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Environmental Sustainability Practices and Offshoring Activities of Multinational Corporations Across Emerging And Developed Markets

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Abstract

Using panel data of 1,080 multinational corporations (MNCs) from the United States, we examine the effects of environmental sustainability practices on the degree of firms' offshoring activities. In addition, we disaggregate offshoring activities into their core components depending on whether or not the firm buys (inputs) or sells (outputs) and/or owns assets in a given country and examine the extent to which sustainability practices influence the different components of offshoring decisions. The results indicate that sustainability practices significantly affect offshoring activities of MNCs. In particular, we found that sustainable business practices matter when the firm sells goods or owns assets in the given host nation. Additionally, the results show that the sustainability−degree of the internationalization relationship is crucial for MNCs that have offshoring activities in advanced economies relative to those firms that have activities in emerging markets. Our results are robust to alternative explanations.

Keywords: Environmental sustainability; offshoring strategy; production assets; advanced economies; emerging economies

1. Introduction

As firms around the globe continue to seek new sources for market competitiveness (MC), outsourcing and offshoring of upstream and downstream value-chain activities have become common strategies (Pereira, Munjal & Ishizaka, 2019). For example, in the United States (US), a growing number of multinational corporations (MNCs) organize their productions on a global scale by capitalizing on location-specific advantages such as low-labor cost in China and India (Du, Lu & Tao, 2008). Offshoring strategy, which focuses on the relocation of business activities and functions from domestic market to foreign locations (Roza, Van den Bosch & Volberda, 2011), is predominantly spurred by aggressive globalization dynamics (Schmeisser, 2013) and persistent advancements in information and communication technology that allow those activities to be undertaken more efficiently on a global scale (Kenney, Massini & Murtha, 2009). Offshoring opens new strategic opportunities for firms to globalize and attenuate resource constraints (Liesch & Knight, 1999; Roza, Van den Bosch & Volberda, 2011). More importantly, offshoring creates remarkable opportunities and exposes firms to many inherent challenges associated with internationalization decisions. For instance, offshoring has hidden costs (Mukherjee, 2018) that lead to numerous firms failing to achieve the expected cost savings from offshoring from low-wage countries (Horn, Schiele & Werner, 2013). Furthermore, the global nature of offshore operations increases a firm's exposure to various

uncertainties in foreign markets, including the need to adjust to the culture in the host nation, transfer management methods and values, and make adaptations to their home-grown organizational structures and systems (Manning, 2014; Fisher & Ranasinghe, 2001). Such uncertainties significantly increase firm complexity and transaction costs as firms strive to adapt to the rapidly changing conditions of several overseas markets (Hutzschenreuter, Lewin & Dresel, 2011).

Within the realm of offshoring research, scholars have pursued a diverse set of objectives. Chief among these are the impact of offshoring decisions on a firm's financial performance (Bustinza, Arias-Aranda & Gutierrez-Gutierrez, 2010; Amendolagine, Capolupo & Ferri, 2014), operational efficiency (Broedner, Kinkel & Lay, 2009) and innovation performance (Han & Bae, 2014; Mazzola, Bruccoleri & Perrone, 2019). Collectively, knowledge accumulation around offshoring strategy has been substantial, driven largely by pressure to engage in international production (Dunning & Buckley, 1977) or geographical distribution of sales (Dunning, 1980) and "welfare-enhancing international division of labor" (Dunning, 2009, p. 10).

Nonetheless, key knowledge voids remain within the realm of offshoring research. A recent literature review (see Fratocchi & Di Stefano, 2019) concluded that environmental and social sustainability issues are increasingly assuming relevance for offshoring decisions. However, the effect of sustainability practices on offshoring decisions of firms is an underexplored topic within the international business domain. This is surprising given that understanding sustainability is not only crucial in enriching current international business literature, but also for public policy in both home and host governments. As such, focusing on such research is important because it may shed needed light on the topic of how firms can effectively manage sustainability in offshoring environments. Indeed, since the formal adoption of the United Nations' Sustainable Development Goals (SDGs) (United Nations, 2015), research on sustainability has garnered greater attention such that global issues are inextricably linked to the role of the firm in society (Marcus, Kurucz & Colbert, 2010; Chams & García-Blandón, 2019). More importantly, the achievement of SDGs necessitates a strategic process that highlights the interconnectedness and interactions between several actors: the private and public sectors, governments, multinational enterprises, non-governmental and philanthropic

organizations, and individuals (Chams & García-Blandón, 2019). Particularly, the introduction of the SDGs has shifted the corporate sustainability discourse from a reactive to proactive focus where corporations are actively and strategically involved in influencing sustainable development trajectories. As such, many firms are starting to emphasize strategic competence by adopting an international sustainability framework toward creating functional linkages between performance and targets, competitiveness and the common good (Williams, Whiteman & Parker, 2019; Van Zanten & Van Tulder, 2018). Thus, this study aims to (1) examine the impact of global sustainability practices on MNCs' offshore activities; and (2) examine the extent to which sustainability business practices affect the degree of offshoring across advanced and emerging markets.

This study contributes to the environmental sustainability and international offshoring literature in three specific ways. First, we extend the existing studies on offshoring strategy (Zhang, Padmanabhan & Huang, 2018; Schmeisser, 2013; Rodgers et al., 2019; Pereira, Munjal & Ishizaka, 2019) by examining the effects of environmental sustainability practices on the degree of firms' offshoring activities. Due to the difficulties in measuring the existence and intensities of offshore activities in each nation, prior studies (Tuzel & Zhang, 2017; Rodgers et al., 2019) provide limited evidence on the risk implications of offshore activities as well as their connections with firms' sustainability practices. Our analysis fills this gap by providing a deeper and more comprehensive understanding of the impact of sustainability practices or strategies on MNCs' offshoring activities from a multifaceted perspective, by examining the broad range and the most important aspects of offshoring activities (or internationalization) considered in the literature: operations, upstream (sales), downstream (purchases) and ownership. This process allows us to show that a firm's sustainability practices and strategies can be impacted by the integration and awareness of all the actors in the value chain, including the suppliers, distributors, and customers.

Second, although prior literature examines sustainability practices of MNCs (Durugbo & Amankwah-Amoah, 2019; Kolk, Kourula & Pisani, 2017; Gallego-Álvarez & Ortas, 2017), this line of research has mostly focused on examining the impact of sustainability in upstream transformations of economic activities (sales), instead of the downstream direction of the value chain where the key

role of retailers and consumers is observed (Srivastava, 2007; Seuring & Müller, 2008; Seuring, 2011). We contribute to and fill gaps in this literature by highlighting the impact of sustainability practices on both upstream and downstream offshoring. By arguing that downstream offshoring activities (purchasing inputs overseas) comprise one-sided commitments where MNCs engage less with corporate partners, we show that sustainability practices or strategies matter most for upstream offshoring activities (selling outputs overseas), which generally involve two-sided commitments without any guarantees from consumers/clients when firms are not sustainability oriented.

Third, we deviate from the existing literature (Cainelli, Mazzanti & Montresor, 2012; Chiarvesio, Marchi & Maria, 2015) which suggests that MNCs are more likely to invest in sustainable environmental practices only if they have ownership of local firms (or subsidiaries) in the host country. Hence, we contribute to the extant literature on outsourcing and offshoring decision making (Pereira et al., 2020; Pereira, Munjal & Ishizaka, 2019) by demonstrating that, for MNCs that do not own production assets overseas, the key channel toward gaining access to overseas markets is by acquiring competencies that allow them to reconfigure their processes and resources dynamically in response to the global demands by developing internationally recognized sustainability practices. Finally, in contrast to much of the previous sustainability literature (Chakrabarty & Wang, 2012; Li & Zhou, 2017; Gómez-Bolaños, Hurtado-Torres & Delgado-Márquez, 2020), this study explores whether the sustainability—degree of offshoring matters for MNCs that engage in offshore activities in advanced economies relative to those in emerging markets. We show that the adoption of sustainability practices or standards is particularly important for MNCs that intend to sell (or purchase) outputs (or inputs) to (from) customers/clients (suppliers) in advanced markets where environmental and sustainability standards are strict, and the stakeholders are very active.

The remainder of the paper is organized as follows. First, we present the theories and hypotheses underlying the sustainability practices and offshoring analysis. We then describe the research methodology and findings of the study. The discussion and implications of this study are then outlined.

2. Theory and hypotheses development

Past studies have demonstrated that cost savings emanating from lower labor costs are a major driver of offshoring (Bunyaratavej et al., 2011; Rodgers et al., 2019; Pereira, Munjal & Ishizaka, 2019). Offshoring strategies represent "the international sourcing of production or support activities by transferring part of the value chain in a foreign country" and in so doing allow firms to accrue location-specific advantages such as labor costs and raw materials (Gooris, 2012, p. 2). Offshoring operations are viewed as an indication of firm internationalization via cross-border (re)location of the firm's value-chain activities (Buckley & Ghauri, 2004; Schmeisser, 2013). Specifically, factors such as access to highly skilled workers (Lewin & Couto, 2007; Lewin, Massini, & Peeters, 2009), access to new technology and knowledge (Pereira et al., 2020), and cost savings are a prime driver of offshoring (Bunyaratavej et al., 2011; Lewin & Couto, 2007). However, the decision to offshore the firm's operations may also have damaging consequences for the firm. Particularly, offshoring has hidden costs (Mukherjee, 2018) that lead to numerous firms failing to achieve the expected cost savings from offshoring from low-wage countries (Horn et al., 2013; Lojacono, Misani & Tallman, 2017). This paper focuses on examining the link between the adoption of global sustainability standards and the degree of offshore operations of MNCs. We argue that, by adopting global sustainability practices or strategies, firms should be more likely to mitigate the inherent risks associated with offshoring.

Business and the private sector have pivotal roles to play in attaining the SDGs. However, in several economies, both developed and emerging, governments lack the finances, resources, and capabilities required to drive the attainment of the SDGs (Rahdari, Sepasi & Moradi, 2016). Hence, the onus has been placed on the private sector to play a central part in sustainable development, not only in terms of economic growth but also in terms of the environmental and social needs of the 21st century (Sullivan, Thomas & Rosano, 2018; Van Zanten & Van Tulder, 2018). However, with the implementation of the SDGs, businesses of all sizes can utilize the requirements as guidance toward achieving corporate sustainability and addressing micro-level SDGs (Rosati & Faria, 2019). In particular, MNCs can utilize the SDGs to develop a better understanding of their role as a corporate

citizen and take on global-level responsibilities such as combating climate change and ending poverty, as are articulated in the macro-level SDGs (Rahdari, Sepasi & Moradi, 2016). Firms have traditionally recognized sustainability policies as essentially subordinate to financial and operational priorities (Porter & Kramer, 2011). However, in recent times, a turning point in the discourse of international business activity and sustainable development originates from the resource-based (Barney, 1991) and natural-resources-based (Hart, 1995) theories.

The resource-based view indicates that all firms are distinct, and therefore possess different degrees of resources and capabilities that drive their strategic decisions as well as their competitive advantage (Chen, Ong & Hsu, 2016; Barney, 1991). In this context, competitive advantage may be embedded in how an organization links its core competencies to the scarce resources in the firm's external environment, whilst relying on organizational capabilities to leverage key hard-to-imitate resources. Under the assumption of resource heterogeneity and imperfect mobility, a resource may drive sustainable competitive advantages given that it is valuable, inimitable, rare, and reinforced by tacit skills or socially complex organizational processes (Barney, 1991). Additionally, the natural resource-based theory (Hart 1995; Hart & Dowell, 2011), which is an extension of the resource-based theory, stipulates that competitive advantages stem from an organization's capability to foster or promote environmentally sustainable economic operations (McWilliams & Siegel, 2011). Specifically, firms can enhance their competitive advantages (for example cost reduction, differentiation, preempting the competition, staking out more secure future positions, etc.) by developing strategic environmental capabilities such as pollution prevention, product stewardship, and sustainable development (Chen, Ong & Hsu, 2016). For instance, cost reduction is attainable by generating less waste and making better use of inputs, which collectively saves production costs by decreasing the cost of raw materials, waste disposal, and pollution activities (Hartmann & Vachon, 2018). In addition to generating differentiation advantages, other key benefits of sustainability practices include increased entry barriers for competitors, and the development of new and valuable firm competencies and capabilities (e.g., learning, better stakeholder integration and management, and innovation) (López-Gamero & Molina-Azorín, 2016). Collectively, these theories mandate the

need for strategists and organizational theorists to understand how environmental-oriented resources and capabilities can serve as sustainable sources of competitive advantage for firms.

