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## Article

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Article

# Empirically Investigating the Disclosure of Nonfinancial Information: A Content Study on Corporations Listed in the Saudi Capital Market

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**Abstract:** This study empirically assesses the disclosure of nonfinancial information in corporate reporting. In examining the contents of annual and board reports for 50 listed corporations, a coding sheet was developed by combining the two coding sheets of Boshnak and the European Directive 2014/95/EU. All corporations in three sectors—energy, utilities, and materials, which collectively represents 85.51% of the Saudi market capitalization—encompass the sample. Results reveal that employees, community, and products and services information have a moderate disclosure level. In contrast, environmental, customers, and fighting corruption have a low level. The findings also show that nonfinancial disclosure of the selected sectors on average range between 28.85% for the corporations in the material sector to 39.22% for the corporations in utilities sector. The corporations in the energy sector scored, on average, 37.65%. The mean for the entire sample of the ratios of disclosed nonfinancial items is 30.35%. However, the average disclosure level is without substantial improvement since 2012 and 2013, as previously reported The Capital Market Authority (CMA) is recommended to mandate nonfinancial information disclosure. It is a step toward realization aspects of Saudi Vision 2030 concerning with, for instance, protecting environment and other related matters.

**Keywords:** Saudi capital market; corporate reporting; nonfinancial information disclosure; voluntary discloser; emerging markets



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## 1. Introduction

One of the foremost objectives of corporate reporting is for the users to understand the underlying economic values of corporations. Corporate reporting plays a vital role in the efficiency and operation of capital markets (Healy and Palepu 2001), and it is a reliable “window into companies’ thoughts and priorities” (Perrini 2006, p. 75) to evaluate the companies’ past, to forecast their future, to decide upon their potential, performance and speculate their continuation. Corporations provide external users with information that is necessary to attract them for investing their wealth and financing their operations. Corporate reporting is not limited to the financial information. Users of corporate reports need to be well informed about an entity to make economically rational decisions. The accounting profession through corporate reporting enhances investor’s confidence (Al-Hazzani and Al-Adeem 2020) and reports relevant and reliable information comprehensively and adequately.

In corporate reporting, comprehensiveness is achieved in conveying nonfinancial information to the conventional function of corporate reporting to provide financial information. Evidently, “nonfinancial performance measures enhance the value of financial measures due to the interactive effects between the two measures” (Maines et al. 2002, p. 360). Corporate reports that provide nonfinancial performance information potentially enable users to assess and forecast corporate financial performance (Behn and Riley 1999). Both types of information complement each other to enhance users’ awareness about diverse aspects of

a corporation (Amir and Lev 1996; Arvidsson 2011). Nonfinancial information has value relevance to the reported financial information in the corporate reporting financial figures (Simpson 2010).

Amir and Lev (1996) call for expanding the corporate reporting function to include nonfinancial information. By including information on social and environmental aspects of a corporation, nonfinancial reporting complements the corporate economic representation that is already evoked in financial information (Perrini 2006). Reporting financial and nonfinancial information on a mandatory or voluntary basis is a fundamental characteristic of corporate reporting practices (Sarioğlu et al. 2019).

Focused on a wide range of areas other than health, safety, and environment, nonfinancial reporting enhances the sustainability of corporate reporting (Perrini 2006). Tamas-Szora (2016) reported that environment, social, staff affairs, respecting human rights, anticorruption and antibribery are the main five reporting areas that maintain the quality of non-financial information and guide its use.

While most countries disclose the nonfinancial information in voluntary context, nonfinancial disclosure is compulsory in some regions such as the European countries. The European Commission has mandated the nonfinancial reporting by its Directive 2014/95/EU (Mion and Adauí 2020) which requires the public interest entities “with more than 500 employees to disclose non-financial and diversity information in their financial statements or in separate, independent documents” (Caputo et al. 2020, p. 1; see also Tamas-Szora 2016). Weber et al. (2018) observed that several companies in 2018 issued their annual reports according to the new regulation in the European Union (EU) by including the mandatory nonfinancial disclosures as a consequence of the new regulation. After adopting its legislation to Directive 2014/95/EU through Royal Decree-Law 18/2017, Spanish Companies report high rates of nonfinancial disclosure (Sierra-García et al. 2018). Arguably, financial reporting is anticipated to grow to match the stakeholders’ demand for more information regarding environmental, social, and governance impacts (Markota Vukić et al. 2018).

By shedding light on the value added of nonfinancial reporting to users of financial statements, this study contributes to our knowledge on whether corporate reporting discloses voluntary non-financial information in the Saudi capital market. It adds to the growing body of accounting literature on Saudi corporate disclosure in general (e.g., Alsaeed 2006) and on voluntary disclosure in particular (e.g., Habbash et al. 2016; Al-Janadi et al. 2012; Al-Janadi et al. 2013; Al-Razeen and Karbhari 2004). The sampled corporations comprise companies in three sectors, namely, energy, material, and utilities. These three sectors represent 85.51% of the total market capitalization of Saudi capital market in 2019.

The remainder of this paper is organized as follows: Section 2 reviews related literature of nonfinancial reporting. Section 3 details the research method. Section 4 presents and discusses research findings. Section 5 discusses the implications of the findings and concludes that good nonfinancial reporting infrastructure exists in the Saudi capital market. However, the average disclosure level is without substantial improvement since 2012 and 2013.

## 2. Literature Review

### 2.1. Nonfinancial Information Is a Segment of the Communication Function of Corporate Reporting

Different definitions have been offered for accounting. One of the most cited ones<sup>1</sup> is the *A Statement of Basic Accounting Theory's* (ASOBAT 1966). Accounting is “the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information”<sup>2</sup> (ASOBAT 1966, p. 1). According to this definition, communicating information about economic events to users with the intent of rationalizing their investment decisions is a function that corporate accounting has assumed in a corporate economy.

The corporate model where ownership and management are separated (Berle and Means 1932) characterizes a long-lasting encounter to corporate accounting since the advent of a corporation as a model for dictating the conduct of business (Al-Adeem 2017a, 2021;

Al-Adeem and Fogarty 2010; Al-Hazzani and Al-Adeem 2020; Merino 1993; Previts and Merino 1998). What the contents of corporate reporting should be remains an open question to the present day.

