The Role of Governance and Integrated Reporting Quality in Stakeholder Value Creation

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ABSTRACT

Stakeholders have the power to enhance or destroy firms' value-creation capabilities, hence firms need to balance the interests of all stakeholders. Boards are argued to be the influential actors in this effort, but how boards contribute to stakeholder value creation (SVC) remains ambiguous. Hence, the present study aimed to fill this gap by examining the role of governance in SVC while examining whether the publication of quality integrated reports supports the boards' role in SVC. The sample consisted of 714 firm-year observations of internationally listed firms that adopted integrated reporting (IR). The content analysis of the integrated reports was utilized covering 2018 to 2020. The results indicated a significant and positive impact of governance on SVC, supporting the notion of the team production theory. The analysis further revealed that IR quality only had a main effect on SVC but not a strengthening effect on the nexus between governance and SVC. These findings provide theoretical support for the boards' function in advancing financial and non-financial value creation for the stakeholders. The important practical implication is the support that IR is more than mere corporate reports as it acts as a communication tool that facilitates stakeholder relationships, supporting the realization of SVC.

Keywords: Governance, Integrated Reporting Quality, IIRC Framework, Value Creation, Stakeholder Value

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INTRODUCTION

Operating in a challenging business environment has seen firms determinedly executing their business strategies and activities to achieve their competitive edge. However, where market economies thrive, billions face unpleasant ecological and social impacts due to aggressive business activities. Presently, trust in business stands at just 58 percent (Edelman, 2020), which harms business stability. To regain the trust of stakeholders, firms have pledged to move from the shareholder to stakeholder paradigm (Ernst and Young [EY], 2020). Firms have agreed on the need to fulfill the needs of multiple stakeholders via enhanced customer satisfaction, reduced carbon footprint, and better employee wellness (EY, 2021b). These elements of corporate goals are associated with the broader conception of value, specifically stakeholder value creation (SVC).

Directors are viewed as the relevant actors in creating various stakeholder values. They can decide between agency and stakeholder approaches to management (Windsor, 2017). Via the governance framework, rules are formed to boost cooperation among business players. This process involves outlining who holds the decision-making authority (who decides), and who monitors so that the self-interest issue can be rectified (who controls), and how value is being allocated (who gets what) (Klein et al., 2019). These functions appear associated with the way boards function. According to the team production theory, shareholders must not be treated as the only residual claimants of the firms, as other stakeholders also have their share of contribution, and thus need to be considered as part of the team (Kaufman & Englander, 2005). The team production theory also holds the board to act as a collective body that rewards multiple actors by ensuring their long-term prosperity (Blair et al., 2005). Drawing from this, it can be accentuated that good governance is a vital source of better outcomes for all stakeholders (Australian Institute of Company Directors [AICD] & Klynveld Peat Marwick Goerdeler [KPMG], 2019).

Despite the agreement that boards are highly accountable for creating value for the stakeholders, empirical evidence is thus far scant. Prior studies also remain ambiguous on how boards contribute to value creation (Huse & Gabrielsson, 2012; Vig & Datta, 2018). In addition, the dominant perception of value remains centered on financial terms. PricewaterhouseCoopers [PwC] (2020) emphasized that, currently, the sole aspect of the organizations that we can ascertain with a high level of confidence is their financial performance. This is possible because the agency theory has been the dominant approach until now (Huse et al., 2011), leading to a confined value creation perspective. A literature review has also exposed that most studies associate the outcome of governance with financial or shareholder value. It is largely skewed on two performance measures: return on assets and Tobin's Q (Arora & Sharma, 2016; Jesuka & Peixoto, 2022). Therefore, the present study aimed to fill the gap by examining the role of governance in SVC.

