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# Corporate Governance and gender: does it really matter for company value?

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## **Main Objectives of the research:**

Investigate the impact of board diversity on firm value

Investigate the impact of Corporate Governance provisions on firm value

## **Results:**

- Companies with high level of board diversity are awarded by the market
- It seems that investors award (in terms of value) just some Corporate Governance variables

## **Future Perspective:**

Analysis of the impact of board diversity accordingly to the choices SR institutional investors did



The focus of this research is on corporate governance and on board diversity in particular

«Monitoring is not the only role that boards play. Boards can also enhance company performance by providing strategic advice, securing external resources, developing managerial capabilities, and helping to manage the firm during a crisis» (Finegold et al., 2007)

**«boards may also need to shake up their composition**  
by increasing the number with a background in the company's industry,  
where board knowledge seems particularly lacking» (McKinsey, 2011)



	Main Authors	Main issues
<b>Conceptualization of board diversity</b>	Hambrick and Mason (1984), Milliken and Martins (1996)	Demographic and cognitive diversity
	Mohan (forth.), Adams and Ferreira (2009), Farrell and Hersch (2005), Erhardt et al. (2003)	Gender, age, expertise, educational background, nationality

## Gender

Enhancement of the control and strategic role of BoD; Positive signal; Risk Adversion

## Age

Variety of perspectives: balance energy – wisdom

## Expertise

Better knowledge of the market and the company networks

## Educational B.

Higher knowledge and skill base for strategic decision making

## Nationality

Knowledge of foreign markets; network of foreign contacts



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<b>Company performance and risk measurements</b>	Modigliani and Miller (1958), Miller (1963), Shin and Stulz (2000)	Financial/stock market measures

“One of the most discussed topic in financial economics is  
establishing a relationship between return and risk”  
(Salvador et al., 2014)



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<b>Company performance and risk measurements</b>	Modigliani and Miller (1958), Miller (1963), Shin and Stulz (2000)	Financial/stock market measures
<b>Relationship between board diversity and the subsequent company value</b>	Hambrick and Mason (1984), Carter et al. (2003), Rose (2007)	Relationship between gender and value



- It still lacks a deep analysis of the impact of gender diversity in major European companies in latest years



## **Objective:**

**Provide an empirical analysis of the impact of board gender diversity on subsequent company value to understand if the market is appraising the board female presence**



**Board Gender**

**Value**

## **RESOURCE BASED THEORY**

Competitive advantage to those firms whose directors are capable of giving access to external resources

Women could be able to open the company also to different networks than the traditional “old boys clubs”





Objective: Provide an empirical analysis of the impact of board gender diversity on subsequent company value to understand if the market is appraising the board female presence

Proposition:

