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FROM DIGITAL CAPITALISM TO PURPOSEFUL ENTERPRISE: SUSTAINABILITY AS THE MORAL ARCHITECTURE OF GLOBAL TRANSFORMATION

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Abstract
We discuss how environmental and pandemic crises in combination with digitization are presenting the multi- national enterprise (MNE) with increasing geopolitical, organizational, and market tensions. Institutional pluralism is creating a more complex global environment. The organization of productive work is shifting, which challenges how MNEs structure and coordinate their activities. Changing consumer and investor expectations are broadening the understanding of value creation with implications for business models. We contend that the tensions invite MNEs to reconsider how they frame, formalize, and realize corporate purpose. We close with a research agenda that recognizes the need for MNEs to become purpose-driven actors.
Keywords:Digital Sustainability Corporate Social Responsibility Multinational Corporations Pandemic Climate Change Purpose

1. INTRODUCTION

As the pandemic forced the world to a standstill, nature recovered. The USA emitted 10.3% less carbon dioxide in 2020 than in 2019, and other regions experienced similar emission declines. Globally, carbon emissions declined between 4 and 8% in 2020 (Kottasova, 2021). Yet, it appears not to be a trend reversal but a blip in the devastating upward march of carbon emissions (IEA, 2021). Leading publications on climate change (e.g., IPCC, 2021) and biodiversity (e.g., Díaz et al., 2019) paint a dire picture and call for audacious action. Rapidly decarbonizing the economy, solving the (marine) plastic waste crisis, and halting the biodiversity decline are interrelated with fighting poverty and improving human health. Businesses have a crucial role to play in tackling these Grand Challenges (Doh et al., 2019; George, Haas, Joshi, McGahan, & Tracey, 2022, 2016, 2015).

Digitization is touted as a tool to accelerate a sustainability transition. Cloud computing has democratized access to services by reducing costs of digital infrastructure. Artificial Intelligence / Machine Learning (AI/ML) is bringing new capabilities to various industries, which could add 14% to global GDP by 2030 (PwC, 2017). Powered by 5G, the Internet of Things (IOT) will connect billions of devices, making everything in homes, offices, and factories smarter. The pandemic has also accelerated expressions of corporate purpose, as employees question the meaning of work and stakeholders reflect on the role of business in championing social outcomes – all in the context of transparent and pid social media responses to MNE actions (Zattoni & Pugliese, 2021). The combination of the pandemic-induced global health crisis, the biodiversity and climate crisis, and the resultant calls for socioeconomic change are changing how profit-seeking firms, especially MNEs, are interacting with stakeholders (Hitt et al., 2021).

The MNE is facing emergent pressures that are causing it to funda- mentally revisit how it harnesses digitization and sustainability to deliver on its mission. First, MNEs face an increasingly complex geopolitical environment, as climate action requires global collaboration in a world increasingly

characterized by nationalism and trade limitations (Lubinski & Wadhwani, 2020). Despite recognized urgency of the climate and biodiversity crises, the political willingness and ability to act and impose stringent regulations diverges significantly among countries. As the global regulatory landscape evolves, digital technologies increase transparency and accountability as MNEs weigh opportunities for sustainable action.

Second, organizational tensions are rising. The pandemic has made coordination more challenging. This is most obvious in the redefinition of the workspace as work-from-home has become a default practice for many employees and leaders over the last two years (Barrero et al., 2021). In addition, the forces that shape the balance between globalization and localization have shifted, causing more localization pressures in areas such as supply chains and sustainability strategies. Hence, MNEs are faced with contradictory forces in which digital trans- formation requires investment and a standardized global approach, while improving local resilience and tailoring sustainability initiatives may require delegating power and inviting local decision-making.

Table 1 Globalization and localization pressures creating tensions for the MNE.

Geopolitical tensions further complicate the organizational context as companies decouple value chains and build-out their "China strategy", even at the cost of redundancies and higher costs (Delios et al., 2021). Third, key market actors such as customers and investors are increasingly raising alarm bells about climate change, a trend that has
Drivers / Tensions
Geopolitical (Regulatory, executive, and judicial branches of government)
Organizational (Employees and supply chain partners)
Market(Consumers and investors)

only been accelerated by the pandemic. This raises questions as to how MNEs ought to allocate resources to create and capture sustainability value. The regeneration paradigm, which is emerging as a complement to the sustainability paradigm, requires investments in the development of natural reserves and other common pool resources. While sustain- Pandemic Nationalism, deglobalization (L)
Decentralization of the Workspace (G)
Realization of physical interconnectedness and increasing environmental awareness (G)
ability and ESG have primarily focused on process efficiencies and waste minimization, these cost leadership strategies are not driving meaningful differentiation. Hence, MNEs are forced to rethink preferred geographies of corporate philanthropic contributions to maximize their positive impact under resource constraints. 'Think global, act Environmental
Crises
Green recovery,
COP26 (climate), COP15
(biodiversity), lawsuits(G)
Supply chains (L)
Distribution of benefits (L)
global' strategies may no longer appease salient market participants.

