Compliance with good corporate governance practices and the managerial ability of managers

El cumplimiento de las prácticas de buen gobierno corporativo y la capacidad de gestión de los directivos

Abstract
The goal of this study is to analyze the influence of compliance with good corporate governance practices on the managerial skills of managers of companies listed on B3. The investigated sample considered 498 observations of the 100 companies listed on B3, with higher share liquidity, during the period from 2015 to 2019, using the multiple linear regression method for analysis. The results show that companies with deficient corporate governance practices and with less compliance with the requirements of the benchmarks of good corporate governance practices operate with more skilled managers to compensate for the organizational deficiency. The evidence indicated that companies with greater compliance with good corporate governance practices have managers who do not necessarily have greater managerial skills. These findings indicate that companies complying with good corporate governance practices can establish high standards of organizational culture, thus reducing the dependence of the manager’s managerial skill on the organization’s results.

Keywords: Corporate governance; Managerial skill; Compliance

Resumo
O objetivo do estudo é analisar a influência do compliance às boas práticas de governança corporativa na escolha de gestores com habilidade gerencial. A amostra investigada considerou 498 observações das 100 empresas listadas na B3 com maior liquidez das ações, utilizando-se o método de regressão linear múltipla para análise. Os resultados evidenciam que as empresas com práticas deficientes de governança corporativa e com menor atendimento aos requisitos dos referenciais de boas práticas de governança corporativa atuam com gestores mais habilidosos para compensar a deficiência organizacional. As evidências indicam que empresas com maior compliance às boas práticas de governança corporativa possuem gestores que não apresentam, necessariamente, maior habilidade gerencial. Os achados indicam que as empresas com compliance às boas práticas de governança corporativa conseguem estabelecer elevados padrões de cultura organizacional, reduzindo a dependência da habilidade gerencial do gestor sobre os resultados da organização.

Palavras-chave: Governança corporativa; Habilidade gerencial; Compliance
1 Introduction

The corporate world is attentive to reforms and regulations in corporate governance mechanisms, making compliance a priority agenda in publicly traded companies (Claessens & Yurtoglu, 2013; Davies & Schlitzer, 2008). Accordingly, corporate governance mechanisms must be compatible with corporate culture and meet the expectations of the stock market (Bauwhede, 2009; Reddy et al., 2010; Nalukenge et al., 2018).

In recent decades, some corporate collapses, caused by frauds and inefficient management systems, have brought uncertainty in the performance of corporate governance mechanisms in terms of monitoring opportunistic behaviors (Costa et al., 2020). Consequently, corporate governance (CG) compliance has become a preponderant factor in terms of generating confidence among minority investors (Aguilera & Cuervo-Cazurra, 2004; Shleifer & Vishny, 1997; Aguilera et al., 2015).

Corporate governance uses compliance precepts to offer security and confidence to interested parties (Costa et al., 2020). Compliance is a pillar that underpins good CG practices, since it requires compliance with regulations, guidelines and laws (IBGC, 2015), and collaborates with CG in terms of improving ethics, transparency and business commitment to society and the environment (Costa et al., 2020).

Compliance is the appropriate instrument to avoid crimes, conflicting and threatening situations, under the aegis of full adherence to citizenship, in a sustainable management model, with mechanisms for valuing social responsibility, looking after sustainability and preserving reputation (Oliveira, 2021). CG is practically useless without integration with compliance programs (Cristóvam & Bergamini, 2019).

However, the requirements for disclosure of actions to adhere CG mechanisms in relation to compliance differ among countries. For example, mandatory disclosure, determined by law, becomes an external disciplinary mechanism that increases companies’ concerns about compliance. Conversely, voluntary disclosure becomes less informative, as investors cannot understand whether companies do not adopt best practices or adopt them but do not disclose (Cuomo et al., 2016).

In the United Kingdom, corporate governance compliance does not yet impact audit quality and the selection of companies’ independent auditors. Such evidence converges with the voluntary nature of the disclosure of CG mechanisms in the United Kingdom, meaning that companies are not held responsible for non-compliance (Gerged et al., 2020), a factor that also happens in the Brazilian corporate market.

Companies that seek compliance with good corporate governance practices are concerned about financial performance. Accordingly, companies with greater compliance with CG practices are more likely to improve the manager selection process and consider differentiated managerial skills when hiring (Outa & Waweru, 2016).

The different knowledge and management styles of executive directors impact the way business is conducted (Bertrand & Schoar, 2003). Successful organizations are managed by executive directors with differentiated management skills in strategic decisions, risk, processes and leadership (Moura et al., 2019). Furthermore, more skilled managers do not tend to engage in tax evasion activities (Francis et al., 2013; Koester, Shevin & Wangerin, 2017), a factor that can harm an organization’s financial health in the long term.

