

Can corporate social responsibility enhance organizational image and commitment in the ocean freight forwarding industry?

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Abstract

Purpose – In the past few decades, the concept of corporate social responsibility (CSR) has received substantial interest in the competitive business environment. This study aims to empirically examine the impact of CSR on corporate image, organizational commitment and organizational performance in ocean freight forwarders.

Design/methodology/approach – Five critical CSR dimensions were identified based on factor analysis: consumer interests, employee interests, environmental management, disclosure and corporate commitment and sponsorship. Structural equation modelling was subsequently performed to examine the hypothesized relationships among CSR, corporate image, organizational commitment and organizational performance.

Findings – Results indicated that CSR had significantly positive effects on corporate image and organizational commitment, whereas corporate image was positively related to organizational commitment and organizational performance, respectively. Organizational commitment was also positively related to organizational performance. However, CSR did not have a significant direct effect on organizational performance.

Research limitations/implications – This study intended to conduct a survey on logistics service providers; however, due to the limited availability of research on ocean freight forwarding service providers, the present sample was limited to ocean freight forwarding enterprises.

Originality/value – From a theoretical perspective, this study contributes to the field by identifying the important dimensions of CSR and their effects on corporate image, organizational commitment and organizational performance. Particularly, it demonstrated the effect of CSR on ocean freight forwarding employees' organizational commitment.

Keywords Corporate social responsibility, Corporate image, Organizational commitment, Organizational performance, Ocean freight forwarding

Paper type Research paper



1. Introduction

In the past few decades, the concept of corporate social responsibility (CSR) has received substantial interest in the competitive business environment. Consequently, several firms now take an active approach toward fulfilling their social responsibility (Fjørtoft *et al.*, 2020). Enterprises mainly tend to pursue profits; however, considering socioeconomic factors, the social responsibilities of an organization go beyond making profits. Thus, enterprises are expected to engage in CSR activities to fulfill their economic, legal, ethical and philanthropic responsibilities. With an increase in awareness regarding consumer interests, employee interests and threats to the environment, several firms have adopted the principle of CSR to achieve sustainable development.

Employees are perceived as valuable assets for the service industry. However, as compared to other industries, employee turnover is high in the logistics service industry because it is often viewed to entail dirty, strenuous, dangerous and low-paid work (Lu, 2009). For instance, the annual employee turnover rate is as high as 27% in the forwarding industry in Greater China (Shang *et al.*, 2016). Employee turnover entails high costs for the logistics service business (Kuo *et al.*, 2020). Therefore, logistics service providers (LSPs) have to control their employee turnover rate so reliable and customized services can be provided to their clients. Several studies have concluded that involvement in CSR activities could improve a firm's reputation (Perrini *et al.*, 2006; Phan *et al.*, 2020; Singh and Misra, 2021). From those literature, a firm's good reputation has been found to enhance employees' commitment to the organization. In the field of organizational behavior and industrial psychology, organizational commitment is defined as an individual's psychological attachment to the organization. Organizational commitment predicts work variables such as turnover, organizational citizenship behavior and job performance (Porter *et al.*, 1974).

Although the concept of CSR has been strongly emphasized in the field of strategic management, most prior research has focused on evaluating the effect of CSR on organizational performance. Few studies have examined its effects on employees' commitment to the organization, especially in the context of LSPs (Lu *et al.*, 2009; Latif and Sajjad, 2018; Lai *et al.*, 2020). Prior research suggests a strong relationship among company reputation or image, customer satisfaction and firm performance (Homburg *et al.*, 2005). A firm's corporate image can affect its ability to increase prices for consumers and can create mobility barriers within the industry (Peloza, 2006). Some researchers have investigated the relationship between CSR and firm performance; however, the findings are inconclusive (Mahoney and Roberts, 2007; Jacobs *et al.*, 2010; Chen and Wang, 2011). Therefore, to fill the gap in the literature, the main objectives of this study were to identify the important dimensions of CSR for LSPs and to examine the impact of CSR on corporate image, organizational commitment and organizational performance.

This study focused on Taiwan, which is an island-based economic entity located in the center of the Asia-Pacific region. Its prosperity is highly dependent on foreign trade. LSPs offer several value-added services to shippers, such as storage, cargo tracking, inland transport, customs clearance, packing and documentation (Lu, 2003). They play an important role in providing integrated logistics-related services to shippers or their clients (Lu *et al.*, 2016; Kuo *et al.*, 2020; Lai *et al.*, 2020). According to the Ministry of Economic Affairs (2020) in Taiwan, the service industry contributed 62.72% of its gross domestic product (GDP) in 2019 and the annual revenue generated from this industry reached US \$30bn, which accounted for 7.2% of the GDP. As there are limited barriers to entering the logistics service market in Taiwan, this industry has become highly competitive. Further, the competition within the logistics industry has continued to increase as Taiwan joined the World Trade Organization and signed the Economic Cooperation Framework Agreement

with Mainland China in 2010 (Yang, 2012). Thus, it is imperative for LSPs to increase their competitive advantage and pursue sustainable development. As demonstrated by previous studies, CSR initiatives lead to win-win situations by bringing about social welfare and improving employees' organizational performance (Lu *et al.*, 2009; McWilliams and Siegel, 2001). Therefore, LSPs should integrate CSR initiatives into their strategy to create a competitive advantage. Due to the limited availability of research in this context, the present study focused on enterprises from the ocean freight forwarding industry.

The remainder of this paper is structured as follows: Section 2 reviews the literature on CSR, corporate image, organizational commitment and organizational performance. A conceptual framework and research hypotheses are also presented in this section. Section 3 describes the research methodology, including questionnaire design, sampling technique and methods of analysis. Section 4 presents the results of the analyzes; it is followed by the conclusions and implications in the final section.

2. Literature review and research

2.1 Corporate social responsibility

CSR is defined as the:

[...] consideration of, and response to, issues beyond narrow economic, technical and legal requirements of the firm to accomplish social (and environmental) benefits along with the traditional economic gains which the firm seeks (Aguilera *et al.*, 2007).

Thus, a firm is expected to go beyond its legal and economic obligations to engage in activities that benefit society. CSR includes economic, legal, ethical and philanthropic dimensions (Carroll, 1979). Based on a factor analysis, Lu *et al.* (2009) identified three dimensions of CSR in the field of container shipping and examined their impacts on organizational performance. These three dimensions were community involvement and environment, disclosure and employee and consumer interests. Mishra and Suar (2010) proposed a composite measure of CSR to evaluate its effects on organizational performance. Their tool included six dimensions, namely, employees, customers, investors, community, natural environment and suppliers.