In this context of competing tensions that challenge the advantage of the multinational form, corporate purpose itself could serve as a tool to
Digitization Data privacy
regulation, digital taxation (G/L)
International knowledge development (G)
Increased visibility and faster, more detailed reporting (L)
preserve organizational advantage. Asmussen and Fosfuri (2019) argue that strong investment in a social brand may help MNEs prevent irresponsible subsidiary behavior under specific conditions. Embedding purpose in digital processes could potentially enhance corporate reputation and guide stakeholders to evaluate and engage the firm in specific ways. Purpose-driven brands can use their reputation to set the agenda of which issues are material to the firm and may find it easier to avoid the multiplexity of divergent stakeholder expectations and nationalist tendencies (Coombs & Holladay, 2006; Meijer & Kleinnijenhuis, 2006). In this article, we explore the pressures facing MNEs, and highlight potential ways in which they are being resolved. Understanding, documenting, and evaluating these efforts help management scholars speak to the evolving nature of the multinational's organizational advantage and its implications for sustainability.

2. GLOBALIZATION AND LOCALIZATION TENSIONS AND THE MNE

The organizational form of the MNE has a variety of characteristics that make it worthy of specific attention. Multinationals operate in multiple institutional contexts, have an expansive organizational structure, and source and sell products and services in diverse markets. MNEs thus need to deal with various and often conflicting stakeholder expectations and have evolved strategies and organizational

structures that balance these competing interests (Sun et al., 2021). However, the pandemic, climate change, and digitization (PCD) forces are exacerbating geopolitical, organizational, and market tensions. These tensions are challenging MNEs' organizational advantage by concurrently driving MNEs to become more global (G) and more local (L) as we explain in Table 1.

2.1. Geopolitical tensions and institutional pluralism

MNEs are embedded within diverse regulatory regimes and normative orders so that they operate in a pluralistic institutional context (Kraatz et al., 2008). Such pluralism creates the potential for fragmentation and conflict, making it hard for MNEs to respond to the demands of locally and internationally and culturally diverse political stake- holders. The dual health and environmental crisis as well as the diver- gent regulatory perspectives on the digital economy worsen geopolitical tensions for MNEs.

Most national governments have connected their short-term pandemic response to closing down borders and a heightened fear of others. Hitt et al. (2021) highlight deglobalization, nationalism, democratic decline, and growing government size as key factors that will influence MNEs and their internationalization strategies. These trends seem to reveal a tendency towards local, nationalist approaches and thus

Note: (G) Globalization and (L) Localization pressures.

fragmentation. On the environmental front, governments have sought to use the pandemic as a springboard for a "green recovery". The High Ambition Coalition for Nature and People, a group including the Euro-

pean Commission, the UK, France, Japan, and many African and South American countries, champions the 30 × 30 goal (expand the quantum of natural reserves to 30% of the world by 2030), which, if taken seriously, will require substantial private sector involvement. Yet, most Asian governments and the USA have not joined this call, giving MNEs operating across those regions environmental arbitrage opportunities with weaker environmental regulations, norms, or targets.

Relatedly, the judicial branch of government increasingly intervenes as environmental activists make their case in courtrooms. In the Netherlands, Shell was sued successfully and forced to alter its climate strategy and to decarbonize more rapidly. Germany's highest court ordered the government to accelerate its emission reduction strategy. In Australia, both the youth climate activists as well as the coal lobby claimed victory in a landmark court case which allowed the expansion of a coal mine to go ahead but argued the Environment Minister owed its young population a duty of care, recognizing the risk posed by coal- associated carbon emissions (Antrobus & Priest, 2021; Boffey, 2021; Burgess, 2021; Mazengarb, 2021). Similar to the pandemic, there is some global coordination (e.g., IPCC reports, COP26 (climate), and COP15 (biodiversity), but nationalist approaches still hold more sway than earth-first, multinationals solutions.