2.1. Environmental sustainability practices and the degree of offshoring activities

In line with the competitive advantages of the adoption of sustainability practices or strategies, we argue that the competencies derived from sustainability practices should mitigate barriers in internationalization contexts. Sustainability practices embody the holistic, balanced, and long-term approaches incorporated in an organization's operations that have a net positive impact on ecological systems, social systems, economic systems, and their many other stakeholders (Chakrabarty & Wang, 2012). Through sustainability practices, organizations can create long-term value through their improved ability to identify opportunities and mitigate economic, environmental, and social risks (Amankwah-Amoah et al., 2019; Danso et al., 2020 López-Gamero & Molina-Azorín, 2016). Therefore, for many MNCs, the ability to develop or adopt key sustainable practices that conform to stakeholders' social and environmental expectations is vital for achieving performance objectives, particularly for offshore or foreign operations (Delgado-Ceballos et al., 2012). In terms of foreign operations, several home and host market stakeholders, including non-governmental organizations (NGOs), industry associations, governments, and many others, have in recent times increased their proactiveness and the importance of sustainability by increasing their demand for practices that address a host of social and environmental concerns (Chams & García-Blandón, 2019). Furthermore, MNCs are required to comply with the countless and distinct socio-environmental regulations and standards across various regions of operations. In addition to acting as safeguards for initial firm entry to overseas markets, these distinct regulations and standards also create fertile grounds for the continuation and sustenance of the MNCs' operations in the future. However, greater reliance on overseas markets exposes MNCs to key risks such as the disapproval of or disfavor from foreign stakeholders (e.g., clients and customers). After all, MNCs tend to have greater visibility in overseas markets (Chakrabarty & Wang, 2012). As such, any failures in meeting the demands of key stakeholders tend to attract greater negative publicity and consequently damage the MNC's

reputation, increasing the numerous liabilities of foreignness and eventually making overseas business operations challenging. Simply, the growing pressure from key stakeholders, at both home and overseas markets, has radically transformed the business landscape. Accordingly, the drive toward increased sustainability orientation has become crucial for MNCs (Zhang, Padmanabhan & Huang, 2018). For instance, Bansal and Hunter (2003) show that the adoption of ISO 14001 standards facilitates internal coordination on environmental issues and boosts an MNC's image toward attaining environmental legitimacy in overseas markets. Scholarship also suggests that public policy and stakeholders' pressures play a vital role in reducing the environmental impact of organizations (cf. Berrone et al., 2013), and firms might decide to relocate environmentally unfriendly value-chain activities to those markets where the enforcement of environmental standards is poor. Grounded on the above, we contend that firms engage in offshoring to reduce costs and develop competitive advantages. However, those MNCs lacking in terms of sustainability practices might encounter key challenges that hinder their global business expansion due to (i) entry barriers and liability of foreignness, (ii) legitimacy problems, and (iii) lack of competitive advantages. We therefore propose that:

H1*: Sustainability practices significantly impact the degree of offshoring activities of MNCs.*

2.2 Sustainability practices and offshoring activities:The role of purchasing (selling) input (output) overseas

In hypothesis 1 above, we argue that firms that adopt key sustainability practices should outperform their counterparts in internationalization or offshoring, particularly when issues of foreignness and legitimacy problems arise. Further, with their greater capabilities, sustainable firms are more competitive in international markets and are in a better position to meet the expectations of diverse stakeholders. Thus, MNCs with higher levels of sustainability practices or strategies may tend to be associated with greater degrees of internationalization or offshoring. However, from a sustainability perspective, another prominent issue that has garnered critical attention is the geographical scale of economic operations. Spatial proximity amongst actors involved in the manufacturing processes may

decrease the costs and impacts of sustainability orientation, and thus increase the effectiveness of a firm's sustainability practices or strategies (Chiarvesio, Marchi & Maria, 2015). Simply, the more fragmented and/or dispersed the production process, the higher the probable negative sustainability impacts and thus increased difficulties of ensuring high sustainability standards, given the additional transaction costs the firm faces in implementing sustainability practices conforming to diverse stakeholders' expectations. In line with these arguments, prior literature that examines the role of the geography of production and consumption activities on sustainability orientation has highlighted the role of proximity and agglomeration of production activities (Da Ronch, Di Maria & Micelli., 2013), as well as the globalization of such activities (Chiarvesio, Marchi & Maria, 2015). Specifically, the evidence suggests that spatial proximity plays a positive role in the relation between production and consumption activities (Da Ronch, Di Maria & Micelli., 2013). However, global dispersion of operations may have adverse effects in terms of sustainable outcomes (Roberts, 2004). Accordingly, prior studies on large global buyers such as IKEA (Marchi, Maria & Micelli, 2013) or Marks & Spencer (Goger, 2013) demonstrate how offshoring activities (i.e., the global production and sourcing strategies) of MNCs drive their environmental and sustainability orientations.

Though prior literature examines sustainability practices of MNCs, research has mostly focused on examining the impact of sustainability in upstream transformations of economic activities (sales), instead of the downstream direction of the value chain where the key role of retailers and consumers is observed (e.g., see Srivastava, 2007; Seuring & Müller, 2008; Seuring, 2011). More specifically, downstream offshoring activities (purchasing inputs overseas) comprise one-sided commitments where MNCs engage less with corporate partners. However, upstream offshoring activities (selling outputs overseas) generally involve two-sided commitments without any guarantees from consumers/clients when firms are not sustainability oriented (Rugman & Verbeke, 2008). Therefore, firms can benefit from proximity to key stakeholders by increasing their efficiency in the management of sustainable processes aimed at reducing the environmental impacts of their economic actions. With the unprecedented rise in the environmental transformation of industrial districts (Becattini, Bellandi & De Propris, 2011), we expect that MNCs that adopt more global sustainability

practices should have fewer challenges in selling inputs to clients/customers specialized in highly concentrated and socially cohesive industries (Da Ronch, Di Maria & Micelli., 2013). Specifically, we contend that spatial proximity to other stakeholders in the value chain, and specifically with consumers/clients, mandates the adoption of global sustainable strategies (e.g., development of new and more eco-friendly products and processes) because the reputational effect of such practices drives competitive advantage in overseas markets, which may directly enhance firm long-term performance. We therefore propose the following hypothesis:

> ***H2:*** *Sustainability practices matter most (positive association) for upstream offshoring activities (selling outputs overseas) rather than downstream offshoring activities (purchasing inputs overseas).*

2.3. Sustainability practices and offshoring activities: The role of ownership of production assets overseas

The pollution-haven hypothesis (Cole, 2004) postulates that increased globalization allows MNCs to take advantage of low environmental regulations in overseas markets, by relocating their pollution-intensive production processes to countries with weaker and less-expensive regulations, particularly emerging and developing countries (Chiarvesio, Marchi & Maria, 2015). Accordingly, prior literature (Lu & Beamish 2004; Chakrabarty & Wang, 2012; Li & Zhou, 2017) suggests that offshoring or internationalization allows MNCs to keep track of the changing dynamics of the global business environment, providing opportunities to re-allocate resources, transfer relevant knowledge, and hedge their bets across countries through arbitrage. Moreover, offshoring operations are motivated by location-specific advantages such as access to raw materials and cheap labor (Buckley & Ghauri, 2004; Doh, Bunyaratavej, & Hahn, 2009). In fact, for firms that go abroad to serve overseas markets, they must first decide whether to establish a subsidiary abroad or acquire an existing local firm or just export (import) directly from (to) their home country (Lehdonvirta et al., 2019). In most cases, firms engaged in offshoring activities very rarely acquire an existing foreign company, but they do establish new entities overseas (Hutzschenreuter, Lewin & Dresel, 2011). By owning production assets overseas, international firms enhance their market orientation through the improvement in their

knowledge base about the demands of international or host markets and the expectations of foreign stakeholders (Grant 1996; Mol & Brandl, 2018). Grounded on the above, we argue that owning production or commercial assets in overseas countries may impact on MNC's sustainability orientation via the proactiveness to adopt sustainable practices given the profound pressure that firms face from a range of stakeholders.

Increased knowledge about the preferences of foreign stakeholders helps managers to develop sustainability practices that address the concerns of these stakeholders effectively (Busch & Hoffmann 2009; Zimmermann & Ravishankar, 2016). With their sophisticated international experience, MNCs gain a better understanding of the social and environmental rules, norms, and preferences of key stakeholders (Suarez-Perales et al., 2017). Given that overseas consumers tend to be environmentally and sustainability oriented, and since policies of overseas governments may be stringent on sustainability issues, we argue that MNCs that do not own production assets overseas may lack a keener understanding of sustainability-related trends in host countries and cannot therefore accurately ascertain the most needed and relevant sustainable practices. For instance, unfamiliar regulations in host countries and little knowledge of them entail higher litigation risks, as firms become vulnerable to an accidental breach of laws (Zimmermann & Ravishankar, 2016; Gómez-Bolaños, Hurtado-Torres & Delgado-Márquez, 2020). Therefore, for MNCs that do not own production assets overseas, the key channel toward gaining access to overseas markets is by acquiring competencies that allow them to reconfigure their processes and resources dynamically in response to the global demands by developing internationally recognized sustainability practices to a larger extent, in a shorter time, with better targeting, and at a lesser cost (Nidumolu, Prahalad & Rangaswami, 2009; Teece, 2007). Thus:

> ***H3:*** *Sustainability practices are particularly important (positively associated) for firms that do not own input-producing assets in offshore nations.*

2.4. Offshoring to advanced versus emerging economies: The role of sustainability practices

In recent years, socially, environmentally and economically sustainable practices of MNCs (and their

suppliers) have gained much attention due to increasing stakeholder pressures (NGOs, media, and customers) (Hsu et al., 2013). Firms from developed markets have widely relied on offshoring strategies to reduce costs and improve efficiency and competitive advantage vis-a-vis their competitors. For instance, the wage difference between developed and emerging economy nations has motivated many firms to relocate value-chain activities to emerging economies (Bunyaratavej et al., 2011). However, due to the varying levels of institutional pressures, sustainable practices that are considered to be the norm in advanced economies such as the US may not be implemented with the same regularity in emerging economies where the expectations are very different and formal institutions are fragile (Lartey et al., 2019; Gómez-Bolaños, Hurtado-Torres & Delgado-Márquez, 2020). In certain jurisdictions, MNCs go beyond local environmental standards by transferring advanced environmental technology to their subsidiaries (i.e., ownership of production assets overseas), thus enabling them to cope with the regulatory demands of the strictest overseas countries where they operate (Christmann & Taylor, 2001; Chen, Ong & Hsu, 2016). However, MNCs may also choose to behave opportunistically by relocating their polluting and unethical value-chain activities to overseas countries with lax environmental and sustainability demands and standards (Li et al., 2017).

