

Motivations and barriers for corporate social responsibility reporting: Evidence from the airline industry



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ABSTRACT

Corporate social responsibility (CSR) has become a popular topic, as related research saliently suggests that CSR reporting has positive impacts, including improving corporate reputation, achieving employee trust, and enhancing customers' satisfaction. Consequently, in the past few years, companies have increasingly begun to report their CSR initiative outcomes, while the majority struggles to adopt similar initiatives. The research presented herein investigates motivations and barriers for reporting CSR outcomes by providing evidence from airline companies to investigate this disparity. Data collected through survey and confirmatory interviews indicates that respondents believe that government is the most important reader (or customer) of CSR reports. Similar to other industries, CSR reporting's major motivations are related to reputation and brand value, employees' CSR awareness, communication with stakeholders, management systems, management culture, market share, and transparency with the government. An enhanced understanding of related barriers and motivators should assist policymakers and company executives in their strategic decision-making regarding CSR reporting, thereby contributing to advancement toward sustainability.

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1. Introduction

The number of regularly released corporate social responsibility (CSR) reports has dramatically increased across industries in the past decade (Chen, 2013; Duff, 2014; Hou and Reber, 2011; Morsing, 2006). Although companies may receive both positive and negative responses to publishing such CSR reports, most scholars note CSR reporting's benefits as a competitive advantage (Coombs and Holladay, 2012; Jiraporn et al., 2014; Jo and Harjoto, 2014; Matute-Vallejo et al., 2011; Tang et al., 2012).

Specifically, prior relevant tourism industry literature has also addressed the importance of publishing CSR reports (Abaeian et al., 2014; Calveras, 2015; Wells et al., 2015). The airline sector in the tourism industry has received notable attention from both academia and the public. The term "sustainable aviation" has become commonplace (Daley, 2012) because aviation has a key role in illustrating sustainability as an important source of economic

growth and environmental impacts (Budd et al., 2013; Upham, 2003). As a result, an increasing number of airlines have implemented CSR initiatives (Ayuso, 2006; Chen et al., 2012b). The airline industry's adoption of CSR is still relatively slow; the number of airlines formally and consistently reporting CSR information for more than ten years is small relative to the size of the sector (Cowper-Smith and de Grosbois, 2010). Andersson and Jabkowski (2013) proposed that airlines' awareness of sustainability topics began to especially receive attention during the last decade. The 2014 Dow Jones Sustainability Indices (DJSI), which recently surveyed 16 airlines (62% of the 26 airlines invited to participate), indicated that the sampled airlines exhibited a market capitalization of 66%. Further, the airline industry's average score was the lowest of all participating industries (Robeco, 2015), indicating that the airline industry's CSR performance should be improved.

This study investigated the factors that motivate airlines to undertake CSR reporting, as well as barriers to this reporting. The literature review, which provides the foundation for this research, also offers concrete insights into social and environmental reporting in the airline industry. Potentially influential factors for CSR reporting in the airline industry were specifically identified, and

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their significance was also examined. An enhanced understanding of related barriers and motivators should assist policymakers and company executives in their strategic decision-making with regards to CSR reporting.

The data was collected through a questionnaire completed by airline executives. The same questionnaire was sent to both CSR reporting airlines and their non-reporting counterparts to arrive at a balanced accounting of motivators and barriers. This study investigated the motivating factors that drive airlines to undertake CSR reporting, as well as their barriers. We specifically focused on:

- (1) Identifying the target readers (or consumers) of a CSR report in the airline industry;
- (2) Highlighting the primary motivations to publish a CSR report in the airline industry, and the goals that are associated with these motivations;
- (3) Discovering the perceived barriers that companies face in CSR reporting within this industry;
- (4) Discerning the relationship among target readers, motivators, and barriers to reporting CSR outcomes in the airline industry; and
- (5) Presenting the differences between those airlines that publish CSR outcomes and those that do not.

We identified salient items, in light of our aforementioned intent, from lists of potential motivations, barriers, target readers from related published research; we then developed a survey instrument. Data collected using the survey instrument was then analyzed using statistical methods to ascertain the factors' significance. The use of statistical methods was then followed by confirmatory interviews. Therefore, our purpose and chosen methods were not designed to “measure” motivators and barriers; instead, we sought to identify their significant barriers and motivators. Section 2 presents a brief literature review of CSR reporting, and its motivations and barriers. A methodology for the study, research results, and conclusion are provided in the remaining sections, respectively. Finally, conclusions are provided.

2. Literature review

2.1. Corporate social responsibility (CSR) reporting

“Corporate social responsibility” (CSR) is defined as “business' continuing commitment to act ethically and contribute to economic development while improving the quality of life for their workforce and their families, as well as of the local community and society at large” (WBCSD, 1998). This reporting was introduced in the beginning of the 20th century (Kannekanti and Muddu, 2008) and originated in environmental disclosures. With governments' increasing awareness of the value of CSR reports, many governments now require CSR disclosures regarding social aspects (O'Rourke, 2004). This type of information includes “companies' economic, legal, ethical, and philanthropic responsibilities towards society in general, and their range of stakeholders in particular” (Carroll, 1999). Documents that include this information are referred to as CSR, sustainability, corporate responsibility, and triple bottom line reports, without significant differences among these terms.

Previous research has studied companies' motivation, contents, and benefits in publishing CSR information (Bonsón and Bednárová, 2015; Fort, 2014; Yu and Choi, 2016). For example, Young and Marais (2012) observed CSR reporting in France and Australia to compare state-led and liberal market economies, and between high- and low-risk industries. They found that CSR reporting is stronger in high-risk industries than in low-risk industries.

Skouloudis et al. (2012) assessed the comprehensiveness and quality of CSR reports based on concept of the triple bottom line in the airport industry. Tewari and Dave (2012) benchmarked the performance of the top 100 Indian companies and multinational companies operating in the information technology (IT) sector through their sustainability reports. Their findings suggested that the number of companies publishing sustainability reports is small, yet the reports' quality meets global standards; Global Reporting Initiative (GRI) benchmarks are achieved by almost all Indian companies in the IT sector.

Most companies use the CSR report as a communication tool to improve stakeholders' understanding and perception of corporate actions (Albu and Wehmeier, 2013; Arvidsson, 2010; Dando and Swift, 2003). Typically, companies communicate with shareholders and investors by focusing on the annual report, which includes financial data (Chen and Gavius, 2015; Du et al., 2010). Additionally, companies can attract media attention to their CSR programs through press releases or information sharing with their employees through email, newsletters, and internal web portals. The effects of CSR on companies' performance have also been studied by researchers (Henderson (2005); Jensen (2001)).

