國家科學及技術委員會補助專題研究計畫報告

CEO 性別會影響社會企業的社會與經濟價值創造嗎?以關注力 基礎觀點探討

報告類別:成果報告計畫類別:個別型計畫

計 畫 編 號 : MOST 111-2629-H-110-001-SSS 執 行 期 間 : 111年08月01日至112年07月31日 執 行 單 位 : 國立中山大學企業管理學系(所)

計畫主持人: 林杏娥

計畫參與人員: 碩士班研究生-兼任助理:蔡曉萍

大專生-兼任助理:林芝良大專生-兼任助理:蔡沛軒

本研究具有政策應用參考價值:■否 □是,建議提供機關	
(勾選「是」者,請列舉建議可提供施政參考之業務主管機關)	
本研究具影響公共利益之重大發現:□否 □是	

中華民國 112 年 09 月 20 日

中 文 摘 要 : 目的:本研究調查CEO性別對社會企業 (SE) 價值創造的影響,以及 選擇性關注對社會企業雙重目標 (即對社會目標與經濟目標的相對 關注)的調節作用。

設計/方法/方法: 我們調查了 596 家活躍的台灣社會企業,對自變量和調節變量進行評估,並收到 191 份回复 (109 名女性首席執行官和 82 名男性首席執行官)。 我們聘請外部SE專家來評估每個SE的經濟和社會價值創造,以降低共同方法偏差的威脅並提高數據質量。

結果:女性CEO創造更高的社會價值(與男性CEO相比),而經濟價值創造往往較低。但是,女性CEO對經濟目標的注意力選擇(即注意力的變化)減輕了女性CEO與經濟價值創造之間的負相關關係。原創性/價值:很少有研究採用基於注意力的觀點來調查管理者性別角色對社會企業雙目標績效(即社會與經濟價值創造)的影響並測試其調節作用。 我們是第一個這樣做的研究。 我們還採用了獨特的研究設計,要求外部 SE 專家提供性能數據。

中文關鍵詞: CEO性別、社會價值創造、社會企業(SE)、注意力基礎觀點(ABV)

英文摘要: Purpose - This study investigates the effects of CEO gender on social enterprise (SE) value creation and the moderating effect of selective attention on SEs' dual goals (i.e., relative attention to social versus economic goals).

Design/methodology/approach - We surveyed 596 active Taiwanese SEs to rate independent and moderating variables and received 191 responses (109 female and 82 male CEOs).

We employed external SE experts to evaluate each SE's economic and social value creation, lowering the threat of common method bias and enhancing data quality.

Findings - Social value creation is higher with female CEOs (compared to those with male CEOs), while economic value creation tends to be lower. But, attentional selection (i.e., changes in attention) to economic goals by female CEOs mitigates the negative relationship between female CEOs and economic value creation.

Originality/value - Little research brings the attention-based view to investigate the effects of managerial gender roles on the dual-goal performance (i.e., social versus economic value creation) of SEs and test its contingency. Our study is the first to do so. We also adopted a unique research design asking outside SE experts to provide the performance data.

Practical implications - Gender diversity in the top management team is critical for dual-goal attainment. Decision-makers' attention focus could vary along with the situation to achieve the desired outcomes. Thus, creating an attention structure under a given situation may help guide the decision-making process toward the desired performance for SEs.

英文關鍵詞: CEO gender, social value creation, social enterprise (SE), attention-based view (ABV)

期末報告

本報告以執行計畫後,撰寫完成之論文投稿 Gender in Management: an International Review (SSCI) 國際期刊 接受已刊登之論文呈現。

The current issue and full text archive of this journal is available on Emerald Insight at: https://www.emerald.com/insight/1754-2413.htm

CEO gender and social versus economic value creation of social enterprises: an attention-based view

Economic value creation

Received 30 June 2022 Revised 7 December 2022 1 March 2023 12 May 2023 Accepted 8 June 2023

Hsing-Er Lin

Department of Business Management, National Sun Yat-Sen University, Kaohsiung, Taiwan

Andy Yu and Jeongho Choi

Department of Management, University of Wisconsin-Whitewater, Whitewater, Wisconsin, USA

Chiung-Wen Tsao

Department of Business and Management, National University of Tainan, Tainan, Taiwan

Jeff Stambaugh

Department of Management, Midwestern State University, Wichita Falls, Texas, USA, and

Dina L. Taylor

University of Illinois Chicago, Chicago, Illinois, USA

Abstract

Purpose — This study aims to investigate the effects of CEO gender on social enterprise (SE) value creation and the moderating effect of selective attention on SEs' dual goals (i.e. relative attention to social versus economic goals).

Design/methodology/approach – The authors surveyed 596 active Taiwanese SEs to rate independent and moderating variables and received 191 responses (109 female and 82 male CEOs). The authors used external SE experts to evaluate each SE's economic and social value creation, lowering the threat of common method bias and enhancing data quality.

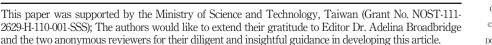
Findings – Social value creation is higher with female chief executive officer (CEOs) (than with male CEOs), whereas economic value creation tends to be lower. But, attentional selection (i.e. changes in attention) to economic goals by female CEOs mitigates the negative relationship between female CEOs and economic value creation.

Practical implications – Gender diversity in the top management team is critical for dual-goal attainment. Decision-makers' attention focus could vary along with the situation to achieve the desired outcomes. Thus, creating an attention structure under a given situation may help guide the decision-making process toward the desired performance for SEs.

Originality/value — Little research brings the attention-based view to investigate the effects of managerial gender roles on the dual-goal performance (i.e. social versus economic value creation) of SEs and test its contingency, and to the best of the authors' knowledge, this study is the first to do so. This study also adopted a unique research design asking outside SE experts to provide the performance data.

Keywords CEO gender, Social value creation, Social enterprise (SE), Attention-based view (ABV)

Paper type Research paper





Gender in Management: An International Journal © Emerald Publishing Limited 1754-2413 DOI 10.1108/GM-06-2022-0219

Introduction

Women-led social ventures comprise an increasing proportion of the 11 million social enterprises (SEs) operating globally (British Council, 2022; Nicolás and Rubio, 2016; Py and Barthélemy, 2019). Particularly in Taiwan, the percentage of female CEOs in SEs is much higher than that of female CEOs in small- and medium-sized enterprises (Taiwan Social Innovation Survey, 2019). However, our understanding of how the CEO gender might affect goal attainment in SEs remains scant (Teasdale *et al.*, 2011). SEs are defined as an entity founded to manifest social goals while "operating with reference to the financial bottom line" (Alter, 2007, p. 11). Yet, simultaneously pursuing these two goals can cause conflicts in allocating firm resources (Ashforth and Reingen, 2014; Bacq and Lumpkin, 2014; Battilana and Lee, 2014). Therefore, CEOs of SEs must pay attention to managing the inherent tensions between social and economic goal attainment (Bacq and Lumpkin, 2014; Stevens *et al.*, 2015b). To address this issue, scholars suggested that the individual characteristics of SE CEOs should be considered. Gender, in particular, is an underlying source of attention selection for prosocial behaviors such as comforting, rescuing and defending others (Eagly, 2009; Engelke *et al.*, 2015).

Managerial attention is a limited resource and a central concept in the decision-making literature. Based on the attention-based view (ABV), firms' behaviors are driven by "how firms distribute and regulate the attention of their decision-makers" (Ocasio, 1997, p. 188), ABV has been extensively discussed in studies of organizational management (Ocasio, 2011), strategic management (Stevens et al., 2015b), institutional theory (Thornton and Ocasio, 1999) and management cognition (Kaplan, 2008), but it has rarely been applied in social entrepreneurship studies (Andersén, 2022; Aisaiti et al., 2021). Only a few exceptional examples exist in Brielmaier and Friesl's (2022) thorough review of ABV-based research. For example, Stevens et al. (2015b) adopted ABV to examine the effect of attention on firm goals and various attention structures in SEs, such as CEO identity and values. Gupta et al. (2020) conducted a thorough review of 188 social entrepreneurship studies but found little research applying ABV and indicated that women-owned social businesses are a crucial study area. As Jennings and Brush (2013) implied, genders may exhibit differences in their selective attention to disparate entrepreneurial goals and outcomes. Unfortunately, few empirical studies explore the influence of selective attention caused by CEO gender differences on goals and performance outcomes in social entrepreneurship studies. To address the above literature gap, this study aims to test ABV in SEs by investigating the relationships between CEO gender differences in attention selection and the dual-goal performance on social versus economic value creation.