However, when regulations are of low quality, compliance costs can increase and cause unnecessary organizational complexity (OECD, 2008; Tariq & Abbas, 2013), a factor that can explain cases of low technical efficiency linked to compliance programs. Furthermore, managers’ lack of understanding of the importance of compliance in corporate governance can lead to ineffective management and damage their companies’ relationships with shareholders, customers, suppliers, regulatory bodies and other stakeholders. (Batista & Wisniewski, 2019).
Accordingly, the compliance program must be an integrated and interactive process with the corporate governance structure, permeating all levels of the organization and inserted into processes and routines. One should highlight the importance of senior management’s engagement with the compliance program, which must form the basis for creating an organizational culture that values ethical behavior, and this is another factor that requires differentiated managerial skills on the part of senior management.

Based on the above, the following research gap arises: what is the influence of compliance with good corporate governance practices on the choice of managers with managerial skills? The goal of this study is to analyze the influence of compliance with good corporate governance practices on the choice of managers with managerial skills.

In practice, the study can contribute to regulatory bodies (CVM, as per its Portuguese acronym), standard setters (IBGC, as per its Portuguese acronym) and CG practices, in their efforts to improve the process aimed at selecting managers with managerial skills aligned with the organization’s compliance culture. Corporate governance compliance with regulations should encourage the manager’s freedom to serve interested parties by achieving maximum organizational efficiency, thus reinforcing the findings by Crisóstomo and Melo Júnior (2015).

Social contribution emphasizes the appreciation of managers who adopt good corporate governance practices as they achieve desired financial results. This may be possible when managers have the managerial skills to engage the team in an organizational culture of ethical behavior. The theoretical contribution reinforces the argument that compliance with good corporate governance practices can be a mediator of agency conflicts by showing that the results of minority shareholders are safeguarded by the managerial skills of managers.

Finally, the empirical results contradict the theoretical precepts of corporate governance, when indicating that companies with non-compliant corporate governance select managers with greater managerial skills. They also suggest that companies are using the most skilled managers to compensate for weaknesses in corporate governance and, thus, meet the wishes of interested parties. Companies that do not focus on compliance with corporate governance mechanisms compensate for inefficiency by selecting executive directors with differentiated managerial skills.

2 Compliance with good corporate governance practices and managerial skills

Good corporate governance practices are associated with a lower cost of own and third-party capital and can help to improve management, create value and improve the performance of organizations in general (Fonseca & Silveira, 2016). Companies with better corporate governance practices perform more favorably (Crisóstomo & Melo Júnior, 2015; Fernandes et al., 2010; Lima et al., 2015; Macedo & Corrar, 2012; Prociainoy & Verdi, 2009; Strour, 2005).

There is empirical evidence that good CG improves financial performance, thus benefiting shareholders with access to capital at a reduced cost (Reddy et al., 2010). Kim et al. (2011) points out that compliance produces substantial changes in companies, so that there is no overlap in decision-making, thus enabling the presence of a holistic view of risk management in portfolios and minimizing the complexity of the risk identification process.

Bauer et al. (2004) reported that, although company value is positively related to CG ratings, company performance, as measured by Return on Equity (ROE) and net profit margin, is negatively related to CG standards. In contrast, Bauwhede (2009) reported a positive relationship between operational performance and the degree of compliance with international best practices. Reddy et al. (2010) identified that CG compliance with regulations and the presence of the remuneration committee have a positive influence on the performance of New Zealand companies.

Tariq and Abbas (2013) studied the effectiveness of the Pakistan Corporate Governance Code and the impact on companies’ performance and efficiency, identifying that the extent of compliance has increased since the issuance of the Corporate Governance code. The study results suggest a positive and significant impact of compliance on company performance. They also found a positive and weak relationship between compliance and technical efficiency, signaling that compliance is not linearly related to financial performance and that companies with high compliance are less profitable.

Boards have the role of overseeing the company’s management and business strategies to achieve long-term value creation (Miranda & Amaral, 2011). Among the most important functions of a board, one can mention: to select a well-skilled CEO to lead the company, monitor and evaluate the CEO’s performance and oversee the CEO succession planning process (Santos & Aragaki, 2015).

Outa and Waweru (2016) examined the impact of compliance with corporate governance guidelines on the financial performance and value of listed companies in Kenya. The results indicated that compliance with the Corporate Governance Index (CGI), an aggregate of all CG guidelines, is positively and significantly related to companies’ performance and market value.

The implementation of a corporate governance system, based on a set of good practices, has been defended as prepared to improve the company’s management, as well as its performance and its relationship with the market. Topics related to executive boards, executive management, shareholder
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relationships, auditing and information disclosure are part of the codes of good corporate governance practice (Crisóstomo & Girão, 2019).

The proportion of compliance with the recommendations made by codes and the level of detail of information disclosed about CG increase over time (Price et al., 2011), as a result of increased market pressure over time (Cuomo; Mallin & Zattoni, 2016). The level of compliance varies depending on code recommendations, as some of the more controversial recommendations are associated with a higher level of non-compliance (Andres & Theissen, 2008; Chizema, 2008).

Previous studies have identified that the introduction of a code of behavior causes changes in corporate governance practices (Chen & Nowland, 2011; Jones et al., 2015; Peasnell et al., 2000). Companies tend to comply with code recommendations for several reasons, mainly to increase their legitimacy among investors and improve the effectiveness of their governance practices (Zattoni & Cuomo, 2008). Silva and Monteiro (2019) unveiled evidence that companies that have experienced cases of corruption, such as those involved in the Lava Jato Case, in Brazil, have restructured corporate governance by improving compliance processes and disseminating best practices. Costa et al. (2020) proved that a high level of compliance reduces the risk of corruption in companies and increases transparency and credibility in the market.

