Emerging Perspectives on Climate Risk: Current Business Leaders & Future Business Leaders

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EXECUTIVE SUMMARY

This research project examines how corporations view non-financial risk, particularly as it relates to climate change and in turn, how MBA students – as a proxy for emerging business leaders – perceive climate-related risks and opportunities. Results from a Form 10-K analysis and interviews of individuals in leadership roles indicate that corporations are aligned in their focus on non-financial risks as a category but vary across industries on the importance and relevance of what constitutes 'material'. A survey of MBA students at two top-twenty business schools demonstrate that students place greater value on mitigating environmental and social disruption risk when primed of its importance but do not feel adequately prepared to address emergent social and environmental issues as corporate professionals. Our findings indicate that there is a gap between what skillset businesses will need from future hires in order to adequately address climate risk and current students' ability to meet the needs of their future employers. To address this gap, we suggest 1) MBA schools incorporate more climate related material and discussion into MBA core classes and 2) businesses and MBA programs invest more resources into understanding the effects of climate change on corporations and industries.

INTRODUCTION

The impact of climate change is directly observable in some industries. For example, with temperatures warming, less snow falls in the Northeast. This affects the Winter Sports Tourism Industry. Across the United States, a lack of snow can have real and tangible business impacts. According to Elizabeth Burkakowski, a climate-scientist at the University of New Hampshire, a winter with lower than average snowfall can cost "$800 million dollars of unrealized revenue" and between "13,000 and 27,000 jobs" in the United States (Jacobson, 2013).

For other industries, like banking, the impact of climate change is more nuanced and discrete; however, the derivative impacts of climate change reverberate throughout these industries in a number of material ways. For example, banks often lend money to companies in the agricultural sector. As the earth warms and water resources are stressed, agricultural businesses may face difficulties growing crops. Diminished yields may result in significant revenue shocks, decreased profit margins, and increased loan default risk.

From storm damage to resource scarcity, environmental risk factors affect all industries, and some companies are taking action. For example, certain companies have responded to the current U.S. Government administration's policies related to climate change, such as the repeal of the clean power plan and the U. S's withdrawal from the Paris Accord. According to the CDP (Carbon Disclosure Project), 32 out of 159 companies described as having "ambitious policies on limiting climate change and protecting water resources and forests" are U.S. companies. These 32 corporations within the U.S. represent the single largest cohort from one country in the world and include companies such as ExxonMobil and ConocoPhillips (Reuters, 2017).

In a recent Harvard Business Review article examining the rise of "CEO activism" and how company leaders are engaging on issues from minimum wage to gun control, 75% of survey

respondents thought it was acceptable for a CEO to weigh in on environmental issues (Chatterji & Toffel, 2018). The authors note, "we believe that the more CEOs speak up on social and political issues, the more they will be expected to do so." The increasingly important need for environmental action by current business leaders begs the question—are future leaders prepared to accelerate corporate responses to pressing environmental and social risks exacerbated by a changing climate?

Many of the companies beginning to engage in activism are popular destinations for MBA graduates. One would be hard pressed to find a company that actively recruits MBAs and does not have some kind of sustainability program. Moreover, most of these companies consider their MBA recruiting program to be a pipeline for leadership. Therefore, it is reasonable to assume that the attitudes of MBA students reflect the attitudes of future leaders.

The effects of climate change are already apparent globally and will continue to evolve over the next 30-50 years. Over this time horizon, current MBA students will become industry leaders. As current leaders begin to tackle climate change within their business operations and future leaders advance in their careers, the following questions have become highly relevant and critically important: is there a gap between the attitudes of current leaders versus future leaders towards climate change risk? Are future leaders given skills in business school that they will need to face a changing climate? The research that follows attempts to answer these questions.

LITERATURE REVIEW

Understanding Corporate Inaction

Very few business managers report that their organizations are in a position to handle the threats posed by a changing climate, and over half of those managers do not prioritize climate change as a pressing problem (Kiron et al., 2013). Before discussing key corporate risks associated with a changing climate, we want to discuss the reasons and rationale as to why levels of corporate inaction remain high. Existing literature suggests a variety of factors that may contribute to a tempered corporate response related to a changing climate.

The muted aggregate response from corporations regarding climate change risk has been linked to "short-termism and uncertainty avoidance" at multiple, mutually-reinforcing levels (Slawinksi et al., 2017, p. 234). The authors propose that individual, organizational, and institutional forces within modern industries explain why many firms have not taken decisive, long-term steps to prepare for climate-related risks. "Uncertainty about the future payback of low-carbon investments will thus mean that the dominance of the market logic will create short-termism in firms and a bias toward marginal emission reduction measures" (p. 264). Companies do not take long-term perspectives on climate change because they are incentivized to focus on short-term objectives.

High discount rates and ambiguous financial benefits of climate-related action over long time horizons make business justification for capital investment in the near term difficult to justify in net present value terms. Moreover, the issue is compounded by management's focus on high

probability events in the near term as opposed to far more uncertain events further in the future. Corporate climate change inaction may also be linked to other management inclinations as well. For example, perception bias, optimism bias, relevance bias, and volition bias detract from one's ability to associate climate-related change to moral and ethical imperatives that mandate definitive action (Mazutis & Eckardt, 2017).

Other researchers propose a different explanation as to why firms' have delayed action. Research indicates interdisciplinary collaboration that synthesizes scientific research into business-relevant literature is lacking (Linnenluecke et al., 2013). The gap is exacerbated by "…equally little work in the management literature that assesses or considers the implication and consequences of climate change that firms and industries may need to adapt to" (p. 398).

In a study focused on Australian business leaders, researchers tested the impact of scientific literature on business leaders who actively engaged with the material (Linnenluecke et al., 2015). The study indicated strong, positive correlation between executives' perception of organizational vulnerability to climate change and their engagement with climate-related scientific literature. Executives who perceived greater vulnerability were also more likely to indicate that their organizations would need to adapt to future impacts.

From these findings, organizational inaction seems to be driven by factors that reinforce traditional business behavior and by information asymmetries that result in gaps in understanding.

MBA Education

Not surprisingly, firms are more likely to respond to climate change risk when the impacts and effects are translated into material business threats. Unfortunately, business practitioners have little guidance from management journals and business literature on how to define and handle material climate change risks. Relative to climate change awareness, management journals fail to exhibit the same level of salience as scientific literature (Patenaude, 2011). "This [research] shortfall is also observed in the teaching curricula of business schools" (p. 268).

As an explanation for this omission in the literature and in business school curriculum, Patenaude (2011) makes the case that similar to the adoption of technological innovations, climate change as an idea must overcome several hurdles as it diffuses through society and culture. Based on that premise, it appears that climate change's "diffusion" has not yet fully been manifest within modern business education. As a result, current and emerging business leaders may not be in a position to appropriately mitigate and adapt to the potential challenges climate change may pose for their organizations both now and in the future.

Other studies support the notion that few emerging business leaders are well-positioned to handle vexing business issues that will accompany climate changes. In an Aspen Institute (2008) MBA survey, over half of MBA students believe that employers do not value a prospective candidate's comprehension of societal and political topics in the hiring process. Moreover, a little over 50% of MBA candidates find a company's approach to environmental stewardship only 'Somewhat important' when evaluating a professional employment opportunity. The study finds that

(1) MBA students do not connect corporate social responsibility to financial, operational, or regulatory benefits;

(2) students do not "identify progressive environmental policies as a very important component of a well-run company" (p. 16); and,

(3) students indicate that the required aspects of the MBA curriculum are the best place to include information about social responsibility, but they do not identify "areas such as marketing, communications, finance and economics" as where the content should reside (p. 16).

Risk Framing

Through qualifying and quantifying organizational threats, firms and management teams can overcome some of the hurdles associated with organizational inaction related to climate change. Upon defining and measuring key threats, corporations can leverage traditional analysis tools to prioritize and respond to climate-related risk (Nyberg & Wright, 2016). The risks of climate change can be accounted for, evaluated, proactively mitigated, and under certain circumstances, leveraged for profit maximization. Through mitigation and exploitation, firms can become proactive participants in the strategic act of protecting and creating long-term shareholder value through climate change preparedness.

A company's vulnerability to climate change is directly impacted by its core industrial focus (Weinhofer & Busch, 2013). Therefore, firms should not react to threats in a uniform manner. A study on the electric utility industry supports the notion, however, that traditional risk management methods represent a set of best practices all firms can employ to address climate-related risk.