Among the maritime-related industries, CSR has been steadily introducing. From United Nations (UN), 2030 Agenda and 17 sustainable development goals (SDGs), refers to a significant regulatory development, which has generated a drastic diffusion of CSR in shipping. Based on SDGs, the International Maritime Organization's (IMO's) also emphasized its vision and commitment to establish a CSR mindset in shipping. Moreover, CSR has been recognized by IMO as a vital component for the achievement of a sustainable shipping industry (IMO 2013). However, comparing to other industries, research on CSR implementation in shipping is still fragmented (Fafaliou *et al.*, 2006). Progoulaki and Roe (2011) suggested that CSR is considered by shipping companies as a key to distinguish their service to customers and assure environmental compliance and efficiency. Moreover, Lund-Thomsen *et al.* (2016) revealed that, with the exception of the container and cruise sectors, which appear to be at a more advanced state, there is not much research undertaken to investigate shipping companies' perceptions over the drivers and barriers influencing their decision to adopt a CSR policy and reporting program.

Several principles or guidelines pertaining to CSR have been proposed and discussed in the literature. For example, the UN proposed 10 principles for global businesses, which included practices related to human rights, labor, the environment and anticorruption (Rasche and Kell, 2010). The Organization for Economic Co-operation and Development (OECD, 2011) also proposed 10 guidelines for multinational enterprises, which pertained to

disclosure, human rights, employment and industrial relations, environment, combating bribery, bribe solicitation and extortion, consumer interests, science and technology and competition. The World Business Council for Sustainable Development (WBCSD, 2000) also suggested that the CSR activities of enterprises should address human rights, employee interests, environment, community, supplier relations, auditing and stakeholders' interest for improving their core value. Based on a review of the literature related to CSR, 30 attributes were selected for use in a questionnaire survey in the present study. Related findings have been presented in the following section.

2.2 Corporate image

Worcester (1972) defined the corporate image as the interconnection of a consumer's experiences, opinions, feelings, beliefs and knowledge about a corporation. Dowling (1986) regarded corporate image as a set of beliefs, emotions and feelings held by a consumer toward a corporation. As a corporate image is a mixture of a consumer's perception and his/her perspective toward a corporation, everything that then comes to mind when people think of a company is part of its corporate image (Chiu and Hsu, 2010). Based on these academic definitions, the concept of "image" does not seem to entail detailed specifications; rather, it is a holistic description and set of ideas. Therefore, the image could be viewed as the public's subjective and holistic perception about a subject. Accordingly, the corporate image can reflect an evaluation of corporations from the market's perspective. Some researchers have investigated the relationship between CSR and firm performance; however, their work revealed inconclusive findings (Aguinis and Glavas, 2012; Frynas and Yamahaki, 2016). Recent studies have also explored the influence of other variables, such as corporate reputation or image, on the relationship between CSR and firm performance (Alamgir and Uddin, 2017; Kim *et al.*, 2017). Some researchers argue that CSR has a strong impact on a corporate image by creating positive customer perceptions (Chiu and Hsu, 2010; Wang, 2020). Further, reputation has been found to have a positive impact on a firm's market share and its market returns in terms of assets and equity (Frynas and Yamahaki, 2016).

2.3 Organizational commitment

Organizational commitment can be defined as the willingness of an employee to exert high levels of effort on behalf of the organization, a strong desire to stay with the organization and an acceptance of its goals and values (Buchanan, 1974). Thus, it refers to a person's affective reactions to characteristics of his/her using organization (Cook and Wall, 1980). Organizational commitment involves affective, continuous and normative components (Allen and Meyer, 1990). Buchanan (1974) and Cook and Wall (1980) suggested that organizational commitment comprises three components, namely, identification, involvement and loyalty. Moreover, Porter *et al.* (1974) argued that organizational commitment could be measured by value commitment, effort commitment and retention commitment. Based on previous studies, the present study adopted the scale proposed by Cook and Wall (1980) to assess organizational commitment. In addition, the organizational commitment was assumed to include three components, namely, organizational identification, job involvement and organizational loyalty.

2.4 Organizational performance

Performance pertains to the measurement and comparison of actual levels of achievement of specific objectives. It can be assessed using financial and non-financial indicators (Venkatraman and Ramanujam, 1986). Dess and Robinson (1984) recommended a comprehensive measure of a firm's performance. Accordingly, the present study used a

combination of financial and non-financial or customer service measures to evaluate the performance of LSPs.

Based on a review of prior research on CSR, the following four commonly-used performance indicators were used to measure customer service performance: service quality, customer satisfaction, customer loyalty and competitive position (Lu *et al.*, 2009; Mishra and Suar, 2010; Yang, 2013). In addition, three indicators were used to measure financial performance: profit rate, market share and sales growth rate (Lu *et al.*, 2009; Mishra and Suar, 2010; Yang, 2013).

2.5 Research hypotheses

Several previous studies on CSR concluded that a firm could increase its performance and competitive advantage by adopting CSR initiatives (Ullmann, 1985; Lu *et al.*, 2009; Mishra and Suar, 2010). Ullmann (1985) reported a positive relationship between CSR and financial performance. Although CSR activities could impose additional costs on firms, integrating such initiatives into its strategy could typically lead a firm to higher revenue generation in the long term (McWilliams and Siegel, 2001). Lu *et al.* (2009) noted that disclosure, community involvement and environmental initiatives were positively related to container carriers' financial performance. In addition, activities related to employee and consumer interests were positively related to non-financial performance.

Involvement in CSR activities has also been found to improve a firm's reputation (Javalgi *et al.*, 1994; Perrini *et al.*, 2006). A firm with a good image or reputation can enhance employees' commitment to the organization. Brammer *et al.* (2007) found that the adoption of CSR initiatives significantly influenced employees' commitment to the organization. Kim *et al.* (2010) reported that a firm's CSR initiatives increased employee-company identification, which, in turn, increased employees' commitment to their organization. Youn *et al.* (2018) found that employees' perceptions on CSR can significantly enhance their commitment to the organization in the casino industry. Carter and Jennings (2002) reported that logistics-related social responsibility had a direct positive effect on job satisfaction and employee motivation.

Accordingly, based on these previous studies, a conceptual model (Figure 1) and the following six hypotheses were proposed:

- H1. CSR has a positive effect on ocean freight forwarding service providers' corporate image.
- H2. CSR has a positive effect on ocean freight forwarding service providers' organizational commitment.
- H3. Corporate image has a positive effect on organizational commitment.
- H4. Corporate image has a positive effect on organizational performance.
- H5. Organizational commitment has a positive effect on organizational performance.
- H6. Organizational commitment has a positive effect on organizational performance.