Besides examining the above relationship, this study was motivated to assess the function of integrated reporting (IR) in facilitating the board's effort to create value. Value creation is the underlying concept in IR, with over 100 times emphasized in the 2013 and 2021 International Integrated Reporting Framework (IIRF). Firms embracing IR are said to have an improved understanding of strategies, business models, and resource allocation decisions (International Federation of Accountants [IFAC] 2015). Accordingly, it provides firms with a systematic manner of managing the interests of all stakeholders. Further, firms typically utilize corporate reporting to instill trust, portray their commitment to the stakeholders, and offer public proof of what firms do in realizing their objectives (EY, 2020). The signalling theory postulates that firms utilize IR to manage shareholders, particularly their actions (Maama & Marimuthu, 2022), and bridge the firms' gap with the stakeholders (Adhikariparajuli et al., 2020). Consequently, it influences the information receivers' choice of investment, purchases, and employment (Connelly et al., 2011), thus providing firms with the required resources and capability to create greater value. Therefore, there is a possibility that IR may strengthen the relationship between governance and SVC. This gave rise to the second objective of this research.

This study contributes to the body of knowledge and practice. First, this study provides an ample discussion of value creation, particularly within the context of IR adopters. Besides, the role of governance and IR in promoting SVC can be verified. Instead of leaning on the mutual view of the agency theory, the present study provides a better perspective of value creation using the lens of the team production theory. The team production theory may pave the way to managing distinct stakeholders' needs and is a better reflection of how firms work as this theory places intense accountability on the board to carry out their fiduciary duties to stakeholders. The present study argued that the commonly applied agency theory is too confined to conceptualize SVC. In addition, exaggerating the agency problems to justify the use of the agency theory (Saha, 2023) is the oldest way of thinking because those conflicts can be minimized by the right board composition (Yadav & Jain, 2023).

Further, the current study included non-financial SVC components, extending from mere financial to extensive financial and non-financial measures. This study contributes to the firm's understanding of the need to ensure an excellent board composition to attain its significant benefits. Firms may also gain insights into the importance of publishing quality information in integrated reports. Policymakers and regulators may also track IR adopters' governance, disclosure quality, and value creation progress. The International Integrated Reporting Council (IIRC) may also assess the suitability of its framework based on the present findings.

The remainder of this paper is organised as follows. Section 2 briefly discusses the literature review and hypotheses development. Section 3 elaborates on the research methodology utilized by this study. Section 4 reports the empirical findings, while Section 5 concludes the paper.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Governance and Stakeholder Value Creation

The significant role of governance is to execute sound practices that may benefit the stakeholders (Salvioni et al., 2016). Board independence, board size, gender diversity, and board meetings are argued to drive value creation. For instance, independent boards are more inclined to assume higher accountability and transparency (Amran et al., 2014), hold broader viewpoints (Ong & Djajadikerta, 2018), and are greatly concerned over sustainability matters (Post et al., 2011). Mahoney (2012) emphasized that the board needs to be independent to effectively serve the stakeholders. This is in tandem with the team production theory that promotes boards to be independent by avoiding any influence that could damage their functions of serving the stakeholders (Blair & Stout, 1999).

Likewise, governance attributes that are orientated on driving environmental, social, and governance (ESG) commitment are also important to steer SVC. Prior studies have suggested that firms that form sustainability committees (Mackenzie, 2007), linking executive compensation to non-financial performance measures (Wang et al., 2020), and associate corporate vision and board experience with sustainability (Sahar et al., 2019) have a greater tendency to implement sustainable strategies that promote the realization of social value. This condition may thereby bring excellent capabilities for firms to create value. The team production theory also recommends that the board safeguard the stakeholders' well-being while refraining from any activities that may risk their relationship with stakeholders (Kaufman & Englander, 2005). Despite the positive influence of the above governance attributes on SVC, insignificant or adverse impacts between boards and value creation were reported. For example, board size (Ozdemir & Kilincarslan, 2021) and board gender diversity (Molla et al., 2023) had less influence on value creation. Rahman et al. (2021) reported that the sustainability committee insignificantly contributes to value creation. The result might be due to the committee's symbolic presence (Michelon & Parbonetti, 2012). Despite these findings, the current study believed that governance still has a vital role in SVC. Therefore, the first hypothesis was:

H1: There is a positive relationship between governance and SVC.