Bonsón and Bednárová (2015) investigated factors that influence the extent of CSR reporting. They analyzed not only the extent to which Eurozone companies report on CSR indicators, but also the factors that influence CSR's use, based on annual sustainability reports from Eurozone companies' websites. Font et al. (2012) study, which benchmarked corporate social responsibility policies and practices for ten international hotel groups, found that corporate social responsibility policies and practices differ widely. Further, the environment and customer engagement present the greatest disclosure-performance gap. Ailawadi et al. (2014) studied two types of CSR activities' impacts on consumers' attitudinal and behavioral loyalty toward retailers. After finding that not all CSR efforts garner equal rewards from all consumers, they highlighted implications for how a retailer can best manage and communicate its CSR initiatives. Their results revealed the influence of both sector and DJSI listing on the extent of reporting. Relevant research papers are organized based on the research foci in Table 1.

2.2. Previous research on motivations for reporting CSR information

Firms consider CSR an important tool to manage external appearances and control their reputation among customers, employees, suppliers, and others, which ultimately affects their legitimacy (Hughey and Sulkowski, 2012). Publishing a CSR report or an annual report is a beneficial method of improving a company's relationship with stakeholders, as many investors, creditors, environmental groups, and governments have recently and primarily relied on the annual report to obtain companies' financial and non-financial information (Neu et al., 1998).

Aside from the value of CSR information, academic studies have been conducted with only small differences in terminology, such as those used for determinants, motivations, and incentives, to understand what factors compel a company to engage in the CSR reporting trend. A company can be encouraged to publish a CSR report for a variety of reasons, as discussed by Deegan and Samkin (2006), Ramdhony and Oogarah-Hanuman (2012), Idowu and Papisolomou (2007), Archel et al. (2009), Mäkelä and Näsi (2010), Reverte (2009), Reynolds and Yuthas (2008), Ehmer (2011), Bonsón and Bednárová (2015), Hopwood et al. (2010), Belal and Cooper (2011), Kolk (2004), Dobbs and van Staden (2012), Morsing (2006), and Lynes and Andrachuk (2008). These reasons include:

- Market and financial strategies
- Stakeholder pressure

Table 1
Research streams on CSR reporting.

	Research question	References
1	What are the factors motivating companies to report their CSR efforts?	O'Rourke (2004); Young and Marais (2012)
2	What content is being reported?	Tewari and Dave (2012); Skouloudis and Evangelinos (2009); Skouloudis and Evangelinos (2009)
3	How is the content being reported or communicated?	Esrock and Leichty (2000); Perks et al. (2013)
4	How does the reporting influence the company's image and performance?	Henderson (2005); Jensen (2001); de Grosbois (2012)
5	What are the factors that influence the extent of reporting?	Bonsón and Bednárová (2015); Costa et al. (2015)
6	What is the gap between CSR claims and actual practices, benchmarking the practices of companies operating in the European leisure market?	Font et al. (2012); Ailawadi et al. (2014)

- Image enhancement
- Regulation compliance
- Good corporate citizenship

According to the “Drivers for Corporate Responsibility Reporting” in KPMG's (KPMG, 2013) report, motivations for CSR reporting may be divided into economic and ethical considerations. The economic consideration consists of four narrow aspects: reputation and brand management, increased access to capital and stakeholder value, risk management, and improved governmental relationships, whereas ethical consideration involves transparent communication. Similarly, O'Rourke (O'Rourke, 2004) argued that the primary drivers of CSR reporting should include the public's “right to know” about corporate activities, customers' and investors' concerns, corporate interests in reporting, other stakeholder interests, and government attempts to use disclosure as a regulatory strategy.

2.3. Previous research on barriers to reporting CSR information

Numerous researchers have highlighted barriers to reporting CSR information. Many challenges exist in determining what to report, in what form, to what level of detail, to what audiences, and for what uses (O'Rourke, 2004). Designing information systems that are accessible, understandable, and rigorous is not easy for every company; hence, this is the first problem considered in reporting CSR progress. Corporations also face difficulties and challenges when they define and forecast how much data and material information stakeholders require to be disclosed, as they will not achieve high stakeholder satisfaction if their report is not sufficiently detailed and employees' effort will be wasted if unnecessary information is provided.

A study of barriers to corporate social and environmental responsibility reporting (CSER) revealed that barriers to CSER in Bangladesh are due to a lack of regulatory framework, tendency toward non-compliance with laws, socioeconomic problems, a lack of awareness and education in sustainable development, and a lack of initiatives from the government (Hossain et al., 2010). Kolk (2004) indicated numerous reasons to discourage a company from publishing CSR reports, including:

- Doubts regarding their potential advantages
- Competitors also not publishing CSR information
- Customers paying little attention to CSR information, and this does not affect customers' buying behavior
- Good company reputation due to its environmental performance
- Other ways of communicating regarding environmental and social issues
- Too expensive
- Difficult to collect data and select correct indicators

- May damage the company's reputation or attract attention to areas of improvement that might have financial and legal implications.

2.4. CSR reporting in the airline industry

Overall, the airline industry has been deeply connected to environmental and cultural issues. As an important part of the tourism system that deserves further study regarding CSR (Inoue and Lee, 2011), corporate social responsibility has become a key competitive advantage in today's airline industry environment (Porter and Kramer, 2006), and a way to acquire customer loyalty (Chen et al., 2012b; McGehee et al., 2009). Therefore, many airlines are committed to running their business with integrity, operating in compliance with local legislation, pursuing best practices wherever practical, and benchmarking themselves against the industry's best practice standards (BBA, 2012). This is evidenced in how airlines currently disclose pollution, noise, and waste controls; water consumption; carbon dioxide production; and energy use (Cowper-Smith and de Grosbois, 2010; Lynes and Andrachuk, 2008; Lynes and Dredge, 2006).

Airline companies' CSR has garnered increasing attention from both airline managers and academics, which is reflected in their concerns and statements regarding the importance of education, labor rights, working conditions, and the economic aspects of their business. Interest in CSR is increasing, in other words, as evidenced by various airlines' current engagement in corporate social responsibility activities. While implementing CSR, airlines identify the pros and cons in CSR initiatives and their performance. It is also imperative for every airline to understand its appropriate, relative CSR level. These CSR initiatives reduce airlines' negative impacts while maintaining or increasing their positive outcomes (Lynes and Dredge, 2006), which include building the firm's reputation (Brammer et al., 2012), enhancing consumer satisfaction, and improving employee motivation.