**The gender diversity of the board members impacts positively but non-linearly the value of the company, enhancing it**

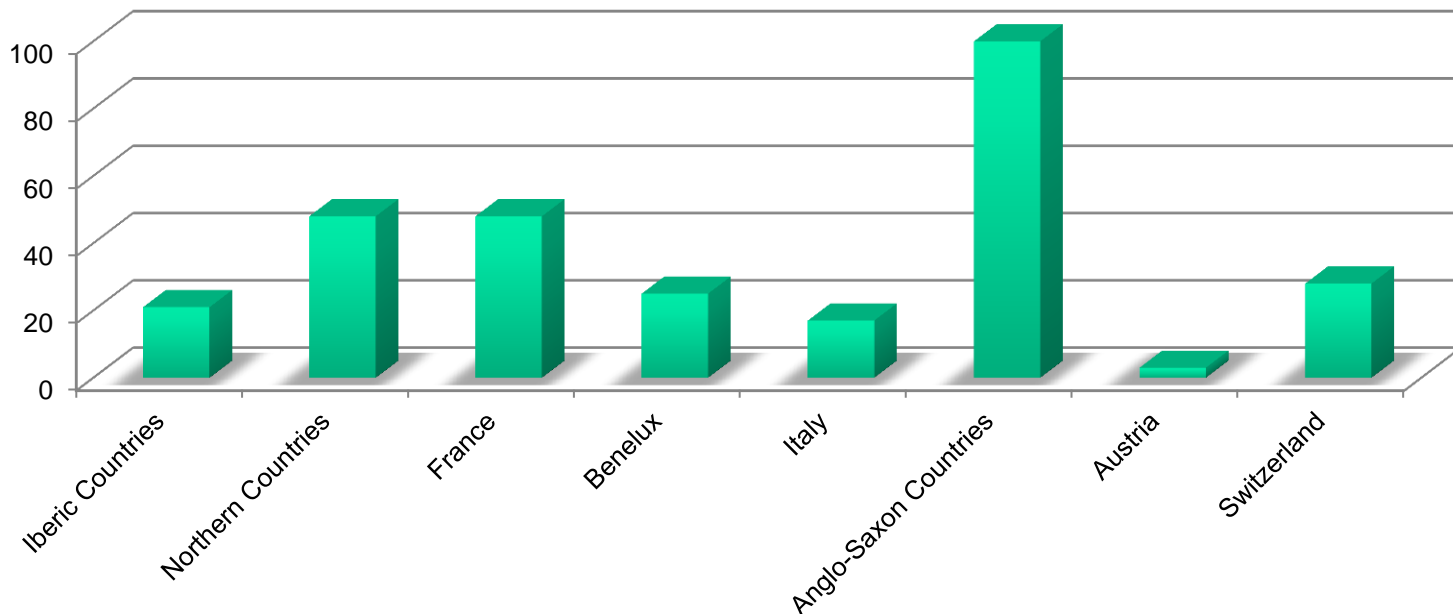


Sample: FTSE EuroTop 300 companies as of December 31, 2013

Years: 2011, 2012, 2013

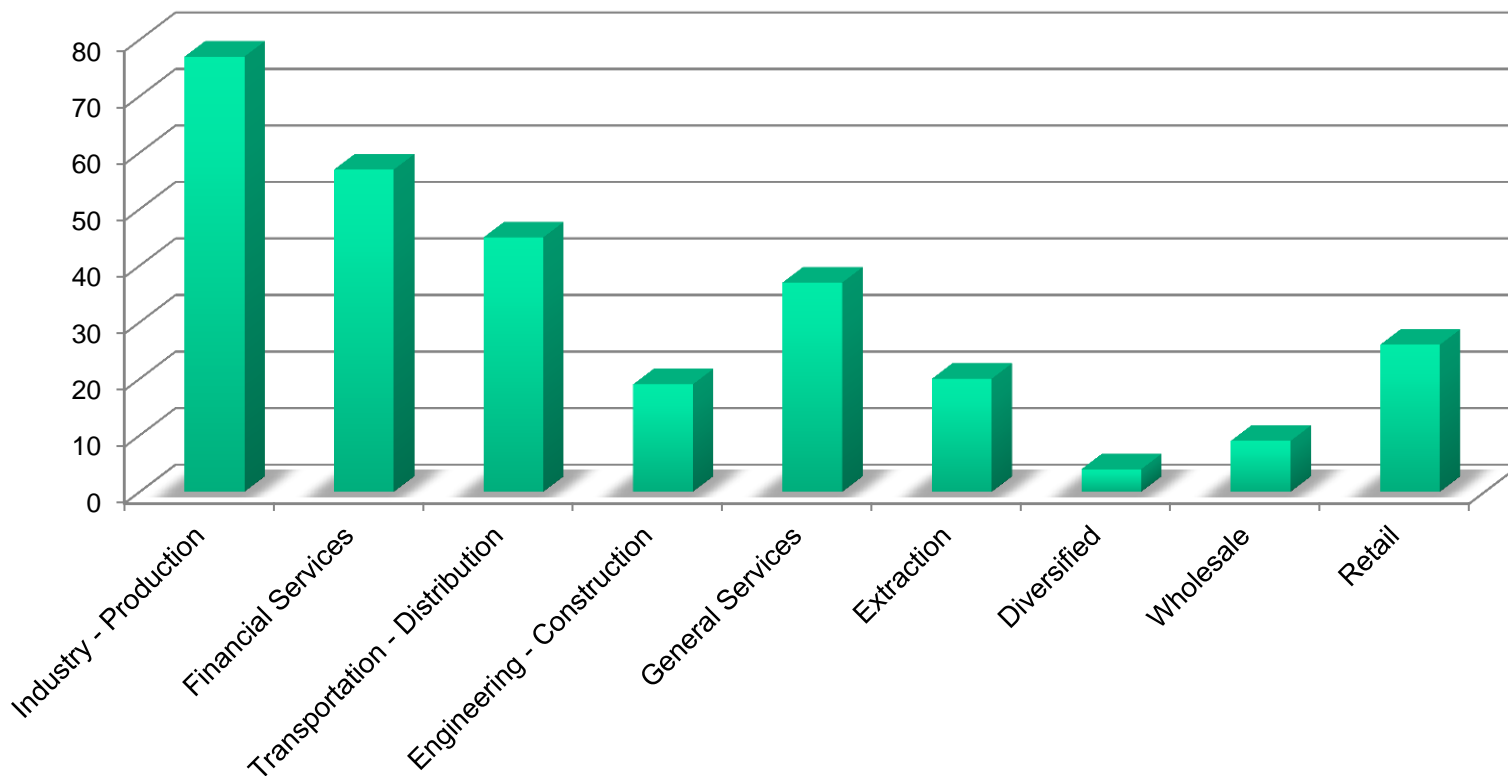
Source: CG reports, annual reports, company websites, financial software

