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**Multinational Enterprises and Sustainable Business in Emerging
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MULTINATIONAL ENTERPRISES AND SUSTAINABLE BUSINESS IN EMERGING MARKETS

Abstract

As emerging markets (EMs) gain in economic and geopolitical importance, their complex relation with sustainable development has emerged as a key focus of study, presenting both challenges and opportunities for multinational enterprises (MNEs) operating in these regions. In this introduction to the special issue, we trace the frontiers of current research on MNEs and sustainable business in EMs and identify new themes. We discuss the triple bottom line of sustainability—economic, social, and environmental dimensions—and examine the pivotal yet conflicting role that MNEs play in promoting sustainable business in EMs. We identify three key characteristics of MNEs that influence their ability to both bridge and widen the sustainability gap in EMs: their role as a Technology Leader, Responsible Leader, and Efficiency Seeker. We use these features of MNEs to deepen the understanding of sustainable business practices in EMs and offer new directions for future research in the evolving landscape of global sustainability.

Keywords: emerging markets; MNE; sustainable business; technology leader; responsible leader; efficiency leader.

1. Introduction

Sustainable development has emerged as a paramount subject of interest in international business (IB) scholarship (Bansal, 2005; Kolk & van Tulder, 2010; Montiel et al., 2021). Especially since the adoption of the United Nations Sustainable Development Goals (SDGs) in 2015, IB scholars have turned their attention towards the expectations and responsibilities of multinational enterprises (MNEs) in fostering sustainable business practices across a diverse range of regions and contexts (DesJardins, 2021; Wood et al, 2021; van Tulder et al., 2021; van Tulder & van Mil, 2023).

A central issue in this field of research that has gained attention yet remains to be fully understood is the complex role that emerging markets (EMs) play in MNEs' sustainability efforts. EMs are countries characterized by rapid economic growth, shifting geopolitical dynamics, and enormous developmental challenges. They offer MNEs unique opportunities in terms of sustainability due to their market potential, rich natural resource endowments, and tolerance for adopting innovative technologies, products, and processes. At the same time, the willingness and ability of MNEs to leverage their EM operations for sustainability is impeded by, among other things, insufficient regulations, infrastructure gaps, and limited access to capital.

In this context, it is our pleasure to introduce this Special Issue of the *Journal of International Management* on “Multinational Enterprises and Sustainable Business in Emerging Markets”. The purpose of this Special Issue is to encourage the study of the evolving landscape of sustainable IB practices, particularly by MNEs, in the dynamic and complex realm of EMs. Moreover, the Special Issue hopes to deepen our understanding of the role of MNEs in promoting sustainability in EMs and to propose avenues for future research.

2. The global importance of sustainable business in EMs

To study how MNEs contribute to sustainable business in EMs, it is instructive to start by providing clear definitions of the terms “sustainable business” and “emerging markets”. Additionally, it is useful to understand how the landscape and challenges

related to sustainability differs in EMs relative to developed countries. In this section, we provide these building blocks and use them subsequently for developing a structured understanding of MNEs and sustainable business in EMs.

2.1 Sustainability and sustainable business

The 1987 Brundtland Report is widely regarded as the foundation of modern sustainability discourse, underscoring the need for adopting a holistic approach towards sustainability that encompasses and balances the needs of profit, people, and planet (World Commission on Environment and Development, 1987). These economic, social, and environmental dimensions are often referred to as the triple bottom line or the three pillars of sustainability (Sachs, 2015).

The economic pillar of sustainability highlights the importance of fostering long-term economic growth while at the same time reducing negative and increasing positive externalities, i.e., the consequences of economic transactions for third parties (van den Bergh, 2010). It involves encouraging innovation and technological advancements to avoid depleting resources (Voegtlin & Scherer, 2017) as well as fostering responsible consumption (Webb, Mohr & Harris, 2008), production (Liu, Lai & Cai, 2021) and supply chains (Linton, Klassen & Jayaraman, 2007).

The social pillar of sustainability emphasizes the well-being and equitable development of individuals and communities. It entails promoting social justice, ensuring access to education, healthcare, and basic amenities for all, and fostering inclusive and diverse societies. Social sustainability also encompasses fair labor practices, human rights, and cultural preservation (Dempsey et al., 2011).

The environmental pillar of sustainability focuses on the conservation and protection of natural resources, ecosystems, and biodiversity. It emphasizes reducing pollution, minimizing waste generation, promoting renewable energy sources, and adopting sustainable land and water management practices (Goodland, 1995; Schaltegger, Burritt & Petersen, 2007).

While governments play a leading role in promoting sustainability, it is generally acknowledged that MNEs also bear a key responsibility (van Zanten & van Tulder, 2018). The foundational principles of sustainable business can be described as the micro-elaboration and application by firms to address the triple bottom line and reach the SDGs (van Tulder & van Mil, 2023). Sustainable business can thus be defined as corporate practices which increase positive externalities that improve conditions for people and the planet (e.g., knowledge, wealth, and health) and reduce negative externalities that harm people and the planet (e.g., the overuse of natural resources, harm to social cohesion, or overconsumption) (Voegtlin & Scherer, 2017; van Zanten & van Tulder, 2018; Montiel et al., 2021). By integrating these principles into their core strategies, sustainable businesses can contribute meaningfully to a more sustainable and equitable global economy (van Tulder & van Mil, 2023).

Sustainable business is distinct from several other terms that are often used to describe companies' social and environmental efforts. In contrast to philanthropy, sustainable business is not simply 'nice to have'. Instead, it reflects the new reality that capital markets, governments, customers and other stakeholders are increasingly holding companies accountable for the environmental, social, and governance (ESG) impact of their actions (Ellimäki et al., 2023; Goerzen et al., 2025), a pressure that is often termed to be a "sustainability imperative" (Lubin & Esty, 2010). To avoid financial and operational repercussions of unsustainable business practices, companies are therefore required to adopt a systemic approach that seeks to integrate considerations of the three pillars of sustainability – social, environmental, and economic – in a manner that generates shared value creation for all stakeholders including the environment and society.

The terms sustainable business and corporate social responsibility (CSR) are also often conflated. A first difference between the terms lies in the temporal dimension (Bansal & Song, 2017). CSR initiatives tend to be guided by ethical considerations, morality, and social norms, often addressing immediate stakeholder concerns. In contrast, sustainability requires businesses to navigate intertemporal trade-offs, ensuring that

present economic activities do not undermine future generations' ability to meet their needs. This long-term perspective necessitates integrating sustainability into core business operations and strategic decision-making rather than treating it as an auxiliary function. Second, and relatedly, sustainable business aligns closely with financial performance and operational efficiency, as it embeds sustainability principles into business strategies such as sustainable supply chains and circular economy models. Companies that integrate sustainability effectively can achieve cost savings, regulatory compliance, and enhanced market positioning. Conversely, CSR initiatives, while valuable for stakeholder engagement, often operate as voluntary programs that may not directly influence a company's profitability or core operations (Montiel, 2008; Sheehy & Farneti, 2021). Siemens exemplifies this distinction in its operations in EMs. Its involvement in India's first large-scale hybrid wind-solar project in Karnataka is a sustainable business initiative that advances both sustainability goals and business growth (Siemens, 2017). In contrast, its Siemens Scholarship Program, which provides financial and mentorship support to underprivileged engineering students in India, represents a CSR effort aimed at social impact without necessarily contributing to Siemens' operational sustainability (Siemens, 2014). This differentiation highlights how sustainable business strategies drive systemic change, whereas CSR primarily serves as a tool for corporate goodwill and reputation management.

2.2 Emerging markets

Although sustainability is one of the grand challenges in IB (Buckley, Doh & Benischke, 2017; van Tulder et al., 2021), most studies focus on developed country contexts (e.g., Bansal, 2005; Strike, Gao, & Bansal, 2006; Matten & Moon, 2008), while studies on EMs remain rare (Holtbrügge & Dögl 2012; Kolk, Kourula & Pisani, 2017; Kolk & van Tulder, 2010). This research gap is important, as EMs present distinct economic conditions and institutional complexities that differ markedly from those in both developed and low-growth developing countries. Understanding sustainability in these contexts is crucial, given that sustainable business practices in EMs hold immense potential for driving economic growth, addressing social challenges, and preserving the

environment. At the same time, the institutional environment in EMs presents unique challenges that complicate the implementation of sustainable business strategies. Factors such as weak rule of law, frequent legislative changes and government interventions create a high-risk environment for businesses (Khanna & Palepu, 2010; Kvint, 2009; Vercueil, 2015).

It is important to point out that EMs are not the same as developing countries, depicting only a small sub-group of them. According to the widely cited definition of Hoskisson et al. (2000, p. 249), “emerging economies are low-income, rapid-growth countries using economic liberalization as their primary engine of growth.” This definition is informative since it clearly highlights the dynamic nature of the economies of EMs, which is not present in all developing countries. Having said that, the definition has as downside that it downplays the significant political, social, and environmental challenges that EMs face (compared to developed countries), which we will build on in our analysis. Rapid economic growth (and economic liberalization for that matter), for example, often leads to rising income disparities, widening the gap between socioeconomic classes (Piketty, 2014). Many EMs also contend with weak political institutions, inconsistent legal frameworks, and high state intervention in key industries, which can create an unpredictable business environment (Acemoglu & Robinson, 2012). Moreover, EMs are disproportionately vulnerable to the adverse effects of climate change, facing heightened risks from extreme weather events, resource depletion, and environmental degradation (Sachs, 2015). While some EMs, like China and India, have made substantial investments in renewable energy, their economies remain heavily dependent on fossil fuels, posing a challenge to long-term sustainability (Tripathi et al., 2016; Abbasi et al., 2022).

