Less is more? Communicating SDG orientation and enterprises’ economic performance

Evelize Culpi Mann a,⁎, Narges Safari b, John Oetzel a, Stuart Dillon a, Amanda Jasmine Williamson a

a University of Waikato, Waikato Management School, 130 Hillcrest Road, Hillcrest, Hamilton, 3240, New Zealand
b Macquarie University, Department of Actuarial Studies and Business Analytics, 4 Eastern Road, Sydney, Australia

ARTICLE INFO

Keywords: Sustainability orientation Sustainable development goals (SDGs) Social enterprises Economic performance Natural language processing (NLP)

ABSTRACT

As the interest in sustainable development increases, businesses can benefit from aligning their orientation with the Sustainable Development Goals (SDGs). It remains unclear, however, how focusing on a broader or narrower set of SDGs affects enterprises’ economic performance. This study examines the impact of a communicated SDG orientation on the economic performance of social enterprises and traditional commercial businesses. Using natural language processing (NLP) techniques to analyse textual content from 661 enterprises’ websites, we found a positive relationship between the communication of a narrow set of SDGs and enterprises’ economic performance. The extent of this effect is similar between social and traditional commercial enterprises. Therefore, stakeholders may value an enterprise’s SDG orientation strategy that focuses on a narrow set of SDGs in distinct purpose-driven institutional contexts.

1. Introduction

Businesses are increasingly encouraged to adopt practices that contribute positively to social and environmental issues (Kuang, 2021). Recent literature emphasises the importance of enterprises balancing social and economic pursuits (Battilana et al., 2019). As such, the United Nations Sustainable Development Goals (SDGs) have become a widely accepted benchmark for enterprises’ sustainability orientation (Amel-Zadeh et al., 2021). While a number of scholars suggest that the pursuit and communication of such goals could improve enterprise competitiveness (Demuijnk andasterling, 2016), doing good does not always mean doing well (Kautonen et al., 2020; Lynn, 2021; Mansouri and Momtaz, 2022). Recent studies demonstrated the dark side of sustainability orientation on enterprises’ competitiveness (Kautonen et al., 2020; Muñoz and Kimmitt, 2019). As such, the extent of enterprises’ SDG orientation can be a critical strategic choice for corporate performance (Giarratana and Pasquini, 2022; Hornstein and Zhao, 2018).

The integration of sustainability into corporate strategy, known as sustainability orientation (Roxas and Coetzter, 2012), has become a vital aspect of business strategy (Ahmić, 2022). One stream of literature is devoted to assessing enterprises’ sustainability orientation by exploring corporate narratives through textual communication (e.g., Mansouri and Momtaz, 2022; Moss et al., 2018). Prior research suggests that communicating a broad set of SDGs (e.g., diverse social offerings) can positively impact an enterprise’s economic performance (Landrum, 2018; Seo et al., 2021). This is because focusing on a variety of sustainability demands can enhance enterprises’ legitimacy and competitiveness (Landrum, 2018). At the same time, scholars have suggested that focusing on a broad set of

⁎ Corresponding author.

E-mail addresses: ec111@students.waikato.ac.nz (E. Culpi Mann), narges.safari@mq.edu.au (N. Safari), john.oetzel@waikato.ac.nz (J. Oetzel), stuart.dillon@waikato.ac.nz (S. Dillon), amanda.williamson@waikato.ac.nz (A.J. Williamson).

https://doi.org/10.1016/j.jbvi.2024.e00470

Received 13 February 2024; Received in revised form 26 April 2024; Accepted 30 April 2024

Available online 10 May 2024

2352-6734/© 2024 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC license (http://creativecommons.org/licenses/by-nc/4.0/).
SDGs can negatively impact an enterprise’s economic performance (Giarratana and Pasquini, 2022). The broad set of SDGs can increase enterprises’ operational complexity (Battilana and Dorado, 2010), leading to business failure (Munoz et al., 2018). This risk is particularly pronounced when there is a great emphasis on social goals, which is usually the case for social enterprises (Young, 2012).

Therefore, recent stakeholder theory developments challenge the doing well by doing good paradigm and recommend further exploring provisional and contextual aspects that reward sustainability orientation (Lynn, 2021). We contribute to this understanding by exploring to what extent a communicated enterprise’s SDG orientation positively impacts enterprises’ performance. Our research question frames the inquiry: How does the communication of SDGs affect enterprises’ economic performance?