On the digital front, policymakers are seeking to end the era of digital exceptionalism with regulation forcing digital services to follow strin- gent data privacy requirements (e.g., GDPR in Europe, PDPA in Singapore) and even international taxation (Milliken & Holton, 2021). At once, regulators are trying to open previously closed fields to empower consumers to take charge of their own data (e.g., the opening up of the banking industry in Europe and the UK), which forces MNEs to sacrifice previously inimitable data and to operate in more diverse environments. China's crackdown on its tech companies to reach "common prosperity for all" also poses difficult questions for Chinese MNEs or global MNEs operating in China (Mitchell & Yu, 2021). The overarching geopolitical challenge for MNEs is that the relative weakness of trans- national coordination and the increasing strength of nationalist, country-first approaches regarding Covid, climate, and digital create an ever more complex, pluralistic, institutional context. Hence, MNEs face the choice to either follow the most stringent regulations everywhere at the risk of local competitive disadvantage or to divaricate regionally at the risk of creating governance approaches that are inconsistent across markets.

2.2. Organizational tensions and the organization of productive work

Stakeholder theory (Freeman & Liedtka, 1997; Freeman et al., 2001) argues that firms need to be responsive to stakeholders needs to be successful. When stakeholders active in diverse national environments are misaligned about issues' importance, MNEs face growing challenges to straddle multiple contexts (Asmussen & Fosfuri, 2019; Odziemkowska & Henisz, 2021). The pandemic, digitization, and sustainability are changing how MNEs organize productive work by changing the nature of the workspace, the design of supply chains, and the ways in which firms develop (international) knowledge.

The advent of large-scale productive equipment during the industrial revolution centralized the physical workspace for employees into factories and offices. While some had experimented with decentralized work arrangements, the common belief remained that work was more productive in a dedicated physical location. The Covid-19 pandemic has now swung the pendulum back, empowering the home as a viable alternative to the office and changing the meaning of organizational space (Delios et al., 2021; Keegan, 2021). While local companies struggle to adjust to the new reality, MNEs in particular endure complexity as the heterogeneous risk tolerance and willingness to reopen the work floor in different countries exacerbate the likelihood that subsidiary employees will experience diverging realities

depending on their physical location.

Growing sustainability concerns are challenging value chain practices. The cradle-to-grave model that turns inputs into outputs that are disposed of at the end of useful product life, is being replaced by a circular model in which materials take on a temporary product form after which this form breaks down into constituent elements that can be reinserted into technological or natural cycles (Geissdoerfer et al., 2017; McDonough & Braungart, 2002; Urbinati et al., 2017). Extended Producer Responsibility (EPR) regulations are forcing companies to think about closing the loop and reorganizing productive work without externalizing product disposal (Leal Filho et al., 2019; Mayers, 2007). The health and environmental crises are also making supply networks complex. In the face of disruptions, many companies have started building alternative supply chains to reduce their dependence on specific geographies in response to unpredictable pandemic waves. At the same time, supply chains are becoming squeezed due to adverse weather effects and MNEs are considering climate risk explicitly in their operations (Ghadge et al., 2020). This necessitates significant changes to processes, routines, organizational practices, and capabilities that have a sizeable impact on employees, suppliers, and other stakeholders (George, Haas, Joshi, McGahan, & Tracey, 2022).

Digitization is a powerful driver of organizational change. Specifically, the volume, velocity, and variety of data that companies collect, store, and use, has changed (Anderson, 2008; Mayer-Schonberger & Cukier, 2013; Thomas & Leiponen, 2016). The cloud enables companies to store more data at negligible marginal cost, while IOT devices, satellites, and mobile devices are used to collect new types of information. These new capabilities raise important questions around access, consent, privacy, security, fair returns, decontextualization, and property rights that MNEs need to manage in different institutional environments (Acquisti et al., 2015, 2016; Beresford et al., 2012; John et al., 2015; Kokolakis, 2017; Loomis, 2015; Matthews, 2016). The availability of new information and greater ease to collect it, influences how MNEs organize international learning. Because digital communication technologies are a centrifugal force that favor the dispersion of high knowledge activities (Autio et al., 2021), the need to develop architectural knowledge before setting up the subsidiary is decreasing, leading to stronger empowerment of the nodes in the MNE's global network (Asmussen et al., 2016).

The overarching organizational challenge for MNEs is that the organization of productive work is undergoing multipronged changes caused by the pandemic, environmental concerns, and digitization. As of yet, there is no template for how MNEs best deal with the concurrent evolution of the decentralization of the workspace which empowers a more global workforce, the duplication and regionalization of supply chains which requires more up-close management and creates over- heads local competitors do not have, and the rapid growth and diversification of capabilities to obtain and manage international knowledge.

