www.cya.unam.mx/index.php/cya

Contaduría y Administración 67 (3), 2022, 210-237

Contaduría y Administración
Accounting & Management

Sustainability report disclosure moderating effect on investment decision, financial accounting variables and share price relationship: A case of Saudi Arabia

Informe de sostenibilidad efecto moderador de la divulgación en la decisión de inversión, variables de contabilidad financiera y relación del precio de las acciones: un caso de Arabia Saudita

Mahfoudh Hussein Mgammal[1*], Ebrahim Mohammed Al-Matari[2]

[1, 2]Jouf University, Arabia Saudita
[1, 2]Amran University, Yemen

Received September 26, 2020; accepted June 20, 2022
Available online June 22, 2022

Abstract

The main objective of this article is to examine the mitigating effects of the publication of the sustainability-report on investment decisions and the share-price relationship. In addition, we examine whether the sustainability-report indirectly effects the financial-accounting variables' value-relevance. We regress GLS with random effects using a balanced sample of 240 observations from the first quarter of 2014 to the last quarter of 2018, including all banks listed in Saudi Arabia. According to the results, the direct coefficient between sustainability reporting, investment decisions and share prices is negatively significant before and after including moderation interaction variable. While the moderated interaction coefficient of the publication of the sustainability-report on the relationship between investment decisions and share prices is positively significant. The direct coefficient between the financial accounting variables and the share-price is positive and significant. Whereas the moderate interaction coefficient of sustainability-report publication on financial accounting variables and share-price is negatively

*Corresponding author.
E-mail address: mrrsr77@yahoo.com (M. H. Mgammal).
Peer Review under the responsibility of Universidad Nacional Autónoma de México.

http://dx.doi.org/10.22201/fca.24488410e.2022.3075

significant. These results suggest that sustainability-reporting information is considered for the benefit of investors and sustainability reporting data is used to supplement accounting information in decision making. The findings also display that investors appreciate the other and complementary disclosures of the financial information provided by the sustainability-report and that this disclosure has had a positive impact on the share-price.

JEL Code: G34, O16, E58, Q01, Q56, M14
Keywords: environmental-social and governance stands; sustainability-report; C-S-R; disclosure; stake price

Resumen

El objetivo principal de este artículo es examinar los efectos mitigadores de la publicación del informe de sostenibilidad sobre las decisiones de inversión y la relación precio-acción. Además, examinamos si el informe de sustentabilidad afecta indirectamente la relevancia del valor de las variables financiero-contables. Realizamos una regresión de GLS con efectos aleatorios utilizando una muestra equilibrada de 240 observaciones desde el primer trimestre de 2014 hasta el último trimestre de 2018, incluidos todos los bancos que cotizan en Arabia Saudita. Según los resultados, el coeficiente directo entre los informes de sostenibilidad, las decisiones de inversión y los precios de las acciones es negativamente significativo antes y después de incluir la variable de interacción de moderación. Mientras que el coeficiente de interacción moderado de la publicación del informe de sostenibilidad sobre la relación entre las decisiones de inversión y los precios de las acciones es positivamente significativo. El coeficiente directo entre las variables contables financieras y el precio de la acción es positivo y significativo. Mientras que el moderado coeficiente de interacción de la publicación del informe de sostenibilidad sobre las variables de contabilidad financiera y el precio de la acción es negativamente significativo. Estos resultados sugieren que la información de los informes de sustentabilidad se considera en beneficio de los inversores y los datos de los informes de sustentabilidad se utilizan para complementar la información contable en la toma de decisiones. Los hallazgos también muestran que los inversionistas aprecian las divulgaciones adicionales y complementarias de la información financiera proporcionada por el informe de sustentabilidad y que esta divulgación ha tenido un impacto positivo en el precio de las acciones.

Código JEL: G34, O16, E58, Q01, Q56, M14
Palabras clave: stands ambientales-sociales y de gobernanza; reporte de sostenibilidad; C-S-R; divulgación; precio de participación

Introduction

Successful companies are demonstrated by high company value, which is an indicator of company performance, reflected in the company's share-price, which is shaped by the supply and demand for the company's shares on the global market and capital markets, which reflect the public's assessment of a company's performance performance (Holly, 2018; Al-Matari, 2020; Al-Matari & Mgammal, 2020). Enterprise value reflects not only economic factors, but also environmental and social factors. If the business people's orientation is to take profit as a short-term goal, the company will not be able to compete in the long-term (Ernawan, 2011; Becker, 2018). Sustainability is something companies are now looking at to maintain their existence in the business world. The Burtland Report describes the concept of sustainable development as a principled development procedure that sustains the needs of today without compromising the capability of future generations to meet their own needs and the community demands this from the company (Susanto, 2013).

Risk is inevitable in any activity because there is uncertainty about the future outcome. There are regulations regarding corporate social responsibility in the Law No. Law 40 on Limited Companies dated 2007 regulates that companies dealing with and/or related to natural resources must fulfill their social and environmental responsibilities and the Financial Services Institution Regulation No. 51/POJK. 03/2017 requires several financial services institutions to disclose their sustainability reports in 2019.

Rossi and Harjoto (2020) show that the disclosure of non-financial reports, i.e. sustainability reports that use a standard ethical rating (SER), is positively associated with firm value, while SER is negatively associated with corporate risk. Research shows that corporate social responsibility disclosures reduce systematic risk and increase firm value. Research by Benlemlih, Shaukat, Qiu, and Trojanowski (2018) found no association between corporate environmental and social exposes and their systematic risk, and showed a negatively and significant relationship between these disclosures and overall risk. Another researcher, Benlemlih et al. (2018) showed different results, finding no relationship between corporate environmental and social confessions and their systematic risk, and showing a significant and negative relationship between total risk and disclosures. These results suggest that broad and objective environmental and social disclosures can help increase a firm's market value, but the effect may not be a reduction in the firm's systematic risk.

Today, companies have realized the advantages of disclosing corporate social reports (C-S-R) (Güler Aras & Crowther, 2009). It has resulted in a much needed extension in the aggregate of data on C-S-R made available to investors, possible financial professionals and another partners (Slapničar, 2006; Cooper & Owen, 2007; Holder-Webb, Cohen, Nath, & Wood, 2009). For example, (Bini & Bellucci, 2020) analyze the motivations for sustainability in detail from the point of view of two primary hypotheses of intentional public and ecological disclosure and the administrative regulation of non-monetary disclosure, and key approaches with clear reference to the Global Reporting Initiative and the Integrated-Reporting-Framework can work in the development of a composite or sustainability-report.

There are several motivations at best to concentrate our review on exposure to C-S-R when dealing with a piece of record. First of all, the sustainability-report is widely shared in this section, and the number of banks that distribute the report is increasing annually (Viganò & Nicolai, 2009; Wensen, Broer, Klein, & Knopf, 2011; Carnevale & Mazzuca, 2014; Gungadeen & Paull, 2020). Second, despite the temptation offered by the Worldwide-Detailing-Activity and the EU Cash-Keeping-League, which in 2005 published a dossier containing a set of standards and allocation rubrics for the sharing of SURE, focusing on the report of sustainability (SURE) when dealing with a record division (European Banking Federation, 2016).

The need for a study of the C-S-R statement when dealing with a registry section has arguably had more grounding options over time since subsequent explosions that have raised supplementary issues regarding the actual C-S-R piece and its significance for banks durability (Fassin & Gosselin, 2011). As a result, banks have reformed their techniques of managing C-S-R (Scholtens, 2006). In addition, Aureli, Gigli, Medei, and Supino (2020) recommend sustainability alerts to investors over temporary monetary practices that persist for quite some time. In a relatively roundabout way, he recommends that ESG information be included in the selection of resources for questionable financial backers. As the market is courteous to ESG information, the results of the review foster a unique sustainability zeal among organizations. Moreover, recommended future study on companies that could design the SURE sharing clock to estimate the impact on the cost of bids. In addition, Ates (2020) proved that contribution to the sustainability record is important for investors in an emerging market. Investigations exhibited that there was a slight negative correlation between organizational sustainability practice and the company's monetary practice. The results showed that this relationship did not change in terms of firm productivity and size. As an oath of financial backers to businesses registered in a sustainability file that are expected to have an extraordinary degree of sustainability–performance.