EMs are also not the same as the BRIC countries (Brazil, Russia, India and China). Goldman Sachs economist Jim O’Neill (2001) coined BRIC to describe four of the largest countries in the world in terms of land area and population with fast-growing economies that would collectively surpass the gross domestic product (GDP) of the G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom and the United

States) and dominate the global economy by 2050. In our analysis, we recognize that there are many EMs beyond these four leading countries.

In this paper, we prefer the adoption of the more comprehensive classification of EMs that was developed by Casanova and Miroux (2022), which they termed E20+China, also referred to as E20+1. This list comprises the BRIC countries and 17 other non-advanced countries that have a relatively high Gross Domestic Product (GDP) per capita and low poverty levels. In Tables 1 and 2, we provide some stylized statistics that characterize these 17 economies.

Table 1. GDP and population statistics of emerging markets

Country	GDP in 2023, current US\$, billion	Annualized GDP growth 2013-2023, %	Contribution to global GDP growth, 2013- 2023, %	Population in 2023, million	Share of world population, %	Per capita GDP in 2023, current US\$
China	19373,586	7,25	34,59	1411,961	17,64	13721,05
India	3736,882	7,24	6,67	1436,51	17,94	2601,36
Russia	2062,649	-1,03	-0,80	143,204	1,79	14403,57
Brazil	2081,235	-1,70	-1,39	215,157	2,69	9673,10
Mexico	1663,164	2,70	1,38	131,23	1,64	12673,66
Indonesia	1391,778	4,26	1,69	277,432	3,47	5016,65
Turkey	1029,303	0,73	0,25	86,268	1,08	11931,46
Argentina	641,102	0,47	0,11	46,763	0,58	13709,60
Thailand	574,231	3,17	0,55	70,183	0,88	8181,91
Nigeria	506,601	-0,16	-0,03	222,182	2,78	2280,12
Egypt	387,11	2,47	0,30	106,225	1,33	3644,25
Bangladesh	420,516	8,88	0,85	170,279	2,13	2469,57
Vietnam	449,094	7,76	0,84	100,345	1,25	4475,50
Malaysia	447,026	3,14	0,42	33,404	0,42	13382,41
South Africa	399,015	-0,05	-0,01	61,528	0,77	6485,10
Philippines	440,901	4,50	0,56	112,893	1,41	3905,48
Iran	367,968	-1,51	-0,21	86,547	1,08	4251,66
Pakistan	340,64	2,73	0,29	231,552	2,89	1471,12
Colombia	334,689	-1,32	-0,17	52,156	0,65	6417,08
Romania	348,902	6,28	0,56	18,829	0,24	18530,03
Chile	358,557	2,61	0,29	20,113	0,25	17827,13
BRIC	27254,352	5,31	39,08	3206,832	40,06	8498,84
E20+1	37354,949	4,44	46,74	5034,761	62,89	7419,41
World	105568,776	3,15	100,00	8005,176	100,00	13187,56

Source: World Economic Outlook

As a group, the E20+1 are home to almost 50 percent of the world's population – more than 5 billion people. They account for 35.4 percent of global GDP and contributed 46.7 percent of global growth between 2013 and 2023.

A further analysis of key social and environmental characteristics of these EMs suggests the complex and conflicting role that they play in sustainability discussions (Table 2). Consider poverty for instance. In 2022, 2.5 billion people in the E20+1 lived in households with an income or consumption per person below \$6.85 a day, which represents the national poverty lines in upper-middle-income countries. This accounts for half of the entire population of E20+1 and about 70 percent of all people around the globe under this poverty line. At the same time, EMs have played a major role in global poverty alleviation. The number of people in E20+1 under the poverty line of \$6.85 a day has dropped by 302 million between 2013 and 2022, while it has increased by 73 million in the rest of the world over the same time period (Table 2).

Table 2. Key sustainability indicators of emerging markets

Country	Population living under the \$6,85 poverty line		Contribution to poverty reduction, 2013-2022	Fossil CO2 emissions, million tons, 2022		Contribution to global fossil fuel emission growth, 2013-2022
	2013	2022 (or last available year)	2013-2022	2013	2022	2013-2022
China	644,27	347,98	129,37	2717,35	3110,47	80,68
India	1135,88	1151,04	-6,62	544,51	772,28	46,75
Russia	7,14	5,88	0,55	447,72	450,92	0,66
Brazil	51,90	50,51	0,61	145,31	131,95	-2,74
Mexico	43,23	27,76	6,75	135,23	139,73	0,92
Indonesia	192,88	166,42	11,55	133,48	198,94	13,43
Turkey	8,28	6,38	0,83	94,80	118,91	4,95
Argentina	3,29	4,66	-0,60	51,73	52,64	0,19
Thailand	13,55	8,72	2,11	71,99	73,89	0,39
Nigeria	153,99	180,23	-11,46	31,75	35,14	0,70
Egypt	61,83	72,62	-4,71	57,70	70,68	2,66
Bangladesh	132,60	126,84	2,52	16,87	27,87	2,26
Vietnam	36,35	19,39	7,41	41,33	93,78	10,76
Malaysia	1,97	0,76	0,53	65,96	79,44	2,77
South Africa	31,52	33,74	-0,97	125,17	110,28	-3,06

Philippines	70,12	78,66	-3,73	26,21	41,05	3,04
Iran	16,40	19,41	-1,31	163,20	188,49	5,19
Pakistan	177,70	185,74	-3,51	41,36	54,64	2,73
Colombia	17,40	18,04	-0,28	24,05	27,22	0,65
Romania	6,56	1,35	2,27	21,66	20,07	-0,33
Chile	2,19	0,92	0,55	22,31	23,03	0,15
BRIC	1839,19	1555,41	123,91	3854,89	4465,63	125,34
E20+1	2809,05	2507,05	131,87	4979,67	5821,41	172,75
World	3847,99	3618,97	100,00	9651,85	10139,10	100,00

Source: Friedlingstein et al. (2023); World Bank Poverty and Inequality Platform (2023)

A second illustration is the contribution of EMs to global climate change concerns. In terms of fossil CO₂ emissions, the E20+1's share of global emissions has grown from 51.6 percent in 2013 to 57.4 percent in 2022. Whereas the rest of the world has overall decreased the fossil CO₂ emissions by 354 billion tons between 2013 and 2022, the E20+1 has increased fossil CO₂ emissions by 842 billion tons.

2.3 The landscape and challenges of sustainable business in EMs

These multifaceted features of EMs suggest that this group of high-growth developing countries offer a vital yet complex role in the contribution of business towards a sustainability future. On the positive side, EMs offer immense opportunities for sustainable business. It provides an enormous market potential as consumers in this group of countries are becoming both richer and eco-conscious. EMs are characterized by a growing middle class, rising consumer demand, and increasing purchasing power. As shown in Table 1, the E20+1 have been responsible for almost 50 percent of global GDP growth between 2013 and 2023. This presents an opportunity for sustainable businesses to tap into these markets by offering environmentally friendly and socially responsible products and services that align with local needs and aspirations (Khanna & Palepu, 2010).

Another reason is that EMs face a disproportionate need to improve the efficiency of their resource use as they face scarcities including limits to the access of energy, water, and raw materials. This characteristic of EMs implies that sustainable business practices

which focus on improving resource efficiency and waste reduction are in high demand in these regions (Dögl, Holtbrügge & Schuster, 2012).

EMs also often have a higher tolerance for adopting innovative technologies, products, and processes due to less entrenched infrastructure and a higher absorptive capacity among businesses than in low-growth developing countries. This encourages the development and implementation of sustainable technologies, such as renewable energy, efficient transportation systems, and waste management solutions (Herstatt & Tiwari, 2017; Prabhu, Radjou & Ahuja, 2012). While industrialized countries seek to replace existing technologies with more sustainable alternatives, EMs can skip some of the dirty stages of development and implement sustainable technologies from scratch ('environmental leapfrogging') (Watson & Sauter, 2011).

Sustainable businesses can also further contribute to social development in EMs by creating employment opportunities, promoting fair labor practices, and supporting local communities. They can also address social challenges such as access to education, healthcare, and clean water. Particularly, low-income customers at the base of the pyramid can benefit from sustainable business which fosters inclusive growth and poverty reduction (Prahalad, 2005). Thus, sustainable businesses can contribute to per-capita GDP growth and reduce the high poverty rates prevalent in EMs (Tables 1 and 2).