Once a firm adopts the appropriate methodology for managing climate risk, the firm then must identify the industry-specific threats and idiosyncratic risks. The risks are varied and highly dependent on the industrial sector of the specific organization. For example, Beermann (2011) mapped firms' potential needs and risks as a result of climate driven impacts in a study focused specifically on the German food industry. The organizational needs within the industry included accelerated innovations to maintain market share positions, movement into new market categories, and formation of new partnerships to take advantage of geographic opportunities given where and how climate changes impact certain regions of the world. Moreover, the researcher noted systemic risks that ranged from demand and supply preferential shifts to product and distribution channel disruptions. Each industry risk profile is unique and complex. Broadly, climate change risk can also include potentialities associated with population displacement, mass immigration, and even pandemic outbreaks (Schwartz, 2007). Moving beyond the risk paradigm and into an opportunistic perspective, "[m]ultinational firms prepared to take the long view can avoid the worst consequences of climate change and perhaps help business build a strong reputation as a powerful agent of societal well-being" (p. 28). Those who are aware of and prepared for climate change will be able to make the most of the situation in the future.

Research Overview

By balancing short-term objectives with longer-term, value accretive opportunities in response to changing environmental realities, corporations have a great deal to gain from reframing climate-related risks in terms that are both relevant and actionable moving forward. In turn, business schools and the academic community have an opportunity to develop and train emerging business leaders in how to innovate through and capitalize on potentialities associated with evolving environmental and climate-related trends and developments.

In the remaining sections, the focus of our research is divided into two primary components. The focus of the first section is to understand how the current business community views non-financial risks, particularly those driven by a changing climate. The focus of the second section is to map current MBA perceptions relative to the importance and significance of climate-related social and environmental risk. We conclude with an overall synthesis of our findings and suggestions for how to address potential gaps and opportunities moving forward related to furthering corporate prioritization, preparedness, and action related to the threats inherent in changing climactic conditions.

CURRENT BUSINESS LEADER BENCHMARKING

Background

To determine if a gap exists between current and future leader perceptions, we first benchmarked current attitudes. Benchmarking included two stages: official reporting and anecdotal information. In stage one, we compared Form 10-K disclosures to the disclosure recommendations of the Sustainability Accounting Standards Board (SASB) to see where leaders aligned with experts on the materiality of certain environmental and social risks. In stage two, we conducted interviews with leaders from companies that are representative of industries that recruit MBA candidates to supplement the Form 10-K analysis with qualitative data.

Stage I: Annual Report Analysis

Sustainability Accounting Standards Board (SASB)

The way in which corporate leaders recognize and prioritize environmental risk is demonstrative of the degree to which leaders find these risks of importance to their business. First, companies cannot begin to reduce their impact and risk if they do not understand what they are. Second, many corporations need guidance and support from NGOs, think-tanks, and regulatory bodies to determine how to communicate effectively to their investors and shareholders. Third, for future business leaders to address climate-related risk, companies need to disclose key risks and threats and by so doing, advocate for business students to learn the tools and methodologies necessary to anticipate and address environmental risk.

As a starting point for our research, we focused first on what non-financial risks are important to various businesses and industries. To do this, we used SASB as a guide.

SASB, was created in 2011 to assist companies across 11 sectors and 79 industries to disclose material sustainability standards and information to investors. SASB's definition of Sustainability spans five categories: Environment, Social Capital, Human Capital, Business Model and Innovation, and Leadership and Governance. Since 2011, SASB has worked with various companies and organizations and conducted research across 11 sectors to recommend reporting standards should be for non-financial risk and defining what is material for shareholders. The resulting materiality map outlines the significance of specific issues by sector. Within the materiality map, SASB indicates if the issue is material for over 50% of organizations within that industry, less than 50%, or not at all material (SASB, 2018).

The materiality map helps illuminate for investors key value drivers for corporations that go beyond easily quantifiable factors. As a result, the SASB materiality map can help investors understand and evaluate non-financial risk.

On the other hand, companies can use SASB and the materiality map to understand how sustainability risk factors can drive value for their organizations. Experts at Harvard Business

School suggest that companies can improve financial metrics, such as return on equity and sales growth, by focusing on SASB sustainability topics (Khan et. al., 2018). However, SASB research indicates that more than 80% of investors believe companies are not adequately addressing sustainability, while 80% of CEOs believe their companies are adequately addressing these risks (SASB, 2018). This suggests that companies are disclosing information but may not be using appropriate metrics. By using SASB metrics and strategy for disclosure, companies can provide a more comprehensive view of their business to investors and reduce the information gap.

Form 10-K and materiality matrix methodology

To understand how current businesses view non-financial risk, we conducted a Form 10-K analysis. A Form 10-Ks (hereafter referred to as a 10-K) is a form of official communication with stakeholders that communicates the financial and non-financial risks that companies deem material to their businesses. Therefore, 10-Ks are a tool to evaluate how businesses view non-financial risks. We designed this methodology to gain a general understanding of how different industries report on non-financial risk. This analysis was not intended to be a scientific or comprehensive approach to mapping corporate views on non-financial risk.

We followed the following guidelines in conducting the 10-K analysis. First, we chose the industries that are most common among Kenan-Flagler and Fuqua business school students (Health Care, Finance, Technology and Communications, Energy, Transportation, and Consumption). In order to choose the targeted companies for the 10-K analysis we took the top two to three ranking firms in each industry based on the Forbes top 500 list of companies. We read through these 10-Ks to find the categories and subcategories provided in SASB and referenced SASB definitions. Each firm was awarded a point for each mention of non-financial risk[1]. We defined a 'mention' as two sentences dedicated to a non-financial risk that matched at least one risk defined by SASB[2]. Any communication related to the risk or opportunity to address said risk was considered a mention.

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[1] Because a wide range of non-financial risks outlined by SASB could be influenced by climate change—from fuel management to employee wellbeing—our analysis covered all risk categories outlined in the SASB materiality map.

[2] For example, in the American Airlines was credited for a mention for greenhouse gas emissions when it stated, "We are subject to risks associated with climate change, including increased regulation to reduce emissions of greenhouse gases. There is increasing global regulatory focus on climate change and greenhouse gas (GHG) emissions. For example, the EU has established the Emissions Trading Scheme (ETS) to regulate GHG emissions in the EU." (American Airlines, 2016 p. 35)

Results
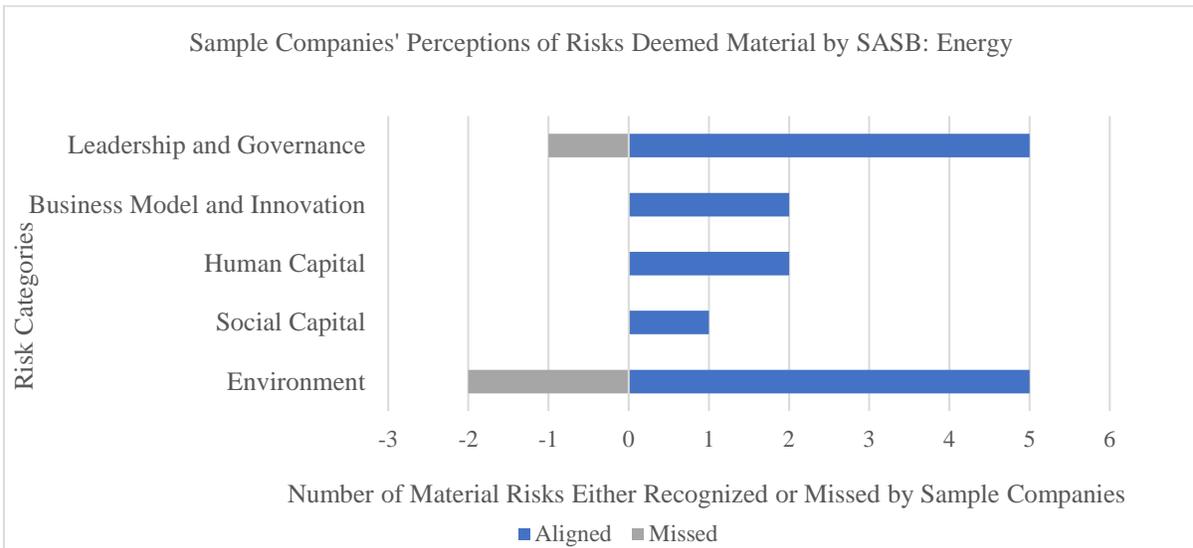
While the risks highlighted across industries are far from perfectly aligned with the issues deemed material by SASB, the high number of non-financial risks disclosed in 10-K form suggests that this is an area of potential interest on the part of current business leaders. Figure 1 includes specific corporate mappings by industry related to how specific companies align or misalign with what SASB deems material[3]. Points are allocated based on the number of times a specific company references a risk that falls within the SASB risk framework.