We deploy an SDGs textual classifier based on Natural Language Processing (NLP) to examine the influence of enterprises’ orientation towards the SDGs on the economic performance of social enterprises and traditional commercial enterprises. NLP is a computational approach that has the potential to advance management theories by effectively extracting valuable insights from a large amount of textual data that traditional approaches could not provide (Kang et al., 2020).

2. Theory and hypotheses development

Stakeholder theory posits that a firm should create value not only for investors but for all stakeholders (Freeman et al., 2010). The key idea that holds this concept is that enterprises focusing on purposes aligned with their main stakeholders are more likely to have economic success (Freeman, 2023). Yet, this can only happen if stakeholders are aware of enterprises’ purposes, which can be achieved through effective communication of such purposes (Balmer, 2017; Lepkowska-White et al., 2022). For these reasons, the range of a communicated enterprise’s SDG orientation can be crucial to balancing the dynamics of doing well and doing good (e.g., Giarratana and Pasquini, 2022; Seo et al., 2021).

Several studies grounded in stakeholder theory have found that sustainability orientation positively relates to enterprise performance (Landrum and Kimmitt, 2019). The underlying rationale is that aligning business practices with the growing demand for sustainability (Lundqvist and Knevel, 2018) can lead stakeholders to perceive sustainable businesses as more valuable than their less sustainable counterparts. Yet, recent studies proposed that sustainability orientation can help businesses, but it can also be costly and distract management from their commercial goals (Munoz et al., 2018; Wang and Bansal, 2012). In this matter, scholars grounded in stakeholder theory suggest that the positive relationship between sustainability orientation and enterprises’ economic performance is contingent on provisional and contextual aspects (Lynn, 2021; Kautonen et al., 2020). One of the key arguments is that enterprises can lose sight of their economic objectives when pursuing and communicating a broad range of social purposes (Kautonen et al., 2020). Therefore, enterprises’ SDG orientation could represent a trade-off (Giarratana and Pasquini, 2022; Seo et al., 2021). We follow Kautonen et al. (2020), proposing that the positive relationship between sustainability orientation and enterprises’ economic performance is contingent on the extent of enterprises’ SDG orientation.

The stakeholder theory indicates that enterprises can enhance long-term value creation by prioritising the interests of a wide range of stakeholders (Freeman et al., 2010). Accordingly, Seo et al. (2021), based on the quantity of philanthropy causes within similar nature categories, suggested that enterprises can enhance their competitiveness by addressing a broad set of SDGs. Enterprises may reach more stakeholders by communicating a broader array of SDGs, as individuals can resonate with one or more of the enterprises’ SDGs (Giarratana and Pasquini, 2022). It also increases the chance that enterprises reflect heightened investors’ and other stakeholders’ attention to the SDGs (Amel-Zadeh et al., 2021). At the same time, the stakeholder theory goes beyond this argument, suggesting that enterprises should generate “as much value as possible for stakeholders, without resorting to trade-offs” (Freeman et al., 2010, p. 28). While a wide range of SDGs can increase the number of supports, it can also increase the enterprise’s tensions in dealing with many different stakeholders’ demands (Amel-Zadeh et al., 2021; Giarratana and Pasquini, 2022). An antagonistic relationship usually leads to trade-offs that can undermine either enterprise’s sustainability or profit objectives (Kautonen et al., 2020). Giarratana and Pasquini (2022) reinforce the argument by exploring enterprises’ SDG orientation through product portfolio in terms of quantity. They suggested that a broad range of SDGs could increase business economic tensions by escalating costs, dividing focus on investments, and harming the enterprises’ image among stakeholders. Therefore, by grounding on the stakeholder theory, we could assume that communicating a narrow set of SDGs can attract stakeholders with similar interests, decreasing the conflicts that generally lead to trade-offs (Giarratana and Pasquini, 2022).