Therefore, the corporate governance structure alone cannot prevent upcoming crises and unethical business practices. Compliance has been one of the biggest concerns of CG bodies, governments and society, materialized through the publication of regulatory and anti-corruption standards in several countries, given that failures in this area can cause enormous losses and effectively compromise the survival of corporations, thus affecting its stakeholders and society as a whole (Da Silva & Monteiro, 2019).

In order to ensure compliance, strict and clear rules are required, through transparency and ethics policies aimed at reducing conflicts and guaranteeing communication and information for all employees, in addition to deadlines for reviewing policies and controls (Chiaretto et al., 2017). Additionally, the pressure for compliance is greater for larger companies, since their ownership structure is more dispersed and is under greater scrutiny from the external environment (Cuomo et al., 2016; Arcot et al., 2010).

Compliance promotes continuous improvement in internal controls, audits, rules, fulfillment of laws and preventive procedures to avoid money laundering (Nakamura et al., 2019; Haas et al., 2020), making the company’s performance based on ethics, respect, transparency and sustainability (Leung & Cooper, 2009, Haas et al., 2020).

Therefore, compliance demonstrates the company’s commitment to strengthening its business, thus helping to ensure its longevity (Santos & Aragaki, 2015). Compliance components are essential for strengthening corporate image and preventing risks, damages and crimes, as well as providing proactive continuity measures balanced with business profitability (Oliveira, 2021).

A compliance program makes it a duty for an organization to comply with the rules to which it is subject as a result of its activities, whether they emanate from laws, regulations or internal policies, encompassing ethical and transparent attitudes in the conduct of business (Giovannini, 2014; Gonsales, 2016). This must be in line with organizational values, intrinsically present in the organizational culture and materialized through documents written in simple language, i.e., accessible to all interested parties (Da Silva & Monteiro, 2019).

Racz, Weippl and Seufert (2010) and Giovannini (2014) comment that compliance must cover at least the following pillars: evaluation and responses to risks; definition of policies and procedures; commitment and support from senior management; communication and training; monitoring and auditing of the program’s operation; mechanisms that confidentially report criminal behaviors (or suspicions); investigation and responses to behaviors inconsistent with program goals; and continuous improvement.

The pillars of a compliance program are interactive and should be understood as an organic structure that will work if there is coherence, concatenation and connection between them (Da Silva & Monteiro, 2019; Carvalho et al., 2021). Therefore, a compliance program requires managerial skills from managers to articulate the pillars and, mainly, to implement corrective actions.

Maeda (2013) argues that the main factor for the success of any compliance program, especially in anti-corruption matters, is the support and commitment of the company’s senior management and a non-tolerance stance towards violations of behaviors. The Brazilian General Union Controllership (CGU, as per its Portuguese acronym, 2015) advises that the support of the company’s senior management is a condition for fostering an ethical culture and respect for laws, as well as for the effective application of the Integrity Program. Senior management must set the right tone not only with words but also with their actions, together with the sustainable organization and management process (Steinberg, 2011).

Accordingly, the operation of a compliance program will depend on the managerial ability of managers in terms of driving a culture of commitment and respect for laws and regulations. To this end, senior managers must have the ability to: incorporate the ethical values that guide the company into their speeches; verbal communication with subordinates when issuing reports; motivate the team and third parties in terms of implementing compliance system actions; monitor integrity actions with a permanent agenda at
board meetings; adequately measure the resources applied during the implementation of the program (CGU, 2015; Da Silva & Monteiro, 2019; Carvalho et al., 2021).

The organization’s manager is responsible for defining, managing and executing the company’s strategies, including, but not limited to, directing operations under the supervision of the board and keeping this board informed of the status of the company’s operations. Managerial responsibilities include strategic planning, risk management and financial reporting. An effective management team runs the company with a focus on executing the strategy over a meaningful time horizon and avoids undue emphasis on short-term metrics (Fonseca & Silveira, 2016).

For Demerjian et al. (2012) and Krishnan & Wang (2014), managerial skill comprises the ability of managers to efficiently convert company resources into revenue, in relation to their peers in the sector. Managers who are successful in their activities have strategic management, operational risk management, process management and leadership skills.

Managerial skills must not be considered innate but improved through studies and training (Capriglione & Casalino, 2014). More skillful managers conduct their companies better to maximize performance and produce benefits for shareholders (Demerjian et al., 2013). Jiraporn et al. (2016) observed that talented managers, confident in their ability to keep the company profitable, are more willing to pay higher dividends because they are less worried about having to reduce dividends in the future. In turn, Huang and Sun (2017) found that managerial skill reduces earnings management.