We argue that emerging and developing markets tend to have weaker institutional requirements, and therefore MNCs from developed markets will have a lower incentive to adopt and promote high global sustainability practices or standards as enforced in their home country. This position is underpinned by the pollution haven hypothesis, which posits that MNCs turn to developing countries when they offshore their operations overseas to reap the benefits of the very lax regulatory environment which enables them to decrease costs and invest less in environmental and sustainability standards (Li & Zhou, 2017). Furthermore, offshoring of operations into advanced markets exposes firms to greater scrutiny from stakeholders (Delgado-Márquez & Pedauga, 2017). Where an MNC acts unethically, the increased exposure may increase criticisms from interest groups and drive a thorough examination of the MNC's environmental impacts, consequently increasing the chances of reputational damage via negative assessments (Marano & Kostova, 2016). In sum, international firms

that offshore their operations into advanced markets face more thorough scrutiny from stakeholders, which may consequently intensify the search for moral legitimacy. Hence, the adoption and promotion of sustainability practices or standards should matter more for MNCs that intend to sell (or purchase) outputs (or inputs) to (from) customers/clients (suppliers) in advanced markets where environmental and sustainability standards are strict. Therefore, we propose the following hypothesis:

> ***H4****: Sustainability practices are particularly important for firms that offshore (i.e. sell (purchase) outputs (inputs) to advanced economies rather than emerging economies.*

3. Methodology

3.1. Data sources and sampling

To construct the sample, we obtain and process data from multiple sources. We collect data on sustainable business practices from the Sustainalytics database, corporate financial information data from the Center for Research in Security Prices (CRSP)/Compustat Merged Database, and offshore data from the Hoberg and Moon (2017, 2019) offshoring database. CRSP/Compustat is a well-recognized database maintained by Wharton Research Data Services (WRDS) to provide financial, statistical, and market information on publicly listed US and non-US companies. Specifically, the database maintains a broad range of information on the typical income statement, balance sheet, and some company-level fundamental variables. The key merits of using this database include its wide coverage and the high level of credibility for internal consistency. Moreover, compared to other databases (e.g. Orbis), CRSP/Compustat provides longer historical data (Yan, Dong & Faems, 2020). The more recent database by Hoberg and Moon (2017, 2019) applies textual analysis on 10-K filings in the Securities and Exchange Commission (SEC) EDGAR[6] database to compile a comprehensive data set on international trading activities of all publicly listed US firms. Specifically, the offshoring

[6] Electronic Data Gathering, Analysis, and Retrieval system

database provides data on how much each US firm sells (and/or purchases) to (or from) other foreign countries and uses this data to identify their customers/clients and suppliers. The text-based offshoring database provides a useful way of assembling a firm's offshore network in a direct and timely fashion (Bai, Garg & Wan, 2019). Sustainalytics provides global analyses of responsible corporate investment in environmental, social, and governance (ESG) mechanisms. We select the Sustainalytics database as our primary source of sustainable business practices because of the high level of credibility and accuracy of the data, which is underpinned by the key principles such as materiality, comparability, risk-based, forward-looking and transparency (Li et al., 2017). Sustainalytics also collects and processes financial statements, corporate documents, or media and interview reports from thousands of global sources. Our initial sample comprises the intersection of firms that are included in the above-mentioned databases over the period 2009–2015. The sample period starts in 2009 due to the unavailability of the Sustainalytics data before that year. We match the initial Sustainalytics sample with Compustat data and exclude all firms in the financial (SIC codes from 6000 - 6999) and utility (SIC codes from 4900 - 4999) sectors from the sample. We also exclude observations with missing values in the measurement of key dependent and independent variables. We end up with a final sample consisting of 5,329 firm-year observations including 1,080 firms.

3.2. Estimation method

In this section, we model the empirical relation between sustainable business practices and offshoring activities. Ordinary Least Square (OLS) estimations have been criticized for ignoring potential omitted variable bias and endogeneity (Borowczyk-Martins, Jolivet, & Postel-Vinay, 2013). Accounting for unobservable heterogeneity is particularly important as prior evidence highlights the fact that firms may differ in their understanding of and ability to adopt sustainability practices (Rahdari, Sepasi & Moradi, 2016). By adopting a fixed-effects panel data estimation, we can correct for endogeneity issues since the internal transformation process used in fixed effects helps to mitigate omitted variables and address unobserved changes over time (Ullah, Akhtar & Zaefarian, 2018; Carter et al., 2010). Specifically, we estimate the following pooled OLS baseline which controls for firm-

fixed effects and year-fixed effects to account for omitted variable bias (i.e., unrecognized firm characteristics, unobservable heterogeneity between years) and endogeneity:

$$OA_{i,t} = \alpha + \beta Sustainable\ Practice_{i,t} + \beta X_{i,t} + \omega_i + \varepsilon_{i,t}$$

where *i* denotes the *i*th firm and *t* denotes the fiscal year. OA is the text-based firm-level measures of the offshoring activities (as captured in section 3.3.2), $Sustainable\ Practice$ is the measure of the firm's investment in global best practices in terms of sustainability (as indicated in section 3.3.1), X is the vector of the control variables employed in our analysis (as indicated in section 3.3.3), α and β are parameters, ω_i is a unique time-invariant unobservable firm characteristic based on firm-level fixed effects, and μ_t is the year-fixed effects (i.e. period in the panel for that observation). The firm-fixed effects account for differences in the industry and sustainability orientation of the firm, among other firm-specific dimensions. Furthermore, to control for possible heteroscedasticity and autocorrelation within firms, the estimated standard errors of the regression coefficients are clustered at the firm level.

3.3. Measurement of variables

3.3.1. Sustainable business practices (global best practices)

The Sustainalytics database contains several indicators that reflect the different dimensions of sustainability. For each firm within a sector, Sustainalytics uses Likert-type scales of 160 indicators that are grouped into four themes: governance (34 indicators), social (58 indicators), environment (56 indicators), and product (12 indicators). For each indicator, the Likert-type scale raw score is weighted using a proprietary method developed based on the Global Industry Classification Standard (GICS) industry groups. Following the sustainability literature, we employed six (6) core indicators to capture global best practices that reflect corporate investments in sustainability. The chosen indicators and motivations for selecting these measures are discussed below:

Environmental Management System (EMS): EMS is an initiative originally championed by the European Commission (EC) and the International Organization for Standardization (ISO) as the

pioneer of a series of policy tools aimed at equipping firms to simultaneously achieve or pursue environmental "excellence" and competitively advantaged positioning synergistically (Iraldo, Testa & Frey 2009). A growing number of firms identify the adoption of EMS as a fundamental part of the overall business strategy. As such, several theoretical and empirical studies that examine EMS (either formal or informal) recognize it as one of the key best practices that drives environmental and economic performances of firms (Radonjič &Tominc, 2007; Darnall, Henriques & Sadorsky, 2008).

External certification of EMS: Third-party certification of EMSs to enable conformity with principles of international standards such as ISO 14001 has become a common tool for firms with an environmental and CSR focus (Heras-Saizarbitoria, Boiral & Arana, 2016). In most cases, environmental inspections and periodic supervisory audits are conducted by independent bodies that serve as technical supervisors (Bernardo et al., 2015). The implementation and certification of EMS can increase investor confidence in a firm and thus stimulate international competitive advantages (Malarvizhi & Yadav, 2009).

CSR reporting quality: Given that corporate reputation relies significantly on the external collective assessment of the firm, a key channel for creating and managing reputation is via CSR reporting (Toms, 2002). Reputation encompasses two core dimensions of firm effectiveness: assessing the firm's economic performance and assessing the firm's discharge of social responsibilities (Fombrun & Van Riel, 1997). From the legitimacy perspective, firms develop and publish CSR reports to signal their CSR strategy, and commitment to transparency and reputation-building initiatives to both external and internal stakeholders (Morsing & Schultz, 2006; De Grosbois, 2012).

External verification of CSR reporting: Sustainability of CSR reporting to stakeholders often takes the form of published reports that conform with the guidelines of international standards such as the Global Reporting Initiative (GRI) guidelines. In recent years, several firms have published these reports due to the growing interest of stakeholders and investors. However, CSR reports are not always prepared in conformity with global standards and official guidelines, and neither is a third-

party verification of the content a rule (Hąbek, 2014). Therefore, the quality of information varies significantly across firms. However, for purposes of authenticating the credibility and comparability of data published in these reports, stakeholders, governments, and investors are demanding external verification of their content (Sierra-García, Zorio-Grima & García-Benau, 2015; Vaz, Fernandez-Feijoo & Ruiz, 2016). The intuition is that, while the reliance on internal assurance gives excessive control to executives over the reporting process, external assurance ensures the overall quality of sustainability disclosures (Pflugrath, Roebuck & Simnett, 2011).

Scope of corporate reporting on greenhouse gas (GHG) emissions: In recent years, climate change has increasingly been highlighted as a vital issue that necessitates management attention, and as a key determinant of future firm growth (Pfeifer & Sullivan, 2008). A focal area has been the need to assess and address the potential threats resultant from the carbon and environmental impacts of firms' production processes, products, and supply chains (Burritt, Schaltegger & Zvezdov, 2011). For instance, the OECD Guidelines for MNCs (May 2011) mandates firms to disclose environmental information with high-quality standards, especially regarding greenhouse gas emissions given the increase in the scope of monitoring to cover direct and indirect, current and future, corporate and product emissions.

Business ethics-related controversies or incidents: In recent years, stakeholder pressure – the extent to which the firms are held liable for their actions and decisions vis-à-vis product design, sourcing, production, or distribution to stakeholders – has been on the rise (Wolf, 2014). Firms that can more effectively assess and address ethical complexities of operations (both domestic and international) via the adoption of formal structures and policies regarding ethics should attract greater interest from international stakeholders who want to invest in or deal with these firms. Specifically, companies engrossed in ethical controversies/incidents will tend to receive greater negative attention from international stakeholders and thus worsen their reputation amongst stakeholders. The poor reputation should consequently create challenges for corporations that intend to internationalize.

3.3.2. Offshoring activities

Our measure of offshoring activities closely follows the methodology employed by Hoberg and Moon, (2017, 2019)[7]. The methodology captures offshoring activities based on foreign countries mentioned in a firm's annual 10-K reports combined with a keyword in the discussion that enables the determination of the nature of related offshore activities in that particular country. Specifically, Hoberg and Moon assess the neighboring words of each mention of a foreign nation to determine the nature of related offshore activities in that particular country. Overall, the methodology uses a complete time-varying network to identify all countries for which MNCs originating from the US sell or purchase their outputs. The advantage of using the Hoberg and Moon offshore data is that the categorization framework accounts for not only the mention of a country but also the context (e.g. input vs output) in which it is referenced. Accordingly, the offshore measures are segregated into key components of offshoring: offshore output (the sale of products in offshore sources), offshore input (purchasing key input to production from offshore sources), and whether or not the firm owns production assets overseas. This study, therefore, captures offshore activities via three key types of offshoring activities (i.e., the sale of output, and the purchase of input with and without ownership of assets).

Aggregate offshoring (OA): Generally, firms decide whether to (1) produce domestically or offshore part of their production and (2) sell their output domestically or both on the domestic and export markets. With the rise in globalization, a large number of multinational firms in the US are participating in offshore trading activities, ranging from offshoring trading activities (i.e., importing and exporting) to offshoring financial activities (e.g., offshore cash holdings). This measure focuses on the import and export aspects of offshoring trading activities. These offshore activities include offshore output activities, such as selling products and services abroad (i.e., offshore output), offshore

[7] We refer the reader to the Internet Appendix Section of Hoberg and Moon, (2017, 2019) for details on the mechanics of the algorithms/methodology used to derive these measures.

input activities such as purchasing from independent foreign manufacturers (i.e., external offshore input), and purchasing internally from foreign subsidiaries (i.e. internal offshore input). To measure overall offshore activities (OA) at the firm-year level, we aggregate the raw counts across different nations. Specifically, OA is captured as the natural logarithm of one plus the aggregate raw count of (i) offshore output – OUTPUT, (ii) external offshore input – EXIN, and (iii) internal offshore input – ININ, for firm *i* during the fiscal year.

Offshore input activities (INPUT): This refers to where a firm procures key production inputs from offshore sources. Offshore input activities are often associated with complex operational arrangements. INPUT is measured as the natural logarithm of one plus the raw count of how many times a firm purchases inputs from other nations. Generally, INPUT includes two types of activities: (1) *Offshore External Input (EXIN)* – purchasing key production inputs from other local companies, and (2) *Offshore Internal Input (ININ)* – purchasing key production inputs from the firm's foreign subsidiaries. The segregation of the measure into components captures whether a firm's procurement originates from foreign countries where the firm owns assets/subsidiaries (ININ) or not (EXIN) in the given nation. While the former manifests when a firm wants to outsource its entire production, the latter is more feasible when a firm wants to expand its production to some low-cost countries. Accordingly, ININ is measured as the natural logarithm of one plus the raw count of how many times a firm purchases inputs from other nations where the firm does also mention owning assets in these nations. EXIN is captured as the natural logarithm of one plus the raw count of how many times a firm purchases inputs from other nations where the firm does not also mention owning assets in these nations. The segregation allows us to examine the link between the adoption of global best sustainability practices and the role of ownership of producing assets which often tends to be bundled with the procurement of inputs. It is important to note that INPUT does not necessarily or always equal EXIN plus ININ. As highlighted in Hoberg and Moon (2017, 2019), some input words are not explicitly identified as either external input or internal input.

Offshore output activities (OUTPUT): This focuses on overseas sales of output, i.e. where a firm sells products and services abroad. Specifically, OUTPUT is measured as the natural logarithm of one plus the raw count of how many times a firm mentions selling goods to other nations. Note that, while OUTPUT refers to the scenario where a firm engages in selling its products and services abroad, INPUT indicates where a firm purchases inputs either externally from independent foreign or local manufacturers (EXIN) or internally from foreign subsidiaries (ININ). These measures have been proven by several valid tests in prior studies to show that the identified offshore measures are related to firms' use of foreign exchange derivatives and can predict firms' future stock returns (Hoberg & Moon, 2019; Bai, Garg & Wan, 2019). The central idea of this paper is that the sustainability orientation of firms can serve as a boost to a their global reputation, reduce entry threats, foster subsidiary relationships, and improve product and market portfolios, of both upstream and downstream value-chain activities.

