

## **The Impact of Corporate Governance on Earnings Quality: Evidence from Peru**

Track: Accounting, Taxation, and Management Information and Control Systems

Key Words: Corporate Governance, Earnings Quality, Peruvian stock Market

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## **Abstract**

The purpose of this paper is to explore whether firms with good corporate governance practices in Peru present higher quality of accounting information. In 2008, the Lima Stock Exchange launched an index including the stocks of firms with good corporate governance practices. Firms that want to be included in the index must submit a self-assessment based on 26 principles of governance practices described in the Principles of Good Governance for Peruvian Corporations. This self-evaluation must be verified by an external firm. I find that firms included in the index present more value relevant, more persistent, and more conservative accounting reports.

## **1. Introduction**

After the accounting scandals in early 2000 and the financial crisis in 2006, regulators around the world put a lot of attention on corporate governance practices that might restore the investors' confidence in accounting information. For example, in 2002, U.S Congress passed the Sarbanes-Oxley Act of 2002 (SOX) to protect investors from the possibility of fraudulent accounting activities by corporations. The SOX Act mandated strict reforms to improve financial disclosures from corporations and prevent accounting fraud. Several governments in Latin America also introduced regulation to promote good corporate practices. In Peru, in September 2002, the National Supervisory Commission for Firms and Securities (CONASEV) published the Principles of Good Governance for Peruvian Corporations (GGPC), which adapted the corporate governance principles established by the Organization for Economic Co-operation and Development (OECD) in 1999 (Lopez & Rios, 2005). Since the end of 2004, firms have voluntarily submitted a self-assessment survey on the 26 principles of good corporate governance practices to CONASEV as an appendix to their annual reports. Authorized auditing firms must verify the validity of the declarations. Based on these self-assessments, on July 1, 2008, the Lima Stock Exchange (LSE) developed and launched a Good Corporate Governance Index (GCGI) that contained securities of the firms with the best corporate practices in Peru and that met the minimum liquidity level of the LSE. While adopting good corporate governance practices is voluntary in Peru, firms with publicly listed securities have to disclose their financial information and also report on the degree of their compliance with the PBCG. Because these principles

constitute a guide for businesses, their implementation signals the firm's commitment to good corporate governance practices.

The purpose of this paper is to explore whether Peruvian firms with an external certification of good corporate governance practice report accounting information with more quality compared to the rest of the firms listed in the LSE. I find that firms that are included in the GCGI present more persistence and value relevant earnings, and more conservative accounting information.

Previous research finds mixed results about the association between corporate governance practices and the quality of earnings in developed economies (Garcia Lara, Osma, & Panalva, 2007; Lim, 2010; and Yu, 2006). In addition, there is some initial evidence on the impact of good governance practices in emerging economies (Abbadi, Hijazi & Al-Rahahleh, 2016). This paper contributes to the current literature in international accounting and Latin American studies in particular. Emerging economies differ from developed economies in that they have institutional weaknesses that cause uncertainty in their regulatory structures (Aulakh & Kotabe, 2008; Khanna & Palepu, 2010). It is important to understand whether good governance practices, operating in such contexts, characterized by high political, social, and economic instability, have an impact on the quality of the accounting information.

The paper proceeds as follows. Section 2 reviews the literature about the impact of corporate governance practices and earnings quality in the capital markets. This section also describes the development of the GCGI in the LSE. Section 3 presents the research design, sample selection, and the descriptive statistics of the main variables under analysis. Section 4 presents the main results and describes some robustness tests performed. Section 5 concludes the paper.