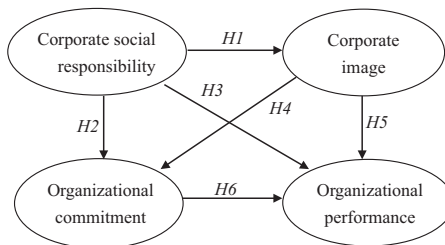


Figure 1. Research framework

- H3. CSR has a positive effect on ocean freight forwarding service providers' organizational performance.
- H4. Corporate image has a positive effect on ocean freight forwarding service providers' organizational commitment.
- H5. Corporate image has a positive effect on ocean freight forwarding service providers' organizational performance.
- H6. Ocean freight forwarding service providers' organizational commitment has a positive effect on their organizational performance.

3. Methodology

3.1 Questionnaire design and measures

Following Churchill and Iacobucci (2010), a self-administered questionnaire comprising five sections was designed to collect the data for this study. Notably, to ensure the validity and reliability of research constructs, all questionnaire items related to the CSR (Lu *et al.*, 2009; OECD, 2011; Yang, 2013), corporate image (Nguyn and Leblanc, 2001), organizational commitment (Cook and Wall, 1980; Yang, 2013) and organizational performance (Yang, 2013) of ocean freight forwarders (OFFs) were drawn from prior studies. Moreover, an interview was conducted with executives and experts in this industry. The questionnaire was pre-tested by distributing a draft to five shipping experts. The final version of the questionnaire included four sections. The first section pertained to the demographic information of the respondents and their companies. The second section assessed the CSR activities of OFFs. The third section focused on corporate image and organizational commitment, while the final section assessed organizational performance.

In total, 30 items were used to measure ocean freight forwarding's CSR activities following Yang (2013). The corporate image was assessed using the following three items adapted from Nguyn and Leblanc (2001): CI1: I have always had a good impression of our company; CI2: In my opinion, our company has a good image in the minds of consumers; CI3: I believe that our company has a better image than its competitors. A nine-item scale adopted from Cook and Wall's (1980) work was used to assess organizational commitment, including three dimensions: organizational identification, job involvement and organizational loyalty. Each item assessing CSR, corporate image and organizational commitment used a five-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree."

With respect to organizational performance, seven-item scales were adapted from prior studies to measure customer service performance and financial performance.

3.2 Sampling techniques

The sample of OFFs was selected from the *Members of the International Ocean Freight Forwarders and Logistics Association* in Taiwan. The questionnaire was distributed to 500 managers, from which, 136 usable responses were obtained, yielding a response rate of 27.2%. The issue of non-response bias could have influenced the present questionnaire survey. Therefore, a *t*-test was subsequently applied to deal with this bias. The respondents were divided into the following two groups based on response waves (Armstrong and Overton, 1977): early ($n = 74$, 54.4%) and late ($n = 62$, 45.6%) respondents. The results revealed no significant differences between the two groups' perceptions on questionnaire items at the 5% significance level, implying that the non-response bias did not influence the present study.

3.3 Research methods

To evaluate the impact of CSR activities on organizational commitment and to further test the research hypotheses, exploratory factor analysis and a two-step structural equation modeling (SEM) were conducted. Specifically, exploratory factor analysis was performed to identify CSR dimensions that were important for OFFs. Subsequently, a confirmatory factor analysis (CFA) was performed to verify the validity and reliability of the measurement model (Anderson and Gerbing, 1988). Finally, SEM was performed to assess the relationships among latent variables.

4. Results of the empirical analysis

4.1 Characteristics of respondents

The profile of respondents, displayed in Table 1, showed that nearly 78% of the respondents held the title of the manager (39.7%) and vice president or above (38.2%). Considering that managers are actively involved in the operations and strategic planning of businesses, the survey findings can be deemed reliable. In addition, over 65% of the respondents had worked in the shipping and forwarding industry for more than 10 years, indicating that they had sufficient practical experience about their companies' CSR activities and were capable of answering the questions appropriately. The majority of the responding firms (38.2%) had been in operation for 11–20 years. Further, approximately 87% of the responding firms had

Characteristics	Indicators	No. of respondents	(%) of respondents
Job title	Vice president or above	52	38.2
	Manager/Assistant manager	54	39.7
	Director/Vice director	8	5.9
	Clerk	11	8.1
	Sales representative	4	2.9
	Other	7	5.1
Working experience (years)	1–5	20	14.7
	6–10	27	19.9
	11–20	39	28.7
	21–30	17	12.5
	Above 31	33	24.3
Age of firm (years)	1–5	4	2.9
	6–10	14	10.3
	11–20	52	38.2
	21–30	27	19.9
	Above 31	39	28.7
Number of employees	Less than 50	84	61.8
	51–100	23	16.9
	101–500	20	14.7
	501–1,000	7	5.1
	Above 1,001	2	1.5
Annual revenue (Million NT\$ ^{a,b})	Less than 10	19	14.7
	10–50	42	32.6
	51–100	15	11.6
	101–1,000	33	25.6
	Above 1,001	20	14.0

Table 1.
Profile of
respondents and
their companies

Notes: ^aUS\$1 equals approximately 28 New Taiwanese (NT) dollars. ^b Seven respondents did not provide this information

been in operation for more than 10 years. Around 62% of the responding firms had fewer than 50 employees, while only 6.6% employed more than 501 employees. Further, 58.9% of the responding companies' annual revenue was below NT\$100m, for 25.6% it was between NT\$101m and NT\$1bn and for 14% it was greater than NT\$1bn.

4.2 Important corporate social responsibility dimensions for ocean freight forwarders

In total, 30 CSR attributes for OFFs were identified based on the literature review and expert interviews. To identify the most important CSR dimensions for OFFs, exploratory factor analysis was performed in this study. Following Churchill and Iacobucci's (2002), an eigenvalue greater than one was used to determine the number of factors. Moreover, to aid interpretation, a varimax rotation was used and variables with loadings of 0.5 or greater on only one factor were extracted (Hair *et al.*, 2010). The initial results yielded five factors that accounted for 72.55% of the total variance. However, three items were found to load on two factors or they had a factor loading lower than 0.5. Accordingly, these three items were dropped from further analyses. Finally, as shown in the Appendix, five CSR dimensions were found to be important for OFFs, which accounted for 70.83% of the total variance.

Factor 1 had eight items pertaining to customer interests. Therefore, this factor was labeled as "consumer interests." It accounted for 19.91% of the total variance. Factor 2 consisted of five items related to employee interests. Therefore, it was labeled as "employee interests." It accounted for 14.82% of the total variance. Factor 3 comprised six items related to environmental management practices. Thus, this factor was labeled as "environmental management." It accounted for 14.32% of the total variance. Factor 4 consisted of five items related to disclosure activities and commitment to CSR activities. Therefore, this factor was named "disclosure and corporate commitment." It accounted for 13.31% of the total variance. The last factor included three items related to sponsorship activities. Thus, this factor was named "sponsorship." It accounted for 8.47% of the total variance.