The core objective and inspiration of the paper is to improve the existing facts on the factors of sustainability-reports. Given the focus of the study, acknowledging, and making sense of our focus so far, from market reaction to presenting an independent sustainability-report, is the first step in motivating the document. There are several reviews here, and we have documented and analyzed the consequences of these rampaging investigations to demonstrate why further research focusing on Saudi banks is needed. Berthelot, Coulmont, and Serret (2012) investigated whether capital industries in Canada consider sustainability-reporting. The findings suggest that investors appreciate this type of notification and that it can serve as a justification for the association's earmarked guarantee against such exposures. On the other hand, Guidry and Patten (2010) did not notice any significant market reaction to the sustainability discharge declaration. However, it was found that firms with top quality-reports showed definitely more certain market responses than organizations giving lower quality reports. found no meaningful market reaction to the sustainability reporting discharge statement.

In this paper, we attend the previously mentioned problems due to the economy of Saudi Arabia explicitly in the monetary zone. These days, the public authority has presented important monetary advances proposed to reduce the Kingdom reliance on payment for oil and to entirely change the economy, including the monetary zone. They enforced a major monetary program change called Saudi Vision 2030, which designed to deprive the Kingdome of its dependence on oil earnings and separate its economy. While the "Financial Sector Development Vision Realization Program (FSDVRP)" aims to propel a displaced and employable currency area towards improving the national economy, to modify its sources of remuneration and to stimulate speculation, money, and investment funds. The FSDVRP will quite often accomplish this inspiration by empowering monetary associations for private sector food development, ensuring the development of an ever-changing capital market, and empowering monetary preparedness. While contributing to the integration of its economy into the new general economy.

Since the Saudi economy is based on oil and is the sole export economy, any major drop in oil prices has an impact on the Saudi economy. The Kingdome's previously undisclosed currency reliance on oil, which accounts for 72 percent of all goods in the country and 70 percent of systemic wages, is re-emerging. As a result, the government is accumulating these assets, increasing public spending, and has appointed advisors for various effects on enormous financial portfolios. As a result, various studies reveal that real variables such as the total income variable affect the determinants of the sustainability-report. It will be fascinating to see how the sustainability-report affects share-price both indirectly and directly. We also look if the report of sustainability alters the material value of financial-accounting-variables.

This study examines whether investors attribute a large fit to the information passed on by reports of sustainability. We attempt to confirm the presence of a link between share prices and reports of sustainability by noticing an example of all Saudi Arabia's examined banks from 2014 to 2018. It added. into the current literature on the valuable implications of examining non-financial factors. In addition, upgrading the literature on the merits of SURE, considers not merely the straight influences of SURE on stock–prices but as well its combination with further accounting factors. Likewise, it upgrades the literature on the segmentation of C-S-R in the banking industry, which has traditionally concentrated on publications of C-S-R methodology and C-S-R strategy. Finally, it is rarely expected to estimate whether contrasts occur in the value of sustainability-reports in Kingdome of Saudi Arabia (KSA) over time, for the causes discussed earlier.

The structure of the article is as follows. In the first place, we present an overview of the literature. Then we talk about the role of SURE in publishing bank information. Thirdly, we develop research–design. Following, we designate the sampling and then the data-collected, debate the empirical outcomes. In conclusion, synopsize the results, deliberate the implications, and ideas for future studies.

Literature–review and hypothesizes–development

Signaling theory revolves around the problem of information asymmetry between two parties (Spence, 1974). The main party is the sender of the signal, which are the insiders whose data cannot be accessed by outsiders, and the other party, the receiver, who are outsiders who need information but need to get the data. In this study, banks have data on the quality of their accounting data as a signaling signal, and investors use accounting data to predict a bank's value and make investment decisions. private are the beneficiaries. Banks with higher quality accounting data have an incentive to voluntarily disclose their quality through sustainability reporting to enhance investor confidence in their ability to predict the market value of their assets. Banks of accounting information and banks that publish sustainability reports have values that are more consistent with accounting data.

Disclosure of C-S-R

Since the 1970s, non-financial disclosure has become an established practice different from conventional financial disclosure. Currently, companies are committed to providing details of the financial performance of their businesses. However, over the decades, the inclusion of some nonfinancial info in annual reports has turn out to be popular. Due to heightened concerns and realizing of the influence of business on the environment and society in the last part of the twentieth century, non-financial reporting has evolved into separate reporting. Thanks to the production and distribution of independent assessments of the company's environmental performance and social policy, this distinction has improved. The Community Court examined the banks as a result of the financial crisis in 2008. The companies did not stop responding, stepping up their attempts in what became recognized as sustainable-banking in order to mitigate the negative consequences of losing their reputation (Albers & Günther, 2010; Fifka, 2013; Dumay, Bernardi, Guthrie, & Demartini, 2016; Rinaldi, Unerman, & De Villiers, 2018; Farooq & De Villiers, 2019; Nájera-Sánchez, 2020).

While institutional environmental disclosures have had a great deal of courtesy, there has never been a single study dedicated to independent sustainability-reporting in the Middle East (Ismaeel & Zakaria, 2019). On the other hand, the publication of environmental and social info in yearly reports is a source of interest in some field surveys. The majority of these studies have focused on identifying explanations for sustainability and the factors that influence C-S-R. Menassa (2010) found that C-S-R disclosure was positively related with the growth and profitability of commercial banks in Lebanon, but not with worldwide presence or stock market listing. Comparably, Khalil and O'sullivan (2017) assert that the profitability and size, as well as the concentration on ownership of Lebanese banks, very useful for social transparency and environment of the internet. Rizk, Dixon, and Woodhead (2008) suggest that the practice of C-S-R disclosure in Egypt is influenced by property building and industry. According to existing research, the area has seen an increase in social and environmental transparency (Mgammal, 2011; Alotaibi & Hussainey, 2016; Habbash, 2016; Ibrahim & Hanefah, 2016; Mgammal, 2017; Gerged, Cowton, & Beddewela, 2018; Rahman, Khan, & Siriwardhane, 2019; Alharbi, Mgammal, & Al-Matari, 2021). However, most of these studies have focused on general social and environmental disclosure rather than stand-alone sustainability-reports as a separate reporting technique. Various hypotheses have been developed in the article to explain C-S-R actions and the final explanation, and it is possible to provide a highly theoretical-framework in this reasoning (Cormier, Magnan, & Van Velthoven, 2005). For example, Aureli et al. (2020), who used a variety of approaches and theoretical perspectives to discover the relation between an constitution's sustainability policies and its financial'–performance, found that the findings became more important in published reports.

As Clarkson Max (1995) pointed out, both important and useful partners need to be empowered to keep the company going. C-S-R action and C-S-R disclosure essentially helps to prepare communication to shape and maintain it. Based on this assumption and on the basis of popular and legitimate hypotheses, some experts have put forward some hypothetical arguments about C-S-R action. For the event, the companies are using C-S-R disclosure to discover authenticity between different partners (e.g. Gray, Kouhy, & Lavers, 1995; Campbell David, 2000; Hooghiemstra, 2000; Maignan & Ralston, 2002; Carnevale & Mazzuca, 2014; Tomaselli, Garg, Gupta, Xuereb, & Buttigieg, 2020).

These theories of C-S-R have two potential suggestions. First of all, C-S-R actions and messages refer to tools that a company can access to enter into its operational system. Second, therefore, the granularity of C-S-R activities and disclosure is affected by the established conditions under which the business exists. The regulation hypothesis of Meyer and Rowan (1977) suggests that the explanation of a corporation's behavior depends on the treatment of entry into an authority shaped by education (DiMaggio & Powell, 1983). More recently, Campbell John (2007) predictability and regulation hypothesis of C-S-R, the definition of which is derived from the process of drafting relative political economy and regulatory testing. The manufacturer has carefully considered the conditions under which the company may be more or less able to guarantee C-S-R behavior.

The past thinks suggests that accounting data isolated is not adequate to describe the market–value of a company and recommends considering the relevance of the value of non-financial information, business ethics and intention. deliberate. disclosure of information (Barth & McNichols, 1994; Hirschey, Richardson, & Scholz, 2001) and (Lapointe-Antunes, Cormier, Magnan, & Gay-Angers, 2006; Choi & Jung, 2008; Pae & Choi, 2011; Carnevale & Mazzuca, 2014).In summary, the authors argues that financial circumstances affect the ability to function in a socially sensitive way. A variety of legal conditions come into play in these situations: strong state controls, collective self-regulatory mechanisms, NGOs and other liberal organizations that screen businesses, environmental management institutions stimulate healthy social behaviors, the provision of representative relationships and the participation in institutionalized conversations with stakeholders.