According to research by Demerjian (2017), more skilled managers would have greater ability to improve profits and maximize benefits for shareholders, thus suggesting high adherence to corporate governance to achieve positive results. García-Sánchez & García-Meca (2018) highlight that the positive effect of skilled managers is reinforced in countries with greater investor protection and effective law enforcement, documenting the complementary role of external corporate governance mechanisms in the association between managerial ability and investment decisions. The results also showed that the impact of skilled managers on investment efficiency is more pronounced when companies are located in countries with better board effectiveness.

Previous literature supports that: (i) managerial skill is related to the ability on the part of managers to obtain the best results for companies (Demerjian et al., 2012; Demerjian et al., 2013); (ii) managers with greater skills improve company performance through optimal use of available resources (Franco & Montalván, 2010); (iii) the impact of managerial ability is more evident in companies with an effective executive board (García-Sánchez & García-Meca, 2018).

It must be associated with innovative managerial skills (Capriglione & Casalino; 2014). The alignment between CG, ethical culture and compliance contributes to and improves the financial performance and, consequently, the sustainability of companies (Nalukenge et al., 2018).

For Demerjian et al. (2012), the measurement of managerial ability is the key to many questions, such as those that examine managerial contributions to company performance and investment decisions, executive compensation, corporate governance, economic effects of corporate ownership and productivity differences among countries. They emphasize that the specific characteristics of a manager (skill, talent, reputation or style) affect economic results and are, therefore, indispensable for economics, finance, accounting, management research and practice.

People’s competences, combined with other company resources, give rise and support to organizational competence. Among the various aspects that make up the notion of competence, one can introduce the individual’s ability to carry out “something” or activity, i.e., the know-how related to good performance (Brandão & Guimarães, 2001). Robbins (1999) defines skill as an individual’s skill to perform the various tasks of a position, being a current evaluation of what someone can do.

Managerial skill exerts influence in several areas. Hayes and Schaefer (1999) related managerial skill to the company’s value, while Demerjian et al. (2012) verify the manager’s skill to transform available corporate resources into revenues. Accordingly, skill can be understood as the ability to carry out a task or set of tasks in accordance with certain standards required by organizations (Wood Jr., 1997), or the ability to master and carry out a certain job (Paschoal, 2001).

In turn, Andreou et al. (2013) examined the role of managerial skill in the US context, particularly during the global financial crisis, reporting that more skillful managers had a greater ability to use the company’s resources. Managers are responsible for important strategic decisions and operations planning. High-level management theory suggests that managers’ individual characteristics and skills influence corporate decisions and earnings (Hambrick & Mason, 1984; Hambrick, 2007). Evidence from research on managerial skill indicates that more skilled managers better conduct their companies to maximize performance and benefits for shareholders (Demerjian et al., 2012; Sun, 2016; Franco & Montalván, 2010).

Mishra (2014) observed that the CEO’s managerial skill is directly related to the return rates that are required by organizations and that the returns obtained by more skilled managers are usually noted in companies with high agency costs, free cash flows and weak governance. Herawaty and Soilihah (2019) point out the importance of personal characteristics to achieve excellence in business management in order to obtain good results, thus applying efficient financial management.
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The literature offers support to establish that the compliance program linked to corporate governance mechanisms require managers with skills to articulate the pillars and all organizational levels in terms of engaging in actions that generate a culture of organizational integrity. Therefore, the following research hypothesis is established:

Hypothesis 1: companies with greater compliance with good corporate governance practices require managers with greater managerial skills.

3 Methodological Procedures

In order to define the investigated sample, companies listed on B3 issuing common shares were considered. The 100 companies were selected, except those in the financial sector, with the highest general share liquidity index in 2019 and with information available from 2015 to 2019.

Following the procedure adopted by Plestch et al. (2020), the choice of the sample was motivated by the relevance of the stock liquidity index in the performance of companies, which would be more likely to attract the attention of investors and seek to hire managers with differentiated managerial skills. It is expected that the higher share liquidity will require more and better financial and managerial information from entities (Delvizio, Macedo, Queiroz & Lopes, 2020), thus requiring more skilled managers. Table 1 shows the researched companies by economic segment according to classification in B3.

Table 1 Classification of the analyzed companies by economic sector B3

<table>
<thead>
<tr>
<th>Segment</th>
<th>Nº of observations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Goods</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Cyclical Consumption</td>
<td>36</td>
<td>36%</td>
</tr>
<tr>
<td>Non-cyclical Consumption</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>9</td>
<td>9%</td>
</tr>
<tr>
<td>Oil, Gas and Fuel</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Health care</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Public Utility</td>
<td>22</td>
<td>22%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

A total of 100 companies were observed annually and those that did not reveal data in the year to carry out calculations related to managerial skill were excluded, totaling 498 observations in the investigated period. As displayed in Table 1, the sectors that showed the greatest representation in the sample were: cyclical consumption (36%), followed by public utility (22%) and industrial goods (16%).

The model for estimating the managerial skills on the part of managers was based on Demerjian et al. (2012), which considers the company’s own characteristics. The assumption of the model is that the most skilled managers can generate higher revenues for a given level of resources, i.e., they are able to maximize the efficiency of available resources.