## **2. Literature review and hypothesis development**

### *Good Corporate Governance Index in Peru*

In early 2002, governmental agencies and the private sector in Peru began conversations on how to promote healthy practices for corporate governance. In September 2002, a document called Principles of Good Governance for Peruvian Companies (GGPC) was published. This document was mainly based on the Principles of the Organization for the Economic Cooperation and Development (1999) because these latter principles have been used as reference worldwide. The 26 principles are divided into four main areas: Shareholders' Rights, Equitable Treatment of Shareholders, Disclosure and Transparency, and the Responsibility of the Board<sup>1</sup>. In December 2003, CONASEV modified the minimum content of

<sup>1</sup> A detailed description of the principles can be found in the following link:  
[http://www.bvl.com.pe/descarga/26\\_principles.pdf](http://www.bvl.com.pe/descarga/26_principles.pdf)

the Annual Reports for Peruvian public companies, including a section where the corporations had to self-evaluate their level of compliance with the 26 Principles. For every Principle, each firm had to grade from 0 to 4 its own level of compliance (0: null compliance and 4: full compliance) and also had to justify its assessment with some objective information.

Starting July 1, 2008, the LSE launched the GCGI. Firms that voluntarily want to participate in the index must submit answers of a survey related to the 26 good governance practices. The auto-evaluation has to be validated by an external auditing firm. The validating firms approved by the LSE are: Grant Thornton, Baker Tilly Peru, Deloitte, Earnest and Young, PWC, KPMG, PCR-Pacific Credit Rating, and Mercado de Capitales, Inversiones y Finanzas (MC&F). Each year, firms must submit the auto evaluation if they want to be included in the index the following period. Based on the scores of the auto evaluation and the liquidity of the securities traded, the LSE prepare the index. The selected securities are part of the portfolio from July to June next year. Appendix 1 presents the companies listed in the GCGI in 2015.

There is some initial evidence about the impact of inclusion in the index, as reflected in the Peruvian capital markets. Fuenzalida, Mongrut, Arteaga, and Eurasquin (2013) find that the announcement of the inclusion of a listed company in the index yields a positive abnormal returns of about 1% on the day of the announcement. So far, there is no study that investigates the impact of the presence on the GCGI on the properties and the quality of accounting information.

#### *Impact of Corporate Governance Practices on Earnings quality*

Agency theory states that financial reporting concerns arise when there are conflicts of interest between managers and owners coupled with information asymmetries. Previous research provides evidence that efficient corporate governance results in lower agency costs and better firm performance. For example, Cremers and Nair (2005) show that firms with strong governance generate abnormal returns of 10% to 15%. Core, Holthausen, and Larcker (1999) find that less effective boards of directors, the presence of old directors, and busy directors are associated with higher levels of management compensation after controlling for economic determinants of compensation. In addition, they find that predicted excess compensation, based on the governance structure of the firm, is negatively correlated with stock returns up to 5 years ahead. Accounting research classifies the proxies of earnings quality into three categories: properties of earnings numbers, investors' response to earnings, and earnings misstatements (Dechow, Ge, & Schrand, 2010). In this study, I focus on two properties of earnings: earnings persistence and conservatism, and one market response to earnings, the earnings response coefficient (ERC).

Persistence in earnings is viewed as a measure of the sustainability of a firm's earnings. Persistent earnings numbers might be perceived by investors and analysts as more permanent and thus less transitory, which would be more useful for analysts given that they usually rely on ratios, such as price to earnings, to map their forecasts in stock recommendations (Bradshaw, 2004). Earnings persistence is a function of the accounting standards, the reporting business model, the operating environment and management discretion (Shipper & Vincent, 2003). For example, Li (2008) finds that the profits of firms with annual reports that are easier to read are more persistent. Even when management cannot exercise discretion over reported earnings, they can exercise discretion over firms' disclosure quality, possibly making it more difficult for investors and analysts to understand the implications of current earnings for future performance.

Accounting information is value relevant if it has a predicted association with equity market values (Barth, Beaver, & Landsman, 2001). Statement of Financial Accounting Concept (SFAC No. 5) proposes that an accounting amount will be considered relevant if it is capable of making a difference to financial statement users' decisions. Corporate governance should provide value relevant accounting information by curbing opportunistic earnings management practices of managers. Habib and Azim (2008) find that better corporate governance structures, board independence, size, CEO duality, and Auditing Committee characteristics increase the value-relevance of accounting information as reflected in a positive and significant ERC coefficient in Australia.