Overall, studies have been limited regarding corporate social responsibility in the airline industry (Tsai and Hsu, 2008). Previous studies have primarily focused on economic impacts, such as financial performance, corporate reputation, or operational effectiveness. Scholars have focused on environmental (i.e., carbon dioxide production and energy concerns, noise and waste control) and social impacts (i.e., charity activities, community awareness) and the related perspectives of management, customers, society, and government, as summarized below in Table 2.

The CSR reporting-related research, focusing on the airline industry, has common characteristics. Studies have generally addressed five essential aspects: (1) drivers of CSR reporting, (2) reported content, (3) CSR reporting in communications from the company, (4) the impacts of CSR reports on corporate image and performance, and (5) the extent of CSR reporting. Examples of these studies are provided in Table 3.

Despite these studies' contributions, we observe two significant limitations. First, the research scope in many of these reported studies only covered the companies that report CSR; we find it important to include those companies that do not report to compare implications. More importantly, while the drivers for CSR have been addressed, its barriers have not been clarified. We conducted a multi-stage survey to provide an enhanced understanding of related barriers and motivators to assist policymakers and company executives in their strategic decisions. The remaining sections provide details of the methodology, including its results.

3. Methodology

3.1. Research model and hypotheses

As per the research questions presented in Section 1, we hypothesize that “a relationship exists among the influence of target readers, motivations, and perceived barriers” regarding publishing CSR reports in the airline industry. We model this hypothesized concept as a cause-and-effect relationship, in which the target reader (or potential influencer) is the independent variable, and motivations and barriers are two dependent variables describing the CSR reporting context. If such relationships exist, it is necessary to test these relationships' strength. We formulate our research's conceptual model based on the summarized extant literature, as illustrated in Fig. 1, and propose the following hypotheses:

H1. The perceived target readers positively relate to CSR reporting motivations in the airline industry.

H2. The perceived target readers positively relate to CSR reporting barriers in the airline industry.

H3. CSR reporting motivations negatively relate to CSR reporting barriers in the airline industry.

H4. CSR reporting motivations are explained by relevant reporting goals in the airline industry.

The target readers, reporting barriers, and reporting motivations

are analyzed based on the studied literature, and listed in Tables 4 and 5. These tables report each aspect mentioned relative to the barriers, motivators, and target readers of CSR reporting. The barriers to CSR practices, as noted in the extant literature, can be summarized as: 1) a lack of guidelines or strategies (Hossain et al., 2010); 2) a lack of awareness (Hossain et al., 2010); 3) doubts as to their advantages (Kolk, 2004); 4) difficulty in compiling consistent data (Kolk, 2004); and 5) cost (Kolk, 2004; O'Rourke, 2004). On the other hand, among the motivators for CSR implementation, the following are reported: 1) the communication and disclosure of information (Bonsón and Bednárová, 2015; Morsing and Schultz, 2006; Reynolds and Yuthas, 2008); 2) satisfying stakeholders' concerns (Dobbs and van Staden, 2012); 3) increased profits (Dobbs and van Staden, 2012; Ramdhony and Oogarah-Hanuman, 2012); 4) enhanced tracking of progress or indicators (Kolk, 2004), and 5) compliance with international standards (Young and Marais, 2012).

We compiled sets of motivations and goals for CSR reporting based on the literature review. The companies have integrated business goals with social/environmental goals as CSR goals to perform business functions and investigate their relative significance at a macro level. This research categorized the 21 goals into 2 groups in an *ad hoc* manner, classifying them as economic and ethical goals. Table 6 lists these CSR reporting goals.

3.2. Research design

The pressure from target readers, or the motivations and barriers of CSR reporting, presents multidimensional variables. Generally, companies might consider risk management, cost reduction, differentiation, positive influence on shareholder value, improved reputation and brand value, and maintaining the license to operate among the motivating factors to publish CSR report. However, as understanding significant factors is important, and should contribute to related managerial decisions, this is what we sought to accomplish.

This study's motivations and barriers in CSR reporting for target

Table 2
Previous studies on CSR in the airline industry.

Research aspect	Research purpose	References
Economic impacts and management point of view	Illustrate the way various external, sector-specific, and internal influences for CSER are interpreted and then translated into action at the firm level.	Lynes and Andrachuk (2008)
Management point of view	Create an operational CSR program for air transportation within the context of limited resources.	Tsai and Hsu (2008)
Management point of view	Investigate effects of positive and negative CSR activities on accounting-based and market-based performance in the airline industry.	Kang et al. (2010)
Management point of view	Examine the relationship between CSR and accounting-based performance in the airline industry and the positive effect of CSR on market-based performance.	Lee and Park (2010)
Management perspective	Identify CSR initiatives in the airline industry and evaluate their adoption as reported by members.	Cowper-Smith and de Grosbois (2010)
Environmental, social, and economic impacts	Disaggregate CSR into voluntary activities for employee relations, product quality, community relations, environmental issues, and diversity issues; examine effects on financial performance among four tourism-related industries: casinos, airlines, hotels and restaurants.	Inoue and Lee (2011)
Management and economic impacts Social impacts and customer perspective	Indicate the integration of CSR into airlines' overall strategy. Examine customer opinions on airline social responsibility; explore the relationship between it and customer loyalty.	PWC (2011) (Chen et al., 2012a)
Management perspective and economic impacts	Research the association between CSR and operational relatedness; examine and compare the effects of CSR dimensions on firm performance influenced by the volatility in oil price.	Lee et al. (2013)
Management and economic impacts	Weigh performance measures of CSR and rank the airlines in terms of CSR performance.	Wang et al. (2015)
Economic impacts	Consider a link between high-quality service and adopting corporate social responsibility in a cost-efficient manner; explore effects of CSR and service quality on firms' performance.	Seo et al. (2015)

Table 3
Previous studies on CSR reporting in the airline industry.

Reference	Research aims	Research findings and results
Mak and Chan (2006); Mak and Chan (2007)	Analyze the environmental reporting structures of Europe, Asia-Pacific, and Japan.	<ul style="list-style-type: none"> - Airlines recognized the need for environmental reporting and demonstrated various degrees of effort. - An increasing number of airline environmental reports follow the guidelines of the Global Reporting Initiative (GRI). - 16 elements relating to companies' commitment to environmental improvement and environmental improvement systems have been identified.
Hooper and Greenall (2005)	Investigate the environmental reporting practices in the airline sector.	Increasing numbers of airlines are implementing CSR initiatives in their operations and reporting them to the public.
Lynes and Andrachuk (2008)	Discuss airline reporting practices.	<ul style="list-style-type: none"> - Almost all early reports were focused on environmental performance. - A change from “environmental reporting” to “sustainability reporting” is noticeable. - Social responsibility is becoming increasingly prominent.
Cowper-Smith and de Grosbois (2010)	Identify CSR initiatives in the airline industry and evaluate their adoption as reported by members.	<ul style="list-style-type: none"> - 14 of 41 airlines had annual CSR reports available in January 2009. - Airlines focus more strongly on environmental issues than on the social or economic dimensions of CSR. - Employee well-being and engagement, diversity and social equity, and community well-being and economic prosperity have contributed to environmental and social themes. - Airlines report CSR initiatives using differing or inconsistent measurements, making evaluation and comparison of their performance and effectiveness difficult.