3.3.3. Control variables

In line with the sustainability and internationalization literature (Elosge et al., 2018; García-Sánchez, Suárez-Fernández & Martínez-Ferrero, 2019) and for purposes of mitigating any chance of omitted variables, we control for other conventional firm-level characteristics that are likely to affect OA. These include firm size, Tobin's Q, return on assets, leverage, investment, firm age, z-score dummy, capital intensity, competition, and S&P quality rating. We also incorporate other environmental controls (eco-design, a formal policy on green procurement, and executive compensation tied to ESG performance) to address residual endogeneity concerns that may cause a spurious association between sustainability and offshoring. Following Hoberg and Moon (2017), we also incorporate control for the log of document length (based on # paragraphs) in the 10-K. Table 1 provides a summary of all key variables used in our main analyses and their descriptions.

Insert Table 1 about here

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4. Results

4.1. Descriptive statistics and bivariate correlations

In Table 2, we present the descriptive statistics of the variables for our empirical analysis. The mean value of our main dependent variable (OA) is 8.81. This variable has a minimum value of 3.40 and a maximum value of 12.63. In general, this variable exhibits a low degree of variability represented by a standard deviation of 1.61. We also report the descriptive statistics of our four measures of offering types: (i) Offshore Internal Input (ININ), (ii) Offshore Input (INPUT), (iii) Offshore External Input (EXIN), and (iv) Offshore Output (OUTPUT). The mean values of these are 8.89, 8.78, 8.68, and 8.82 respectively. These variables also have a standard deviation of 1.58, 1.65, 1.50, and 1.63. Among these variables, *EXIN* has the lowest mean value as well as the lowest degree of variability (indicated by a standard deviation of 1.50). Six (6) main independent variables are also tested in our analysis. These are (i) Environmental Management Systems (EMS), (ii) External Certification of EMS (EC), (iii) CSR Reporting Quality (CSRRQ), (iv) External Verification of CSR Reporting (EVCSRR), (v) Scope of Corporate Reporting on GHG Emission (SCRE), and (vi) Business Ethics-Related Controversies or Incidents (BERC). Concerning these independent variables, a few findings are worth pointing out. We observe that BERC has the biggest mean value (3.86) and the highest standard deviation (1). This variable has a minimum value of 1 and a maximum value of 10.19, signifying a fair degree of heterogeneity. Among the control variables, we also observed that the average value of ROA is 0.31 with a standard deviation of 5.97. This variable has a minimum and maximum value of -2.61 and 226.31 respectively. This shows that some of the firms investigated had experienced a negative performance.

Insert Table 2 about here

In Table 3A, we present the correlation between the variables used in our study. We observe that the correlations between our measures of the degree of offshoring (OA, ININ, INPUT, EXIN, and OUTPUT) are high. This indicates that all five dependent variables are capturing similar information

(degree of offshoring or internationalization). Concerning the independent variables, the correlation among them shows that there are no high correlations and thus there is no issue of multicollinearity. In Table 3B, we also examine the variance inflation factors (VIFs), which are computed as 1/Tolerance, to further test for the potential for multicollinearity. This is diagnosed by running the collinearity diagnostic tests after our core regression model. The VIFs also reveal no sign of potential multicollinearity. The mean VIF of the variables in our sustainability-offshoring model is 1.46. The VIF is considered high if it is greater than 10 (Wooldridge, 2016). The lowest VIF for all variables in our sustainability-offshoring models is 1.01, and the highest VIF is 2.51, suggesting that multicollinearity problems are unlikely in our regression models. A further test, Condition Number Test (k), is used to also check multicollinearity. The test result ($k = 3.384$) is found to be far less than the threshold value of 15 (Ciftci et al., 2019), indicating that there is no multicollinearity. Generally, the findings from tables 2, 3A and 3B show that none of the variables suffers from any serious bias that is likely to affect the regression results.

Insert Table 3A about here

Insert Table 3B about here

4.2. Sustainability practices and offshoring activities

Hypothesis 1 states that sustainability practices significantly impact the offshoring activities of MNCs. We test this in Table 4, where we present the empirical results of the impact of business sustainability practices on the degree of internationalization of firms. We start our discussion with models 1–5, where the degree of internationalization is explained by five of our independent variables (i.e. EMS, EC, CSRRQ, EVCSRR, and SCRE*).* Under these measures, business sustainability practices have a positive and statistically significant impact on the degree of internationalization at a 1% level. This significant impact is achieved irrespective of whether we introduce control variables

or not.

Insert Table 4 about here

However, we observe a negative relationship between the degree of internationalization and business ethics-related controversies or incidents (BERC) – which measures operational and product-related issues and controversies linked to the firm as well as an assessment of the firm's reputation amongst stakeholders. Thus, as expected, BERC and offshoring activities should be negatively related. In all, the results obtained indicate that sustainability practices are important for OA, thus offering support for hypothesis 1. Further, the study proposes in hypothesis 2 that sustainability practices or strategies matter most for upstream offshoring activities (selling outputs overseas) rather than downstream offshoring activities (purchasing inputs overseas). The results for testing this hypothesis (H2) are shown in tables 5 to 8. The results for the relationship between sustainable business practices and Offshore Input (INPUT) are shown in Table 5. First, we observed that only EMS and CSRRQ have a positive and significant impact on INPUT. Further, we observe a negative relationship between ININ and BERC.

Insert Table 5 about here

Insert Table 6 about here

However, in Table 6 we observed a positive and significant relationship between Offshore Output (OUTPUT) and all our measures of sustainable business practices except with BERC, which has a negative and significant relationship with OUTPUT. Collectively, we observe that suppliers pay less attention to sustainability orientation in downstream offshoring activities (purchasing inputs overseas). However, upstream offshoring activities (selling outputs overseas) force firms to be sustainability oriented. Hence, this offers support for our hypothesis 2. Hypothesis 3 states that sustainability orientation is particularly important for firms that do not own input-producing assets in

offshore nations. We report the results for these tests in tables 7 and 8. We observe that four (4) of our measures of sustainable business practices (i.e., EMS, EC, CSRRQ, and EVCSRR) have a positive and significant effect on Offshore External Input (EXIN). We find no significant relationship between SCRE and ININ. In Table 8, we observed that all the sustainable business practice measures, except EVCSRR, have no significant relationship with Offshore Internal Input (ININ). Overall, the results obtained offer support for Hypothesis 3.

Insert Table 7 about here

Hypothesis 4 states that sustainability orientation is particularly important for firms that offshore (i.e. sell (purchase) outputs (inputs) to advanced economies rather than emerging markets. We present these results in Table 9. With the advanced markets, we observed that business sustainability practices have a positive and statistically significant impact on the degree of internationalization at a 1% level except business ethics-related controversies or incidents (BERC), which has a negative and significant relationship with the degree of internationalization. However, with the emerging markets, we only observed a positive and significant relationship between EVSCRR and the degree of offshoring. These results therefore offer support for hypothesis 4.

Insert Table 8 about here

Insert Table 9 about here
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5. Discussion and implications

5.1. Sustainability practices and offshoring activities

Over the past decade, sustainable business practices have been highlighted as an increasingly important strategy for international business management and firms' competitiveness (Frynas & Yamahaki, 2016; Kolk, 2016; Maksimov, Wang & Yan, 2019). The primary aim of this paper is to

explore and broaden understanding on how observable sustainability practices are related to a firm's decision making and the extent of offshoring of upstream and downstream value-chain activities across different markets—advanced and emerging markets. MNCs play critical roles in terms of sustainability given their global influence and activities through which they get exposed to a range of issues, stakeholders and institutional contexts, in both home and host countries (Kolk & Van Tulder, 2010; Berrone et al., 2013; Bansal, 2019).

From our result, we show that MNCs can gain value from sustainability in their international offshoring (especially purchasing and sales) strategy by demonstrating the inclusion of social and environmental concerns in their business operations, increasing interactions with stakeholders and reducing market-related uncertainties, which are found to consequently increase environmental and economic performances of firms (Radonjič & Tominc, 2007; Darnall, Henriques & Sadorsky, 2008). Specifically, MNCs that adopt or implement integrated EMS systems as required by government agencies are more likely to engage in offshore operations. This is particularly so because an integrated EMS program (for example on pollution prevention) saves firm resources by enhancing efficiency and decreasing the cost of energy, materials, fines, and penalties. Further, we observe that a firm's ability to offshore or internationalize increases by roughly 28.2 percent (as measured by the size of the coefficient, which increases from 0.465 to 0.596) where the EMS system is certified by third-party agencies to ensure conformity with principles of the international standards. Key reasons for this outcome are that, where regulatory requirements in other jurisdictions mandate environmental impact assessments (EIAs) and therefore necessitate firms and their suppliers or clients to implement a certified EMS, then US firms that possess this capability should operate internationally with more ease than their counterparts without. Moreover, the implementation and certification of EMS boosts investor confidence in a firm and thus stimulates international competitive advantages (Kirkpatrick & Pouliot, 1996).

MNCs' potential to be not only part of the problem but also perhaps part of the solution is increasingly recognized in their international business activities. MNCs that report better quality CSR

information that satisfies the valuable needs of both external and internal stakeholders have a greater likelihood of engaging in offshore operations. Specifically, being able to meet the CSR disclosure standards and auditing procedures in other jurisdictions via high-quality and comparable reported CSR information boosts a firm's reputation and competitive edge over its counterparts. Further, we observe that a firm's ability to offshore or internationalize almost doubles (98.4 percent) (the coefficient, which increases from 0.364 to 0.722) when its CSR reports are certified by third-party agencies to ensure conformity with global standards and official guidelines. A key implication of this finding is that the landscape of international business has evolved beyond just CSR reporting, with stakeholders explicitly recognizing that the quality of the CSR information varies significantly across firms. Therefore, to enhance authenticity, credibility, and comparability of data published in CSR reports, stakeholders, governments, and investors are increasingly demanding external verification of their content (Vaz, Fernandez-Feijoo & Ruiz, 2016). Being able to meet these requirements signals a duty of care and the firm's commitment to social and environmental issues (Hąbek, 2017), which collectively boosts the firm's global reputation, reduces entry threats, fosters subsidiary relationships, and improves product and market portfolios, both upstream and downstream (Kolk & Van Tulder, 2010)

With the increasing awareness of climate change and environment-related issues, key questions highlighted in the literature include "Is being a 'good' institution fundamental to MNCs?", and if so, "Why do management of MNCs carry out little corporate activity to improve their institutions and environment, especially in resource-rich economies?" (Peng, Wang & Jiang, 2008; Wiig & Kolstad, 2010). Accordingly, several MNCs have adopted initiatives such as implementing corporate management systems, making public commitments to emissions reductions, engaging in voluntary initiatives (e.g. product labeling), and seeking to influence their supply chains and customers to decrease their emissions (Pinske & Kolk, 2012; Sullivan & Gouldson, 2017). Given the greater variations in quality and quantity of information available to capture the various climate-change-related strategies adopted by corporations, we used the scope of corporate reporting on GHG

emissions to address the above questions. Our analysis of the impact of these strategic choices on offshore operations shows that MNCs that disclose high-quality environmental information regarding their GHG emissions to cover direct and indirect, current and future, corporate and product emissions are more likely to boost investor confidence and thus overcome entry threats both upstream and downstream. MNCs report high-quality information on their climate-change-related risks and opportunities in order to attract greater interest from international stakeholders (e.g., governments, policymakers and regulators, and investors as well as the international media) who want to invest in or deal with these firms.