Accounting conservatism is based on the tendency of accounting to require a higher degree of verification for the recognition of good news compared to the recognition of bad news (Basu, 1997). Governance mechanisms such as independent boards of directors and audit committees constrain aggressive accounting practices, limiting the incidence of income increasing earnings management (Klein, 2002; Peasnell, Pope, & Young, 2005). Similarly, recent research shows that independent audit committees hire better quality auditors (Abbot, Parker, Peters, & Raghunandan, 2003), which may produce more conservative accounting choices (Chung, Firth, & Kim 2003). Consistent with this evidence, Garcia Lara et al. (2007) find that Spanish firms with strong corporate governance practices report more conservative accounting numbers.

Previous studies also present some evidence that corporate governance does not have much impact on earnings quality. Yu (2006) finds that the relation between corporate governance and earnings management depends on the type of governance mechanism considered. He finds a positive relation between internal governance mechanisms (board structure and ownership concentration) and earnings management, but a negative relation between external governance mechanisms (anti-takeover provisions and institutional ownership) and earnings management. Larcker, Richardson, and Tuna (2007) find mixed evidence on the relation between governance and earnings attributes, such as smoothness, conservatism, and value relevance, in U.S. firms. Lim (2010), using a sample of Australian firms, finds that only the percentage of

independent directors and the separation of the CEO and Chairman's role are (weakly) associated with more conservative accounting numbers. The number of independent directors, the size of the board, and the number of independent directors on the board are not associated with more conservative accounting choices. Given the mixed evidence found in the literature, more evidence is needed on the impact of good corporate practices on earnings quality.

There is some initial evidence on the impact of corporate governance practices in Latin America. Harris (2009) reviews Latin American literature on the link between good corporate governance and market value. He concludes that, in general, Latin American countries are not only improving corporate governance quality, but also that good corporate governance increases the market value of firms and improves financial performance. Seanz Gonzales and Garcia-Meca, (2014) find that frequency of board of directors meetings has an impact on earnings management practices. They study several corporate governance characteristics such as external directors, ownership concentration, family ownership, board independence and board size in Argentina, Brazil, Chile and Mexico. This paper intends to add the Peruvian evidence that has been missing so far in the current Latin American empirical literature.

If corporate governance practices reduce information asymmetry between managers and investors, financial statements might present higher quality: more persistence, more value relevance and more accounting conservatism. Therefore, the main hypothesis of this paper is stated as follows:

*H1: Firms included in the GCGI present more earnings persistence, more value relevant earnings, and more conservative accounting information.*

### **3. Research Design**

In order to test the impact of good governance practices in earnings quality, I use two properties of earnings: earning persistence, and accounting conservatism, and one measure based on the response of investors: the earnings response coefficient (ERC). My first proxy for earning quality is the ERC, which is usually perceived as a measure of value relevance of accounting information. The ERC is a market-based proxy of earnings quality that measures how the change in earnings from one period to another affects firms' stock returns. This metric specifically evaluates how investors react to changes in earnings numbers reported by firms. I use the long window ERC by regressing the annual stock returns on the annual change in earnings (Hanlon, Maydew, & Shevlin, 2008).

Model 1

$$\text{Ret}_{i,t} = \alpha_0 + \alpha_1 \text{Ch\_Earn}_{i,t} + \alpha_2 \text{GOV}_{i,t} + \alpha_3 \text{Ch\_Earn}_{i,t} * \text{GOV}_{i,t} + \text{Industry Dummies}$$

$$+ \text{Year Dummies} + \varepsilon_{i,t}$$

where  $Ret_{i,t}$  is firm  $i$ 's stock return, including dividends in year  $t$ ;  $Ch\_Earn_{i,t}$  is the annual change, between year  $t-1$  and  $t$ , in firm  $i$ 's earnings before interest and taxes scaled by the beginning of the period total assets; and  $GOV_{i,t}$  is a dummy variable that takes the value of 1 if firm  $i$  is included in the GCGI in year  $t$  and 0 for firms not included in the index in year  $t$ . I include the interaction of  $GOV_{i,t}$  and  $Ch\_Earn_{i,t}$  to measure the effect of changes in earnings on market returns for firms included in the GCGI in the Lima Stock Exchange. I expect the coefficient  $\alpha_3$  to be positive and statistically significant if the firms with good governance practice present more relevant accounting numbers.

