

The effects of Board Characteristics on Companies Sustainability Performance.

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On the basis of Resources Dependence Theory this paper examines the effect of different board characteristics on Sustainability Performance. Using an international companies sample, we want to analyze if the board composition, gender diversity, size and leadership, among others, have a different impacts on three components of Sustainability Performance, ie, Environmental performance, Social performance or Economical performance. We also want to analyze whether the international legal context also affects the relationship and the moderating effect of institutional participation and ownership concentration on the relationship between governance and performance variables.

I. INTRODUCTION

The incorporation of a greater number of groups to the discussion on macro sustainable economy and micro corporate sustainability concepts has meant that attention has shifted over the last three decades to a three-dimensional approach that takes into account economic, environmental and social aspects of sustainable development (triple bottom line agenda)[1-3].

The concept of sustainability applied at a micro level has been conceptualized in different ways, thus, Swanson and Orlitzky [4] define Corporate Social performance (CSP) as “the simultaneous pursuit of social, environmental, and economic goals”. They consider that CSP embraces environmental aspects too, since environmental hopes come from firms stakeholders and society in general. Schaltegger and Burritt [5] define the analogous concept of Corporate Sustainability (CS) as the performance measurement of management attempts to address the changes required by sustainability, it requires taking into account a broad approach that includes different characteristics, in particular relating to integration of economic, environmental and social aspects.

CSP, Sustainability Performance and Corporate Sustainability are different ways of looking the same concept and based on Swanson and Orlitzky [4] definition we measure it as an aggregation of organization's Social Performance (SocP), Environmental Performance (EP) and Economical or Financial Performance (FP).

Corporate governance performance (CGP) it is

considered as the main driver to integrate TBL agenda in business environment. [1, 2]. In that sense, it have been considered that ultimate responsibility for the design and implementation of the structure of corporate governance and responsibility agenda lies on the board of directors to the extent to which it is the organ that act as the link between managers and the different firm's stakeholders (including shareholders)[1, 6]. being the main body responsible for designing, implementing and improving the contributions that the company will make to sustainability.

Board composition, leadership structure and its gender diversity has been considered as mechanisms of good corporate governance[7, 8] and multiple studies have analyzed the CSP relationship with different government variables, many have analyzed social performance and the CGP link, and also the Environmental Performance-CGP relationship with disparate and contradictory conclusions, as can be seen in appendix A for CSP and appendix B for Financial performance.

We have observed that it remains to be analyzed whether the GC proxies' effect on Corporate Sustainability is conditioned to the type of sustainability component and whether the legal context affects the relationship between the CG and the different components of the TBL agenda UN PAR DE CITAS.

The objective of this work is to try to determine the relationship between different CGP proxies with CSP or SP components.

This paper addresses some of these concerns and contributes to the literature in different ways. First, we examine the impact the Corporate Governance Performance (CGP) proxies have on a firm's Corporate Social performance. Previous studies have often ignored the different CSP component's effect on CSP-CGP relationship. Second we control for the firm's institutional and legal context, since it may influence both CSP and CGP.

The article is organized as follows: In the next section, we define the theoretical foundations and hypothesis we'll try to confirm on the relation between CSP and CGP through a literature review. In the “Results and Discussion” section, the results have been presented and analyzed with special reference to the contributions intended to cover.

II. THEORETICAL BACKGROUND, PREVIOUS RESEARCH AND HYPOTHESES DEVELOPMENT

The resource dependency theory (RDT) developed by Pfeffer and Salancik [9, 10] considers the firm as an open system which is dependent upon external entities, they affirm (page vii)[10] “ The need for resources, including financial and physical resources as well as information, obtained from the environment, made organizations potentially dependent on the external sources of these resources”, these dependencies represents an increase in risks and uncertainties [9] , so in order to reduce the dependencies, the firms can cultivate linkages to the external agent and organizations that control those resources. Under this theory board members selection is in order to his capacity to provide these critical resources and the board directors are the nexus between the firm and the resources it needs to maximize value.

The resource dependency theory considered that independent directors, female directors, and bigger boards may provide important benefits to the provision of resources function of the board such as: increases information search, the range of perspectives, advice and counsel alguna cita ; The incorporation of this kind of members in a board could generate some benefits for the company for example could add legitimacy to the organization; communication, commitment, and access to specific resources because their different experiences, knowledge, skills, and links to: customers, current and potential employees and important suppliers [11, 12].

Academics have often employed the resource dependency theory to examine the relation between corporations and the critical resources that are needed to improve performance [13-15].

Board independence, leadership structure and CSP

Prior studies have used different proxies to analyze board independence. We will focus on two different proxies: proportion of independent directors and CEO duality.

In this study, a board member is considered as independent when he/she has no financial and family ties with the firm [16]and CEO duality exists when the CEO serves concurrently as chairman of the board ,this concentrated power of the single individual will constraint the boards independence[17] .

In the resource dependence role independent directors, and consequently the no executive chairman, serve to connect with external factors and apart from reduce uncertainty[18], independent and no-CEO chairman’s provide key resources to the firm such as, information, abilities, expertise, access to key constituents and legitimacy[19].