On the negative side, however, EMs show a large sustainability gap with firms in these economies lagging their counterparts in advanced countries across all ESG dimensions (Boston Consulting Group, 2023). One reason for this disparity is the less strict environmental and social regulations as well as inferior technological capabilities in these countries (compared to developed countries), which disincentivize the adoption of sustainable business practices. In addition, EM firms face comparatively lower stakeholder pressure to adopt sustainable business practices, further slowing progress in this domain. While some scholars have argued that the institutional voids in EMs can – in theory – present an opportunity for businesses to forcefully advocate for the development of supportive sustainability policies and for technological leapfrogging

(Doh et al., 2017; Gao et al, 2017), the absence of a well-developed and coordinated regulatory environment that encompasses all relevant government departments has – in reality – impeded the macro-level adoption of circular economy practices (Nudurupati et al., 2022).

Most EMs also face infrastructure gaps, including inadequate transportation networks, energy grids, telecommunications infrastructure, and waste management systems. These deficiencies can pose substantial challenges for sustainable businesses, requiring them to invest in developing or upgrading infrastructure to support their operations and ensure the effective implementation of sustainable practices (Doh, Teegen & Mudambi, 2004; Banerjee, Oetzel & Ranganathan, 2006). Advancements in new technologies, such as AI and blockchains, have in this regard been presented as key tools for the development of more integrated and efficient infrastructure systems. At the same time, many EMs also face a “digital divide” relative to developed countries, with their adoption of digital tools continuing to lag. For this reason, recent scholarship has pointed out that digital solutions per se will not resolve sustainability problems without reliable regulatory institutions and supportive policies (Bu et al., 2024; Ajwani-Ramchandani et al., 2021).

Access to finance can also be a significant barrier for sustainable businesses in EMs. Limited access to capital, high interest rates, and a lack of awareness among investors about the potential returns of sustainable investments make it challenging for businesses to secure the necessary funding for their sustainability initiatives (Bekaert & Harvey, 2002; Claessens & Yurtoglu, 2013).

Policy priorities also differ in EMs relative to developed countries. EMs often prioritize economic growth as a means to address immediate socioeconomic challenges, such as poverty alleviation, employment creation, and improving living standards. As a result, the long-term benefits of social rights and environmental protection are frequently perceived as secondary concerns in the pursuit of rapid economic development. This emphasis on economic performance has contributed to weaker social and environmental standards compared to advanced economies, with less stringent

enforcement mechanisms for prosecuting social and environmental harm (Dobers & Halme, 2009). To bridge this gap, businesses operating in EMs must adopt a more integrated approach to sustainability, ensuring that their operations generate positive socio-environmental impacts (Le et al., 2024).

In this context, the concept of environmental justice provides an important perspective for understanding the incentives for EM firms to develop sustainable business practices and the broader implications that they entail. Environmental justice encompasses equality, recognition and participation in environmental decision-making and calls for justice against social and cultural inequality and ecological devastation (Schlosberg, 2004). This analytical lens focuses especially on the impact on disadvantaged and indigenous communities (Capizzo & Luisi, 2024) and sheds a new light on various dimensions concerning sustainable businesses, e.g., human right violations in the upstream of the electric vehicle value chain (Rouhana et al., 2024) and the tension between stakeholders in tourism (Tops & Lamers, 2024). By integrating environmental justice principles, businesses in EMs can move beyond compliance-driven sustainability efforts to foster more equitable and socially responsible development.

Finally, EMs are diverse in terms of culture, socioeconomic conditions, and consumer preferences (Holtbrügge, 2022). Sustainable businesses must navigate these differences, understand local contexts, and tailor their strategies accordingly. Building trust, engaging with local communities, and promoting awareness about sustainability can be crucial in gaining acceptance and market penetration (Schuster & Holtbrügge, 2014).

Given these significant differences between EMs, developed countries, and low-growth developing countries, the contribution of firms operating in EMs to sustainability is called for since there are fewer constituencies and institutions providing social goods than in developed countries. However, domestic firms in EMs have often only low incentives and capabilities to engage in sustainability. Therefore, MNEs are seen as major players in addressing economic, environmental, and social problems in EMs and

developing more sustainable business models (Meyer & Peng, 2016; Valente & Crane, 2010).

3. MNEs and sustainable business in EMs

Compared to local firms in EMs, MNEs possess abundant sources of capital and advanced technology, enabling them to adopt and disseminate sustainable business practices more effectively (Wood et al., 2021). The literature on green innovation provides compelling evidence of this technological advantage. Research indicates that MNE affiliates consistently display outperform domestic firms in green innovation (Chiarvesio, De Marchi & Di Maria, 2015; De Marchi, Cainelli & Grandinetti, 2022), including in developing countries (Amendolagine et al., 2023). Notably, this performance advantage is particularly pronounced among MNEs originating from countries with stricter environmental regulations, as they are more inclined to engage in green innovation (Konara, Lopez & Shirodkar, 2021).

However, their contribution to sustainability often falls short of expectations, and does not necessarily carry over from developed to EM contexts (Yu et al., 2023). This complex nature of the diffusion of sustainable business practices means that actions suitable in one context may prove unsuitable in another (Maletič, Maletič & Gomišček, 2018; Sardana et al., 2020), raising the question which factors drive the observed inconsistencies in the sustainability impact of MNEs.

Scholars generally trace the source of these inconsistencies by analyzing three key mechanisms through which MNEs engage with business activities in EMs: foreign direct investment (FDI), spillover effects, and global value chain (GVC) linkages. In this section, we will demonstrate that, depending on the context, MNEs can both reduce and worsen the sustainability gap in EMs through these three mechanisms. We will subsequently use these insights to identify three pivotal roles that MNEs play in supporting sustainable business in EMs.

3.1. MNE sustainability impact mechanisms

3.1.1 FDI

FDI is a key mechanism through which MNEs influence the socioeconomic context in EMs (Clark & Geppert, 2006; Kolk, 2016; Ramamurti, 2004). Since FDI implies a greater long-term commitment than other entry modes, it generates a higher level of transfer of capital, knowledge, technologies, and practices to host countries which may or may not be beneficial for sustainability (Amendolagine et al., 2023; Brammer, Nardella & Surdu, 2021). This effect of FDI has been found to differ significantly depending on a host country's market size, openness, availability of infrastructure, institutional context, and the competitive environment (Nielsen et al., 2017; Pisani et al., 2019), suggesting that country characteristics matter for the diffusion of sustainability to EMs.

An MNE's motive for conducting FDI in EMs has also been found to matter (e.g., Demena & Bergeijk, 2019; Hanson, 2001; Pavlínek & Žížalová, 2016). For instance, while asset-seeking or market-seeking FDI could plausibly facilitate innovation and promote sustainable business practices (De Marchi et al., 2022), efficiency-seeking FDI might in some cases end up deteriorating the environmental and labor conditions in EMs (Wang et al., 2013). This is because FDI that is conducted for cost reduction purposes may well relocate activities to EMs to take advantage of weaker environmental or social regulations (Bu & Wagner, 2016), stifling the adoption of sustainable practices. The acute reader will recognize how two key features of EMs thus create juxtaposing forces through which MNEs may affect sustainable business. The dynamic market environment of EMs encourages those types of FDI that may positively encourage the diffusion of sustainable business practices; the weaker institutional environment then again promotes FDI types that may undermine sustainable business practices. For these reasons, there are growing voices in both policy and academic circles to focus on ways how EMs can better attract 'sustainable

FDI', which contribute to the economic, social and environmental development of host countries while making it commercially viable (Sauvant & Mann, 2019).

3.1.2 Spillover effect

Besides themselves contributing to sustainable business practices in EMs, MNEs may also influence local sustainability practices through knowledge spillovers (Meyer, 2004), which can be of both technological or non-technological nature (e.g., ESG practices). In this case, MNEs willingly or unwillingly act as conduits for knowledge spillovers to firms in EMs, which are essential for sustainable development across economic, social, and environmental dimensions.

Blomström and Kokko (1998) identify three principal sub-mechanisms through which such technological or non-technological knowledge spillovers can occur: a demonstration effect, employee mobility effect, and competition effect.¹ Understanding these sub-mechanisms is important for leveraging potential benefits and addressing the challenges posed by MNEs in fostering sustainability within EMs (Kim et al., 2022).

Demonstration effects involve MNEs displaying advanced technologies and efficient organizational practices to local firms. In the realm of environmental sustainability, this can manifest itself as showcasing renewable energy technologies, waste reduction techniques, and efficient resource utilization. In terms of social sustainability, this can occur through the demonstration of corporate best practices in terms of the treatment of women and vulnerable groups (e.g., Fang et al. 2023). For example, the adoption of high ESG standards by MNEs can serve as a model for local businesses, thereby raising the overall sustainability standards of the host country.

The *movement of employees* between firms also allows the transfer of skills and knowledge from the MNE to local firms (Balsvik, 2011). Employees who have worked in MNEs can bring valuable insights into sustainable practices when they move to local firms in EM. This sharing of knowledge can build capacity to develop sustainable

¹ Blomström and Kokko (1998) identify supply chain linkages as a fourth spillover mechanism. We treat GVC linkages as a separate mechanism different from spillovers.

practices and can foster a culture of sustainability at the grassroots level, enhancing both the social and environmental dimensions of sustainability.