Sustainability report (SURE)

Asaolu, Agboola, Ayoola, and Salawu (2012) discover that sustainability-monitoring is inadequate due to the lack of mandatory legislation holding organizations accountable to oil and gas corporations. They suggest that researchers follow the legal age requirement, which allows all companies to report on sustainability and is useful for reporting. The found that companies should not participate in the fair reporting process and that the reporting process would have a detrimental effect. In several empirical studies such as Sobhani, Amran, and Zainuddin (2012) and Sufian and Noor Mohamad Noor (2012), multinational companies are not obliged to undertake fair reporting and therefore global companies do not impact the social monitoring system. These results have little interest inside the country for these foreign companies. They achieve goals regardless of social reliability in the nation of investment.

Previous studies have identified many factors that impact sustainability-reporting, the most important of which are environmental and social reporting. Numerous earlier researches, for example Adams (2002), Baele and Van (2012) and Mitra, Agrawal, and Ghosh (2015), have found that the external and internal-regulatory environments associated with sustainability reporting determine aggregate impacts. Additionally, Adams (2002) has shown that these impacts help produce high-quality sustainability reports.

According to Mitra et al. (2015) regulators play a crucial role in reporting high-quality sustainability research. It will assist them in business planning and other aspects of social reporting linked to long-term development, thus helping corporate decision makers. Companies will now be able to report on sustainability through legal processes. The basic–phrases and phrases in the yearly-reports are "corporate social responsibility", "world, people, benefits", "sustainable business growth", "civil rights." business, "economic ethics" and "sustainable industry" service to explore sustainability–elements in annual reports. To assist those concerned in learning in a pleasant and organized way (Dissanayake, Tilt, & Xydias-Lobo, 2016),

Promoting transparency has been shown to provide better outcomes for organizations and consumers, as well as useful information to support them, according to sustainability advocates. For example, it has been proven to help improve social cohesion and financial well-being (Eccles & Saltzman, 2011; Krzus, 2011; Eccles, Krzus, & Ribot, 2015). According to Adams and Larrinaga-González (2007), reporting of sustainability is about connecting organizations within companies to help produce improvements in the long-term sustainability performance of the business, as the number of results shows. The importance of managers in applying these measures to organizations in order to communicate sustainability with annual reports has been demonstrated in this research.

Sustainability-report and bank's disclosure

In banking, the introduction of sustainability reporting in annual reports is an important but somewhat depressing topic (Carlucci, Ferreira, Schiuma, Jalali, & António, 2018). In the same spirit, the most important of them come together, integrate social and environmental aspects and standardize social and environmental-responsibility programs (Jeucken & Bouma, 1999). In addition, Carnevale and Mazzuca (2014) examined the relationship between sustainability studies on European stock prices. They find that a strong correlation with stock prices can be found in the sustainability study. Similarly, Weber (2016) examined the relationship between the sustainability of Chinese banks between 2009 and 2013. He found that its sustainability and financial metrics are very well linked. Finally, the sustainability study revealed a fundamental link between environmental and social success. Mandatory sustainability monitoring has also been shown to have an impact on Chinese banks, helping to address the social and environmental challenges that increase the effectiveness of services offered to stakeholders.

In this context, Saxena and Kohli (2012) discussed several yield proxies for instance after-tax benefits and earnings per stake, and analyzed performance. Accordingly, due to its importance in promoting corporate social responsibility, managers have been advised to report on sustainability in annual reporting. He also suggests that aspiring scientists try to advance the concept of environmental communication by improving decisions about socially responsible investment processes. In addition, previous analytical research on the ecological relevance and stability of financial sectors such as banking has been largely ignored. Similarly, the relationship of corporate sustainability claims with classified UAE banks was investigated (Nobanee & Ellili, 2016). Moreover, they found that the overall association between sustainability reporting and sustainability disclosure among UAE banks was not strong. Study suggested possible investigations to focus the UAE and Arab countries on this partnership.

According to many recent studies, Islamic finance is entirely focused on improving social behavior and promoting development in environmentally friendly ways. However, future research should focus on this issue, as the industry's contribution to sustainability disclosures is still not clearly defined statistically (Akhtar, 2008; Ahmed Esra & Hamdan, 2015; Aliyu, 2017; Al-Homaidi, Al-Matari, Anagreh, Tabash, & Senan, 2021). In addition, sustainability reporting is not required when writing the annual report, as social responsibility law takes into account the application of international norms. However, concerns closely related to corporate activities that highlight the resilience of banks are issues such as the availability of money, economic acumen and expertise in vitality. In a similar context, the Bank is more focused on biodiversity research, environmental protection and the development of renewable goods and services within the group's sustainability research area (Kumar & Prakash, 2019). The relationship between sustainability monitoring and social responsibility analysis by Guler Aras, Tezcan, and Furtuna (2018). Sustainable growth approach was achieved with multidimensional cascades. They provided a model for examining the sustainability of Turkish companies, for which the study referred to four banks. They argue that sustainability reports perform a role in driving the results of Turkish corporations. Rustles shows that increasing the profitability of banks will improve the position of banks and prioritize them over current and potential shareholders.

The sustainability tracking scale of six European banks, which are amongst the big firms that implemented sustainability in 2016 (Carè, 2018). The study suggested that flexibility that increases the company's corporate accountability and improves improved results should be disclosed in annual reports. During the previous studies discussed above that touched on the sustainability reporting mechanism in some surveys, the researches exposed that on the one hand, the sustainability-disclosure mechanism had been dropped. As a result, Gulf countries, counting KSA, suffer from education lack, especially in the banking district, which diverges significantly from other areas. In the end, the purpose of this paper is to fill and improve the gaps left by previous research.

Share price for bank, sustainability-report and value relevance

Our goal is to see whether the SURE disclosure changes the usefulness of accounting data, making it simpler to understand a company's market worth. According to Carnevale, Mazzuca, and Venturini (2012) and Cardamone, Carnevale, and Giunta (2012), SURE publication can disturb the final share-price since the document's nature, composition and trends of accounting-variables related to value, BPS & EPS are considered by shareholder to be a resource of further and corresponding information. SURE must offer data not merely on the bank's history and present C-S-R requirements, but as well on the policy itself, based on the processes expected by GRI and other relationships. The future book by Bank, the publishing of SURE with GRI-standards is mandated in certain European countries, while it is optional in others. For example, in Indonesia, SURE declaration is not obligatory since there are no rudimentary standards rule that (Kholis, Rambe, & Muda, 2020)

As a result, it should cover data about the measures and activities that could arise from the numerous economic resource allocation options. These data are basically not linked to the financial statements, which highlights the integrated nature of the data in SURE. SURE also calculates the impact of the program on accounting–variables in future financial–statements. On the other hand, the situations do not end here, as the utility of SURE value is quite wide. For example, bank contribution methods for traditional energy firms and the automobile sector will be affected by new EU initiatives on pollution and sustainable energy. Each bank's SURE should contain information on financed businesses and acquiescence with new EU-renewable energy and environmental requirements. In the case of corporations that do not comply with the standards, banks may be exposed to unforeseen risks. This information about possible credit–risk is very significant for investors but is not reflected in the financial–statements (Carnevale & Mazzuca, 2014).

SURE highlights the obvious stance of considering the future dangers associated with financial institutions' non-socially responsible decisions. In this regard, it is obvious that the teaching function of SURE is integral to the information presented in the financial statements. If this is the case, the publication of SURE may have an indirect effect on stock prices by changing the effect of other accounting factors. In the absence of data provided by SURE, for instance, if a SURE suggests a possible future responsibility for the firm, it is fair to assume that investors will attribute less credibility to BPS. Saudi Arabia understands the critical need for a diverse energy mix for the country's long–term economic sustainability. Henceforward, the National–Renewable–Energy–Program has promised a obligation to increase its energy leadership over Sustainable–Industry, principally in Framework–for–Developing-Tendering–Policies, Bank assurances perform a very significant role (National Renewable Energy Program, 2019).