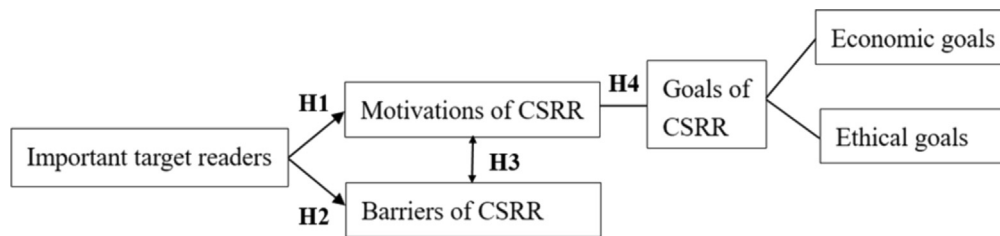


Fig. 1. Research framework.

Table 4
List of target readers.

Target readers	
(R1) Owners	(R7) Creditors/shareholders and investors
(R2) Managers	(R8) Governments
(R3) Employees	(R9) Non-governmental organizations (NGOs)
(R4) Suppliers and contractors	(PR10) Industrial peers
(R5) Customers	(R11) Academics
(R6) Community	(R12) Media

References: (Cl, 2014; Morsing, 2006; Morsing and Schultz, 2006).

readers are analyzed using a questionnaire as the survey instrument. The questionnaire's construction consisted of four steps: (1) the selection of an adequate number of suitable items from published studies to form a questionnaire draft, (2) asking experts in the field for a review and feedback to ensure valid content, (3) data collection by surveying those who worked with CSR reporting and relevant results analysis, and (4) confirmation of the results with two professional CSR reporting managers in different airline companies.

First, the authors endeavored to select items that reflect a list of target readers assumed to influence CSR publishing decisions, a set of goals that decision makers may consider, and a range of motivations and barriers that may affect decision makers' choice as to whether to report their company's CSR activities. The intent of this task was to screen all items mentioned in the literature, and to select items that were adequate and reasonable for this case. Three experts were then invited to participate in a review and provide feedback. The first expert is a deputy project manager from the

Foundation of Taiwanese industry service, which aims to improve industrial safety, environmental protection, and sustainable competitiveness in Taiwanese industries. This agency primarily focuses on sustainable planning, greenhouse gas management, CSR, green factories, and pollution prevention. She suggested clarifying the research purpose and making it more specific. The second expert is an assistant professor in the Department of Environmental Management at Tung Nan University, Taiwan. He is an expert on the disclosure of information for corporate sustainability reports, low-carbon supply chain/sustainable supply chain management, corporate social responsibility, and sustainable management in the tourism industry. He recommended adding more choices (e.g., academics, media in target readers, and options for motivations and barriers). The other expert, a general manager from a large professional services company, commented regarding the questionnaire's question types and the appropriateness of response choices. The questionnaire was revised based on their comments.

3.3. Sampling

Companies were randomly selected, to decrease potential bias due to the authors' subjective perspective, by inviting hundreds of airlines worldwide to participate. Significant aviation markets were the focus, such as Asia, Europe, and North America. The sample consisted of 26 respondents from 15 airlines and 1 cargo company. Of these, nine airlines were from Asia, three airlines and one cargo company were from Europe, two airlines were from North America, and one airline was from Africa. Regarding nationalities, there were 12 Taiwanese participants, which accounts for 46.2% of the

Table 5

Motivations and barriers of CSR reporting.

Motivations (Bonsón and Bednárová, 2015; Dobbs and van Staden, 2012; Ehmer, 2011; Kolk, 2004; Morsing and Schultz, 2006; Ramdhony and Oogarah-Hanuman, 2012; Reynolds and Yuthas, 2008; Young and Marais, 2012)
(M1) Adjust management systems and processes.
(M2) Increase awareness of CSR among employees.
(M3) Attract capital.
(M4) Open and maintain customer/supplier base.
(M5) Attract and retain talented employees.
(M6) Broaden context for the company management culture.
(M7) Improve corporate image (reputation and brand value).
(M8) Ensure transparency with government.
(M9) Deal with non-supportive organizations and community.
(M10) Communicate effectively with stakeholders.
Barriers (Hossain et al., 2010; Kolk, 2004; O'Rourke, 2004)
(B1) Lack of CSR strategy
(B2) Need to seek budget
(B3) Ability to hire experts in this area
(B4) Cost and benefit analysis
(B5) Communication with related departments
(B6) Justification of the value of report
(B7) Confirmation of plan for publishing
(B8) Definition of the scope of report
(B9) Measurement and selection of information
(B10) Dealing with adverse or sensitive information
(B11) Collecting credible data
(B12) Time consuming
(B13) Fulfillment of resource

Table 6

Goals of CSR reporting.

Economic goals	Ethical goals
(G1a) To monitor and control social and environmental activities	(G2a) To meet legally imposed requirements
(G1b) To provide information for potential investors/financial organizations	(G2b) To meet legal obligations
(G1c) To satisfy and increase awareness of employees	(G2c) To broaden awareness of social and environmental issues in the community
(G1d) To meet the trend in the industry	(G2d) To satisfy the "right to know" requirement of the government
(G1e) To improve effectiveness of the CSR program	(G2e) To promote sustainability and good corporate citizenship
(G1f) To satisfy customers' concerns	(G2f) To publish and maintain the context for the company management culture
(G1g) To deal with changes and mistakes	(G2g) To prevent threats from non-supportive organizations
(G1h) To satisfy suppliers' concerns	(G2h) To satisfy community concerns about the corporation
(G1i) To attract talented employees	
(G1k) To enhance market share and increase profit	
(G1l) To provide clear corporate messages and image in terms of social and environmental issues	
(G1m) To meet shareholders/creditors' right to access information and improve their trust in the company	
(G1n) To increase reputation and brand equity	

responses. Although the sample is small, an almost equal number of Taiwanese and non-Taiwanese companies allowed for a comparison between these groups.