Inspired by Stevens et al. (2015a), we define social value creation as the perceived nonfinancial outcomes of an organization that contribute to its community or the natural environment. Economic value creation refers to the perceived financial outcomes of an organization. As defined and demanded, SEs must balance nonfinancial and financial outcomes to satisfy their diverse stakeholders (Liu et al., 2015). Based on gender role-based values (Jennings and Brush, 2013), we predict that, on average, female CEOs outperform male CEOs on social value creation but lag on economic value creation. Moreover, within CEOs of the same gender, CEOs give attention to the dual goals (social and economic) differently (i.e. situated attention selection in Ocasio, 1997). Hence, we argue that the situated attention selection act as a boundary condition in the relationship between female CEO and social/economic value creation. Specifically, this study examines the moderating roles of selective attention (relative attention to social versus economic goals or RASEG) on the CEO-gender-SE-performance relationship.

Our study contributes to the social entrepreneurship literature in several ways. First, we incorporate ABV into social entrepreneurship to delineate the CEO gender effects on value creation and the interaction between CEO gender effects and attention selection to the competing social and economic goals. As such, this paper advances our knowledge of the impact of CEO gender and

selective attention on SE value creation. Second, this paper also contributes to the literature on ABV by testing an ABV model in the context of SEs. Therefore, our study responds to the call of Ocasio (1997) to extend ABV by applying this perspective to social entrepreneurship research. Finally, our findings add to the literature on female social entrepreneurship by investigating the role of female CEOs' values in fulfilling their organizations' social missions. Our study thus responds to Teasdale et al.'s (2011) call to fill the research gap on gender effect in social entrepreneurship.

Theoretical background

Social enterprise hybridity and competing goals

SEs are hybrid organizations that feature a dual mission. "At the macroeconomic level, SEs adopt commercial activities to make profit, while they pursue a project to address specific social needs at the microeconomic level" (Gupta *et al.*, 2020, p. 216). Additionally, SEs are characterized by the blended features of private, public and nonprofit organizations and encounter conflicting institutional logics (Tracey *et al.*, 2011). Billis (2010) argued that SEs must follow the market logic to maximize return on investment but are also guided by the public-sector logic of public benefit and collective choice.

The hybridity of SEs affects how they obtain and mobilize financial resources (Doherty et al., 2014). If SEs underperform financially, banks and venture capital firms typically determine them as unattractive investments (Sud et al., 2009). In contrast to financial returns, social returns lack quantifiable and standardized measurement metrics (Mair and Marti, 2006). Also, SEs prioritize social goals over economic ones, complicating financial calculations (Gupta et al., 2020). Social returns generated at the expense of financial returns worry most potential investors. Because the inherent tension between the paradoxical and dual goals is embedded in SEs' social values and financial viability, it is very challenging for SE decision-makers to allocate resources. Understanding how SE CEOs manage the inherent tensions between social and economic goals is critical (Stevens et al., 2015b).

CEO gender and social enterprise value creation: attention-based view ABV (Ocasio, 1997) explains the decision-maker's attention to achieving desired firm outcomes (Joseph and Wilson, 2018). Ocasio (1997, p. 189) defined managerial attention as:

Encompass[ing] the noticing, encoding, interpreting, and focusing of time and effort by organization decision-makers on both (a) issues: the available repertoire of categories for making sense of the environment: problems, opportunities, and threats; and (b) answers: the available repertoire of action alternatives: proposals, routines, projects, programs, and procedures.

As firms cannot address all these issues and environmental stimuli concurrently because of limited capacity (Ocasio, 1997), managers must efficiently allocate their attention to different goals for value maximization (Greve, 2008).

In addition, managers' values and attributes, such as gender, are a crucial component of the organizational attention structure (Brielmaier and Friesl, 2022; Ocasio, 1997) because these are associated with a strategic orientation and performance outcomes (Davis *et al.*, 2010). For example, using a sample of 148 SEs in Belgium, Stevens *et al.* (2015b) discovered significant relationships between CEO values emphasizing benefits for others in society and relative attention to social goals. Similarly, Pasricha *et al.* (2018) found that leaders' values-based management contributes to social value creation because some organizations favor leadership styles that emphasize the well-being of society. Nevertheless, relatively less attention has been paid to managers' attributes (e.g. gender and gender role differences) and their impacts on strategic decision-making for dual goal achievements in SEs. This is

probably because gender is often a control variable in social entrepreneurship research (Angulo-Ruiz et al., 2020) rather than exploring its main effect.

Previous literature encourages gender-based research for SEs, as female entrepreneurs are more likely to be social entrepreneurs (Haugh, 2005; Van Ryzin et al., 2009). From the lens of social role theory, a significant gender role difference exists between females and males because the two genders behave based on beliefs and stereotypes related to their social roles (Eagly, 1987). Therefore, men and women develop different behaviors concerning work-related values, strategic orientation and decision-making. Given this, a handful of studies have investigated gender roles in SEs. For example, Rosca et al. (2020) found that female social entrepreneurs are highly motivated to respond to social issues because they are more empathetic as part of the feministic characteristics. Also, Datta and Gailey (2012) concluded that female empowerment in large-scale cooperatives is beneficial to address social problems in India. Despite the upturn in research on gender roles, these studies focus on women's characteristics ber se rather than delve into the gender and managerial roles of a CEO in managing dual mission goals in SEs. To achieve such dual goals, female CEOs or managers may need to balance their feminine gender role with the masculine managerial role. To deepen our knowledge of this issue, we are further interested in the intersection of the CEO's gender and their executive roles (i.e. attention structure) to manage the tension in achieving two competing goals.

Hypothesis development

Female CEOs and social enterprise value creation

On average, female CEOs are different from male CEOs in behaviors, typically due to the social learning process regarding gender roles (Peake and Eddleston, 2021). For instance, women typically value altruism more than men (Dietz et al., 2003), exhibit greater patience and are more likely than men to engage in actions that result in delayed gratification (Silverman, 2003). Female managers tend to be more independent, participative and fairer than male managers in administration actions (Mehmood et al., 2020). Female directors, relative to their male counterparts, frequently exhibit greater self-transcendent values, such as benevolence and universalism, but fewer self-enhancement values, such as authority and achievement (Adams and Funk, 2012).

Additionally, compared to men, women engage in more prosocial behaviors (Andreoni and Vesterlund, 2001), which is true for female entrepreneurs as well (Hechavarria et al., 2012). Moreover, the emphasis on particular activities of prosocial behaviors differs between genders (Eagly, 2009). For example, men tend to prefer agentic types of social activities (e.g. political activities and civic services) that demonstrate their competitiveness. In contrast, women typically favor communal activities (e.g. volunteering and environmental protection) that present their caring nature (Peake and Eddleston, 2021). Accordingly, we argue that CEO gender is a critical predictor of social versus economic value creation in SEs. Specifically, female leaders are more aligned with prosocial activities than male leaders, derived from traditional gender roles and values (Andreoni and Vesterlund, 2001; Hechavarria et al., 2012), whereby female CEOs' attention falls more on social value creation (Hechavarria et al., 2012). Jennings and Brush (2013) reviewed studies on female entrepreneurship and proposed that women-led firms are typically less profitable than those led by male CEOs. Yang et al. (2019) supported this notion. They reasoned that female CEOs are likelier to prioritize nonpecuniary entrepreneurial motivations, altruism and communal traits such as compassion (Yang et al., 2019). Female CEOs tend to incorporate social missions into business (Hechavarria et al., 2012), which may distract attention focus and resources from economic value creation.