Governance, Integrated Reporting Quality, and Stakeholder Value Creation

The link between governance and value creation has been regularly examined. However, the results produced do not always converge. Villanueva-Villar, Rivo-Lopez and Lago-Penas (2016) discovered that independent directors enhanced value creation, contradicting Queiri et al. (2021). Prior studies introduced moderating variables (Franco et al., 2019), including IR (Grassmann, 2021), to explain the results. IR helps boards communicate how their strategy, governance, and performance support the firm's capability to create value (IIRC, 2021). Extensive disclosures on important matters like sustainability may signal that potentially significant risks are managed while minimizing the information asymmetry (De Villiers & Van Staden, 2011). The argument is in line with the signalling theory that emphasizes disclosure ability in sending distinct signals to and influencing responses from the market (Bae et al., 2018). Evidently, IR aids the board in addressing the information gap and expressing clearly how the board manages risks and creates wealth (IIRC, 2014). IR also assists in regaining public trust and supports the boards in raising sustainability awareness (Songini et al., 2023). The comprehensive and clearly communicated information may assist the readers in understanding the signal and reacting accordingly. Consequently, the boards' drive towards SVC can be enhanced.

Regardless, prior studies provide limited evidence of the moderating role of IR. Grassmann (2021) indicated that IR strengthens the relationship between corporate social responsibility (CSR) expenditures and firm value creation. Besides, prior studies revealed that IR can alter the relationship between financial reporting quality and cost of debt (Muttakin et al., 2020) and ESG disclosure and a firm's competitive advantage (Rabaya & Norman, 2022). Nonetheless, despite the proven moderating role of IR, the extent to which quality disclosure of integrated reports may strengthen the association between governance and value creation has not been examined. Further, the above studies merely utilized a dummy score to measure IR. Therefore, the present study aimed to examine this unexplored association by exclusively looking at IR quality. Hence, the second hypothesis was:

H2: IR quality strengthens the relationship between governance and SVC.

RESEARCH METHODOLOGY

Population and Sample Selection

This study collected a sample from the IR Examples Database. The database clusters the adopters according to Africa, Asia, Europe, Australasia, and American regions. Table 1 presents the sample selection procedure and its regional composition as of 24 December 2022. As indicated, 238 firms were selected over three years from 2018 until 2020, which led to 714 observations. Of this figure, most firms were from South Africa (35.71 percent) and Japan (28.57 percent). Additionally, 55.50 percent of sample firms were from developed countries, and 53.80 percent were from civil law countries.

Data Collection and Analysis

This study content analyzed the integrated reports to gather governance, IR quality, and SVC information. Content analysis is a common approach in the accounting literature, with over half of the researchers employing this method to assess corporate disclosure (Beattie, 2005). Following Oktorina et al. (2021), we downloaded, from the website, all reports titled Integrated Report, Integrated Annual Report, and Annual Integrated Report. Stata Software Version 17 was used to perform the regression analysis, and a few regression assumptions were tested to ensure the reliability and validity of the results.

Table 1: Sample Selection Procedure

Particular/ Region	Africa	Asia	Europe	Australasia & America	Total
Total adopters listed in the IIRC database	188	147	192	53	580
Less: Unlisted or delisted firms	31	6	25	8	70
Less: Not adopting in the year of study	1	3	56	15	75
Less: Annual report not available	16	15	26	4	61
Less: Report not in English	-	-	7	3	10
Less: Financial institutions and REITs	55	35	26	10	126
Final sample	85	88	52	13	238
Total firm-year observations			**714**		

Measurement of Variables

Governance

Unlike previous studies, this study incorporated sustainability next to the corporate governance mechanisms. Eight governance mechanisms were selected to represent both governance categories, i.e. board independence, board size, board gender diversity, board meeting, sustainability committee, executive compensation based on non-financial performance measures, sustainability vision or mission, and board sustainability experiences. Consistent with previous research, this study employed a composite governance score in grasping the overall strength of the governance framework rather than evaluating each attribute separately (Wang et al., 2020). Based on the dichotomous scoring method, the governance score was measured by the ratio of actual scores to the maximum possible scores (eight). Table 2 describes the governance measurement.