2.3. Market tensions and evolving models of value creation and capture

As the pandemic sharpened our people's realization that they are physically interconnected, it also accelerated awareness about climate change and the associated risks. Ninety five percent of respondents to a BCG survey believe their personal actions could help reduce waste, tackle climate change, and protect biodiversity and this belief has strengthened during the pandemic (Kachaner et al., 2020). Stafford et al. (2021) found that about 80% of consumers in the US, the UK, and China expect companies to not only reduce their footprint but also actively create a handprint by contributing to positive impact projects like reforestation, habitat preservation, ocean plastic clean-ups and so on.

Investors are realizing that the pandemic, no matter how horrific, may only be a training exercise for the kinds of systemic disruptions that climate change could – and is likely to – cause in the next decades. It is therefore no surprise that investors display rising demands for transparency and increasing environmental activism, with shareholders ever more willing to go against executives that refuse to take climate risk seriously (Ambrose, 2021; Helman, 2021; Mufson, 2021). The heightened attention to sustainability forces MNEs to reconsider previously dominant financial practices with regards to the distribution of benefits. Accelerated by rising nationalism, calls for climate justice and growing consumer awareness posit that the extractive structure of an MNE, in which locally earned revenue is sent back to the HQ (headquarters), creates a discord between the de facto resource provider (local com- munity, local biome) and the location in which benefits are accrued.

Digitization has increased the visibility of corporate behavior, exposing the treatment of various stakeholders in the midst of environmental and health crises. Rising demands for accountability are driving companies to put broader and detailed environmental monitoring and impact management systems in place that feed a fast-growing digital industry for ESG reporting. Leading multinationals are starting to set ambitious environmental science-based targets (Delmas et al., 2019). Achieving those targets relies on collecting credible and timely information about impact (Howard-Grenville et al., 2014). Digitization re- duces the costs of monitoring ever more diverse data. Real-time emission detection using remote sensing and IOT devices in cold chains that write information on distributed ledgers are some examples of how companies are using digital technologies to meet changing market demands.

The overarching market challenge for MNEs is that the standard models of how MNEs create and appropriate value, are being challenged. The growing consumer and investor awareness around the

climate crisis, sharpened by the pandemic, calls for global solutions while the questioning of the extractive value generation model of the MNE demands more local involvement. The increasing scope and depth of monitoring and reporting, enabled by a growing digital monitoring, reporting, and validation industry are helping MNEs address these concerns. However, the associated costs put them at a relative disad- vantage against local competitors that avoid the same levels of inter- national scrutiny.

Given these geopolitical, organizational, and market tensions, MNEs are placed in a position that is increasingly complex to manage and with contrarian pressures that challenge their organizational advantage.

3. PRESERVING ORGANIZATIONAL ADVANTAGE WITH PURPOSE

The pandemic, climate risk, and digitization (PCD) forces are creating environments in which MNEs need to at once become more locally involved and more globally committed. The resulting tensions may, if not resolved, jeopardize the organizational advantage of the MNE. In parallel, the pandemic has brought to the fore discussions of organizational purpose (Gulati, 2022). Purpose has been advanced as a crucial organizational asset and sustainability – which includes the ESG (environmental, social and governance) dimensions – is becoming an integral part of purpose in the for-profit firm (George et al., 2022). Therefore, we explore how the geopolitical, organizational and market tensions discussed earlier may be influencing MNEs to frame, formalize and realize their purpose in unique ways.

3.1. Geopolitical tensions and the framing of purpose

For MNEs that need to navigate pluralistic institutions, geopolitical tensions pose a challenging problem. A familiar issue in international management research is how MNEs conform to globally standardized expectations versus being responsive to local conditions (Jahanbakht et al., 2021). Relatedly, theories of external influence, including demand-side research, stakeholder theory, and issue salience theory suggest that firms need to be responsive to environmental influences in order to be considered legitimate and to be successful (Frooman, 1999, 2010; George & Schillebeeckx, 2018; Odziemkowska & Henisz, 2021; Priem et al., 2018; Schillebeeckx et al., 2022). Crilly (2011) argued that MNE subsidiaries can be expected to solve global societal problems that do not address issues salient to the local context and norms, which strongly differentiates them from local firms.

MNEs negotiate strategic and political compromises to meet diver- gent expectations of political and civil society stakeholders. Moreover, national business systems can influence stakeholder expectations such that the same type of stakeholder may have diverging expectations in different national contexts (Conte et al., 2020). To navigate this institutional pluralism, MNEs may need to define a clear vision that underpins aspirational objectives and guides long-term decision-making (Gulati, 2022). By translating these values, mission, and vision into a cohesive narrative that encapsulate the organization's identity, the MNE engages in framing its purpose (George et al., 2022).

