RELATIONSHIP BETWEEN DIRECTORS' COMPENSATION AND BUSINESS PERFORMANCE: ONE ISSUE TO DEBATE

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Abstract

The compensation received by directors has attracted the interest on good corporate governance practices related to remuneration matters, with particular emphasis on the need to link the remuneration of directors and the business performance. However, the question remains whether this relationship is being implemented or, on the contrary, we must address through other measures that encourage directors' remunerations more in line with the shareholders' interests. The analysis of a sample of 76 Spanish firms over the period 2004-2009 shows the existence of this relationship if book based indicators are taken as a reference. However, this relation does not exist with those indicators made according to market data. These results should make researchers and regulators think about the need for new ways of remuneration that convey confidence to compensation systems.

Keywords: Directors' Compensation, Corporate Governance, Performance, Board of Directors

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1 Introduction

The issue of directors' remuneration has received an increasing attention in recent times. In particular, the fact that directors themselves are responsible for setting their own remuneration may create a conflict of interests, resulting in high pay levels, barely linked to the activity they perform (ratification and monitoring of Chief Executive Office (CEO) decisions). Under these circumstances, traditional codes of good governance, at international and national level, have recommended some measures to control the remuneration granted to directors. Particularly, the main efforts in the international context in this regard (at European level, the Commission published a new recommendation regarding the remuneration of directors of listed companies (3177/2009/EC)) have been focused on revitalizing the functions of the Boards of Directors in order to align the firms' organizational structure and the legitimacy of board functions. Particularly, recent regulatory efforts have been focused on two things: one is increasing the transparency of information, and, second, linking the compensation systems to business performance criteria. Regarding the compensation systems, the document published by the European Union (EU) outlines some measures related to variable compensation linked to performance criteria and the fulfilment of long-term goals and establishing limits on compensation awarded for termination of contract and share-based payments for executive directors. In fact, there are reasons to believe that directors' remuneration systems linked to the business performance could contribute to further growth of the firm (Duffhues and Kabir, 2008) and limit the opportunity of directors to award themselves remuneration raises, which are not congruent with the shareholders´ interests.

In Spain some of these recommendations have been incorporated in the Sustainable Economy Act (2011) and the revised version of the Unified Code of Good Governance, the Good Governance Code of Listed Companies (hereafter Good Governance Code, Spanish National Stock Market Commission or CNMV, 2015). The Sustainable Economy Act (2011) prescribes that listed companies must provide information on the individual remuneration of directors. Adittionally, the Good Governance Code (CNMV, 2015) recommends that the variable remuneration of executive directors should be established on the basis of criteria related to performance and financial and non-financial factors, which should be measurable and encouraging sustainability and profitability of the company in the mind-long term.

Now, the question is whether there is a relationship between the remuneration received by members of the Spanish Board of Directors and business performance. If there were a relationship, which are the performance measures really linked to the directors' compensation? This study will attempt to answer these questions in Spain, where they have not been addressed previously.

Usually, business performance is measured in two ways: immediate accounting results (Return on assets ratio, hereafter ROA) and mid-long term market results (stock return, hereafter STOCKRET).

We studied the relationship between the directors' remuneration and those two performance variables in a panel data of 76 firms for the period 2004-2009. We found a significant positive relationship between directors' remuneration and ROA. The relationship between directors' remuneration and STOCKRET was not significant.

Extending the analysis to different types of directors, it further illustrates that for proprietary and executive directors, the performance is also subject to joint measures, considering indicators based on accounting measures (ROA) and a mixture of accounting and market measures (Tobin's Q). For these reasons, companies should consider which part of the remuneration granted to directors should be assessed in relation to the "market performance", encouraging sustainability and profitability of the company in the mid-long term. Remuneration systems based on market performance and other profitability measures related to mid-long term performance might potentially be welcomed by shareholders and investors in general as a measure to link their interests with those of directors. Finally, these results lead us to assert that it is necessary to make policy makers and regulators be aware of the need to decide on the best policy about compensation to directors in the Spanish market