Attempting to theorize corporate reporting, accounting academics and researchers, accounting academic organizations and accounting professional bodies have put forward theories for corporate reporting<sup>3</sup>. However, none of them has gained the necessary acceptance to become the accounting theory (Al-Adeem 2017a, 2017b, 2017c, 2019a, 2019b, 2021; Al-Adeem and Fogarty 2010; Al-Hazzani and Al-Adeem 2020); *Statement on Accounting Theory and Theory Acceptance* (SATTA 1997)<sup>4</sup>; (Beaver 2002; Belkaoui 2004; Chatfield 1977; Coetsee 2010; Gaffikin 1987; Garcia 2017; King 2006; Lee 2009).

At the professional level, corporate reporting has been expanded in scope to accommodate the expanded users' needs for more information about their corporations. The impossibility of capturing economic reality to contain it in corporate financial statements (White et al. 2002) justifies such an expansion. Corporate reporting is expanded to cover business and corporate sustainability<sup>5</sup>, corporate social responsibility (see for example Rupley et al. 2017), triple-bottom line<sup>6</sup> along with reporting intellectual capital (see for example, Guthrie 2001; Guthrie et al. 2001; Mouritsen et al. 2004; Petty and Guthrie 2000). Such a broadness in corporate reporting signifies needed information that financial statements lack.

The function of communication through corporate reporting potentially mitigates agency issue that the corporate model symbolizes. External parties are intended to be served by nonfinancial information in addition to financial information through corporate reporting. Integrating reporting on such matters in corporate reporting yields integrated reporting (see Humphrey et al. 2017; Maama and Mkhize 2020; Rezaee 2017) that best serves users of corporate accounting. Corporate disclosure encompasses financial and nonfinancial information conveyed by formal and informal channels of communication (Gibbins et al. 1990, 1992). "Financial disclosure is defined as any deliberate release of financial information, whether numerical or qualitative, required or voluntary, or via formal or informal channel" (Gibbins et al. 1990, p. 122). Since nonfinancial is an unstandardized form of corporate disclosure, exploring the practice of corporate reporting is ironic. An empirical investigation revealed that users in Saudi Arabia value information conveyed in the annual reports and considers them the most important source of information (Al-Razeen and Karbhari 2004).

## 2.2. A Brief History of Nonfinancial Reporting

Since the beginning of the 19th century, the industrial revolution has affected corporate reporting's focus when corporations started to be concerned about corporate social responsibility (CSR) of women's rights and social inequalities of their employees (Markota Vukić et al. 2018). The 1970s witnessed criticism toward negative impacts of corporations on the environmental and social aspects (Bruntland 1987). An awareness toward reporting nonfinancial information to develop the sustainability and to integrate economic and ecological considerations in decision making has emerged (Bruntland 1987). In the early 1990s, corporations have been reporting nonfinancial information to illustrate their commitment toward society by producing environmental, social and sustainability reports (as cited in Kolk 2003, p. 280).

Nonfinancial reporting has increased substantially since the publication of the first separate environmental reports in 1989 (Kolk 2004). According to a study conducted by KPMG (2002)<sup>7</sup> in 19 countries, an increase in nonfinancial reporting from 13% in 1993, to 17% in 1996, 24% in 1999, and 28% in 2002 is reported.

## 2.3. Recognizing the Need for Nonfinancial Reporting

Corporate scandals shed light on measures increasing in popularity, which include a wide range of environmental performance indicators and the way of dealing with workers to corporate governance and providing charities (Chatterji and Levine 2006). Criticizing the

current corporate reporting model for not responding to changes in environment, [Jenkins \(1994\)](#)<sup>8</sup> observed that the existing corporate reporting model failed to fully fulfil the needs of a wide range of users, and he suggested to go beyond the financial reporting to include nonfinancial measures (see also [Nielsen and Roslender 2015](#)).

Companies vary in the manner of defining, preparing, and reporting the nonfinancial reports ([Perrini 2006](#)). [Erkens et al. \(2015, p. 25\)](#) define nonfinancial reporting as

“Disclosure provided to outsiders of the organization on dimensions of performance other than the traditional assessment of financial performance from the shareholders and debt-holders’ viewpoint. This definition includes, but is not limited to, items related to social and environmental accounting, CSR, and intellectual capital disclosed outside the financial statements”.

Nonfinancial reporting to investors is crucial, which is widely recognized ([Hirschey et al. 2001](#)). Nonfinancial information positively impacts individual investor’s investment decision ([Naveed et al. 2020](#)). Nonfinancial reporting gives the investors a better perception through providing more information about different important aspects ([Landau et al. 2020](#)). [Ernest & Young \(2017\)](#)<sup>9</sup>, conducted a study that showed that the nonfinancial reports are highly significant for users and that 68% of investors use the nonfinancial reports to make their investment decisions.

From a business’ perspective, the nonfinancial information disclosure and the inclusion of environmental, social, and governance activities is critical for strengthening the corporate reputation with customers and contribute more to the decision-making process ([Ernest & Young 2021](#))<sup>10</sup>. Markets do react to environmental news ([Gupta and Goldar \(2005\)](#)). The need for engaging environmental aspects in the decision making is indispensable for sustainability development ([Bruntland 1987](#)).

Disclosing nonfinancial information along with financial information complements the corporate reporting in a consistent manner and provides the investors relevant information ([Arvidsson 2011](#)). [Brazel et al. \(2009\)](#) found that nonfinancial information can be used to detect the inconsistency among patterns in financial and nonfinancial information, which is a significant indicator of financial fraud.

Nonfinancial information can be a useful device to predict stock returns (see [Luft 2009](#)). Particular nonfinancial measures such as employees’ satisfaction and customers’ satisfaction are very useful for managers in predicting future earnings ([Banker and Mashruwala 2007](#)). In addition, the market’s assessment of accounting performance is affected by nonfinancial measures such as customer satisfaction ([Ittner and Larcker 1998, p. 32](#)).

Advocates of nonfinancial information reporting promote that such information, when disclosed, provides better insights into the value creation of a firm ([Landau et al. 2020](#)). Arguably, nonfinancial information gives more focus on the factors that impact the value creation for the long term ([Nielsen and Roslender 2015](#)).

From the practitioner and researchers’ viewpoint, the use of nonfinancial measures in the managerial control systems of firms has considerable influence ([Banker and Mashruwala 2007](#)). Nonfinancial performance measures are a part of a balanced scorecard system that plays a role in building long-term value for shareholders that should assist stakeholders such as customers, societies, standard setters, and potential staffs to evaluate the social performance of firm ([Chatterji and Levine 2006](#)). The use of nonfinancial measures is justified based on the assumption that these measures could be indicators for future financial performance ([Banker and Mashruwala 2007](#)).