Figure 1: Sample Companies' Perception of Risks Deemed Material by SASB

Sample Companies' Perceptions of Risks Deemed Material by SASB: Financial Industry

Sample Companies' Perceptions of Risks Deemed Material by SASB: Health Care

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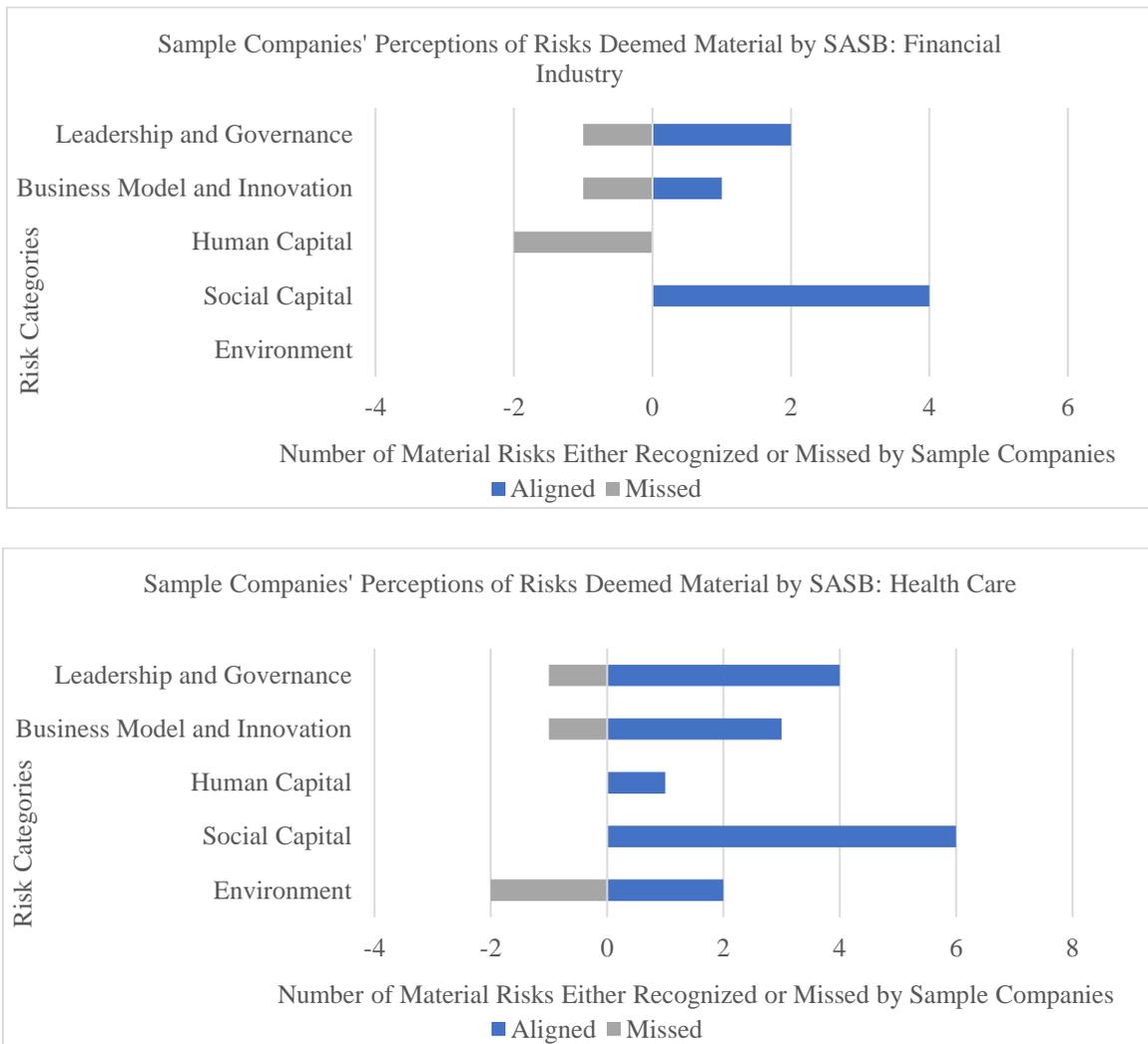
[3] Companies whose Form 10-Ks were analyzed include: Amazon, American Airlines, Apple, AT&T, Chevron, CVS Health, ExxonMobil, Ford, General Motors, J. P. Morgan Chase, McKesson, Proctor & Gamble, United Health Group, Walmart and Wells Fargo.

Sample Companies' Perceptions of Risks Deemed Material by SASB: Tech and Communications

Risk Categories (y-axis, top to bottom): Leadership and Governance, Business Model and Innovation, Human Capital, Social Capital, Environment

X-axis: Number of Material Risks Either Recognized or Missed by Sample Companies (-4 to 6)

Legend: ■ Aligned ■ Missed

Sample Companies' Perceptions of Risks Deemed Material by SASB: Consumption

Risk Categories (y-axis, top to bottom): Leadership and Governance, Business Model and Innovation, Human Capital, Social Capital, Environment

X-axis: Number of Material Risks Either Recognized or Missed by Sample Companies (-6 to 6)

Legend: ■ Aligned ■ Missed

Sample Companies' Perceptions of Risks Deemed Material by SASB: Energy

Risk Categories (y-axis, top to bottom): Leadership and Governance, Business Model and Innovation, Human Capital, Social Capital, Environment

X-axis: Number of Material Risks Either Recognized or Missed by Sample Companies (-3 to 6)

Legend: ■ Aligned ■ Missed

Stage II: In-depth Interviews

In-depth interviews with current business leaders provided additional insight into why companies determine non-financial risks to be material or non-material to their industry. Though our interview sample size was limited, our general interview findings complement the results of the 10-K analysis and indicate possible drivers for why companies highlight certain non-financial risks as material.

Methodology

Interviewees were selected to provide a broad representation of functions, experience, and company size in addition to industry. First, variation in function aims to avoid the strong bias of solely sustainability-focused employees. Second, these functions—including operations, HR, and finance—represent the future career paths of the students we surveyed in the second section of our research, allowing for better comparison between current and future business leaders' perceptions. Interviewees also represented a range of experience levels, from managers with 10 years of experience to executives. The company sample varied in life-cycle stage, from start-ups to established Fortune 100 firms.

Three central questions posed in our interviews aimed to reveal business leaders' perceptions of non-financial risk and new hires' preparation to address these risks. The first question directly asked interviewees to rate the relevance of non-financial risks to their industry (See Appendix A). For consistency across our study, non-financial risks were defined based on the SASB Materiality Matrix, also used in the 10-K analysis (SASB, 2017).

The second question delved further into the rationale behind the risk ratings and whether business leaders viewed these sustainability categories solely as risks to be managed or also as opportunities to fill future needs. This question aimed to bring in a sense of change over time, to highlight trends to indicate the relevance of these sustainability issues in the future. The final question sought to gauge current business leaders' perception of their human resources and the relevant preparation of new hires.

Results

Overall, the majority of business leaders interview ranked 3 or more risk categories as highly relevant to their industries, though these material risks varied between industries. In addition to rating each risk separately, the respondents provided qualitative examples to further support both high and low ratings (Table 1).

Table 1. Current Business Leaders In-depth Interviews; Response to Question 1.

Results of Question 1: Materiality of Non-Financial Risks *Which of 5 categories of non-financial risks are relevant to your industry? Please **rate** their importance on a scale from 1-10, 10 being most significant to your industry.*							
Category	Infrastructure	Transport	Tech	Energy	Health Care	Retail	Finance
Environment	6.5	9	9	8.5	7.5	9	2
Social Capital	7	8.5	9	7	9	9	10
Human Capital	5	10	7	10	10	10	3
Business Model and Innovation	5	4	8	8.5	10	7	1
Leadership and Governance	8	8	8	10	9	6	8

Infrastructure

Overall, Environment, Social Capital, and Leadership and Governance represented areas of greatest relevance to the infrastructure industry globally; however, our interviewee emphasized that the country in which firms operated highly influenced whether or not they had to take into account these non-financial risks. Differences across countries aligned with their level of economic development, due to factors including the extent and enforcement of regulation, level of civil unrest, and the characteristics of the local talent pool. For example, the extensive environmental regulations and standards in place in Europe increase the relevance of environmental risks to local infrastructure firms. However, countries without established regulations may at any time adopt these regulations, which, our interviewee argued, made these non-financial risks relevant in less regulated markets as well. Protests and social unrest, for example, enable civil society to disrupt or halt infrastructure projects over impacts not yet regulated by the government.