In contrast, men's embedded values may be related to agentic characteristics, such as competitiveness and determination as well as high-status and powerful leadership roles

(Yang et al., 2020). Male CEOs are more likely to aggressively pursue performance-driven economic activities to demonstrate their capabilities and increase their social capital among stakeholders (Jabeen and Faisal, 2018). Accordingly, we hypothesize that social value creation will be higher with female CEOs, but economic value creation will be lower:

- H1a. In SEs, social value creation will be higher with female CEOs than with male CEOs.
- H1b. In SEs, economic value creation will be lower with female CEOs than with male CEOs.

Moderating effects: relative attention to social versus economic goals

ABV claims that organizations' attention structure (i.e. managerial roles played by top-level management) affects the decision-making process (Ocasio, 1997). Moreover, attentional selection may be from the "automatic or intentional attention-driven processes" (Ocasio, 2011, p. 1289) and used by executives to respond to the selected stimuli from an organization's internal or external environments. Researchers have determined that selective attention can be from both top-down attentional processes, such as goals (André and Pache, 2016; Greve, 2008), task demands and prior cognitive orientation, and bottom-up processes influenced by discontinuous events, attentional ecology and performance (Ocasio, 2011). Based on this, we consider the SEs' dual competing goals as the situated targets for CEOs. SE CEOs must consider realizing both goals and generating optimal outcomes from their daily operations, as social and economic goals co-exist (Grassl, 2012). In most conditions, both goals are imbalanced and change dynamically because of environmental stimuli. Given this situational background, we incorporate the relative attention to social versus economic goals (RASEG) as a moderator and argue how this contingency alters the relationship between CEO gender and SE performance.

As discussed, due to the gender stereotype, female CEOs, compared to their male counterparts, tend to be more altruistic and nonmonetary-oriented (Hechavarria et al., 2012) and therefore contribute more to social value creation. But when the female CEOs increase their managerial attention (or focus) to social goals (i.e. a case of higher RASEG), their performance in social value creation can be enhanced. This is because they are more likely to increase efforts and allocate resources to accomplish social value creation. However, there is considerable variation within gender. Female CEOs may pay more or less attention to social goals than male CEOs because female CEOs simultaneously carry out gender and managerial roles (Boulouta, 2013). As per the social role theory, multiple social roles, such as organizational and managerial roles, can override gender roles, thereby changing managers' behavior accordingly (Eagly, 2009). For instance, Lämsä et al. (2000) examined gender differences between female and male leaders. They found that women in leadership positions may adopt masculine-type styles because such styles are highly regarded. Similarly, Brewer et al. (2002) found that masculine and feminine leaders may have different conflict management styles regardless of their biological sex. In other words, female (male) leaders may have masculine (feminine) management styles depending on the situation. Given these, we argue that female CEOs' increased managerial attention to economic goal achievement (i.e. a case of lower RASEG) may help mitigate female CEOs' negative impact on economic value creation. In addition, more so than males, females can display androgynous leadership styles (Berkery et al., 2013). Such androgynous leadership styles allow female CEOs to adopt the two roles well (i.e. a feminine gender role and a masculine managerial role [e.g. female CEOs' attention to economic goals]). Thereby, a lower RASEG

mitigates the negative relationship between female CEOs and economic value creation. In other words, this negative relationship will become less significant. Taking all together, we propose the following hypotheses:

- H2a. In SEs, a higher RASEG positively moderates the relationship between female CEO and social value creation, such that the positive relationship posited in H1a can be strengthened by a higher RASEG.
- H2b. In SEs, a lower RASEG positively moderates the relationship between female CEO and economic value creation, such that the negative relationship posited in H1b can be mitigated by a lower RASEG.

Methods

Samble and data collection

To test our research model, we collected data from profit-seeking SEs in Taiwan. We chose to study Taiwanese profit-seeking SEs for three reasons. First, according to Dees and Anderson (2003), the business model of profit-seeking SEs presents unique hybridity because they pursue the creation of both social and economic value; thus, balancing these dual goals is essential. Since the first launch of SEs in 2007, Taiwanese social entrepreneurs have paid increasing interest in building SEs to address various social concerns (Chan *et al.*, 2011). Taiwan presents a valuable context to understand how social entrepreneurs and SEs grow due to the specific institutional systems and cultural embeddedness in place (Wu, 2021). Investigating the Taiwanese context can help transfer knowledge and experience to countries with similar institutional and cultural backgrounds. Second, Hofstede and Jan's cultural survey (2005) suggested that in Taiwan, men and women possess similar opportunities to pursue their goals. Third, Taiwanese government policies forced nonprofits to be financially sustainable through market-driven mechanisms without government subsidies. These characteristics make Taiwan an ideal context for examining the impact of gender roles on pursuing social-economic goals when all genders have equal opportunities.

As the total number of Taiwanese registered SEs are not disclosed publicly, we followed the approach of the Taiwan Social Innovation Survey (2019) and used three sources [1] to construct our sample frame (Podsakoff *et al.*, 2012). After removing the overlapping firms, the master list comprised 596 active SEs [2]. We then distributed our first survey to all 596 SEs to provide a complete picture of SEs in Taiwan.

Following Podsakoff *et al.* (2012), to minimize common methods variance (CMV), we collected the variables from two different sources (i.e. splitting variables into two surveys). In July 2019, we delivered the *first* survey that addressed the *independent and moderating variables* to each subject SE and requested the CEO (or a top management team member if the CEO was unavailable) complete the survey. We engaged in several follow-up calls to maximize the response rate and sent reminder emails to the SEs. In total, we received 191 responses from the 596 distributed surveys (32%). This data sample included responses from 109 (57%) female CEOs, and 59% of CEOs had college degrees. The mean value of employees was 26, and the average firm age was 15.5 years. Regarding mission, 34 organizations helped the unemployed; 76 provided social, community and environmental services; 75 focused on community development; and six promoted ethical trading. For the *second* survey, we then used three outside SE experts to rate the *dependent variables* (DVs; i.e. five items measuring social value creation and six items measuring economic value creation) for each SE completing the first survey in mid-November 2019. The advantage of this approach was that the highly experienced raters had a more holistic view of the entire

Taiwanese social sector than the individual CEOs. Notably, we recruited SE experts to participate in our study based on three criteria. First, the expert led or directed an SE research center or relevant association for over three years. Second, the expert had reviewed SE funding applications in the past five years. Finally, the expert had experience surveying SEs regularly in the past five years at the national level. Consequently, our external raters comprised specialists with high levels of SE knowledge and expertise to generate objective data.

Moreover, we supplied the three experts with the subject SEs' profiles based on the information disclosed on their websites, social media and financial reports to facilitate the rating process. We provided the required information and documents similar to SEs' funding applications for expert review. Using external experts for the rating process enhanced the data validity and quality, and it is a valuable addition to the SE literature.

Measures

The measures in this study were validated in English, so we adopted back translation with minor revisions in the language to enhance their applicability in the Taiwanese context. Following Stevens *et al.* (2015a) and Liu *et al.* (2015), we conducted a pilot study to test our initial questionnaire. The first draft of our questionnaire was emailed to the CEOs of 30 SEs. The results of the pilot study confirmed acceptable levels of reliability for the scales comprising social value creation ($\alpha = 0.95$) and economic value creation ($\alpha = 0.67$). Crucially, we excluded these 30 SEs in our tests of the proposed hypotheses.