Nonfinancial information indicates the future profitability and enhances the level of social performance when the stakeholders prefer the firms that are more socially responsible and have the ability to reward it ([Chatterji and Levine 2006](#)). Moreover, several nonfinancial indicators are considered as highly value relevant such as the growth proxy and operating performance measures ([Amir and Lev 1996](#)). Nonfinancial information is considered as essential incremental information over financial ratios when predicting value drivers: growth, profitability, and risk ([Laitinen 2004](#)).



#### 2.4. Corporate Reporting in the Saudi Capital Market: Closely Looked

Since its establishment in 1985, the Saudi capital market has been emerging and is at a relatively early stage of its development (Al-Razeen and Karbhari 2004; Al-Adeem and Al-Sogair 2019). The Minister of Commerce issued the Ministerial Resolution No. 692, on 11/11/1985. Later, a professional accounting body, i.e., the Saudi Organization for Auditors and Accountants<sup>11</sup>, was founded in 1993 (Al-Razeen and Karbhari 2004) for professionally organizing the accounting profession and the audit function in Saudi Arabia. The Saudi capital market shows evidence against the Efficient Market Hypothesis (Lamouchi 2020). However, researchers assume that such a market operates a weak form of the market efficiency (Alabaas 2008; Al-Adeem 2017d; Al-Adeem and Al-Sogair 2019; Al-Salman 2007; Alzahrani 2010). The issuance of financial statements by publicly held corporations is mandatory, standardized and regulated in the Saudi capital market. Their contents are considered as publicly available information.

In the Saudi capital market, three main market regulatory bodies exist, namely, the Capital Market Authority (CMA), the Ministry of Commerce and Investment, and the Saudi Central Bank. CMA is in charge of regulating capital markets, including the Saudi Exchange<sup>12</sup>, known as Tadawul. On 19 March 2007, the Saudi Stock Exchange (Tadawul) was established as the official stock exchange in Saudi Arabia (Lamouchi 2020). Moreover, the Ministry of Commerce and Investment is responsible for company law, regulating trade, expanding the private sector, and all relevant laws and rules. The Central Bank regulates the banking, insurance, and other finance sectors in Saudi Arabia.

The Saudi capital market differs from those of developed countries. Generally, emerging markets have possibility of high growth, relatively weak regulatory environment, weak corporate governance leading to expropriation of minority shareholders, and low level of information disclosure, causing a high information gap among firms and investors (Alturki 2014). Saudi Arabia is “one of the pioneers in corporate governance in the Middle East” (Al-Aali et al. 2014, p. 1332). Projections toward the Saudi economy have been virtually positive. Forecasted in 2017, Saudi Arabia was to have growth in the year of 2020. Specifically, Saudi Arabia is one of the world’s fastest-growing nations, with per-capita income expected to rise from USD 25,000 in 2012 to USD 33,500 by 2020.<sup>13</sup> Contemporarily, the economy seems to be recovering from COVID-19. The General Authority for Statistics (GASTAT) declared that “Saudi Arabia recorded a positive growth rate for the first time since the start of COVID-19 pandemic by 1.5% in Q2/2021 compared to Q2/2020”<sup>14</sup>.

In the Saudi capital market, the annual corporate report is considered the only official source of information about companies’ performance (Al-Razeen and Karbhari 2004). However, by assessing the magnitudes of disclosure in the annual reports of specific Saudi firms, Alsaeed (2006) demonstrated that the average level of disclosure in the annual reports of non-financial Saudi firms is low, an indication of the need for more disclosures to fill the gap between information available about companies and the information needed by the investors. Alsaeed (2006) further brought attention to the need for more research on emerging markets exists due to its imperative role in developing the weak transparency and disclosure situation by attracting the attention of regulatory authority and corporations.

In the context of nonfinancial reporting, Alturki (2014) demonstrated that voluntary non-financial disclosure level of publicly traded firms in Saudi Arabia is considered moderate and the choice to disclose is left to the discretion of management. The average voluntary disclosure in Saudi Arabia is 18.38%, which is the lowest rate of the countries studied, compared to 26.08% in Tunisia and 75.76% in Bahrain (Habbash et al. 2016). Such a rate is not commensurate with the size of the Saudi market and economy (Habbash et al. 2016). By studying 2012 and 2013 annual reports, Abdulhaq et al. (2015) reported that 36% of nonfinancial information is disclosed. Boshnak (2021) analyzed half of the Saudi listed firms’ annual reports over the period 2016–2018 and reported a higher level of 68% of voluntary disclosure of social and environmental information. Boshnak (2021) articulated that such an improvement might be attributed to the implementation of international financial reporting standards (IFRS) by Saudi listed firms. In fact, publicly held corporations have

been mandated to prepare their financial statements in accordance with IFRS starting 1 January 2017. Acknowledging the variation of reported level of nonfinancial information of Saudi corporate reporting in the literature, this paper investigates 2019 annual reports for the voluntary disclosure of nonfinancial information in three sectors: energy, materials, and utilities.

### 3. Research Method

#### 3.1. Research Instrument for Data Collection

A coding sheet that consists of 34 disclosing items under seven categories was used for coding the sampled corporate reports. These categories are environmental, employees, community, product and services, customers, human right, and anticorruption and bribery. The coding sheet was developed by combining Boshnak’s (2021) coding sheet, which is based on the global reporting initiative-G4 guidelines, with the European Directive 2014/95/EU.

The process of combining the two coding sheets of Boshnak (2021) and the European Directive 2014/95/EU was conducted in four steps. First, two items (establishing non-profit projects and charity, donations, zakat, hajj, Quran and ongoing charity) were listed under the community matters instead of environmental related matters. This is because the society, not the environment, is the main beneficiary. Second, an item concerning human rights was listed as a distinct category instead of categorizing it as an environmental related matter. Third, deleting an item due to duplication. The item labelled as ‘innovation and product development’ was listed under two categories that are ‘environmental’ in addition to ‘product and services.’ Last, four items from the European Directive 2014/95/EU, namely health and safety at work, diversity of competence, more diversified on boards, instruments to fight corruption and bribery, were added. Modifications to the coding sheet of Boshnak (2021) were necessary to enhance its usability and suitability for best serving the purpose of this study. Appendix A displays the coding sheet used in the coding procedure.

#### 3.2. The Sampled Corporate Reports

The sample consists of 50 companies, mainly from three sectors, namely, energy, utilities, and materials. The nature of activities in the selected sectors has a direct impact on the environment and community. The three sectors’ market capitalization collectively represents 85.51% of the total market capitalization of the Saudi capital market for the sampled year 2019 as demonstrated in Table 1.