Table 2: Governance Measurement

Governance mechanisms	Measurement	Score
Board independence	The proportion of independent directors to total directors (Cooray, Gunarathne & Senaratne, 2020; Vitolla, Raimo & Rubino, 2019)	1 if above the sample median and 0 if otherwise
Board size	The number of Board of Directors (Cooray et al., 2020; Vitolla et al., 2020)	1 if above the sample median and 0 if otherwise
Board gender diversity	The proportion of women directors to total directors (Fasan & Mio, 2017)	1 if above the sample median and 0 if otherwise
Board meeting	The number of annual board meetings (Fasan & Mio, 2017; Vitolla et al., 2020)	1 if above the sample median and 0 if otherwise
Sustainability Committee	The establishment of specific sustainability/ CSR/social and ethics/risk and audit committees within the firm (Malola & Maroun, 2019)	1 if present and 0 if absence
Executive compensation based on non-financial performance measures	The use of both financial and non-financial performance measures in executives' compensation contracts (Wang et al., 2020)	1 if present and 0 if absence
Sustainability vision/mission	Linking the corporate vision or mission with the sustainability value (environmental, social, or governance) (Weng Foong, Amran, Iranmanesh & Foroughi, 2019)	1 if present and 0 if absence
Board sustainability experiences	The proportion of directors with sustainability-related experience to total directors (Amira, Nazli Anum & Sherliza, 2020)	1 if above the sample median and 0 if otherwise

Integrated Reporting Quality

Consistent with Nguyen et al. (2021), the study adopted an IR quality index developed by Kilic and Kuzey (2018). The index consisted of seven Content Elements drawn in the 2013 IIRC Framework: 1) Organisational Overview and External Environment; 2) Governance; 3) Business Model; 4) Risks and Opportunities; 5) Strategy and Resource Allocation; 6) Performance; and 7) Outlook. Instead of applying a binary score of 0 and 1 proposed by Kilic and Kuzey (2018), the current study adapted the scheme established by Oktorina et al. (2021), with a score interval of 0-1-2. A score of zero (0) was assigned for no disclosure, one (1) score for a brief mention of the disclosure items, and two (2) for detailed elaboration of information. With fifty disclosure items, a firm may attain a maximum score of 100 (50 items x 2 points).

Stakeholder Value Creation

SVC is the firm's accountability to fulfill the economic and social interests of the broader stakeholders. However, a specific measurement for value creation is thus far unavailable. EY (2021a) pointed out an absence of specific value creation measurements, and their survey respondents found it accommodating to have a framework for measuring value. Due to the composition of shareholders and non-shareholders in the stakeholder paradigm, it seemed suited to construct an index that blended financial and non-financial measures. The development of such an index was principally guided by the prescriptions of EY and IIRC (2013) in their Background Paper on Value Creation.

The development process involved five stages. The first stage involved extracting, reviewing, and analyzing the existing information sources to understand the value creation criteria. We gathered 141 relevant value-creation materials (articles, technical reports, books) from Google search, Google Scholar, Scopus, and Web of Science databases. In the second stage, the value creation criteria emphasized in these materials were assigned to the relevant stakeholder group (shareholders, employees, customers, and societies). Stage three identified suitable value creation attributes, and stage four entailed obtaining and reviewing feedback from academic and industry experts. The index validation process was participated by ten experts. One is employed in New Zealand, two in the United Kingdom, and seven resided in Malaysia. The experts included professors from higher learning institutions and officers from professional accounting bodies, Big 4 Accounting Firms, non-profit organizations, government-linked companies, and leading restaurant chain operators who are well-versed in stakeholder engagement and IR. Based on their feedback, the index was finalized in Stage 5. The finalized index encompassed four major stakeholder groups and 16 value-creation attributes, as displayed in Table 3. The SVC score was calculated as the ratio of the firms' actual value creation score to the maximum potential score, with 16 maximum scores and 0 minimum scores.