The first earnings property that I use as a proxy of earnings quality is earnings persistence. Persistent earnings indicate earnings information that is more sustainable and predictable, which may improve valuation models (Dechow et al., 2010). I estimate earnings persistence by regressing current earnings per share on last year's earnings per share (Francis, LaFond, Olsson, & Schipper, 2004).

#### Model 2

$$EPS_{i,t} = \beta_0 + \beta_1 EPS_{i,t-1} + \beta_2 GOV_{i,t} + \beta_3 EPS_{i,t-1} * GOV_{i,t} + \text{Industry Dummies} + \text{Year Dummies} + \varepsilon_{i,t}$$

where  $EPS_{i,t}$  is firm  $i$ 's earnings per share in year  $t$  and  $EPS_{i,t-1}$  is firm  $i$ 's earnings per share in year  $t-1$ .  $GOV_{i,t}$  is a dummy variable that takes the value of 1 if firm  $i$  is included in the GCGI  $t$  and 0 for firms not included in the GGI in year  $t$ . I include the interaction of  $GOV$  and the  $EPS_{i,t-1}$  to measure the effect of good corporate governance practices on the persistence of earnings. I expect the coefficient  $\beta_3$  to be positive and statistically significant if good corporate governance practices increase the persistence of earnings.

The second earnings property I use as a proxy of earnings quality is earnings conservatism. I use the Basu model (1997), which measures the asymmetrical timeliness of earnings to bad news compared to goods news.

#### Model 3

$$EBIT_{i,t} = \gamma_0 + \gamma_1 D + \gamma_2 Ret_{i,t} + \gamma_3 D * Ret_{i,t} + \gamma_4 GOV_{i,t} + \gamma_5 D * GOV_{i,t} + \gamma_6 Ret_{i,t} * GOV_{i,t} + \gamma_7 D * Ret_{i,t} * GOV_{i,t} + \text{Industry Dummies} + \text{Year Dummies} + \varepsilon_{i,t}$$

where  $EBIT_{i,t}$  is firm  $i$ 's earnings before interest and taxes for firms in year  $t$ .  $D_{i,t}$  is a dummy variable which takes the value of 1 when firm  $i$ 's annual return in year  $t$  is negative.  $Ret_{i,t}$  is firm  $i$ 's annual return in year  $t$ .  $GOV_{i,t}$  is a dummy variable

that takes the value of 1 if firm  $i$  is included in the GCGI  $t$  and 0 for firms not included in the index in year  $t$ . The  $D_{i,t}$  coefficient measures the sensitivity of earnings to bad news. I expect the coefficient  $\gamma_7$  to be positive and statistically significant if good corporate governance practices increase the level of conservatism in earnings.

### *Sample and Descriptive Statistics*

I obtain annual financial data for all firms listed in the LSE from *Economica*. Each year I selected the firms listed in the GCGI and other firms in the LSE with all available information to compute the variables under analysis. I did not include financial firms because they are heavily regulated and it might have an impact in the properties of accounting information. The final sample consists of 420 observations from 2009 to 2015. Table 1 presents the distribution of firms per industry and year. More than half of the observations correspond to two specific industries: 1) manufacturing and mining; and 2) oil and gas.

[Insert Table 1 around here]

Table 2 presents the descriptive statistics of the main variables under analysis. The average annual return for the sample is 9.9%. Almost 12.6% of the observations in my sample are included in the GCGI in the LSE.

[Insert Table 2 around here]

Table 3 presents the Pearson correlation coefficients. As expected, the firms' annual returns are positive correlated with change in earnings. The firms' current period EPS is positive correlated with last period EPS.