**Table 1.** Market capitalization for each sector in 2019.

Sector	Total Market Capitalization	%
Energy	7,089,144,660,000	78.55%
Utilities	86,556,026,939.3	1%
Materials	541,863,065,508.78	6%
Total three sectors market capitalization	7,717,563,752,448	85.51%
Total Market Capitalization in Saudi Capital Market	9,025,438,669,340.85	100%

#### 3.3. Coding Procedure

After the annual reports and board of director reports were examined, each item in the template was coded. The coding sheet contains the seven categories with 34 items. The items were coded dichotomously as (1) or (0) in the coding sheet, where (1) indicates that the sampled corporation discloses the item in its reports, while (0) indicates that the company does not disclose it. The ratio for each category is calculated by dividing the number of items disclosed in each category by the total items listed under the category.

## 4. Research Findings and Discussion

### 4.1. Background Data and Descriptive Statistics

Table 2 illustrates the selected sample with information related to its establishing date, when it publicly traded, its total assets, net income, and capitalization. The energy sector consists of five companies, the utilities sector consists of three companies, and the material sector consists of 42 companies making the total sampled corporations 50 companies.

Table 2 presents information of the entire sampled corporation. It provides information for each corporation such as the name of the corporation, its trading name, when it became public, and the value of its total assets, net income and capitalization in the sampled year.

The averages of total assets, net income and capitalization of five corporations that comprise the energy sector are SR 409,664,739 (with a standard deviation of SR 633,868,789), SR 127,929,893 (with a standard deviation of SR 168,030,909.9), and 1,417,873,764,000 (with a standard deviation of 3,148,463,897,339.78) consequently.

The utility sector consists of three corporations that display higher means for total assets which is SR 1,000,113,863 (with a standard deviation of SR 965,863,854.7). However, the means of the other two items were lower in comparison to the energy sector. The means of net income and capitalization are SR, 78,494,736 (with a standard deviation of SR 71,416,305.5), and 28,855,342,313 (with a standard deviation of 47,985,897,708) subsequently.

The material sector displays a higher mean for the net income of SR 4,103,688,024 (with a standard deviation of SR 15,256,943,979) in comparison to the other two sectors. The mean of the net income of corporations that are in the material sector is lower than the means of both sectors which is found to be SR 34,295,895 (with a standard deviation of SR 292,669,826) and so for the mean of capitalization which is SR 12,901,501,560 (with a standard deviation of SR 43,793,988,925).

### 4.2. Measuring Disclosed Nonfinancial Information: An Empirically Constructed Index

This section details the research findings. Table 3 provides a comprehensive index for each company under each category of the index for measuring nonfinancial disclosure. For each company, its corporate reports are examined and coded. The number of nonfinancial items that are disclosed are counted and summed up. They are also reported in Table 3 as ratios for each item. Then, the ratios for items disclosed in the corporate reports are averaged to represent a measure of disclosed nonfinancial information for a corporation. Last, the ratios for all the corporations in a sector have been averaged to measure the extend to which nonfinancial information is disclosed by sectors included in the study. Hence, Table 3 presents the scores, ratios, and percentage for each area, company, and sector as follows:

As clearly shown in Table 3, Aramco and SABIC have the highest level of nonfinancial disclosure with 91.17% and 91.18%, respectively. Aramco has the highest market capitalization, which represents 78% of the total market capitalization in Saudi capital market. According to (The Arabian Sun 2020), Aramco completes acquisition of 70% stake in SABIC. After Aramco and SABIC, GASCO comes the second highest level of nonfinancial disclosure with a score of 61.76% then FIBCO and SABIC AGRI-NUTRIENTS with a score of 58.82%. On the other hand, with a score of 5.88%, AWPT and ASLAK have the lowest level of nonfinancial disclosure. While AWPT is newly listed in the Saudi capital market, ASLAK was listed in 1990. The time of being publicly traded corporation arguably does not appear a contributing factor for gaining experience in disclosing nonfinancial information. With a score of 8.82%, SARCO, ALUJAIN, and OASIS have the second lowest level of disclosure. The remaining companies' nonfinancial disclosures range between 11.76% and 50.00%.



**Table 2.** Background data and descriptive statistics.

Company Name	Trading Name	Establishing Date	Publicly Traded in	Total Assets	Net Income	Capitalization
<b>Energy Sector</b>						
Saudi Arabia Refineries Co.	SARCO	June, 1960	NA	456,022,000	17,170,699	670,500,000
Saudi Arabian Oil Co.	SAUDI ARAMCO	November, 1988	December, 2019	1,494,126,000	330,693,000	7,050,000,000,000
Rabigh Refining and Petrochemical Co.	PETRO RABIGH	September, 2005	January, 2008	74,029,648	(602,960)	18,974,160,000
National Shipping Company of Saudi Arabia	BAHRI	January, 1978	NA	20,560,827	645,070	15,974,160,000
Aldrees Petroleum and Transport Services Co.	ALDREES	September, 1962	March, 2006	3,585,220	291,743,658	3,750,000,000
	Mean			409,664,739	127,929,893	1,417,873,764,000
	SD			633,868,789	168,030,909.9	3,148,463,897,339.78
	MAX			1,494,126,000	330,693,000	7,050,000,000,000
	MIN			3,585,220	−602,960	670,500,000
<b>Utilities Sector</b>						
National Gas and Industrialization Co.	GASCO	December, 1963	NA	2,114,580,974	142,369,283	2,317,500,000
Alkhorayef Water and Power Technologies Co.	AWPT	January, 1991	March, 2021	405,930,624	91,727,369	0
Saudi Electricity Co.	SAUDI ELECTRICITY	April, 2000	NA	479,829,990	1,387,557	84,248,526,939.30
	Mean			1,000,113,863	78,494,736	28,855,342,313
	SD			965,863,854.7	71,416,305.5	47985897708
	MAX			2,114,580,974	142,369,283	84,248,526,939
	MIN			405,930,624	1,387,557	0
<b>Materials</b>						
Takween Advanced Industries Co.	TAKWEEN	October, 1993	February, 2012	1,966,409	(96,717)	760,000,000
Middle East Paper Co.	MEPCO	August, 2000	May, 2015	1,567,810,754	6,127,972	715,000,000
Basic Chemical Industries Co.	BCI	February, 1973	June, 2008	756,351,951	59,385,672	659,450,000
Saudi Arabian Mining Co.	MAADEN	March, 1997	July, 2008	97,657,597,048	(1,528,137,524)	54,638,246,882.40
United Wire Factories Co.	ASLAK	October, 1990	August, 2011	603,217,953	22,118,397	761,670,000
Al Yamamah Steel Industries	ALYAMAMAH STEEL	January, 1989	May, 2016	1,552,124,684	(38,463,736)	960,120,000
Saudi Steel Pipe Co.	SSP	June, 1980	August, 2009	1,118,893,791	(26,828,587)	1,054,680,000
Methanol Chemicals Co.	CHEMANOL	August, 1989	September, 2008	1,943,037,580	(84,075,501)	1,007,010,000

Table 2. Cont.