Table 3: SVC Index

	Stakeholder Group	Value Creation Attributes	Measurements	Score
1	**Shareholders**	Sound firm performance	a) Return on Assets (ROA): Net income/average assets	1 if ROA is above the sample median or 0 if otherwise
			b) Return on Equity (ROE): Net income/average shareholders' equity	1 if ROE is above the sample median or 0 if otherwise
		Technological advancement	Evidence of the use of advanced technology	1 if the firm uses advanced technology or 0 if otherwise
		Synergy creation	Evidence on the merger/acquisition / restructuring event/joint venture/strategic partnership	1 if merger/acquisition/restructuring/alliance occurs or 0 if otherwise.
2	**Employees**	Proper compensation	A proper employee compensation scheme is in place (bonuses, stock options, health insurance, pension plan, paid vacation time)	1 if the firm offers a proper compensation scheme or 0 if otherwise
		Talent retention	The availability of a talent retention plan	1 if the firm has a talent retention plan or 0 if otherwise
		Career and training development	The availability of career advancement and learning program	1 if the firm has a career advancement and learning program or 0 if otherwise
		Conducive working environment	A workplace wellness program is in place (workplace ethics and safety)	1 if the firm has a workplace wellness program or 0 if otherwise.
3	**Customers**	Quality products/ service	Award/recognition for brand value	1 if the firm receives any brand award or 0 if otherwise
		Product/ service innovation	Evidence on the introduction of new product/service	1 if there is a new product/service introduced or 0 if otherwise
		Upholding customer satisfaction	The existence of a customer satisfaction/loyalty program	1 if customer satisfaction/ loyalty program exists or 0 if otherwise

		Customer relationship management	On-going conversation/engagement with customers through the workshop, sending surveys, or customer service.	1 if the firm actively engages with customers or 0 if otherwise.
4	**Societies**	Donations to charitable organisations	Contribution made to charitable organisation	1 if there is a donation made to a charitable organisation or 0 if otherwise
		Involvement in voluntary work	Participation in the community project	1 if there is participation in a community project or 0 if otherwise
		Sustainability concern	Awards / recognition for good sustainability practices	1 if the firm receive any award relating to sustainability practices or 0 if otherwise
		Job creation	The existence of job offering	1 if the firm provides job opportunities to the community or 0 if otherwise.

Control Variables

Other factors can also influence SVC. Hence, the study incorporated firm size, firm age, firm growth, sales growth, country development level, and country law as control variables. Firm size was measured by total assets (Cooray et al., 2020), while firm age was measured by the number of years since the firm's establishment (Zheng et al., 2015). Additionally, we considered the influence of growth opportunities on SVC. In line with Gong et al. (2018), the firm growth proxied to the market-to-book ratio, while the sales growth proxied to the debt-to-equity ratio. Further, we used the classification of developed (1 score) or developing country (0 score) to measure the country's economic development level (Shi & Svensson, 2002). Lastly, we assigned a dichotomous score of one (1) for firms operating their businesses in a civil law country and a zero (0) score for a common law country (Girella et al., 2019).

RESEARCH FINDINGS

Descriptive Statistics

Table 4 presents the descriptive statistics for all the variables. Overall, the IR adopters created 75.10 percent value for their stakeholders. Certain firms created as minimal as 18.80 percent value, while several met all stakeholders' needs. The mean value of governance was 51.10 percent. Meanwhile, the quality of integrated reports, measured by their adherence to the IIRC framework, was 74%. The result indicated an above-average quality of integrated reports prepared by its adopters. Likewise, firms were substantially distinct in size, as witnessed in the deviation between the minimum and maximum values. The selected sample firms were as mature as 203 years, with the youngest of 4 years. The mean for firm growth and sales growth values were 2.213 and 5.647, respectively. Lastly, 56 percent and 54 percent of the sample firms operated in developed and civil law countries, respectively.