[Insert Table 3 around here]

## **4. Results and discussion**

The results of Model 1 are presented in Table 4. The coefficient of the variable measuring the change in earnings between consecutive periods is positive and statistically significant (0.947 p-value<0.01). The change in earnings has a positive impact on the annual firms' returns. In addition, the coefficient of the interaction between good corporate governance and the change in earnings is positive and significant (1.469 p-value<0.01). This result supports my hypothesis that corporate governance practices have a positive impact on the ERC. The value relevance of earnings is higher for firms with good levels of corporate governance in Peru.

[Insert Table 4 around here]

The results of Model 2 are presented in Table 5. The coefficient of firms' EPS last period is positive and statistically significant (0.323, p-value<0.10). The persistence of earnings is positive and significant for the listed Peruvian



firms in the sample period. The coefficient of the interaction between the dummy variable indicating good corporate governance practices and the firms' EPS last period is positive and significant (0.414, p-value<0.050). The results show that the last year EPS explains more of the current EPS for firms with high levels of corporate governance in Peru. The persistence of earnings is stronger for these firms in the GCGI.

[Insert Table 5 around here]

The results of Model 3 are presented in Table 6. The interaction between the variable that measures annual returns, good corporate practices and the dummy variable indicating bad news is positive and statistically significant (0.303, p-value<0.05). The interaction of returns and the variable indicating bad news is not significant. The results shows that only companies in the GCGI present conservative accounting numbers.

[Insert Table 6 around here]

#### *Robustness Tests*

Previous studies find that the quality of earnings has increased after the implementation of the International Financial Reporting Standards (IFRS) in Latin America (Melgarejo, 2017). Peru implemented IFRS in 2012. I re-estimate the models including a dummy variable denoting the year before and after the IFRS implementation. The results presented in this paper remain. I also include a dummy variable controlling for the auditing firms that evaluate the firms' good corporate practices self-assessments without any major changes in the results.

There is a possibility that the decision to be part of the index and the characteristics of accounting information are affected by the same set of factors, producing endogeneity bias. I implemented a two-stage approach to control for this potential bias (Heckman, 1979). In the first step, I estimate the following multivariate logistic model:

$$GOV_{i,t} = \theta_0 + \theta_1 \text{Size}_{i,t} + \theta_2 \text{Leverage}_{i,t} + \theta_3 \text{Mining} + \theta_4 \text{Manufacturing} + \varepsilon_{i,t}$$

where  $GOV_{i,t}$  is a dummy variable that takes the value of 1 if firm  $i$  is included in the GCGI in year  $t$  and 0 for firms not included in the index in year  $t$ . Size is the natural logarithm of assets for firms  $i$  in year  $t$ . Leverage is the total liabilities over average of assets for firm  $I$  in year  $t$ . Mining is a dummy variable equals to 1 for firms in the Mining, Oil and Gas industry. Manufacturing is a dummy variable set equal to 1 for firms in the Manufacturing industry.

After I estimate the coefficients of the model, I computed the inverse Mills ratios (IMR). Then, I re-estimate the models 1, 2 and 3 including the IMR, without industry dummy variables. The coefficient of IMR is barely significant in the three models and the main results presented in this paper remain.

## **5. Conclusions**

Emerging economies, including Latin-American countries, have been characterized by their corruption levels, which may affect the effective function of governments and the quality of the information provided to investor in capital markets (Aidt, 2009). The implementation of controls intended to reduce corruption, improve the effectiveness of the government, and improve corporations' good governance could lead to a reduction in opportunistic behavior and, consequently, improve the quality of accounting information reported by firms. Peru introduced the Principles of Good Governance for Peruvian Companies in 2002. Based on these principles, companies listed in the LSE must submit an auto-evaluation of their corporate governance practices. Using these self-assessments, the LSE prepares annually an index (GCGI) including the stocks of the firms with the best governance structures. In this study, I evaluate whether the firms included in the GCGI present accounting information with better quality. I find that firms included in the GCGI report more persistent earnings, more value relevant earnings, and more conservatism accounting information. Firms included in the GCGI report higher quality of accounting information.