The model by Demerjian et al. (2012) is guided by two stages: a) the first measures the company’s efficiency through data envelopment analysis (DEA). The calculation of the company’s total efficiency consists of relating the inputs (available resources) with the output (generated revenue). The inputs considered as resources are: cost of sold goods; selling, general and administrative expenses; fixed assets; operating lease; research and development expenses; goodwill; and intangible asset. The output consists of net sales; b) the second uses the company’s efficiency as a dependent variable in a multiple linear regression model that estimates the residual as a proxy for managerial skill.

The model by Demerjian et al. (2012) uses the following independent variables in multiple linear regressions: company size (log of total assets), market share (Herfindahl-Hirschman index, which measures market share based on total assets), available cash (cash and cash equivalents), company age (years of foundation), operational complexity (number of subsidiaries) and foreign operations (export revenues).

In the current study, the variables related to company size, market share and available cash, present in the model by Demerjian et al., (2012) were maintained. Following the theoretical assumptions of the existence of a relationship between the variables related to organization performance and efficiency (Demerjian et al., 2012), three other variables were considered: asset profitability (Verriest & Gaeremynck, 2009; Vogt et al., 2016; Sun, 2016); sales growth (Majid, 2015; Kabir & Rahman, 2016; Vogt et al., 2016); and debt (Majid, 2015; Kabir & Rahman, 2016; Sun, 2016).

Finally, the modified regression model that measures managerial skill, according to the organization’s characteristics, is shown in Equation 1.

\[ EFC_{it} = \beta_0 + \beta_1 TAM_{it} + \beta_2 HHI_{it} + \beta_3 CAI_{it} + \beta_4 ROA_{it} + \beta_5 CV D_{it} + \beta_6 END_{it} + \varepsilon_{it} \]  

(Equation 1)
In order to measure the company's efficiency, data envelopment analysis was used, carried out using the MAXDEA software. The DEA model adopted in this study is BCC (Banker, Charnes & Cooper, 1984), also known as Variable Returns to Scale (VRS), whose formulation allows the projection of each Decision-Making Unit (DMU) inefficient on the boundary surface (envelope) determined by efficient DMU with compatible size.

According to Demerjian et al. (2012), the total efficiency score generated by DEA can be assigned both to the company's specific characteristics and to the managers' skill factor. Thus, to isolate managerial skill, the total efficiency indicator (dependent) must be regressed against company-specific variables (independent), which can help or hinder managers' ability, with the purpose of obtaining an error term in the regression, which will be the indicator of managerial skill. Table 2 displays the construct of the variables used in the research.

Table 2
Construct of research variables

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Metrics</th>
<th>Background authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial skills (HG, as per its Portuguese acronym)</td>
<td>$EFC_{it} = \beta_0 + \beta_1TAM_{it} + \beta_2HHI_{it} + \beta_3CAX_{it} + \beta_4ROA_{it} + \beta_5CVD_{it} + \beta_6END_{it} + \varepsilon_{it}$</td>
<td>Demerjian, Lev and McWay (2012); Sun (2016)</td>
</tr>
<tr>
<td>Variables of Interest</td>
<td>Metrics</td>
<td>Background authors</td>
</tr>
<tr>
<td>CG practices index (IPGC, as per its Portuguese acronym)</td>
<td>$\sum = (CFI + CFP + ADE + DCEO + ACA + MECA + SCA) / QIP$</td>
<td>Correia, Amaral &amp; Louvet (2011)</td>
</tr>
<tr>
<td>Advisory committees (CA, as per its Portuguese acronym)</td>
<td>$\sum = (AUD + FIN + CONT + NRHR + RC + SUT + GOV + DI + CE) / QIP$</td>
<td></td>
</tr>
<tr>
<td>Compliance with good CG practices (ABPGC, as per its Portuguese acronym)</td>
<td>$\sum = [MCA + TCA + MDE + TCAUD + CI] + (CAUDCE/CAUD) / QIP$</td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td>Metrics</td>
<td>Background authors</td>
</tr>
<tr>
<td>CSR practices (PRSC, as per its Portuguese acronym)</td>
<td>Score from 0 to 100 from the report on CSR practices and strategies published by the company.</td>
<td>Hussain, Rigoni &amp; Cavezzali (2018); Xie et al. (2018); Wang &amp; Sarkis (2017)</td>
</tr>
<tr>
<td>CSR integration (IRSC, as per its Portuguese acronym)</td>
<td>Score from 0 to 100 from the category related to CSR strategy and the integration of economic, social and environmental dimensions into your decision-making processes.</td>
<td></td>
</tr>
<tr>
<td>Size (TAM, as per its Portuguese acronym)</td>
<td>Natural logarithm of the book value of the company's total assets.</td>
<td>Sun (2016)</td>
</tr>
<tr>
<td>Audit Type (BF, as per its Portuguese acronym)</td>
<td>Variable &quot;dummy&quot;: where 1 is used for companies audited by big four and 0 for the others.</td>
<td>Barakat, Pérez &amp; Ariza (2015)</td>
</tr>
</tbody>
</table>

Notes:

Corporate Governance Practices Index – (IPGC): to operationalize the variable, number 1 was assigned to companies that have zero (0); otherwise, for each of the following items in year $t$:
- CFI = Installed Fiscal Board;
- CFP = Permanent Fiscal Board;
- ADE = Evaluation of the Executive Board;
- DCEO = CEO Duality;
- ACA = Evaluation of the Executive Board;
- MECA = Effective Women in the Executive Board;
- SCA = Replacements in the Executive Board;
- QIP = Number of Researched Indexes.