Among the 16 companies in the study, only 4 had not published any CSR reports. Reporting social and environmental information in the company's annual report (6 companies), issuing a stand-alone CSR report (6 companies), and posting CSR information on the company website (5 companies) are popular methods used by companies that publish CSR reports; only one company chose an initial public offering (IPO) report to provide information related to its CSR activities.

As different work functions and responsibilities influence employees' concerns and knowledge, the closer the survey's subject matter to the respondents' work responsibility, the more reliable the collected data. Therefore, the reliability of the collected data in this study is acceptable based on the respondents' demographic information. Based on this analysis, most respondents are managers, accounting for 46.2% of the participants, from departments directly related to CSR reporting issues: safety and environment, general management, investor relations, marketing and public

Table 7
Respondents' details.

Airline	Nation	Region	CSR report
Air Greenland	Greenland	Asia	✓
China Airlines	Taiwan	Asia	✓
EVA Air	Taiwan	Asia	✓
Hong Kong Airlines	China	Asia	✓
Malaysia Airlines	Malaysia	Asia	✓
Mandarin Airlines	Taiwan	Asia	✓
Sri Lanka Airlines	Sri Lanka	Asia	✓
Tiger Air Taiwan	Taiwan	Asia	✓
Vietnam Airlines	Vietnam	Asia	✓
Virgin Atlantic Air	USA	America	✓
Alaska Airlines	USA	America	✓
Austrian Airlines	Austria	Europe	✓
Deutsche Lufthansa	Germany	Europe	✓
Lufthansa Cargo	Germany	Europe	✓
Turkish Airlines	Turkey	Europe	✓
South Africa Airways	South Africa	South Africa	✓

✓: this sign indicates that the company releases a CSR.

Table 8
Results of the reliability analysis.

Tested variable	Number of questions	Cronbach's alpha
Target readers	12	0.634
Importance level of target readers	13	0.870
Motivations	11	0.799
Economic goals	13	0.893
Ethical goals	9	0.833
Barriers	13	0.870
Overall	70	0.920

Table 9
Target readers.

Criteria	Mean	p-value	t-value	Std.	Rank
Government	4.3810	0.000**	7.864	0.80475	1
Owners	4.3810	0.000**	7.864	0.80475	1
Customers	4.1905	0.000**	5.294	1.03049	3
Employees	4.0476	0.000**	4.481	1.07127	4
Managers	4.0476	0.000**	5.215	0.92066	4
Community/society	4.0000	0.000**	4.583	1.00000	6
Creditors/shareholders/investors	3.9048	0.001	3.970	1.04426	7
Media	3.6667	0.019	2.552	1.19722	8
NGOs	3.3333	0.217	1.276	1.19722	9
Supplier contractors	3.3333	0.184	1.375	1.11056	9
Academics	2.7143	0.249	-1.188	1.10195	11
Industry peers	2.5238	0.086	-1.805	1.20909	12

**Significant at the 0.01 level.

Values in bold and italic indicates mean is less than 3.5.

Table 10
Motivations for publishing CSR reports.

Criteria	Mean	t-value	p-value	Std.	Rank
Improve corporate image (reputation and brand value).	4.24	7.384	0.000**	0.76842	1
Increase awareness of CSR among employees.	4.14	5.754	0.000**	0.91026	2
Communicate effectively with stakeholders.	3.95	3.760	0.001	1.16087	3
Adjust management systems and processes.	3.90	3.516	0.002	1.17918	4
Broaden the context for the company management culture.	3.86	3.408	0.003	1.15264	5
Ensure transparency with government.	3.71	2.970	0.008	1.10195	6
Open and maintain the customer/supplier base.	3.62	2.648	0.015	1.07127	7
Deal with non-supportive organizations and community.	3.38	1.321	0.202	1.32198	8
Attract and retain talented employees.	3.26	1.188	0.249	1.10195	9
Attract capital	2.90	-0.357	0.724	1.22085	10

**Significant at the 0.01 level.

Values in bold and italic indicates mean is less than 3.5

relations (PR), human resource (HR) management, and sustainability/CSR. The respondents' details are listed in Table 7.

3.4. Data analysis method

Various statistical methods were applied to investigate the motivations and barriers for CSR reporting in the airline industry, including descriptive statistics, *t*-tests (one sample and independent), and correlation tests. As nearly all the questionnaire items are quantitatively estimated using a 5-point Likert scale, the group's average value was used for one sample *t*-test. An "independent *t*-test" indicates differences in sample averages between one group and another; this was used in this study to explore the differences between CSR reporting and non-reporting airlines. These differences focused on barriers and motivations (or economic and ethical goals) to CSR reporting, with items that revealed the airlines' location or region and the respondents' professional position. Three correlation tests were used to test the relationships between (1) target readers and motivation, (2) target readers and

barriers, and (3) motivations and barriers. Finally, the correlation test was also applied for overall motivations and goals to verify hypothesis H4.

Regarding the questionnaire's reliability, Cronbach's alpha, as the most common measure of internal consistency, was used to determine if the scale was reliable. The SPSS software was used to obtain a Cronbach's alpha for the 70 sub-questions, and was found to be 0.92, well above the acceptance level of 0.7. Additionally, to ensure the reliability of the six main research factors, we also checked their alpha value; five are acceptable (between 0.799 and 0.893). Details are provided in Table 8.

4. Research results

4.1. Target readers

The relative significance of various pressures listed in Table 9 were tested using *t*-tests, comparing each mean to the middle value of the response choices (value = 3). The results revealed that eight first-ranked pressures, from government to media, are believed to influence CSR reporting; this can be observed in the table as they have *p*-values lower than $\alpha = 0.05$, and positive *t*-values. In contrast, academics, industry peers, and others do not represent important pressures, as demonstrated by their negative *t*-values and smaller means. Hence, these can be excluded from the study. When comparing the pressure of target readers between CSR publishing and non-publishing airlines, only a slight gap exists between airlines that report CSR and those that do not when

assessing the pressure from academics, media, creditors, shareholders, and investors.

4.2. Motivations for publishing CSR reports

Seven motivators are discerned as important for reporting CSR information using similar methods, given the *p*-values and *t*-values provided in Table 10. These motivators have *p*-values lower than $\alpha = 0.05$ (from 0 to 0.015), and positive *t*-values. The most significant motivation for reporting the respondent airlines' CSR information is improving the corporate image (both reputation and brand value), followed by employees' increasing awareness of CSR, effective communication with stakeholders, and adjusting management systems and processes. Ranked as more important are broadening the context for the company management culture, and transparency with the government. Additionally, handling non-supportive organizations or communities and attracting and retaining talented employees are relatively less important, with a *p*-value greater than 0.05. Alternatively, as the motivation to attract

Table 11
Economic goals.