Dependent variable: social and economic value creation. This study defines social value creation as the perceived nonfinancial outcomes of an organization that contribute to its community or the natural environment. Economic value creation is defined as the perceived financial outcomes of an organization (Stevens et al., 2015a). With reference to Liu et al. (2015), we adapted the scales of economic and social value creation because they are both specific and relevant for SEs' purposes. The five-item scale of social value creation measures an SE's prior 12-month social performance ($\alpha=0.64$). Likewise, to evaluate the economic value creation of an SE, we used six items to measure an SE's prior 12-month economic performance ($\alpha=0.92$) (Liu et al., 2015). As mentioned, we asked the three expert raters to respond to the questionnaire items using a Likert scale ranging from 1 (completely disagree) to 7 (completely agree). The scales are listed in the appendix.

Independent variable: female CEO. Studies discovered little differential explanatory power between biological sex factors and psychological gender characteristics linked to various behaviors (Stern, 1988). Therefore, we used biological sex to assess gender. Female CEO in our model is coded as female = 1 and male = 0.

Moderating variable: relative attention to social *versus* economic goals. The RASEG represents the conditions where dual goals may be imbalanced or changing dynamically because of environmental stimuli. SE CEOs must consider realizing both goals and generating optimal outcomes from their daily operations (Grassl, 2012). To measure RASEG, we adopted the approach presented by Stevens *et al.* (2015a). However, our measure differed from their study's ipsative approach (Stevens *et al.*, 2015a) because our study measured the simultaneous pursuit of both goals by SEs (Bacq *et al.*, 2016). Accordingly, we adopted a Likert scale with seven anchor points. The social ($\alpha = 0.86$) and economic scales ($\alpha = 0.88$) exhibited satisfactory reliability. Next, we used the resulting eight items to measure RASEG. We calculated RASEG as the ratio of the score of attention to social goals over that of attention to economic goals. Furthermore, the average variance extracted (AVE) and composite reliability (CR) were both higher than 0.70, as shown in Appendix. Therefore,

attention to economic goals and attention to social goals are different measures (Fornell and Larcker, 1981).

Control variables. At the leader level, CEO age, education and work experience were controlled because they represent "human capital that may affect personal and business performance" (Eddleston *et al.*, 2016, p. 500). Education is a dummy variable that indicates that leaders had either high school, university, or graduate education. At the firm level, firm age and mission type were controlled because of their potential effects on social and economic value creation. The social mission may dominate the CEOs' behavior of SEs' (Stevens *et al.*, 2015a). Mission type is a dummy variable that indicates that SEs have work integration, provision, community development or ethical trading mission. Finally, we also controlled for the effect of respondent positions as a dummy variable (1 = non-CEO, 0 = CEO).

Analyses and results

Confirmatory factor analysis indicated an adequate model fit for the four factors of CEO gender, social value creation, economic value creation and the RASEG (CFI = 0.96, TLI = 0.94, SRMR = 0.05, RMSEA = 0.07) (MacCallum *et al.*, 1996). As exhibited in Table 1, the chi-square differences of the four-factor model significantly varied from those of the baseline model (p < 0.001). This confirmed that the four-factor model had good discriminant validity and was suitable for testing our hypotheses.

Table 2 presents the means, standard deviations and pairwise correlations for all the variables in this study. Table 3 summarizes the regression results of the direct effect of CEO gender on social value creation (Model 2 for H1a) and economic value creation (Model 3 for H1b). Model 1 presents the controls. Model 2 reports the statistically significant and positive effect of a female CEO on social value creation ($\beta = 0.15, p < 0.05$). The results of comparing means (F = 2.81, p < 0.05) further support H1a. However, the relationship between female CEO and economic value creation reported in Model 3 has only a weakly significant effect ($\beta = -0.12, p < 0.10$). We also compared means and found the statistics (F = 2.69, p < 0.10) marginally support H1b.

Finally, we proposed in H2a that a higher RASEG positively moderates the relationship between a female CEO and SE social value creation. Model 4 reveals a positive and insignificant interaction effect between female CEO and RASEG, thus failing to support H2a. For H2b, we proposed that a low RASEG (i.e. higher levels of attention to economic goals) lessens the negative relationship between female CEO and economic value creation. As expected, in Model 5, the interaction term between female CEOs and RASEG was negative and statistically significant ($\beta = -0.25$, p < 0.05). While the negative sign of the interaction term might suggest that RASEG worsens the negative baseline relationship, the

Model	Factor	χ^2	df	χ^2/df	p	$\Delta \chi^2$	CFI	TLI	RMSEA	SRMR
Baseline Model		405.47	78	5.2						
	Four-factor model	113.28	00	2.0	< 0.001		0.96	0.94	0.07	0.05
Model 3	Three-factor model	309.77	62	5.0	< 0.001	6.0	0.81	0.77	0.15	0.13
Model 2	Two-factor model	447.28	64	7.0	< 0.001	-3.0	0.71	0.65	0.18	0.14
Model 1	One-factor model (combination with all four factors)	523.84	65	8.1	< 0.001	-9.1	0.65	0.59	0.19	0.13
Source:	Authors' own creation									

Table 1.Results of confirmatory factor analyses for measurement model

Economic value creation

Variable	Mean	SD	1	2	3	4	2	9	7	8
1 CEO age (26–35)	0.22									
2 CEO age (36–45)	0.19	0.39	-0.25***							
3 CEO age (46–55)	0.31		-0.35***	-0.32***						
4 CEO age (56 above)	0.23		-0.29***	-0.27**	-0.36***					
5 Edu-high school	0.13		-0.12	-0.10	0.17*	0.10				
6 Edu-university	0.59		0.15*	-0.09	-0.06	-0.12	-0.46**			
7 Edu-graduate	0.28		-0.07	0.18**	-0.05	0.05	-0.24**	-0.75**		
8 CEO work experience	20.87		90.0-	-0.04	-0.04	0.16*	0.21**	-0.10	-0.05	
9 Firm age	15.5		-0.09	-0.02	-0.08	0.20**	-0.04	-0.01	-0.02	-0.02
10 Mission-work int	0.18		-0.01	0.02	0.08	-0.06	-0.05	-0.03	0.08	-0.03
11 Mission-provision	0.40		0.07	0.04	-0.08	-0.07	-0.11	0.02	0.07	-0.06
12 Mission-com. develop	0.39		-0.03	-0.08	0.01	0.12	0.18*	-0.03	-0.12	0.09
13 Mission-ethical trading	0.03		-0.10	0.07	0.01	-0.03	-0.07	60:0	-0.05	-0.01
14 Female CEO	0.57		-0.02	0.03	0.07	-0.19**	-0.03	0.16*	-0.14	-0.10
15 RASEG	1.51		-0.09	0.02	0.04	0.03	-0.04	-0.06	-0.02	0.08
16 Social value creation	4.95		-0.03	90.0	-0.01	0.01	-0.07	0.10	-0.05	-0.07
17 Econ. value creation	4		0.22***	0.07	-0.15*	-0.18**	-0.11	-0.02	0.11	-0.07
18 Respondent's title	0.48		-0.32***	0.02	0.15*	0.24**	0.05	-0.32**	0.30***	0.10

Notes: N = 191; * $^{\circ}$ > 0.05, ** $^{\circ}$ > 0.001, *** $^{\circ}$ > 0.001; Edu = education; mission-work int. = mission-work integration; Mission-com. develop = mission-community development; RASEG = ratio of attention to social goals relative to economic goals; Econ. value creation = economic value creation; Fernale CEO is coded such that female = 1 and male = 0 **Source:** Authors' own creation

(continued)

Table 2.
Descriptive statistics:
means, standard
deviations (SD) and
correlations