Advisory Committees – (CA): to operationalize the variable, number 1 was assigned to companies that have zero (0); otherwise, for each of the following items in year $t$:
- AUD = Audit;
- FIN = Finance;
- CONT = Controllership;
- NRHR = Appointment/Human Resources and Remuneration;
- RC = Risk and Compliance;
- SUT = Sustainability;
- GOV = Governance;
- DI = Information Disclosure;
- CE = Strategic Committee;
- QIP = Number of Researched Indexes.

Compliance with Good Corporate Governance Practices – (ABPGC): to operationalize the variable, number 1 was assigned to companies that have zero (0); otherwise, for each of the following items in year $t$:
- MCA = Mandate of the Executive Board – recommended maximum of 2 years;
- TCA = Size of the Executive Board – recommended from 5 to 11 members (effective + substitutes);
- MDE = Mandate of the Executive Board – recommended maximum of 3 years;
- TCAUD = Size of the Audit Committee – recommended 3 to 5 members;
- CI = Number of Independent Advisors – recommended 2 or 20% (whichever is greater);
- CAUDCE/CAUD = Ratio between the number of members of the audit committee who are effective advisors and the total number of members of the audit committee – reference value 1;
- RICA/CAUD = Ratio between the number of independent members of the Executive Board and the total number of members of the audit committee – Reference value 0.5 and QIP = Number of Researched Indexes.
Data referring to the variables “HG”, “PRSC”, “IRSC”, “TAM” and “BF” were collected from Thomson Reuters Eikon. The variables relate to corporate social responsibility were formulated using Thomson Reuters Eikon’s own methodology, which considers qualitative and quantitative items involving environmental, social, and economic aspects in the variable “IRSC” and involving CSR strategies in the variable “PRSC”.

In turn, the variables “IPGC”, “CA” and “ABPGC” were obtained manually from reference forms in B3, from October 2020 to May 2021. To perform the analysis of corporate governance information, after collection in the reference forms in B3, the information was ordered into binary variables (0 or 1) to represent whether the company meets (1) or does not meet (0) the provisions of B3 rules and regulations.

Finally, multiple linear regressions with a fixed effect of year and sector were used to evaluate the effect of compliance with corporate governance practices on managerial skill, according to Equation 2.

\[ VD_{it} = \beta_0 + \beta_3 HG_{it} + V I(\beta_3 IPGC_{it} + \beta_3 CA_{it} + \beta_4 ABPGC_{it} + \beta_5 PRSC_{it} + \beta_6 URSC_{it} + \beta_7 TAM_{it} + \beta_8 BF_{it}) + \epsilon_{it} \]  

(Equation 2)

In order to validate the model, the multiple linear regression assumptions were validated. According to Gujarati (2006) and Matloff (2009), classical analysis presupposes three hypotheses for linear regression: Linearity of the model, the conditional distribution of Y given X is normal and the homogeneity of variance (Homoscedasticity) of the variable “response” Y given the set of independent variables X.

Accordingly, the assumptions are analyzed based on the variables used in the research and can also be made based on products or results of the analysis (e.g.: analysis of residuals from multiple linear regression). The assumptions that must be met by multiple linear regression models are: normality, linearity and homoscedasticity (Gujarati, 2006; Matloff, 2009).

Goldberger (1998) argues that the classic regression model does not require a high R². Thus, a high R² is not favorable evidence for the model and a low R² is not unfavorable evidence. For Gujarati (2006, p. 179), “the researcher should be more concerned with the logical or theoretical relevance of the explanatory variables in relation to the dependent variable and its statistical significance”. Accordingly, the variables used in the model are recurrent in previous studies and have theoretical consistency for their use.

In the current study, the collinearity test was performed to observe the existence of correlation between the research’s predictor variables using the SPSS software. All variables showed Variance Inflation Factors (VIF) between 1.226 and 4.886, while the Durbin-Watson statistic showed a result equal to 1.832, meeting the assumptions for validating the model. Furthermore, multiple linear regression controlled the sector and the period, adding the robust model for White’s correction.

4 Analysis and Discussion of Results

This section contains the description and analysis of the collected data. First, the descriptive statistics are unveiled, as displayed in Table 3.