Table 4: Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
SVC	714	0.751	0.145	0.188	1
GOV	714	0.511	0.182	0	1
IRQ	714	0.740	0.096	0.430	0.990
Firm Size	714	25676329	53941796	13088	6.228e+08
Firm Age	714	66.466	43.021	4	203
Firm Growth	714	2.213	2.855	0.140	36.190
Sales Growth	714	5.647	21.327	-65.700	239.290
Country Dev	714	0.555	0.497	0	1
Country Law	714	0.538	0.499	0	1

Where: SVC = Scores of SVC; GOV= Composite scores of governance; IRQ = Scores of IRQ; Firm Size = Total assets in US Dollar; Firm Age = Number of firm's years since establishment; Firm Growth = Market-to-book ratio; Sales growth = Sales growth rate; Country Dev = Developed or developing country; Country Law = Civil or common law

Diagnostic Tests

We performed the Pearson correlation and Variance Inflation Factor (VIF) tests for all variables to detect the presence of multicollinearity problems. Results indicated that none of the correlation coefficients exceeded the recommended threshold of 0.80, demonstrating that multicollinearity was not a concern in this study (Gujarati & Porter, 2009). Likewise, the values of VIF for all concerned variables were less than 10, verifying the non-existence of multicollinearity. Before regression analysis, this study performed a diagnostic test to determine whether the study met the Ordinary Least Square (OLS) assumptions. We checked for heteroscedasticity, autocorrelation, and groupwise heteroscedasticity problems. The Breusch-Pagan, Wooldridge, and Modified Wald tests revealed the presence of these issues. Thus, we used the robust coefficient covariance method to cater to these problems (Gujarati & Porter, 2009).

Regression Results

The Poolability F-test, Breusch and Pagan Lagrange Multiplier (BPLM) test, and the Hausman test were executed to recognize the appropriate model for the present study. The Poolability F-test indicated that the Fixed Effect Model (FEM) was preferred over Pooled OLS, as the significant p-value implies. Further, the BPLM test revealed that the Random Effect Model (REM) was more suitable than Pooled OLS. Finally, the Hausman test deduced that REM was the preferred model for this study.

The relationship between governance and stakeholder value creation

Hypothesis 1 posited a positive association between governance and SVC. Table 5 presents the results of a one-way panel data regression analysis. As indicated in Table 5 (column 2), the governance structure was positively and significantly related to SVC at the $p < 0.10$ percent significant level. The adjusted R^2 implied that the variation in SVC could be 20.40 percent explained by the model. The governance estimated coefficients denoted 0.051 basis points enhancement in the SVC. This finding confirmed the primary view of the team production theory that governance is a crucial driver of SVC. It certified the boards' role as a wealth-creating team and that boards are not exclusively accountable to their principal (Blair & Stout, 1999). The finding of this study supported the team production argument that the board has the accountability of rewarding all stakeholders due to the stakeholders' collective contributions to the firms (Kaufman & Englander, 2005). The outcome of this research also demonstrated that the board renders a means of safeguarding the interest of the stakeholders. It was made possible via their involvement in decision-making (Hinna & Monteduro, 2017), and their valuable qualities have provided a better condition for expanding the overall team's benefits.

The positive findings of the present study suggested that boards possess the power to determine between agency and stakeholder styles of management (Windsor, 2017). This advocates the assertion that governance is imperative to realize a successful value creation strategy (EY, 2021c), which is consistent with the underlying premise of the team production theory. This study's positive finding extends the existing research work that is largely concentrated on the influence of governance on financial value creation. For instance, Al Farooque et al. (2020) and Tran et al. (2022) found that quality governance resulted in a favorable outcome for firms by way of enhanced ROA, ROE, and Tobin's Q. The finding of this study was beyond this economic perspective by highlighting that boards positively contribute to the attainment of financial (ROA and ROE) and non-financial value (14 non-financial value measures). Thus, the evidence of the contribution of boards on the extensive forms of value creation is made apparent by the present study. Further, our findings may enhance the governance literature currently showing inconsistent findings. A clear direction of the relationship is presented, and the need for quality board composition to drive value creation can be highlighted. Therefore, it can be reinstated that our finding echoed the team production theory that suggests that boards exercise their fiduciary role of serving the stakeholders, thus supporting the first hypothesis.