Company Name	Trading Name	Establishing Date	Publicly Traded in	Total Assets	Net Income	Capitalization
<b>Materials</b>						
National Petrochemical Co.	PETROCHEM	Sepember, 2007	August, 2009	19,015,723	1,018,161	11,395,200,000
Saudi Basic Industries Corp.	SABIC	January, 1977	NA	310,365,751	8,462,836	281,700,000,000
SABIC Agri-Nutrients Co.	SABIC AGRY-NUTRIENTS	Sepember, 1965	March, 1990	9,662,542	1,473,919	32,291,666,615
National Industrialization Co.	TASNEE	May, 1985	NA	22,939,499	(1,843,256)	9,150,745,790.88
National Gypsum Co.	NGC	April, 1959	NA	464,265,968	10,906,493	430,033,337.86
The National Company for Glass Industries	ZOUJAJ	January, 1990	NA	739,153,713	(29,852,802)	581,014,000
Alujain Holding Corp.	ALUJAIN	December, 1991	NA	1,496,722	191,166	2,076,000,000
Filing and Packing Materials Manufacturing Co.	FIPCO	June, 1991	June, 1991	292,670,777	(26,026,206)	332,350,000
Arabian Pipes Co.	APC	August, 1991	December, 1992	1,133,887,000	28,705,000	510,400,000
Nama Chemicals Co.	NAMA CHEMICALS	May, 1992	October, 1998	1,302,602,000	1,176,000	555,542,400
National Metal Manufacturing and Casting Co.	MAADANIYAH	December, 1990	NA	452,356,132	(65,108,989)	429,552,719.92
Zamil Industrial Investment Co.	ZAMIL INDUST	July, 1998	February, 2002	5,643,398	(129,710)	1,089,600,000
Saudi Industrial Investment Group	SIIG	January, 1996	February, 2004	22,207,304	1,286,990	10,800,000,000
Yanbu National Petrochemical Co.	YANSAB	February, 2006	February, 2006	18,070,407	1,089,772	31,443,750,000
Saudi Paper Manufacturing Co.	SPM	November, 1989	June, 2006	935,747,275	(27,468,911)	233,680,000
Sahara International Petrochemical Co.	SIPCHEM	December, 1999	September, 2006	23,991,272,000	244,708,000	13,170,666,642.72
Advanced Petrochemical Co.	ADVANCED	October, 2005	January, 2007	3,802,588,000	759,308,000	10,693,785,960
Saudi Kayan Petrochemical Co.	SAUDI KAYAN	June, 2007	June, 2007	35,327,795	636,777	16,650,000,000
Hail Cement Co.	HCC	October, 2010	October, 2011	1,313,855,586	59,657,071	1,194,380,000
Najran Cement Co.	NAJRAN CEMENT	October, 2005	May, 2012	2,484,328,000	53,515,000	2,033,200,000
City Cement Co.	CITY CEMENT	June, 2005	October, 2012	2,331,361,282	180,945,473	3,386,680,000
Northern Region Cement Co.	NORTHERN CEMENT	March, 2006	February, 2013	3,218,787,991	92,753,025	2,131,200,000
Umm Al-Qura Cement Co.	UACC	July, 2013	June, 2014	1,266,621,166	79,823,172	1,215,500,000
Zahrat Al Waha for Trading Co.	OASIS	October, 2003	September, 2017	489,794,251	56,635,828	705,000,000

Table 2. Cont.

Company Name	Trading Name	Establishing Date	Publicly Traded in	Total Assets	Net Income	Capitalization
<b>Materials</b>						
Al Kathiri Holding Co.	ALKATHIRI	August,2008	July, 2017	110,283,613	16,015,975	596,756,160
Arabian Cement Co.	ACC	January, 1955	NA	3,646,924	212,548	3,680,000,000
Yamama Cement Co.	YSCC	August, 1961	NA	5,565,506,080	256,335,297	5,244,750,000
Saudi Cement Co.	SAUDI CEMENT	October, 1955	NA	3,909,280	451,397	10,725,300,000
Qassim Cement Co.	QACCO	August, 1976	NA	2,056,671,016	360,735,095	5,949,000,000
Southern Province Cement Co.	SPCC	January, 1978	NA	4,200,173,479	462,711,487	9,016,000,000
Yanbu Cement Co.	YCC	March, 1977	NA	3,690,527,264	257,675,907	6,008,625,000
Eastern Province Cement Co.	EPCCO	January, 1983	NA	2,764,934,000	180,696,000	3,096,000,000
Tabuk Cement Co.	TCC	July, 1994	NA	1,813,923,110	24,189,800	1,422,000,000
Al Jouf Cement Co.	JOUF CEMENT	August, 2006	August, 2010	2,280,301,774	39,511,302	1,368,510,000
	Mean			4,103,688,024	34,295,895	12,901,501,560
	SD			15,256,943,979	292,669,826	43,793,988,925
	MAX			97,657,597,048	759,308,000	281,700,000,000
	MIN			1,496,722	−1,528,137,524	233,680,000

Source of data: Tadawul Website <https://www.saudiexchange.sa/> (accessed on 2 April 2021). Descriptive statistics were calculated by the authors. NA: The company profile on Tadawul website did not clarify any date related to the publicly traded date.