2. Literature review

2.1 Characteristics of directors´ remuneration systems in Spain. Some preconceptions

Spanish Board of Directors is a clear example of what is known as "unitary board" to collect, in the same corporate governance structure, executives and non-executive members. Additionally, among the non-executive members, two categories are distinguished (CNMV, 2006):

a) Independent directors, they are those who, appointed for their personal or professional qualities, may perform their duties without being influenced by any connection with the company, its shareholders or its management.

b) Proprietary directors, which are those that own an equity stake above or equal to the legally determined threshold for significant holdings, or otherwise appointed due to their status as shareholders.

A third category within this latter group is called "other external directors". This category would include those directors whose characteristics cannot be framed in any of the above. It is an exceptional figure that is reaching more and more importance. Unified Good Governance Code (CNMV, 2006) sets, as an example, those:

- executive directors no longer holding a management post due to retirement or other circumstances; or,
- independent directors who, for some reason, no longer qualify as such but whose experience and knowledge warrant their continuing presence on the board.

Regarding the directors' remuneration structure, in accordance with Spanish practice, this could include one or more of the following types of payments:

a) Fixed salary: only includes the amounts paid to directors for their participation as board directors. This pay remains constant and is independent of the level of activity or any potential impact that management may have on the company's results.
b) Attendance fees: are referred to expenses incurred by directors for attending meetings of the board and its delegated committees. The aim of this type of compensation is to encourage the active participation of directors.
c) Variable salary: includes amounts received in the form of profit sharing or any other formula that links these perceptions to the achievement of specific measurable objectives (company's net profit or other financial management indicators).
d) Other potential benefits: including advances, loans, funds and pension plans, insurance premiums and guarantees provided for directors.

From the data used in this work, compensation packages awarded to directors in the Spanish context are mainly based on fixed fees, attendance fees and variable salary, although this latter concept has relatively low weight on the total compensation. The total amounts differ significantly depending on the type of director. Particularly, data handled in this paper shows that the average remuneration per executive, proprietary and independent directors for the year 2009 was around € 1,087,000, € 90,000, and € 32,000, respectively (see Table 3).

In this context, it has highlighted the need to promote the transparency and reasonability of the compensation systems of the members of the Board of Directors.

2.2. Directors´ remuneration and performance

From the optimal contracting theory some compensation practices could be used to motivate directors to perform their function in an efficient and effective way. Particularly, and according to the recommendation of the Spanish Good Governance Code (CNMV , 2015), the directors' remuneration packages should be attractive enough to attract and retain the directors of the desired profile and to reward the commitment, abilities and responsibilities taken in the firm, but not as high as to compromise the independent judgment of non-executive directors (Recommendation 56). This recommendation is extended to other countries' "corporate governance practices" (e.g. Malasian Code on Corporate Governance, 2001, among others).

Particularly, prior research on executive compensation (see review by Murphy, 1999) suggests that compensation should be linked to performance as a way to align their interests with those of shareholders (Fernandes, 2005). Following this theoretical approach, a positive relationship between pay and performance is expected, although this relationship has not been unanimously demonstrated empirically. Most of previous studies on executive compensation and performance found a positive but weak relationship between both variables (Main et al., 1996; Brunello et al., 2001, Buck et al., 2003; Kato and Long, 2004; Kato and Kubo, 2006; Banghoj et al., 2010). Others confirm a stronger positive relationship between directors' compensation and performance (Lazarides et al., 2008; Linck et al, 2008; Andreas et al, 2012). In these studies, different performance measures, linked to both indicators accounting basis (dividends, ROA and total assets) and market (stock return) or even a mixture of both (Tobin's Q), have been used. For example, Linck et al. (2008) found that stock performance is positively correlated with total director pay for a sample studied in the post period to the Sarbanes-Oxley Act. Also Lazarides, Dimpretas & Dimitrios (2008) confirm the positive relation between financial performance and remuneration. This study used three variables. Two of them are based on accounting measures (ROA and Total Assets) and the third is Tobin´s Q, which is mainly based on stock market value. Tobin´s Q is the only variable that was not statistical significant in the final model. More recently, Andreas et al. (2012) also find a positive relationship between performance (dividend and accounting-based measures) and the level of directors´ compensation. In the Spanish context, this relationship is found in the Crespí and Gisper (2003) study. Results of this study confirm a positive relationship between board remuneration and company performance, which is stronger for book values (ROA) than for stock market measures (stock return) for a sample of Spanish listed companies during the period 1990-1995.