Empirical studies explore the orientation of enterprises towards SDGs in terms of quantity and nature (e.g., Giarratana and Pasquini, 2022; Seo et al., 2021). Many SDGs are correlated by nature and tend to be treated simultaneously (Giarratana and Pasquini, 2022). Therefore, we explore the extent of enterprises’ SDG orientation considering the number of goals (SDGs-quantity) and their similarity according to the nature of their outcomes (SDGs-similarity). The SDG outcomes can be classified according to the SDG “wedding cake” framework (Rockstrom and Sukhdev, 2022), where the layers represent the economy, society, and biosphere (Folke et al., 2016). Although the SDG outcomes are interconnected across various sustainability dimensions due to their systemic nature, their placement in a specific layer indicates an emphasis on a particular area (Pet et al., 2023). Therefore, we employ the wedding cake framework to assess each SDG from a business perspective (e.g., Pet et al., 2023). We hypothesise that focusing on a narrow set of SDGs that emphasise a specific layer of sustainability (economy, society, or biosphere) could enhance enterprises’ economic performance, as summarised in H1 and H2.

H1. There is a negative relationship between the quantity of SDGs orientation and enterprises’ economic performance.

H2. There is a positive relationship between enterprises’ SDGs orientation emphasising similar sustainability outcomes and their economic performance.

Furthermore, explanations of the relationship between doing well and doing good “are couched within the details of relevant
institutional context" (Lynn, 2021, p. 525). Social enterprises and traditional commercial enterprises operate within distinct institutional contexts (Kautonen et al., 2020). Although the literature lacks comparative insights on the topic, scholars offer some evidence. The centrality of social purposes over economic purposes distinguishes social enterprises from traditional commercial ventures (Bandyopadhyay and Ray, 2020). The higher the centrality of social purposes, as observed in social enterprises, the higher its social visibility (Giarratana and Pasquini, 2022). As such, higher social visibility can moderate the relationship between enterprises’ SDGs orientation and economic performance (Giarratana and Pasquini, 2022). Still, similar to the dynamics presented by traditional commercial enterprises, an enterprise enhances legitimacy and competitiveness by conforming to stakeholder expectations (Bansal and Roth, 2000).

Social enterprises tend to face more scrutiny from the stakeholders over the authenticity of their social claims than traditional commercial enterprises (Giarratana and Pasquini, 2022). It occurs due to the visibility of social purposes as a central attribute of enterprises’ competitiveness (Bandyopadhyay and Ray, 2020). A social enterprise failing to demonstrate commitment to one of the SDGs claimed could face authenticity threats to all other SDGs (Alhouti et al., 2016). Moreover, clear communication of value propositions is a crucial aspect of a social enterprise’s legitimacy (Mersland et al., 2019). Communicating a broad set of SDGs may attract a diverse group of stakeholders, increasing the complexity of dealing with several stakeholders’ expectations (Teasdale, 2010). In turn, the tensions can threaten the legitimacy of social enterprises (Battilana and Dorado, 2010), leading to reduced stakeholder support (Doherty et al., 2014; Klein et al., 2021) and potentially contributing to business failure (Battilana and Lee, 2014). We expect the dynamics of a narrow set of SDGs to be present from the vantage point of a social enterprise and a traditional commercial enterprise, as presented in H3.

H3. The relationship between a narrow set of SDGs and enterprises’ economic performance is positive for both social and traditional commercial enterprises.

3. Methods

The “About Us” section of enterprise websites is where they usually share information about “who they are” and “what they do” (e.g., Haans, 2019). In our observational study, we utilised the textual content in the “About Us” section to evaluate how enterprises strategically align with the SDGs. To overcome challenges in measuring SDGs properties (Amel-Zadeh et al., 2021), we applied the Open SDGs (OSDG), an NLP model proposed by Pukelis et al. (2022). The OSDG is a multilingual tool built from an anthology integrating existing SDG research for classifying text data by SDGs (Pukelis et al., 2022). We performed sanity checks to ensure this approach accurately identifies SDGs within a business context.

3.1. Sample and procedures

We sampled private enterprises from the PrivCo Database for the United States market. The PrivCo dataset is a financial data provider on major private companies and has been cited by many researchers in the field (e.g., Cao et al., 2017; Chen and Kelly, 2015). In addition, we used web scraping techniques to select enterprises that contained textual content related to the “About Us” on their websites and with text that met the criteria for the OSDG textual classifier. Our final sample includes 661 observations, with 105 (16%) social enterprises and 556 (84%) traditional commercial enterprises across various industry sectors.