Relevance of social risks also varied across countries: commoditized labor in developing markets is relatively easy for firms to access, whereas recruitment and retention can represent a significant issue to firms in developed nations. Our interviewee also stated that worker rights and safety remains a significant issue in many developing nations and emerging markets, while the processes and standards in place in developed nations reduce risk (A. Gibson, Interview, 2017).

Technology

All risk categories were rated as highly relevant by our interviewee, though the primary motivation for focusing on non-financial risk was regulatory compliance and risk mitigation. In many of the highlighted risk areas, our interviewee confirmed that action taken on behalf of their firm focused primarily on complying with regulation, rather than finding any competitive advantage in addressing these sustainability areas. In our interviewee's experience, those

departments focused on these risk areas were perceived internally as "burdensome" rather than adding value to the firm. At the same time, the interviewee emphasized the importance of public opinion to company leadership through its impact on sales, and its potential to raise the importance of various sustainability issues.

As highlighted by the interviewee in infrastructure, the interviewee in technology emphasized variations in risk relevance by region. These variations primarily stemmed from differences in regulation, private and public-sector relations, and the strength of watchdog groups. The strength of regulation and watchdog organizations in the U.S., for example, makes environmental and social risks more relevant to local firms than those headquartered in countries like China with a significant connection between the private and public sectors. (A. Gibson, Interview, 2017).

Retail

Despite ranking multiple issues as highly relevant to the retail industry, the interviewer affirmed that the action being taken across the industry on these issues is limited. Awareness of the importance of these issues is high and there is significant communication around those limited actions taken by companies. However, the interviewee believes that corporate activities do not yet match the opportunity that these sustainability challenges represent (A. Duggan, Interview, 2018).

Transportation

Our interviewee ranked all issues except Business Model Innovation as highly relevant to the transportation industry. Similar to the retail interviewee, the interviewee from the transportation believed in the relationship between performance on sustainability issues and broader company performance. For example, actions to reduce fuel consumptions address a primary cost driver to the firm while also reducing emissions. Taking care of employees similarly supports better service to customers and therefore sales. Regarding action taken across the industry, the interviewee's firm had gained competitive advantage in addressing these issues raised by civil society groups more thoroughly than competitors. Other issues, such as enhancing fuel economy, have attracted consistent and significant attention across firms.

While action on sustainability issues provides advantages in some markets, our interviewee also highlighted barriers to sustainability improvements. One of these barriers includes the need to compete with firms based in other countries who are not held to the same sustainability requirements. For example, companies based in select Asian countries are able to offer significantly lower wages to their employees than those based elsewhere, making it difficult for those firms to invest in human capital and remain competitive (A. Duggan, Interview, 2018).

Health Care

All sustainability issues are highly important according to our interviewee, which represents a significant change over time. The importance of social capital, for example, has increased drastically over the past 15 years; our interviewee estimates that the difference could be

represented by the change in rating from a 5 to a 9 on a scale of 1-10. Increasing demands around access to and affordability of medicines are driving this change. Patient privacy also becomes both more important and more complex with the rise of the digital world and global companies.

According to our interviewee, Leadership and Governance as well as human capital issues have also increased in importance over time. The former due to the increase in regulation, and the latter due to the challenge of recruiting and retaining quality talent essential to business. With the increase in relevance, action on these issues has simultaneously increased across the industry, viewed both as risk management and as value creation (D. Bonney, Interview, 2018).

Energy

The full range of sustainability categories were highlighted as relevant by our interviewee from the energy industry and included topics such as energy efficiency, energy access, and the health and safety of employees. With revenues in regulated markets flat to declining, the rise of distributed resources, and falling cost curves, energy utilities are actively exploring new market opportunities in pursuit of growth. The current exploration of growth opportunities is largely opportunistic as utilities balance risk avoidance and mitigation with strategic objectives (G. Luke, Interview, 2018).

Finance

For our interviewee's firm, those sustainability issues deemed most relevant included social capital and leadership and governance. Leadership and Governance was highlighted as essential in the years following the 2008 financial crisis due to the enhanced regulation governing the industry. Data security, which falls under social capital, was highlighted by the interviewee as the most important issue facing the finance industry in the coming decades. This emphasis on data security stems from the heightened risk posed by hacking and data piracy globally (A. Gibson, Interview, 2017).

Preparation of New Hires

Perceptions of the preparation of new hires varied significantly across interviewees. The respondent from the technology industry commented that only those employees who dealt directly with sustainability issues would need additional preparation. For example, the interviewee felt that sales representatives would deal very little with sustainability issues and would be held accountable to other metrics like sales numbers. The interviewee from retail felt that MBA students entering the firm were sufficiently prepared to be the flexible leaders with sufficiently broad backgrounds to address the issues material to the industry. MBAs might not be trained on climate change, but they are trained in problem solving, which they can apply to climate risks when the time comes. The interviewee felt that MBA students did not come prepared to address significant issues in the relevant area of human rights, for example, but the interviewee believed that these skills would indeed come from further work experience.

Stage II: In-Depth Interviews - Conclusion

In-depth interviews showed varying interest in sustainability issues, including those related to climate change, with each interviewee highlighting at least one issue area as highly relevant to their industry. Qualitative responses suggested the materiality of these issues stems from regulatory compliance, risk mitigation, as well as value creation, though action across industries was sometimes described to lag behind awareness. Though small sample size prevents statistically significant results, these initial interviews support results of the 10-K analysis and suggest that current business leaders may be aware of material non-financial risks.

After benchmarking current leader attitudes, our team conducted a survey of MBA students to quantify the corresponding attitudes of future leaders on climate-related risks. This survey was designed to measure how important students think climate will be to their industries, and how prepared they feel to act on these risks should the need arise in their future careers.

Survey Design

The survey was developed utilizing Qualtrics, a web-based survey platform. The survey was randomly assigned to participants by utilizing "randomizer" in the Qualtrics survey flow. To avoid ordering bias, the "choice randomization" feature was used for each question to vary the order of question variables.

Survey Distribution

The survey was distributed to current MBA students at Duke University's Fuqua School of Business (FSB) and the University of North Carolina's Kenan-Flagler Business School (KFBS) through school email listservs and student group distribution channels. Due to the nature of the survey, we attempted to avoid survey bias by not disclosing our environmental degree in email outreach communications or the survey itself. Further, outreach emails for survey distribution did not specify a focus on risks related to climate change but rather corporate risks in future careers.

Procedure

The survey was distributed and responses collected between January 23 and February 5, 2018. Participants were randomly assigned one of two surveys, either the *control* or *treatment survey*. In the first question, both the *control* or *treatment survey* contained the following scenario aimed at evaluating corporate risk perceptions:

> *You are a business manager leading a large, international line of business for a global firm that provides goods and services to consumers. As you develop your budget for the next fiscal year, you have to decide how to allocate a pool of funds designated for risk mitigation.*

If assigned the *treatment survey*, respondents received additional information which included the climate change prime:

> *During the process, you find a new report by the Task Force for Climate-related Disclosures, a multi-year project commissioned by the Financial Stability Board (FSB), which recommends voluntary disclosures for the risks associated with climate change.*

After the business scenario, participants then received a series of eight identical questions related to broad corporate risks, climate change specific risks, risks in future careers, and perceived readiness to address climate related risk attributable to an MBA education. These questions utilized a Likert scale to measure the participants' opinions.

At the end of survey, all participants received six demographic questions. In accordance with Institutional Review Board protocol, participant identities have remained anonymous and Informed Consent was obtained. Respondents generally completed the survey in 5 – 10 minutes. Survey questions are replicated in Appendix B.

Participants

Survey respondents consisted of 237 MBA students from Duke University (*n* = 126) and The University of North Carolina (*n* = 110). The sample included 79 females and 157 males. The median age was 29 – 33 years old. Of the participants, 122 received the *control survey,* and 115 received the *treatment survey*. Not all respondents provided demographic information. See *Table 2* for additional participant demographics. Generally, distributions are consistent with typical MBA populations.

Table 2. Respondent demographics, frequency by survey type.