Purpose framing forms a blueprint of how MNEs deal with complexity in their international context. MNEs can then assess the salience of stakeholders across countries within a larger issue network that recognizes diversity of national interests, interactions among stakeholders, and guides issue selection (Odziemkowska & Henisz, 2021), and then benchmark their strategic decisions and issue responsiveness against a clearly framed purpose. For instance, if fighting climate change or contributing to the prevention of biocide are part of an MNE's mission, this may require resource allocation in ways that are unresponsive to specific stakeholders. Climate concerns may compel purpose-driven firms to prioritize future and geographically distant stakeholders over local and current stakeholders, which contradicts the theoretical expectation of stakeholder responsiveness (Freeman, 1984). For MNEs, a clearly framed purpose can be an antidote against stake- holder complexity. On the political front, purpose can guide strategic decisions and the degree of local responsiveness. Regarding civil society, stakeholders' expectations are likely to be influenced by the firm's purpose and likely reduce variation in stakeholder behavior, thus reducing managerial complexity.

3.2. Organizational tensions and the formalizing of purpose

MNEs manage social issues and implement sustainability activities inside their geographically scattered and culturally diverse subsidiary network (Asmussen & Fosfuri, 2019). They risk severe backlash if local irresponsible behavior is exposed, which highlights the need to formalize purpose through embedding appropriate governance practices, routines, and organizational structures. As subsidiaries face idiosyncratic contexts, the possibility to ignore HQ formal rules, norms, and principles regarding sustainability can lead them and their employees to deviate from HQ priorities and relax social and environmental standard (Durand & Jacqueminet, 2015). The WFH practice normalized by the pandemic has only sharpened the impact of this trend. Purpose can serve as a control mechanism that reduces monitoring needs. As countries open up at different speeds, the ability to bring employees back to the office and to engage directly with international suppliers diverges globally, which affects MNEs differently, depending on where their subsidiaries and their partners are located.

At first glance, one would assume that digitization makes coordination and control easier for the MNE because it improves communication and monitoring capabilities while lowering search costs. However,

limitations on travel and the emergence of the WFH paradigm decrease the ability of managers to monitor employee sentiments. While this challenge is not unique to MNEs, its effect is greater because of their culturally diverse workforces. The reduction of coordination costs also enables MNEs to develop more complex global value chains (Autio et al., 2021), which gives rise to more specialized, and less integrated entities. When higher value chain complexity empowers different value chain members to leverage culturally and geographically distributed knowl- edge bases, subsidiaries and suppliers may seize the opportunity to respond to local needs, even if this deviates from formalized purpose. As the pandemic fortified national boundaries, the allegiance of key value chain partners is at risk of shifting from the firm to the nation, imposing challenges pertaining to both employee and value chain partner engagement.

A strong, formalized purpose is emerging as a means to reduce the potential fallout. If the HQ has a strong purpose-driven strategy, the likelihood that employees strongly identify with the company is much higher, and this alleviates concerns around cultural differences and integration of employees. Even if the HQ does not accommodate local preferences to ensure homogeneity in product, brand, and reputation, this is much less likely to lead to subsidiary workforce disengagement when shared purpose is strong. Similarly, a purpose-driven MNE is likely to be a good partner to its suppliers and have a stronger internal alignment with its subsidiaries which reduces the risk of subsidiaries objecting to HQ's decisions.

3.3. Market tensions and the realizing of purpose

The realization of purpose hinges on a broad understanding of what public and private value firms intend to create (George et al., 2022). The evolving market context increases stakeholder activism and the need to globally coordinate and govern (pertaining to both the environmental and the health crises), challenging the realization of sustainability commitments that focus on firm efficiencies and waste reduction. Yet, perhaps the most important sustainability trend for value capture of this decade is the rising expectation that companies take active part in the regeneration of the natural world (Stafford et al., 2021). These authors report on a survey of US, UK, and Chinese consumers that reveals that regeneration is more marketable than sustainability and carbon neutrality, because the latter are becoming standard expectations of corporate behavior. In response, pioneers like Microsoft and Patagonia are setting restorative goals that go beyond carbon neutrality or Net Zero towards truly becoming nature positive. Through regeneration, the focus of corporate sustainability expands beyond reducing negative externalities of resource use – the dominant sustainability paradigm in the extractive economy - towards the explicit inclusion of and ac- counting for positive impact – the paradigm of the regenerative economy (Schillebeeckx & Merrill, 2021). Succeeding in this new endeavor may require the overhauling of boards, business models, capabilities, and employment practices.