Variable	6	10	11	12	13	14	15	16	17	18
1 CEO age (26–35) 2 CEO age (36–45) 3 CEO age (46–55) 4 CEO age (46–55) 5 Edu-high school 6 Edu-university 7 Edu-graduate 8 CEO work experience 9 Firm age 10 Mission-provision 12 Mission-provision 12 Mission-ethical trading 14 Female CEO 15 RASEG 16 Social value creation 17 Econ, value creation 18 Rescondent's title	-0.15* 0.22*** -0.07 -0.08 0.10 -0.01 0.16* -0.19***	-0.38*** -0.37*** -0.06 0.06 0.17* 0.12*	-0.65** -0.15* -0.20** -0.05	-0.15* -0.06 0.10 -0.30*** -0.19***	-0.19*** -0.12* -0.07	- -0.09 0.19** -0.13*	0.16*	-0.31**	800	
					10:0		0.10	0.00	000	

Economic value creation

	Mc Socia	Model 1 Social value	Me	Model 2 Social value	M. Econo	Model 3 Economic value	Soci	Model 4 Social value	Mc Econol	Model 5 Economic value	Mc	Model 6
Dependent variables Hypothesis	cre	creation	cre	creation $H1a$	CL	creation $H1b$	cre	creation $H2a$	CT C	creation <i>H2b</i>	<u>5</u> 5	SEVC
	Beta	(t)	Beta	(t)	Beta	(t)	Beta	(t)	Beta	(t)	Beta	(t)
Constant		(4.77)		(4.55)		(4.97)		(4.54)		(2.06)		(2.63)
Main effects FCEO ^a RASEG ^b			$0.15 \\ 0.15$	(1.96)* (2.02)*	$-0.12 \\ -0.02$	(-1.38)+ (-0.33)	-0.01 0.11	(-0.02) (1.40)	0.09	(0.72)	-0.09 0.07	(-0.73) (0.89)
Interaction effects FCEO ^a *RASEG ^b							0.20	(1.67)	-0.25	(-2.08)*	0.30	(2.49)*
Control variables CEO age 26–35 vears	0.11	(62.0)	0.17	(1.24)	-0.11	(-0.78)	0.21	(1.46)	-0.15	(-1.06)	0.20	(1.39)
CEO age 36-45 years	0.20	(1.46)	0.24	(1.74)	-0.23	(-1.62)	0.26	(1.86)+	-0.25	(-1.78)+	0.26	(1.87)+
CEO age 46–55 years	0.23	(1.47)	0.27	(1.71)	-0.45	(-2.83)**	0.29	(1.86)+	-0.48	(-3.04)**	0.43	(2.73)**
CEO age $>= 56$ years	0.27	(1.79)	0.33	(2.16)*	-0.43	(-2.81)**	0.35	(2.32)*	-0.45	(-3.01)**	0.44	(2.89)**
Education-high school Education-university	-0.05 -0.01	(-0.16) (-0.01)	-0.TO	$(-0.30)^*$ $(-0.19)^*$	0.04 0.04	(0.12) (0.08)	80:0	(-0.26)	0.02	(0.07)	-0.05 -0.04	(-0.14)
Education-graduate	-0.11	(-0.26)	-0.18	(-0.42)*	0.12	(0.28)	-0.18	(-0.41)	0.12	(0.27)	-0.16	(-0.36)
CEO work experience	-0.04	(-0.51)	-0.03	(-0.39)	-0.04	(-0.58)	-0.03	(-0.43)	-0.04	(-0.54)	-0.01	(-0.01)
Firmage	0.12	(1.61)	0.11	(1.44)	-0.13	(-1.79)+	0.10	(1.40)	-0.13	(-1.74)+	0.11	(1.48)
Mission-work integration Mission-provision	0.10	(1.24)	0.10	(1.26)	0.09	(1.19)	0.10	(1.32)	0.09	(1.13) $(-2.41)*$	-0.03	(-0.32)
Mission-community development	-0.29	(-3.59)**	-0.28	(-3.41)**	-0.10	(-1.20)	-0.28	(-3.40)**	-0.10	(-1.25)	-0.18	(-2.25)*
Mission-ethical trading Respondent's title	-0.12 -0.16	(-1.67)* (-1.87)	-0.09 -0.14	(-1.14) (-1.74)	0.11	(1.45)	-0.09 -0.15	(-1.14) (-1.77)+	0.11	(1.46) (1.38)	-0.13 -0.14	(-1.72)+ (-1.65)
$rac{R}{A}$	0	.41		0.46		0.45		0.47		0.47	0	0.45
Aujusieu A F	2 67	2.60**	2 44			7.15 2.69+		2.84**	2 44	2.85**	2 01	.55**

Notes: Standardized regression coefficients are shown here; +p < 0.1; **p < 0.05; ***p < 0.01; ***p < 0.01; ***p < 0.01; ***p < 0.001; ***p <

Table 3.
Regression results of female CEO on social value creation, economic value creation and social relative to economic value creation (SEVC)

moderating variable, RASEG, actually reflects the ratio of social goal attention to economic goal attention. As such, a low RASEG implies higher levels of attention to economic goals and may not yield the direct interpretation of the interaction term. To provide a better interpretation of the results of H2b, we followed Preacher *et al.*'s (2006) guidance and produced Figure 1 with the conditions. As shown in Figure 1, a low RASEG dampens the negative relationship between female CEOs and economic value creation. The mitigation effect is so strong that the economic value creation for female CEOs (0.9) becomes higher than that of male CEOs (0.8). Therefore, we find evidence in support of H2b.

Robustness test

To assess the robustness of our results, we used an alternative DV by calculating a ratio of social to economic value creation (SEVC). We consider that the ratio reflects the nature of SEs that simultaneously focus on social and economic value creation (Bacq *et al.*, 2016; Short *et al.*, 2009). Figure 2 demonstrates that the result ($\beta = 0.30$, p < 0.05) is consistent with our initial findings. Social value creation is higher with female CEOs when managerial attention to social goals is high (i.e. a high RASEG), but economic value creation is higher (i.e. the lower solid line or lower SEVC point in Figure 2) with female CEOs when RASEG is low. Additionally, we used a different regression model – General Linear Model to analyze the above model again. The results (F = 5.52, p < 0.05) support the interaction effect too.

Discussion

Theoretical implications

First, our findings support the notion that CEO gender can influence the social versus economic value creation in SEs. Consistent with prior studies concluding that female CEOs are more likely to prioritize nonpecuniary entrepreneurial motivations over profit (Jennings and Brush, 2013; Yang *et al.*, 2019), we found from testing *H1a* and *H1b* that Taiwanese SEs' female CEOs support social value creation but somewhat deter economic

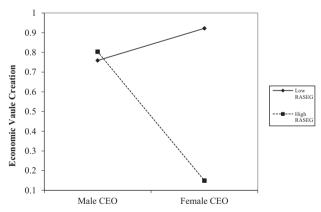


Figure 1.
The interaction
effects of female CEO
and attention to social
relative to economic
goals (RASEG) on
economic value
creation

Notes: Based on the Johnson-Neyman method, the regions of RASEG values range from 1.66 to 15.09, at which CEOs-economic value creation relations are significantly different from zero (Preacher *et al.*, 2006)

Source: Authors' own creation

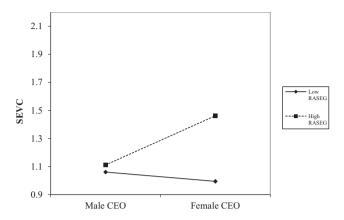


Figure 2.
The interaction effects of female CEO and attention to social relative to economic goals (RASEG) on social relative to economic value creation (SEVC)

Notes: Based on the Johnson-Neyman method, the regions of RASEG values from higher than 1.15, at which CEOs-SEVC relations are significantly different from zero (Preacher *et al.*, 2006)

Source: Authors' own creation

value creation. According to Hofstede and Jan (2005), Taiwan represents a society where men and women possess similar opportunities to pursue goals. With equal opportunities, it may be that the embedded gender role and values (Andreoni and Vesterlund, 2001; Hechavarria *et al.*, 2012) drive female CEOs' to generate more social value than economic value compared to male CEOs.