Table 5: One-Way Panel Data Regression Estimates

DV: SVC	REM Robust Standard Errors (Without Moderator)	REM Robust Standard Errors (With Moderator)
GOV	0.051*	-0.037
	(0.028)	(0.207)
IRQ	0.255***	0.194
	(0.061)	(0.160)
GOV*IRQ	-	0.122
		(0.284)

Firm Size	0.003	0.003
	(0.003)	(0.003)
Firm Age	0.002	0.002
	(0.010)	(0.010)
Firm Growth	0.013***	0.013***
	(0.003)	(0.003)
Sales Growth	0.148***	0.148***
	(0.054)	(0.054)
Country Dev	-0.105***	-0.104
	(0.016)	(0.016)
Country Law	-0.004	-0.004***
	(0.010)	(0.010)
Constant	-0.283	-0.236
	(0.308)	(0.312)
R-Squared	0.204	0.204
N	238	238

Note: Robust standard errors are reported in parenthesis, estimated coefficients are on top of parenthesis, and statistical significance levels are as follows: *** $p<0.01$, ** $p<0.05$, * $p<0.1$

The moderating role of integrated reporting quality on the relationship between governance and stakeholder value creation

Hypothesis 2 predicted that publishing quality integrated reports can improve the nexus between governance and SVC. However, according to Hair et al. (2021), a direct relationship between the moderating and dependent variables must first be determined to model the moderating effect. Subsequently, the moderation analysis can be performed to testify to its interaction effect with the independent variable. Thus, in explaining this moderating effect, we divided the discussions into two parts.

i. *The direct relationship between integrated reporting quality and stakeholder value creation*

As shown in Table 5 (column 2), a significant positive association between IR quality and SVC was seen. The coefficient value was 0.255 and significant at the $p < 0.01$. This finding supported that IR is an important source of value creation. This finding indicated that IR assists firms in having a better comprehension of the value creation process via integrated thinking and enhanced decision-making capabilities (Tlili et al., 2019). Previous evidence also showed that firms embracing IR transformed their thinking about strategies, business models, and resource allocation decisions (IFAC, 2015). These circumstances give firms a systematic tactic for managing their stakeholders.

ii. *The moderating effect of integrated reporting quality in the relationship between governance and stakeholder value creation*

As shown in Table 5 (column 3), IR quality did not strengthen the relationship between governance and SVC. The finding suggested that IR adopters benefited equally from its governance framework regardless of the extent of information presented in the integrated reports. The finding indicated that IR quality had an independent impact on SVC and did not alter the nature of the association between governance and SVC. Therefore, while former studies verified the role of IR as a moderator (Muttakin et al., 2020; Rabaya & Norman, 2022), our study could not support their findings. Consequently, we concluded that our finding was inconsistent with the arguments of the signalling theory; hence, Hypothesis 2 was not supported.

The finding of this study contradicts previous studies. This inconsistency may partly be attributed to their research setting which is completely diverse in variables and measures. For instance, Grassmann (2021) examined the moderating influence of IR in the association between environmental expenditure and firm value. Rabaya and Norman (2022) assessed how IR contributed to enhancing the relationship between sustainability disclosure and a firm's competitive advantage. In addition, these studies used a dichotomous score to measure IR, compared to the present study which used a disclosure index to measure IR adherence with reporting framework. A distinct measurement is one of the factors that contribute to the diversity in findings (Abdo & Fisher, 2007). The reporting behavior of the IR adopters might have also contributed to our varied findings. According to the Association of Chartered Certified Accountants [ACCA] (2017), firms are found to hold back certain information due to legal and competition concerns. Besides, firms tend to concentrate on financial disclosure to satisfy their financial providers' informational needs (ACCA, 2017). This reporting style was also apparent in our study. This condition may weaken the possibility of sending useful information to the general stakeholders, hindering the fulfillment of SVC.

Based on this rationale, we reinstate that IR quality does not have a strengthening effect. This is in contrast to the signalling theory that promotes the signalling power of corporate reporting in sending valuable signals to the market and gaining favourable responses (Bae et al., 2018). The fundamental signalling objective of corporate reports to minimize information asymmetry (De Villiers & Van Staden, 2011) in supporting boards' efforts to enhance SVC could not be affirmed by the present study. This indicates an inconsistency in the findings of the present and several past studies (Grassmann, 2021; Rabaya & Norman, 2022).