3.2. Measures

Dependent Variable. The dependent variable in our study is Productivity, which serves as a crucial measure of an enterprise’s economic performance (Abbott et al., 2019; Battilana et al., 2015; Bagnoli and Megali, 2011; Lee and Seo, 2017). Productivity is a numerical variable represented by the natural logarithm of the ratio between the annual revenue and the number of employees for 2020. Productivity is a valid measure for comparing the economic performance of social and traditional commercial enterprises (Abbott et al., 2019; Lee and Seo, 2017) across different industry sectors (Battilana et al., 2015). Independent Variables. We draw the core independent variables, namely SDGs-quantity and SDGs-similarity, from the enterprises’ “About Us” web pages using the OSDG textual classifier (Pukelis et al., 2022). SDGs-quantity represents the number of unique SDGs identified in each enterprise’s textual content from SDG1 to SDG16 (e.g., Patueli and Saracco, 2023). The measure is a continuous variable from 1 to 16 related to the number of SDGs; it moves towards 16 when more text content is matched across the different SDGs (e.g., value 3 = SDG1, SDG6, SDG12). SDGs-similarity classifies the SDGs presented in an enterprise narrative into SDG wedding cake layers according to the nature of the goal’s outcome. It is measured from 1 to 3 based on the number of layers: economy, society, and biosphere. Value 1, 2, and 3 means that SDGs are classified under one layer, two layers, and three layers respectively. As presented in Fig. 1, the SDG wedding cake is based on the framework proposed by Rockström and Sukhdev, 2022, which assigns SDGs as follows: The top layer, the Economy, comprises goals 8, 9, 10, and 12. The middle layer, Society, encompasses goals 1, 2, 3, 4, 5, 7, 11, and 16. The bottom layer, Biosphere, includes goals 6, 13, 14, and 15. In addition, Type is a binary variable indicating whether a firm is a social or traditional commercial enterprise. We used the B Corp Certification to identify the businesses with core social hybrid organisation aspects in our sample (e.g., Cao et al., 2017; Siqueira et al., 2018). Control Variables. We used the number of employees to control for firm size. It reflects the scale

---

1 Our dataset for social and commercial enterprises was acquired from https://www.privco.com.
2 The industry sector is based on the Industry Classification Benchmark (ICB), which comprises enterprises from financials (n = 238, 36%), consumer Discretionary (n = 186, 28%), industrials (n = 98, 15%), consumer staples (n = 7%), health care (n = 36, 5%), technology (n = 31, 5%), utilities (n = 11, 2%), basic materials (n = 7, 1%), energy (n = 6, 1%).
of business operations and resource access (Cacciolatti et al., 2020). Age is a numerical variable indicating the number of years since the enterprise’s founding. Sustainability orientation on financial outcomes may differ depending on the firm’s age (e.g., Cacciolatti et al., 2020; Mansouri and Momtaz, 2022). Industry denotes the industry group a firm belongs to, and it is encoded as a dummy variable (e.g., Grimes et al., 2018). The relevance of the SDGs varies across industries due to the nature of operational sustainability impacts (Sætra, 2021).

3.3. Data analysis

Data analysis proceeds in three main steps. First, we used descriptive analysis to understand the SDG orientation among social and traditional commercial enterprises. Second, we tested H1 and H2 using OLS regression models and H3 using interaction effects. Third, we carried out robustness tests by checking multicollinearity and using multilevel models using R packages.
4. Data analysis and results

4.1. Descriptive statistics

Fig. 2 shows that the enterprises of our sample touched all labelled SDGs. In proportion, social enterprises tend to demonstrate higher levels of SDG orientation than traditional commercial enterprises. Moreover, by analysing the overall frequency, the SDG9-Industry, Innovation & Infrastructure (28.8%) is the most identified goal in our sample. In addition, SDG4-Quality Education (14.8%) and SDG8-Decent Work and Economic Growth (11.9%) are the second and third most common goals in the enterprises’ narratives. In contrast, the SDGs related to biodiversity, SDG15-Life On Land (0.43%) and SDG14-Life Below Water (0.75%), followed by SDG2-Zero Hunger (0.75%) and SDG13-Climate Action (0.75%), are among the goals that received less attention. In addition, a fraction of enterprises is aligned with SDG10-Reducing Inequality (2%) and SDG5-Gender Equality (1%). Regarding the quantity of SDGs communicated per enterprise, 7 is the maximum number of goals identified with 1.7 as the mean value.