Demographic Question	Answer Choice	Survey Type	
		Control	Treatment
Which best describes your sex?	Male	76	81
	Female	45	34
	Total	121	115
Which best describes your age?	18-23	0	1
	24-28	54	40
	29-33	59	67
	34-38	8	6
	39+	0	0
	Total	121	114
Which best describes your region of origin?	Africa	2	3
	Asia	19	19
	Australia/Pacific Islands	0	0
	Central America/Caribbean	2	2
	Europe	6	10
	Middle East	4	1
	North America	82	66
	South America	6	13
	Total	121	114
What business school do you attend?	The Fuqua School of Business	61	65
	Kenan-Flagler Business School	61	49
	Total	122	114

Statistical analysis was conducted with Stata SE15. One-way analysis of variance (ANOVA) were used to determine whether or not there was a statistically significant difference between control and treatment responses. For questions with no statistical difference, the population was aggregated and evaluated across demographic factors.

Results

Does the context of climate change alter the relative importance MBA candidates place on mitigating corporate risks?

We compared how unprimed (*control*) and primed (*treatment*) respondents allocated a pool of theoretical funds across eight risk categories. ANOVA with survey type as the factor variable indicated significant priming effects on both Global Market Volatility, $F(1, 235) = 3.65$, $p = 0.0574$ (*Figure 2*), and Environmental & Social Disruption, $F(1, 235) = 4.16$, $p = 0.0425$ (*Figure 3*). In addressing Global Market Volatility, primed respondents allotted a smaller percentage of funds ($M = 13.00\%$) than did the control group ($M = 15.41\%$). When accounting for Environmental & Social Disruption, participants in the treatment condition allocated more funds ($M = 13.21\%$) than the control group ($M = 10.60\%$).

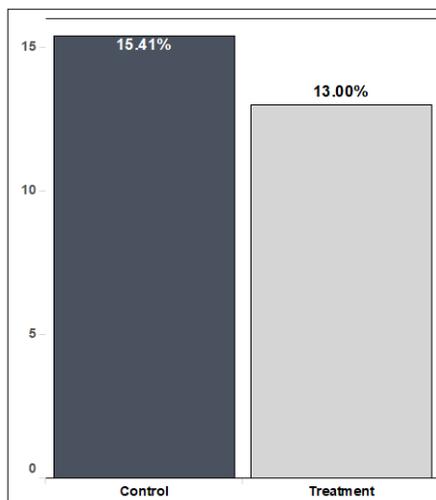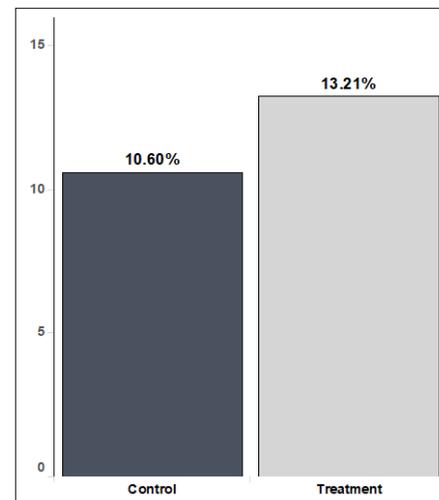*Figure 2*. Percent allocated to Global Market Volatility ($p = 0.0574$).

Figure 3. Percent allocated to Environmental & Social Disruption ($p = 0.0425$).

To test whether priming instigated a trade-off between these risks, we conducted pairwise correlation of variables. This analysis indicated a very slight negative correlation between Global Market Volatility and Environmental & Social Disruption in both the control ($r = -0.1617$, $p = 0.0751$) and treatment groups ($r = -0.1804$, $p = 0.0537$). Though priming decreased allocation towards Global Market Volatility and increased that of Environmental & Social Disruption, the weak correlations between these variables fails to support the notion that respondents faced a trade-off when allocating across these risks.

Because we found significant priming effects at the aggregate level, we conducted analysis to determine if particular industries or sectors were more susceptible to priming. We first evaluated the distribution of post-MBA industries by survey type (*Table 3*) to identify industries with adequate sample sizes for further analysis. Based on this evaluation, we determined Financial Services, Consulting, and Technology merited further analysis.

Table 3. Post-MBA Industry frequency, by survey type.

Survey	Financial	Retail/CPG	Energy	Healthcare	Consulting	Technology	Transportation	Other	Total
Control	24	11	7	11	24	28	5	12	122
Treatment	29	8	7	11	17	26	1	15	114
Total	**53**	**19**	**14**	**22**	**41**	**54**	**6**	**27**	**236**

We conducted one-way ANOVAs with survey type as the independent variable for the three post-MBA industries. This analysis revealed statistically insignificant priming effects on allocation of funds across all risk variables for Consulting, $F(1, 39) = 0.31$, $p = 0.5788$, and Technology, $F(1, 52) = 1.41$, $p = 0.2412$. However, Financial Services professionals revealed statistically significant priming effect when allocating funds towards Environmental & Social Disruption, $F(1, 51) = 3.91$, $p = 0.0534$. In addressing this risk, primed Financial Services participants allocated more funds (M = 15.00%) than the control group (M = 8.50%). These results are represented in *Figure 4*.
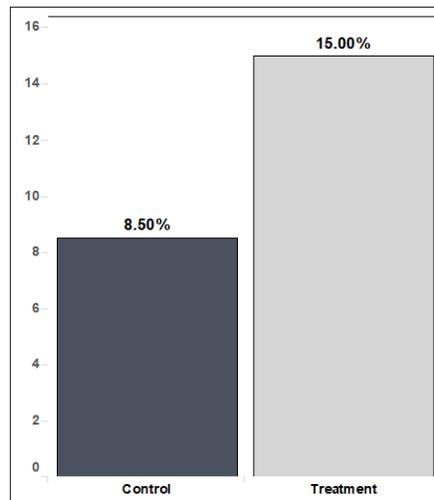

Figure 4. Percent allocated to Environmental
& Social Disruption by Financial Services professionals ($p = 0.0534$)

When MBA candidates think about climate change within a business context, do they perceive mitigating climate risks as more important to corporations?

To evaluate this, analysis focused on responses to questions regarding how important participants thought it was for both current and future corporate leaders to be prepared to address climate change risks. Participants responded on a 4-point Likert scale, anchored at 1 = *unimportant* and 4 = *very important*.

ANOVA with survey type as the independent variable indicated a significant priming effect on the importance placed on the preparedness of corporate leaders both now and in the future. When primed, respondents placed less importance on current leaders addressing climate change, $F(1, 235) = 5.24$, $p = 0.0230$ (*Table 4*). Similar analysis revealed that primed respondents also placed less weight on future leaders, $F(1, 235) = 8.84$, $p = 0.0032$.

Further, across both groups, participants believed it was more important for future leaders to be prepared to address climate change related risks. The importance that participants placed on both current and future leaders had strong positive correlations, within both the control ($r = 0.6310$, $p < 0.000$) and treatment ($r = 0.7319$, $p < 0.000$) groups.

Table 4. Perceived importance that corporations are prepared to address climate change currently and in the future, by survey type and post-MBA industry

Post-MBA Industry	Importance of Current Leaders				Importance of Future Leaders			
	$M_{control}$	$M_{treatment}$	F-statistic	p	$M_{control}$	$M_{treatment}$	F-statistic	p
All Industries	3.28	3.05	$F(1,235) = 5.24$	0.0230*	3.57	3.30	$F(1,235) = 8.84$	0.0032*
Financial Services	3.29	2.79	$F(1,51) = 6.47$	0.0140*	3.50	3.03	$F(1,51) = 5.01$	0.0296*
Consulting	3.65	3.24	$F(1,39) = 4.65$	0.0373*	3.67	3.52	$F(1,39) = 0.63$	0.4314
Technology	3.25	3.04	$F(1,52) = 1.04$	0.3129	3.54	3.19	$F(1,52) = 3.06$	0.0861**

* p-value < 0.05; ** p-value < 0.10

Next, we assessed whether post-MBA industry influenced this perception. When primed, both Finance and Consulting professionals placed less importance on current leaders, $F(1, 51) = 6.47$, $p = 0.0140$, and $F(1, 39) = 4.65$, $p = 0.0373$, respectively. When evaluating the importance of future leaders, primed Finance professionals thought it less important relative to the control group, $F(1, 53) = 5.01$, $p = 0.0296$. Technology respondents displayed a marginally significant priming effect while lowering importance on future leaders, $F(1, 52) = 3.06$, $p = 0.0861$.

Across these industries, MBA candidates felt that it was more important for future leaders to be prepared to address climate change related risks.