So far, our evidence suggests that sustainable business practices are recognized globally and thus their presence should increase the corporation's ability to offshore and gain value. However, the extent to which these MNCs are held liable for their actions and decisions vis-à-vis product design, sourcing, production, or distribution to stakeholders cannot be ignored. We, therefore, go further to examine whether a corporation's concern for and commitment to ethical behavior enhances its ability to offshore/internationalize. Specifically, we examine whether firms that are engrossed in business ethics-related controversies or incidents have similar chances as their counterparts who make conscious efforts toward being "good" institutions. From our result, we found that MNCs that are associated with a higher incidence of business ethics-related controversies/incidents have key challenges when they want to go offshore or international. The implication is that MNCs engrossed in ethical controversies/incidents receive greater negative attention from international stakeholders, which worsens their international reputation amongst stakeholders and consequently creates key entry challenges for corporations that intend to offshore or internationalize. As such, firms that are more ethically inclined to assess and address ethical complexities of operations effectively via the adoption of formal structures and policies regarding ethics, attract greater interest from international stakeholders who want to invest in or deal with these firms. Another key implication of this finding is that the need to offshore or internationalize can drive the strategic role of ethics in both formal structures and informal managerial behavior within firms (Watson & Weaver, 2003). Agency risks

resultant from offshoring/internationalization can stimulate the implementation of formal and/or structural controls primarily to mitigate ethical controversies/incidents (Jensen, 1986). Overall, by focusing on the firm-level incentives for sustainability orientation, we offer new insights into global offshoring challenges encountered by MNCs due to their role as increasingly dominant players.

5.2 Sustainability orientation and offshoring activities: The role of purchasing (selling) input (output) overseas

In this section, we examine whether the sustainability effect on offshoring may have different implications for firms that are solely engaged in purchasing inputs (e.g., raw materials) or selling outputs (goods and services) overseas. We observe that, among the sustainability measures, only EMS and CSR reporting quality have a significant effect on offshoring when MNCs are solely engaged in purchasing inputs overseas. A key implication for this outcome is that suppliers are less concerned about third-party certification of EMS programs or CSR reports or the incidence of business ethics-related controversies/incidents. Specifically, suppliers are less concerned about environmental inspections and periodic supervisory audits that take place in other jurisdictions as long as the funds flow downstream. In another breath, this outcome also confirms the recent trend of saturation and/or deterioration of sustainability requirements in certain jurisdictions, particularly those where environmental certifications were conventionally more prevalent (Franceschini et al., 2011). Having an integrated EMS system and being able to publish CSR reports irrespective of whether they are prepared in conformity with global standards and official guidelines is enough to foster supplier relationships overseas.

Examining the subset of MNCs that engage solely in sales of outputs (goods and services) overseas, we observe that all the key sustainability variables are significantly important. All the sustainability components (except business ethics controversies/incidents) have a positive (negative) and significant impact on offshoring capability in terms of sales overseas. Indeed, the results confirm and complement our main findings that sustainability orientation matters for MNCs' decision to offshore. The key implications of these findings are that selling goods and services overseas mandate

firms to be sustainability oriented. MNCs that are highly sustainability oriented attract greater interest from international stakeholders (e.g., governments, policymakers and regulators, and investors as well as the international media) who want to invest in or deal with these firms. Simply, the nature and location of international supply and production networks are directly related to a range of CSR issues such as environment, health, ethics, safety, and labor conditions (Van Tulder, Van Wijk, & Kolk, 2009). Thus, MNCs that intend to engage in selling outputs overseas must incorporate sustainability orientation into their international business strategies. Being able to meet these requirements reflects a duty of care toward customers/clients, compliance with regulatory standards, and the firms' commitment to social and environmental concerns (Hąbek, 2017), which collectively boosts the firm's global reputation, reduces entry threats, fosters subsidiary relationships, and improves product and market portfolios, both upstream and downstream (Kolk & Van Tulder, 2010).

Overall, the findings collectively indicate that, compared to downstream offshoring activities (purchasing inputs overseas) where MNCs engage less with corporate partners and where one-sided commitments are generally at play (Rugman & Verbeke, 2008) when it comes to sales, these are two-sided without any guarantees from consumers/clients when firms are not sustainability oriented. This suggests greater liabilities for MNCs and highly complicated requirements for CSR implementation across the whole value chain, from beginning to end (Kolk & Van Tulder, 2010). In upstream offshoring activities (selling outputs overseas), sustainability requirements are key challenges faced by MNCs particularly in jurisdictions where governments are interested in championing sustainable development. The findings also provide key insights on the extent to which consumers and other stakeholders care about sustainability attributes of products/services, and the impact on the various dimensions of international business markets such as consumption, distribution, and production.

5.3. Sustainability orientation and offshoring activities: The role of ownership of production assets overseas

In this section, we examine whether the sustainability effect on offshoring may have different implications for a firm that owns foreign assets in the same nations in which it sells (purchases) its

output (inputs). We observe that sustainability orientation is not important for firms that own input-producing assets in offshore nations. Only CSR reporting quality and third-party verification of CSR reports have a significant impact on offshoring where MNCs own production assets overseas. Key implications of this finding are that, for firms that own nontrivial or key assets abroad to reduce their potential exposure to foreign risks, the incorporation of sustainability orientation into their international business strategies is not a core requirement. Having a key channel such as CSR reporting to create and manage the firm's reputation is adequate to assess the firm's economic performance, and its ability to discharge social responsibilities (Fombrun & Van Riel, 1997). Hence, based on the legitimacy perspective, MNCs that own input-producing assets in offshore nations must develop and publish CSR reports to signal their CSR strategy, and commitment to transparency and reputation-building initiatives (Morsing & Schultz, 2006). The sustainability effect is even more pronounced (the coefficient increases from 0.162 to 1.055) when the MNC's CSR reports are certified by third-party agencies to ensure conformity with global standards and official guidelines.

Examining the subset of MNCs that do not own input-producing assets in offshore nations, we observe that sustainability orientation significantly matters. Specifically, all the sustainability measures (except BERC) have a positive (negative) and significant impact (except SCRE) on the offshore measure (EXIN). A key implication of this prediction is that the sustainability effect on offshoring particularly matters for attracting greater interest from international stakeholders when the firm does not own production assets overseas. We observe that a firm's ability to offshore or internationalize increases by roughly 51.59 percent (as measured by the size of the coefficient, which increases from 0.533 to 0.808) where the EMS system is certified by third-party agencies to ensure conformity with principles of the international standards. Further, offshoring doubles (105.16 percent) (the coefficient increases from 0.349 to 0.716) when the MNC's CSR reports are certified by third-party agencies to ensure conformity with global standards and official guidelines. The scope of GHG reporting has an insignificant impact while the incidence of business ethics controversies/incidences lessens an MNC's competitive edge over other counterparts in international

markets. Further, MNCs that do not own key assets abroad are generally exposed to home-country (or foreign) environmental and social requirements and thus are obligated to be sustainability oriented to gain global reputation, competitive edge and value, both upstream and downstream (Kolk & Van Tulder, 2010).

Overall, our findings indicate that sustainability orientation matters most when a firm buys input without owning assets in the given nation (EXIN) rather than when a firm does own offshore assets used to produce input (ININ). Our finding complements the production-based equilibrium model in Tuzel and Zhang (2017) which suggests that offshore asset values will be pro-cyclical, and thus weaken the counter-cyclical benefits of the purchase of input.

5.4. Offshoring to advanced versus emerging economies

In recent years, social, environmental and economically sustainable practices of MNCs (and their suppliers) have gained much attention due to increasing stakeholder pressures (NGOs, media, and customers) (Hsu et al., 2013; Bansal, 2019). However, sustainable practices that are considered to be the norm in advanced economies such as the US may not be implemented with the same regularity in emerging economies where the expectations are very different due to the strong role of informal institutions. Accordingly, it is imperative to understand how the different contexts of developed and emerging economies result in different implications of sustainable practices on a firm's offshoring decisions. This section, therefore, examines whether counterparty national characteristics affect the sustainability–offshoring relation.

We observe in Table 9 that sustainability orientation is particularly important for firms that offshore (i.e., sell (purchase) outputs (inputs)) to advanced economies. While sustainability practices such as the presence of an integrated EMS, external certification of EMS, CSR reporting quality, the scope of GHG reporting and ethics controversies have a significant impact at the 1% level for advanced economies, these practices are either insignificant or significant at the 10 percent level for emerging economies. Key explanations for these findings are that, for advanced economies, pressure

from specific stakeholders (e.g., regulators, shareholders, creditors, investors, environmentalists, and the media) has key implications for sustainable business practices. For emerging economies, sustainable business practices are significantly driven by external forces/powerful stakeholders such as international buyers, foreign investors, international media, and international regulatory bodies (e.g., the World Bank) (Ali, Frynas & Mahmood, 2017). However, emerging markets still face substantial challenges in the implementation of modern sustainable strategies and regulations such that in some cases even the basic definitions remain unclear (Tseng et al., 2016). Thus, compared to advanced economies, firms that offshore to emerging economies perceive relatively little pressure from the public with regard to sustainable practices.

Key implications of these findings are that, although certain aspects of MNC operations overseas are regulated, the level of stringency usually is not the same everywhere, and rules differ across countries/regions, as will monitoring and compliance (Kolk & Van Tulder, 2010). For MNCs, the "modern era of globalization" thus necessitates achieving a balance between the components that constitute their core internationalization strategies and the broader sustainability considerations. As such, Hoberg and Moon (2019) suggest that MNCs' offshore output will be more dominant in economies with greater development (GDP) and lower tariffs, while offshore external input is more prevalent in economies with a lower price of labor and better governance structures.

Further, MNCs are increasingly extending their supplier/subsidiary relationships overseas due to the cost advantages from operations. However, as MNCs extend their supplier/subsidiary base overseas, their supplier's/subsidiary's actions may expose the main company to greater risk (Klassen & Vereecke, 2012), for instance, supplier actions related to social issues regarding product and process aspects which affect consumers, people, and society around operating locations (Tate, Ellram & Kirchoff, 2010; Mani, Gunasekaran & Delgado, 2018). In advanced economies, regulations incorporate the need for both downstream and upstream supply chain design that not only affects the main company but also affects the overall supply chain, particularly when the MNC's operations are built on strategic alliances (Ageron, Gunasekaran & Spalanzani, 2012). To this end, we observed that

the sustainability–degree of offshoring relations is crucial for firms who have offshoring activities in advanced economies relative to those in emerging markets.

6. Conclusion

The importance of sustainability practices in shaping organizations' value and impact on society cannot be overemphasized. Thus, in this paper, using data from US MNCs, we examine the impact of the effects of environmental sustainability practices on the degree of firms' offshoring activities. Our results show that environmental sustainability practices are extremely important for offshoring activities. This outcome offers important theoretical and practical implications for extending the international business literature. However, despite the important contributions, this study has several limitations that open avenues for future international business scholars. Therefore, we suggest that the findings be interpreted in light of some notable and well-grounded limitations of the study. First, the focus on this study is on multinational corporations from one developed country (i.e., the United States). An examination of the effects of sustainability practices on offshoring activities by firms from two or more developed countries could result in nuanced differences to the findings reported in this study given that the domestic conditions, law, and regulations shape the behaviors of the firms in different markets. Thus, future international business research should account for this limitation. Also, the findings are limited in terms of our focus on large MNCs. Thus, future research should address this issue by comparing both large, medium, and small firms as an empirical setting. Further, the rise of emerging-market MNCs provides an ideal context to examine the influence of environmental sustainability on their global value-chain activities. Studies are also needed that could examine specific capabilities of firms and how those capabilities influence environmental sustainability practices, and in turn influence the decision to offshore. Recently, many firms have started to reshore activities to their home markets, thus it would be interesting to see how such decisions are shaped by a firm's orientation toward environmental sustainability practices. We leave these topics for future research.