4.2. Regression models

Table 1 reports the results for our model specifications. In Model 1 we tested H1 and H2, and in Model Model 2 and Model 3 we tested H3. Adding the independent variables improved the model fit compared to using them solely as covariates F (4, 648) = 16.42, p < 0.001. We checked for multicollinearity using the VIFs, which are below the widely accepted threshold of 10 (e.g., Kautonen et al., 2020). The highest score is 7.8, which is a score from the interaction term. Next, due to the nested structure of the data, we used a multilevel model to account for differences across industries, Models 4, 5 and 6. We have 661 firms distributed among 7 industry sectors, where the majority (n = 238) are from financials, and the minority (n = 6) are from energy industry sectors. These results are similar to those in Models 1, 2 and 3. In H1, we tested the relationship between SDGs-quantity and economic performance. Model 1 reveals a significant negative association between the number of SDGs mentioned in an enterprise’s narrative and the likelihood of higher productivity (β = −0.34, p = 0.03). Our results support H1, suggesting that enterprises that present a narrow SDG orientation are more likely to present higher economic performance. In H2, we tested the relationship between SDGs-similarity and productivity. Model 1 demonstrates a non-significant relationship between enterprises’ economic performance and SDGs-similarity (β = 0.19, p = 0.18). Our results do not support the proposition that a communicated SDG orientation strategy emphasising a specific layer of sustainability could benefit enterprises’ economic performance. H3 anticipates a similar effect of SDG orientation on the performance of both social enterprises and traditional commercial enterprises. First, we added an interaction term between the enterprises’ type and SDGs-quantity (β = 0.10, p = 0.62) for productivity in Model 3. Next, we added an interaction term between the enterprises’ type and SDGs’ similarity (β = 0.20, p = 0.29) for productivity in Model 4. In both cases, the interaction term is not significant. Thus, as anticipated, when comparing a social enterprise to a traditional commercial enterprise, the result indicates similar patterns in the effects of SDG orientation on economic performance.

5. Discussion

Drawing on stakeholder theory and recent literature on entrepreneurship, we assume that one critical strategic decision for doing well by doing good is the enterprise’s SDG orientation (e.g., Freeman, 2023; Giarratana and Pasquini, 2022; Hornstein and Zhao, 2018). Our results demonstrated that enterprises communicating their purpose with a narrow set of SDGs in terms of quantity, regardless of the sustainability dimension of SDGs outcomes, tend to be positive for economic performance. This relationship tends to be similar among social enterprises and traditional commercial enterprises. Therefore, our insights demonstrate that the extent of SDGs communicated by firms holds significance for their stakeholders, which, in turn, positively impacts their economic performance.

The stakeholder theory suggests enterprises should create as much value as possible for stakeholders. Still, making as much value as possible does not mean placing enterprises’ strategic orientation towards a large array of SDGs. As Freeman (2023) suggested, enterprises with a purpose aligned with their main stakeholders to guide the day-to-day operations are likely to achieve maximum value creation. Therefore, our findings corroborate the proposition that communicating a broad range of SDGs could increase enterprises’ complexity and divert management attention away from commercial objectives (Giarratana and Pasquini, 2022). When comparing social enterprises and traditional commercial enterprises, Kautonen et al. (2020) suggested that adhering to stakeholder preferences for sustainability can be good for business if not taken too far (Kautonen et al., 2020). Our findings support that both social and traditional commercial enterprises should focus on a narrow number of SDGs to better balance sustainability orientation and economic performance. In addition, following the dynamics of authenticity (Albouit et al., 2016) and mission drift (Battilana and Dorado, 2010), we understand that focusing on a broad range of SDGs can increase the risk of jeopardising enterprises’ image among stakeholders by appearing less authentic, especially in the context of social enterprises.

Furthermore, our results demonstrated a non-significant relationship between a communicated SDG orientation strategy with similar sustainability outcomes and economic performance. This notion can be supported by the interconnectivity between different SDGs (Philippidis et al., 2020; Smith et al., 2021). The “wedding cake” framework illustrates how SDGs are interlinked (Folke et al., 2016). For instance, challenges like climate change, hunger, and poverty are correlated and should be treated simultaneously (Giarratana and Pasquini, 2022). Yet, poverty and hunger fall within the societal layer of the cake, while climate change is part of the biosphere layer. This illustrates the bidirectional relationship between the economy (top cake layer), which serves society (middle cake layer), which in turn operates within the biosphere (bottom of the cake) (Philippidis et al., 2020). Therefore, our results highlight a nuanced consideration of specific SDGs in a way that suits organisational purpose, instead of a more aggregated view of the sustainability dimensions. For enterprises, especially social enterprises (Kouame et al., 2022), its long-term depends on whether sustainability propositions resonate with the stakeholders that support them (Giorgi, 2017). In this matter, scholars suggest that a
Table 1
The relationship between productivity and its determinant factors.