<table>
<thead>
<tr>
<th>Research variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial Skill (HG)</td>
<td>-1.7122</td>
<td>2.7348</td>
<td>-0.0405</td>
<td>0.0000</td>
<td>0.5163</td>
<td>-12.7481</td>
</tr>
<tr>
<td>Size (TAM)</td>
<td>7.1500</td>
<td>11.6100</td>
<td>9.8400</td>
<td>9.8600</td>
<td>0.5015</td>
<td>0.4652</td>
</tr>
<tr>
<td>CG Practices (IPGC)</td>
<td>0.0000</td>
<td>0.8571</td>
<td>0.3680</td>
<td>0.4286</td>
<td>0.0214</td>
<td>0.5908</td>
</tr>
<tr>
<td>Advisory Committees (CA)</td>
<td>0.0000</td>
<td>0.6667</td>
<td>0.1274</td>
<td>0.0000</td>
<td>0.1753</td>
<td>1.3760</td>
</tr>
<tr>
<td>Good CG Practices (ABPGC)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.5103</td>
<td>0.4286</td>
<td>0.2586</td>
<td>0.5068</td>
</tr>
<tr>
<td>CSR Practices (PRSC)</td>
<td>0.0000</td>
<td>65.6780</td>
<td>10.2423</td>
<td>0.0000</td>
<td>23.6333</td>
<td>2.3074</td>
</tr>
<tr>
<td>CSR Integration (IRSC)</td>
<td>0.0000</td>
<td>95.0617</td>
<td>8.5401</td>
<td>0.0000</td>
<td>20.8653</td>
<td>2.4432</td>
</tr>
</tbody>
</table>

The results in Table 3 show that the mean of the indicators related to the variables related to Corporate Governance (CG Practice Indexes, Advisory Committees and Compliance with Good CG Practices) varied between 0.1274 and 0.5103, signaling that the organizations in the study demonstrate low adherence to compliance.

The results are similar to the findings by Ramos and Martinez (2006), when they identified that 81.3% of the companies listed on the stock exchange did not meet the corporate governance criteria required by the new market. Therefore, most companies did not reach the highest level of corporate governance in the Brazilian stock market.

Table 4 displays the results from the multivariate regression, which allowed determining the influence of compliance with good governance practices on the managerial skills of companies.
The set of explanatory variables showed significance on the dependent variable, validating the econometric model (F statistics). The explanatory predictive power (R²) of the model is approximately 6%. However, Goldberger (1998) considers that R² has a modest role in regression analysis, constituting a measure of the quality of adjustment of a linear regression of sample least squares on a set of data.

The explanatory variable “governance practices” showed statistical significance at the level of 5% regarding managerial skill, whose coefficient proved to be negative. Thus, it is understood that companies that have less adherence to governance practices tend to require more skilled managers, as a way of compensating for such managerial deficiency.

Thus, in relation to meeting the reference values of corporate governance practices, the investigated companies tended to demand a lower level of skill from their managers. These results are not aligned with research by García-Sánchez & García-Meca (2018), which highlight the relevance of the role of corporate governance tools, remembering that the efficiency of this internal control mechanism complements the effect that skillful managers have on the efficiency of the investment.

The explanatory variable “referential compliance with good governance practices” showed significance at the level of 5% regarding managerial skill, whose coefficient proved to be negative. It is understood that companies that meet the benchmarks of good governance practices to a lesser extent tend to require managers with a higher degree of managerial skill. The result corroborates Cristóstomo and Girão (2019), who indicated that the Brazilian company’s failure to comply with the recommendations of the audit committee and fiscal board can particularly weaken the transparency and control of the company’s internal acts in particular. Furthermore, adherence to differentiated market levels is associated with a greater inclination to observe the suggestions emanating from the codes, due to the perception of a favorable cost-benefit ratio of adopting corporate governance in terms of maximizing organizational results, which does not reflect on the level of skills required by managers.

The variables of advisory committees, CSR practices, CSR integration, company size, and audit type were not significant in terms of influencing the manager’s managerial ability. Regarding the audit type, it can be seen that of the 498 observations, only 45 were related to the big four audit type. Based on the results of this study, hypothesis H₁ is refuted – companies with greater compliance with good corporate governance practices require managers with greater managerial skills, due to the existence of evidence in the research that companies with greater compliance with good practices have managers with lower managerial skills.

These findings reinforce the studies by Vintila and Ghergina (2012), Mishra (2014) and Sánchez, Hussain and Ferrero (2019), since they argue that more skilled managers have in-depth knowledge and can carry out earning management actions, exposing organizations to high-risk businesses, thus not complying with the rules envisaged in governance codes and guidebooks. The literature suggests that the CEO’s managerial skills (or CEO’s human capital) are more important for certain types of companies and industries or in certain situations, such as peaks in certain activities or possible difficulties, which implies the possibility of heterogeneity in expected returns (Mishra, 2014).

Managerial skills may be more important for companies that operate in dynamic markets and that face changes in their regulations (Hubbard & Palia, 1995), changes in technology and management practices (Garciano & Rossi-Hansberg, 2006; Custódio, Ferreira & Matos, 2013). The findings converge with the study by Bertrand & Schoar (2003), which indicated that companies seek to maximize performance and benefits for shareholders by selecting highly skilled managers. The different knowledge and management styles of executive directors impact the way business is conducted.