On the contrary, other studies document non-existent relationship (Cordeiro et al., 2000; Fernandes, 2005; Haid and Yurtoglu, 2006) between performance and directors' compensation. For example, Cordeiro et al. (2000) find no relationship between stock return and total compensation per director. In similar terms, Fernandes (2005) find that not even variable compensation is related to performance, either market-based, or accounting-based for a large sample of Portuguese firms during the period 2002-2004. The work of Duffhues and Kabir (2008) fails to detect a positive pay-performance relationship for a large sample of Dutch listed firms during the period 1998-2001.

Also, there is no consensus about the link between non-executive directors' payment and performance as an incentive to act as honest guardians of shareholders' interests. Specifically, the Spanish Good Governance Code (CNMV, 2015) recommends that the remuneration of non-executive directors are excluded from variable systems linked to firm's performance. The rationale for this recommendation is the potential conflict of interests that could arise when they have to decide about certain accounting practices or other issues that may affect the results of the company and therefore their salaries if these are linked to performance.

According to that, the aim of this work is to test empirically if there is a relationship between performance and directors' remuneration distinguishing between executive, independent and proprietary directors. We also distinguish between performance measures based on accounting data, market values or mixed data.

3. Methodology

3.1. Sample

In order to empirically test the relationship between performance and directors' remuneration, a sample of Spanish companies listed in the Stock Exchange Interconnection Spanish System (SIBE) or continuous market has been taken. Particularly, we take those non-financial firms, excluding in our analysis financial firms (banks, insurance companies, investment funds and utilities) due to the particular features that might arise in terms of regulatory requirements, standards of financial reporting and compliance (Sulong and Mat Nor, 2010).

After a process of verification and debugging, the sample comprises 76 out of a total of 125 listed companies, whose data have been studied over the period 2004-2009. In this sense, a panel data was built with a size of 456 observations (76 companies x 6 years), whose characteristics define it as a short, linear and strongly balanced panel.

To verify the representative nature of the sample, the maximum allowable error for a finite population was estimated, being this of 7.07% for a confidence level of 95% (p = 5%). This result leads us to the conclusion that the sample is representative of the population.

As sources of information, we have taken Annual Reports on Corporate Governance and the financial statements of each company from the website of the CNMV.

Table 1 shows the characteristics of the companies under study. The distribution of the sample reflects that its sectorial composition remains homogeneous relative to the stock market structure.

Table 1. Composition of the population and sample firms according to the industry type

	Listed companies on the Spanish Computerized Trading System		**Sample**	
	N	%	N	%
1. Oil and energy	20	16.00	11	14.47
2. Basic materials, manufacturing and construction	40	32.00	23	30.26
3. Consumer goods	36	28.80	26	34.21
4. Consumer services	20	16.00	11	14.47
5. Technology and telecommunications	9	7.20	5	6.58
Total	125	100.00	76	100.00

Source: Spanish Computerized Trading System (SIBE) or Continuous Market. Retrieved from: http://www.bolsamadrid.es

3.2. Variables

Table 2 shows the variables used in this work as well as the measurement scale and the studies that previously have used them.

As the dependent variable, the level of compensation given to board´s members has been used. We have chosen this variable because we want to study if the total compensation takes into account the performance of the company, because it is possible to think that companies set higher fixed and variable salary to directors when the company has had a good performance.