According to our current study, SURE influences the stock price by providing great risk and opportunity information to shareholders. Along with appropriate accounting data, higher levels of deliberate disclosure can help eliminate information–asymmetries between shareholders and management, reduce uncertainty about future returns from protecting the firm, and reduce foreign exchange expenses for owners, according to voluntary disclosure research. Also, the company is interested in publishing more than it believes will increase its credibility, regardless of whether the news is good or bad (Blacconiere & Patten, 1994). On the other hand, even negative news can help improve the quality of disclosure and, as a result, the reputation and position of the company. Consequently, such information should have an impact on the market (Cormier & Magnan, 2007; Cardamone et al., 2012; Carnevale et al., 2012; Carnevale & Mazzuca, 2014; Alharbi et al., 2021). On this basis, we scrutinize the following hypothesis: H1: SURE announcement directly impacts share–price.

Revenue refers to the economic component, planets to the environmental aspect and people to the social aspect, so sustainability is built on a three-part framework of findings. The sustainability-report of the corporation explains the duties of the company not only in the economic field, but also in the social and environmental fields. Organizations can use sustainability reports to better monitor, analyze and interconnect their economic, environmental, social and administrative performance, as well as to set objectives and manage change. There is a high need for information security and the quality of the company's environmental assets and operations. The majority of shareholders want companies to report on issues such as ethics, employee relatives and community engagement.

Few studies have focused on the importance of environmental–reporting values, and even fewer provide a critical explanation for the Carnevale and Mazzuca (2014) study. Cormier and Magnan (2007) investigated the impact of environmental–reporting on the link between a corporation's stock marketplace valuation and its sales. The spread of the environmental report appears to affect the stock marketplace value and income of German corporations, but not those of French and Canadian corporations. According to Moneva and Cuellar (2009) a company's environmental reporting and market value are inextricably linked. Environmental exposure was associated with value and matched with financial data, according to Semenova, Hassel, and Nilsson (2010) the impact of the release of the sustainability-report on systemic risk. The sustainability-reports serves as proof of the company's commitment to stakeholders. The Company complies with current rules covering a wide range of financial and non-financial matters, including economic, environmental and social matters (Sejati & Prastiwi, 2015). The availability of the Sustainability-report shows that the company is concerned about the long-term effects of its operations. Non-financial information improves shareholders' access to better information about management's attempts to manage numerous risks, so companies that disclose more non-financial information are usually better equipped to manage overall risk (Rossi & Harjoto, 2020).

Sustainability Impact Report Disclosure of Company Value Despite the company's share-price, the company's value expresses the company's visible performance. The company will make every effort to keep its share-price stable. Investors fear non-financial news for instance economic, social and environmental issues as they can reduce information asymmetries within the company. Sustainability reports provide non-financial reporting as a form of responsibility, such as economic, social and environmental issues. The studies also showed that sustainability–reporting has a positive effect on business value (Latifah & Luhur, 2017; Aboud & Diab, 2018; Diantimala, 2018). In contrast, Radhouane, Nekhili, Nagati, and Paché (2019) on the other hand, focuses on the social and annual reports of French corporations. In terms of market value, the data reveal that ESI companies and applications for environmental guarantees are worthless. Furthermore, holding a proficient accountant and proposing a broader range of assurances as a guarantee provider enhances the value of environmental–reporting relationship.

For internal and external stakeholders, sustainability-reporting is a method of evaluating, disseminating and holding an organization responsible for its performance in achieving sustainable development goals. When a company's share-price is high, its value is also high and the company produces strong results that benefit its shareholders. Publishing sustainability reports can help reduce systemic risk and increase business value as a result. The form of corporate social responsibility outlined in the Sustainability-Report offers investors broader and more transparent information and reduces the systemic risks that push corporations to meet their social obligations. Due to the minimal risk, the company will perform better and the results will be reflected in the value of the company. Disclosure of sustainability reports can reduce the information gap between principals and agents, as the information disclosed is increasingly transparent.

Furthermore, the authors found that the BPS accounting data were more relevant for the companies that disclosed SURE compared to the companies that did not account for SURE, but the value relevance of EPS did not change for these corporations. This agrees with the findings of Carnevale and Mazzuca (2014). In this regard, Carnevale and Mazzuca provide the key to analyzing the likely link between the bank's market capitalization and preparing a sustainability-report that meets these assumptions and backgrounds. Our essay also falls into this category because it provides a way to determine the possible link between SURE disclosure and the bank's share-price. Therefore, not enough studies on the importance of SURE have been performed. These studies yielded mixed findings. Greeves and Lapido (2004) have discovered a link amongst SURE's benefits and the success of the companies that issue them. Schadewitz and Niskala (2010) looked at the impact of GRI's disclosure on commercial market value to see if the inclusion of SURE contributed to the clarity of the company's value. The importance of SURE in the banking industry has been investigated by Cardamone et al. (2012) they discovered an important negative association between SURE's business-listing and market-value.

One of the goals of our study was to better understand sustainability reports by analyzing whether the publication of sustainability reports can increase the usefulness of accounting data. Accounting, especially accounting variation, is a topic that many people are interested in. In terms of signal theory applications, the GRI reporting framework for sustainability reporting provides a more meaningful signal that a firm is providing investors with higher quality information. According to recent studies, companies that have sustainability reports are increasing investors' confidence in using accounting information to make decisions (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012; Lourenço, Callen, Branco, & Curto, 2014; Sutopo, Kot, Adiati, & Ardila, 2018). Carnevale and Mazzuca (2014) on the other hand, found that sustainability reporting reduces the value relevance of a bank's carrying amount per share, but has no effect on the bank's value relevance on European stock markets because additional information reduces the explanatory power of financial reporting variables (Carnevale & Mazzuca, 2014).

Reports on environmental risks and banks' impact on society are part of sustainability reports. These can be either indirectly or directly in nature (Scholtens, 2009). These are directly related to the bank's performance and decision-making. The injured bank debtor is an indirect person. The risk ratio of the borrower will reduce the credit quality of the loan approved by the bank. This logical model is also

http://dx.doi.org/10.22201/fca.24488410e.2022.3075

successful in terms of its potential impact on EPS. SURE corresponds to EPS & BPS values and affects the weight that shareholders attach to accounting–factors by providing additional information on EPS and BPS values (Cormier & Magnan, 2007; Cardamone et al., 2012; Carnevale et al., 2012; Carnevale & Mazzuca, 2014). To determine if SURE provides shareholders with the relevant data and, as a result, affects the significance of accounting—variables, we examination the following hypothesis: H2: SURE, the release indirectly affects the share-–price.

Investment decisions (INDEC)

Afrăsinei and Georgescu (2020) financial information provided by corporations is a component of the completeness of data commonly required to strengthen investment decisions. The efficiency and qualitative quality of accounting indicators, as well as the maturity of capital markets, are replicated to the level that they add to the value relevance of stock price formation. Previous research has found that accounting information alone is not sufficient to determine a company's market–value and recommends that the value of non-financial info and its intended disclosure be investigated (Barth & McNichols, 1994; Hirschey et al., 2001), assure to trade–ethics (Choi & Jung, 2008; Pae & Choi, 2011) and intended–disclosure (Lapointe-Antunes et al., 2006; Clarkson Peter, Li, Richardson, & Vasvari, 2008; Carnevale & Mazzuca, 2014)

Studies have analyzed the association between sustainability–reporting and social responsibility, as well as sustainability and share-price analysis. However, studies have been conducted to the extent that the readiness to craft investment decisions be subject to the evaluation of stocks. Given their importance, they are one of the main objectives of this study to discover this variable in order to offer info that, on the other hand, reinforces the literature of previous articles. Otherwise, it is an expansion and a guiding light for future studies. While both INDEC indexes increase returns, there are two reasons, one of the possible reasons would be in the field of business administration in an alternative investment strategy. Next, all managers can differ in the most interesting product collection because unique managers have one of the key talents. In other words, the management is “matched” to the assets (Holmes & Schmitz Jr, 1996). Second, a commonality, such as the cumulative success of the task involved, will greatly influence the profitability of maintaining or selling the initiative in a given change management case.

In addition, investments focus on various factors: the company's normal and sustainable market share, its technology and the evolution of costs in the exit process. Rates and time and method of payment are further specified by this information. Finally, the interests and financial expectations of investors would like to relate individually to the creation of a bonus for business owners. Investments in such companies can be carried out by economic supervision, which on the one hand works in the interests of its clients and expands the costs of the ordinary company and subsequently its valuation of shares. Investment decisions to increase the share-price and include this variable are, according to a previous statement, crucial. However, this site is the latest bypass study and the new results rely on beautifying this relationship to better improve the previous review and include the right details.