5 Final Considerations

The research findings allowed observing that the higher the Corporate Governance Practices and

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**Table 4**

| Managerial Skills (HG) | Coefficient. | Standard error. | t  | P>|t| |
|-----------------------|--------------|----------------|----|-------|
| CG Practices (IPGC)   | -0.2450603   | 0.1150822      | -2.16 | 0.031* |
| Advisory Committees (CA) | 0.050956 | 0.1794089      | 0.28 | 0.777 |
| Good CG Practices (ABPGC) | -0.241663 | 0.1261533      | -1.92 | 0.056** |
| CSR Practices (PRSC)   | -0.003373    | 0.0023466      | -1.44 | 0.151 |
| CSR Integration (IRSC) | 0.002338     | 0.0025914      | 0.90  | 0.367 |
| Size (TAM)             | -0.009367    | 0.0072915      | -1.28 | 0.200 |
| Audit Type (BF)        | -0.142416    | 0.0808091      | -1.80 | 0.031* |
| Constant               | 0.202934     | 0.0937397      | 2.16  | 0.031* |

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* Significant at 5%; ** Significant at 10%.
Compliance with Good Practices index, the lower the requirement with regard to the level of skills on the part of managers. It was also observed that practices related to advisory committees, corporate social responsibility practices and integration of corporate social responsibility, company size and audit type are not significant when related to the managerial skill index.

As for governance practices, the results suggest that companies with an installed fiscal board, permanent fiscal board, evaluation of the executive board, CEO duality, evaluation of the executive board, women in the executive board and replacements in executive board, tend to require lower level of skills from their managers.

It is concluded that compliance with good corporate governance practices meets the desires of interested parties that do not require the hiring of executive directors with differentiated managerial skills. The results of the study suggest that good corporate governance practices support management with constant improvements that make the company efficient, even having hired less skilled managers. Furthermore, the reality of the Brazilian corporate environment has been quite contrasting with corporate governance compliance regulations, with contradictory results emerging in the effect of compliance with good governance practices on the managerial skills of managers.

The negative effect of compliance with good corporate governance practices on the managerial skills of managers (measured by efficiency) may have originated from the complexity of regulatory obligations, as already mentioned by OECD (2008). The corporate governance system compatible with the capital market and the corporate culture will, theoretically, facilitate businesses and, thus, allow companies to achieve better financial performance and efficiency. However, if there are poor quality regulations, compliance costs can increase and cause unnecessary complexity (OECD, 2008).

The findings indicate that companies that comply with good corporate governance practices can establish high standards of organizational culture, thus reducing the dependence on the manager’s managerial skills on the organization’s results. Accordingly, management turnover would no longer be a determining factor in corporate efficiency, thus providing opportunities for new investigations on the joint effects of turnover and managerial skill on organizational decisions. This is important to show interested parties that long-term strategies will be maintained, even if the main executives are changed, who become mediators of the management process.

As a practical contribution, the results can serve as a discussion to improve manager selection processes by suggesting that companies with lower corporate governance practices and poor compliance with reference items of good corporate governance practices select more skilled managers. Accordingly, the results may be important for regulatory bodies (CVM), standard setters (IBGC) and corporate governance boards in their efforts to improve practices without discouraging the managerial skills of managers. Corporate governance in accordance with the guidebooks and regulations needs to encourage the manager’s freedom to serve the parties, and not restrict the ability to achieve maximum organizational efficiency.

It is noteworthy that, although the literature points to the positive influence of compliance with good corporate governance practices on company performance, it does not always result in better economic results for the organization. During the conduction of this research, it was possible to identify some limitations, such as the lack of information on some variables, which may have compromised the prediction. Additionally, as a limitation, one can consider the evaluation of skills based on the company’s economic indicators.

The limitations constitute a perspective for future research. It is suggested that studies are carried out to evaluate whether compliance with good corporate governance practices promotes the selection of managers with personality traits compatible with the business environment. New research on compliance could measure managerial skills with behavioral variables through a survey. It is also recommended to investigate the influence of compliance with good corporate governance practices on the managerial skills of managers in companies from other segments and from different countries.

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Compliance with good corporate governance practices and the managerial ability of managers


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Compliance with good corporate governance practices and the managerial ability of managers


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* A preprint version of the paper was presented at the International Conference in Management and Accounting, 2021.

NOTES

ACKNOWLEDGMENT
Does not apply.

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Review and approval: Dal Magro, C. B., Mazzioni, S.

FINANCING
The dataset that supports the results of this study is not publicly available.

FINANCIAMENTO
Does not apply.

CONSENT TO USE IMAGE
Does not apply.

APPROVAL OF THE RESEARCH ETHICS COMMITTEE
Does not apply.

CONFLICT OF INTERESTS
Does not apply.

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PUBLISHER
Federal University of Santa Catarina. Accounting Sciences Course and Postgraduate Program in Accounting. Publication on the [UFSC Journal Portal](https://doi.org/10.5007/2175-8069.2023.e84840). The ideas expressed in this article are the responsibility of their authors, and do not necessarily represent the opinion of the editors or the university.

EDITORS
José Alonso Borba, Denize Demarche Minatti Ferreira, Carlos Eduardo Facin Lavarda.

HISTORIC
Received on: 16/11/2021 - Peer reviewed on: 16/11/2022 - Reformulated on: 28/08/2023 - Recommended for publication on: 16/10/2023 - Published on: 08/12/2023