**Table 3.** Measuring disclosed nonfinancial information for each area, company, and sector.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %	
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item		
Energy	SARCO	Score	0/8	2/9	1/7	0/3	0/5	0/1	0/1	8.82%	
		Ratio	0	0.22	0.14	0	0	0	0		
	SAUDI ARAMCO	Score	8/8	9/9	7/7	3/3	3/5	0/1	1/1	91.17%	
		Ratio	1	1	1	1	0.60	0	1		
	PETRO RABIGH	Score	2/8	3/9	4/7	0/3	0/5	0/1	0/1	26.47%	
		Ratio	0.25	0.33	0.57	0	0	0	0		
	BAHRI	Score	2/8	5/9	2/7	3/3	0/5	0/1	0/1	35.29%	
		Ratio	0.25	0.56	0.29	1	0	0	0		
	ALDREES	Score	2/8	4/9	2/7	1/3	0/5	0/1	0/1	26.47%	
		Ratio	0.25	0.44	0.29	0.33	0	0	0		
	For the entire Sector			0.35/1	0.51/1	0.46/1	0.47/1	0.12/1	0.00/1	0.20/1	37.65%
	In percentages %			35.00%	51.11%	45.71%	46.67%	12.00%	0.00%	20.00%	
Utilities	GASCO	Score	3/8	9/9	5/7	2/3	2/5	0/1	0/1	61.76%	
		Ratio	0.38	1	0.71	0.67	0.40	0	0		
	AWPT	Score	0/8	1/9	1/7	0/3	0/5	0/1	0/1	5.88%	
		Ratio	0	0.11	0.14	0	0	0	0		
	SAUDI ELECTRICITY	Score	2/8	7/9	6/7	2/3	0/5	0/1	0/1	50.00%	
		Ratio	0.25	0.78	0.86	0.67	0	0	0		
	For the entire Sector			0.21/1	0.63/1	0.57/1	0.44/1	0.13/1	0.00/1	0.00/1	39.22%
	In Percentages %			20.83%	62.96%	57.14%	44.44%	13.33%	0.00%	0.00%	

Table 3. Cont.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item	
Materials	TAKWEEN	Score	1/8	4/9	1/7	0/3	0/5	0/1	0/1	17.65%
		Ratio	0.13	0.44	0.14	0	0	0	0	
	MEPCO	Score	4/8	2/9	5/7	2/3	0/5	0/1	0/1	38.24%
		Ratio	0.50	0.22	0.71	0.67	0	0	0	
	BCI	Score	1/8	3/9	1/7	0/3	0/5	0/1	0/1	14.71%
		Ratio	0.16	0.33	0.14	0	0	0	0	
	MAADEN	Score	4/8	6/9	5/7	1/3	0/5	0/1	0/1	47.06%
		Ratio	0.50	0.67	0.71	0.33	0	0	0	
	ASLAK	Score	0/8	1/9	1/7	0/3	0/5	0/1	0/1	5.88%
		Ratio	0	0.11	0.14	0	0	0	0	
	ALYAMAMAH STEEL	Score	0/8	4/9	2/7	0/3	0/5	0/1	0/1	17.65%
		Ratio	0	0.44	0.29	0	0	0	0	
	SSP	Score	1/8	6/9	3/7	2/3	1/5	0/1	0/1	38.24%
		Ratio	0.13	0.67	0.43	0.67	0.20	0	0	
	CHEMANOL	Score	3/8	6/9	3/7	2/3	0/5	0/1	0/1	41.18%
		Ratio	0.38	0.67	0.43	0.67	0	0	0	
PETROCHEM	Score	2/8	1/9	5/7	0/3	0/5	0/1	0/1	23.53%	
	Ratio	0.25	0.11	0.71	0	0	0	0		
SABIC	Score	7/8	9/9	6/7	3/3	4/5	1/1	1/1	91.18%	
	Ratio	0.88	1	0.86	1	0.80	1	1		



Table 3. Cont.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item	
Materials	SABIC AGRI-NUTRIENTS	Score	3/8	6/9	7/7	3/3	1/5	0/1	0/1	58.82%
		Ratio	0.38	0.67	1	1	0.20	0	0	
	TASNEE	Score	3/8	5/9	6/7	2/3	0/5	0/1	0/1	47.06%
		Ratio	0.38	0.56	0.86	0.67	0	0	0	
	NGC	Score	1/8	2/9	1/7	0/3	0/5	0/1	0/1	11.76%
		Ratio	0.13	0.22	0.14	0	0	0	0	
	ZOUJAJ	Score	0/8	2/9	3/7	1/3	0/5	0/1	0/1	17.65%
		Ratio	0	0.22	0.43	0.33	0	0	0	
	ALUJAIN	Score	1/8	1/9	1/7	0/3	0/5	0/1	0/1	8.82%
		Ratio	0.13	0.11	0.14	0	0	0	0	
	FIPCO	Score	3/8	7/9	4/7	3/3	3/5	0/1	0/1	58.82%
		Ratio	0.38	0.78	0.57	1	0.60	0	0	
	APC	Score	0/8	3/9	1/7	0/3	0/5	0/0	0/0	11.76%
		Ratio	0	0.33	0.14	0	0	0	0	
	NAMA CHEMICALS	Score	0/8	3/9	2/7	0/3	0/5	0/1	0/1	14.71%
		Ratio	0	0.33	0.29	0	0	0	0	
	MAADANIYAH	Score	0/8	2/9	2/7	0/3	0/5	0/1	0/1	11.76%
		Ratio	0	0.22	0.29	0	0	0	0	
ZAMIL INDUST	Score	1/8	6/9	3/7	2/3	0/5	0/1	0/1	35.29%	
	Ratio	0.13	0.67	0.43	0.67	0	0	0		

Table 3. Cont.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item	
Materials	SIIG	Score	1/8	2/9	3/7	0/3	0/5	0/1	0/1	17.65%
		Ratio	0.13	0.22	0.43	0	0	0	0	
	YANSAB	Score	6/8	5/9	4/7	2/3	0/5	0/1	0/1	50.00%
		Ratio	0.75	0.56	0.57	0.67	0	0	0	
	SPM	Score	1/8	2/9	1/7	1/3	0/5	0/1	0/1	14.71%
		Ratio	0.13	0.22	0.14	0.33	0	0	0	
	SIPCHEM	Score	0/8	4/9	5/7	0/3	0/5	0/1	0/1	26.47%
		Ratio	0	0.44	0.71	0	0	0	0	
	ADVANCED	Score	0/8	1/9	6/7	0/3	0/5	0/1	0/1	20.59%
		Ratio	0	0.11	0.86	0	0	0	0	
	SAUDI KAYAN	Score	4/8	4/9	3/7	2/3	0/5	0/1	0/1	38.24%
		Ratio	0.50	0.44	0.43	0.67	0	0	0	
	HCC	Score	3/8	5/9	5/7	0/3	0/5	0/1	0/1	38.24%
		Ratio	0.38	0.56	0.71	0	0	0	0	
	NAJРАН CEMENT	Score	0/8	3/9	4/7	0/3	0/5	0/1	0/1	20.59%
		Ratio	0	0.33	0.57	0	0	0	0	
CITY CEMENT	Score	1/8	2/9	4/7	2/3	0/5	0/1	0/1	26.47%	
	Ratio	0.13	0.22	0.57	0.67	0	0	0		
NORTHERN CEMENT	Score	1/8	3/9	3/7	0/3	0/5	0/1	0/1	20.59%	
	Ratio	0.13	0.33	0.43	0	0	0	0		