## Sample description by country





## Sample description by industry





## Corporate Governance Variables

### Board Structure and Activities

Independent directors – CEO Duality –  
Board dimension – Board Diversity

### Board Committees

Independence Remuneration Committee  
Independence Nomination Committee

### Board Riskiness

Risk management

### Shareholders Composition

Board Equity Ownership  
Institutional Investors



Variable	Obs.	Mean	Std. Dev.	Min	Max
CG1	885	0.636	0.204	0	1
CG2	885	0.153	0.360	0	1
CG3	885	11.849	3.578	5	26
CG4	885	9.406	3.682	4	39
CG5	885	0.193	0.110	0	0.583
CG6	885	0.116	0.135	0	1.143
CG7	885	0.102	0.302	0	1
CG8	885	0.636	0.205	0.1	1
CG9	885	0.853	0.243	0	1
CG10	885	5.817	2.966	0	25
CG11	885	0.820	0.233	0	1
CG12	885	0.696	0.309	0	1
CG13	885	0.027	0.088	0	0.6682
CG14	885	0.423	0.200	0.028	1
CG15	885	0.971	0.086	0.406	1
CG16	885	0.746	0.436	0	1
	885	0.652	0.213	0.309	1.312



## Control Variables

- Firm Age
- Company dimension
- Growth rate
- Operative Performance
- Dummy for Country
- Dummy for Industry

## Dependent Variables

- Tobin's Q
- Market-to-Book ratio



## Panel of data analyses

- Pooled Ordinary Least Squares (POLS)
- Random Effect Model (RE)
- Fixed Effect Model (FE)
- Least Squared Dummy Variable (LSDV)
- Weighted Least Square (WLS)

# WLS – excluding CG variables

Source	SS	df	MS
Model	25.5339085	21	1.2159004
Residual	7.28693065	863	.00844372
Total	32.8208391	884	.037127646

Number of obs =	885
F( 21, 863) =	144.00
Prob > F =	0.0000
R-squared =	0.7780
Adj R-squared =	0.7726
Root MSE =	.09180

R-sq adj  
77.26%

TQ	Coef.	P> t
DPS	.0135848	0.001
Age	-.0012169	0.021
LnAsset	-.0691629	0.000
Growth_3	.0029833	0.642
ROA	.0075499	0.000
IbericCountries	.0219618	0.580
NorthernCountries	.0381047	0.196
France	-.0980417	0.002
Benelux	0	
Italy	-.063724	0.084
AngloSaxonCountries	.0357187	0.226
Austria	.0168373	0.580
Switzerland	.0248832	0.435
IndustryProduction	-.0877996	0.915
FinancialServices	-.6758462	0.412
TransportationDistribution	-.6607487	0.423
EngineeringConstruction	-.1724534	0.834
GeneralServices	-.0211107	0.980
Extraction	-.5213021	0.527
Diversified	-.679013	0.427
Wholesale	.0788621	0.925
Retail	.0082228	0.992
_cons	2.513627	0.003