Do MBA candidates associate specific risks with climate change when thinking about business?

We tested this hypothesis by evaluating priming effects across the following risks:

Political Instability
Currency / Foreign Exchange
Global Market Volatility
Supply Chain Disruption
Digital & Physical Security
Labor Shortages

Sea-level rise
Carbon Emissions / Tax
Biodiversity loss
Resource Scarcity (fuel, material)
Drought / famine
Severe storms
Population Dislocation

Specifically, we asked participants to answer the following questions by rating each risk on a 4-point Likert scale:

1. In your career, how likely is it that you will you be required to take action regarding the following risks? (1 - very unlikely, 2 - unlikely, 3 - likely, 4 - almost certainly)
2. How confident are you in your ability to address these risks? (1 - not confident, 2 - somewhat confident, 3 - confident, 4 - very confident)
3. How much impact will these risks have on your future industry? (1 - no impact, 2 - little impact, 3 - some impact, 4 - big impact)

One-way ANOVA of MBA candidates with survey type as the independent variable indicated a statistically significant priming effect on confidence in abilities to address Population Dislocation, $F(1, 235) = 5.27$, $p = 0.0225$. Primed respondents indicated a higher level of confidence ($M = 1.84$) than did the control group ($M = 1.60$). At the aggregate level, no other significant priming effects occurred.

When evaluating the significance of risks to future industry, Consulting professionals had strong statistically significant priming effects when considering Resource Scarcity, $F(1, 39) = 6.76$, $p = 0.0131$, and Population Dislocation, $F(1, 39) = 6.23$, $p = 0.0169$. This suggests that consultants strongly associate these threats with climate change.

When thinking about climate change in a business context, do MBA candidates feel more prepared to address these risks?

To evaluate this, we analyzed responses to questions regarding how well MBA candidates felt their MBA education had prepared them to address environmental and social threats driven by climate change. Participants responded on a 4-point Likert scale, anchored at 1 = *not within my skill set* and 4 = *definitely within my skill set*.

Treatment group participants reported that their MBA education had better prepared them to address Environmental Threats than the control group, $F(1, 235) = 2.94$, $p = 0.0878$, which is marginally significant. However primed respondents did not indicate a statistically significant perception regarding Social Threats, $F(1, 235) = 2.24$, $p = 0.1360$. Analysis of post-MBA industries did not reveal statistically significant priming effects (*Table 5*).

Table 5. Perceived readiness, by survey type and post-MBA industry.

Post-MBA Industry	Environmental Threats				Social Threats			
	$M_{control}$	$M_{treatment}$	F-statistic	p	$M_{control}$	$M_{treatment}$	F-statistic	p
All Industries	1.58	1.73	$F(1,235) = 2.94$	0.0878**	1.89	2.03	$F(1,235) = 2.24$	0.1360
Financial Services	1.38	1.48	$F(1,51) = 0.46$	0.5002	1.75	1.79	$F(1,51) = 0.06$	0.8098
Consulting	1.67	1.94	$F(1,39) = 1.8$	0.1878	1.83	2.06	$F(1,39) = 0.97$	0.3299
Technology	1.61	1.62	$F(1,52) = 0.00$	0.9652	1.82	2.15	$F(1,52) = 2.63$	0.1111

** p-value < 0.10

Do MBA candidates feel prepared to address climate risks as related to their industry?

To address this question, we assessed the average confidence of MBA students in their ability to address financial and non-financial risks, given how likely they believe they will be required to act on each risk in their future career and the perceived impact the risk will have on their future industry. This is represented by *Figure 5*, where the size of the bubble represents how large of an impact the students believe on average the risk will have on their industry. At the aggregate level, it appears that the more likely students believe they will encounter a certain risk, the more confident they feel in their ability to address that risk. Further, risks that are perceived as more impactful are skewed towards the upper right corner of the *Figure 5*. We determined this general trend to represent the *perceived relevancy* of each risk.

Figure 5 displays the average confidence of MBA students in their ability to address financial and non-financial risks, given how likely they believe they will be required to act on each risk in their future careers. The size of the bubble represents how large of an impact the students believe on average the risk will have on their industry. At the aggregate level, it appears that the more likely students believe they will encounter a certain risk, the more confident they feel in their ability to address that risk. Further, risks that are perceived as more impactful are skewed towards the upper right corner of *Figure 5*.
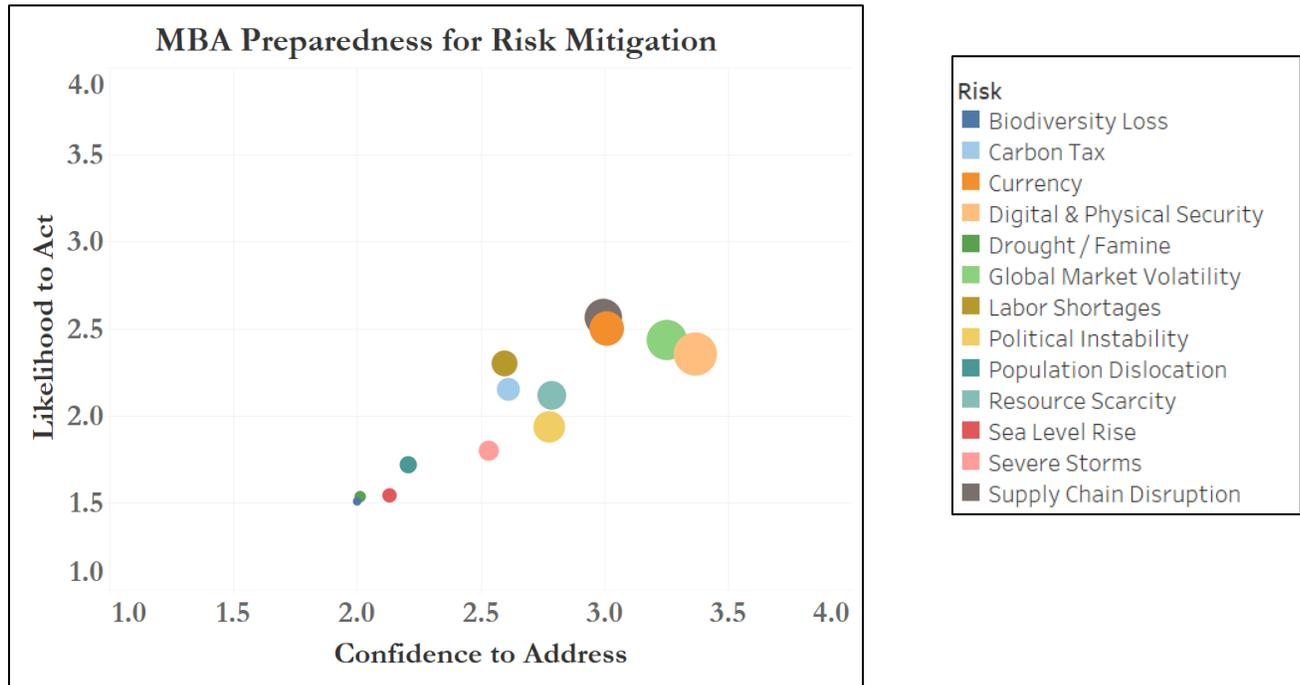

Figure 5. Average MBA candidate perception of whether they will need to act on a specific risk, if they are confident to address the risk, and how much impact it may have on their industry.