RDT in particular has often been used to explain the relationship between board independence and different CSP constituents, thus:

Among others, Sahin et. al . [20], find a positive relationship between corporate social performance and board independence based on RDT for the a Turkish firms sample. Zhang [21]for 475 fortune 500 firms, show some evidence of a positive and significant relationship between resource dependence role of outside directors and CSP as measured by KLD.

Post, Rahman & Rubow [22]for 78 Fortune 1000 firms find boards with a higher proportion of outside board directors provide a higher KLD environmental strength and less negative incidents, to the contrary Hanniffa & Cook [23] findings indicate that non-executive and independent directors have a negative relationship with Corporate social reporting for Malaysian companies and Choi et. al[24] measuring heterogeneity by independence and foreign members obtain positive results with CSR activities measured by KEJI Index which contains scores for the following categories among others: Contributions to communities; employee and consumer protection and satisfaction; environmental protection; contributions to economic growth.

Jackling & Johl [25]for 180 Indian firms sample; Honeine & Swan [26]for 270 Australian companies sample and Ameer , Ramli, & Zakaria [27]for 277 Malaysian firms, show some evidence of a positive and significant relationship between board composition in terms of independent directors and financial performance as measured by Tobin’s Q .

Pathan, Skully y Wickramanayake [28],in a Thai firms sample; Kouki & Guizani [29] for 42 Tunisian companies and Liu , Wei & Xie [30] over 2000 Chinese firms sample detected a positive relationship between boards independence and financial performance measured in accounting terms.

In negative sense Rodríguez-Ariza et al. [31] in 690 European firms sample obtain opposite sign empirical evidence, no significative for independence and positive for gender diversity in the relation with the elaboration and disclosure of a corporate social responsibility report.

Kaczmarek et al. [14], also observed a negative relationship between financial performance (Tobin's Q) and the independence of the board for a sample of companies in the UK. (see Appendix A and B for more evidence)

Although this body of research has advanced our understanding of corporate governance and CSP, the influence of CG proxies on CSP constituent has been almost absent.

Thus, it is proposed to verify compliance with the following hypothesis:

H1A. Companies with higher levels of board Independence and no CEO-Duality exhibit superior Sustainability Performance

H1B. Companies with higher levels of board Independence and no CEO-Duality exhibit superior

Commenté [A1]: Esto no se entiende muy bien dale una vuelta a esta justificación

corporate environmental performance

H1C. Companies with higher levels of board Independence and no CEO-Duality exhibit superior corporate social performance

H1D. Companies with higher levels of board Independence and no CEO-Duality exhibit superior corporate economic performance

Board gender diversity and CSP

RD theory considered that female directors may provide important benefits (different of male directors) to the firm such as: increases information search, the range of perspectives, advice and counsel; they could add legitimacy to the organization; communication, commitment, and access to specific resources because their different experiences, knowledge, skills, and links to: customers, current and potential employees and important suppliers. [11]

Academics have often employed the resource dependency theory to examine the relation between corporations and the critical resources that are needed to improve performance [14, 15, 25] , and in particular has often been used to explain the relationship between gender diversity and financial performance [30, 37, 38]

Minguez-Vera and Lopez-Martinez [32], in Spanish SMEs and again Liu , Wei & Xie (2014)[30] for Chinese companies detected a positive relationship between board gender composition and financial performance measured in accounting terms.

Gulamhussen & Santa (2015)[33], for top 25 banks operating in 24 OECD countries; Labelle, Francoeur & Lakhil (2015) [34] for 1,691 firm observations operating in 17 countries and Joecks, and Pull, & Vetter (2013) for 151 German companies, show evidence of a positive and significant relationship between gender composition and financial performance's accounting measurement.

Adams and Ferreira [35] in a sample of US firms, instead found a negative relationship between female directors and independent directors fraction with financial performance (Tobin's Q and ROA), Kaczmarek et al. [14] for a sample of companies in the UK, and Darmadi [36] for Indonesian sample also observed a negative relationship between financial performance (Tobin's Q) and the independence of the board

Meanwhile, Ntim y Soobaroyen [39] for a South African firms sample detected that a combination of CSR and board diversity have a strong positive effect on CFP and CSR, implying that CG positively influences the Sustainability Performance ("the CSR-CFP connection"). In the same vein Harjoto & Jo, for near 15.000 US firms, find empirical support that gender composition [40] act as moderator with a positive effect on Sustainability Performance ("the CFP-CSR nexus") by contributing to reduce conflicts of interests among different stakeholders.. Mallin, Michelon, & Raggi [41] for the 100 U.S. Best Corporate Citizens find empirical support for the hypothesis: stakeholders oriented boards (more independent and female directors among others) is

positively associated with reporting according to the triple bottom line (economic, social, and environmental).