The presence of MNEs often introduces a higher level of *competition*, compelling local firms to improve their efficiencies and innovations to survive. This pressure can accelerate the adoption of sustainable technologies and practices as firms strive to maintain their competitive edge, potentially leading to enhanced economic sustainability through increased productivity and innovation.

Similar to our discussion about FDI, it is important to caution that the sustainability spillover effects of MNEs in EMs is not universally positive (Yu, Bansal & Arjaliès, 2023). Local companies may be all too ready to adopt new technologies or corporate practices that improve their financial bottom line at the cost of environmental or social conditions. Similarly, competition effects, may lead to crowding-out if local firms cannot keep pace, potentially leading to market exits or reduced labor conditions under cost-cutting measures. Furthermore, the standards imposed by MNEs might be culturally inappropriate or too demanding for local firms, leading to economic stress or social discontent (Dau et al., 2022). The realization of sustainability-promoting spillover effects is contingent upon a balanced approach that acknowledges and mitigates potential negative impacts to ensure that the sustainability achievements are both inclusive and comprehensive in EMs.

3.1.3 Global value chain linkages

The *supply chain linkages* that MNEs develop with EM suppliers (backward linkages) and EM customers (forward linkages) is a third important pathway for transmitting technologies and sustainable business practices to firms in EMs. Through these supply chain connections, MNEs can diffuse technology and promote the adoption of sustainability standards among its value chain partners (Pietrobelli et al., 2021; Van Assche & Brandl, 2021). The question, however, is the extent to which MNEs are willing to pursue improved sustainability practices among its GVC partners and the extent to which suppliers are willing or able to adopt them.

From our discussion above, it should be clear that many profit-seeking MNEs have little incentive to improve sustainable business practices among their GVC partners. A main motive for MNEs to extend their GVCs to EMs is for efficiency-seeking purposes, that is, reducing costs by arbitraging cost differences across countries. A large literature has

discussed how such an arbitrage within GVCs can lead to the entrenchment of inequalities, where developed countries increase their own welfare through the exploitation of marginalized workers in EMs and through the outsourcing of pollutive activities overseas (Bair & Werner, 2011; Pietrobelli et al., 2021).

There are nonetheless MNEs that provide technology and knowledge to its suppliers that can improve the business operations of suppliers through economic upgrading, that is, through an upward movement of value-added activities (Gereffi, 2005; Gereffi & Lee, 2016). This may place these suppliers on dynamic learning curves that strengthen their domestic technological capabilities, including in sustainability-related sectors (Gereffi, 2019; Pietrobelli et al., 2021).

However, GVC scholarship cautions that higher value-added does not necessarily go hand-in-hand with more sustainable practices among suppliers. To study sustainability dimensions in GVCs, scholars have developed the concepts of ‘social upgrading’ and ‘environmental upgrading’. Social upgrading refers to “the process of improvement in the rights and entitlements of workers as social actors, which enhances the quality of their employment” (Barrientos, Gereffi & Rossi., 2011, p. 324). Environmental upgrading is the process in which GVC actors improve their environmental performance to reduce the negative impact of their products on the environment (De Marchi, Di Maria & Micelli, 2013; Jeppesen & Hansen, 2004; Khattak et al., 2015). A central insight from GVC studies is that economic upgrading is neither a necessary nor a sufficient condition for social and environmental upgrading among suppliers. A study conducted by Barrientos, Gereffi & Rossi (2011) on the Moroccan garment industry, for example, reveals that economic upgrading benefitted only a select group of regular workers on a permanent contract. The studies on other EMs, such as China and Mexico, also suggest that economic upgrading does not automatically lead to social upgrading (Jindra et al., 2019; Locke et al., 2007).

More recent scholarship has further highlighted that MNE efforts to improve sustainability conditions within GVCs may have detrimental implications for EM activities outside of these GVCs. Requiring EM suppliers to comply to higher environmental and social standards may cut the most vulnerable EM suppliers and workers out of GVCs, which desperately rely on these activities for their livelihood (Narula, 2019; Soundararajan et al., 2025). And pressuring EM suppliers to green their

own activities might lead to the adoption of initiatives that worsen the environmental actions of their sub-suppliers (De Marchi & Di Maria, 2019), often also in EMs.

Finally, it is important to analyze the willingness and ability of suppliers to improve their sustainability practices. Jeppesen and Hansen (2004) suggest that environmental upgrading has been driven by the lead firms, which are under pressure stemming from harsh competition and stakeholders' expectations. Nonetheless, suppliers in EMs can be skeptical about the return on investments in environmental performance due to the broadness of environmental issues and the vagueness of the concept of environmental upgrading (Khattak et al., 2015). This also relates to the limited resources of firms in low-income nations. The study carried out by Achabou, Dekhili and Hamdoun (2017) on the production of olive oil in Tunisia shows that although the negative impact on the local environment has been reduced, the positive impact also remains limited because of a lack of financial and technical resources. The problem is that MNEs from advanced countries tend to impose Western norms and environmental standards upon less developed countries without providing adequate support and resources to local entities (Lund-Thomsen & Lindgreen, 2014).

To upgrade GVC activities in a sustainable manner, governance mechanisms have been found to be crucial (Gereffi & Lee, 2016; Khattak et al., 2015). The concept of GVC governance centers on the power structure exercised by the lead firms to shape their value chains, allocate value-added activities across countries, and determine the terms and conditions of GVC participation (Gereffi & Lee, 2012; Kaplinsky, 2004; Van Assche & Narula, 2023). However, while the lead firms' orchestration is important in terms of implementing sustainable business among the key actors involved, relationships between MNEs from advanced countries and firms in EMs are typically asymmetric (Clark & Geppert, 2006). An unequal distribution of power among participants in a value chain arises due to differences in various factors, such as the participant's organizational size, expertise, resources and dependence on others in information and technologies (Nachum, 2021; Nyaga et al., 2013; Strange, 2011).

Power imbalances are central to international outsourcing, with small suppliers in emerging markets often lacking bargaining power (Gereffi et al., 2005; Magnani et al., 2019; Vilakazi & Ponte, 2020). Lead firms frequently shift compliance burdens to these

suppliers, creating a “sustainability supplier squeeze” (Ponte, 2019). This dynamic allows MNEs to retain profits while imposing demanding standards on Global South suppliers, sometimes leading to unethical or unsustainable practices (Bernards et al., 2022; Talay et al., 2020; Husted & de Sousa-Filho, 2017). To address this, private sustainability governance frameworks promote improved practices and systems (Awuzie & Monyane, 2020; Bush et al., 2015). Power relations can shift as suppliers enhance their capabilities or act collectively to drive change (Humphrey & Schmitz, 2002; Glavee-Geo et al., 2022). Nonetheless, meaningful progress also depends on lead firms managing relationships more equitably (Touboulic et al., 2014).

3.2 MNEs as technology leaders, responsibility leaders, and efficiency seekers

Our analysis of the three mechanisms – FDI, spillovers, and GVC linkages – has uncovered that MNEs play three distinct roles that influence the sustainability trajectory of EMs. They play the role of technology leaders that can potentially generate sustainability-related knowledge diffusion to EMs; they are responsible leaders who may use standards to promote sustainable practices to firms in EMs; and they are efficiency seekers who may undermine sustainable business in EMs by overly zealously using these countries for cost reduction. We have also seen that several pull factors in EMs and push factors in MNE home countries influence the degree to which MNEs take on these roles, which we in this section categorize into: the institutional environment, the local absorptive capacity, the dynamic market environment, and stakeholder pressures. Figure 1 provides a visual summary of these relations between MNEs and sustainable business in EMs, on which we elaborate in this section.

3.2.1 MNEs as technology leaders

A key message that came from our analysis is that MNEs are generally *technology leaders* who possess cutting-edge technologies and innovative business practices that are often absent in EMs. Gaining access to these technologies is crucial for the widespread adoption of sustainable practices in EMs, as they enable local firms to transition toward more resource-efficient, low-emissions, and socially responsible operations. However, the extent to which MNEs choose to engage in such technology diffusion is shaped by both pull and push factors. In terms of pull factors, it depends on the EM’s institutional environment, the absorptive capacity of local firms, and the dynamic market environment. In terms of push factor, it depends on the stakeholder

pressures that the MNE faces at home. We discuss these factors and present outstanding research questions regarding the conditions under which these mechanisms are most effective, the barriers that hinder technology diffusion, and the policies that EMs can adopt to strengthen technology diffusion.

Institutional environment. The strength of a country's institutional framework is recognized as a pivotal pull factor that shapes the degree of sustainability-related technology diffusion by MNEs in EMs. Strong regulatory frameworks, well-enforced environmental and labor standards, and incentives for green and social investments have been found to create an enabling environment that encourages MNEs to implement and diffuse sustainable technologies and practices in EMs. Conversely, weak institutions not only discourage such diffusion but also attract forms of FDI and GVC practices that may compromise long-term sustainability in EMs. Despite the literature's general recognition of these dynamics, several important questions remain for future research: How do variations in the institutional context across EMs influence the amount and type of sustainability-related technologies and innovative practices that MNEs are willing or able to diffuse? Does the institutional environment matter differently for the diffusion of environmental versus social technologies? What mechanisms can EMs adopt to strengthen institutional capacity to foster sustainable FDI and responsible GVC integration?