Second, we tested the moderating effect of managerial attention selection (i.e. RASEG) on SEs' CEOs, as CEOs' attentional behaviors may change when managerial roles override gender roles (Brewer *et al.*, 2002; Eagly, 2009; Lämsä *et al.*, 2000). Our findings extend the ABV in the way that female CEOs who pay less attention to social goals can significantly improve economic value creation, overriding the inherent alignment with prosocial goals (Hechavarria *et al.*, 2012). In contrast, when female CEOs pay more attention to social goals, it does not help enhance social value creation. This interesting outcome suggests that focusing more on a goal does not enhance performance when an individual is already inclined to prioritize that goal.

Another interesting finding, and perhaps a corollary to our outcome that female CEOs who focused on social goals did not improve social performance, is that economic value creation is higher when a male CEO focuses more on social goals (i.e. a high RASEG in Figure 1). Although we did not hypothesize regarding this finding, this may be explained by the following two reasons. First, as male CEOs try to achieve economic outcomes, emphasizing the social goals signals a balanced hybridity, increasing legitimacy and attracting stakeholders. Another reason is the social emphasis softens the agentic (or masculine) characteristics of a male CEO, which draws more users or buyers to sponsor the business.

Finally, our research design and analytical measures also contribute to the social entrepreneurship literature. One merit of our approach is that we measured both types of value creation outcomes to test their relative variation, answering the call of Short *et al.* (2009).

Furthermore, to avoid social desirability and single-source bias, we recruited external social sector experts to rate the performance of each SE. We then combined the SE CEOs' and experts' data to construct this study's unique data set. Our use of external raters enhanced the data quality. Overall, by testing an ABV model in the context of SEs, this paper advances our knowledge of the impact of CEO gender and selective managerial attention on SE value creation or performance.

Practical implications

Our findings also provide insightful implications for top management teams of SEs. First, our findings suggest the need to consciously build a strong top management team with a balanced perspective toward dual-goal achievement. As it is challenging to switch CEOs' attention focus flexibly (Ocasio, 2011), a top management team with a balanced view will allow the SEs to attend to both goals properly. Second, our findings imply the importance of the gender diversity of the management team and board of directors for a balanced view. Specifically, practitioners can periodically revisit the gender composition of their management team and board to balance and improve their social and economic outcomes.

As moderating effects revealed, SEs should focus on both social and economic goals simultaneously but with different levels of attention depending on the characteristics of CEOs, such as gender and roles. If female or male CEOs overemphasize one goal over the other, it may lead to a resource allocation problem. To overcome this, female (or male) CEOs may need to focus their attention consciously, emphasizing economic (or social) value creation. Therefore, creating an appropriate attention structure under a given situation may help guide the decision-making process toward the desired outcomes for SEs (Ocasio, 1997).

Finally, SEs and policymakers need to help develop women-led social ventures, especially in emerging countries with many social issues. Rosca *et al.* (2020) argued that women entrepreneurs in emerging markets are more highly motivated to solve social concerns than their male counterparts, implying a natural fit between female social entrepreneurs in response to social needs. By increasing the participation of female CEOs in resolving social issues, the SE can enhance social value creation while the entire society can gain invaluable benefits.

Limitations and suggestions for future research

One of the limitations of this study lies in the measurement of the key variables. We examined a single respondent's knowledge from each SE to measure the independent and moderator variables, which could raise an issue of CMV. However, the CEO is the key decision-maker (Rosca *et al.*, 2020) in a small SE and is thus most knowledgeable about the SE's mission, goals and value creation. If we relied on the responses of multiple C-level executives at the same SE, our response rate would suffer. Balancing the response rate and CMV is a challenging issue. However, studying upper-level executives with a single respondent is typical in the relevant literature (Liu *et al.*, 2015; Rosca *et al.*, 2020; Stevens *et al.*, 2015a). Second, while we used pretested scales to measure social and economic value creation, future research may consider using the indicators of social return on investment instead, as it is suggested as holistic indicators for SEs (Millar and Hall, 2013).

Another limitation may include the non-generalizability of our findings, which gives an opportunity for future research. We surveyed all *active* SEs in Taiwan. Although our data set comprised census data, the sample size was not very large (N=191), and a specific mission type may be under-represented (e.g. only six SEs in our sample promoted ethical trading). This limited sample size constrained our ability to conduct comparative analyses between the subgroups of female CEOs (N=109) and male CEOs (N=82). Future studies

can expand the sample size and collect more balanced mission types to see if the findings of this study have external validity. Finally, the analysis results are affected because the study was conducted in a specific context. Our SE subjects were located in Taiwan. A sample of SEs in a different cultural context might have different results. Future research, therefore, could be designed to determine whether cultural characteristics (e.g. performance orientation, long- or short-term orientation and individualism or collectivism) and social institutions affect executives' attention. For example, Taiwan is a socially supportive culture (Yu et al., 2019) where community development activities (e.g. caring for the elderly, homeless, physically challenged and children) may be more suitable social goals for SEs than ethical trading initiatives. In addition, different sets of business values, ethics, goals and innovative strategic initiatives may be critical variables influencing attention in SEs.

Conclusion

All in all, this paper is one of the few in the literature (Brielmaier and Friesl, 2022) that brings ABV to SE by testing the relationship between CEO gender and social versus economic value creation. The paper also introduced attention selection as a contingency. Our findings reveal both the positive and negative impact of CEO gender on dual-goal performance in SEs and the significant moderating role of attentional selection. We hope this study provides intriguing opportunities to help SEs grow and manage the challenges of achieving social and economic outcomes and encourage more exciting research emerging from SEs.

Notes

- The sources included firms that participated in the Multi-Employment Service Program (funded by the Workforce Development Agency of the Ministry of Labor) from 2010 to 2018, firms that currently are members of the Social Enterprise Development Association, and firms listed on the Social Enterprise Insights website.
- According to the Taiwan Social Innovation Survey (2019) by Small and Medium Enterprise
 Administration, Ministry of Economic Affairs, the total number of the registered SEs is 561. This
 number is comparable to the total number of our active SEs in Taiwan.

References

- Adams, R. and Funk, P. (2012), "Beyond the glass ceiling: does gender matter?", *Management Science*, Vol. 58 No. 2, pp. 219-235.
- Aisaiti, G., Liang, L., Liu, L., Xie, J. and Zhang, T. (2021), "How social enterprises gain cognitive legitimacy in the post-pandemic period? Social welfare logic and digital transformation", *Industrial Management and Data Systems*, Vol. 121 No. 12, pp. 2697-2721.
- Alter, K. (2007), "Social enterprises typology", virtue Ventures LLC., available at: www.4lenses.org/setypology/prolog/ (accessed 20 October 2020).
- Andersén, J. (2022), "An attention-based view on environmental management: the influence of entrepreneurial orientation, environmental sustainability orientation, and competitive intensity on green product innovation in Swedish small manufacturing firms", Organization and Environment, Vol. 35 No. 4, pp. 627-652, doi: 10.1177%2F10860266221101345.
- André, K. and Pache, A.C. (2016), "From caring entrepreneur to caring enterprise: addressing the ethical challenges of scaling up social enterprises", *Journal of Business Ethics*, Vol. 133 No. 4, pp. 659-675.