Barako and Brown too [42] in a 40 Kenyan banks sample evidence that a joint higher level of women representation and independent directors greatly improves corporate social responsibility disclosure in sustainability reports, designed to make known to all stakeholders the economic, social and environmental impact of the business performance in a given period of time.

Amongst others Rao, Tilt & Lester. [20], find a positive relationship between environmental reporting and board heterogeneity (independence and gender diversity) for the largest 100 Australian firms. Zhang, Zhu, & Ding[43] for 500 of the largest companies listed on the U.S. stock exchanges empirical find evidence showing that greater presence of outside and women directors is linked to better Corporate Social performance. Cuadrado-Ballesteros et. al. [44] for 1.043 international companies found that independence and board diversity, measured by the presence of female and foreign members, has a positive effect on the social and environmental behavior of companies also. Zhang [21] for a sample of 475 publicly traded Fortune 500 companies obtains coincident results for the two governance proxies, evidencing a positive relationship between the board's gender composition and the percentage of outside directors with Corporate Social Performance. Sundarasan's [17] and Hanniffa & Cook [23] findings indicate that non-executive and independent directors have a negative relationship with Corporate social reporting, while corporate social women on board and foreign directors indicate a positive relationship for Malaysian companies. Post, Rahman & Rubow [22]for 78 Fortune 1000 firms find that three or more female board members and with a higher proportion of outside board directors provide a higher KLD environmental strength and less negative incidents and Walls, Berrone & Phan [45]for Standard & Poor's (S&P) 500 sample find that more female directors provide less environmental concerns

Thus, it is proposed to verify compliance with the following hypothesis:

H2A. Companies with higher levels of board gender diversity exhibit superior Sustainability Performance

H2B. Companies with higher levels of board gender diversity exhibit superior corporate environmental performance

H2C. Companies with higher levels of board gender diversity exhibit superior corporate social performance

H2D. Companies with higher levels of board gender diversity exhibit superior corporate economic performance

III. MAIN DATES

Our sample is drawn from the full international universe of firms for which ASSET4 provides Board structure data, Environmental Performance, Social

Performance and Economic performance scores.

ASSET4 annually provides more than 280 key performance indicators and 750 individual data points for each firm, from objective and publicly available sources such as stock exchange filings, annual financial and sustainability reports, non-governmental organization's websites, etc.

KPI scores are aggregated into 4 pillars (Economic, Environmental, Social, and Corporate Governance) that are finally integrated into a single score, as this score includes governance data, we have calculated an variable that takes into account social, environmental and economic aspects and leaves aside aspects related to governance, since we want to analyze the relationship between SP and a set of GCP proxies.

Sustainability performance score represents the mean value of three indicators; Economic score, Social score and environmental score) It is the sum of three scores divided by the total number of scores [46, 47]:

SusP_s = Sustainability Performance Score
 SocP_s = Social Performance Score
 EnvP_s = Environmental Performance Score
 EconP_s = Economic Performance Score

$$SusP_s = \frac{\sum EnvP_s, SocP_s, EconP_s}{n}$$

Escriba aquí la ecuación.

ASSET4 data have been extensively used in the literature on corporate social and environmental performance (see, e.g., Ijas, 2012 [46]; Ioannou & Serafeim, 2011[48]

Kassinis et. al, 2016[49]; Ferrero-Ferrero et. al, 2015[50]Ortas et. al, 2014 [51]; Rees & Rodionova ,2015 [52]; Velte, 2016[53]; Shaukat et. al , 2015[54].

Kinder, Lydenberg and Domini (KLD) and ASSET4 measures are recognized as the most complete ratings of CSP and social responsibility [51]

TABLE 1: Variables of the study

<i>Dependent variable</i>	<i>Explanation</i>
Sustainability Performance	It is the sum of three scores divided by the total number of scores
Economical performance	The economic pillar measures a company's capacity to generate sustainable growth and a high return on investment through the efficient use of all its resources
Social performance	The social pillar measures a company's capacity to generate trust and loyalty with its workforce, customers and society, through its use of best management practices
Environmental perf.	The environmental pillar measures a company's impact on living and non-living natural systems, including the air, land and water, as well as complete ecosystems.
<i>Independent variable</i>	
Board independence	% of strictly independent board members
Gender diversity	% of female members in the board

Board size	The total number of board members
CEO duality	CEO duality (dummy = 1 if CEO is also Chairman, 0 otherwise)
Ownership concentration	Percentage of shares held by all insiders and 5% owners.
Institutional ownership	Percentage of shares held by institutional investors
<i>Control variables</i>	
FSIZE	Natural logarithm of total assets
LEV	Ratio of total debt divided by total assets

TABLE 2 Description of used ASSET4 pillars and categories

<i>Environment Performance</i>	<i>Economic Performance</i>
Resource Reduction	Performance
Emission Reduction	
Product Innovation	
<i>Social performance</i>	<i>Corporate Governance</i>
Employment Quality	Board Structure
Health & Safety	
Training & Development	
Diversity & Opportunity	
Community	
Product Responsibility	

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References

- [1] Elkington, J. Governance for sustainability*. *Corporate Governance: An International Review* **2006**, *14*, 522-529.
- [2] Elkington, J. Cannibals with forks. *The triple bottom line of 21st century* **1997**.
- [3] Bennett, M.D.; Schaltegger, S.; Zvezdov, D. *Exploring corporate practices in management accounting for sustainability*; ICAEW London: 2013; .
- [4] Swanson, D.L.; Orlitzky, M. In *Toward a Conceptual Integration of Corporate Social and Financial Performance*; Handbook of Integrated CSR Communication; Springer: 2017; pp 129-148.
- [5] Schaltegger, S.; Burritt, R. In *Corporate sustainability*; 2005; pp 185.