Criteria	Mean	t-value	p-value	Std.	Rank
To increase reputation and brand equity	4.2381	7.384	0.000**	0.76842	1
To provide clear corporate messages and image in terms of social and environmental issues	4.0952	5.319	0.000**	0.94365	2
To monitor and control social and environmental activities	4.0952	5.043	0.000**	0.99523	3
To satisfy customers' concerns	4.0476	4.481	0.000**	1.07127	4
To improve effectiveness of the CSR program	4.0000	4.830	0.000**	0.94868	5
To satisfy and increase awareness of employees	3.9524	5.423	0.000**	0.80475	6
To meet shareholders/creditors' right to access information and to improve their trust in the company	3.8095	3.996	0.001	0.92839	7
To provide information for potential investors/financial organizations	3.5238	1.921	0.069	1.24976	8
To deal with changes and mistakes	3.4286	1.910	0.071	1.02817	9
To attract talented employees	3.3333	1.919	0.069	0.79582	10
To satisfy suppliers' concerns	3.3333	1.160	0.260	1.31656	11
To meet the trend in the industry	3.2857	1.369	0.186	0.95618	12
To open market share and increase profit	2.9524	-0.195	0.847	1.11697	13

**Significant at the 0.01 level.

Values in bold and italic indicates mean is less than 3.5.

Table 12
Ethical goals.

Criteria	Mean	t-value	P-value	Std.	Rank
To promote sustainability and be a good corporate citizen	4.1429	4.544	0.000**	1.15264	1
To broaden awareness about social and environmental issues in the community	4.1429	4.725	0.000**	1.10841	2
To satisfy community concerns about the corporation	4.1429	6.136	0.000**	0.85356	3
To publish and maintain the context for the company management culture	4.0000	5.477	0.000**	0.83666	4
To satisfy the "be known" requirement of the government	3.6667	2.646	0.016	1.15470	5
To meet legal obligations	3.5238	1.808	0.086	1.32737	6
To meet legally imposed requirements	3.4762	1.644	0.116	1.32737	7
To prevent threats from non-supportive organizations	3.1905	0.722	0.479	1.20909	8

**Significant at the 0.01 level.

Table 13
List of perceived barriers.

Criteria	Mean	t-value	p-value	Std.	Rank
Time consuming	3.4231	1.789	0.086	1.20576	1
Must confront adverse or sensitive information	3.4231	0.550	0.587	3.92095	2
Collection of credible data	3.1154	0.531	0.600	1.10732	3
Fulfilling resources	3.0385	0.876	0.157	1.24838	4
Cost and benefit analysis	2.8846	-0.500	0.622	1.17735	5
Need to seek budget	2.7308	-1.070	0.295	1.28243	6
Communication with related departments	2.6538	-1.225	0.232	1.44062	7
Measurement and selection of information	2.4615	-2.897	0.008	0.94787	8
Justification of the value of report	2.3846	-2.767	0.010	1.13409	9
Lack of CSR strategy	2.3846	-2.767	0.010	1.13409	10
Ability to hire experts in this area	2.3462	-3.277	0.003	1.01754	11
Confirmation of plan for publishing	2.1923	-3.430	0.002	1.20064	12
Definition of the scope of the report	2.0769	-4.308	0.000**	1.09263	13

**Significant at the 0.01 level.

Table 14
Comparison between CSR publishing companies and non-publishing companies.

Criteria	Mean	
	CSR reporting	Not reporting
Lack of CSR strategy	2.2222	2.7500
Absence of a budget to support CSR reporting	2.3889	3.5000
Ability to hire experts in this area	2.0000	3.1250
Cost and benefit analysis	2.6111	3.5000
Communicate with related departments	2.3889	3.2500
Justify the value of the report	2.2778	2.6250
Confirmation of plan for publishing	1.8889	2.8750
Definition of the scope of the report	1.7778	2.7500
Measurement and selection of information	2.3333	2.7500
Adverse or sensitive information	3.6111	3.0000
Collection of credible data	3.0000	3.3750
Time consuming	3.1667	4.0000
Fulfilling resources	2.7778	3.6250

capital has a negative *t*-value and a mean of less than 3, and seems to be of little importance in promoting or publishing CSR reports, we therefore eliminate this option.

4.3. Economic goals that affect the company's motivations

As with the previous analysis, significantly important goals are

Table 15
Relationships among target readers, motivations, and barriers.

Pearson correlation	Target readers	Motivations	Barriers
Target readers	1	0.623**	0.122
Motivations	0.623**	1	-0.26
Barriers	0.122	-0.26	1

** Correlation is significant at the 0.01 level (2-tailed).

N = 21.

easily recognizable: increasing reputation and brand equity, providing clear corporate messages and images in terms of social and environmental issues, monitoring and controlling social and environmental activities, and satisfying customers' concerns. The following analysis includes improving the CSR program's effectiveness, satisfying employees and increasing their awareness, and gaining the right to access shareholders/creditors' information and then improving their trust in the company.

A comparison of the economic goals of CSR reporting between publishing and non-publishing airlines indicates small differences across the following goals: (1) to monitor and control social and environmental activities, (2) to satisfy and increase employees' CSR awareness, (3) to increase reputation and brand equity, (4) to provide information for potential investors/financial organizations, and (5) to satisfy customers. Conversely, significant differences exist between the two groups in terms of: (1) handling changes and mistakes, (2) improving the CSR program's effectiveness, (3)

reporting. Apart from agreement on its time-consuming nature, the collecting of credible data and facing adverse or sensitive information are perceived as barriers. Table 15 records substantial differences between CSR reporting-airlines and those that do not report. Specifically, the absence of a budget to fund CSR, difficulty in hiring experts in this area, analyzing costs and benefits, and the complex nature of communicating with related departments are considered significant barriers from non-reporting airlines' perspective, while reporting airlines consider these problems to be only mildly difficult. The mean of non-publishing airlines across all options displays a higher value than that of publishing airlines. The biggest difference is in their perspectives regarding the ability to hire experts.

4.5. Results of the hypotheses' tests

H1. The perceived target readers positively relate to CSR reporting motivations.

As per the aforementioned variable definitions, target readers provide a means to influence the promotion of CSR reporting, while motivations refer to significant motivators. Table 15 illustrates a two-tailed, significant correlation between target readers and motivations at the 0.01 significance level.

H2. The perceived target readers positively relate to CSR reporting barriers.

In testing the hypothesis regarding the relationship between target readers and barriers, the latter refers to perceived significant barriers. Table 15 reveals correlations between target readers and barriers; however, no significant correlation is observed.