It helps achieve business goals by evaluating the role that investment choices play in current and future investment processes. Sustainability reporting companies strive to provide a comprehensive range of valuable information on socially and environmentally beneficial activities. This supports development and provides a good indicator of the company's success, and local investors use this information to decide how to proceed. It helps investors make more informed investment decisions by allowing them to choose companies that are trying to deliver accurate info at the precise time.

The high quality of the reporting materials encourages internal as well as external stakeholders to consider them sincerely and build on them during investment decisions. In a similar vein, investment choices aid fundamental and technical analysis in predicting stock prices, as technical and fundamental analysis depends on the information-quality contained in the articles. As a result, the connection between sustainability-reporting, social responsibility and business success will play an important role in stock valuation decisions. According to this theory, the emphasis is on the selection of investment choices as part of corporate sustainability and performance reporting in Saudi banks. On this basis, we suggest the subsequent hypothesis: H3: INDEC influences share-price.

Data and methodology

The Breusch–Pagan-LM check helps to choose between random-effects and pooled OLS-regression continuous coefficients model. In Table 1, the result of the LM examination is significant. Therefore, there is confirmation of important differences between banks and H0 are excluded. Therefore, random-effects–regression can be operated for this article. (Breusch & Pagan, 1980; Gujarati, 2015).

Table 1
Breusch and Pagan-L-M Test

	SPRC
chibar2(l)	14.21
Prob > chibar2	0.0002

Indicate significant * 5%, **2.5%, * ** 1%, respectively

Hausman's test was used to decide on a random or fixed effect model. The results show that the method of Random-effects GLS regression effects is preferred to test the hypotheses under study. The result uncovered in Table 2 arraigned that Hausman particular tests are irrelevant (prob <chi2 more than

.05). Consequently, the H0 are not dismissed and it tends to be presumed that the random–effects GLS model is proper, on the grounds that there is proof of significant contrasts across Saudi banks; accordingly, random–effects GLS–regression can be operated for this article (Gujarati, 2015).

Table 2
Hausman–Tests

	SPRC
$Chi^2(8)$	14.20
Prob > chi^2	0.0766

Indicate significant * 5%, **2.5%, * ** 1%, respectively

We collect quarterly data of all Saudis registered banks from the 2014 to 2018 using banks' financial reports, banks' Website and Datastream. After screening for missing values, we were left with 240 bank-year observations of 14 banks listed on Saudi stock Market. To investigate the direct impact of SURE, INDEC and EPS and BPS as accounting-variables on SPRC, we construct the following model:

$$SPRC = \beta0 + \beta3\ SURE + \beta4\ INDEC + \beta1\ BPS + \beta2\ EPS + \beta5\ ASTS + \varepsilon \tag{1}$$

Where SPRC is “estimated from the prices of common stocks of firms traded on resident or foreign stock exchanges”. SURE is “sustainability-report, dummy variable for bank i at quarter t, equal to 1 if the bank publishes the SURE and 0 if it does not”. INDEC “is the investment-decisions, following the method implemented by Elliott (2006) and requested members to make an investment decision.” BPS “estimated by grabbing the percentage of equity available to common stockholders against the number of shares-outstanding”. “EPS = net income - preferred dividends / average outstanding common shares”. ASTS "the natural logarithm of total assets” and ε is the error term. Additionally, to explore the moderating effect of SURE on the relationship between BPS, EPS, INDEC and SPRC, we extend our model as below:

$$SPRC = \beta0 + \beta1\ SURE + \beta2\ INDEC + \beta3\ BPS + \beta4\ EPS + \beta5\ ASTS + \beta6\ SURE\text{-}BPS + \beta7\ SURE\text{-}EPS + \beta8\ SURE\text{-}\ INDEC + \varepsilon \tag{2}$$

Where: SURE_BPS represents interaction terms of SURE with BPS and SURE_ EPS represents interaction terms of SURE with EPS and SURE_INDEC represents interaction terms of SURE with INDEC. Another variables are the similar as in model 1. We employ the Random-effects GLS-regression analysis to address the possible converse causality and excluded variable-bias.

Empirical analysis

Descriptive

We display descriptive–statistics in Table 3. The mean–value of 25.5971for SPRC indicate that on average the share-price of Saudi banks is normal. However, the minimum 7.033828 and the maximum 40.46455 that is means all Saudi banks share-price are operating in a position to achieve an optimal balance of returns. The mean values of BPS 0.091663, EPS 0.4793658, SURE 0.0833333, INDEC 0.0045818 and logarithm of ASTS 1.381963, respectively, represent the variations in the chosen sample banks. The rest values represent the mean of interaction variables.

Table 3
Descriptive

Variables	Obs	Mean	Std.Dev.	Min	Max
SPRC	240	25.5971	11.4266	7.033828	70.46455
BPS	240	0.0916631	0.0481601	0.0373479	0.2932853
EPS	240	0.4793658	0.2433876	-0.21813	1.29637
SURE	240	0.0833333	0.276963	0	1
INDEC	240	0.0045818	0.0016183	-0.0036157	0.0108791
ASTS	240	1.381963	0.0816264	1.112231	1.42526
SURE_BPS	240	0.0056323	0.0189353	0	0.0921455
SURE_EPS	240	0.0373187	0.1257267	0	0.54254
SURE_INDEC	240	0.0002977	0.0010041	0	0.0041323

Regression results discussion

It is predictable with Carnevale and Mazzuca (2014) acknowledging that there is an important relationship between share–price and EPS also BPS. Table 4 shows that BPS & EPS are significant and positive correlate with share–price (Z= 8.72*** and 9.79***) indicating that the Basis Point of equity and earnings has an impact on a banks' market value. For this reason, investors pay attention to the importance of accounting-info (Slack & Campbell David, 2008). These results are steady with Schadewitz and Niskala (2010), Greeves and Lapido (2004), and Carnevale and Mazzuca (2014) and Sumritsakun (2022). The sustainability-report coefficient is negatively and strongly important (Z= -8.93***), which means that the market assigns a negative significant-relationship to other information provided to sustainability-report. Conflicting with Barnea and Rubin (2010), discussed that their results undoubtedly cannot support the argument that investors explain the allocation of sources to C-S-R activities as a departure from other beneficial objectives. Table 4 shows that the association between the share–price and sustainability-report is significant for KSA banks. Because investors believe that sustainability-report proffers sufficient info, investors seem to indicate the value of sustainability-report dispersed by banks. In this regard, we find a direct important negative correlation between INDEC and the share–price. ASTS is a negative and important association (Z= -3.07*** and -3.06***), which suggests that the size of the bank does not increase the market valuation of banks.

Table 4
Regression Model 1 without moderating variables

Dependent Variable: SPRC
Method: Random-effects GLS regression

SPRC	Coef.	* Robust Std. Err.	Z	P>|z|	[95% Conf Interval]	
SURE	-6.056012	.6778597	-8.93***	0.000	-7.384593	-4.727431
BPS	74.31776	8.523598	8.72***	0.000	57.61181	91.0237
EPS	33.0015	3.370494	9.79***	0.000	26.39545	39.60755
INDEC	-1207.67	513.207	-2.35***	0.019	-2213.537	-201.8025
ASTS	-47.91247	15.60062	-3.07***	0.002	-78.48912	-17.33582
_cons	75.21633	23.49612	3.20***	0.001	29.16478	121.2679

Table 5
Regression Model 2 with moderating variables

Dependent Variable: SPRC
Method: Random-effects GLS regression

SPRC	Coef.	* Robust Std. Err.	Z	P> |z|	[95% Conf Interval]	
SURE	-9.17795	3.709382	-2.47***	0.013	-16.4482	-1.907696
INDEC	-1239.324	512.1939	-2.42***	0.016	-2243.206	-235.4423
BPS	73.20547	8.439849	8.67***	0.000	56.66367	89.74727
EPS	33.01827	3.401512	9.71***	0.000	26.35143	39.68511
ASTS	-47.92757	15.67433	-3.06***	0.002	-78.6487	-17.20645
SURE_BPS	-59.37348	12.11587	-4.90***	0.000	-83.12015	-35.62681
SURE_EPS	-23.33674	5.500613	-4.24***	0.000	-34.11774	-12.55574
SURE_INDEC	1995.53	1415.152	1.41*	0.159	-778.1163	4769.176
_cons	75.48142	23.68136	3.19***	0.001	29.06681	121.896