Mis en forme: Anglais (E.U.)

- [6] Cadbury, S.A. The corporate governance agenda. *Corporate Governance: An International Review* **2000**, 8, 7-15.
- [7] Fama, E.F.; Jensen, M.C. Separation of ownership and control. *The Journal of Law & Economics* **1983**, 26, 301-325.
- [8] Farrell, K.A.; Hersch, P.L. Additions to corporate boards: the effect of gender. *Journal of Corporate Finance* **2005**, 11, 85-106.
- [9] Pfeffer, J. Size and composition of corporate boards of directors: The organization and its environment. *Adm. Sci. Q.* **1972**, 218-228.
- [10] Pfeffer, J.; Salancik, G.R. *The external control of organizations: A resource dependence perspective*; Stanford University Press: 2003; .
- [11] Hillman, A.J.; Shropshire, C.; Cannella, A.A. Organizational predictors of women on corporate boards. *Academy of Management Journal* **2007**, 50, 941-952.
- [12] Hillman, A.J.; Dalziel, T. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review* **2003**, 28, 383-396.
- [13] Bear, S.; Rahman, N.; Post, C. The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *J. Bus. Ethics* **2010**, 97, 207-221.
- [14] Kaczmarek, S.; Kimino, S.; Pye, A. Board Task- related Faultlines and Firm Performance: A Decade of Evidence. *Corporate Governance: An International Review* **2012**, 20, 337-351.
- [15] Kiel, G.C.; Nicholson, G.J. Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review* **2003**, 11, 189-205.
- [16] Ferrarini, G.A.; Filippelli, M. Independent directors and controlling shareholders around the world. *European Corporate Governance Institute (ECGI)-Law Working Paper* **2014**.
- [17] D. Sundarasan, S.D.; Je-Yen, T.; Rajangam, N.; Eweje, G.; Eweje, G. Board Composition and Corporate Social Responsibility in an Emerging Market. *Corporate Governance: The International Journal of Business in Society* **2016**, 16.
- [18] Pfeffer, J.; Salancik, G.R., Eds.; In *The external control of organizations: a resource dependence perspective*; New York: Harper & Row: 1978; .
- [19] Hillman, A.J.; Cannella, A.A.; Paetzold, R.L. The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies* **2000**, 37, 235-256.
- [20] Kathy Rao, K.; Tilt, C.A.; Lester, L.H. Corporate governance and environmental reporting: an Australian study. *Corporate Governance: The international journal of business in society* **2012**, 12, 143-163.
- [21] Zhang, L. Board demographic diversity, independence, and corporate social performance. *Corporate Governance: The international journal of business in society* **2012**, 12, 686-700.
- [22] Post, C.; Rahman, N.; Rubow, E. Green governance: Boards of directors' composition and environmental corporate social responsibility. *Bus. Soc.* **2011**, 50, 189-223.
- [23] Haniffa, R.M.; Cooke, T.E. The impact of culture and governance on corporate social reporting. *J. Account. Public Policy* **2005**, 24, 391-430.
- [24] Choi, B.B.; Lee, D.; Park, Y. Corporate social responsibility, corporate governance and earnings quality: Evidence from Korea. *Corporate Governance: An International Review* **2013**, 21, 447-467.
- [25] Jackling, B.; Johl, S. Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review* **2009**, 17, 492-509.
- [26] Honeine, S.; Swan, P.L. What are the Determinants of Board Performance: Skin in the Game, Composition, Diversity, Size? <http://dx.doi.org/10.2139/ssrn.1914769>. *SSRN* **2011**, <http://dx.doi.org/10.2139/ssrn.1914769>.
- [27] Ameer, R.; Ramli, F.; Zakaria, H. A new perspective on board composition and firm performance in an emerging market. *Corporate Governance: The international journal of business in society* **2010**, 10, 647-661.
- [28] Pathan, S.; Skully, M.; Wickramanayake, J. Board size, independence and performance: an analysis of Thai banks. *Asia-Pacific Financial Markets* **2007**, 14, 211-227.
- [29] Kouki, M.; Guizani, M. Outside directors and firm performance: The moderating effects of ownership and board leadership structure. *International Business Research* **2015**, 8, 104.

