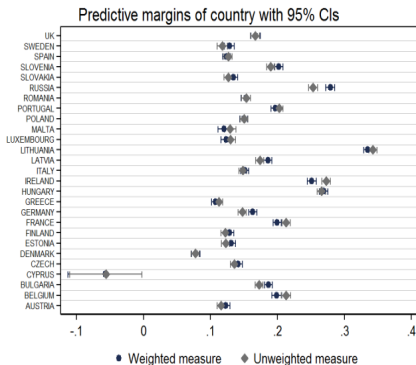
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year	7.70%	9.50%	10.00%
all	46.30%	64.60%	63.70%
	Fraction of firms with no women		
country	43.90%	57.80%	55.20%
sector (broad)	2.10%	2.80%	2.30%
sector (2 digits)	5.40%	7.00%	6.80%
country and sector	49.90%	64.30%	59.90%
year	0.90%	1.30%	5.60%
all	50.80%	65.40%	65.40%

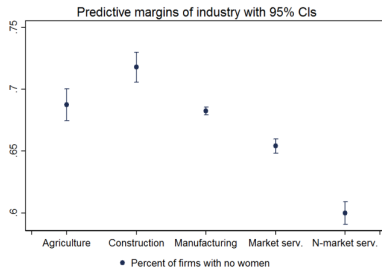
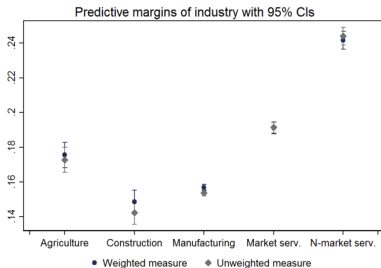
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Two sets of results

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- ▶ Matsa & Miller (2011): test if probability of women on a **management** board correlates positively with prior presence of women on **supervisory** board.
- ▶ Adams & Kirchmaier (2016): general openness to women should make it easier for them to be on **supervisory** boards (\Rightarrow **management** boards)?

Replicating M&M

	Stock-listed firms from trusted data set (M&M)			
	(1) = (3MM)	(2) = (4MM)	(3) = (5MM)	(4)
W in SB ($t - 1$)	0.226***	0.226***	0.010***	0.020***
W in M ($t - 1$)			0.770***	0.613***
Year FE	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes
Constant	0.233***	0.243***	0.089***	0.113***
# of obs	111,214	111,214	111,214	111,214
# of firms	12,538	12,538	12,538	12,538

Extending M&M to nonlisted companies

	Reduced data			
	(1a)	(2a)	(3a)	(4a)
W in SB ($t - 1$)	-0.043***	-0.047***	-0.080***	-0.091***
W in M ($t - 1$)			0.644***	0.419***
Year FE	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes
Constant	0.348***	0.398***	0.158***	0.253***
# of obs	6,038,840	6,038,840	6,038,840	6,038,840
# of firms	1,029,740	1,029,740	1,029,740	1,029,740

Is this big or small?

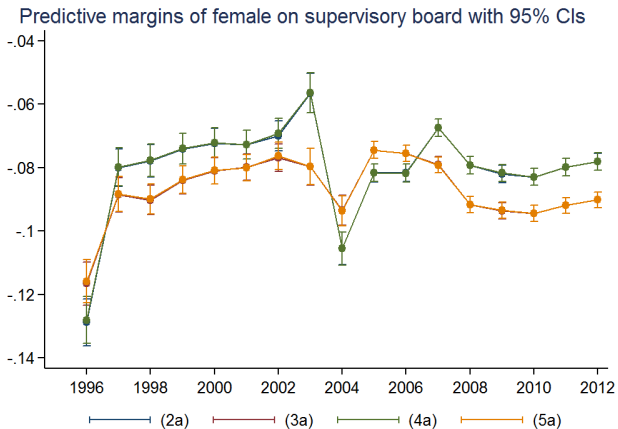
Placebo test (France, Germany & UK)	Trusted data			
	(1a)	(2a)	(3a)	(4a)
Name in S_{t-1}	-0.002***	-0.002***	-0.001	-0.001
Name in M_{t-1}			0.449***	0.328***
Year FE	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes
Constant	0.024***	0.014***	0.015***	0.010***
# observations	2,612,525	2,612,525	2,612,525	2,612,525
# firms	433,724	433,724	433,724	433,724

French names: Philippe, Olivier, Laurent

German names: Thomas, Michael, Andreas

British names: David, Paul, John

Dynamics over time?



Is this result robust?

Yes!

- ▶ We also control for a number of other factors (e.g. size of firm, HHI, innovativeness of the sector, etc.)
- ▶ We analyze other samples (e.g. more reduced data, complete data)
- ▶ We analyze alternative assignment of SB and MB
- ▶ We analyze subsample of firms equivalent to LTD

Extending A&K: probability of being a woman if on a board

Country characteristics

Subsample:	Management board		Supervisory board	
	all boards	> 1 boards	all boards	> 1 boards
# people on board	0.026***	0.033***	0.007	-0.001
Employment (in logs)		0.001**		0.001**

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Innovative sector	0.004*	0.003*	-0.002	-0.002
HHI	-0.002	-0.002	-0.019	-0.019

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Innovative sector		0.004*	0.003*	-0.002	-0.002	
HHI		-0.002	-0.002	-0.019	-0.019	
FFTEP	0.175	0.200*	0.577***	-0.114	-0.116	-0.199
% w/ TE	0.077	0.071	0.051	0.047	0.04	0.195***
W social rights	-0.003*	-0.003*	-0.001	-0.014***	-0.014***	-0.003*
Weconomic rights	0.001	-0.003**	-0.004***	0.021***	0.020***	0.004
% parliament seats			-0.105***			-0.089***
Women administrators			0.005			0.035**

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Employment (in logs)			0.001**		0.001**	
Innovative sector		0.004*	0.003*	-0.002	-0.002	
HHI		-0.002	-0.002	-0.019	-0.019	
FFTEP	0.175	0.200*	0.577***	-0.114	-0.116	-0.199
% w/ TE	0.077	0.071	0.051	0.047	0.04	0.195***
W social rights	-0.003*	-0.003*	-0.001	-0.014***	-0.014***	-0.003*
Weconomic rights	0.001	-0.003**	-0.004***	0.021***	0.020***	0.004
% parliament seats			-0.105***			-0.089***
Women administrators			0.005			0.035**
Gender wage gap	0.02	0.02	0.098***	-0.156***	-0.148***	-0.157***
Gender employment gap			-0.003			0.018

Extending A&K: probability of being a woman if on a board

Country characteristics

Subsample:	Management board		Supervisory board			
	all boards	> 1 boards	all boards	> 1 boards	> 1 boards	
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Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
C&S fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations		47,597,469	32,199,906	2,687,032		2,231,247
R-squared		0.552	0.556	0.441		0.421

Contents

Motivation

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Conclusions

Instead of conclusions

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- ▶ Perhaps changes in corporate Europe drive changes in institutional Europe?

Questions or suggestions?
Thank you!



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