Absorptive capacity. Our analysis has shown that MNEs are more likely to transfer sustainability-related technologies to foreign countries when local firms and their workers possess the technical expertise and infrastructure necessary to adopt and implement them effectively. In contrast, limited capabilities may hinder technological diffusion, restricting the ability for MNEs to contribute to sustainable business. Nonetheless, most of these insights have not been derived in EM contexts. Outstanding questions are therefore: how does the absorptive capacity of EM firms differ from those in developed and low-growth developing countries? What strategies and governance structures can MNEs develop to enhance the absorptive capacity of local firms to facilitate sustainability-related technology transfer? And what role can government policies play in fostering an environment conducive to the diffusion of sustainability-related technologies?

Dynamic market environment. We have shown that EM dynamics, including fast growth and the presence of consumer demand for sustainable products and services,

can influence MNEs' incentives to introduce sustainability-related technologies. In markets where consumers and business partners prioritize environmental and social responsibility, MNEs may find it commercially advantageous to implement and disseminate sustainable innovations. A question that remains unaddressed, however, is which type of sustainable products, services and technologies EM consumers and firms first turn to, and what factors influence this choice.

Stakeholder pressures. We have seen that stakeholders in the home country shape the strategic objectives that MNEs develop regarding technology transfer to EMs (e.g., Konara et al., 2021). While some firms may proactively integrate sustainability into their global strategies, seeking reputational benefits, regulatory compliance, or long-term cost savings, others may be less inclined to do so unless compelled by host-country policies or stakeholder pressures. The interplay of these factors ultimately determines whether and to what extent MNEs transfer sustainability-related technologies to EMs. Few studies, however, have empirically analyzed this in the EM context.

3.2.2 MNEs as responsible leaders

Our analysis has also shown that MNEs often have both the mandate and the power to promote sustainable business throughout its subsidiary network and along its GVC, making them potential responsible leaders. MNEs – especially those headquartered in developed countries – are frequently subject to intense scrutiny by various stakeholders, including consumers, governments, and non-governmental organizations. This scrutiny increases their responsibility boundaries (DeBerge, 2024) and drives them to implement sustainability standards across their global operations. Our discussion has referred to an emerging literature around sustainability standards but many questions remain.

Institutional environment. In theory, we have seen that the strength of a country's institutions shapes both the willingness and ability of MNEs to assume the role of a responsible leader and promote sustainability standards among its affiliates and GVC partners in EMs. Indeed, weaker institutions may deter responsible MNEs from engaging with firms in EMs, as these companies often exhibit lower sustainability performance and it is harder to monitor their operations. This is nonetheless a relation that still needs to be empirically validated in the EM context (Goerzen, Iskander & Hofstetter (2021) is a notable exception).

Absorptive capacity. Like with technology diffusion, but virtually unstudied, the ability of EM firms to comply with MNE-imposed sustainability standards also depends on their absorptive capacity. Complying to sustainability standards requires investments, which many EM suppliers are unable to finance due to suboptimal financial systems and thin profit margins. Adding to this, supplier compliance may require substantial efforts for EM firms to shift behaviors around issues that are not deeply embedded in the local cultural context (Lund-Thomsen & Lindgreen, 2014). More research is needed to identify the factors that influence the capacity of EM firms to comply to MNE-imposed sustainability standards.

Dynamic market environment. MNEs may favor the role of responsible leader in EMs relative to low-growth developing countries due to the fact that there are growing local stakeholder pressures in EMs for firms to adopt a sustainable conduct. This question has to our knowledge not been addressed empirically however.

Stakeholder pressures. As stakeholders in developed countries place greater emphasis on environmental, social, and governance (ESG) issues, key stakeholders including governments and capital markets are increasingly adopting reporting and due diligence rules that require MNEs to promote sustainability throughout its global operations and GVCs (Goerzen et al., 2025; Van Assche & Narula, 2023). While these legislative measures and domestic stakeholder pressures are expected to encourage MNEs to assume the role of responsible leader within EMs, this assumption needs to be empirically validated. Moreover, this new legislative trend raises several other intriguing questions: how does the expectation of responsible leadership impact an MNE's competitiveness in the global economy? Could responsible leadership hinder an MNE's ability to drive sustainability-related technological advancement in EMs? In other words, do responsible and technological leadership act as complements or substitutes?

3.2.3 MNEs as efficiency seekers

While the roles of technology and responsible leadership generally contribute positively to sustainability in EMs, we have seen that the role of MNEs as efficiency seekers can generate mixed or even negative effects on sustainability in EMs. In their pursuit of lower operational costs, MNEs may opt for practices that, while financially beneficial,

can be detrimental for sustainability in EMs. This includes engaging with suppliers in EMs that may not adhere to sustainable practices due to the cost implications.

Institutional environment. It has been widely documented that the drive for efficiency can lead to a 'race to the bottom' in terms of environmental and labor standards, particularly in EMs where regulatory frameworks are weak. For example, Brandl et al. (2022) finds that land acquisitions by foreign MNEs weaken community informal institutions and, as a consequence, exacerbate rural poverty. This pursuit for efficiency can exacerbate environmental degradation and worsen working conditions, as local suppliers cut corners to meet cost objectives set by MNEs. An outstanding question in this area is which institutional features are most likely to contribute to race to the bottom behavior.

Absorptive capacity. The ability of EM firms to adapt to the MNE demands for cost reductions is a research area that has flown under the radar. In many countries, the existence of a large informal sector has allowed GVC suppliers to reduce costs and increase flexibility (Narula, 2019). An open research question is what other factors drive the willingness and capability of MNEs to take on the role of efficiency seekers in EMs.

Dynamic market environment. It remains an open question how an EMs dynamic market environment influence the ability of MNEs to act as efficiency seekers in EMs. Fast economic growth early on can incentivize MNEs to engage in efficiency-seeking in EMs; however, rising wages and other input costs may later on dissuade MNEs to use EMs as cost reducing locations.

Stakeholder pressures. To mitigate the negative impacts of efficiency-seeking behavior, many MNEs are facing growing stakeholder pressure to adopt responsible leadership, demonstrating a clear trade-off between these two MNE roles. This observation has led to a flourish in IB research on decoupling – the need for firms to balance efficiency concerns with institutional pressures (Xu et al., 2024) – with studies analyzing the likelihood that MNEs will “walk the talk” in terms of implementing and enforcing corporate codes of conduct (e.g., van Tulder et al., 2021). More work is needed to understand the role that EM engagement plays in the decoupling of MNEs (Bu, Xu & Tang, 2023).

4. The papers in this special issue

The five papers in the special issue cover MNE practices in and from EMs, include a conceptual piece, and four empirical papers that adopt quantitative and qualitative methods. The topics range from sustainability transition, corporate social responsibility, decoupling to Bottom of the Pyramid, and legitimacy issues. Taken together, the articles illustrate the many ways through which MNE practices in and from EMs deal with sustainability challenges and contribute to the intersectional research field of sustainable development and IB, in particular the EMs.

Ascani et al., (2023) explores whether Chinese MNEs in their FDI location choices seek or avoid countries with weaker environmental conditions. In their study of 948 greenfield manufacturing investments across 82 countries from 2013 to 2019, they find that Chinese FDI is attracted by locations with weak environmental ecosystem vitality, especially in developing countries and in pollution-intensive industries. The paper provides a nice illustration how lower pressures for MNEs to act as responsible leaders combined with a strong efficiency-seeking motivation can lead to a negative relation between FDI and sustainable practices, especially in South-South relations.

Roh et al., (2024) investigates the relationship between innovation ambidexterity and MNEs' sustainable performance. Studying 228 MNE subsidiaries in China, they find that innovation ambidexterity, supported by dynamic capabilities, enables subsidiaries to achieve better environmental and social outcomes. Furthermore, they highlight the moderating role that host government pressures plays. Overall, the article contributes valuable insights into MNEs as technology leaders and the strategies that they develop for long-term sustainability in international markets.

Hong et al., (2024) uses a qualitative case study of a Japanese MNE's China-based subsidiary to analyze how the shift from CSR to creating shared value (CSV) influences its economic and social goals. This transition showcases a strategic shift towards integrating short-term economic gains with long-term social benefits, employing a temporal form of policy-practice decoupling to manage the inherent trade-offs.

Opening up the black box of MNEs as responsible leaders, their findings contribute to understanding the dynamic between CSR and CSV and the complexities of managing both economic and social objectives in MNE settings.

Heucher et al., (2024) applies a paradox lens to understand how MNEs manage sustainability tensions within global, interorganizational systems, focusing on a consortium in the food packaging industry transitioning to bio-based plastics. Their case study reveals the global-local paradoxes that stall sustainability transitions, advocating for a glocal approach to managing these challenges effectively. This research illuminates the complex interdependencies and tensions faced by MNEs in striving for sustainability across different geographic and institutional contexts.

Verbeke et al., (2024) analyzes India's journey toward digital and financial inclusion, particularly addressing the 'poverty premium' that affects Bottom of the Pyramid (BOP) consumers. They propose enhancing contract-enforcing institutions through a transaction cost economics approach, highlighting the importance of strong formal institutions for achieving social equity in BOP markets. Their work contributes to the discourse on the role of MNEs in overcoming systemic economic barriers in emerging markets.