Figures 6 and 7 display the *perceived relevancy* of each risk to post-MBA industries. Risks are grouped as climate-related and non-climate related. Climate-related risks are those that were identified by SASB (see Stage 1 of research). Overall, students across industries have a general consensus about the *perceived relevancy* of non-climate risks, while only Biodiversity achieves the same level of consensus among the climate-related risks. All other climate risks have a spread of *perceived relevancy* due to variation in confidence, likelihood to act, or magnitude of impact to the industry.
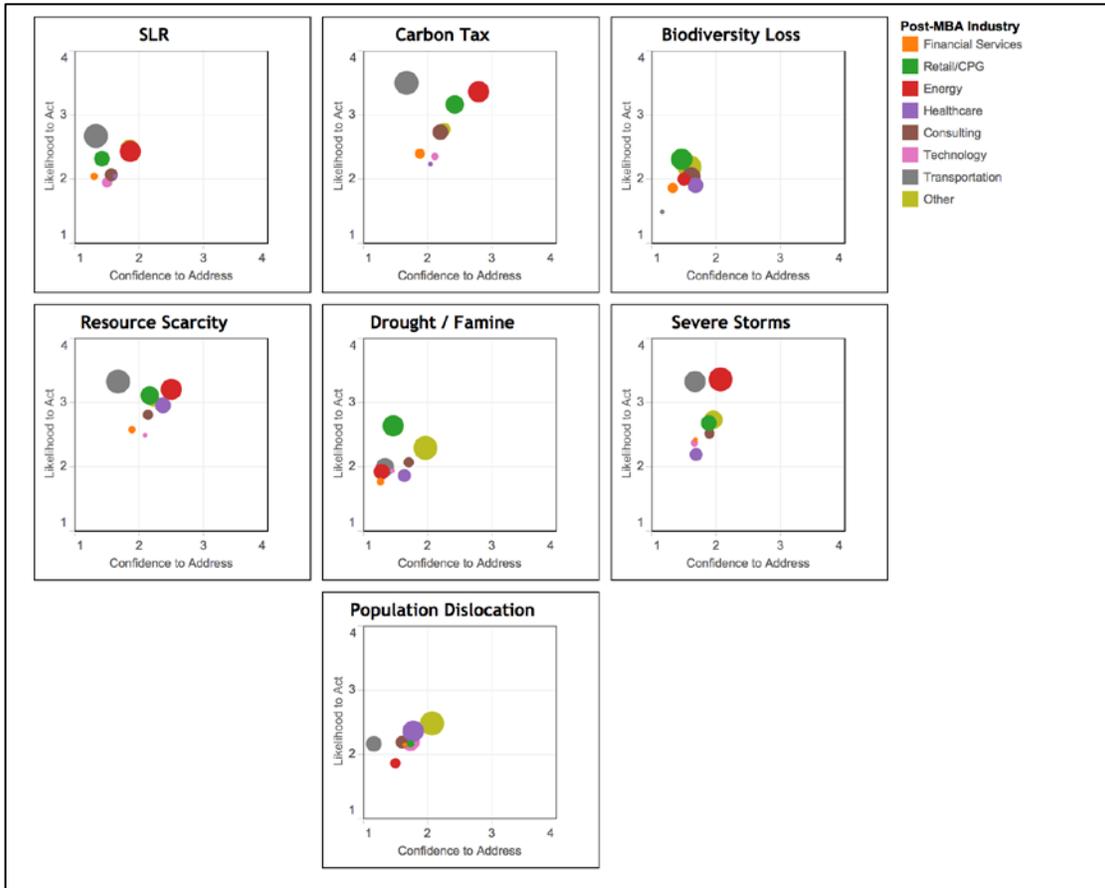
Figure 6. Perceived relevancy of climate risks, by industry.

Figure 7. Perceived relevancy of non-climate risks, by industry.

Next, we evaluated respondent perceptions of how well their MBA education prepared them to address environmental and social risks related to climate change (*Figure 8*). Overwhelmingly, MBA candidates do not feel that their MBA education has provided them the necessary tools to address these risks.
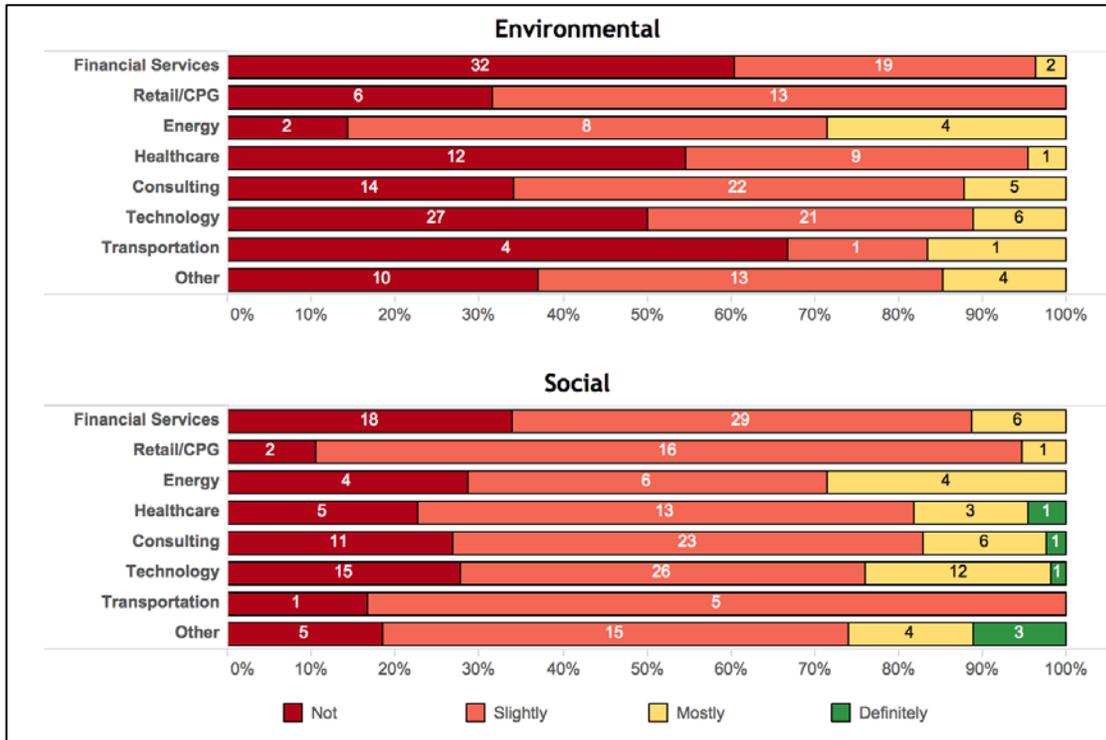

Figure 8. Readiness to address environmental and social risks associated with climate change, by industry. Note: Specific numeric references indicate the number of individual responses indicating MBA education sentiments

Analysis

MBA students weight environmental risks more heavily as a broad category after being primed with climate change awareness, as shown in Figure 3. Yet they are not able to identify which specific risks will be material to their industries. On the whole, MBA students ranked climate-related risks as low likelihood, low confidence, and low impact when compared with other, traditional business risks (Figure 5). The discrepancy between acknowledging broad environmental risks and downplaying the importance when asked about specific risks indicates a lack of understanding about how climate change will affect future industry. Furthermore, an overwhelming majority of students do not feel their MBA educations have given them the tools to address environmental or social risks.

While the separate analysis of current business leaders and students provides interesting insights into both groups, our final research question prompts us to ask: do these two groups align in the non-financial risks they believe impact their industry?

Zooming in on climate risks specifically, it is clear that MBA students consider the likelihood of acting on these risks to be less than 50%. If MBAs are correct about the likelihood of action, there is little reason for concern—if they won't be called upon to act, their confidence in addressing the matter is immaterial. However, generally, current business leaders all ranked environmental and social risks much higher in importance (except finance). The climate gap discrepancy between current leaders and future leaders potentially poses a threat to future business success.

To further identify the climate gap, we isolated the responses of students pursuing specific industries to compare directly to the corresponding business leaders. Due to the large sample size of surveyed students pursuing the tech and finance industries, we selected those industries for comparison with the identified perceptions of current business leaders.

Finance

Only one of the sustainability-related risk categories was highlighted as material by both current and future business leaders: data and digital security. Those risks primarily related to climate change were not deemed relevant by any of the current or future business leaders represented. Carbon tax, GHG emissions, fuel management, biodiversity impacts loss all ranked low in relevance—either in terms of 'likelihood' a future business leader would need to take action on these topics or whether these topics were 'relevant' to current leaders' industries. Social and human capital risks beyond digital security, including issues like labor shortages and population dislocation, were not considered material by either group.

Tech and Communications

Multiple sustainability-related risk categories were identified as material by both groups; however, students failed to identify material environmental risks highlighted by current leaders. Students and current leaders aligned in identifying social and human capital issues including digital security and labor shortages as relevant to their industry. Unlike in the finance industry, assessment of environmental risks diverged between students and business leaders. Risks posed by a carbon tax did not register with surveyed students; however, firms' 10-Ks mentioned various material risks related to carbon tax, including GHG emissions, energy use, and fuel management. The current business leader interviewed also highlighted the importance of environmental risks due to regulation, giving a rating of 9 on a scale of 1-10, whereas most students stated that it is 'very unlikely' to 'unlikely' that they will have to take action on related environmental risks.

Across both industries, represented current leaders and students aligned in many of the top social, human capital, and environmental issues identified, with the exception of environmental risks for the tech and communications industry. This brief analysis indicates areas for future research to determine whether current students are keeping pace with the sustainability issues relevant to their future careers.