The total compensation includes: fixed salary, attendance fees, variable salary and other potential benefits. Following the standard approach in other studies a logarithmic transformation of the dependent variable was applied to reduce heteroscedasticity (Cheng and Firth, 2005; Finkelstein and Hambrick, 1989). In the same way, remuneration concepts like redundancy payment or insurance premiums were not included, due to their sporadic character and high amount, which could distort the results and make their interpretation difficult.

Furthermore, the dependent variable has been categorized into three different types of compensation, according to the types of director (executive, independent and proprietary).

As independent variables, several measures concerning the corporate performance are proposed: ROA (as an accounting performance measure), Stock Return (as a market performance measure) and Tobin´s Q (hybrid of accounting and capital market-based measures).

3.3. Methods

The information obtained was treated and processed through the Stata statistical software. After a first descriptive analysis, explanatory models for both the total remuneration received by all members of the board and those received by the different types of directors (executive, independent and proprietary) were developed.

To avoid problems of heterogeneity and endogeneity of the independent variable, the methodology of panel data proposed by Arellano and Bond (1991) and Blundell and Bond (1998) was used as statistical technique.

Specifically, the Generalized Method of Moments (GMM) was applied, using a two-step estimator, which provides efficient and asymptotically robust estimators in the presence of heterocedasticity.

It has also considered the temporal persistence of wages, adding the first lag of the dependent variable to the estimated models, hoping to present a positive relationship with the remuneration of the year of study (Lillington, 2006; Canarella and Nourayi, 2008). Dummy variables representing the sector and the year to capture its potential impact on payments to directors have also been included in the models

Table 2. Definition and typology of the variables

Variables	Definition	Typology	Previous research
	Compensation variables		
COMPEN	Natural log of total compensation by member of the board of directors	Continuous	Finkelstein and Hambrick (1989) Boyd (1994) Kato and Long (2004) Cheng and Firth (2005) Haid and Yurtoglu (2006) Crespí and Pascual-Fuster (2008)
EXECOM	Natural log of total compensation by executive member of the board of directors	Continuous	
INDCOM	Natural log of total compensation by independent member of the board of directors	Continuous	
PROCOM	Natural log of total compensation by proprietary member of the board of directors	Continuous	
	Firm performance variables		
ROA	Return on assets, ratio of operating income to net assets	Continuous	Angbazo and Narayanan (1997) Arrondo *et al.* (2008) Andreas *et al.* (2009)
STOCKRET	Stock return measured as the sum of stock price and dividend per share over stock price in the year before	Continuous	Cordeiro *et al.* (2000) Ryan and Wiggins (2005) Brick *et al.* (2006) Duffhues and Kabir (2008) Andreas *et al.* (2009)
TOBIN'S Q	Tobin´s Q measured as the sum of market value of common shares and book value of debt to book value of total assets according to Duffhues and Kabir´s (2008) specifications	Continuous	Duffhues and Kabir (2008)
	Control variables		
CRPSIZE	Corporate size measured by the logarithm of total assets	Continuous	Elston and Goldberg (2003) Ryan and Wiggins (2005) Brick *et al.* (2006) Arrondo *et al.* (2008) Andreas *et al.* (2009)
INDUSTRY	1. Oil and energy 2. Basic materials, manufacturing and construction 3. Consumer goods 4. Consumer services 5. Technology and telecommunications	Dichotomic	Elston and Goldberg (2003) Ryan and Wiggins (2003) Fich and Shivdasani (2005) Ertugrul and Hedge (2008) Farrell *et al.* (2008)

4. Results

4.1. Descriptive analysis

The descriptive analysis shows that the average compensation received by each member of the Board of Directors was around €194,000 for 2004 and €274,000 for 2009, representing a rate of inter-annual growth of approximately 7% since 2004. This tendency is followed by remunerations received by each type of director (see Table 3).