5. Conclusion

EMs present unique challenges and opportunities for sustainable business practices. While rapid economic growth puts strain on sustainable practices as it leads to increased demand for resources and environmental degradation, it also creates larger market demand for sustainable solutions and opportunities for innovation and investment in sustainable technologies. The potential for sustainable business in EMs is immense (Dögl, Holtbrügge & Schuster, 2012; Herstatt & Tiwari, 2017), but there are numerous obstacles to putting sustainable business ideas into practice (Bekaert & Harvey, 2002; Schuster & Holtbrügge, 2014).

MNEs must take a nuanced approach to sustainable business practices in EMs. They need to balance the need to meet local regulations and cultural norms with their own

corporate sustainability goals. Given the controversy surrounding MNE activity in EMs, it is important to think about how MNEs may collaborate with local businesses, and governments. This can involve sharing knowledge and resources, building local capacity, and developing policies that incentivize sustainable practices. We have developed a framework that identifies the various roles that MNEs play and the mechanisms that MNEs use to influence sustainable business practices in EMs, which we believe can be helpful for future research.

Building on the framework we have developed, we believe that future research on MNEs' impact on sustainability business in EMs needs to consider the advantages and costs of MNEs engaging in sustainability business. What drives MNEs as technology leaders to transfer sustainable technologies and practices to EMs? To what extent is the growing sustainability imperative in developed countries altering the role of MNEs as responsible leaders and how does this translate into changes in sustainability practices in EMs? And how does the trade-off between being a responsible leader and an efficiency leader alter MNEs' engagement with EMs?

More research is also needed on the public policy actions that EM governments can take to better harness MNE actions for sustainable development. Sustainability-related technologies are different from general technologies and attracting FDI in these areas may thus be responsive to different types of policy incentives. Policies that strengthen the ESG performance of local firms may improve the attractiveness of EM suppliers to be included in GVCs. To date, there has been little empirical research to address these questions.

Additionally, more study is required on the social and cultural aspects of MNEs' sustainable development in EMs. This may entail researching the contribution that regional communities make to the advancement of sustainable practices as well as the bearing that cultural norms and values have on sustainability.

Promising theoretical angles to evaluate these questions are:

- Institutional theory, which contends that a society's norms and values influence the adoption of sustainable practices. Understanding the function of institutions in fostering sustainability is essential in EMs, where cultural norms and values differ from those in industrialized nations. Indeed, the institutional context is bound to shape both the positive and negative externalities related to business activities, and so a promising research direction is exploring the varieties of sustainable business that emerge across EMs.
- Resource dependency theory contends that in order to thrive, enterprises must adjust to the resource limitations of their surroundings. Businesses that value sustainability may have a higher chance of long-term success in emerging countries where resources may be few or challenging to get. More research is needed to explore how EMs' distinct resource endowments shape the good, bad, and ugly sides of sustainable business in EMs.
- Stakeholder theory, which suggests that businesses must consider the needs and priorities of all stakeholders, including local communities and the environment, in order to be successful. In EMs, where social and environmental issues may be more pressing, but less pressed, understanding the role of stakeholders in promoting sustainability is crucial.

Overall, we hope that the framework in this article will help to deepen the understanding of sustainable international business practices and offer new directions for future research in the evolving landscape of global sustainability.

References

- Abbasi, K. R., Shahbaz, M., Zhang, J., Irfan, M., & Alvarado, R. (2022). Analyze the environmental sustainability factors of China: The role of fossil fuel energy and renewable energy. *Renewable Energy*, 187, 390-402.
- Acemoglu, D., & Robinson, J. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Currency.
- Achabou, M. A., Dekhili, S., & Hamdoun, M. (2017). Environmental upgrading of developing country firms in global value chains. *Business Strategy and the Environment*, 26(2), 224-238.
- Ajwani-Ramchandani, R., Figueira, S., de Oliveira, R. T., Jha, S., Ramchandani, A., & Schuricht, L. (2021). Towards a circular economy for packaging waste by using new technologies: The case of large multinationals in emerging economies. *Journal of Cleaner Production*, 281, 125139.
- Amendolagine, V., Hansen, U. E., Lema, R., Rabellotti, R., & Ribaud, D. (2023). Do green foreign direct investments increase the innovative capability of MNE subsidiaries? *World Development*, 170, 106342.
- Ascani, A., Nair, L. B., & Iammarino, S. (2023). Racing to the bottom or seeking legitimacy? National environmental performance and the location strategies of Chinese MNEs. *Journal of International Management*, 29(2): 100993.
- Awuzie, B., & Monyane, T. G. (2020). Conceptualizing sustainability governance implementation for infrastructure delivery systems in developing countries: Success factors. *Sustainability*, 12(3), 961.
- Bair, J., & Werner, M. (2011). Commodity chains and the uneven geographies of global capitalism: A disarticulations perspective. *Environment and planning A*, 43(5), 988-997.
- Balsvik, R. (2011). "Is Labor Mobility a Channel for Spillovers from Multinationals? Evidence from Norwegian Manufacturing." *Review of Economics and Statistics*, 93(1), 285-297.
- Banerjee, S.G., Oetzel, J.M., & Ranganathan, R. (2006). Private Provision of Infrastructure in Emerging Markets: Do Institutions Matter? *Development Policy Review*, 24(2): 175-202.
- Bansal, P. (2005). Evolving sustainably: a longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3): 197-218.
- Bansal, P., & Song, H.-C. (2017). Similar But Not the Same: Differentiating Corporate Sustainability from Corporate Responsibility. *Academy of Management Annals*, 11(1): 105-149.
- Barrientos, S., Gereffi, G., & Rossi, A. (2011). Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review*, 150(3-4), 319-340.

- Bekaert, G., & Harvey, C.R. (2002). Research in emerging markets finance: looking to the future. *Emerging Markets Review*, 3(4): 429-448.
- Bernards, N., Campbell-Verduyn, M., & Rodima-Taylor, D. (2022). The veil of transparency: Blockchain and sustainability governance in global supply chains. *Environment and Planning C: Politics and Space*, 23996544221142763.
- Blomström M., & Kokko A. (1998). Multinational corporations and spillovers. *Journal of Economic Surveys*, 12(3), 247-277.
- Boston Consulting Group. (2023). The sustainability imperative in emerging markets. <https://www.bcg.com/publications/2023/the-importance-of-sustainability-in-business>
- Brammer, S., Nardella, G., & Surdu, I. (2021). Defining and deterring corporate social irresponsibility: Embracing the institutional complexity of international business. *Multinational Business Review*, 29(3), 301-320.
- Brandl, K., Moore, E., Meyer, C., & Doh, J., (2022). The impact of multinational enterprises on community informal institutions and rural poverty. *Journal of International Business Studies* 53, 1133-1152.
- Buckley, P. J., Doh, J. P., & Benischke, M. H. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. *Journal of International Business Studies*, 48(9): 1045-1064.
- Bu, J., Cuervo-Cazurra, A., Luo, Y., & Wang, S. L. (2024). Mitigating soft and hard infrastructure deficiencies in emerging markets. *Journal of World Business*, 59(4), 101540.
- Bu M, & Wagner M. (2016). Racing to the bottom and racing to the top: The crucial role of firm characteristics in foreign direct investment choices. *Journal of International Business Studies*, 47, 1032-1057.
- Bu, M., Xu, L., & Tang, R.W., (2023). MNEs' transfer of socially irresponsible practices: A replication with new extensions. *Journal of World Business* 58, 101384.
- Bush, S. R., Oosterveer, P., Bailey, M., & Mol, A. P. (2015). Sustainability governance of chains and networks: A review and future outlook. *Journal of Cleaner Production*, 107, 8-19.
- Capizzo, L., & Luisi, M. (2024). Responsibility, sustainability, or environmental justice? Strategic communication and evolving expectations for stewardship and citizenship. *Public Relations Inquiry*, 13(2), 161-187.
- Casanova, L., & Miroux, A. (2022). *Emerging Market Multinationals Report 2022: Reinventing Global Value Chains*. Cornell University, SC Johnson College of Business, <https://ecommons.cornell.edu/handle/1813/112770>. Retrieved 2023-05-25.
- Chiarvesio, M., De Marchi, V., & Di Maria, E. (2015). Environmental innovations and internationalization: Theory and practices. *Business strategy and the environment*, 24(8), 790-801.