The relationship between control variables and stakeholder value creation

As indicated in Table 5, only two control variables were significantly related to SVC. Columns two and three consistently reported that firm growth and sales growth significantly influenced SVC at the $p < 0.01$. This finding favored the view that the firm's ability to create value is substantially conditional on the firm's ability to grow (Iturriaga & Crisóstomo, 2010). Besides growth, column two indicates that firms in developed countries do not contribute to SVC. However, the finding was not consistent in column 3. In this perspective, firms that carried out businesses in developed countries demonstrated a diminishing commitment to meeting their stakeholders' needs. This is possible because they are substantially interested in innovation (Fasan et al., 2016), thus limiting their attention to the stakeholders. The inconsistent finding was also reported in the case of the country's legal system.

Additional Analyses

Two additional analyses tested the correlation between governance, IR quality, and SVC. In the first analysis, the study examined the impact of each governance mechanism on SVC. The findings indicated that only two board mechanisms, i.e. board independence and board gender diversity, were positively and significantly related to SVC. It was also discovered that IR quality, firm growth, and sales growth were positively related to SVC. In contrast, country development was negatively related to SVC. The second analysis examined the influence of governance and IR quality on various forms of value creation, specifically ROA, ROE, and non-financial value creation (NFVC). It was revealed that governance had a significant and positive impact on NFVC, but an insignificant negative impact on ROA and ROE. The direct association between IR quality and ROA and NFVC was significant and positive at the $p < 0.10$ and $p < 0.01$ levels, respectively. Regardless, the interaction term between governance and IR quality on all forms of value creation was insignificant. Accordingly, the present study could not verify the idea that IR quality played a role as a moderator.

CONCLUSION

This study analyzed the impact of governance on SVC. Moreover, we included IR quality as a moderator of this relationship. Utilizing 714 firm-year observations between 2018 and 2020 from an international perspective (global IR adopters), we discovered that firms created an average value of 75 percent for their stakeholders. Firms were observed to utilize approximately four out of eight mechanisms in their governance structure. Besides, the quality of integrated reports prepared by the IR adopters stood at 74 percent. Based on the REM, boards were found to play a significant role in meeting the needs of stakeholders. This affirmed the team production theory that regards the board as an influential mediating hierarchy that manages diverse stakeholder needs. Despite this, the present study reported no amplifying effect of IR quality on the association between governance and SVC, thus deviating from the predictions of the signalling theory. This is possibly contributed by the firms' reporting behaviour that remains encircled around financial matters, thus failing to convey wide-ranging information concerning firms. Moreover, the additional analysis further indicated that only board independence and gender diversity drove the execution of valuable activities for stakeholders. In addition, the board's role appeared significant in generating non-financial value. Though no moderating effect was recorded, the direct effect of IR quality on SVC remained robust in all additional analyses.

This study renders valuable theoretical and practical implications. Firstly, our research expands the extant literature by implying governance as a major driver of SVC. Instead of linking the board's role in boosting shareholders' and firms' value, this study proposed that boards are accountable to all stakeholders. This study also suggested that quality integrated reports help firms to promote value creation agenda, though no moderating influence was recorded. This study also detailed the application of the team production theory and signalling theory for the case of the SVC framework. Practically, this study encourages firms to ensure a quality composition of their boards and effective corporate communication in yielding the most total benefits. The IIRC and other regulatory bodies may benefit from our findings in encouraging IR adopters to enhance the quality of integrated reports and implement an effective governance framework. Another important implication is the support for a broader value conception, which may be gained via the implementation of an effective governance system.

This study is not without limitations. Our concentration on eight governance mechanisms might not be sufficient to capture the board's intention to serve stakeholders. Future research may consider other elements that may be instrumental in value creation. Besides, we only focused on 16 value-creation attributes to represent four stakeholder groups. Future research may expand the scope of our index and capture multiple stakeholder groups. We also provided findings from a limited time frame, which future studies can extend by considering the latest 2021 IIRC framework. Due to the unsupported moderating function of IR quality, future research may examine other potential moderating variables such as media coverage, ownership structure, and corporate culture.

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