RESEARCH CONCLUSIONS

In conclusion, the focus of this study was to document and understand emerging perspectives on non-financial risks, particularly risks related to or directly impacted by a changing climate. The research team employed various research methods, including a 10-K analysis, a series of in-depth, corporate interviews, and an MBA student survey, to map how both current and future business leaders view climate-related risk.

Overall, findings indicate that corporate business leaders consider non-financial risks related to climate change material to their companies and industries; however, corporate perspectives vary – based on industry – relative to what constitutes true materiality. Moreover, industry-focused interviews indicate that regulatory compliance and country/regional specificity have an impact on the way corporations and industries approach non-financial risks, particularly environmental and social threats. However, despite industry and region-specific nuances, industry practitioners broadly acknowledge the increasing importance and attention paid to emerging social and environmental issues in the modern corporation.

From a student perspective, MBAs share the sentiment with industry practitioners that climate-related, non-financial risks – categorized as environmental and social disruption – are material to the modern corporation; yet, students have a limited understanding of granular climate-related risks and feel inadequately prepared to handle climate risks upon graduation from business school. In addition, MBA students respond to climate risk priming. When primed of the relevance and materiality of climate-related risk, MBAs increase their allocation to risk mitigation by approximately 25%. In addition, MBAs' intended industry post-graduation can even further impact the degree by which they respond to a climate-related prime. For example, MBAs focused on careers in finance increase their budget allocation to environmental and social risk mitigation by approximately 75% between the control and the prime. Lastly, we noted that primed MBAs decrease the importance of current and future leader preparedness to address climate-related risk relative to the control. This particular result is confounding in light of how MBAs increase their categorical resource allocation to environmental and social risk mitigation and suggests that additional research may be necessary and helpful in understanding specifically how climate-related priming shapes MBAs' perceptions.

RECOMMENDATIONS & NEXT STEPS

As a solution to addressing the MBA preparedness gap, we propose that business schools refine MBA curriculums to integrate environmental and social issues, threats, and opportunities into the core curriculum. Business schools should highlight the presence of climate-driven risks alongside other industry risks and opportunities. MBA programs should consider focusing on both the threats and opportunities for corporations, industries, and the global economy as the climate changes, with a particular emphasis on the pursuit of value-accretive, corporate strategies.

Moreover, we propose that business schools should support and fund further academic and business research that translates environmental and social risks and opportunities into relevant and applicable business literature both in the form of case-based learning as well as scholarly research. This support would help bridge the gap cited by Patenaude (2011) in translating climate science into business-relevant literature. If done successfully, this translation has the potential to inform both students and industry on how to mitigate and respond to the emergent threats and opportunities associated with a changing climate. As a final step, we recommend additional exploratory research to understand the inherent sensitivities associated with how students both perceive and respond to climate-related information in a business context. We as a research team see enormous opportunity within business education to prepare emerging corporate leaders to respond to climate risks and by so doing, create long-term value both for corporate shareholders and society at large.

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APPENDIX A: IN-DEPTH INTERVIEW GUIDING QUESTIONS

1) Which of 5 categories of non-financial risks are relevant to your industry? Please **rate** their importance on a scale from 1-10. Has this changed over time?

- *Environment*: GHG emissions, air quality, energy management, fuel management, water and wastewater, waste and hazardous materials, biodiversity impacts

- *Social Capital*: human rights and community relations, access and affordability, customer welfare, data security and customer privacy, fair disclosure and labeling, fair marketing and advertising

- *Human Capital*: labor relations, fair labor practices, employee health safety and wellbeing, diversity and inclusion, compensation benefits, recruitment development and retention

- *Business Model and Innovation*: lifecycle impact of products and services, environmental, social impacts on assets and operation, product packaging, product quality and safety

- *Leadership and Governance*: Systematic risk assessment, accident and safety management, business ethics, competitive behavior, regulatory capture and political influence, material sourcing, supply chain management (SASB, 2017).

2) Across the industry, how significant is the action being taken on the issues deemed relevant? Is that action perceived as value creation, value protection, or both? Has this perception changed over time?

3) Are the MBA students entering your organization are adequately prepared to address these risks to your industry. Are there certain attributes of a recent hire that make them better prepared (i.e. previous experience, school attended, etc.)?
   A) Looking to the future, what knowledge or skillset do you wish students come prepared with?
   B) Should MBA programs have a role to play in helping students be better prepared

APPENDIX B: MBA STUDENT SURVEY QUESTIONS

Scenario (All Respondents): You are a business manager leading a large, international line of business for a global firm that provides goods and services to consumers. As you develop your budget for the next fiscal year, you have to decide how to allocate a pool of funds designated for risk mitigation.

Climate Change Prime (Treatment Group Only): During the process, you find a new report by the Task Force for Climate-related Disclosures, a multi-year project commissioned by the Financial Stability Board (FSB), which recommends voluntary disclosures for the risks associated with climate change.

Question 1 (All Respondents): To mitigate risk, what percentage of the funds do you allocate to each of the eight threats below? (Total 100%)

Political Instability   Digital & Physical Security
Currency / Foreign Exchange   Labor Shortages
Global Market Volatility   Environmental & Social Disruption
Supply Chain Disruption   Other (Please list)

Question 2 (All Respondents): In your career, how likely is it that you will you be required to take action regarding the following risks? (1 - very unlikely, 2 - unlikely, 3 - likely, 4 - almost certainly)

Political Instability   Sea-level rise
Currency / Foreign Exchange   Carbon Emissions / Tax
Global Market Volatility   Biodiversity loss
Supply Chain Disruption   Resource Scarcity (fuel, material)
Digital & Physical Security   Drought / famine
Labor Shortages   Severe storms
                                               Population Dislocation

Question 3 (All Respondents): How confident are you in your ability to address these risks? (1 - not confident, 2 - somewhat confident, 3 - confident, 4 - very confident)

Political Instability   Sea-level rise
Currency / Foreign Exchange   Carbon Emissions / Tax
Global Market Volatility   Biodiversity loss
Supply Chain Disruption   Resource Scarcity (fuel, material)
Digital & Physical Security   Drought / famine
Labor Shortages   Severe storms
                                               Population Dislocation

Question 4 (All Respondents): How much impact will these risks have on your future industry? (no impact, little impact, some impact, big impact)

Political Instability   Sea-level rise
Currency / Foreign Exchange   Carbon Emissions / Tax
Global Market Volatility   Biodiversity loss
Supply Chain Disruption   Resource Scarcity (fuel, material)
Digital & Physical Security   Drought / famine
Labor Shortages   Severe storms
                                               Population Dislocation

APPENDIX B: MBA STUDENT SURVEY QUESTIONS (Continued)

Question 5 (All Respondents): If faced with corporate risks related to **environmental threats** driven by climate change (including sea-level rise, air and land pollution, biodiversity loss, extreme weather, and carbon regulation), do you feel your MBA education thus far has given you the skills needed to tackle these risks? (not within my skill set, slightly within my skill set, mostly within my skill set, definitely within my skill set)

Question 6 (All Respondents): If faced with corporate risks related to **social threats** driven by climate change (including population displacement, access to food and water, political instability, etc.) do you feel your MBA education thus far has given you the skills needed to tackle these risks? (not within my skill set, slightly within my skill set, mostly within my skill set, definitely within my skill set)
(a)
Question 7 (All Respondents): How important is it to corporations that **current senior leaders** are prepared to identify, monitor, and respond to emergent environmental and social threats driven by a changing climate? (unimportant, somewhat unimportant, somewhat important, very important)

Question 8 (All Respondents): How important is it to corporations that **future senior leaders** are prepared to identify, monitor, and respond to emergent environmental and social threats driven by a changing climate? (unimportant, somewhat unimportant, somewhat important, very important)

Question 9 (Treatment Group): In Question 1, the FSB recommends voluntary disclosures for what type of risk? (multiple choice)
- Currency
- Climate
- Political
- Labor

Demographic Information (Optional for All Respondents):
Which best describes your sex (Male, female)

Which best describes your age (18-23, 24-28, 29-33, 34-38, 39+)

Which best describes your region of origin (North America, South America, Central America/Caribbean, Africa, Middle East, Europe, Asia, Australia/Pacific Islands)

What business school do you attend? (Duke or UNC)

What year will you graduate? (2018, 2019, later)

What was your industry before school? (financial services, retail/CPG, energy, healthcare, consulting, tech, transportation, other)

What is your intended industry or sector after graduation? (financial services, retail/CPG, energy, healthcare, consulting, tech, transportation, other)