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Table 1: Variable definitions

Variables	Description
Independent Variables	
Environmental Management System ***(EMS)***	The implementation of a formal Environmental Management System that provides an effective guidance for firm to simultaneously establish, develop and review their business practices towards both corporate and environmental goals.
External Certification of EMS ***(EC)***	A measure of the third-party verification and certification of EMSs to ensure conformity with principles of international standards.
CSR Reporting Quality ***(CSRRQ)***	A measure of the presence of disclosure standards and auditing procedures that ensures greater quality and comparability of reported information in several jurisdictions
External Verification of CSR Reporting ***(EVCSRR)***	A measure of the presence of mechanisms to ensure external verification and certification of CSR or sustainability data via independent third-party organizations.
Scope of Corporate Reporting on GHG Emissions ***(SCRE)***	A measure of the presence of mechanisms to assess and address the potential threats resultant from the carbon and environmental impacts of the firm's production processes, products and their supply chains.
Business Ethics Related Controversies or Incidents ***(BERC)***	A measure of operational and product related issues and controversies linked to the firm as well as an assessment of the firms' reputation amongst stakeholders. Simply, the extent to which stakeholders have been affected by an issue and the degree of control the organization had to prevent the issue. It also proxies for the quality of preventive steps taken by the firm.
Dependent Variables	
Offshoring Activities ***(OA)***	The natural logarithm of one plus the aggregate number of mentions of all given activities (ININ, EXIN, OUTPUT) for firm *i* during the fiscal year.
Offshoring type	
Offshore Internal Input ***(ININ)***	The natural logarithm of one plus the number of mentions of the firm purchasing inputs from other nations where the firm does also mention owning assets in these nations.
Offshore Input ***(INPUT)***	The natural logarithm of the raw count of how many times a firm purchases inputs from other nations.
Offshore External Input (**EXIN**)	The natural logarithm of one plus the raw count of how many times a firm purchases inputs from other nations where the firm does not also mention owning assets in these nations.
Offshore Output ***(OUTPUT)***	The natural logarithm of one plus the raw count of how many times a firm sells goods to other nations.
Firm Specific Controls	
Firm size	The natural logarithm of the book value of Total Assets.
Tobin's Q	The market value of assets divided by the book value of assets. It proxies for growth prospects.
Return on assets	The operating income before depreciation divided by the book value of assets. It serves as a proxy for profitability and the availability of internal funds.
Book leverage	The summation of the book value of long-term debt and debt in current liabilities divided by market value of assets.
Investment	The net capital expenditure (capital expenditure minus depreciation) divided by the book value of total property, plant and equipment.
Firm Age	The natural logarithm of the time between a firm going public and the end of the fiscal year.
Z-score dummy	Firms with high Z-scores usually have high credit quality and low financial distress. Z-score dummy is a variable equal to one if a firms' Z-score is greater than 1.81, and zero otherwise (Brockman, Martin and Unlu, 2010; Huang, Tan and Faff, 2016).
Capital Intensity	Capital Intensity is a proxy for barriers to entry and complementary assets. It is measured as book value of total tangible assets scaled by sales (Zhou et al., 2018).
Competition	Competition is captured via the Lerner index as operating income before depreciation minus depreciation scaled by total sales (Gutiérrez and Philippon, 2017).
Logdocsiz	The log document length (based on the number of paragraphs) in the 10-K file.
SnP Quality rating	SnP Quality rating is the S&P Quality (Credit) rating for firm i during the fiscal year.
Eco Design	The ability of the firm to systematically integrate environmental considerations in R&D
Green Procurement	The firm has a formal policy or programme to incorporate environmental aspects in its procurement decisions.
Exec. pay tied ESG	Where executive compensation is tied/linked to ESG performance of the firm.

The table presents the mnemonics and description of each dependent and independent variable used in this paper.

Table 2: Descriptive statistics

	Mean	S.D.	Minimum	Maximum	25th P	50th P	75th P	Obs.
OA	8.81	1.61	3.40	12.63	7.87	8.78	9.83	5329
ININ	8.89	1.58	3.40	10.53	7.92	8.83	9.91	1394
INPUT	8.78	1.65	3.00	12.63	7.84	8.76	9.84	1523
EXIN	8.68	1.50	2.40	9.97	7.78	8.70	9.57	674
OUTPUT	8.82	1.63	2.80	12.44	7.91	8.76	9.88	1738
EMS	0.69	0.87	0.00	7.00	0.00	0.40	1.06	5329
EC	0.40	0.49	0.00	5.28	0.00	0.26	0.53	5329
CSRRQ	0.37	0.67	0.00	7.00	0.00	0.00	0.60	5329
EVCSRR	0.50	0.29	0.00	1.00	0.34	0.56	0.75	5329
SCRE	1.03	0.56	0.00	3.00	0.56	1.00	1.50	5329
BERC	3.86	1.00	0.00	10.19	3.25	4.00	4.00	5329
Firm Size	0.22	0.43	-2.58	1.62	0.15	0.29	0.36	5329
Tobin's Q	1.53	1.16	0.14	6.67	0.82	1.21	1.90	5308
ROA	0.31	5.97	-2.61	226.31	0.08	0.12	0.17	5119
Leverage	0.26	0.21	0.00	3.49	0.11	0.24	0.38	5308
Investment	0.31	4.40	0.00	279.20	0.12	0.19	0.29	5329
Firm Age	6.87	0.62	5.61	7.77	6.59	7.00	7.29	5329
ZScore Dummy	0.71	0.45	0.00	1.00	0.00	1.00	1.00	5329
Capital Intensity	-1.47	1.33	-7.17	4.09	-2.25	-1.65	-0.76	5329
Competition	0.16	0.17	-0.60	0.70	0.07	0.14	0.23	5318
Logdocsiz	6.38	0.56	4.78	7.63	6.09	6.42	6.72	5329
SnP Quality rating	4.75	1.52	1.00	8.00	4.00	5.00	6.00	5329
Eco Design	0.11	0.28	0.00	3.00	0.00	0.00	0.13	5329
Green Procurement	0.34	0.60	0.00	5.00	0.00	0.00	0.50	5329
Exec. pay tied ESG	0.10	0.26	0.00	1.25	0.00	0.00	0.00	5329

The table presents the summary statistics for all variables used in our core analysis. The sample comprises 1,080 multinational firms in the US over the period 2009–2015. All variable definitions are in Table 1.

Table 3A: Correlations matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	OA	1.00																								
2	ININ	0.73*	1.00																							
3	INPUT	0.71*	0.86*	1.00																						
4	EXIN	0.63	0.72*	0.73*	1.00																					
5	OUTPUT	0.73*	0.90*	0.92*	0.75*	1.00																				
6	EMS	0.01	0.02	0.03	0.04*	0.03	1.00																			
7	EC	0.04*	0.01	0.02	0.02	0.02	0.57*	1.00																		
8	CSRRQ	0.05*	0.02	0.00	0.03	0.02	0.37*	0.32*	1.00																	
9	EVCSRR	0.19*	0.01	0.02	0.05*	0.00	0.21*	0.27*	0.26*	1.00																
10	SCRE	0.12*	0.03	0.00	0.06*	-0.02	0.19*	0.18*	0.09*	0.13*	1.00															
11	BERC	-0.06*	-0.01	-0.02	-0.05*	0.04*	-0.06*	-0.10*	-0.06*	-0.16*	-0.21*	1.00														
12	Firm Size	0.13*	0.02	0.02	0.02	-0.00	0.06*	0.06*	-0.08*	-0.02	0.02	-0.14*	1.00													
13	Tobin's Q	-0.35*	-0.02	-0.04*	0.00	-0.08*	-0.03	-0.04*	-0.01	-0.12*	-0.06*	-0.02	-0.10*	1.00												
14	ROA	-0.11*	-0.01	0.00	-0.01	-0.02	-0.01	0.01	-0.02	0.01	-0.03	0.00	-0.10*	0.14*	1.00											
15	Leverage	0.06*	0.04*	-0.01	-0.00	-0.00	-0.01	0.01	-0.04*	0.00	0.02	-0.04*	0.26*	0.00	-0.04*	1.00										
16	Investment	0.01	-0.01	0.03	-0.01	-0.01	-0.02	-0.02	-0.01	-0.12*	0.03	0.00	-0.03	-0.01	-0.01	-0.02	1.00									
17	Firm Age	0.12*	0.03	0.01	0.00	0.00	0.17*	0.00	0.10*	-0.09*	-0.04	0.34*	0.00	0.02	-0.01	0.06*	-0.03	1.00								
18	ZScore Dummy	-0.04*	-0.01	-0.03	-0.00	0.02	-0.05*	-0.01	0.03	0.03	-0.07*	0.08*	-0.39*	0.12*	0.03	-0.32*	0.01	-0.03	1.00							
19	Capital Intensity	0.05*	0.01	0.02	-0.02	0.00	-0.04*	0.01	-0.01	0.06*	0.01	-0.02	0.00	0.05*	-0.01	-0.06*	0.03	0.00	0.05*	1.00						
20	Competition	0.20*	0.01	0.02	-0.04*	0.06*	-0.10*	-0.10*	-0.05*	-0.07*	-0.08*	0.14*	-0.02	0.11*	0.11*	0.03	-0.01	-0.02	0.19*	0.05*	1.00					
21	logdocsiz	0.28*	0.04*	0.05*	0.00	0.02	-0.05*	-0.01	-0.02	0.12*	0.02	-0.08*	0.13*	-0.24*	-0.04*	0.10*	0.03	-0.17*	-0.13*	-0.03	0.03	1.00				
22	SnP Quality rating	-0.24*	-0.02	-0.04*	0.01	-0.04	0.08*	0.05*	-0.02	-0.13*	-0.01	-0.02	0.17*	-0.23*	-0.25*	0.09*	0.02	-0.03	-0.22*	-0.14*	-0.23*	0.07*	1.00			
23	Eco Design	0.05*	0.04*	-0.01	-0.00	-0.01	0.19*	0.27*	0.20*	0.24*	0.07*	-0.15*	0.07*	-0.07*	-0.03	-0.02	-0.04	-0.07*	-0.06*	-0.01	-0.03	0.06*	-0.02	1.00		
24	Green Procurement	-0.04	-0.01	-0.02	0.07*	-0.03	0.54*	0.41*	0.25*	0.16*	0.14*	-0.15*	-0.01	-0.03	0.03	0.02	-0.01	0.03	0.02	-0.05*	-0.07*	-0.00	0.06*	0.17*	1.00	
25	Exec. pay tied ESG	0.04	0.01	-0.02	0.01	0.02	0.20*	0.11*	0.03	0.11*	0.09*	-0.01	0.15*	-0.11*	-0.06*	0.06*	-0.08*	0.10*	-0.11*	-0.04	-0.07*	0.02	0.06*	0.14*	0.09*	1.00

The table presents the unconditional correlation coefficient between any pair of variables. All variables are as described in Table 1. * Indicates significance at 1%.

Table 3B: Collinearity diagnostics - VIF

Variable	VIF	SQRT VIF	Tolerance	R-Squared	Eigenval	Cond Index
OA	1.03	1.01	0.972	0.028	2.946	1.000
EMS	2.51	1.58	0.399	0.601	2.495	1.087
EC	1.78	1.33	0.563	0.437	1.728	1.306
CSRRQ	1.37	1.17	0.728	0.272	1.475	1.413
EVCSRR	1.24	1.11	0.805	0.195	1.210	1.560
SCRE	1.14	1.07	0.880	0.120	1.098	1.638
BERC	1.55	1.24	0.647	0.353	1.042	1.682
Firm Size	1.51	1.23	0.661	0.339	1.034	1.688
Tobin's Q	1.48	1.22	0.676	0.324	0.967	1.745
ROA	2.24	1.50	0.447	0.554	0.935	1.775
Leverage	1.34	1.16	0.746	0.254	0.837	1.876
Investment	1.19	1.09	0.840	0.160	0.784	1.938
Firm Age	1.73	1.31	0.579	0.421	0.707	2.042
ZScore Dummy	1.48	1.22	0.675	0.325	0.660	2.112
Capital Intensity	1.01	1.01	0.986	0.014	0.615	2.188
Competition	1.76	1.33	0.568	0.432	0.566	2.281
Logdocsiz	1.20	1.09	0.836	0.164	0.499	2.430
SnP Quality rating	1.23	1.11	0.815	0.185	0.462	2.525
Eco Design	1.19	1.09	0.842	0.158	0.404	2.701
Green Procurement	1.57	1.25	0.636	0.364	0.279	3.247
Exec. pay tied ESG	1.12	1.06	0.890	0.111	0.257	3.384
Mean VIF	1.46			Condition Number		3.384

The table presents the variance inflation factors for our core regression model.