4.3 Descriptive statistics and reliability test

The descriptive statistics and reliability test results with corrected item-total correlation (CITC) coefficients and Cronbach's α values have been presented in Table 2. Regarding CSR dimensions, the results indicated that OFFs performed well on consumer interests (mean = 4.343) in the current situation, followed by employee interests (mean = 4.049), sponsorship (mean = 3.767), environmental management (mean = 3.721) and disclosure and corporate commitment (mean = 3.400). As most OFFs were small and medium enterprises with a capital of NT\$7.5m and they were not listed on the Taiwan Stock Exchange, they did not perform well on the CSR disclosure dimension.

Table 2 also presents the respondents' agreement level with their firms' image and organizational commitment. Results indicated that the respondents perceived corporate image (mean = 4.314) as the most agreeable dimension, followed by job involvement (mean = 4.257), organizational identification (3.988) and organizational loyalty (mean = 3.948). Moreover, OFFs exhibited better customer service performance (mean = 4.046) rather than financial performance (mean = 3.514).

To assess the consistency and reliability of each factor and dimension, a reliability test with CITC coefficients and Cronbach's α values was conducted. As evident from Table 1, the CITC coefficient for each dimension was larger than 0.5 and all Cronbach α values were well above the suggested threshold of 0.8, implying that the present results are reliable (Churchill and Iacobucci, 2002).

Table 2.
Descriptive statistics
and results of the
reliability test

Latent variables	Factors	No. of items	Mean	SD	Alpha	Range of CITC
ξ1 CSR	CSR1: Consumer interests	8	4.343	0.643	0.930	0.673–0.798
	CSR2: Employee interests	5	4.049	0.750	0.899	0.718–0.789
	CSR3: Environmental management	6	3.721	0.810	0.875	0.629–0.723
	CSR4: Disclosure and corporate commitment	5	3.400	0.897	0.886	0.550–0.805
	CSR5: Sponsorship	3	3.767	0.800	0.816	0.598–0.751
η1 CI	CI: Corporate image	3	4.314	0.621	0.917	0.810–0.847
η2 OC	OC1: Organizational identification	3	3.988	0.749	0.827	0.631–0.730
	OC2: Organizational loyalty	3	3.948	0.846	0.893	0.723–0.853
	OC3: Job involvement	3	4.257	0.654	0.943	0.759–0.840
η3 FP	FP1: Financial performance	3	3.514	0.701	0.800	0.567–0.742
	FP2: Customer service performance	4	4.046	0.649	0.878	0.657–0.805

4.4 Analysis of the measurement model

Before testing the research hypotheses, it is important to establish the unidimensionality, reliability and validity of the measurement model (Anderson and Gerbing, 1988). Thus, a CFA was performed to purify the measurement model. Common goodness-of-fit indices, namely, χ^2 , normed χ^2 and *p*-value were used to assess the fit of the measurement model. Results showed that the χ^2 value ($\chi^2 = 142.613$, *df* = 59, *p* = 0.000) was statistically significant at the 0.05 level of significance, implying that the initial model needed to be modified. Accordingly, by inspecting the standardized residuals and modification indices, the variable “disclosure and corporate commitment” was eliminated because the highest residual value (4.500) exceeded the threshold of 2.58 (Hair *et al.*, 2010). The revised model exhibited adequate goodness of fit on several indices ($\chi^2 = 76.066$, *df* = 48, *p* = 0.006, The goodness of fit index (GFI) = 0.916, comparative fit index (CFI) = 0.976, the root mean square residual (RMR) = 0.016, root mean square error of approximation (RMSEA) = 0.066), implying that the proposed model (PM) was credible. The subsequent tests of validity, reliability and unidimensionality were conducted as described below.

The CFA results (Table 3) indicated that the CFI, IFI and TLI values were well above the recommended cut-off value of 0.90 and the RMR and RMSEA values were all below the recommended threshold of 0.08, implying that all the constructs were unidimensional (Anderson and Gerbing, 1988). Regarding convergent validity, as evident in Table 3, all composite reliability values were significant on the factor loadings at the 0.05 level, suggesting that the measured variable or factor represented the underlying construct. Moreover, except for financial performance, all *R*² values were above 0.3. Considering the profit rate, market share and sales growth rate are common and important items for measuring financial performance in prior studies, the financial performance was not removed and the results are marginally acceptable. The average variance extracted (AVE) values ranged from 0.535 to 0.789, exceeding the 0.50 threshold value. These indices suggest that all indicators measured the same construct, thus providing satisfactory evidence of convergent validity (Fornell and Larcker, 1981; Anderson and Gerbing, 1988; Hair *et al.*, 2010).

A rigorous and commonly-used method to assess discriminant validity entails comparing the AVE values with the squared correlation between research constructs (Fornell and Larcker, 1981; Koufteros, 1999). As evident in Table 4, the highest squared correlation was observed between corporate image and organizational commitment at 0.588.

Latent variables	Factors	Unstandardized factor loading	Standardized factor loading	S.D.	Critical ratio	R ²
ξ1 CSR	Consumer interests	0.798	0.816	0.072	11.035	0.666
	Employee interests	1.000 ^a	0.848	–	–	0.719
	Environmental management	0.687	0.581	0.097	7.056	0.338
η1 CI	Sponsorship	0.923	0.724	0.099	9.354	0.525
	CI1	0.934	0.855	0.065	14.317	0.731
	CI2	0.880	0.899	0.055	15.962	0.808
η2 OC	CI3	1.000	0.909	–	–	0.826
	Organizational identification	0.896	0.891	0.068	13.127	0.794
	Organizational loyalty	1.000	0.838	–	–	0.703
η3 OP	Job involvement	0.816	0.845	0.068	12.057	0.713
	Financial performance	0.548	0.472	0.110	4.999	0.223
	Customer service performance	1.000	0.920	–	–	0.846

Notes: ^aindicates a parameter fixed at 1.0 in the original solution; CSR: corporate social responsibility; CI: corporate image; OC: organizational commitment; OP: organizational performance; model fit index: $\chi^2 = 76.066$ (48), $p = 0.006$, RMR = 0.016, RMSEA = 0.066, GFI = 0.916, The adjusted goodness of fit index (AGFI) = 0.864, CFI = 0.976, normed fit index (NFI) = 0.937, radio frequency interference (RFI) = 0.914, incremental fit index (IFI) = 0.976, Tucker–Lewis index (TLI) = 0.966. CI1: I have always had a good impression of our company; CI2: In my opinion, our company has a good image in the minds of consumers; CI3: I believe that our company has a better image than its competitors