H3. CSR reporting motivations negatively relate to CSR reporting barriers.

Table 15 notes an inverse linear relationship between motivations and barriers. However, the significance index $p = 0.910$ and correlation index $r = -0.26$ suggest that this relationship is not significant.

H4. CSR reporting motivations are explained by the relevant reporting goals.

A correlation test was used to test H4, regarding the relationship between each motivation and goal of CSR reporting. The results indicate that the null hypothesis "there is no correlation" is rejected, as significant relationships are found at the level $\alpha = 0.05$ and $\alpha = 0.01$. Table 16 illustrates the goals for reporting CSR information and their related alphas.

attracting talented employees, (4) providing clear corporate messages and images regarding social and environmental issues, (5) meeting shareholders/creditors' right to access information and improving their trust in the company, (6) satisfying suppliers' concerns, and (7) meeting the trends in the industry (see Table 11).

4.4. Ethical goals that affect the company's motivations

The results in Table 12 indicate that most of the questionnaire's options are valuable, and suitable from respondents' perspective, except for "to meet legal obligation," "to meet legally imposed requirements," and "to prevent threats from non-supportive organizations," for which the p-values are 0.86, 0.116, and 0.479, respectively. Promoting sustainability and good corporate citizenship are the most important ethical goals and satisfying the government's "be known" requirement carries the least importance among the eight options.

Regarding the above information, only 4 of the 12 barriers have means greater than 3; the remaining goals occupy a lower level of importance. However, this situation seems to be caused by the different management perspectives regarding barriers to reporting CSR information among publishing versus non-publishing airlines (see Table 13).

Table 14 further provides meaningful findings regarding the perceived barriers in the studied airlines' CSR information

We sought validation by providing a summary of the results and our interpretations due to the respondents' small sample size. We could ascertain through a series of phone interviews that the results presented reflect CSR reporting contexts in the airline industry.

4.6. Discussion

This study investigates airline managers' opinions and beliefs toward motivations and barriers in CSR reporting. The findings indicate that airline managers have many different and similar opinions regarding influences from target readers, motivations, and barriers.

First, in terms of target readers, all respondents consider the government as the most important reader. One possible explanation is that airline industry operations impact the reduction and control of both noise and air pollution, which are regulated by the government. Chen and Chang (2013) studied the degree of pressure on environmental and social issues and arrived at the same conclusion. Respondents placed the owners in second place; as airlines handle international transport and are also frequently owned by governments, they can be considered representatives of their respective nations. Government and owners undoubtedly have a right to know about all aspects of an airline's business.

This study differs from Lynes and Dredge (2006) work on

Table 16
Reporting goals and significantly related motivations.

Goals of CSR report	α level
<i>(G1n) to increase reputation and brand equity</i>	
(M9) Deal with non-supportive organizations and community.	0.01
(M10) Effectively communicate with stakeholders.	0.01
(M7) Improve corporate image (reputation and brand value).	0.01
(M6) Broaden context for the company management culture.	0.05
(M2) Increase awareness of CSR among employees.	0.05
<i>(G1l) To provide clear corporate messages and image in terms of social and environmental issues</i>	
(M6) Broaden context for the company management culture.	0.01
(M7) Improve corporate image (reputation and brand value).	0.01
(M8) Ensure transparency with government.	0.01
(M2) Increase awareness of CSR among employees.	0.05
(M4) Open and maintain customer/supplier base.	0.05
<i>(G1a) To monitor and control social and environmental activities</i>	
(M2) Increase awareness of CSR among employees.	0.01
(M6) Broaden context for the company management culture.	0.01
(M4) Open and maintain customer/supplier base.	0.01
(M8) Ensure transparency with government.	0.05
<i>(G1e) To improve effectiveness of the CSR program</i>	
(M1) Adjust management systems and processes.	0.05
(M2) Increase awareness of CSR among employees.	0.05
(M6) Broaden context for the company management culture.	0.05
(M7) Improve corporate image (reputation and brand value).	0.05
<i>(G1c) To satisfy and increase awareness of employees</i>	
(M2) Increase awareness of CSR among employees.	0.01
(M6) Broaden context for the company management culture.	0.01
(M7) Improve corporate image (reputation and brand value).	0.05
(M8) Ensure transparency with government.	0.05
<i>(G1m) To meet shareholders/creditors' right to access information and improve their trust in the company</i>	
(M1) Adjust management systems and processes.	0.01
(M10) Effectively communicate with stakeholders.	0.05
<i>(G1h) To satisfy suppliers' concerns</i>	
(M2) Increase awareness of CSR among employees.	0.05
(M8) Ensure transparency with government.	0.05
<i>(G2e) To promote sustainability and good corporate citizenship</i>	
(M6) Broaden context for the company management culture.	0.01
(M8) Ensure transparency with government.	0.01
(M7) Improve corporate image (reputation and brand value).	0.01
(M2) Increase awareness of CSR among employees.	0.05
(M10) Effectively communicate with stakeholders.	0.05
<i>(G2c) To broaden awareness about social and environmental issues in the community</i>	
(M10) Effectively communicate with stakeholders.	0.05
(M6) Broaden context for the company management culture.	0.05
(M2) Increase awareness of CSR among employees.	0.05
(M9) Deal with non-supportive organizations and community.	0.05
<i>(G2h) To satisfy community concerns with the corporation</i>	
(M8) Ensure transparency with government.	0.01
(M2) Increase awareness of CSR among employees.	0.01
(M6) Broaden context for the company management culture.	0.05
(M7) Improve corporate image (reputation and brand value).	0.05
(M10) Effectively communicate with stakeholders.	0.05
<i>(G2f) To publish and maintain the context for the company management culture</i>	
(M6) Broaden context for the company management culture.	0.01
(M2) Increase awareness of CSR among employees.	0.05
(M1) Adjust management systems and processes.	0.05
(M8) Ensure transparency with government.	0.05
<i>(G2d) To satisfy the "be known" requirement of government</i>	
(M8) Ensure transparency with government.	0.01
(M2) Increase awareness of CSR among employees.	0.05
(M4) Open and maintain customer/supplier base.	0.05

Values in bold and italic indicates mean is less than 3.5.