Moreover, in table 5 the inter-action term BPS×SURE was discovered to have a negative and important effect, suggesting that the influence of BPS on share–price is lower for banks that issuance sustainability-report. These results are unchanged with the study of Carnevale and Mazzuca (2014) in EU countries and study of Sumritsakun (2022) in Thailand. The negative connotation of the interaction terms SURE and BPS seems to disprove our hypothesis. This means that stakeholders assign less value to the data attached to the SURE in relation to the BPS-components and they contemplate this data harmonizing to the accounting-info. The value-reduction relationship of BPS can be described by the varied natures of the info attached in SURE. The EPS×SURE interaction coefficient is significant and negative. The results show that SURE affects the value of EPS, means that stockholders retain a normal rating for the accounting approach, confident that sustainability-report does not recommend any additional information to existing earnings-reproducing EPS accounting data, thus, there is a deterioration in the explicatory strength of earning variables (Carnevale & Mazzuca, 2014). In conclusion, we find an vital negative correlation between bank–size and stock–price that is not consistent with the earlier article by (Carnevale & Mazzuca, 2014; Alharbi et al., 2021).

Conclusions

The target of this article is to examine if the SURE issuance affects, directly or indirectly, the share–prices of a sample of listed KSA banks. We will look unswervingly at the effects of SURE and the investment–decision on the share–price. We discovered that BPS also BPA are significantly positive related to the share–price. This confirms our first hypothesis. Shareholders therefore remain concerned about the importance of accounting-info (Slack & Campbell David, 2008). These results are in line with Schadewitz and Niskala (2010), Greeves and Lapido (2004), Carnevale and Mazzuca (2014) and Sumritsakun (2022), the SURE figure is without hesitation and heartfelt, which recommends that the marketplace provide a positive critical positive association to other data transmitted by the sustainability-report system. Conflicting Barnea and Rubin (2010), our results clearly cannot confirm the question that investors explain the spread of assets to C-S-R as a departure from other beneficial purposes. In addition, we discover a negative and huge connection between stock price and SURE. Financial investors seem to allocate less value to sustainability-report spread by banks because they imagine that SURE offers normal data. The findings also show that investors are less likely to understand the SURE value, regardless of the business–model used. In this context, we found a significant negative relationship between INDEC and stock-price. Consistently with (e.g. Greeves & Lapido, 2004; Schadewitz & Niskala, 2010; Carnevale & Mazzuca, 2014; Alharbi et al., 2021; Sumritsakun, 2022), we see that financial-markets assign a confidence value based on sustainability-report. This confirms our subsequent working-hypothesis. The results show that investors accept the addition and that SURE may continue to disclose information, perhaps as it can enable them to make more efficient decisions and reduce informational asymmetry. information

We are indirectly investigating the effects of sustainability-report on the share-price. We fined BPS*SURE the interaction coefficient is significantly negative. These results are in agreement with the work of Carnevale and Mazzuca (2014) and study of Sumritsakun (2022). The declining value relationship of BPS can be explained by more info provided by sustainability-report, especially for the development of environmental–risks and social–risks. This findings are consistent with previous articles (Skinner, 2008), arguing that the descriptive–power of financial–statements has decreased and is not sufficient to net the company market-value. Similarly, the impact of sustainability-report on BPS can be illuminated by the diversity of statistics contained in sustainability-report with an assessment of capital risks. This is the stakeholder's sustainability-report in relation to the components of the BPS. It means that they attribute less value to the data added to and view this info as a complement to the accounting data. The value–reduction relationship of BPS can be described by the diverse nature of the data included in SURE. Also, the EPS*SURE interaction coefficient is negative and significant, which is more driven by short-term or annual results, which is in agreement with (Carnevale & Mazzuca, 2014; Alharbi et al., 2021).

In contrast, this study found a positive effect of the interaction between sustainability-report, investment decisions (INDEC*SURE). That means the investors seeking a sustained return on their investment, and that sustainable information in SURE to be used in support accounting information. Thus, banks with a sustainability-report with more disclosure improve the confidence of investors in using accounting variables to make a decision. Conclusively, the results imply that the evaluation of sustainability-report differs according to the size of the bank. Consistent with our prospects and contrary to Carnevale and Mazzuca (2014), the sustainability-report-value likewise concerns the big banks. This result shows that less expose and intermittent–monitoring by big banks is adequate to meet the info demands of investors who yet view sustainability-report as a valuable info tool. In contrast, this study found a positive effect of the interaction between sustainability-report, investment decisions (INDEC*SURE). That means the investors seeking a sustained return on their investment, and that sustainable information in SURE to be used in support accounting information. Hence, banks with a sustainability-report with more disclosure enhance the confidence of investors in using accounting variables to make a decision. In conclusion, the results articulate that the evaluation of sustainability-report diverges with the size of the bank.

The paper proposes important theoretical contributions from previous literature in the arena of sustainability-report application. The conceptual model of this work developed from the implementation of signal theory. Our findings suggest certain considerations. First, our paper on KSA Banks seems to confirm the strength of implementations by EU-banks' management in approving an increase in sustainability-report disclosure. Next, our paper has important suggestions for GCC states, managers and international corporations engaged in the development of a common–framework on sustainability–report. From this standpoint, our results sustain the importance of the EBF and numerous national banking suggestions' initiatives to implement C-S-R reporting. In addition, it is a new contribution to academic research to broaden the understanding of the Sustainability-report, especially in G20 countries. This does not require the sustainability-report to become mandatory. And expose of C-S-R is expensive. The scope of the publication activity would therefore be regulated bringing into account the practical benefits and the prices of publishing C-S-R. In addition, these benefits and costs can vary significantly across corporations and industries, reliant on various components, for instance the strength of corporations and stakeholders. They must therefore not be documented by normative rules. Because our result is influenced by social-qualities, financial-conditions, constitutional constraints, accounting rules and transparency of banking sectors in Saudi Arabia. Future research could extend the review to other regions and geographies, such as the Middle East or all GCC countries, and evaluate the reliability of sustainability-reports.

References

Aboud, A., & Diab, A. (2018). The impact of social, environmental and corporate governance disclosures on firm value: Evidence from Egypt. Journal of Accounting in Emerging Economies.

Adams, C. A. (2002). Internal organisational factors influencing corporate social and ethical reporting. Accounting, Auditing & Accountability Journal.

Adams, C. A., & Larrinaga-González, C. (2007). Engaging with organisations in pursuit of improved sustainability accounting and performance. Accounting, Auditing & Accountability Journal.

Afrăsinei, M.-B., & Georgescu, I. E. (2020). Value Relevance of the Information Reported by Romanian Quoted Companies with Connections to Tax Havens. In Eurasian Business Perspectives (pp. 249-268): Springer.

Ahmed Esra, & Hamdan, A. (2015). The impact of corporate governance on firm performance: Evidence from Bahrain Bourse. International Management Review, 11(2), 21.

Akhtar, S. (2008). Islamic finance: sustainability and challenges. NBR ANALYSIS, 18(4), 15.

Al-Homaidi, E. A., Al-Matari, E. M., Anagreh, S., Tabash, M. I., & Senan, N. A. M. (2021). The relationship between zakat disclosures and Islamic banking performance: Evidence from Yemen.

Al-Matari, E. M. (2020). Do characteristics of the board of directors and top executives have an effect on corporate performance among the financial sector? Evidence using stock. Corporate Governance: The International Journal of Business in Society, *20*(1), 16-43. https://doi.org/10.1108/CG-11-2018-0358.

Al-Matari, E. M., & Mgammal, M. H. (2020). The moderating effect of internal audit on the relationship between corporate governance mechanisms and corporate performance among Saudi Arabia listed companies. Contaduria y Administracion (Accounting & Management), 65(5), 1-36.

Albers, C., & Günther, T. (2010). Disclose or not disclose: determinants of social reporting for STOXX Europe 600 firms. Zeitschrift für Planung Unternehmenssteuerung, 21(3), 323-347.

Alharbi, M. A., Mgammal, M. H., & Al-Matari, E. M. (2021). Sustainability Report Publication and Bank Share Price: Evidence from Saudi Arabia Stock Markets. The Journal of Asian Finance, Economics, and Business, 8(2), 41-55.