This is because the regenerative economy poses a significant challenge to the MNE. If sustainability has thus far focused on reducing negative externalities through creating internal or supply chain efficiencies that combine ecological and economic benefits, how can companies benefit from redirecting scarce financial resources towards the commons by contributing to national reserves (public value), the restoration of ecosystems, and the re-wilding (biodiversity) of the planet? Regeneration does not drive internal process efficiencies; therefore the answer must rest in superior business models to create and capture value (George et al., 2021; Leppanen et al., 2022). Like a

Table 2 Future research directions.

Resolving Tensions	Exemplar Research Questions	Potential frameworks

product's value, the success of a business model is partially driven by intangible, non-functional, idiosyncratic components that stem from the buyer's perception of the brand, country of origin, and more recently supply chain transparency and fair trade (Priem, 2007; Priem et al., 2018). Blockchains are being touted as instrumental technologies to track the provenance of goods and materials, thereby enabling more transparency re sustainable practices and faster issue identification. At once, digitization empowers companies to imbue products and services with credible claims to tokenized regenerative benefits which can positively influence customer loyalty, willingness to pay, and thus value appropriation.

So far, we explored how MNEs' corporate purpose can be integral to its strategy to address the geopolitical, organizational, and market tensions induced by the pandemic, climate change and digitization. We proposed that framing, formalizing, and realizing purpose can help the MNE preserve its organizational advantage. Now, we suggest that the interaction between PCD-induced tensions and purpose could fuel a promising research agenda which generates scholarly evidence to enable these transitions to a purpose-led multinational organization.

4. A Research And Practice Agenda

While there is debate about the long-term impact of the pandemic on globalization (Ciravegna &

Michailova, 2022; Contractor, 2022), we contend that the trio of tensions will persist as evolving geopolitical, organizational, and market contexts will have lasting impacts on how MNEs achieve and sustain their organizational advantage. These topics raise important questions for international business and sustainability scholars and practitioners Table 2. highlights some of these questions and categorizes them as caused by PCD-induced geopolitical, organizational, and market tensions. Below, we expand on some of these questions, not aiming to provide an exhaustive treatment, but as an invitation to scholars to consider them as catalysts for their own work in the coming years.

4.1. Navigating geopolitical tensions and the digitization of stakeholder activism

International jurisprudence regarding climate responsibility and digital regulation and taxation discussions are hallmarks of the complex and pluralist institutional environment that MNEs need to navigate. As Europe considers digital taxation and imposes stringent data privacy regulation, all MNEs with European operations or clients are forced to enter a new institutional paradigm. At the same time, awareness of the climate crisis is shaping board room discussions on appropriate governance standards. These tensions raise serious questions about how MNEs should approach internationalization, how to deal with locally, region- ally, and globally dissonant logics, and how to alleviate liabilities of foreignness. As the climate and health crises cry out for more global coordination, the realities of regional regulatory regimes and idiosyncratic and often nationalist political priorities challenge the MNE's advantage, especially outside home markets.

Purpose as a compass to navigate and reframe these tensions is not only theoretically relevant but could also be practically helpful to making decision-makers succeed in this PCD-driven environment. For instance, when does purpose framing or formalizing mitigate regulatory pressures? Why and when do regulators as social control agents inter- vene in the affairs of multinational organizations as (ir)responsible ac- tors? These questions raise important contributions for stakeholder and institutional theories, especially with norm-setting on the boundaries of corporate responsibility. These questions fundamentally challenge when the MNE's responsibility ends when local claimants require or expect

Geopolitical: Framing corporate purpose to cope with PCD-induced geopolitical tensions
Organizational: Formalizing corporate purpose in the wake of PCD-induced organizational tensions
Market: Realizing purpose to address PCD-induced market tensions

How are MNEs' national and international strategies affected by emerging precedents from climate- related lawsuits?
Are digital taxation policies affecting MNEs' internationalization strategies?
Are digitally native stakeholders exercising disproportionate influence on MNEs issue identification?
Does a clearly framed purpose reduce attention from non-focal stakeholders and increase attention from stakeholders interested in the company's purpose?
Are MNEs and their subsidiaries developing variegated strategies to building authentic local presence in diverse geographic markets?
Can identity, innovation, and competitiveness be preserved or accelerated if nationalist regulations force MNEs to create separate corporate structures?
Are the effects of WFH on creativity, innovation, and employee turnover influenced by the formalization of purpose? Does purpose formalization affect how MNEs adjust monitoring and control mechanisms and governance practices?
Does purpose help MNEs manage competing requirements for resiliency and efficiency in supply chains?
Can MNEs overcome their dependence on economies of scale and embrace economies of collective action?
How do MNEs' value propositions evolve as consumers demand more regenerative actions?
Will markets evolve their expectations of non- manufacturing MNEs as the regeneration paradigm matures?
Can MNEs design new business models that capture private value from contributing to public goods?
How do MNEs manage the conflict between the shareholder value extraction paradigm and the socio- ecological needs to distribute value more equitably?
How do MNEs reactively or
Competitive strategy Liability of foreignness Stakeholder theory Institutional theory Identity
Social movements Agglomeration and location-based theories
Structural ambidexterity