## References

- Abbadi, S. S., Hijazi, Q. F., & Al-Rahahleh, A. (2016). Corporate governance quality and earnings management: Evidence from Jordan. *Australasian Accounting Business & Finance Journal*, 10(2), 54-75.
- Abbott, L. J., Parker, S., Peters G. F., & Raghunandan K. (2003). An empirical investigation of audit fees, nonaudit fees, and audit committees. *Contemporary Accounting Research*, 20, 215-234.
- Ahsan Habib & Istiaq Azim (2008), Corporate governance and the value-relevance of accounting information: Evidence from Australia, *Accounting Research Journal*, 21(2), 167-194
- Aidt, T. (2009). Corruption, institutions, and economic development. *Oxford Review of Economic Policy*, 25(2), 271–291
- Aulakh, P. S., & Kotabe, M. (2008). Institutional changes and organizational transformation in developing economies. *Journal of International Management*, 14(3), 209–216.
- Barth, M.E., Beaver, W.H. & Landsman, W.R. (2001), The relevance of the value relevance literature for financial accounting standard setting: another view, *Journal of accounting and Economics*, 31, 77-104.
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of accounting and economics*, 24(1), 3-37.
- Bradshaw, M. T. (2004). How do analysts use their earnings forecasts in generating stock recommendations? *The Accounting Review*, 79(1), 25-50.
- Chung, R., Firth M., & Kim, J.-B. (2003). Auditor conservatism and reported earnings. *Accounting and Business Research*, 33, 19 - 32.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, the executive officer compensation, and firm performance. *Journal of Financial Economics*, 51, 371–406.
- Cremers, K. J. M., & Nair, V. B. (2005). Governance mechanisms and equity prices. *Journal of Finance*, 60, 2859–2894.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50(2), 344-401.
- Francis, J., LaFond, R., Olsson, P. M., & Schipper, K. (2004). Costs of equity and earnings attributes. *The accounting review*, 79(4), 967-1010.
- Fuenzalida, D., Mongrut, S., Arteaga, J. R., & Erausquin, A. (2013). Good corporate governance: Does it pay in Peru? *Journal of Business Research*, 66(10), 1759-1770.
- García Lara, J. M., Osmá, B. G., & Penalva, F. (2007). Board of directors' characteristics and conditional accounting conservatism: Spanish evidence. *European Accounting Review*, 16(4), 727-755.
- Habib, A., & Azim, I. (2008). Corporate governance and the value-relevance of accounting information: Evidence from Australia. *Accounting Research Journal*, 21(2), 167-194.
- Hanlon, M., Maydew, E. L., & Shevlin, T. (2008). An unintended consequence of book-tax conformity: A loss of earnings informativeness. *Journal of Accounting and Economics*, 46(2), 294-311.
- Harris, J. E. (2009). A review of Latin American corporate governance literature: 2000-2009. *Corporate Governance: The international journal of business in society*, 9(5), 635-648.
- Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica*, 47, 153-162.
- Khanna, T., & Palepu, K. (2013). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press. Massachusetts.

- Klein, A. (2002). Audit committee, board of directors' characteristics, and earnings management. *Journal of Accounting and Economics*, 33, 375-400.
- Larcker, D., Richardson, S. & Tuna, I. (2007). Corporate Governance, accounting outputs, and organizational performance. *Accounting Review*, 82, 963-1008.
- Li, F. (2008). Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics*, 45(2), 221-247.
- Lim, R. (2010). Are corporate governance attributes associated with accounting conservatism? *Accounting and Finance*, 51, 1007-1030.
- López Herrera, F., & Ríos Szalay, J. (2005). Resumen de los principios de la OCDE para el gobierno corporativo. *Contaduría y Administración (UNAM)*, 216, 169-181.
- Melgarejo, M. (2017). Additional Evidence on the Impact of the International Financial Reporting Standards on Earnings Quality: Evidence from Latin America. *Journal of Applied Business and Economics*. Forthcoming
- Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: Do outside directors' influence abnormal accruals? *Journal of Business Finance and Accounting*, 32, 1311-1346.
- Shipper, K., & Vincent, L. (2003). Earning Quality. *Accounting Horizons, Suppl*, 97-110.
- González, J. S., & García-Meca, E. (2014). Does corporate governance influence earnings management in Latin American markets? *Journal of Business Ethics*, 121(3), 419-440.
- Yu, F., (2006). Corporate governance and earnings management. Working Paper, Carlson School of Management-University of Minnesota.