Aliyu, S. (2017). Sustainability of Islamic banks: a comparative analysis between GCC and Non-GCC countries.

Alotaibi, K., & Hussainey, K. (2016). Determinants of CSR disclosure quantity and quality: Evidence from non-financial listed firms in Saudi Arabia. In International Journal of Disclosure andÂ â€¦: Springer.

Aras, G., & Crowther, D. (2009). Corporate sustainability reporting: a study in disingenuity? Journal of business ethics, 87(1), 279.

Aras, G., Tezcan, N., & Furtuna, O. K. (2018). Multidimensional comprehensive corporate sustainability performance evaluation model: Evidence from an emerging market banking sector. Journal of cleaner production, 185, 600-609.

Asaolu, T. O., Agboola, A. A., Ayoola, T. J., & Salawu, M. K. (2012). Sustainability reporting in the Nigerian oil and gas sector. COLERM Proceedings, 1, 61-84.

Ates, S. (2020). Membership of sustainability index in an emerging market: Implications for sustainability. Journal of cleaner production, 250, 119465.

Aureli, S., Gigli, S., Medei, R., & Supino, E. (2020). The value relevance of environmental, social, and governance disclosure: Evidence from Dow Jones Sustainability World Index listed companies. Corporate Social Responsibility and Environmental Management, 27(1), 43-52.

Baele, A., & Van, L. O. (2012). The CEO's perception on CSR: A determinant of CSR reporting. Unpublished Master Thesis. Ghent University, Belgium. Available from.

Barnea, A., & Rubin, A. J. J. o. b. e. (2010). Corporate social responsibility as a conflict between shareholders. 97(1), 71-86.

Barth, M. E., & McNichols, M. F. (1994). Estimation and market valuation of environmental liabilities relating to superfund sites. Journal of Accounting Research, 32, 177-209.

Becker, C. U. (2018). Business ethics: methods and application: Routledge.

Benfratello, L. (2014). Random effects regression for panel data. Encyclopedia of quality of life and well-being research. Springer, Dordrecht. https://doi. org/10.1007/978-94-007-0753-5_2402.

Benlemlih, M., Shaukat, A., Qiu, Y., & Trojanowski, G. (2018). Environmental and social disclosures and firm risk. Journal of business ethics, 152(3), 613-626.

Berthelot, S., Coulmont, M., & Serret, V. (2012). Do investors value sustainability reports? A Canadian study. Corporate Social Responsibility and Environmental Management, 19(6), 355-363.

Bini, L., & Bellucci, M. (2020). Accounting for Sustainability. In Integrated Sustainability Reporting (pp. 9-51): Springer.

Blacconiere, W. G., & Patten, D. M. (1994). Environmental disclosures, regulatory costs, and changes in firm value. Journal of accounting and economics, 18(3), 357-377.

Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. The Review of Economic Studies, 47(1), 239-253.

Campbell David, J. (2000, 2000). Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969–1997.

Campbell John, L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. Academy of management review, 32(3), 946-967.

Cardamone, P., Carnevale, C., & Giunta, F. (2012). The value relevance of social reporting: evidence from listed Italian companies. Journal of Applied Accounting Research, 13(3), 255-269.

Carè, R. (2018). Sustainability in banks: emerging trends. In Sustainable Banking (pp. 93-130): Springer.

Carlucci, D., Ferreira, F. A. F., Schiuma, G., Jalali, M. S., & António, N. J. S. (2018). A holistic conception of sustainable banking: adding value with fuzzy cognitive mapping. Technological and Economic Development of Economy, 24(4), 1303-1322.

Carnevale, C., & Mazzuca, M. (2014). Sustainability report and bank valuation: evidence from E uropean stock markets. Business Ethics: A European Review, 23(1), 69-90.

Carnevale, C., Mazzuca, M., & Venturini, S. (2012). Corporate social reporting in European banks: The effects on a firm's market value. Corporate Social Responsibility and Environmental Management, 19(3), 159-177.

Choi, T. H., & Jung, J. (2008). Ethical commitment, financial performance, and valuation: An empirical investigation of Korean companies. Journal of business ethics, 81(2), 447-463.

Clarkson Max, E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. Academy of management review, 20(1), 92-117.

Clarkson Peter, M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. Accounting, organizations and society, 33(4-5), 303-327.

Cooper, S. M., & Owen, D. L. (2007). Corporate social reporting and stakeholder accountability: The missing link. Accounting, Organizations Society, 32(7-8), 649-667.

Cormier, D., & Magnan, M. (2007). The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective. Ecological economics, 62(3-4), 613-626.

Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: economic incentives, public pressures or institutional conditions? European accounting review, 14(1), 3-39.

Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. The Accounting Review, 87(3), 723-759.

Diantimala, Y. (2018). The mediating effect of sustainability disclosure on the relationship between financial performance and firm value.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American sociological review, 147-160.

Dissanayake, D., Tilt, C., & Xydias-Lobo, M. (2016). Sustainability reporting by publicly listed companies in Sri Lanka. Journal of cleaner production, 129, 169-182.

Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: A structured literature review. Paper presented at the Accounting Forum.

Eccles, R. G., Krzus, M. P., & Ribot, S. (2015). Models of best practice in integrated reporting 2015. Journal of Applied Corporate Finance, 27(2), 103-115.

Eccles, R. G., & Saltzman, D. (2011). Achieving sustainability through integrated reporting. Stanf Soc Innov Rev Summer, 59, 56-61.

Ernawan, E. R. (2011). Business Ethics–Etika Bisnis Edisi Revisi. Alfabeta. Bandung.

European Banking Federation. (2016). Corporate social responsibility. Retrieved from https://www.ebf.eu/

Farooq, M. B., & De Villiers, C. (2019). Understanding how managers institutionalise sustainability reporting: Evidence from Australia and New Zealand. Accounting, Auditing Accountability Journal, 32(5), 1240-1269.

Fassin, Y., & Gosselin, D. (2011). The collapse of a European bank in the financial crisis: An analysis from stakeholder and ethical perspectives. Journal of business ethics, 102(2), 169-191.

Fifka, M. S. (2013). Corporate Responsibility Reporting and its Determinants in Comparative Perspective-a Review of the Empirical Literature and a Meta-analysis. Business Strategy and the Environment, 22(1), 1-35.

Gerged, A. M., Cowton, C. J., & Beddewela, E. S. (2018). Towards sustainable development in the Arab Middle East and North Africa region: A longitudinal analysis of environmental disclosure in corporate annual reports. Business Strategy and the Environment, 27(4), 572-587.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal, 8(2), 47-77.

Greeves, L., & Lapido, D. (2004). Added Values? Measuring the'Value Relevance'of Sustainability Reporting. Imagination (GIC) and Lintstock: London.

Guidry, R. P., & Patten, D. M. (2010). Market reactions to the first-time issuance of corporate sustainability reports. Sustainability Accounting, Management and Policy Journal.

Gujarati, P. (2015). Basic Econometrics (5th ed.). New York: McGraw-Hill Education.

Gungadeen, S., & Paull, M. (2020). Sustainability Reporting and Its Impact on the Implementation of Sustainable Development Goals in Island Economies in Africa: A Comparative Study of Private Sector Organisations in Mauritius, Madagascar and Seychelles. In The Future of the UN Sustainable Development Goals (pp. 123-152): Springer.

Habbash, M. (2016). Corporate governance and corporate social responsibility disclosure: evidence from Saudi Arabia. Social Responsibility Journal, 12(4), 740-754.

Hirschey, M., Richardson, V. J., & Scholz, S. (2001). Value relevance of nonfinancial information: The case of patent data. Review of Quantitative Finance and Accounting, 17(3), 223-235.

Holder-Webb, L., Cohen, J. R., Nath, L., & Wood, D. (2009). The supply of corporate social responsibility disclosures among US firms. Journal of business ethics, 84(4), 497-527.

Holly, A. (2018). Determinan Nilai Perusahaan di Bursa Efek Indonesia. SiMAk, 16(02), 101-118.

Holmes, T. J., & Schmitz Jr, J. A. (1996). Managerial tenure, business age, and small business turnover. Journal of Labor Economics, 14(1), 79-99.

Hooghiemstra, R. (2000). Corporate communication and impression management–new perspectives why companies engage in corporate social reporting. Journal of business ethics, 27(1-2), 55-68.