- [30] Liu, Y.; Wei, Z.; Xie, F. Do women directors improve firm performance in China? *Journal of Corporate Finance* **2014**, *28*, 169-184.
- [31] Rodríguez-Ariza, L.; Aceituno, J.V.F.; Rubio, R.G. El consejo de administración y las memorias de sostenibilidad. *Revista de Contabilidad* **2014**, *17*, 5-16.
- [32] Minguez-Vera, A.; Lopez-Martinez, R. Female Directors and SMES: an empirical analysis. *Journal of Global Strategic Management* **2010**, *8*, 34-46.
- [33] Gulamhussen, M.A.; Santa, S.F. Female directors in bank boardrooms and their influence on performance and risk-taking. *Global Finance Journal* **2015**, *28*, 10-23.
- [34] Labelle, R.; Francoeur, C.; Lakhali, F. To regulate or not to regulate? Early evidence on the means used around the world to promote gender diversity in the boardroom. *Gender, Work & Organization* **2015**, *22*, 339-363.
- [35] Adams, R.B.; Ferreira, D. Women in the boardroom and their impact on governance and performance. *J. Financ. Econ.* **2009**, *94*, 291-309.
- [36] Darmadi, S. Do women in top management affect firm performance? Evidence from Indonesia. *Corporate Governance: The international journal of business in society* **2013**, *13*, 288-304.
- [37] Lücknerath-Rovers, M. Women on boards and firm performance. *Journal of Management & Governance* **2013**, *17*, 491-509.
- [38] Abdullah, S.; Ismail, K.; Izah, K.N.; Nachum, L. Women on boards of Malaysian firms: Impact on market and accounting performance. *Lilac, Women on Boards of Malaysian Firms: Impact on Market and Accounting Performance (September 10, 2012)* **2012**.
- [39] Ntim, C.G.; Soobaroyen, T. Corporate governance and performance in socially responsible corporations: New empirical insights from a Neo- Institutional framework. *Corporate Governance: An International Review* **2013**, *21*, 468-494.
- [40] Harjoto, M.; Laksmana, I.; Lee, R. Board diversity and corporate social responsibility. *J. Bus. Ethics* **2015**, *132*, 641-660.
- [41] Mallin, C.; Michelon, G.; Raggi, D. Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *J. Bus. Ethics* **2013**, *114*, 29-43.
- [42] Barako, D.G.; Brown, A.M. Corporate social reporting and board representation: evidence from the Kenyan banking sector. *Journal of Management & Governance* **2008**, *12*, 309-324.
- [43] Zhang, J.Q.; Zhu, H.; Ding, H. Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley era. *J. Bus. Ethics* **2013**, *114*, 381-392.
- [44] Ballesteros, B.C.; Rubio, R.G.; Ferrero, J.M. Efecto de la composición del consejo de administración en las prácticas de responsabilidad social corporativa. *Revista de Contabilidad* **2015**, *18*, 20-31.
- [45] Walls, J.L.; Berrone, P.; Phan, P.H. Corporate governance and environmental performance: is there really a link? *Strategic Manage. J.* **2012**, *33*, 885-913.
- [46] Ijas, J. The Impact of Board Gender Diversity on Corporate Responsibility Performance in the FTSE 100. **2012**.
- [47] Bernardi, R.A.; Threadgill, V.H. Women directors and corporate social responsibility. **2011**.
- [48] Ioannou, I.; Serafeim, G. What drives corporate social performance? International evidence from social, environmental and governance scores. Retrieved September 2010, 1, 2011.
- [49] Kassinis, G.; Panayiotou, A.; Dimou, A.; Katsifaraki, G. Gender and Environmental Sustainability: A Longitudinal Analysis. *Corporate Social Responsibility and Environmental Management* **2016**.
- [50] Ferrero- Ferrero, I.; Fernández- Izquierdo, M.Á.; Muñoz- Torres, M.J. Integrating sustainability into corporate governance: an empirical study on board diversity. *Corporate Social Responsibility and Environmental Management* **2015**, *22*, 193-207.
- [51] Ortas, E.; Moneva, J.; Álvarez, I. Sustainable supply chain and company performance: a global examination. *Supply Chain Management: An International Journal* **2014**, *19*, 332-350.
- [52] Rees, W.; Rodionova, T. The influence of family ownership on corporate social responsibility: An international analysis of publicly listed companies. *Corporate Governance: An International Review* **2015**, *23*, 184-202.
- [53] Velte, P.; Jones, G.; Jones, G. Women on management board and ESG performance. *Journal of Global Responsibility* **2016**, *7*.

- [54] Shaukat, A.; Qiu, Y.; Trojanowski, G. Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *J. Bus. Ethics* **2015**, 1-17.

1 **Appendix A**

2 The next tables present the results obtained in the studies that have conducted a regression studies between CSP with Corporate Governance Performance proxies.