Table 3. Cont.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item	
Materials	UACC	Score	1/8	4/9	1/7	1/3	0/5	0/1	0/1	20.59%
		Ratio	0.13	0.44	0.14	0.33	0	0	0	
	OASIS	Score	0/8	2/9	1/7	0/3	0/5	0/1	0/1	8.82%
		Ratio	0	0.22	0.14	0	0	0	0	
	ALKATHIRI	Score	0/8	2/9	1/7	2/3	0/5	0/1	0/1	14.71%
		Ratio	0	0.22	0.14	0.67	0	0	0	
	ACC	Score	2/8	4/9	4/7	2/3	0/5	0/1	0/1	35.29%
		Ratio	0.25	0.44	0.57	0.67	0	0	0	
	YSCC	Score	1/8	4/9	5/7	1/3	0/5	0/1	0/1	32.35%
		Ratio	0.13	0.44	0.71	0.33	0	0	0	
	SAUDI CEMENT	Score	2/8	5/9	5/7	1/3	0/5	0/1	0/1	38.24%
		Ratio	0.25	0.56	0.71	0.33	0	0	0	
	QACCO	Score	2/8	3/9	4/7	1/3	1/5	0/1	0/1	32.35%
		Ratio	0.25	0.33	0.57	0.33	0.20	0	0	
	SPCC	Score	0/8	4/9	3/7	0/3	0/5	0/1	0/1	20.59%
		Ratio	0	0.44	0.43	0	0	0	0	
YCC	Score	0/8	2/9	6/7	0/3	0/5	0/1	0/1	32.53%	
	Ratio	0	0.22	0.86	0	0	0	0		
EPCCO	Score	2/8	5/9	3/7	2/3	0/5	0/1	0/1	35.29%	
	Ratio	0.25	0.56	0.43	0.67	0	0	0		

Table 3. Cont.

Sectors	Companies	Results as:	Environmental	Employees	Community	Products and Services	Customers	Human Rights	Fitting Corruption and Bribery	Disclosure per Companies In %
			8 Items	9 Items	7 Items	3 Items	5 Items	1 Item	1 Item	
Materials	TCC	Score	2/8	5/9	4/7	2/3	0/5	0/1	0/1	38.24%
		Ratio	0.25	0.56	0.57	0.67	0	0	0	
	JOUF CEMENT	Score	1/8	3/9	3/7	2/3	0/5	0/1	0/1	26.47%
		Ratio	0.13	0.33	0.43	0.67	0	0	0	
For the entire Sector			0.19/1	0.40/1	0.48/1	0.33/1	0.05/1	0.02/1	0.02/1	28.85%
In Percentages %			19.34%	40.48%	47.62%	33.33%	4.76%	2.38%	2.38%	
MEAN FOR THE ENTIRE SAMPLE (the three scores)								30.35%		

Moreover, nonfinancial disclosures of the selected sectors range between 28.85% for the corporations in the material sector and 39.22% for the corporations in utilities sector. The corporations in the energy sector scored, on average, 37.65%. The percentages are quite close to each other, but the level of disclosed information differs from sector to sector depending on the nature of activities of each sector. For instance, the energy sector disclosed more environmental information, with 35%, when compared with the other two sectors, with 20.83 and 19.34%, respectively.

The mean for the entire sample of the ratios of disclosed nonfinancial items is 30.35%. It is calculated by averaging the measures of the ratios of disclosed nonfinancial items which can be treated as a global measure of disclosed nonfinancial information of the three sectors included in the study. While the mean is not compatible with Boshnak's (2021) study, which reported a measure of disclosure 68%, it is similar to the previous study's mean of 36%, a study conducted by Abdulhaq et al. (2015) that examined the annual reports of the years 2012 and 2013. The modified version of Boshnak's (2021) index reports a score of disclosed nonfinancial in Saudi corporate reporting that is close to what is previously documented in the literature (Abdulhaq et al. 2015). The omission of the items incorporated from the European Directive 2014/95/EU into Boshnak's (2021) index may contribute to the variation of reported results. More research on nonfinancial disclosure in Saudi corporate reporting is needed to report rigorous results.

#### 4.3. Further Analysis

The examination of the corporate reports of the sampled corporations leads further to several observations. First, it is indicated that the most disclosed nonfinancial information is on employees and community-related matters, with an average score of 50%. Second, nonfinancial information on 'employees' benefits', which is under category labeled employees, and on 'Charity, Donations, Zakat, Hajj, Quran and Ongoing Charity (WAGFF)', under the category labeled community, are disclosed by all the sampled corporations. Third, the disclosure of products and services information is the third highest average, with a score of 41%. Except for ARAMCO and SABIC, none of the selected companies disclosed any information regarding human rights, anticorruption and bribery. Fourth, the average disclosure of nonfinancial information about the customers is 10%, which is deemed very low. Fifth, ironically, the average score of disclosed information on environmental matters is only 25%, despite the nature of activities of the sampled corporations and their serious impact on the environment.

## 5. Conclusions

The study investigates whether Saudi corporate reporting disclose nonfinancial information. More specifically, the study investigates the annual report and board of directors report for the year 2019 of the energy, utilities, and materials sectors to examine their nonfinancial disclosure. A modified template consisting of 34 items was used and applied for 50 publicly traded companies.

Overall, out of the seven categories included in the index which are: environmental, employees, community, product and services, customers, human rights, and anticorruption and bribery, the three sectors disclose 30.35% of nonfinancial information in their reports. Whilst the companies' nature of activities has a serious impact on the environment, the results show that disclosing information related to the environmental matters does not seem a foremost concern to the companies. Human rights, fighting corruption and bribery, and customers aspects are, to some extent, neglected. In contrast, the other aspects such as employees, community, and product and services have a moderate level of disclosure.