- Claessens, S., & Yurtoglu, B.B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review*, 15: 1-33.
- Clark, E., & Geppert, M. (2006). Socio-political processes in international management in post-socialist contexts: Knowledge, learning and transnational institution building. *Journal of International Management*, 12(3), 340-357.
- Dau, L. A., Li, J., Lyles, M. A., & Chacar, A. S. (2022). Informal institutions and the international strategy of MNEs: Effects of institutional effectiveness, convergence, and distance. *Journal of International Business Studies*, 53(6): 1257-81.
- DeBerge, T. (2024). Responsibility boundaries and the governance of global value chains: The interplay of efficiency, ethical, and institutional pressures in global strategy. *Global Strategy Journal*, 14(1), 196-222.
- De Marchi, V., Cainelli, G., & Grandinetti, R. (2022). Multinational subsidiaries and green innovation. *International Business Review*, 31(6), 102027.
- De Marchi, V., & Di Maria, E. (2019). Environmental upgrading and suppliers' agency in the leather global value chain. *Sustainability*, 11(23), 6530.
- De Marchi, V., Di Maria, E., & Micelli, S. (2013). Environmental strategies, upgrading and competitive advantage in global value chains. *Business Strategy and the Environment*, 22(1), 62-72.
- Demena, B. A., & van Bergeijk, P. A. (2019). Observing FDI spillover transmission channels: Evidence from firms in Uganda. *Third World Quarterly*, 40(9), 1708-1729.
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5): 289-300.
- DesJardins, J. (2021). *Is it Time to Jump off the Sustainability Bandwagon?* College of Saint Benedict, Saint John's University.
- Dobers, P., & Halme, M. (2009). Corporate social responsibility and developing countries. *Corporate Social Responsibility and Environmental Management*, 16(5): 237-249.
- Dögl, C., Holtbrügge, D. & Schuster, T. (2012). Competitive advantage of German renewable energy firms in India and China: An empirical study based on Porter's diamond. *International Journal of Emerging Markets*, 7(2): 191-214.
- Doh, J., Rodrigues, S., Saka-Helmhout, A., & Makhija, M. (2017). International business responses to institutional voids. *Journal of International Business Studies*, 48: 293–307.
- Doh, J., Teegen, H. & Mudambi, R. (2004). Balancing private and state ownership in emerging markets' telecommunications infrastructure: country, industry, and firm influences. *Journal of International Business Studies*, 35, 233–250.
- Ellimäki, P., Aguilera, R. V., Hurtado-Torres, N. E., & Aragón-Correa, J. A. (2023). The link between foreign institutional owners and multinational enterprises' environmental outcomes. *Journal of International Business Studies*, 54(5), 910-927.

- Fang, S., Xu, D., Xu, L.C., & Shams, H., (2023). Does FDI have a social demonstration effect in developing economies? Evidence based on the presence of women-led local firms. *Journal of International Business Studies*, 54, 1332-1350.
- Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Bakker, D.C., Hauck, J., Landschützer, P., Le Quéré, C., Luijkx, I.T., & Peters, G.P., (2023). *Global carbon budget 2023*. Earth System Science Data, 15, 5301-5369.
- Gao, C., Zuzul, T., Jones, G., & Khanna, T. (2017). Overcoming Institutional Voids: A Reputation-Based View of Long-Run Survival. *Strategic Management Journal*, 38(11): 2147-2167.
- Gereffi, G. (2005). The global economy: Organization, governance, and development. In Smelser, N. J., & Swedberg, R. (Eds.) *The Handbook of Economic Sociology* (2nd ed.) (pp. 160–182). Princeton, NJ: Princeton University Press.
- Gereffi, G. (2019). Global value chains and international development policy: Bringing firms, networks and policy-engaged scholarship back in. *Journal of International Business Policy*, 2(3), 195-210.
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78-104.
- Gereffi, G., & Lee, J. (2012). Why the world suddenly cares about global supply chains. *Journal of Supply Chain Management*, 48(3), 24-32.
- Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: Why governance matters. *Journal of Business Ethics*, 133(1), 25-38.
- Glavee-Geo, R., Engelseth, P., & Buvik, A. (2022). Power imbalance and the dark side of the captive agri-food supplier–buyer relationship. *Journal of Business Ethics*, 178(3), 609-628.
- Goerzen, A., Iskander, S. P., & Hofstetter, J. (2021). The effect of institutional pressures on business-led interventions to improve social compliance among emerging market suppliers in global value chains. *Journal of International Business Policy*, 4(3), 347-367.
- Goerzen, A., Van Assche, A., Zhan, J., & Zhang, L. (2025). From the editor: global sustainability reporting standards and the future of international business. *Journal of International Business*, forthcoming.
- Goodland, R. (1995). The Concept of Environmental Sustainability. *Annual Review of Ecology and Systematics*, 26: 1-24.
- Hanson, G. H. (2001). Should countries promote foreign direct investment? G-24 Discussion Paper Series, United Nations Conference on Trade and Development. Available at <http://people.umass.edu/econ797f/Projects/out%20readings/hanson.fdi.un.pdf>.
- Herstatt, C., & Tiwari, R. (eds.) (2017). *Lead Market India: Key Elements and Corporate Perspectives for Frugal Innovations*. Cham: Springer.

- Heucher, K., Schrage, S., & Abosag, I., When Global is Not Enough: Taking a Paradox Lens to Sustainability Transitions in Global, Interorganizational Systems. *Journal of International Management*, 30(5): 101186.
- Holtbrügge, D. (2022). *Intercultural Management. Concepts, Practice, Critical Reflection*. London: Sage.
- Holtbrügge, D., & Dögl, C. (2012). How International is Corporate Environmental Responsibility? A Literature Review. *Journal of International Management*, 18(2): 180-195.
- Hong, J., Leung, T., & Snell, R. S. (2024). Transitioning from CSR to CSV in a foreign subsidiary in China through temporal decoupling. *Journal of International Management*, 30(1): 101082.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249-267.
- Humphrey, J., Schmitz, H. (2002) How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies*, 36(9), 1017-1027.
- Husted, B. W., & de Sousa-Filho, J. M. (2017). The impact of sustainability governance, country stakeholder orientation, and country risk on environmental, social, and governance performance. *Journal of Cleaner Production*, 155, 93-102.
- Jeppesen, S., & Hansen, M. W. (2004). Environmental upgrading of third world enterprises through linkages to transnational corporations. Theoretical perspectives and preliminary evidence. *Business Strategy and the Environment*, 13(4), 261-274.
- Jindra, B., Hatani, F., Steger, T., & Hiemer, J. (2019). Social upgrading and cooperative corporate social responsibility in global value chains: The case of Fairphone in China. *Global Networks*, 19(3), 371-393.
- Kaplinsky, R. (2004). Spreading the gains from globalization: What can be learned from value-chain analysis? *Problems of Economic Transition*, 47(2), 74-115.
- Khanna, T., & Palepu, K.G. (2010). *Winning in Emerging Markets: A Road Map for Strategy and Execution*. Boston, Mass.: Harvard Business Press.
- Khattak, A., Stringer, C., Benson-Rea, M., & Haworth, N. (2015). Environmental upgrading of apparel firms in global value chains: Evidence from Sri Lanka. *Competition & Change*, 19(4), 317-335.
- Kim, N., Sun, J., Yin, H., & Moon, J.J., (2022). Do foreign firms help make local firms greener? Evidence of environmental spillovers in China. *Journal of International Business Studies* 53, 1370-1393.
- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51(1), 23-34.
- Kolk, A., & van Tulder, R. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*, 19(2): 119-125.

- Kolk, A., Kourula, A., & Pisani, N. (2017). Multinational enterprises and the Sustainable Development Goals: what do we know and how to proceed? *Transnational Corporations*, 24. <https://doi.org/https://doi.org/10.1016/j.intman.2013.03.005>
- Konara, P., Lopez, C., & Shirodkar, V. (2021). Environmental innovation in foreign subsidiaries: The role of home-ecological institutions, subsidiary establishment mode and post-establishment experience. *Journal of World Business*, 56(6), 101261.
- Kvint, V. (2009). *The Global Emerging Market: Strategic Management and Economics*. New York, London: Routledge.
- Le, T. T., Tran, P. Q., & Dhar, B. K. (2024). Circular economy and social life cycle assessment: The role of corporate renewable energy strategies, environmental justice, and environmental impacts. *Journal of Cleaner Production*, 485, 144387.
- Linton, J.D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 25(6): 1075-1082.
- Liu, F., Lai, K.-h., & Cai, W. (2021). Responsible Production for Sustainability: Concept Analysis and Bibliometric Review. *Sustainability*, 13, 1275.
- Locke, R., Kochan, T., Romis, M., & Qin, F. (2007). Beyond corporate codes of conduct: Work organization and labour standards at Nike's suppliers. *International Labour Review*, 146(1-2), 21-40.
- Lubin, D. A., & Esty, D. C. (2010). The sustainability imperative. *Harvard business review*, 88(5), 42-50.
- Lund-Thomsen, P., & Lindgreen, A. (2014). Corporate social responsibility in global value chains: Where are we now and where are we going? *Journal of Business Ethics*, 123, 11-22.
- Magnani, G., Zucchella, A., & Strange, R. (2019). The dynamics of outsourcing relationships in global value chains: Perspectives from MNEs and their suppliers. *Journal of Business Research*, 103, 581-595.
- Maletič, M., Maletič, D., & Gomišček, B. (2018). The role of contingency factors on the relationship between sustainability practices and organizational performance. *Journal of Cleaner Production*, 171, 423-433.
- Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404-424.
- Meyer, K.E., (2004). Perspectives on multinational enterprises in emerging economies. *Journal of International Business Studies* 35, 259-276.
- Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(3): 3-22.
- Montiel, I. (2008). Corporate social responsibility and corporate sustainability: Separate pasts, common futures. *Organization & Environment*, 21(3), 245-269.