**Appendix 1. List of firms included in the GCI in 2015**

<b>Firm</b>	<b>Auditor</b>
Alicorp	PCR-Pacific Credit Rating
BBVA Banco Continental	PCR-Pacific Credit Rating
Grana y Montero	Grant Thornton
Ferreycorp	PCR-Pacific Credit Rating
Buenaventura	MC&F
Cementos Pascamayo	PWC
Milpo	Deloitte
Refineria La Pampilla	MC&F
Credicorp	Deloitte

<b>Year</b>	<b>Sector</b>								
	<b>Accommodation</b>	<b>Agro</b>	<b>Construction</b>	<b>Information</b>	<b>Management</b>	<b>Manufacturing</b>	<b>Mining, Oil and Gas</b>	<b>Real Estate</b>	<b>R</b>
<b>2009</b>	2	7	1	2	4	30	7	0	
<b>2010</b>	2	6	1	0	3	29	14	2	
<b>2011</b>	1	6	1	1	4	28	13	1	
<b>2012</b>	1	6	1	1	4	26	13	1	
<b>2013</b>	2	5	1	1	4	22	11	1	
<b>2014</b>	2	7	1	1	4	22	13	1	
<b>2015</b>	2	7	1	1	4	24	15	0	
<b>Total</b>	12	44	7	7	27	181	86	6	

**Table 1. Distribution of the observations per year and industry**

**Table 2. Descriptive statistics**

Table 2 presents the descriptive statistics of the main variables under analysis.

$GOV_{i,t}$  is a dummy variable that takes the value of 1 if firm  $i$  is included in the GCGI in year  $t$  and 0 for firms not included in the index in year  $t$ .  $Ret_{i,t}$  is firm  $i$ 's stock return, including dividends in year  $t$ .  $Ch\_Earn_{i,t}$  is the annual change, between year  $t-1$  and  $t$ , in firm  $i$ 's earnings before interest and taxes scaled by the beginning of the period total assets.  $EPS_{i,t}$  is firm  $i$ 's earnings per share in year  $t$ .  $EPS_{i,t-1}$  is firm  $i$ 's earnings per share in year  $t-1$ .

Variable	Obs	Mean	Std. Dev.	Min	Max
$GOV_{i,t}$	420	0.126	0.332	0	1
$Ret_{i,t}$	420	0.099	0.436	-0.754	1.499
$EPS_{i,t}$	420	0.187	0.474	-1.773	3.508
$EPS_{i,t-1}$	420	0.206	0.504	-0.387	5.656
$Ch\_Earn_{i,t}$	420	0.001	0.085	-0.752	0.387

**Table 3. Correlation matrix**

Table 3 presents the Pearson correlation coefficients. The definition of the variables is presented in Table 2.

	1	2	3	4	5
1 GOV	1				
2 Ret	0.0177	1			
3 EPS t	0.0554	0.1285	1		
4 EPS t-1	0.0636	-0.0343	0.6265	1	
5 Ch_Earn	0.0599	0.2933	0.1469	-0.1723	1

**Table 4. Regression results of the impact of governance practices on the value relevance of earnings**

Table 4 presents the regression results of the following model:

$$\text{Ret}_{i,t} = \alpha_0 + \alpha_1 \text{Ch\_Earn}_{i,t} + \alpha_2 \text{GOV}_{i,t} + \alpha_3 \text{Ch\_Earn}_{i,t} * \text{GOV}_{i,t} + \text{Industry Dummies} + \text{Year Dummies} + \varepsilon_{i,t}$$

The definition of the variables is presented in Table 2.