Table 3. Results of the CFA

This was significantly lower than their individual AVEs, which were 0.789 and 0.737, respectively. Accordingly, the results prove the discriminant validity of the study constructs. Composite reliability refers to the internal consistency and homogeneity of the items comprising a scale. As shown in Table 4, all constructs exceeded the recommended

Variable	Construct reliability ^a	ξ1 CSR	η1 CI	η2 OC	η3 FP
ξ1 CSR	0.834	<i>0.562^b</i>			
η1 CI	0.918	0.415	<i>0.789</i>		
η2 OC	0.893	0.518	0.588	<i>0.737</i>	
η3 FP	0.676	0.319	0.415	0.345	<i>0.535</i>

Notes: ^aConstruct reliability = (sum of standardized loading)²/[(sum of standardized loading)² + (sum of indicator measurement error)]; Indicator measurement error can be calculated as 1 – (standardized loading)²; ^bThe AVE value has been presented in italics font on the diagonal

Table 4. Discriminant validity and composite reliability

level of 0.6 (Bagozzi and Yi, 1988; Hair *et al.*, 2010), implying that all indicators measured the same latent construct. In sum, the overall results of the goodness-of-fit and assessment of the measurement model lend substantial support to the PM.

4.5 Structural equation modeling: hypotheses testing

After confirming a good model fit for the PM, this study proceeded to test the hypothesized relationships among the proposed structural model. Results displayed a good model fit with $\chi^2 = 76.066$, $df = 48$, $\chi^2/df = 1.585$, $p = 0.006$, GFI = 0.916, CFI = 0.976, RMR = 0.016, RMSEA = 0.066. However, two of six hypothesized coefficients were found to be insignificant, namely, the effect of CSR on organizational performance (standardized $\beta = 0.114$, $p = 0.521 > 0.05$) and the organizational commitment on organizational performance (standardized $\beta = 0.244$, $p = 0.283 > 0.05$), respectively. Given the fact that engaging in CSR activities could impose additional costs on firms, a competing model without the direct relationship between CSR and organizational performance was re-estimated.

The competing model also exhibited a series of goodness-of-fit indices ($\chi^2 = 76.454$, $df = 49$, $\chi^2/df = 1.560$, $p = 0.007$, GFI = 0.916, CFI = 0.976, RMR = 0.017, RMSEA = 0.064). To determine the best model, a χ^2 difference test suggested by Anderson and Gerbing (1988) was conducted. Table 5 showed that the competing model ($\Delta\chi^2 = 0.388$, $df = 1$, $p > 0.05$) was not significantly better than the PM. Scholars argued out that when equivalent modes have equal values of fit indices, it is not possible to determine the best model through a χ^2 difference test (Kline, 2011; Nunkoo and So, 2016). In contrast, it should be based on both theoretical and quantitative criteria (Hershberger, 2006; Kline, 2011; Nunkoo and So, 2016). As prior studies offered theoretical support for the removal of the direct relationship between CSR activities and organizational performance (Mehralian *et al.*, 2016; Wang *et al.*, 2020), a competing model was subsequently proposed and found to have a good model fit. Moreover, both the Akaike information criteria (AIC) and the Browne–Cudeck criterion (BCC) were commonly used to compare different possible models and determine which one is the best fit (Akaike, 1987; Browne and Cudeck, 1989; Nunkoo and So, 2016). Results showed that the AIC and BCC for the competing mode were better than those in the PM.

Results, shown in Table 6, derived from the competing model indicated that five path relationships proposed in the model were all found to be significant. Results revealed the CSR was found to have significant positive impacts on corporate image (standardized $\beta = 0.773$, C.R. > 1.96) and organizational commitment (standardized $\beta = 0.529$, C.R. > 1.96). Meanwhile, corporate image was found positively related to organizational commitment (standardized $\beta = 0.448$, C.R. > 1.96) and organizational performance (standardized $\beta = 0.517$, C.R. > 1.96). Moreover, a significant positive relationship between organizational commitment and organizational performance was also found in this study (standardized $\beta = 0.352$, C.R. > 1.96).

Results derived from the competing model indicated that CSR activities had a positive impact on the corporate image (H1) and organizational commitment (H2). This finding implies that OFFs can significantly improve their corporate image and enhance

Table 5.
Comparison of PM
and CM

Model	χ^2	df	$\Delta\chi^2$	GFI	CFI	RMR	RMSEA	AIC	BCC
PM	76.066	48	–	0.916	0.976	0.016	0.066	136.066	142.460
CM	76.454	49	0.388	0.916	0.976	0.017	0.064	134.454	140.634

Notes: PM: proposed model; CM: competing model

Table 6.
Results of the SEM

Relationships	Estimate	SE	t-value	p	Supported/ not supported
Corporate social responsibility → Corporate image	0.773	0.120	8.789	0.000**	Supported
Corporate social responsibility → Organizational commitment	0.529	0.140	4.960	0.000**	Supported
Corporate social responsibility → Organizational performance	–	–	–	–	Not supported
Corporate image → Organizational commitment	0.448	0.096	4.588	0.000**	Supported
Corporate image → Organizational performance	0.517	0.132	3.426	0.000**	Supported
Organizational commitment → Organizational performance	0.352	0.135	2.330	0.020**	Supported

Notes: Fit indices: $\chi^2 = 76.454$, $\chi^2/df = 1.560$, GFI = 0.916, CFI = 0.976, RMR = 0.017, RMSEA = 0.064; **Significant at the 0.05 level of significance

employees' commitment to the organization by engaging in CSR activities. Thus, OFFs' involvement in CSR activities related to employee interests, consumer interests, environment management and sponsorship can significantly improve their corporate image and organizational commitment. This finding is consistent with that reported by previous studies (Carter and Jennings, 2002; Brammer *et al.*, 2007; Kim *et al.*, 2010; Chiu and Hsu, 2010; Youn *et al.*, 2018; Wang, 2020). The present results also showed that corporate image was positively related to organizational commitment (*H4*) and organizational performance (*H5*), implying that OFFs with a good corporate image can not only create positive customer perceptions but also enhance employees' commitment to the organization. In turn, these would improve the OFFs' customer service performance and financial performance. This finding is consistent with those reported by previous studies (Brammer *et al.*, 2007; Kim *et al.*, 2010; Frynas and Yamahaki, 2016). Finally, the present results revealed that organizational commitment was positively related to organizational performance (*H6*), implying that employees with a higher commitment to the organization are more satisfied with their organization and that they have lower turnover intention. These results suggest that OFF employees' high organizational identification, job involvement and organizational loyalty could lead to better organizational performance in terms of customer service and financial performance. This finding is consistent with that reported by previous studies (Mayer and Schoorman, 1992; Brammer *et al.*, 2007; Kim *et al.*, 2010).