# WLS – including CG variables

R-sq adj 83.25%

Variable	Sign	Significance
CG1	+	**
CG2	+	
CG3	-	***
CG4	-	
CG5	-	
CG6	-	***
CG7	+	**
CG8	-	
CG9	-	
CG10	-	*
CG11	-	**
CG12	-	
CG13	+	***
CG14	-	**
CG15	+	***
CG16	-	***
CG17	+	

Source	SS	df	MS
Model	.114780062	38	.003020528
Residual	.021910894	846	.000025899
Total	.136690956	884	.000154628

Number of obs = 885  
 F( 38, 846) = 116.63  
 Prob > F = 0.0000  
 R-squared = 0.8397  
 Adj R-squared = 0.8325  
 Root MSE = .00509

TQ	Coef.	P> t
DPS	.0122437	0.001
Age	-.0013872	0.027
LnAsset	-.0467369	0.003
Growth_3	.0062262	0.537
ROA	.0113495	0.000
IndustryProduction	-.162532	0.835
FinancialServices	-.773500	0.323
TransportationDistribution	-.646653	0.409
EngineeringConstruction	-.436150	0.578
GeneralServices	-.072556	0.926
Extraction	-.627704	0.422
Diversified	-.750616	0.356
Wholesale	-.053754	0.946
Retail	-.05979	0.939
IbericCountries	-.054019	0.344
NorthernCountries	.058818	0.206
France	-.101577	0.064
Benelux	.016474	0.700
Italy	-.073761	0.085
AngloSaxonCountries	.075129	0.049
Austria	-.054644	0.132
Switzerland		
_cons	2.36790	0.003



# WLS – U shaped



R-sq adj 86.89%

Variable	Sign	Significance
CG1	+	**
CG2	+	
CG3	-	**
CG4	-	
CG5	-	**
CG6	-	***
CG7	+	**
CG8	+	
CG9	-	
CG10	-	*
CG11	-	***
CG12	-	
CG13	+	***
CG14	-	**
CG15	+	***
CG16	-	***
CG17	+	
CG18	+	**

Source	SS	df	MS
Model	.971041146	39	.0248984
Residual	.139091738	845	.0001646
Total	1.11013288	884	.0012558

Number of obs = 885  
 F( 39, 845) = 151.26  
 Prob > F = 0.0000  
 R-squared = 0.8747  
 Adj R-squared = 0.8689  
 Root MSE = .01282

TQ	Coef.	P> t
DPS	.0135514	0.000
Age	-.0012382	0.052
LnAsset	-.0471945	0.003
Growth_3	.0051628	0.591
ROA	.0112621	0.000
IndustryProduction	-.1603824	0.838
FinancialServices	-.7598984	0.332
TransportationDistribution	-.6493228	0.407
EngineeringConstruction	-.4328794	0.581
GeneralServices	-.0733523	0.926
Extraction	-.6249213	0.425
Diversified	-.7515906	0.355
Wholesale	-.0431877	0.957
Retail	-.0589988	0.940
IbericCountries	.0533389	0.250
NorthernCountries	.1557693	0.005
France	0	
Benelux	.1255535	0.018
Italy	-.0044439	0.935
AngloSaxonCountries	.1920684	0.000
Austria	.0729472	0.226
Switzerland	.0841803	0.122
_cons	2.330654	0.004



The best model fit is the WLS one

In that model, 9 of the CG variables result to be significant and:

*Board Independence, CG17, Board shares ownership, CG15* have a significant and positive impact on Tobin's Q

*Board dimension, CG6, Remuneration Committee Independence, Institutional Investors and Risk Management* have a significant but negative impact

# WLS – M/B excluding CG var.

Source	SS	df	MS
Model	97.3511775	21	4.63577036
Residual	99.084931	863	.11481452
Total	196.436108	884	.222212792

Number of obs = 885  
 F( 21, 863) = 40.38  
 Prob > F = 0.0000  
 R-squared = 0.4956  
 Adj R-squared = 0.4833  
 Root MSE = .3384