Table 4: Bus practices on internationalization (Dependent Variable: OA*)*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EMS	0.465***						0.046***
	(0.118)						(0.011)
EC		0.596***					0.182***
		(0.189)					(0.017)
CSRRQ			0.364***				0.206***
			(0.123)				(0.012)
EVCSRR				0.722***			0.034*
				(0.237)			(0.021)
SCRE					0.501***		0.058***
					(0.138)		(0.010)
BERC						-0.394***	-0.126**
						(0.112)	(0.082)
Firm Size	0.319***	0.339***	0.352***	0.334***	0.364***	0.332***	0.043
	(0.120)	(0.122)	(0.122)	(0.123)	(0.117)	(0.116)	(0.081)
Tobin's Q	-0.398***	-0.429***	-0.427***	-0.403***	-0.408***	-0.414***	-0.108*
	(0.108)	(0.107)	(0.110)	(0.107)	(0.111)	(0.107)	(0.064)
ROA	-0.500	-0.435	-0.410	-0.378	-0.427	-0.191	-0.092
	(0.930)	(0.886)	(0.890)	(0.886)	(0.890)	(0.866)	(0.554)
Leverage	0.644	0.610	0.558	0.545	0.644	0.656	-0.070
	(0.507)	(0.504)	(0.510)	(0.508)	(0.494)	(0.490)	(0.354)
Investment	0.208	0.206	0.163	0.134	0.232	0.170	-0.315
	(0.330)	(0.330)	(0.336)	(0.336)	(0.325)	(0.327)	(0.335)
Firm Age	0.487	0.556*	0.469	0.400	0.601**	0.652**	0.294
	(0.308)	(0.308)	(0.300)	(0.299)	(0.303)	(0.305)	(0.280)
ZScore Dummy	0.094	0.121	0.130	0.130	0.130	0.135	-0.072
	(0.183)	(0.186)	(0.187)	(0.187)	(0.186)	(0.180)	(0.151)
Capital Intensity	0.123	0.099	0.110	0.097	0.110	0.121	-0.087
	(0.107)	(0.108)	(0.105)	(0.105)	(0.104)	(0.104)	(0.075)
Competition	2.234***	2.308***	2.216***	2.335***	2.100***	1.990***	0.155
	(0.633)	(0.622)	(0.629)	(0.616)	(0.614)	(0.615)	(0.488)
logdocsiz	0.376***	0.395***	0.387***	0.389***	0.388***	0.387***	0.231***
	(0.120)	(0.121)	(0.121)	(0.120)	(0.123)	(0.123)	(0.087)
SnP Quality rating	-0.332***	-0.336***	-0.343***	-0.328***	-0.334***	-0.327***	-0.008
	(0.055)	(0.055)	(0.056)	(0.057)	(0.054)	(0.055)	(0.043)
Eco Design	0.138	0.139	0.069	0.143	0.227	0.162	-0.283*
	(0.254)	(0.265)	(0.281)	(0.265)	(0.257)	(0.265)	(0.158)
Green Procurement	0.059	0.215	0.257	0.244	0.254	0.257	-0.017
	(0.195)	(0.192)	(0.190)	(0.194)	(0.189)	(0.189)	(0.098)
Exec. pay tied ESG	0.351	0.417*	0.421*	0.348	0.341	0.395*	0.077
	(0.222)	(0.218)	(0.218)	(0.225)	(0.217)	(0.231)	(0.211)
_cons	4.987**	4.522*	5.321**	5.434**	3.914*	5.533**	-0.133
	(2.370)	(2.356)	(2.297)	(2.285)	(2.306)	(2.415)	(2.070)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	5119	5119	5119	5119	5119	5119	5119
r2	0.660	0.654	0.654	0.654	0.661	0.662	0.474
N_clust	1088	1088	1088	1088	1088	1088	1088

This table provides the estimation results of the effect of business sustainability practices on offshoring activities. All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Bus practices on internationalization (Dependent Variable: INPUT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EMS	0.582***						0.204***
	(0.229)						(0.032)
EC		0.243					0.057
		(0.341)					(0.338)
CSRRQ			0.551***				0.111***
			(0.209)				(0.028)
EVCSRR				0.480			0.025
				(0.364)			(0.051)
SCRE					0.348		-0.092
					(0.246)		(0.219)
BERC						-0.081	-0.092
						(0.166)	(0.171)
Firm Size	0.494***	0.520***	0.572***	0.514***	0.532***	0.514***	0.192
	(0.171)	(0.169)	(0.172)	(0.173)	(0.170)	(0.165)	(0.161)
Tobin's Q	-0.384***	-0.447***	-0.436***	-0.417***	-0.426***	-0.443***	-0.183
	(0.119)	(0.126)	(0.119)	(0.130)	(0.128)	(0.130)	(0.126)
ROA	0.329	0.272	0.176	0.307	0.302	0.362	0.262
	(0.908)	(0.907)	(0.865)	(0.885)	(0.880)	(0.900)	(1.541)
Leverage	0.754	0.600	0.431	0.601	0.578	0.677	0.181
	(0.804)	(0.836)	(0.806)	(0.851)	(0.830)	(0.838)	(0.716)
Investment	0.079	0.082	-0.059	0.033	0.203	0.066	-0.553
	(0.785)	(0.765)	(0.701)	(0.769)	(0.750)	(0.762)	(0.658)
Firm Age	1.190**	1.162*	0.950	1.014*	1.237**	1.249**	1.214*
	(0.517)	(0.596)	(0.624)	(0.606)	(0.601)	(0.617)	(0.713)
ZScore Dummy	0.090	0.185	0.212	0.190	0.169	0.210	0.035
	(0.302)	(0.331)	(0.319)	(0.339)	(0.337)	(0.336)	(0.305)
Capital Intensity	0.110	0.100	0.148	0.083	0.102	0.104	-0.215
	(0.210)	(0.221)	(0.196)	(0.222)	(0.222)	(0.224)	(0.193)
Competition	0.848	1.042	0.869	0.983	0.809	0.943	1.109
	(0.761)	(0.805)	(0.764)	(0.777)	(0.808)	(0.788)	(1.088)
logdocsiz	0.464**	0.541***	0.524***	0.525***	0.540***	0.552***	0.280
	(0.188)	(0.199)	(0.197)	(0.203)	(0.204)	(0.204)	(0.218)
SnP Quality rating	-0.422***	-0.441***	-0.445***	-0.431***	-0.443***	-0.435***	0.015
	(0.097)	(0.098)	(0.097)	(0.100)	(0.096)	(0.098)	(0.085)
Eco Design	-0.156	-0.080	-0.476	-0.134	-0.085	-0.059	0.226
	(0.572)	(0.625)	(0.711)	(0.621)	(0.606)	(0.610)	(0.320)
Green Procurement	0.041	0.311	0.289	0.319	0.272	0.341	0.044
	(0.299)	(0.285)	(0.285)	(0.299)	(0.290)	(0.295)	(0.230)
Exec. pay tied ESG	0.802	0.884*	0.917*	0.840*	0.894*	0.899*	0.283
	(0.543)	(0.500)	(0.497)	(0.499)	(0.493)	(0.520)	(0.424)
_cons	0.115	0.225	1.888	1.118	-0.557	-0.144	-6.785
	(4.149)	(4.646)	(4.831)	(4.710)	(4.660)	(4.778)	(5.200)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1523	1523	1523	1523	1523	1523	1523
r2	0.842	0.832	0.841	0.833	0.835	0.831	0.773
N_clust	716	716	716	716	716	716	716

This table provides the estimation results of the effect of business sustainability practices on offshoring activity (INPUT). All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table 6: Bus practices on internationalization (Dependent Variable: OUTPUT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EMS	0.465***						0.140***
	(0.222)						(0.017)
EC		0.792**					0.018
		(0.422)					(0.031)
CSRRQ			0.435**				0.117**
			(0.248)				(0.069)
EVCSRR				0.995***			0.421***
				(0.449)			(0.077)
SCRE					0.660***		0.065***
					(0.233)		(0.016)
BERC						-0.716***	-0.269*
						(0.193)	(0.144)
Firm Size	0.217	0.225	0.244	0.240	0.239	0.169	-0.181
	(0.199)	(0.202)	(0.210)	(0.210)	(0.191)	(0.150)	(0.128)
Tobin's Q	-0.290*	-0.333*	-0.333*	-0.301*	-0.333*	-0.362**	0.045
	(0.173)	(0.171)	(0.175)	(0.169)	(0.178)	(0.154)	(0.097)
ROA	-2.311	-2.160	-2.435	-2.351	-2.193	-1.629	0.257
	(1.733)	(1.716)	(1.717)	(1.677)	(1.764)	(1.582)	(1.246)
Leverage	0.288	0.342	0.158	-0.080	0.351	0.470	0.072
	(0.821)	(0.817)	(0.851)	(0.850)	(0.812)	(0.772)	(0.750)
Investment	0.173	0.229	0.126	0.021	0.210	0.192	-0.119
	(0.307)	(0.305)	(0.327)	(0.323)	(0.317)	(0.296)	(0.388)
Firm Age	0.298	0.361	0.280	0.219	0.652	0.593	0.401
	(0.447)	(0.483)	(0.461)	(0.443)	(0.498)	(0.515)	(0.478)
ZScore Dummy	0.174	0.258	0.209	0.169	0.279	0.286	0.147
	(0.302)	(0.301)	(0.301)	(0.310)	(0.311)	(0.264)	(0.262)
Capital Intensity	-0.171	-0.225	-0.184	-0.165	-0.247	-0.131	-0.336*
	(0.211)	(0.213)	(0.203)	(0.204)	(0.196)	(0.203)	(0.172)
Competition	2.522***	2.593***	2.599***	2.780***	2.296**	1.958**	-0.375
	(0.972)	(0.955)	(0.954)	(0.928)	(0.913)	(0.953)	(0.721)
logdocsiz	0.478***	0.539***	0.507***	0.513***	0.518***	0.557***	0.378**
	(0.184)	(0.189)	(0.182)	(0.184)	(0.191)	(0.199)	(0.153)
SnP Quality rating	-0.359***	-0.338***	-0.356***	-0.357***	-0.331***	-0.335***	-0.112
	(0.115)	(0.113)	(0.114)	(0.115)	(0.112)	(0.107)	(0.078)
Eco Design	0.337	0.314	0.293	0.318	0.440	0.224	-0.202
	(0.381)	(0.400)	(0.401)	(0.362)	(0.388)	(0.334)	(0.198)
Green Procurement	-0.042	0.142	0.185	0.168	0.184	0.081	-0.126
	(0.334)	(0.310)	(0.309)	(0.302)	(0.298)	(0.295)	(0.178)
Exec. pay tied ESG	0.107	0.166	0.183	0.069	0.116	-0.139	0.018
	(0.382)	(0.369)	(0.374)	(0.392)	(0.373)	(0.438)	(0.390)
_cons	5.862*	4.897	5.992*	6.087*	2.619	6.180	-1.329
	(3.459)	(3.701)	(3.530)	(3.462)	(3.790)	(4.044)	(3.500)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1738	1738	1738	1738	1738	1738	1738
r2	0.740	0.740	0.740	0.743	0.747	0.766	0.738
N_clust	786	786	786	786	786	786	786

This table provides the estimation results of the effect of business sustainability practices on offshoring activity (OUTPUT). All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table 7: Bus practices on internationalization (Dependent Variable: EXIN)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EMS	0.533***						0.118***
	(0.211)						(0.025)
EC		0.808***					0.640**
		(0.357)					(0.410)
CSRRQ			0.349**				0.031*
			(0.250)				(0.019)
EVCSRR				0.716***			0.157***
				(0.269)			(0.052)
SCRE					0.193		0.090
					(0.287)		(0.242)
BERC						-0.386*	0.002
						(0.225)	(0.170)
Firm Size	0.228	0.237	0.254	0.252	0.279	0.220	-0.159
	(0.224)	(0.229)	(0.233)	(0.229)	(0.229)	(0.228)	(0.155)
Tobin's Q	-0.519**	-0.533***	-0.521**	-0.512**	-0.518**	-0.511**	-0.306***
	(0.207)	(0.206)	(0.215)	(0.208)	(0.216)	(0.226)	(0.114)
ROA	0.074	0.205	0.247	0.301	0.298	0.323	-0.160
	(0.851)	(0.851)	(0.853)	(0.850)	(0.861)	(0.852)	(0.916)
Leverage	0.380	0.380	0.347	0.370	0.430	0.353	-0.053
	(0.731)	(0.734)	(0.749)	(0.745)	(0.749)	(0.742)	(0.679)
Investment	0.613	0.567	0.535	0.470	0.426	0.438	-0.855
	(0.901)	(0.909)	(0.924)	(0.936)	(0.900)	(0.894)	(0.767)
Firm Age	0.587	0.693	0.579	0.556	0.763	0.674	0.658
	(0.671)	(0.692)	(0.659)	(0.698)	(0.680)	(0.732)	(0.612)
ZScore Dummy	0.162	0.198	0.132	0.152	0.189	0.216	0.311
	(0.309)	(0.320)	(0.328)	(0.330)	(0.338)	(0.323)	(0.291)
Capital Intensity	-0.102	-0.094	-0.069	-0.090	-0.065	-0.105	-0.020
	(0.145)	(0.154)	(0.155)	(0.167)	(0.166)	(0.159)	(0.136)
Competition	1.091	0.982	0.968	1.057	0.916	0.645	0.574
	(1.098)	(1.118)	(1.130)	(1.119)	(1.139)	(1.149)	(0.881)
logdocsiz	0.353*	0.352*	0.364*	0.354*	0.373*	0.320	0.371**
	(0.199)	(0.203)	(0.204)	(0.205)	(0.208)	(0.213)	(0.181)
SnP Quality rating	-0.338***	-0.336***	-0.357***	-0.339***	-0.356***	-0.354***	0.007
	(0.101)	(0.103)	(0.106)	(0.106)	(0.106)	(0.100)	(0.087)
Eco Design	0.132	0.149	0.065	0.104	0.216	0.197	-0.129
	(0.268)	(0.275)	(0.289)	(0.285)	(0.282)	(0.262)	(0.245)
Green Procurement	-0.089	0.044	0.155	0.166	0.213	0.180	0.071
	(0.380)	(0.372)	(0.358)	(0.351)	(0.350)	(0.349)	(0.201)
Exec. pay tied ESG	0.572	0.591	0.645	0.567	0.601	0.709	0.250
	(0.468)	(0.485)	(0.474)	(0.468)	(0.488)	(0.482)	(0.388)
_cons	4.676	4.007	5.003	4.903	3.547	6.138	-4.586
	(4.986)	(5.158)	(4.944)	(5.204)	(5.157)	(5.628)	(4.801)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1394	1394	1394	1394	1394	1394	1394
r2	0.779	0.776	0.772	0.772	0.768	0.777	0.755
N_clust	639	639	639	639	639	639	639