Scandinavian and Taiwanese airlines' promotion of environmental management, which argued that passengers did not exert a high degree of pressure, in that this study revealed customers, including passengers, are important target readers who can influence CSR reporting. Dobbs and van Staden (2012) emphasized that community concerns and shareholder rights are the most important influencing factors in companies' reporting decisions. Naturally, due to the community's role in building a company's reputation

and spreading its image, the former is also considered an important reader. Moreover, CSR reports published by such studied airlines as Deutsche Lufthansa concentrate on their economic sustainability, social responsibility, climate and environmental responsibility, and corporate citizenship, while such companies as Turkish Air and China Airlines focus on their environmental and energy management structure and investing in people and the community. Thus, the statement that their key readers are government, customers, and community is reasonable, logical, and reliable.

Regarding the goals and motivations of CSR reporting, this study demonstrates that the major motivations of CSR reporting are related to reputation and brand value, employees' CSR awareness, communication with stakeholders, management systems, management culture, market share, and transparency with the government. These findings present target readers' role in this issue and respondents' beliefs on CSR reporting advantages. As demonstrated through hypothesis tests, several accepted economic and ethical goals have a significant relationship to motivation, which means that respondents see these goals as related to motivation.

This study's results correspond to the findings of Chen (2013) and Brammer et al. (2012), who suggested that companies can improve their image and strengthen their relationship with stakeholders, including customers, suppliers, and the community, if they apply environmental management in their business issues. Like Lynes and Dredge (2006) and Lynes and Andrachuk (2008), this study highlights the importance of culture in determining social and environmental motivations. We also find relevant results in research regarding the motivations for CSR reporting in Bangladesh (Hossain et al., 2010). For instance, those in Bangladesh appreciate the role of social obligation, the influence of management perspectives, and the enhancement of corporate image. Hence, the reliability of this study's results is reinforced.

Primary barriers from airline managers' perspective are that CSR reporting is time consuming, companies must confront adverse or sensitive information, collecting credible data requires effort, and they must determine how to fulfill resource utilization goals. Reporting CSR information, which normally requires a huge volume of information related to a company's economic, environmental, and governance performance, is a costly and time-consuming process.

5. Conclusions

5.1. Conclusion regarding the research questions

This study's objective is to provide a comprehensive view of motivations and barriers in the airline industry in publishing CSR reports. The research results indicate that all respondents believe government is the most important reader, followed by owners, customers, employees, internal managers, and the community. When determining what factors motivate airlines to publish CSR reports, this study's message is that the major motivations for CSR reporting are related to reputation and brand value, employees' awareness of CSR, communication with stakeholders, management systems, management culture, market share, and transparency with the government. Regarding barriers to reporting CSR information, respondents generally agreed that the biggest barriers were that the effort was time consuming, they had to confront adverse or sensitive information, collecting credible data was an effort, and it was not always clear how to fulfill resource utilization goals. Meanwhile, among managers who work for airlines that do not report CSR information, the CSR report is still perceived as unnecessary, which raises a range of questions as to how they can communicate with related departments, analyze costs and benefits, and seek a dedicated budget for CSR reporting.

This study's results provide support for airline companies' managers and other stakeholders regarding their CSR reporting management decisions. First, from a managerial perspective, this study provides a framework to help companies determine whether they should report CSR. An airline company, in other words, that has adopted almost all the goals mentioned in this study should consider reporting CSR information as a noticeable method to reach its targeted goals. Additionally, for airlines considering CSR information reporting, this study provides an overall view of CSR reporting benefits and challenges. Specifically, as inferred from this study's results, managers are likely to know that improvements in shareholders' and creditors' trust should increase the company's reputation, brand equity, and customer satisfaction. Further, improvement in transparency with the government is a potential benefit gained through CSR reporting. The results can also prepare airline company managers to anticipate the difficulties they will potentially face when reporting CSR information. As the government is the most important reader of CSR reports, governments can push airlines to publish CSR information on environmental and social issues to improve sustainable development in their respective countries' airline sector.

Governments can understand the problems that hinder airlines in reporting CSR information and look for solutions (e.g., associating CSR reporting guidelines with related regulations to help airlines in collecting credible data, or providing the information for the agencies or officers responsible for supporting companies in these issues) based on the barriers acknowledged in this study. This research demonstrates the important roles of customers and the community or society in CSR reporting. This presents the opportunity for transparency among airlines regarding environmental and social issues. Further, this suggests that governments can influence airlines to publish their CSR information, which is likely to increase awareness and support for the community's "right to know" regarding airlines' efforts to protect the environment.

From a methodological perspective, this research incorporates subject matter expert (SME) opinion and feedback during the survey instrument's development, as well as for the confirmation of inferences. We opine that the incorporation of SMEs increases the results' validity. Importantly, as the survey instrument simultaneously covered many motivators and barriers, the study eliminates the extant limitations studied, which only partially covered these factors (e.g., only motivators or barriers).

In summary, the authors hope that this study comprehensively illustrates the motivations and barriers of CSR reporting, and that its results can be applied in many ways, from other stakeholders' perspectives.

5.2. Limitations

One concern regarding this research's methodology may involve the lack of airlines in Africa and South America. However, the chosen sample is still valid because it covers the most significant aviation markets (Boeing, 2013). Thus, one can accept the sample as representative of the population. Regarding the framework design, or questionnaire, the authors are aware of a possible argument that it is too general, and not significantly tailored to the airline industry. However, due to the comprehensive nature and wide acceptance of such framework/questionnaire, it is believed that the questionnaire designed for this research is acceptable, and sufficiently specific for this kind of study.

Another perceived drawback for the analysis is the lack of analytical functions and measurement methods to confirm the results' relevance. Such validation is not available in this work beyond confirmatory interviews. Nonetheless, that relevance is a highly subjective issue, which is difficult to measure. As this study's

forementioned focus is to capture outstanding motivations and barriers for CSR reporting in the airline industry, the mentioned drawbacks are understandable and not overly significant. It is noteworthy that pressure from target readers is a motivator for CSR reporting. Target readers' different levels of pressure will result in different motivators and barriers for the implementation of CSR reporting. We refer to "pressure from target readers" here as the target readers' pressure as perceived by managers who can make CSR publishing decisions, as the level of perceived pressure might influence the managers in various ways (e.g., an insignificant level of perceived pressure might result in a decision not to publish).

5.3. Suggestions for future research

We do not consider the impacts of geographic factors in this study, although as data is gathered by airlines from different continents and countries, this study's results only generally address the researched problem. Future research may carefully consider the research issues under the influence of the business' country, which has its own culture, business behaviors, and level of development in sustainability. These characteristics can be efficiently and effectively studied to achieve more accuracy and detail in CSR reporting. Comparing the airline industry's issues to those in other industries or industry groups is another significant study direction to enhance the motivations and minimize the barriers of CSR reporting. Such research would certainly identify differences, and the reasons behind those differences, which would contribute to expanding our general knowledge of CSR reporting.

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