3 **Corporate Social Performance and Independence**

Positive	No Significant and Negative
<p>Arayssi , Dah & Jizi (2016)(D), Barako & Brown (2008)(D) Burke, Hoitash, & Hoitash (2017)(I) Choi et al. (2013) (I) Cuadrado-Ballesteros et. al.(2015)(I) Deschênes, et. al.(2015) (I), Ducassy (2015) (I), Dunn & Sainty(2009)(I) Fernández-Gago, Cabeza-García & Nieto (2016)(I), Garcia-Sanchez, Cuadrado-Ballesteros& Sepulveda (2014) (I) García - Sánchez, Rodríguez-Domínguez & Frias-Aceituno (2015) Hoje & Harjoto (2011) (I), Huang (2010)(D) Hussain, Rigoni & Orij (2016) (D), Jizi (2017)(D) Kiliç, Kuzey & Uyar(2015)(D), Liao, Luo, & Tang (2015)(D), Mallin & Michelon (2011)(I),</p>	<p>No Significant Barakat et. Al (2015)(D) Benomran et. al. (2015) (D), Cho, Jung, Kwak, Lee, Yoo (2015) (I), Cormier, Ledoux & Magnan (2011)(D), David, Bloom & Hillman (2007) (D), IV. Habbash (2016)(D) Haldar y Mishra (2015)(D) Hafsi & Turgut (2013)(I), Harjoto et. al (2015)(I) Prado-Lorenzo y Garcia-Sanchez (2010)(I) Rodríguez-Ariza et. al (2014)(D) Said, Noorain, & Wan (2013)(D), Said, Zainuddin & Haron (2009)(D) Tauringana & Chithambo (2015)(D) Wang, Wang, Zhang & Yang (2012) (D), Walls & Berrone (2015) (I), Walls y Hoffman (2013)(I) Negative Hanniffa & Cook (2005)(D) Nurhayati, Taylor & Tower (2015)(D), Ortiz-de-Mandojana et. al. (2016)(P), Sundarasan et.al (2016) (D, I), Walls, Berrone, & Phan (2012)(I)</p>

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Corporate Social Performance and Gender diversity

Positive	No Significant and Negative
Arayssi , Dah y Jizi (2016)(D) Bear, Rahman, & Post (2010) Barako & Brown (2008)(D) Cho, Jung, Kwak, Lee, Yoo (2015) (I) Cuadrado-Ballesteros et. al.(2015)(I) Deschênes, et. al.(2015) (I) Fodio y Oba (2012)(P) Garcia-Sanchez, Cuadrado-Ballesteros& Sepulveda (2014) (I) Hafsi & Turgut (2013)(I) Hussain, Rigoni & Orij (2016) (D) Jizi (2017)(D) Kassinis, Panayiotou, Dimou & Katsifaraki (2016) Kiliç, Kuzey & Uyar(2015)(D) Liao, Luo, & Tang (2015)(D) Mallin y Michelin (2011)(I)	Marquis y Lee (2013), Ntim y Soobaroyen (2013)(I) Post, Rahman, & McQuillen(2015)(I) Rao , Tilt , Lester(2012)(D) Rao & Tilt (2016)(D) Rodriguez-Ariza et. al (2014)(D) Sundarasan et.al (2016)(I,D) Velte (2016)(I) Walls, Berrone, & Phan (2012)(I) Williams(2003) (P) Zhang (2012)(I) Zhang, Zhu, & Ding (2013)
	<u>No Significant</u> Martínez-Ferrero et. al(2015) (I) Prado-Lorenzo y Garcia-Sanchez (2010)(I) Rodriguez-Dominguez, Gallego-Alvarez, & Garcia- Said, Noorain, & Wan (2013)(D) Sanchez(2009)(D) Santiago Castro (2014)(I) Stanwick & Stanwick(1998)(I) Wieland & Flavel (2015)(I), <u>Negative</u>

12

13

Corporate Social Performance and Board Size

Positive	No Significant and Negative
Barakat et. Al (2015)(D) Benomran et. al. (2015)(D) Burke, Hoitash, & Hoitash (2017)(I) Choi et al. (2013)(I) Cho, Jung, Kwak, Lee, Yoo (2015) (I) Cormier, Ledoux y Magnan (2011)(D) Cuadrado-Ballesteros et. al.(2015)(I) De Villiers(2011)(I) Godos-Diez,Cabeza-García, Alonso-Martínez & Fernández-Gago (2016) Htay et. al. (2012)(D)	Hillman et. al (2001)(I), Ienciu, Popa & Ienciu(2012)(D) Jizi (2017)(D) Liao, Luo, & Tang (2015)(D) Marquis y Lee (2013) Rodriguez-Ariza et. al (2014)(D) Said, Zainuddin & Haron (2009)(D) Tauringana y Chithambo (2015)(D) Walls, Berrone, & Phan (2012)(I)
	<u>No Significant</u> Deschênes, et. al.(2015) (I) Hafsi & Turgut (2013)(I) Halдар y Mishra (2015)(D) Kiliç, Kuzey & Uyar(2015)(D) Said, Noorain, & Wan (2013)(D) <u>Negative</u> Prado-Lorenzo y Garcia-Sanchez (2010)(I) Santiago Castro (2014)(I)

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Corporate Social Performance and CEO duality