In this regard, the remuneration of the executive directors of the Board has become the doubled from 2004 to 2009. Less important is the rate of growth of the compensation of independent directors, which is 6%, from an average of near to €67,000 in 2004 to €90,000 in 2009. Finally, the compensation of proprietary directors has also gone up, from an average of about €21,000 in 2004 to €32,000 in 2009.

This behaviour shows that the level of remuneration granted to members of the board of directors has been increasing significantly from 2004 to 2009, behaviour that contrasts with the problems experienced by the economy over the last years of this time period. Hence the interest aroused about the analysis of the determinants of the remuneration received by the directors and their link with their performance as controllers of managers.

Table 3. Descriptive statistics on Board of Directors compensation

Variable	2004	2005	2006	2007	2008	2009
Total compensation by member of the board of directors						
Mean	194,041.77	207,063.00	274,057.89	270,622.96	294,110.55	273,831.32
Rate of change		6.71	32.35	-1.25	8.68	-6.89
St. Dev.	215,262.86	236,485.90	378,720.96	337,402.01	412,956.20	324,449.41
Min	0	0	14,250.00	17,142.86	21,363.64	15,888.89
Max	1,042,466.67	1,381,714.29	2,016,076.92	2,274,900.00	2,690,400.00	2,036,333.33
Total compensation by executive member of the board of directors						
Mean	585,004.96	613,810.11	870,088.42	937,910.27	987,125.00	1,087,289.59
Rate of change		4.92	41.75	7.79	5.25	10.15
St. Dev.	588,542.97	561,632.37	1,134,918.05	1,087,358.50	1,157,856.34	1,170,084,44
Min	15,000.00	15,000.00	15,000.00	7,000.00	68,000.00	48,500.00
Max	3,398,300.50	2.145.500,00	5,912,500.00	5,745,000.00	6,371,000.00	5,641,000.00
Total compensation by independent member of the board of directors						
Mean	67,270.51	74,927.88	79,645.94	110,996.62	106,283.69	89,928331
Rate of change		11.38	6.30	39.36	-4.25	-15.39
St. Dev.	54,623.20	62,587.17	67,591.29	171,168.75	143,695.72	75,625.80
Min	6,500.00	7,000.00	7,500.00	8,500.00	6,500.00	3,666.67
Max	257,749.33	325,000.00	325,285.71	1,344,000.00	832,000.00	338,250.00
Total compensation by proprietary member of the board of directors						
Mean	21,070.07	24,869.22	27,105.22	30,460.27	31,550.04	31,675.63
Rate of change		18.03	80.99	12.38	3.58	0.40
St. Dev.	24,310.76	32,902.79	35,275.65	38,346.06	41,514.41	45,218.52
Min	0	0	0	0	0	0
Max	110,464.00	189,583.33	205,333.33	242,466.67	250,666.67	246,466.67

This table shows a summary of statistics on director compensation measured in Euros, distinguishing between executives, independent and proprietary directors´ compensation.

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In order to clarify this behaviour we compare the GDP (Gross Domestic Product) rate of change, as indicator of the economic cycle, and the rate of change of the compensation received by each type of director (see Figure 1). Differences among the evolution of compensation for each type of director are observed. During expansionary periods (2004-2007), the compensation received by executive and independent directors increase significantly. Particularly, the growth of executive and independent directors' remuneration packages is stronger than the rate of economic growth. The increase on executive directors' remuneration in expansionary periods, probably is related to the performance increase of the firm, so should be seen as fair to the shareholders. However, one important observation from those data is that the level of remuneration to independent directors increased considerably during the period 2004-2007. According to the recommendations of the Spanish Good Governance Code (CNMV, 2015), high level of independent directors' remuneration may put in risk their role, quality and integrity as controllers of executive members of the board.

In recession period (2008-2009) the evolution of remuneration received by both types of directors takes opposite paths. While remuneration granted to independent directors went down, the remuneration granted to executive directors grew in a moderate quantity. Given the greater responsibilities shouldered by directors to steer the companies out of the crisis, executives directors received higher remuneration. In summary, the directors' remuneration increased substantially during the boom –particularly executive directors - and only marginally increase with the bust in 2008 and 2009.