Ibrahim, A. H., & Hanefah, M. M. (2016). Board diversity and corporate social responsibility in Jordan. Journal of Financial Reporting and Accounting, 14(2), 279-298.

Ismaeel, M., & Zakaria, Z. (2019). Perception of preparers of sustainability reports in the Middle East. Meditari Accountancy Research.

Jeucken, M. H. A., & Bouma, J. J. (1999). The Changing Environment of Banks. Greener Management International(27).

Khalil, S., & O'sullivan, P. (2017). Corporate social responsibility: Internet social and environmental reporting by banks. Meditari Accountancy Research, 25(3), 414-446.

Kholis, A., Rambe, P., & Muda, I. (2020). Determining factors for disclosure of sustainability reporting with inclusive stakeholder models in indonesia public company issuer. International Journal of Management (IJM), 11(3).

Krzus, M. P. (2011). Integrated reporting: if not now, when. Zeitschrift für internationale Rechnungslegung, 6(6), 271-276.

Kumar, K., & Prakash, A. (2019). Examination of sustainability reporting practices in Indian banking sector. Asian Journal of Sustainability and Social Responsibility, 4(1), 2.

Lapointe-Antunes, P., Cormier, D., Magnan, M., & Gay-Angers, S. (2006). On the relationship between voluntary disclosure, earnings smoothing and the value-relevance of earnings: The case of Switzerland. European accounting review, 15(4), 465-505.

Latifah, S. W., & Luhur, M. B. (2017). Pengaruh Laporan Keberlanjutan Pada Nilai Perusahaan Dan Profitabilitas Sebagai Variabel Moderasi. Jurnal Akuntansi Dan Bisnis, 17(1), 13-18.

Lourenço, I. C., Callen, J. L., Branco, M. C., & Curto, J. D. (2014). The value relevance of reputation for sustainability leadership. Journal of business ethics, 119(1), 17-28.

Maignan, I., & Ralston, D. A. (2002). Corporate social responsibility in Europe and the US: Insights from businesses' self-presentations. Journal of International Business Studies, 33(3), 497-514.

Menassa, E. (2010). Corporate social responsibility: An exploratory study of the quality and extent of social disclosures by Lebanese commercial banks. Journal of Applied Accounting Research, 11(1), 4-23.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American journal of sociology, 83(2), 340-363.

Mgammal, M. H. (2011). Voluntary Disclosure and Ownership Structure Among Saudi Arabia Companies: Universiti Utara Malaysia. College of Business, https://books.google.com.sa/books?id=mst6AQAACAAJ.

Mgammal, M. H. (2017). The Effect of Ownership Structure on Voluntary Disclosure: Evidence from Saudi Arabia. Journal of Advanced Management Science Vol, 5(2), 138-151.

Mitra, P. K., Agrawal, V., & Ghosh, A. (2015). Exploring the factors for effective sustainability reporting: A survey of Indian chemical industry. Asian Social Science, 11(3), 197.

Moneva, J. M., & Cuellar, B. (2009). The value relevance of financial and non-financial environmental reporting. Environmental and Resource Economics, 44(3), 441-456.

Nájera-Sánchez, J. J. (2020). A Systematic Review of Sustainable Banking through a Co-Word Analysis. Sustainability, 12(1), 278.

National Renewable Energy Program. (2019). Framework for Developing Tendering Policies. Retrieved from https://www.ief.org/_resources/files/events/third-ief-eu-energy-day/turki-al-shehri-24.02-repdo---ief_riyadh_v2-2.pdf

Nobanee, H., & Ellili, N. (2016). Corporate sustainability disclosure in annual reports: Evidence from UAE banks: Islamic versus conventional. Renewable and Sustainable Energy Reviews, 55, 1336-1341.

Pae, J., & Choi, T. H. (2011). Corporate governance, commitment to business ethics, and firm valuation: Evidence from the Korean stock market. Journal of business ethics, 100(2), 323-348.

Radhouane, I., Nekhili, M., Nagati, H., & Paché, G. (2019). Is voluntary external assurance relevant for the valuation of environmental reporting by firms in environmentally sensitive industries? Sustainability Accounting, Management and Policy Journal.

Rahman, S., Khan, T., & Siriwardhane, P. (2019). Sustainable development carbon pricing initiative and voluntary environmental disclosures quality. Business Strategy and the Environment, 28(6), 1072-1082.

Rinaldi, L., Unerman, J., & De Villiers, C. (2018). Evaluating the integrated reporting journey: insights, gaps and agendas for future research. Accounting, Auditing Accountability Journal, 31(5), 1294-1318.

Rizk, R., Dixon, R., & Woodhead, A. (2008). Corporate social and environmental reporting: a survey of disclosure practices in Egypt. Social Responsibility Journal, 4(3), 306-323.

Rossi, F., & Harjoto, M. A. (2020). Corporate non-financial disclosure, firm value, risk, and agency costs: evidence from Italian listed companies. Review of Managerial Science, 14(5), 1149-1181.

Saxena, M., & Kohli, A. S. (2012). Impact of Corporate Social Responsibility on Corporate Sustainability: A Study of the Indian Banking Industry. IUP Journal of Corporate Governance, 11(4).

Schadewitz, H., & Niskala, M. (2010). Communication via responsibility reporting and its effect on firm value in Finland. Corporate Social Responsibility and Environmental Management, 17(2), 96-106.

Scholtens, B. (2006). Finance as a driver of corporate social responsibility. Journal of business ethics, 68(1), 19-33.

Scholtens, B. (2009). Corporate social responsibility in the international banking industry. Journal of business ethics, 86(2), 159-175.

Sejati, B. P., & Prastiwi, A. (2015). Pengaruh pengungkapan sustainability report terhadap kinerja dan nilai perusahaan. Diponegoro Journal of Accounting, 195-206.

Semenova, N., Hassel, L. G., & Nilsson, H. (2010). The Value Relevance of Environmental and Social Performance: Evidence from Swedish SIX 300 Companies. Liiketaloudellinen Aikakauskirja(3).

Skinner, D. (2008). Accounting for intangibles–a critical review of policy recommendations. Accounting business research, 38(3), 191-204.

Slack, R., & Campbell David. (2008). Narrative reporting: analysts' perceptions of its value and relevance: Association of Chartered Certified Accountants.

Slapničar, S. (2006). Reporting on corporate social responsibility. Hauppauge, NY: Nova Science.

Sobhani, F. A., Amran, A., & Zainuddin, Y. (2012). Sustainability disclosure in annual reports and websites: a study of the banking industry in Bangladesh. Journal of cleaner production, 23(1), 75-85.

Spence, M. (1974). Market signaling: Information transfer in hiring and related screening procedure. In: Cambridge, MA: Harvard University Press.

Sufian, F., & Noor Mohamad Noor, M. A. (2012). Determinants of bank performance in a developing economy: Does bank origins matters? Global Business Review, 13(1), 1-23.

Sumritsakun, C. (2022). The effect of sustainability report on value relevance of accounting information: Case study of Thai listed firms. Kasetsart Journal of Social Sciences, 43(2), 387-394.

Susanto, Y. K. (2013). Pengaruh pengungkapan sustainability report terhadap profitabilitas perusahaan. Business Accounting Review, 1(2), 319-328.

Sutopo, B., Kot, S., Adiati, A. K., & Ardila, L. N. (2018). Sustainability Reporting and value relevance of financial statements. Sustainability, 10(3), 678.

Tomaselli, G., Garg, L., Gupta, V., Xuereb, P. A., & Buttigieg, S. C. (2020). Corporate Social Responsibility Application in the Healthcare Sector: A Bibliometric Analysis and Synthesis. International Journal of Information Systems and Social Change (IJISSC), 11(1), 11-23.

Viganò, F., & Nicolai, D. (2009). CSR in the European banking sector: evidence from a survey. London: Edward Elgar.

Weber, O. (2016). The sustainability performance of Chinese Banks: institutional impact. Available at SSRN 2752439.

Wensen, K. v., Broer, W., Klein, J., & Knopf, J. (2011). The state of play in sustainability reporting in the EU. Publication commissioned under the European Union's Programme for employment and social solidarity–progress (2007-2013). Amsterdam, Berlin. Retrieved from http://ec.europa.eu/enterprise/policies/sustainablebusiness/corporate-social-responsibility/reportingdisclosure/index_en.htm