However, the direct effect of CSR on organizational performance (*H3*) was not supported in this study, which implies that involvement in CSR activities does not directly influence organizational performance. It is not surprising because CSR activities could impose additional costs on firms, and therefore, such activities could not provide superior performance in the short term. This finding is consistent with that of previous studies (McWilliams and Siegel, 2001; Yang, 2013; Mehralian *et al.*, 2016; Wang *et al.*, 2020).

5. Conclusions and discussions

This study aimed to examine the impact of CSR on corporate image, organizational commitment and organizational performance in ocean freight forwarding service providers, from their employees' perspective. The main findings have been summarized below.

An exploratory factor analysis was performed to identify the CSR dimensions that are important for OFFs. Five such CSR dimensions were identified, namely, consumer interests, employee interests, environmental management, disclosure and corporate commitment and sponsorship. The findings also showed that OFFs providers perform well with regard to consumer interests in the current situation, followed by employee interests, sponsorship, environmental management and disclosure and corporate commitment. Notably, they did not perform well on CSR disclosure, possibly because most of them were not listed on the Taiwan Stock Exchange.

SEM was subsequently used to evaluate the hypothesized relationships among CSR, corporate image, organizational commitment and organizational performance in OFFs. The PM revealed that two of six relationships were not significant. As prior theoretical studies argued that engaging in CSR activities could impose additional costs on firms and that CSR did not have a direct impact on organizational performance, a competing model was proposed and it was found to exhibit adequate model fit.

The present study was the first to examine the impact of CSR on corporate image, organizational commitment and organizational performance in LSPs, specifically OFFs. It contributes to the literature by demonstrating the absence of a direct relationship between CSR activities and organizational performance in OFFs. Further, it proved that, according to employees, engaging in CSR activities can significantly enhance their organization's corporate image and organizational commitment. Though they may not lead to superior organizational performance in the short term, CSR activities were found to improve the corporate image by creating positive customer perceptions and enhancing employees' commitment to the organization. Thus, OFFs can exert more efforts to address employee and consumer interests, environment management and sponsorship to enhance employees' commitment to the organization, which would, in turn, lead to superior organizational performance in the long term. In particular, top sales representatives and senior shipping operators are valuable assets to the OFF industry. Given that the employee turnover rate is high in OFFs as compared to other industries, they are suggested to engage in CSR activities to achieve sustainable development.

From a theoretical perspective, this study contributes to the field by identifying CSR dimensions that are important for the OFF industry and by examining their impact on corporate image, organizational commitment and organizational performance. However, it has several limitations. First, the different-sized OFFs included in this study may have had different resources for engaging in CSR activities. Therefore, future research should assess the effects of organizational characteristics on CSR activities. Second, this study did not observe the direct impact of CSR on organizational performance. Indeed, CSR could indirectly impact organizational performance through corporate image and organizational commitment. Therefore, a worthwhile avenue for future research could involve testing the mediating effects of corporate image and organizational commitment in the PM.

References

- Aguilera, R., Rupp, D., Williams, C. and Ganapathi, J. (2007), "Putting the S back in corporate social responsibility: a multi-level theory of social change in organizations", *Academy of Management Review*, Vol. 32 No. 3, pp. 836-863.
- Aguinis, H. and Glavas, A. (2012), "What we know and don't know about corporate social responsibility: a review and research agenda", *Journal of Management*, Vol. 38 No. 4, pp. 932-968.
- Akaike, H. (1987), "Factor analysis and AIC", *Psychometrika*, Vol. 52 No. 3, pp. 317-332.

- Alamgir, M. and Uddin, M.N. (2017), "The mediating role of corporate image on the relationship between corporate social responsibility and firm performance: an empirical study", *International Journal of Business and Development Studies*, Vol. 9 No. 1, pp. 91-111.
- Allen, N.J. and Meyer, J.P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, Vol. 63 No. 1, pp. 1-18.
- Anderson, J. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Armstrong, S.J. and Overton, T.S. (1977), "Estimating nonresponse bias in the mail survey", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-93.
- Brammer, S., Millington, A. and Rayton, B. (2007), "The contribution of corporate social responsibility to organizational commitment", *The International Journal of Human Resource Management*, Vol. 18 No. 10, pp. 1701-1719.
- Browne, M.W. and Cudeck, R. (1989), "Single sample cross-validation indices for covariance structures", *Multivariate Behavioral Research*, Vol. 24 No. 4, pp. 445-455.
- Buchanan, B. (1974), "Building organizational commitment: the socialization of managers in work organizations", *Administrative Science Quarterly*, Vol. 19 No. 4, pp. 533-546.
- Carroll, A.B. (1979), "A three-dimensional conceptual model of corporate performance", *Academy of Management Review*, Vol. 4 No. 4, pp. 497-505.
- Carter, C.R. and Jennings, M.M. (2002), "Logistics social responsibility: an integrative framework", *Journal of Business Logistics*, Vol. 23 No. 1, pp. 145-180.
- Chen, H. and Wang, X. (2011), "Corporate social responsibility and corporate financial performance in China: an empirical research from Chinese firms", *Corporate Governance: The International Journal of Business in Society*, Vol. 11 No. 4, pp. 361-370.
- Chiu, K.H. and Hsu, C.L. (2010), "Research on the connections between corporate social responsibility and corporation image in the risk society: take the mobile telecommunication industry as an example", *International Journal of Electronic Business Management*, Vol. 8 No. 3, pp. 183-194.
- Churchill, G.A. and Iacobucci, D. (2002), *Marketing Research: Methodological Foundation*, 8th ed., South-Western.
- Churchill, G.A. and Iacobucci, D. (2010), *Marketing Research: Methodological Foundation*, 10th ed., South-Western Cengage Learning, Canada.
- Cook, J. and Wall, T. (1980), "New work attitude measures of trust, organizational commitment and personal need non-fulfillment", *Journal of Occupational Psychology*, Vol. 53 No. 1, pp. 39-52.
- Dess, G.G. and Robinson, J. (1984), "Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit", *Strategic Management Journal*, Vol. 5 No. 3, pp. 265-273.
- Dowling, G.R. (1986), "Managing your corporate image", *Industrial Marketing Management*, Vol. 15 No. 2, pp. 109-115.
- Fafaliou, I., Lekakou, M. and Theotokas, I. (2006), "Is the European shipping industry aware of corporate social responsibility? The case of the Greek-owned short sea shipping companies", *Marine Policy*, Vol. 30 No. 4, pp. 412-419.
- Fjørtoft, B.E., Grimstad, S.M.F. and Glavee-Geo, R. (2020), "Motivations for CSR in the Norwegian Maritime cluster: stakeholder perspectives and policy implications", *Maritime Policy and Management*, Vol. 47 No. 8, pp. 1010-1026.

- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable and measurement error", *Journal of Marketing Research*, Vol. 30 No. 2, pp. 65-73.
- Frynas, J.G. and Yamahaki, C. (2016), "Corporate social responsibility: review and roadmap of theoretical perspectives", *Business Ethics: A European Review*, Vol. 25 No. 3, pp. 258-285.
- Hair, J.F., Black, B., Babin, B., Anderson, R.E. and Tatham, R.L. (2010), *Multivariate Data Analysis: A Global Perspective*, 7th Ed., Pearson Education, Upper Saddle River, NJ.
- Hershberger, S.L. (2006), "The problems of equivalent structural models", in Hancock, G.R. and Mueller, R.O. (Eds), *Structural Equation Modeling: A Second Course*, Information Age, Greenwich, CT.
- Homburg, C., Koschate, N. and Hoyer, W.D. (2005), "Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay", *Journal of Marketing*, Vol. 69 No. 2, pp. 84-96.
- Jacobs, B.W., Singhal, V.R. and Subramanian, R. (2010), "An empirical investigation of environmental performance and the market value of the firm", *Journal of Operations Management*, Vol. 28 No. 5, pp. 430-441.
- Javalgi, R.G., Traylor, M.B., Gross, A.C. and Lampman, E. (1994), "Awareness of sponsorship and corporate image: an empirical investigation", *Journal of Advertising*, Vol. 23 No. 4, pp. 47-58.
- Kim, H.R., Lee, M., Lee, H.T. and Kim, N.M. (2010), "Corporate social responsibility and employee-company identification", *Journal of Business Ethics*, Vol. 95 No. 4, pp. 557-569.
- Kim, J., Song, H.J., Lee, C.K. and Lee, J.Y. (2017), "The impact of four CSR dimensions on a gaming company's image and customers' revisit intentions", *International Journal of Hospitality Management*, Vol. 61, pp. 73-81.
- Kline, R.B. (2011), *Principles and Practices of Structural Equation Modeling*, 3rd ed., Guilford Press, New York, NY.
- Koufteros, X.A. (1999), "Testing a model of pull production: a paradigm for manufacturing research using structural equation modeling", *Journal of Operations Management*, Vol. 16 No. 1, pp. 21-41.
- Kuo, S.Y., Yang, C.C. and Lai, P.L. (2020), "Determining inland logistics service attributes: a case study of Chinese landlocked regions", *Maritime Business Review*, Vol. 5 No. 3, pp. 309-326.
- Lai, P.L., Su, D.T., Tai, H.H. and Yang, C.C. (2020), "The impact of collaborative decision-making on logistics service performance for container shipping services", *Maritime Business Review*, Vol. 5 No. 2, pp. 175-191.
- Latif, K.F. and Sajjad, A. (2018), "Measuring corporate social responsibility: a critical review of survey instruments", *Corporate Social Responsibility and Environmental Management*, Vol. 25 No. 6, pp. 1174-1197.
- Lu, C.S. (2003), "The impact of carrier service attributes on shipper-carrier partnering relationships: a shipper's perspective", *Transportation Research Part E: Logistics and Transportation Review*, Vol. 39 No. 5, pp. 399-415.
- Lu, C.S., Lai, P.L. and Chiang, Y.P. (2016), "Container terminal employees' perceptions of the effects of sustainable supply chain management on sustainability performance", *Maritime Policy and Management*, Vol. 43 No. 5, pp. 597-613.
- Lu, C.S., Lin, C.C. and Tu, C.J. (2009), "Corporate social responsibility and organizational performance in container shipping", *International Journal of Logistics Research and Applications*, Vol. 12 No. 2, pp. 119-132.
- Lund-Thomsen, P., Poulsen, R.T. and Ackrill, R. (2016), "Corporate social responsibility in the international shipping industry: state-of-the-art, current challenges and future directions", *The Journal of Sustainable Mobility*, Vol. 3 No. 2, pp. 3-13.
- McWilliams, A. and Siegel, D. (2001), "Corporate social responsibility: a theory of the firm perspective", *Academy of Management Review*, Vol. 26 No. 1, pp. 117-127.

-
- Mahoney, L. and Roberts, R.W. (2007), "Corporate social performance, financial performance and institutional ownership in Canadian firms", *Accounting Forum*, Vol. 31 No. 3, pp. 233-253.
- Mayer, R.C. and Schoorman, F.D. (1992), "Predicting participation and production outcomes through a two-dimensional model of organizational commitment", *Academy of Management Journal*, Vol. 35 No. 3, pp. 671-684.
- Mehralian, G., Nazari, J.A., Zarei, L. and Rasekh, H.R. (2016), "The effects of corporate social responsibility on organizational performance in the Iranian pharmaceutical industry: the mediating role of TQM", *Journal of Cleaner Production*, Vol. 135 No. 1, pp. 689-698.
- Ministry of Economic Affairs (2020), *2020 Taiwan Logistics Yearbook*, MOEA, Taiwan.
- Mishra, S. and Suar, D. (2010), "Does corporate social responsibility influence firm performance of Indian companies?", *Journal of Business Ethics*, Vol. 95 No. 4, pp. 571-601.
- Nguyrn, N. and Leblanc, G. (2001), "Corporate image and corporate reputation in customers' retention decisions in services", *Journal of Retailing and Consumer Services*, Vol. 8 No. 4, pp. 227-236.
- Nunkoo, R. and So, K.K.F. (2016), "Residents' support for tourism: testing alternative structural models", *Journal of Travel Research*, Vol. 55 No. 7, pp. 847-861.
- Organization for Economic Co-operation and Development (OECD) (2011), *OECD Guidelines for Multinational Enterprises*, OECD Publishing, doi: [10.1787/9789264115415-en](https://doi.org/10.1787/9789264115415-en) (accessed January 2021).
- Pelozo, J. (2006), "Using corporate social responsibility as insurance for financial performance", *California Management Review*, Vol. 48 No. 2, pp. 52-72.
- Perrini, F., Pogutz, S. and Tencati, A. (2006), "Corporate social responsibility in Italy: state of the art", *Journal of Business Strategies*, Vol. 23 No. 1, pp. 65-91.
- Phan, T.M., Thai, V.V. and Vu, T.P. (2020), "Port service quality (PSQ) and customer satisfaction: an exploratory study of container ports in Vietnam", *Maritime Business Review*, Vol. 6 No. 1.
- Porter, L.W., Steers, R.M., Mowday, R.T. and Boulian, P. (1974), "Organization commitment, job satisfaction, and turnover among psychiatric technicians", *Journal of Applied Psychology*, Vol. 59 No. 5, pp. 603-609.
- Progoulaki, M. and Roe, M. (2011), "Dealing with multicultural human resources in a socially responsible manner: a focus on the Maritime industry", *WMU Journal of Maritime Affairs*, Vol. 10 No. 1, pp. 7-23.
- Rasche, A. and Kell, G. (2010), *The United Nations Global Compact: Achievements, Trends and Challenges*, Cambridge University Press, Cambridge.
- Shang, K.C., Chao, C.C. and Lirn, T.C. (2016), "The application of personality traits model on the freight forwarding service industry", *Maritime Business Review*, Vol. 1 No. 3, pp. 231-252.
- Singh, K. and Misra, M. (2021), "Linking corporate social responsibility (CSR) and organizational performance: the moderating effect of corporate reputation", *European Research on Management and Business Economics*, Vol. 27 No. 1, p. 100139.
- Ullmann, A.A. (1985), "Data in search of a theory: a critical examination of the relationships among social performance, social disclosure, and economic performance of U.S. firms", *Academy of Management*, Vol. 10 No. 3, pp. 540-557.
- Venkatraman, N. and Ramanujam, V. (1986), "Measurement of business performance in strategy research: a comparison of approaches", *Academy of Management Review*, Vol. 11 No. 4, pp. 801-814.
- Wang, C., Zhang, Q. and Zhang, W. (2020), "Corporate social responsibility, green supply chain management and firm performance: the moderating role of big-data analytics capability", *Research in Transportation Business and Management*, Vol. 37, p. 100557, doi: [10.1016/j.rtbm.2020.100557](https://doi.org/10.1016/j.rtbm.2020.100557).