- Andreoni, J. and Vesterlund, L. (2001), "Which is the fair sex? Gender differences in altruism", *The Quarterly Journal of Economics*, Vol. 116 No. 1, pp. 293-312.
- Angulo-Ruiz, F., Pergelova, A. and Dana, L.P. (2020), "The internationalization of social hybrid firms", Journal of Business Research, Vol. 113, pp. 266-278.
- Ashforth, B.E. and Reingen, P.H. (2014), "Functions of dysfunction: managing the dynamics of an organizational duality in a natural food cooperative", Administrative Science Quarterly, Vol. 59 No. 3, pp. 474-516.
- Bacq, S., Hartog, C. and Hoogendoorn, B. (2016), "Beyond the moral portrayal of social entrepreneurs: an empirical approach to who they are and what drives them", *Journal of Business Ethics*, Vol. 133 No. 4, pp. 703-718.
- Bacq, S. and Lumpkin, G.T. (2014), "Can social entrepreneurship researchers learn from family business scholarship? A theory-based future research agenda", *Journal of Social Entrepreneurship*, Vol. 5 No. 3, pp. 270-294.
- Battilana, J. and Lee, M. (2014), "Advancing research on hybrid organizing insights from the study of social enterprises", *Academy of Management Annals*, Vol. 8 No. 1, pp. 397-441.
- Berkery, E., Morley, M. and Tiernan, S. (2013), "Beyond gender role stereotypes and requisite managerial characteristics: from communal to androgynous, the changing views of women", *Gender in Management: An International Journal*, Vol. 28 No. 5, pp. 278-298.
- Billis, D. (2010), "Towards a theory of hybrid organizations", in Billis, D. (Ed.), Hybrid Organizations and the Third Sector, Palgrave Macmillan, London, pp. 46-71.
- Boulouta, I. (2013), "Hidden connections: the link between board gender diversity and corporate social performance", *Journal of Business Ethics*, Vol. 113 No. 2, pp. 185-197.
- Brewer, N., Mitchell, P. and Weber, N. (2002), "Gender role, organizational status, and conflict management styles", *International Journal of Conflict Management*, Vol. 13 No. 1, pp. 78-94.
- Brielmaier, C. and Friesl, M. (2022), "The attention-based view: review and conceptual extension towards situated attention", *International Journal of Management Reviews*, Vol. 25 No. 1, pp. 1-31.
- British Council (2022), "More in common: the global state of social enterprise", available at: www.britishcouncil.org/sites/default/files/more_in_common_global_state_of_social_enterprise.pdf (accessed 29 November 2022).
- Chan, K.T., Kuan, Y.Y. and Wang, S.T. (2011), "Similarities and divergences: comparison of social enterprises in Hong Kong and Taiwan", Social Enterprise Journal, Vol. 7 No. 1, pp. 33-49.
- Datta, P.B. and Gailey, R. (2012), "Empowering women through social entrepreneurship: case study of a women's cooperative in India", *Entrepreneurship Theory and Practice*, Vol. 36 No. 3, pp. 569-587.
- Davis, P., Babakus, E., Englis, P.D. and Pett, T. (2010), "The influence of CEO gender on market orientation and performance in service small and medium-sized service businesses", *Journal of Small Business Management*, Vol. 48 No. 4, pp. 475-496.
- Dees, J.G. and Anderson, B.B. (2003), "Sector-bending: blurring lines between nonprofit and for-profit", Society, Vol. 40 No. 4, pp. 16-27.
- Dietz, T., Kalof, L. and Stern, P.C. (2003), "Gender, values, and environmentalism", Social Science Quarterly, Vol. 83 No. 1, pp. 353-364.
- Doherty, B., Haugh, H. and Lyon, F. (2014), "Social enterprises as hybrid organizations: a review and research agenda", *International Journal of Management Reviews*, Vol. 5 No. 1, pp. 231-277.
- Eagly, A. (1987), Sex Differences in Social Role Behaviour: A Social Role Interpretation, Taylor and Francis Group, New York.
- Eagly, A.H. (2009), "The his and hers of prosocial behavior: an examination of the social psychology of gender", American Psychologist, Vol. 64 No. 8, pp. 644-658.

- Eddleston, K.A., Ladge, J.J., Mitteness, C. and Balachandra, L. (2016), "Do you see what I see? Signalling effects of gender and firm characteristics on financing entrepreneurial ventures", *Entrepreneurship Theory and Practice*, Vol. 40 No. 3, pp. 489-514.
- Engelke, H., Mauksch, S., Darkow, I.L. and Heiko, A. (2015), "Opportunities for social enterprise in Germany—evidence from an expert survey", *Technological Forecasting and Social Change*, Vol. 90, pp. 635-646.
- Fornell, C. and Larcker, D. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388.
- Grassl, W. (2012), "Business models of social enterprise: a design approach to hybridity", *ACRN Journal of Entrepreneurship Perspectives*, Vol. 1 No. 1, pp. 37-60.
- Greve, H.R. (2008), "A behavioral theory of firm growth: sequential attention to size and performance goals", *Academy of Management Journal*, Vol. 51 No. 3, pp. 476-494.
- Gupta, P., Chauhan, S., Paul, J. and Jaiswal, M.P. (2020), "Social entrepreneurship research: a review and future research agenda", *Journal of Business Research*, Vol. 113, pp. 209-229.
- Haugh, H. (2005), "A research agenda for social entrepreneurship", Social Enterprise Journal, Vol. 1 No. 1, pp. 1-12.
- Hechavarria, D.M., Ingram, A., Justo, R. and Terjesen, S. (2012), "Are women more likely to pursue social and environmental entrepreneurship?", Global Women's Entrepreneurship Research, Edward Elgar Publishing, Cheltenham, UK, doi: 10.4337/9781849804752.00016.
- Hofstede, G. and Jan, G. (2005), *Cultures and Organizations: Software of the Mind*, McGraw-Hill, New York, NY.
- Jabeen, F. and Faisal, M.N. (2018), "Imperatives for improving entrepreneurial behavior among females in the UAE: an empirical study and structural model", Gender in Management: An International Journal, Vol. 33 No. 3, pp. 234-252.
- Jennings, J.E. and Brush, C.G. (2013), "Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature?", Academy of Management Annals, Vol. 7 No. 1, pp. 663-715.
- Joseph, J. and Wilson, A.J. (2018), "The growth of the firm: an attention-based view", *Strategic Management Journal*, Vol. 39 No. 6, pp. 1779-1800.
- Kaplan, S. (2008), "Cognition, capabilities, and incentives: assessing firm response to the fiber-optic revolution", *Academy of Management Journal*, Vol. 51 No. 4, pp. 672-695.
- Lämsä, A.M., Säkkinen, A. and Turjanmaa, P. (2000), "Values and their change during the business education—a gender perspective", *International Journal of Value-Based Management*, Vol. 13 No. 3, pp. 203-213.
- Liu, G., Eng, T.Y. and Takeda, S. (2015), "An investigation of marketing capabilities and social enterprise performance in the UK and Japan", Entrepreneurship Theory and Practice, Vol. 39 No. 2, pp. 267-298.
- MacCallum, R.C., Browne, M.W. and Sugawara, H.M. (1996), "Power analysis and determination of sample size for covariance structure modeling", Psychological Methods, Vol. 1 No. 2, pp. 130-149.
- Mair, J. and Marti, I. (2006), "Social entrepreneurship research: a source of explanation, prediction, and delight", Journal of World Business, Vol. 41 No. 1, pp. 36-44.
- Mehmood, K., Li, Y., Jabeen, F., Khan, A.N., Chen, S. and Khalid, G.K. (2020), "Influence of female managers' emotional display on frontline employees' job satisfaction: a cross-level investigation in an emerging economy", *International Journal of Bank Marketing*, Vol. 38 No. 7, pp. 1491-1509.
- Millar, R. and Hall, K. (2013), "Social return on investment (SROI) and performance measurement", Public Management Review, Vol. 15 No. 6, pp. 923-941.
- Nicolás, C. and Rubio, A. (2016), "Social enterprise: gender gap and economic development", *European Journal of Management and Business Economics*, Vol. 25 No. 2, pp. 56-62.