The study results show that the companies have a good nonfinancial reporting infrastructure. However, as reported in this study, one may infer that the average of disclosure may have been steady since 2012 without major improvements. The CMA is recommended to mandate the disclosure of the nonfinancial information in order to enhance the corporate reporting in Saudi Arabia. Mandating nonfinancial disclosure is considered a step



aligned with Saudi Vision 2030, because protecting the environment and human rights are main concerns in the vision. This recommendation is aligned with Al-Janadi et al.'s (2013) advice to the regulators in Saudi capital market about the importance of developing the corporate governance in order to improve the Saudi corporate disclosures and provide adequate information. Provision of information to participants in the Saudi capital market facilitates the transition of the Saudi economy to a more open economy where information is freely available them. Free information is mandatory for competition. As corporations are competing to magnetize capital from participants in the capital market, the participants demand information to assist them evaluate the economic reality and the prospect of the corporations they are interested in financing. Financial statements are insufficient to capture economic reality (see White et al. 2002) urging the need for more disclosure. Nonfinancial financial disclosure is a corporate practice meets such a need. However, corporation ought to balance when providing information to the market in order not to overloud users of financial statements with information (e.g., Beerbaum 2016; Wu and Pupovac 2019). CMA and other regulatory bodies can regulate provision of nonfinancial information to best serve users of corporate reports and hence for the economy overall.

The study is not free from limitations. The main limitation is the sample size which is limited to three sectors. It is recommended for future research to expand the sample size and study the whole market. Future research may consider examining nonfinancial disclosure at different settings by controlling for other factors that hypothetically affect voluntary nonfinancial disclosure such as effectiveness of board of directors, the diversity of shareholders, and institutional ownership.

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**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

**Table A1.** “Developed Index for Measuring Nonfinancial Disclosure”—the coding sheet that is employed in coding sampled corporate reports.

NO.	Disclosure Items	Score
#	<b>Environmental</b>	
1	Environmental policy statement	
2	Designing facilities harmonious with environment	
3	Environmental impact of transport and supplies	
4	Electricity/energy use and consumption	
5	Type of resources/materials used	
6	Water consumption	
7	Financing for pollution control equipment and facilities	
8	Environmental graphs and statistical data	

Table A1. Cont.

NO.	Disclosure Items	Score
#	<b>Employee information</b>	
1	Employee data	
2	Training and development	
3	Employee benefits	
4	Pay awards (reward program)	
5	Pension	
6	Workplace	
7	Health and safety at work (from EU directive)	
8	Diversity of competence (from EU directive)	
9	More Diversified on Boards (from EU directive)	
#	<b>Community information</b>	
1	Supporting community initiatives/events/projects	
2	Supporting education program	
3	Supporting recruitment/scholarship program	
4	Supporting health program and medical research	
5	Supporting government campaign	
6	Establishing non-profit information projects	
7	Charity, donations, Zakat, Hajj, for Quran and Ongoing Charity (WAGFF)	
#	<b>Products and services</b>	
1	Developing and innovating new products	
2	Product and service quality	
3	ISO and other awards	
#	<b>Customer</b>	
1	Commercial and marketing information	
2	Meeting customers' need	
3	Customer feedback	
4	Customer service	
5	Customer satisfaction	
#	<b>Human Rights</b>	
1	Prevention of Human Rights Abuses	
#	<b>Anti-Corruption and Bribery Matters (from the EU directive)</b>	
1	Instruments to fight corruption and bribery	

## Notes

- <sup>1</sup> Even accounting researcher outside the United States refers to this definition as well, e.g., [Alwabil \(1999, p. 7\)](#).
- <sup>2</sup> Some accounting researchers argue against the “decision usefulness” part of the definition ([Al-Adeem 2021](#); [Williams and Ravenscroft 2015](#); [Young 2006](#)). Users of financial statements are theoretically, but not in fact, made ([Young 2006, p. 596](#)) and their needs are imaginary ([Al-Adeem 2021](#)).
- <sup>3</sup> For examples of their efforts, see [Al-Adeem \(2021\)](#); [Al-Adeem and Fogarty \(2010\)](#).
- <sup>4</sup> Prepared by the American Accounting Association Committee on Concepts and Standards for Externals Financial Reports.
- <sup>5</sup> On the development and history of sustainability reporting see ([Christofi et al. 2012](#)) and for an overview see [Herzig and Schaltegger \(2006\)](#).
- <sup>6</sup> For the notion of the triple bottom line, see [Norman and MacDonald \(2004\)](#) and [Elkington \(1997\)](#). For a history of the triple bottom line see [Elkington \(2004\)](#). For a review of literature on the triple bottom in see [Adams et al. \(2004\)](#). For methods on reporting triple bottom line, see reporting on the triple bottom line [Gray and Milne \(2004\)](#).
- <sup>7</sup> KPMG International Survey of Corporate Sustainability Reporting 2002. p. 12. Available: [https://www.researchgate.net/publication/254746739\\_KPMG\\_International\\_Survey\\_of\\_Corporate\\_Sustainability\\_Reporting\\_2002](https://www.researchgate.net/publication/254746739_KPMG_International_Survey_of_Corporate_Sustainability_Reporting_2002) (accessed on 8 April 2021).

- <sup>8</sup> He chaired a special committee on financial reporting that was formed by American Institute for Certified Public Accountants (AICPA), also officially known *Improving Business Reporting—A Customer Focus*, the report is available: <http://www.aicpa.org/InterestAreas/FRC/AccountingFinancialReporting/DownloadableDocuments/Jenkins%20Committee%20Report.pdf> (accessed on 4 March 2022), Some have commented on the report, e.g., Noll and Weygandt (1997) and Nusbaum and Weiss (1993). Jenkins later led the Financial Accounting Standard Board (FASB).
- <sup>9</sup> Retrieved: [https://www.ey.com/en\\_gl/assurance/is-your-nonfinancial-performance-revealing-the-true-value-of-your-business](https://www.ey.com/en_gl/assurance/is-your-nonfinancial-performance-revealing-the-true-value-of-your-business) (accessed on 7 April 2021).
- <sup>10</sup> Retrieved: [https://www.ey.com/en\\_gl/nonfinancial-integrated-reporting](https://www.ey.com/en_gl/nonfinancial-integrated-reporting) (accessed on 2 April 2021).
- <sup>11</sup> The name used to be the Saudi Organization for Certified Public Accountants (SOCPA).
- <sup>12</sup> <https://www.saudiexchange.sa/wps/portal/tadawul/home?locale=en> (accessed on 9 April 2021).
- <sup>13</sup> See Doing Business in Saudi Arabia's guide on "Why Saudi Arabia?" <http://www.saudiarabia.doingbusinessguide.co.uk/the-guide/opportunities-in-saudi-arabia> (accessed on 13 February 2018).
- <sup>14</sup> Retrieved from [https://www.stats.gov.sa/sites/default/files/press\\_release\\_GDP%20nowcasting%20report%20EN%20Q2\\_2021.pdf](https://www.stats.gov.sa/sites/default/files/press_release_GDP%20nowcasting%20report%20EN%20Q2_2021.pdf) (accessed on 9 April 2022).

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