Variable	Coefficient	t-value	
Ch_Earn	0.947	5.05	***
GOV	0.005	0.09	
Ch_Earn * GOV	1.469	2.91	***
2010	0.072	0.82	
2011	-0.364	-4.31	***
2012	-0.162	-1.94	*
2013	-0.399	-4.95	***
2014	-0.381	-5.05	***
2015	-0.575	-7.60	***
Agriculture and Fishing	-0.068	-0.51	
Construction	0.092	0.65	
Information	-0.030	-0.19	
Management of Companies	-0.093	-0.71	
Manufacturing	-0.006	-0.05	
Mining, Oil and Gas	-0.163	-1.21	
Real Estate and Rental	0.091	0.41	
Retail Trade	0.058	0.38	
Utilities	0.127	0.95	
Wholesale Trade	-0.038	-0.27	
_cons	0.386606	2.53	**
<hr/>			
R2	0.270		
N	420		

\*\*\*, \*\*, \* denote significance at 1%, 5% and 10% respectively; p-values are calculated using robust standard errors clustered by firm.

**Table 5. Regression results of the impact of governance practices on the persistence of earnings**

Variable	Coefficient	t-value	
Governance_index	-0.024	0.58	
EPSt-1	0.323	1.73	*
EPSt-1 * Governance_Index	0.414	2.39	**
2010	0.062	0.90	
2011	0.027	0.61	
2012	-0.041	0.75	
2013	-0.187	2.09	**
2014	-0.080	1.48	
2015	-0.161	2.07	**
Agriculture and Fishing	0.299	1.75	*
Construction	0.063	1.48	
Information	0.072	1.27	
Management of Companies	0.089	2.13	**
Manufacturing	0.064	2.03	**
Mining, Oil and Gas	0.163	1.84	*
Real Estate and Rental	0.061	1.27	
Retail Trade	0.174	1.75	
Utilities	0.098	2.98	***
Wholesale Trade	0.078	1.55	
Constant	0.049	1.12	
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R2	0.430		
N	420		

Table 5 presents the regression results of the following model:

$$EPS_{it} = \beta_0 + \beta_1 EPS_{it-1} + \beta_2 GOV_{it} +$$

$$\beta_3 EPS_{it-1} * GOV_{it} + Industry$$

$$Dummies + Year Dummies + \varepsilon_{i,t}$$

The definition of the variables is presented in Table 2

\*\*\*, \*\*, \* denote significance at 1%, 5% and 10% respectively; p-values are calculated using robust standard errors clustered by firm.



**Table 6. Regression results of the impact of governance practices on accounting conservatism**

Table 6 presents the regression results of the following model:

$$\text{EBIT}_{i,t} = \gamma_0 + \gamma_1 D + \gamma_2 \text{Ret}_{i,t} + \gamma_3 D * \text{Ret}_{i,t} + \gamma_4 \text{GOV}_{it} + \gamma_5 D * \text{GOV}_{it} + \gamma_6 \text{Ret}_{i,t} * \text{GOV}_{it} + \gamma_7 D * \text{Ret}_{i,t} * \text{GOV}_{it} + \text{Year Dummies} + \text{Industry Dummies} + \varepsilon_{i,t}$$

Variables	Coefficient	t-value	
D	-0.047	0.95	
Ret	0.184	2.90	**
Ret * D	-0.319	1.54	
GOV	0.026	0.59	
D * GOV	0.004	0.05	
Returns * GOV	-0.151	2.53	**
Returns * D * GOV	0.303	1.93	**
2010	-0.019	0.52	
2011	-0.007	0.14	
2012	-0.035	0.68	
2013	-0.114	1.98	
2014	-0.103	1.48	
2015	-0.136	1.75	
Agriculture and Fishing	0.474	1.17	
Construction	0.541	1.39	
Information	0.526	1.31	
Management of Companies	0.595	1.47	
Manufacturing	0.454	1.07	
Mining, Oil and Gas	0.505	1.28	
Real Estate and Rental	0.714	1.76	
Retail Trade	0.540	1.32	
Utilities	0.667	1.62	
Wholesale Trade	0.594	1.50	
Constant	-0.400	0.99	
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R2	0.240		
N	420		

\*\*\*, \*\*, \* denote significance at 1%, 5% and 10% respectively; p-values are calculated using robust standard errors clustered by firm.