Positive	No Significant and Negative	
Bear, Rahman, & Post(2010)(I), Prado-Lorenzo y Garcia-Sanchez (2010)(I)	<u>No Significant</u> Arayssi , Dah y Jizi (2016)(D) Benomran et. al. (2015) (D) Cho, Jung, Kwak, Lee, Yoo (2015) (I) De Villiers(2011)(I) Godos-Díez,Cabeza-García, Alonso-Martínez & Fernández-Gago (2016) Habbash (2016)(D) Hafsi & Turgut (2013)(I) Habbash (2016) (D) Htay et. al. (2012)(D) Jizi (2017)(D) Liao, Luo, & Tang (2015)(D) Morales-Raya (2016) (P) Ortiz-de-Mandojana, Aguilera-Caracuel, & Said, Zainuddin & Haron (2009)(D) Walls, Berrone, & Phan (2012)(I) Walls y Hoffman (2013)(I) Wang, Wang, Zhang y Yang (2012)(D),	<u>Negative</u> Mallin y Michelon (2011)(I), Zhang (2012)(I) Rao , Tilt , Lester(2012)(D) Santiago Castro (2014)(I) Nurhayati, Taylor & Tower (2015)(D) Zhao, Chen & Xiong (2016)(I) Hussain, Rigoni & Orij (2016) (D) Amran, Periasamy & Zulkafli (2014) (I) Haldar y Mishra (2015)(D)

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23 present the results obtained in the studies that have conducted a regression studies between CSP with Corporate Governance Performance proxies.

Financial Performance(Accounting) and Independence		
Positive	No Significant	Negative
Pathan, Skully y Wickramanayake (2007), Bonn (2004), Bhagat y Bolton (2013), Liu , Wei y Xie (2014), Kouki & Guizani (2015), Terjesen, Couto & Francisco (2016)	Darmadi (2013), Wasiuzzaman y Gunasegava (2013), Akpan & Amran (2014), Al-Shammari & Al-Saidi (2013), Habbash (2016) (D), Fidanoski, Mateska, & Simeonovski (2014), Elsayed (2007), Peng, Li, Xie & Su (2010), Kyereboah-Coleman & Biekpe (2006), Jackling and Johl (2009), Adams & Jiang (2016), Kilic (2015), Rodriguez Fernandez, Fernández Alonso & Rodriguez Rodriguez(2013), Zemzem, & Kacemb (2014)	Low, Roberts, y Whiting (2015), Mohammadi, Basir & Löö (2015), Abdullah, Ismail & Izah(2012), Mahadeo,Soobaroyen & Hanuman (2011), Shukeri, Shin, & Shaari (2012)
Financial Performance(Accounting) and Gender		
Positive	No Significant	Negative
Lückerath-Rovers (2013), Shrader, Blackburn, & Iles (1997), Gulamhussen & Santa (2015), Labelle, Francoeur & Lakhali (2015), Joecks, Pull, & Vetter (2013), Abdullah, Ismail & Izah(2012), Liu , Wei y Xie (2014), Mahadeo,Soobaroyen & Hanuman.(2011), Terjesen, Couto & Francisco (2016), Strom, D'Espallier, & Mersland (2014)	Haslam et. al. (2009),Darmadi (2013), Low, Roberts, y Whiting (2015), Julizaerma y Zulkarnai (2012), Al-Mamun, Yasser, Entebang, & Nathan (2013), Ali, Ng, y Kulik (2014), Adams & Jiang (2016), Zemzem, & Kacemb (2014), Shukeri, Shin, & Shaari (2012)	Arena et. al (2015), Akpan & Amran (2014), Mohammadi, Basir & Löö (2015), Kilic (2015), Di Donato, Panaro & Trucco (2016)
Financial Performance(Accounting) and Board Size		
Positive	No Significant	Negative
Akpan & Amran (2014), Kyereboah-Coleman & Biekpe (2006), Abdullah, Ismail & Izah(2012), Shukeri, Shin, & Shaari (2012), Sheikh, Wang & Khan (2013)	Arena et. al (2015),Darmadi (2013), Lückerath-Rovers (2013), Wasiuzzaman y Gunasegava (2013), Julizaerma y Zulkarnai (2012), Shrader, Blackburn, & Iles (1997), Al-Mamun, Yasser, Entebang, & Nathan (2013), Elsayed (2007), Labelle, Francoeur & Lakhali (2015), Kilic (2015), Vo & Nguyen (2014)	Pathan, Skully y Wickramanayake (2007),Low, Roberts, y Whiting (2015), Al-Shammari & Al-Saidi (2013), Bhagat y Bolton (2013), Gulamhussen & Santa (2015), Mohammadi, Basir & Löö (2015), Joecks, Pull, & Vetter (2013), Rodriguez Fernandez, Fernández Alonso & Rodriguez Rodriguez(2013), Terjesen, Couto & Francisco (2016), Zemzem, & Kacemb (2014)
Financial Performance(Accounting) and CEO duality		
Positive	No Significant	Negative
Peng, Zhang & Li (2007), Mohammadi, Basir & Löö (2015), Liu , Wei y Xie (2014), Vo & Nguyen (2014), Gupta et. al (2015)	Kyereboah-Coleman & Biekpe (2006), Rodriguez Fernandez, Fernández Alonso & Rodriguez Rodriguez(2013), Terjesen, Couto & Francisco (2016), Zemzem, & Kacemb (2014), Shukeri, Shin, & Shaari (2012)	Bhagat y Bolton (2013), Peng, Li, Xie & Su (2010), Shrivastav & Kalsie (2016), Rutledge, Karim & Lu (2016), Kouki & Guizani (2015), Gallego-Alvarez et. al. (2010)
Financial Performance(Accounting) and Corporate Governance Index		
Positive	No Significant	Negative
Chong, A. y López-de-Silanes (2006), Labelle, Francoeur & Lakhali (2015), Cheung, Connelly, Impaphayom & Zhou (2007)	Bhagat y Bolton (2013)	Bianco, Ghosh & Sirmans (2007)