-
- Wang, C.C. (2020), "Corporate social responsibility on customer behaviour: the mediating role of corporate image and customer satisfaction", *Total Quality Management and Business Excellence*, Vol. 31 Nos 7/8, pp. 742-760.
- World Business Council for Sustainable Development (WBCSD) (2000), *Corporate Social Responsibility: Making Good Business*, Sense, WBCSD, Geneva.
- Worcester, R.M. (1972), *Consumer Market Research Handbook*, McGraw-Hill Book Company, New York, NY.
- Yang, C.C. (2012), "Assessing the moderating effect of innovation capability on the relationship between logistics service capability and firm performance for ocean freight forwarders", *International Journal of Logistics Research and Applications*, Vol. 15 No. 1, pp. 53-69.
- Yang, C.C. (2013), "The effects of corporate social responsibility on organizational commitment and performance in the logistics service industry", *Proceedings of the International Forum on Shipping, Ports and Airports (IFSPA) 2013*, Hong Kong, pp. 122-131
- Youn, H., Lee, K. and Lee, S. (2018), "Effects of corporate social responsibility on employees in the casino industry", *Tourism Management*, Vol. 68, pp. 328-335.

Further reading

- Fasoulis, I. and Kurt, R.E. (2019), "Determinants to the implementation of corporate social responsibility in the Maritime industry: a quantitative study", *Journal of International Maritime Safety, Environmental Affairs, and Shipping*, Vol. 3 Nos 1/2, pp. 10-20.
- Subramaniam, N., McManus, L. and Mia, L. (2002), "Enhancing hotel managers' organizational commitment: an investigation of the impact of structure, need for achievement and participative budgeting", *International Journal of Hospitality Management*, Vol. 21 No. 4, pp. 303-320.

CSR attributes	F1	F2	F3	F4	F5
Our company does not make representations or omissions, nor does it engage in any other practices that are deceptive, misleading, fraudulent or unfair	0.853	0.147	0.096	0.111	0.040
Our company emphasizes consumer privacy and provides protection for personal data	0.806	0.143	0.191	-0.004	0.159
Our company complies with the tax laws and regulations in all countries in which it operates and it contributes to the public finances of host countries by making timely payments of their tax liabilities	0.803	0.243	0.072	0.030	0.045
Our company emphasizes the appropriate storage and carriage of dangerous cargoes	0.758	0.241	0.338	0.001	0.081
Our company emphasizes the safety of cargoes	0.746	0.323	0.176	0.042	0.080
Our company and competitors can carry out activities in a manner consistent with all applicable competition laws and regulations	0.673	0.345	0.132	0.107	0.171
Our company provides transparent and effective procedures to address consumer complaints and it contributes to fair and timely resolution of consumer disputes without undue cost or burden	0.665	0.304	0.256	0.257	0.261
Our company does not obtain business interests by cheating our customers	0.540	0.406	0.288	0.113	0.170
Our company has a fair system of employment and promotion without discrimination	0.246	0.812	0.163	0.111	0.120
Our company emphasizes the development of reserved staff, skill training and on-job training	0.221	0.762	0.007	0.110	0.295
Our company emphasizes employees' interests	0.376	0.734	0.197	0.055	0.133
Our company takes adequate steps to ensure employees' occupational health and safety in their operations	0.363	0.722	0.103	0.080	0.162
Our company provides appropriate compensation and counseling to employees who are laid off or dismissed	0.282	0.712	0.292	0.013	0.114
Our company requests our business partners to enhance environmental protection awareness and comply with related environmental regulations	0.103	0.231	0.720	0.234	0.261
Our company has established environmental auditing programs	0.197	0.010	0.701	0.294	0.080
Our company cooperates with customers to advocate for environmental management activities	0.212	0.171	0.694	0.229	0.246
Our company adopts a total quality environmental management program	0.139	0.021	0.684	0.429	-0.042
Our company is devoted toward developing green logistics services	0.299	0.167	0.654	0.151	0.250
Different departments in our company cooperate with each other to improve the quality of the environment	0.266	0.298	0.618	0.154	0.042
Our company applies high-quality standards for disclosure, accounting, audit, environmental and CSR reporting where it is located	0.015	0.032	0.235	0.875	-0.041

(continued)

Table A1.
Factor analysis on
CSR

MABR
6,4

376

Table A1.

CSR attributes	F1	F2	F3	F4	F5
Our company ensures that timely, regular and relevant information is disclosed regarding our activities, structure, financial situation and performance	0.121	0.150	0.081	<i>0.861</i>	-0.081
Our company adopts high standards of environmental and CSR reporting	0.060	0.098	0.333	<i>0.786</i>	0.175
Our company has an environmental-health-and-safety department	-0.047	0.064	0.386	<i>0.759</i>	0.213
Our company's top managers advocate CSR activities	0.308	0.021	0.216	<i>0.549</i>	0.383
Our company participates in community development and inhabitants' welfare	0.062	0.239	0.369	0.013	<i>0.784</i>
Our company sponsors cultural and artistic activities	0.216	0.278	0.264	0.138	<i>0.725</i>
Our company sponsors charities	0.366	0.430	-0.042	0.100	<i>0.622</i>
Eigenvalues	5.374	4.003	3.866	3.593	2.286
Percentage variance	19.91	14.82	14.32	13.31	8.47

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