- Montiel, I., Cuervo-Cazurra, A., Park, J., Antolín-López, R., & Husted, B.W. (2021). Implementing the United Nations' Sustainable Development Goals in international business. *Journal of International Business Studies*, 52, 999–1030.
- Nachum, L. (2021). Value distribution and markets for social justice in global value chains: Interdependence relationships and government policy. *Journal of International Business Policy*, 4(4), 541.
- Narula, R. (2019). Enforcing higher labor standards within developing country value chains: Consequences for MNEs and informal actors in a dual economy. *Journal of International Business Studies*, 50(9), 1622-1635.
- Nielsen, B. B., Asmussen, C. G., & Weatherall, C. D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business*, 52(1), 62-82.
- Nudurupati, S. S., Budhwar, P., Pappu, R. P., Chowdhury, S., Kondala, M., Chakraborty, A., & Ghosh, S. K. (2022). Transforming sustainability of Indian small and medium-sized enterprises through circular economy adoption. *Journal of Business Research*, 149, 250-269.
- Nyaga, G. N., Lynch, D. F., Marshall, D., & Ambrose, E. (2013). Power asymmetry, adaptation and collaboration in dyadic relationships involving a powerful partner. *Journal of Supply Chain Management*, 49(3), 42-65.
- O'Neill, J. (2001). *Building Better Global Economic BRICs*. Goldman Sachs, Global Economics Paper No. 66, http://www.elcorreo.eu.org/IMG/pdf/Building_Better_Global_Economic_Brics.pdf. Retrieved 2023-05-25.
- Pavlínek, P., & Žížalová, P. (2016). Linkages and spillovers in global production networks: firm-level analysis of the Czech automotive industry. *Journal of Economic Geography*, 16(2), 331-363.
- Pietrobelli, C., Rabellotti, R., & Van Assche, A. (2021). Making sense of global value chain-oriented policies: The trifecta of tasks, linkages, and firms. *Journal of International Business Policy*, 4(3), 327-346.
- Piketty, T. (2014). *Capital in the Twenty-First Century*. Boston, Mass.: Harvard University Press.
- Pisani, N., Kolk, A., Ocelík, V., & Wu, G. (2019). Does it pay for cities to be green? An investigation of FDI inflows and environmental sustainability. *Journal of International Business Policy*, 2, 62-85.
- Ponte, S. (2019). *Business, Power and Sustainability in a World of Global Value Chains*. London: ZedBooks.
- Prabhu, J., Radjou, N., & Ahuja, S. (2012). *Jugaad Innovation: A Frugal and Flexible Approach to Innovation for the 21st Century*. San Francisco: Jossey-Bass.

- Prahalad, C.K. (2005). *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits*. Upper Saddle River, NJ: Prentice Hall.
- Ramamurti, R. (2004). Developing countries and MNEs: Extending and enriching the research agenda. *Journal of International Business Studies*, 35, 277-283.
- Roh, T., Xiao, S., & Park, B. I. (2024). MNEs' capabilities and their sustainable business in emerging markets: Evidence from MNE subsidiaries in China. *Journal of International Management*, 30(1): 101097.
- Rouhana, F., Zhu, J., Chacon-Hurtado, D., Hertel, S., & Bagtzoglou, A. C. (2024). Ensuring a just transition: The electric vehicle revolution from a human rights perspective. *Journal of Cleaner Production*, 462, 142667.
- Sachs, J. D. (2015). *The Age of Sustainable Development*. New York: Columbia University Press.
- Sardana, D., Gupta, N., Kumar, V., & Terziovski, M. (2020). CSR 'sustainability' practices and firm performance in an emerging economy. *Journal of Cleaner Production*, 258, 120766.
- Sauvant, K. P., & Mann, H. (2019). Making FDI more sustainable: Towards an indicative list of FDI sustainability characteristics. *Journal of World Investment & Trade*, 20(6), 916-952.
- Schaltegger, S., Burritt, R., & Petersen, H. (2007). *An Introduction to Corporate Environmental Management: Striving for Sustainability*. London: Routledge.
- Schlosberg, D. (2004). Reconceiving environmental justice: global movements and political theories. *Environmental politics*, 13(3), 517-540.
- Schuster, T., & Holtbrügge, D. (2014). Benefits of Cross-sector Partnerships in Markets at the Base of the Pyramid. *Business Strategy and the Environment*. 23(3): 188-203.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965.
- Siemens (2014). Siemens India launches Scholarship for engineering students. *Press Release*, February 24, 2014, <https://press.siemens.com/in/en/pressrelease/siemens-india-launches-scholarship-engineering-students>.
- Siemens (2017). Siemens Gamesa wins first order for a hybrid wind-solar project in India. *Press Release*, September 26, 2017, https://www.siemensgamesa.com/global/en/home/press-releases/siemens-gamesa-wins-first-order-for-a-hybrid-wind-solar-project-in-india.html?utm_source=chatgpt.com.
- Soundararajan, V., Van Assche, A., Bapuji, H., Ertug, G. (2025). Global value chain practices of MNEs and societal inequalities. Mimeo.
- Strange, R. (2011). The outsourcing of primary activities: Theoretical analysis and propositions. *Journal of Management & Governance*, 15, 249-269.

- Strike, V. M., Gao, J., & Bansal, P. 2006. Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, 37(6): 850-862.
- Talay, C., Oxborrow, L., & Brindley, C. (2020). How small suppliers deal with the buyer power in asymmetric relationships within the sustainable fashion supply chain. *Journal of Business Research*, 117, 604-614.
- Tops, J., & Lamers, M. (2024). Just tourism transitions? Sustainability policy interventions and implications on Boracay, Philippines. *Tourism Geographies*, 26(2), 237-254.
- Touboullic, A., Chicksand, D., & Walker, H. (2014). Managing imbalanced supply chain relationships for sustainability: A power perspective. *Decision Sciences*, 45(4), 577-619.
- Tripathi, L., Mishra, A. K., Dubey, A. K., Tripathi, C. B., & Baredar, P. (2016). Renewable energy: An overview on its contribution in current energy scenario of India. *Renewable and Sustainable Energy Reviews*, 60, 226-233.
- Valente, M., & Crane, A. (2010). Public responsibility and private enterprise in developing countries. *California Management Review*, 52(3): 52–78.
- Van Assche, A., & Brandl, K. (2021). Harnessing power within global value chains for sustainable development. *Transnational Corporations Journal*, 28(3).
- Van Assche, A., & Narula, R. (2023). Internalization strikes back? Global value chains, and the rising costs of effective cascading compliance. *Journal of Industrial and Business Economics*, 50(1), 161-173.
- Van den Bergh, J.C.J.M. 2010. Externality or sustainability economics? *Ecological Economics*, 69(11): 2047-2052.
- Van Tulder, R., Rodrigues, S. B., Mirza, H., & Sexsmith, K. (2021). The UN's sustainable development goals: Can multinational enterprises lead the decade of action?. *Journal of International Business Policy*, 4, 1-21.
- Van Tulder, R., & van Mil, E. (2023). *Principles of Sustainable Business*. London; New York: Routledge.
- Van Zanten, J. A., & Van Tulder, R. (2018). Multinational enterprises and the sustainable development goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1(3): 208–233.
- Verbeke, A., Simoes, S., & Grøgaard, B. (2024) The Role of Multinational Enterprises and Formal Institutions in BOP Markets. *Journal of International Management*, 30(4): 101171.
- Vercueil, J. (2015). *Les pays émergents. Brésil – Russie – Inde – Chine. Mutations économiques, crises et nouveaux défis*. 4th ed., Paris: Bréal.
- Vilakazi, T., & Ponte, S. (2020). The political economy of competition, regulation and transformation: Black economic empowerment (BEE) and quota allocations in South African industrial fisheries. CBDS Working Paper Series Working Paper 2020/3.

- Voegtlin, C., & Scherer, A. G. (2017). Responsible innovation and the innovation of responsibility: Governing sustainable development in a globalized world. *Journal of Business Ethics*, 143(2), 227-243.
- Wang, D. T., Gu, F. F., David, K. T., & Yim, C. K. B. (2013). When does FDI matter? The roles of local institutions and ethnic origins of FDI. *International Business Review*, 22(2), 450-465.
- Watson, J. & Sauter, R. (2011). Sustainable innovation through leapfrogging: a review of the evidence. *International Journal of Technology and Globalisation*, 5, 3-4, 170-189.
- Webb, D.J., Mohr, L.A., & Harris, K.E. (2008). A re-examination of socially responsible consumption and its measurement. *Journal of Business Research*, 61(2): 91-98.
- Wood, G., Pereira, V., Temouri, Y., & Wilkinson, A. (2021). Exploring and investigating sustainable international business practices by MNEs in emerging markets. *International Business Review*, 30(5), 101899.
- World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press.
- Xu, K., Shi, W., Zhao, J., & Chen, X. (2024). When does a firm fail to walk the talk? Decoupling in international expansion. *Journal of Management Studies*.
<https://doi.org/10.1111/joms.13089>
- Yu, H., Bansal, P., & Arjaliès, D.-L., (2023). International business is contributing to environmental crises. *Journal of International Business Studies* 54, 1151-1169.

Figure 1. Sustainability gaps in emerging markets