- Ocasio, W. (1997), "Towards an attention-based view of the firm", *Strategic Management Journal*, Vol. 18 No. S1, pp. 187-206.
- Ocasio, W. (2011), "Attention to attention", Organization Science, Vol. 22 No. 5, pp. 1286-1296.
- Pasricha, P., Singh, B. and Verma, P. (2018), "Ethical leadership, organic organizational cultures and corporate social responsibility: an empirical study in social enterprises", *Journal of Business Ethics*, Vol. 151 No. 4, pp. 941-958.
- Peake, W. and Eddleston, K. (2021), "Conditioned to care: gender differences in entrepreneurs' socially responsible behaviors", *Journal of Small Business Management*, Vol. 59 No. 3, pp. 1-34.
- Podsakoff, P.M., MacKenzie, S.B. and Podsakoff, N.P. (2012), "Sources of method bias in social science research and recommendations on how to control it", *Annual Review of Psychology*, Vol. 63 No. 1, pp. 539-569.
- Preacher, K.J., Curran, P.J. and Bauer, D.J. (2006), "Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis", *Journal of Educational and Behavioral Statistics*, Vol. 31 No. 4, pp. 437-448.
- Py, J. and Barthélemy, S. (2019), "Women-led social enterprises: an European study. A study by empow'her", supported by The Prairial Foundation, available at: https://empow-her.com/wpcontent/uploads/2019/10/Women-led-social-enterprises-a-European-study-by-EmpowHer-VFF-1.pdf (accessed 01 March 2021).
- Rosca, E., Agarwal, N. and Brem, A. (2020), "Women entrepreneurs as agents of change: a comparative analysis of social entrepreneurship processes in emerging markets", *Technological Forecasting* and Social Change, Vol. 157, p. 120067.
- Short, J.C., Moss, T.W. and Lumpkin, G.T. (2009), "Research in social entrepreneurship: past contributions and future opportunities", Strategic Entrepreneurship Journal, Vol. 3 No. 2, pp. 161-194.
- Silverman, I.W. (2003), "Gender differences in delay of gratification: a meta-analysis", Sex Roles, Vol. 49 Nos 9/10, pp. 451-463.
- Stern, B.B. (1988), "Sex—role self—concept measures and marketing: a research note", *Psychology and Marketing*, Vol. 5 No. 1, pp. 85-99.
- Stevens, R., Moray, N. and Bruneel, J. (2015a), "The social and economic mission of social enterprises: dimensions, measurement, validation, and relation", Entrepreneurship Theory and Practice, Vol. 39 No. 5, pp. 1051-1082.
- Stevens, R., Moray, N., Bruneel, J. and Clarysse, B. (2015b), "Attention allocation to multiple goals: the case of for-profit social enterprises", *Strategic Management Journal*, Vol. 36 No. 7, pp. 1006-1016.
- Sud, M., VanSandt, C.V. and Baugous, A.M. (2009), "Social entrepreneurship: the role of institutions", Journal of Business Ethics, Vol. 85 No. S1, pp. 201-216.
- Taiwan Social Innovation Survey (2019), "Small and medium enterprise administration, ministry of economic affairs", available at: https://si.taiwan.gov.tw/Files/Survey/2019/2019%20Social% 20Innovation%20Survey%20Key%20Results.pdf
- Teasdale, S., McKay, S., Phillimore, J. and Teasdale, N. (2011), "Exploring gender and social entrepreneurship: women's leadership, employment and participation in the third sector and social enterprises", *Voluntary Sector Review*, Vol. 2 No. 1, pp. 57-76.
- Thornton, P.H. and Ocasio, W. (1999), "Institutional logics and the historical contingency of power in organizations: executive succession in the higher education publishing industry, 1958–1990", *American Journal of Sociology*, Vol. 105 No. 3, pp. 801-843.
- Tracey, P., Phillips, N. and Jarvis, O. (2011), "Bridging institutional entrepreneurship and the creation of new organizational forms", *Organization Science*, Vol. 22 No. 1, pp. 60-80.
- Van Ryzin, G.G., Grossman, S., DiPadova-Stocks, L. and Bergrud, E. (2009), "Portrait of the social entrepreneur: statistical evidence from a US panel", VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, Vol. 20 No. 2, pp. 129-140.

Wu, Y.J. (2021), "Social enterprise in Taiwan", Social Entrepreneurship and Enterprises in Economic and Social Development, in Briar-Lawson, K., Miesing, P. and Ramos, B.M. (Eds), Oxford University Press, New York, doi: 10.1093/oso/9780197518298.003.0014.

Economic value creation

- Yang, S., Kher, R. and Newbert, S.L. (2020), "What signals matter for social startups? It depends: the influence of gender role congruity on social impact accelerator selection decisions", *Journal of Business Venturing*, Vol. 35 No. 2, p. 105932.
- Yang, P., Riepe, J., Moser, K., Pull, K. and Terjesen, S. (2019), "Women directors, firm performance, and firm risk: a causal perspective", *The Leadership Quarterly*, Vol. 30 No. 5, p. 101297.
- Yu, A., Lumpkin, G.T., Parboteeah, K.P. and Stambaugh, J.E. (2019), "Autonomy and family business performance: the joint effect of environmental dynamism and national culture", *International Small Business Journal: Researching Entrepreneurship*, Vol. 37 No. 2, pp. 153-185.

GM Appendix

Variable	α	CR	AVE	Scale items
Social value creation	0.64	0.85	0.54	Please indicate the following performance indicators in the SE over the past 12 months: 1. Bidding for public service contract 2. Bidding government (or its funding body's) grants for enterprise activities 3. Serves more beneficiaries in the community 4. Provide more social service (different types) 5. Expend a call corries to different learning.
Economic value creation	0.92	0.86	0.52	5. Expand social service to different locations Please indicate the following performance indicators in the SE over the past 12 months: 1. Business unit profitability 2. Reaching enterprise financial goals 3. Enterprise customer satisfaction 4. Delivering value to the enterprise customer 5. Expand enterprise activities to different locations 6. Expand enterprise activities (different types)
Attention to social goal	0.86	0.73	0.92	 6. Engage more enterprise activities (different types) 1. It is important to our organization that we have the possibility to participate in activities that address social issues 2. It is important to examine regularly new opportunities and programs which can result in an increase in value fo society 3. Our organization is successful when it fulfills its
Attention to	0.88	0.74	0.92	philanthropic and charitable responsibilities 4. It is important that the organization attends to addressing societal problems 1. It is important to our organization that long-term
economic goal	0.00	0.11	0.32	return on investment is maximized 2. It is important to allocate resources on their ability to improve long-term profitability 3. Our organization is successful when it is consistently profitable 4. It is important that the organization attends to being a profitable as possible

Table A1. Scale items, Cronbach's alpha, CR and AVE of key variable

Note: Items are rated on a Likert scale ranging from 1 (completely disagree) to 7 (completely agree) **Source:** Authors' own creation

Corresponding author

Hsing-Er Lin can be contacted at: hsingerlin@cm.nsysu.edu.tw

111年度專題研究計畫成果彙整表

計			計畫編號:111-2629-H-110-001-SSS						
計	畫名稱:CEO	性別會影響社會企業的社會	與經濟價值	創造。	馬?以關注力基礎觀點探討				
		成果項目	量化	單位	質化 (說明:各成果項目請附佐證資料或細 項說明,如期刊名稱、年份、卷期、起 訖頁數、證號等)				
		期刊論文	0						
		研討會論文	0	篇					
國	的小山丛上	專書	0	本					
內	學術性論文	專書論文	0	章					
		技術報告	0	篇					
		其他	0	篇					
		期刊論文	1	篇	Gender in Management: An International Journal, online first				
國 學術性論文		研討會論文	0						
	學術性論文	專書	0	本					
		專書論文	0	章					
	技術報告	0	篇						
		其他	0	篇					
		大專生	2		協助文獻蒐集				
		碩士生	1		協助文獻整理分類				
١.	本國籍	博士生	0						
參與		博士級研究人員	0						
計		專任人員	0	1 -6					
畫		大專生	0	人次					
人 力		碩士生	0						
	非本國籍	博士生	0						
		博士級研究人員	0						
		專任人員	0						
際	獲得獎項、重影響力及其6	其他成果 長達之成果如辦理學術活動 重要國際合作、研究成果國 也協助產業技術發展之具體 青以文字敘述填列。)	無						