Knowledge-based Resource dependence Supply chain resilience
Uppsala/ internationalization Transaction cost Motivation
Social network Governance
- Organization design

Business models Sustainability reporting Stewardship theory Agency theory Value creation and capture
- Shared value

(continued on next page)

Table 2 (continued)

Resolving Tensions	Exemplar Research Questions

proactively engage with evolving ESG reporting practices and demands for more real-time disclosures? Do MNEs that seek to realize ambitious purpose-driven targets outperform others?
PCD = pandemic, climate risk, and/or digitization.
more commitments towards the public good.

Potential frameworks

questions about how to govern productive work within and between organizations.

Economies of scale are normally driven by indivisibilities in the production equipment and/or labor specialization (Edwards & Starr, 1987). However, digitization has made it possible for much present-day productive equipment to exist in the cloud and be accessible to all while the reduction of coordination costs has makes it easier to coordinate action both within but especially across organizational boundaries. Digitization is thus revolutionizing the basis of competition by eroding the salience of scale economies and by increasing the importance of the "economies of collective action", the ability to coordinate across organizational boundaries via an ecosystem to achieve a competitive advantage. This is particularly challenging for large MNEs with analog Beyond politics and regulation, civil society stakeholders' ability to

give voice to their idiosyncratic concerns is supercharged by digitization and the emergence of digital issue networks, i.e. trending topics of social concern that bring rather disparate groups together. This empowers digitally native stakeholders to gain prominence by broadcasting their preferred issues into a wide network of issue amplifiers through social media networks. By virtue of their size and influence, MNEs become targets of social media activism. As such, digitization extends Mitchell et al. (1997) stakeholder salience framework and calls to question the ideas of stakeholder based on legitimacy, urgency, and power. Hence, MNEs are contending with a new type of stakeholder and devising capabilities and strategies to respond to powerful memes, digital attacks, or viral social media posts that challenge a company's activities and credibility. Thus, who is a stakeholder and the bases of their influence are rapidly shifting. Examining the emergence of new classes of stake- holders, and how corporate purpose provides procedural avenues for engagement become important research issues. Simultaneously, it raises research questions pertaining to theories of managerial attention and stakeholder salience. When, how, and why do MNE managers select issues on which to focus their attention, and have PCD-forces shifted attention to corporate purpose in meaningful ways?

4.2. Streamlining organizational tensions and economies of collective action

Operationally, the pandemic has revolutionized the organization of work. Facilitated by digital tools, employees have embraced the ability - and now habit - to work from home, which has reduced the importance of the firm as a physical space where employees meet, work, and create. This shift is unlikely to be fully reversible because digitization processes lead to micro-diffusions of power away from central authority, a process that is typically unidirectional – which raises theoretical questions on the bases of power, location, and control, and how corporate purpose could substitute for control and monitoring in employment. However, because MNEs have a culturally diverse workforce in countries with varying perceptions regarding the need to continue working from home, the need to streamline corporate and national preferences is challenging. Therefore, MNEs may need to create more digital monitoring and control mechanisms and evolve governance practices in order to preserve organizational efficiency and advantage.

Strategically, climate risk and the pandemic have also accentuated the fragility of global supply chains and the dependence many MNEs have on manufacturing powerhouses like China. This has reinvigorated debates on supply chain agility, resiliency, and efficiency and how digital technologies like AI can be used to balance these competing requirements (Ivanov, 2021), which raises new questions on behavioral issues of incentivizing and motivating with corporate purpose. The climate and

digitization trends create new theoretical challenges of organizing, coordinating, and collaborating for individual, organizational, network and social resilience, with a renewed focus on theories of organization and job design (van der Vegt et al., 2015). At once, blockchains are being used to create new forms of trust that reduce the need for monitoring in interorganizational relationships, raising new practices and routines, making them less nimble than digital natives. Consider digital platforms like Uber and Airbnb, who employ a fraction of the people employed by BMW and Marriott while having higher valuations (Ozcan et al., 2021). While analog MNEs have built their competitive advantage on a combination of resources and economies of scale (Barney, 1991), digital companies are smaller, control fewer re- sources in-house, build an advantage through the superior deployment of open access resources (e.g., people's cars and homes), and maintain that advantage not because of firm size but through network effects. The operating leverage for shared resources also raises questions on externalities caused by novel business models and its effects on communities and nations, especially with regard to climate change and resource footprints.