<table>
<thead>
<tr>
<th>DV: Productivity</th>
<th>Model 1 (OLS)</th>
<th>Model 2 (OLS with interaction term for SDGs quantity)</th>
<th>Model 3 (OLS with interaction term for SDGs similarity)</th>
<th>Model 4 (LM)</th>
<th>Model 5 (LM with interaction term for SDGs_quantity)</th>
<th>Model 3 (LM with interaction term for SDGs_similarity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>12.38***</td>
<td>12.39***</td>
<td>12.44***</td>
<td>12.10***</td>
<td>12.11***</td>
<td>12.16***</td>
</tr>
<tr>
<td></td>
<td>(p = 0.26)</td>
<td>(p = 0.27)</td>
<td>(p = 0.29)</td>
<td>(p = 0.31)</td>
<td>(p = 0.31)</td>
<td>(p = 0.33)</td>
</tr>
<tr>
<td>Employees</td>
<td>0.03 (p = 0.05)</td>
<td>0.03 (p = 0.05)</td>
<td>0.03 (p = 0.05)</td>
<td>0.03 (p = 0.27)</td>
<td>0.03 (p = 0.27)</td>
<td>0.03 (p = 0.27)</td>
</tr>
<tr>
<td></td>
<td>(p = 0.05)</td>
<td>(p = 0.01)</td>
<td>(p = 0.01)</td>
<td>(p = 0.14)</td>
<td>(p = 0.14)</td>
<td>(p = 0.14)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.05***</td>
<td>-0.05***</td>
<td>-0.05***</td>
<td>-0.05***</td>
<td>-0.05***</td>
<td>-0.05***</td>
</tr>
<tr>
<td></td>
<td>(p = 0.01)</td>
<td>(p = 0.01)</td>
<td>(p = 0.01)</td>
<td>(p = 0.14)</td>
<td>(p = 0.14)</td>
<td>(p = 0.14)</td>
</tr>
<tr>
<td>Type: SE</td>
<td>0.54***</td>
<td>0.51***</td>
<td>0.28 (p = 0.25)</td>
<td>0.53***</td>
<td>0.50***</td>
<td>0.28 (p = 0.31)</td>
</tr>
<tr>
<td></td>
<td>(p = 0.10)</td>
<td>(p = 0.12)</td>
<td>(p = 0.12)</td>
<td>(p = 0.15)</td>
<td>(p = 0.15)</td>
<td>(p = 0.31)</td>
</tr>
<tr>
<td>SDGs_quantity</td>
<td>-0.34*</td>
<td>-0.37*</td>
<td>-0.35*</td>
<td>-0.36*</td>
<td>-0.36*</td>
<td>-0.36*</td>
</tr>
<tr>
<td></td>
<td>(p = 0.16)</td>
<td>(p = 0.17)</td>
<td>(p = 0.16)</td>
<td>(p = 0.17)</td>
<td>(p = 0.17)</td>
<td>(p = 0.17)</td>
</tr>
<tr>
<td>SDGs_similarity</td>
<td>0.19 (p = 0.14)</td>
<td>0.18 (p = 0.14)</td>
<td>0.13 (p = 0.16)</td>
<td>0.18 (p = 0.16)</td>
<td>0.18 (p = 0.16)</td>
<td>0.14 (p = 0.17)</td>
</tr>
<tr>
<td></td>
<td>0.10 (p = 0.20)</td>
<td>0.10 (p = 0.20)</td>
<td>0.10 (p = 0.16)</td>
<td>0.10 (p = 0.16)</td>
<td>0.10 (p = 0.16)</td>
<td>0.10 (p = 0.16)</td>
</tr>
<tr>
<td>SDGs_similarity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type SE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Group</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>661</td>
<td>661</td>
<td>661</td>
<td>661</td>
<td>661</td>
<td>661</td>
</tr>
<tr>
<td>mean size group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>0.13</td>
<td>0.13</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.11</td>
<td>0.11</td>
<td>0.19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The above table presents regression coefficients and std error in parentheses. Significance ***p < 0.001; **p < 0.01; *p < 0.05. Multilevel models with random effects. SE = Social Enterprises.
category signals essential features to an audience, which helps stakeholders formulate their expectations towards that category (Romanelli and Khessina, 2005). Our results suggest that communicating a sustainability-oriented strategy at the goal level can serve as a signal that resonates better with stakeholders.