R-sq adj  
48.33%

MB	Coef.	P> t
DPS	.022291	0.399
Age	.0079412	0.017
LnAsset	.0773262	0.513
Growth_3	-.0171803	0.924
ROA	.0054044	0.424
IbericCountries	.1084428	0.712
NorthernCountries	0	
France	-.8660384	0.009
Benelux	-.1660554	0.639
Italy	-.6122411	0.023
AngloSaxonCountries	-.0211099	0.941
Austria	-.1711861	0.807
Switzerland	-.5745348	0.047
IndustryProduction	13.96612	0.033
FinancialServices	11.53881	0.079
TransportationDistribution	12.53695	0.056
EngineeringConstruction	13.01479	0.047
GeneralServices	14.64551	0.026
Extraction	12.3672	0.060
Diversified	12.28094	0.070
Wholesale	13.9787	0.036
Retail	13.85106	0.035
_cons	-11.74519	0.076

# WLS – M/B including CG var.

R-sq adj 69.03%

Variable	Sign	Significance
CG1	-	
CG2	-	
CG3	+	
CG4	-	
CG5	+	
CG6	-	
CG7	+	
CG8	+	
CG9	+	
CG10	+	
CG11	-	
CG12	-	
CG13	-	
CG14	+	
CG15	+	
CG16	-	
CG17	+	**

Source	SS	df	MS
Model	227.712378	38	5.992431
Residual	95.9349692	846	.113398309
Total	323.647347	884	.366116909

Number of obs = 885  
 F( 38, 846) = 52.84  
 Prob > F = 0.0000  
 R-squared = 0.7036  
 Adj R-squared = 0.6903  
 Root MSE = .33775

MB	Coef.	P> t
DPS	.1155877	0.001
Age	.0066685	0.200
LnAsset	.1038073	0.382
Growth_3	-.2023397	0.081
ROA	.0147797	0.003
IndustryProduction	14.02015	0.023
FinancialServices	11.32981	0.066
TransportationDistribution	12.31309	0.046
EngineeringConstruction	13.42018	0.030
GeneralServices	14.74672	0.017
Extraction	12.91792	0.036
Diversified	12.70645	0.046
Wholesale	14.16126	0.024
Retail	14.2624	0.021
IbericCountries	.3944746	0.318
NorthernCountries	.3668641	0.388
France	-.6733093	0.087
Benelux	0	
Italy	.0402493	0.900
AngloSaxonCountries	.3645858	0.210
Austria	.2554927	0.636
Switzerland	-.0284724	0.926
_cons	-14.62915	0.021



# WLS – M/B U shaped



R-sq adj 69.14%

Variable	Sign	Significance
CG1	-	
CG2	-	
CG3	+	
CG4	-	
CG5	+	
CG6	-	
CG7	+	
CG8	+	
CG9	+	
CG10	+	
CG11	-	
CG12	-	
CG13	-	
CG14	+	***
CG15	+	
CG16	-	
CG17	+	**
CG18	+	**

Source	SS	df	MS
Model	204.201957	39	5.23594761
Residual	85.4372244	845	.101109141
Total	289.639181	884	.327646133

Number of obs =	885
F( 39, 845) =	51.79
Prob > F =	0.0000
R-squared =	0.7050
Adj R-squared =	0.6914
Root MSE =	.31700

MB	Coef.	P> t
DPS	.1155921	0.001
Age	.0067896	0.200
LnAsset	.1035447	0.383
Growth_3	-.2040635	0.080
POA	.0147522	0.004
IndustryProduction	14.0164	0.023
FinancialServices	11.32902	0.066
TransportationDistribution	12.30986	0.046
EngineeringConstruction	13.41632	0.030
GeneralServices	14.74249	0.017
Extraction	12.91316	0.036
Diversified	12.70469	0.046
Wholesale	14.15854	0.024
Retail	14.25638	0.021
IbericCountries	.4021488	0.315
NorthernCountries	.3581962	0.421
France	-.6764357	0.086
Benelux	0	
Italy	.0324904	0.920
AngloSaxonCountries	.3686275	0.207
Austria	.2636435	0.626
Switzerland	-.0315678	0.919
_cons	-14.63395	0.021



The impact of diversity is non-linear: in particular, it has a negative impact at first power while a positive one at a second power

The inclusion of diversity at second power makes the R-squared Adjusted increase of about 3.6% in absolute terms

Considering Tobin's Q as dependent variable, the best model fit is the WLS model where 9 of the CG variables result to be significant

Controlling for robustness, Market-to-Book ratio was chosen as dependent variable. The analysis on Tobin's Q results to have an higher R-squared adjusted

CG and diversity are relevant in analysing the value of a company



# Thank you for your attention