Regarding proprietary directors, the rate of change of remuneration tends to be in line with the general evolution of the economy.

Figure 1. Annual change rate of GDP and compensation received by director (2005-2009)

This figure shows the inter-annual change rate of GDP (Gross Domestic Product) (http://www.datosmacro.com/pib/espana accessed 6 of December of 2015) and compensation received by director.

4.2. Performance and remuneration of the members of the Board of Director

After the descriptive analysis of the data, we proceed to apply the analysis of Generalized Method of Moments (GMM) system with the aim of running a set of regressions where the dependent variable is the remuneration perceived by directors and the explanatory variable is the business performance, measured by ROA, return on the shares (STOCKRET) and the Q of TOBIN.

The results of regression to total remuneration per director are shown in Table 4. We find a significant and positive relationship between the ROA variable and the average remuneration per director ($\beta = 1.5087$, $p<0.001$). These results show that large accounting results increase the level of compensation of directors. However, the link between compensation to directors and other measures of performance (STOCKRET and Tobin's Q) is not significant, coinciding with previous studies developed in other regulatory contexts, such as Basu et al. (2007).

However, the results of the regressions for compensation received by each type of director are different (see Table 5). That is, while the remuneration of executive and proprietary directors is linked to the ROA and Tobin Q variable, the remuneration received by independent directors is only linked to the ROA.

To summarize, it may mean that the directors' remuneration are linked to business performance, measured by indicators developed mainly with accounting data, attributing two major drawbacks:

On the one hand, these are indicators that only capture past aspects of business performance, when prepared from market data are able to grasp the skills of the company to generate future economic benefits (McGuire et al., 1988).

On the other hand, these are indicators of corporate performance measurement that can be manipulated and being under the influence of the different accounting procedures (Branch, 1983; Brilloff, 1972).

Table 4. Estimation: System-GMM in two steps

(1)	(2)	(3)	(4)	(5)
	Expected signs	*Average remuneration by director* ***COMPEN***		
		(Model 1)	(Model 2)	**(Model 3)**
COMPEN_1	+	**0.8754*** (0.0422)**	0.8646*** (0.0411)	**0.9226*** (0.0361)**
ROA	+	**1.5087*** (0.1926)**		
STOCKRET	+		-0.0214 (0.0189)	
TOBIN'S Q	+			-0.0040 (0.0047)
Intercept	+	1.7898*** (0.6059)	2.0217 (0.5903)	1,1881** (0.5100)
Test of joint significance.				
Explanatory variables		689.61*** (2.74)	238.21*** (2.74)	366.39*** (2.74)
Dummy year variables		4.20*** (4.74)	1.03 (4.74)	4.56*** (4.74)
Overidentifying test				
Sargan		63.69 (23)	43.18 (23)	49.53 (23)
Autocorrelation test				
AR(1)		-3.47***	3.17***	-3.21***
AR(2)		**0.61**	**0.44**	**0.38**

This table shows the impact of the measures of return on the average pay level of each director.
Variables are defined in Table 2.
The models are obtained with the GMM method.
Standard errors is shown in brackets
The bold tex shows significant coeficients.
*.**.*** respectively indicate significance levels at 10%, 5% and 1%.
Column 2 includes the predicted sign of each variable in the regression.