Moreover, the SDG9-Industry, Innovation & Infrastructure from the economy layer is the goal that exhibits the highest frequency. This aligns with the literature suggesting that SDG9 is the most discussed goal in corporate practices (Mio et al., 2020). In contrast, the SDGs related to biodiversity, SDG15-Life On Land and SDG14-Life Below Water, are among the goals that received less attention. Biodiversity conservation is among the worldwide problems that businesses have less practised (Addison et al., 2019). In addition, our results demonstrated that a fraction of enterprises is aligned with SDG10-Reducing Inequality and DGS-Gender Equality, topics that heightened social attention in recent years, such as the emergence of the “me-too” movement in the U.S. (Amel-Zadeh et al., 2021).

In summary, the strategic selection of social goals can impact the balance between economic and social welfare logic (see Kautonen et al., 2020; Battilana and Dorado, 2010). Yet, the “responsiveness to stakeholders alone is not guarantee of performance” (Kautonen et al., 2020, p. 6). The stakeholder theory suggests that trade-offs must be avoided (Freeman, 2023). A key aspect might be a narrow SDG orientation strategy to align with their main stakeholders while decreasing conflicts.

As with many entrepreneurship research studies, there is limited availability of economic-financial data for private enterprises (Wasserman, 2017). Therefore, a common limitation is the relatively small sample size. In addition, this study only focuses on enterprises from the U.S. Given the increasing presence of social enterprises worldwide, we cannot fully generalize our results for countries with distinct institutional settings (e.g., She and Michelon, 2023).

6. Implications for theory and practice

This study has implications for both research and practice. For research, this study contributes to the entrepreneurship literature and stakeholder theory by exploring and comparing conditions under which enterprises’ SDG orientation positively influences economic performance across social enterprises and traditional commercial businesses (Abbott et al., 2019; Doherty et al., 2014; Lynn, 2021). In addition, this study serves as a proof of concept of the use of big data to overcome challenges in measuring enterprises’ contribution to the SDGs (Amel-Zadeh et al., 2021; Mio et al., 2020; Patuelli and Saracco, 2023). Finally, we add to the literature by stimulating wider discussions on aligning enterprises’ strategies with the SDGs (Günzel-Jensen et al., 2020).

For practice, given that SDGs challenge businesses worldwide (Rosati and Faria, 2019) and the limited literature directly addressing business and SDGs sparse (Mio et al., 2020), our results can inform social entrepreneurs and business leaders in reshaping their sustainability-oriented strategies. Our results inform social entrepreneurs and business leaders about the value of communicating a narrow set of SDGs for enterprises’ economic performance. Furthermore, our findings suggest that enterprises should align their purpose with the main stakeholders (not all) to guide the day-to-day operations to achieve maximum value creation. Trying to do it all generates complexity and tension. A focused strategy would allow stakeholders to evaluate what the enterprise can achieve and attract those who share similar interests. It is an important insight for enterprises, especially social enterprises, that often have limited resources and must decide wisely about their allocation (Miles et al., 2014).

7. Conclusion

Our study investigates enterprises’ SDG orientation through the lens of stakeholder theory using enterprises’ textual communication. The findings show that stakeholders can positively value a narrow set of SDGs for both social enterprises and traditional commercial enterprises. For practitioners, this implies that focusing deeply on a smaller set of SDGs may be perceived better than trying to do it all. The main implication for future research is a call for empirical evidence that compares conditions under which enterprises can do well by doing good considering social and traditional commercial enterprises’ contexts.

CRediT authorship contribution statement

Evelize Culpi Mann: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. Narges Safari: Writing – review & editing, Supervision, Formal analysis, Conceptualization. John Oetzel: Writing – review & editing, Supervision, Conceptualization. Stuart Dillon: Writing – review & editing, Supervision, Conceptualization. Amanda Jasmine Williamson: Writing – review & editing, Supervision, Conceptualization, Methodology.

Declaration of competing interest

None.

References