4.3. Exploiting market tensions and the rise of regeneration

The health and environmental crises have raised the stage of sustainability and ESG, not only for customers but also for investors. Therefore, more companies, and especially MNEs, are tasked with finding new approaches to meet the demands from increasingly skep- tical and well-informed customers and investors. The crucial challenge is that the classic approach to sustainability in terms of reducing negative externalities (waste, pollution, injustice etc.) remains hyper-important but provides a weak basis for superior value creation and appropriation. Sustainability and ESG are cost reduction and efficiency strategies that have been presented as competitive differentiators (Schillebeeckx, 2021). Markets, however, are seeing through this. The solution may lie in the quickly escalating demands for regeneration (Stafford et al., 2021, 2018). UNEP's State of Finance for Nature report concluded that public and private actors need to triple their investment in nature by 2030 and quadruple it by 2050. By then, a total investment of USD 8.1 trillion will be needed to safeguard our planet's essential ecosystems. Annually, the private sector only invests USD 18 billion in regeneration (Mulder et al., 2021), while it invests approximately 1.5 trillion dollars in digital transformation (Ozcan et al., 2021). This exemplifies the importance of seeing digital and sustainability converge while also showing that the quantum of investment needed for regeneration is not out of reach if rebuilding natural capital makes business sense. While there is some conceptual work on the concept of digital sustainability (George et al., 2021), empirical work and evidence on novel business models and organization designs are scarce (e.g., Merrill et al., 2019) and are an important area for scholarship to provide evidence of effectiveness and innovative templates for adoptions.

Due to their scale, impact, and exposure, MNEs will be the first ones
expected to go beyond carbon neutrality and zero waste objectives to- wards true ecosystem value creation. Pioneers like Microsoft and Patagonia are already making such commitments. When organizations identify regenerative actions that make a direct and positive quantifiable impact on the world (aka handprints) and align those with their purpose and values, purposeful business models can be developed that protect and rebuild our fading natural capital. Making regeneration an integral part of any business model by aligning it with strategic growth KPIs could empower all companies – including service companies that have limited power to reduce manufacturing and energy-related externalities
- to become nature-positive organizations (Schillebeeckx & Merrill, 2021). This will require a rapid maturation of the markets for nature-based solutions to ensure that actions taken are credible and effective which in turn hinges on digital monitoring, reporting, validation, and visualization of impact (IUCN, 2021). Research topics include bandwagon effects, institutional conformance and factors that drive adoption behaviors across MNEs and countries. Here again, corporate purpose and the implications of formalized processes on sustainability could be examined from shareholder or stakeholder theoretical perspectives, but also from behavioral perspective such as procedural jus- tice or solidarity, diversity, equity and fairness theories.

By layering positive impact on top of existing business processes and services, MNEs can embed reputational capital and goodwill into transactions and relationships, creating a sense of collective ownership. Through digital automations like software apps, financial transactions can protect natural reserves, cloud storage can restore forests, advertising can plant corals, CRM systems can regenerate arid land, events can clean the ocean, academic citations can support education in developing nations, and so on. These cross-level and emerging applications that make the world truly better also raise new questions for how we look at theories of value creation and value capture. As MNEs persist in reducing their footprint, those that think of sustainability as a competitive differentiator could start growing their handprint by developing circular and regenerative business models that create public value while appropriating part of that value in the form of enhanced customer loyalty, brand equity, repeat business, reputational capital, and employee commitment.

5. CONCLUSION

Pandemic and climate emergency discussions have become a priority in every boardroom. The convergence of digitization and sustainability is providing new tools that enable MNEs to make a lasting impact on the planet's natural capital. As MNEs embrace social and environmental purpose, and digital technologies magnify economies of collective action and the appropriability of private value from public goods, opportunities abound to truly shape our planet into a better planet. For management scholars, this provides an opportunity to generate empirical evidence of the drivers, contingencies, and contexts where such efforts are fruitful and regenerative. These trends are now likely to shape novel theoretical lenses and empirical approaches to the organizational design and multi-location operating advantages of MNEs which, at its core, redefine the role, organization, and purpose of a multinational firm.

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