Table 5. Estimation: System-GMM in two steps. Average remuneration by type of director

(1)	(2)	(3)			(4)			(5)		
	Expected Signs	*Compensation by executive director EXECOM*			*Compensation by independent director INDCOM*			*Compensation by proprietary director PROCOM*		
		(Model 4)	(Model 5)	(Model 6)	(Model 7)	(Model 8)	(Model 9)	(Model 10)	(Model 11)	(Model 12)
EXECOM_1	+	**0.6225*** (0.0557)**	**0.7942*** (0.0461)**	**0.5719*** (0.0301)**						
INDCOM_1	+				**0.7837*** (0.0442)**	**0.7756*** (0.0405)**	**0.7574*** (0.0363)**			
PROCOM_1	+							**0.6750*** (0.0613)**	**0.8180*** (0.0540)**	**0.6936*** (0.0530)**
ROA	+	**0.9877*** (0.1526)**			**0.3235** (0.1425)**			**1.7432*** (0.2703)**		
STOCKRET	+		-0.0292 (0,0283)			-0.0680 (0.0441)			0.0291 (0.0425)	
TOBIN'S Q	+			**0.0301*** (0.0064)**			-0.0046 (0,0053)			**0.0145*** (0.0051)**
Intercept		5.0206*** (0.7288)	2.8273*** (0.6297)	5.6130*** (0.7132)	2.4525*** (0.4952)	2.5916*** (0.4631)	2.7315*** (0.3968)	3.6418*** (0.6934)	2.0341*** (0.6163)	3.3891*** (0.6014)
Test of joint significance.										
Explanatory variables		155.89*** (2.71)	154.37*** (2.71)	94.45*** (2.71)	313.73*** (2.71)	192.02*** (2.71)	233.24*** (2.71)	211.93*** (2.70)	117.91*** (2.70)	119.59*** (2.70)
Dummy year variables		4.23*** (4.71)	2.16** (4.71)	6.02*** (4.71)	2.18** (4.71)	2.41** (4.71)	2.07** (4.71)	1.60 (4.70)	1.93 (4.70)	4.74*** (4.70)
Overidentifying test										
Sargan		64.98 (24)	48.63 (24)	56.53 (24)	45.42 (24)	56.43 (24)	64.89 (24)	56.57 (23)	67.06 (24)	61.76 (23)
Autocorrelation test										
AR(1)		-3.22***	-3.23***	-3.09***	-3.21***	-3.14***	-3.16***	-3.40***	-3.53***	-3.55***
AR(2)		0.73	1.00	0.69	0.83	0.70	0.75	0.20	0.06	0.13

This table shows the impact of the measures of return on the average pay level of each director.
Variables are defined in Table 2.
The models are obtained with the GMM method.
Standard errors is shown in brackets
The bold tex shows significant coeficients.
*.**.*** respectively indicate significance levels at 10%, 5% and 1%.
Column 2 includes the predicted sign of each variable in the regression.

5 Discussion and Conclusion

In Spain, Sustainable Economy Act (2011) collected as a novelty, that listed companies and saving banks will provide information on the individual remuneration of directors and explain the relationship between the remuneration and the results and/or other formulas chosen to measure the firm's performance.

Although this measure has provided some light into the opacity that has characterized and surrounded the directors' remuneration issue for decades, it is questionable whether it could also contribute to recover the stakeholders confidence into directors control role over the decisions of managers.

The results of this study show that the directors' remuneration is related to business performance, at least with those indicators based on accounting measures, including those of non-executive directors, with the consequences this may have in terms of conflict of interest when they have to make decisions that could affect their own remuneration. However, there is no relationship between directors´ remuneration and business performance when it is measured from indicators developed based on market data. So, companies still have a long way to go in linking directors' remuneration to the profitability of the company in the mind-long term.

Regarding directors' remuneration, to bring rigor and transparency to the firms' actions through the adoption of good corporate governance practices and linking these initiatives to management, would add great value to the economic development of any country. To this end, the most essential and important issue is to continue developing mechanisms to encourage transparency, and link the directors' remuneration to the profitability of the company, following the good corporate governance practices.

Both actual and potential investors (owners or not), and other stakeholders more easily perceive market information (for example, the market price of the shares). Besides, these indicators made with market data do not show the shortcomings of indicators based on accounting information. For these reasons, companies should consider whether to assess which part of the remuneration granted to the directors must be linked to "market performance", as it would probably be welcomed by shareholders and investors in general.

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