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27 **Appendix B**

28 The next tables present the results obtained in the studies that have conducted a regression studies between Financial performance(market or accounting measurement) with
 29 Corporate Governance Proxies.

Financial Performance(Market) and Independence		
Positive	No Significant	Negative
Jackling and Johl (2009), Honeine & Swan(2011), Fernández, Gómez-Ansón & Fernández-Méndez (1998), Ameer , Ramli, & Zakaria(2010)	Lefort y Urzúa (2008), Dang, y Nguyen (2016), Al-Shammari & Al-Saidi (2014), Bøhren & Strøm (2007), Beiner, Drobetz, Schmid y Zimmermann (2006), Marinova, Plantenga, & Remery (2016), Rubino, Tenuta & Cambrea (2016), Cheung, Jiang, Limpaphayom & Lu(2010), Kaczmarek, Kimino & Py (2012), Rodriguez Fernadez, Fernández Alonso & Rodriguez Rodríguez(2013)	Darmadi (2013), Fidanoski, Mateska, & Simeonovski (2014), Kyereboah-Coleman & Biekpe (2006), Horvath & Spirollari (2012), Terjesen, Couto & Francisco (2016)
Financial Performance(Market) and Gender		
Positive	No Significant	Negative
Dang, y Nguyen (2016), Bonn (2004), Bonn, Yoshikawa, & Phan (2004) Australianas, Honeine & Swan(2011), Terjesen, Couto & Francisco (2016)	Al-Shammari & Al-Saidi (2014), Marinova, Plantenga, & Remery (2016), Fidanoski, Mateska, & Simeonovski (2014), Rubino, Tenuta & Cambrea (2016), Horvath & Spirollari (2012)	Haslam et. al. (2009),Darmadi (2013), Bøhren & Strøm (2007)
Financial Performance(Market) and Board Size		
Positive	No Significant	Negative
Darmadi (2013), Bermig & Frick (2010), Beiner, Drobetz, Schmid y Zimmermann (2006), Kyereboah-Coleman & Biekpe (2006), Saibaba (2013), Rubino, Tenuta & Cambrea (2016), Fernández, Gómez-Ansón & Fernández-Méndez (1998), Sheikh, Wang & Khan (2013), Gallego-Alvarez et. al. (2010)	Lefort y Urzúa (2008) P, Dang, y Nguyen (2016), Bonn (2004), Marinova, Plantenga, & Remery (2016), Horvath & Spirollari (2012), Ameer , Ramli, & Zakaria(2010), Rodriguez Fernadez, Fernández Alonso & Rodriguez Rodríguez(2013), Vo & Nguyen (2014)	Bøhren & Strøm (2007), Bonn, Yoshikawa, & Phan (2004) JAPONESAS, Honeine & Swan(2011), Abdullah, Ismail & Izah(2012), Terjesen, Couto & Francisco (2016), Di Donato, Panaro & Trucco (2016)
Financial Performance(Market) and CEO duality		
Positive	No Significant	Negative
Lam & Lee (2008), Guillet, Seo,Kucukusta & Lee (2013),Sheikh, Wang & Khan (2013)	Bøhren & Strøm (2007), Braun y Sharma(2007), Saibaba (2013), Rubino, Tenuta & Cambrea (2016), Cheung, Jiang, Limpaphayom & Lu(2010),Kaczmarek, Kimino & Py (2012), Rodriguez Fernadez, Fernández Alonso & Rodriguez Rodríguez(2013), Vo & Nguyen (2014)	Kyereboah-Coleman & Biekpe (2006), Shrivastav & Kalsie (2016), Terjesen, Couto & Francisco (2016), Gupta et. al (2015)
Financial Performance(Market) and Corporate Governance Index		
Positive	No Significant	Negative
Beiner, Drobetz, Schmid y Zimmermann (2006), Chong, A. y López-de-Silanes (2006), Garay y González (2008),Cheung, Jiang, Limpaphayom & Lu(2010), Brown y Caylor (2006)	Gupta, Kennedy y Weaver (2009)	