This table provides the estimation results of the effect of business sustainability practices on offshoring activity (ININ). All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table 8: Bus practices on internationalization (Dependent Variable: ININ)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EMS	0.300						0.393
	(0.307)						(0.343)
EC		0.449					0.346
		(0.510)					(0.624)
CSRRQ			0.162**				0.243***
			(0.084)				(0.081)
EVCSRR				1.055**			0.139***
				(0.630)			(0.059)
SCRE					0.461		0.062
					(0.365)		(0.289)
BERC						-0.218	-0.071
						(0.258)	(0.297)
Firm Size	0.430	0.448*	0.437	0.448*	0.464*	0.460	0.131
	(0.264)	(0.268)	(0.277)	(0.261)	(0.254)	(0.285)	(0.241)
Tobin's Q	-0.548*	-0.578*	-0.600*	-0.558**	-0.480*	-0.550*	-0.028
	(0.301)	(0.302)	(0.316)	(0.268)	(0.279)	(0.308)	(0.194)
ROA	-0.965	-0.559	-0.191	-1.149	-1.251	-0.174	-0.837
	(4.043)	(3.945)	(4.199)	(3.854)	(3.638)	(3.828)	(2.601)
Leverage	2.001	2.186	2.102	1.747	2.262*	2.367*	0.134
	(1.387)	(1.350)	(1.342)	(1.303)	(1.306)	(1.392)	(1.089)
Investment	-1.182	-1.189	-1.314	-1.182	-1.351	-1.153	0.660
	(1.127)	(1.204)	(1.149)	(1.197)	(1.036)	(1.210)	(0.760)
Firm Age	-0.431	-0.346	-0.559	-0.856	-0.582	-0.451	-0.233
	(1.921)	(1.937)	(1.867)	(1.883)	(1.780)	(1.859)	(1.241)
ZScore Dummy	0.796*	0.791*	0.783*	0.735*	0.853**	0.848*	-0.142
	(0.423)	(0.427)	(0.413)	(0.410)	(0.426)	(0.444)	(0.466)
Capital Intensity	-0.502	-0.488	-0.431	-0.404	-0.402	-0.415	-0.369
	(0.510)	(0.470)	(0.449)	(0.441)	(0.449)	(0.441)	(0.312)
Competition	3.653	3.783	3.846	4.279	3.907*	3.550	0.076
	(2.566)	(2.552)	(2.622)	(2.690)	(2.343)	(2.599)	(1.896)
logdocsiz	0.432	0.402	0.434	0.480	0.472	0.410	0.013
	(0.486)	(0.488)	(0.481)	(0.442)	(0.470)	(0.490)	(0.353)
SnP Quality rating	-0.316***	-0.328***	-0.330**	-0.335***	-0.319***	-0.309**	0.045
	(0.121)	(0.119)	(0.130)	(0.114)	(0.121)	(0.129)	(0.113)
Eco Design	-0.056	-0.160	-0.025	-0.437	-0.147	-0.065	-0.723
	(1.067)	(1.060)	(1.141)	(0.988)	(1.022)	(1.086)	(0.737)
Green Procurement	0.217	0.262	0.347	0.268	0.283	0.332	0.029
	(0.355)	(0.332)	(0.332)	(0.365)	(0.324)	(0.341)	(0.260)
Exec. pay tied ESG	1.263*	1.328*	1.288*	1.137*	1.059	1.295*	0.506
	(0.652)	(0.683)	(0.683)	(0.656)	(0.653)	(0.678)	(0.676)
_cons	10.624	10.276	11.687	13.129	11.007	11.658	2.601
	(14.508)	(14.572)	(14.034)	(13.871)	(13.256)	(14.016)	(8.920)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	674	674	674	674	674	674	674
r2	0.896	0.896	0.894	0.901	0.900	0.895	0.834
N_clust	330	330	330	330	330	330	330

This table provides the estimation results of the effect of business sustainability practices on offshoring activity (EXIN). All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table 9: Bus practices on internationalization – offshoring to advanced vs emerging markets

	Advanced countries							Emerging countries						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
EMS	0.501***						0.477***	0.438*						0.034
	(0.141)						(0.081)	(0.225)						(0.199)
EC		0.643***					0.193***		0.654*					0.299
		(0.217)					(0.014)		(0.379)					(0.287)
CSRRQ			0.410***				0.134**			0.010				0.064
			(0.145)				(0.081)			(0.256)				(0.169)
EVCSRR				0.436			0.082				0.875**			0.134***
				(0.315)			(0.167)				(0.404)			(0.037)
SCRE					0.529***		0.463***					0.301		0.258
					(0.159)		(0.071)					(0.290)		(0.190)
BERC						-0.463***	-0.593***						-0.386	0.084
						(0.132)	(0.074)						(0.265)	(0.137)
Firm Size	0.438***	0.461***	0.476***	0.453***	0.478***	0.432***	0.052	0.218	0.205	0.215	0.187	0.236	0.244	0.072
	(0.141)	(0.146)	(0.145)	(0.147)	(0.139)	(0.137)	(0.056)	(0.238)	(0.229)	(0.244)	(0.234)	(0.236)	(0.227)	(0.123)
Tobin's Q	-0.245**	-0.258**	-0.266**	-0.250**	-0.251**	-0.247**	-0.047	-0.185	-0.223	-0.204	-0.184	-0.195	-0.215	0.053
	(0.117)	(0.119)	(0.120)	(0.117)	(0.120)	(0.119)	(0.034)	(0.171)	(0.167)	(0.165)	(0.170)	(0.163)	(0.153)	(0.080)
ROA	-0.815	-0.748	-0.703	-0.624	-0.630	-0.330	0.110	-3.549	-3.000	-3.243	-2.990	-3.329	-2.715	1.289
	(1.592)	(1.574)	(1.576)	(1.573)	(1.531)	(1.532)	(0.380)	(2.774)	(2.665)	(2.754)	(2.711)	(2.673)	(2.799)	(1.805)
Leverage	0.878	0.849	0.817	0.824	0.899	0.933	-0.118	0.975	0.950	0.928	0.805	0.815	0.843	-0.248
	(0.671)	(0.674)	(0.682)	(0.683)	(0.655)	(0.654)	(0.240)	(0.936)	(0.921)	(0.939)	(0.921)	(0.949)	(0.925)	(0.605)
Investment	0.176	0.170	0.136	0.094	0.199	0.118	0.133	0.212	0.075	-0.068	0.055	0.038	-0.032	-0.417
	(0.364)	(0.368)	(0.371)	(0.375)	(0.367)	(0.371)	(0.182)	(0.990)	(1.001)	(1.002)	(0.982)	(0.989)	(0.977)	(0.553)
Firm Age	0.270	0.346	0.221	0.278	0.377	0.516	0.074	0.220	0.246	0.244	0.077	0.258	0.346	0.376
	(0.422)	(0.426)	(0.416)	(0.426)	(0.422)	(0.423)	(0.177)	(0.543)	(0.521)	(0.506)	(0.554)	(0.501)	(0.506)	(0.364)
ZScore Dummy	0.296	0.315	0.318	0.325	0.312	0.325	0.004	0.183	0.189	0.225	0.193	0.207	0.190	0.068
	(0.246)	(0.252)	(0.254)	(0.258)	(0.250)	(0.242)	(0.102)	(0.327)	(0.329)	(0.330)	(0.321)	(0.336)	(0.330)	(0.207)
Capital Intensity	0.005	-0.000	0.009	0.003	0.006	-0.001	0.033**	0.077*	0.093**	0.085**	0.062	0.081*	0.086**	-0.069*
	(0.028)	(0.029)	(0.029)	(0.030)	(0.029)	(0.027)	(0.015)	(0.041)	(0.047)	(0.042)	(0.044)	(0.043)	(0.041)	(0.042)
Competition	0.930	0.933	0.906	0.912	0.847	0.778	-0.107	1.268*	1.153	1.204*	1.156	1.182*	1.047	-0.156
	(0.612)	(0.624)	(0.618)	(0.621)	(0.579)	(0.568)	(0.135)	(0.720)	(0.700)	(0.724)	(0.718)	(0.704)	(0.728)	(0.536)
logdocsiz	0.565***	0.592***	0.585***	0.593***	0.585***	0.579***	0.075	-0.089	-0.062	-0.059	-0.017	-0.055	-0.036	0.251*
	(0.184)	(0.186)	(0.187)	(0.185)	(0.187)	(0.191)	(0.063)	(0.211)	(0.210)	(0.217)	(0.207)	(0.214)	(0.216)	(0.146)
SnP Quality rating	-0.369***	-0.371***	-0.385***	-0.376***	-0.376***	-0.350***	0.020	-0.242***	-0.251***	-0.249***	-0.228**	-0.241***	-0.252***	-0.002
	(0.075)	(0.076)	(0.077)	(0.079)	(0.073)	(0.075)	(0.029)	(0.092)	(0.094)	(0.092)	(0.095)	(0.091)	(0.093)	(0.061)
Eco Design	0.072	0.058	-0.003	0.082	0.169	0.073	-0.089	0.990	1.063	1.205*	1.043	1.085	1.120*	0.176
	(0.334)	(0.345)	(0.358)	(0.341)	(0.336)	(0.347)	(0.087)	(0.652)	(0.669)	(0.724)	(0.661)	(0.687)	(0.671)	(0.358)
Green Procurement	0.074	0.213	0.272	0.295	0.273	0.266	-0.148**	-0.105	0.014	0.087	0.021	0.082	0.066	-0.038
	(0.239)	(0.252)	(0.249)	(0.261)	(0.248)	(0.248)	(0.072)	(0.394)	(0.357)	(0.359)	(0.363)	(0.366)	(0.368)	(0.139)
Exec. pay tied ESG	0.298	0.394	0.386	0.359	0.266	0.360	-0.038	0.226	0.274	0.321	0.286	0.255	0.244	-0.249
	(0.264)	(0.268)	(0.264)	(0.271)	(0.258)	(0.300)	(0.131)	(0.539)	(0.484)	(0.511)	(0.498)	(0.507)	(0.513)	(0.237)

_cons	5.439*	4.869	5.946**	5.324*	4.350	5.566*	0.223	9.442**	9.167**	9.386**	9.718**	8.965**	10.031**	-3.867
	(2.943)	(2.967)	(2.889)	(2.945)	(2.917)	(3.024)	(1.349)	(4.377)	(4.276)	(4.214)	(4.437)	(4.078)	(4.405)	(2.879)
Firm Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3710	3710	3710	3710	3710	3710	3710	1466	1466	1466	1466	1466	1466	1466
r2	0.678	0.672	0.673	0.668	0.679	0.682	0.451	0.795	0.794	0.788	0.795	0.791	0.796	0.661
N_clust	665	665	665	665	665	665	665	415	415	415	415	415	415	415

This table provides the estimation results of the recognition of economic development on the sustainability practices and offshoring nexus. All models use time dummies and spell individual fixed effects and year effects. Standard errors robust to heteroscedasticity and clustering at firm level are given in parentheses. Significance indicators: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.