



**Preparing Business Students to be
Sustainable Business Leaders in the 21st Century**

by

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Abstract

The necessity and importance of sustainability has been discussed increasingly often and urgently as material business considerations, notably by Larry Fink, the CEO of Blackrock (Fink 2021a). Further, research over the past few decades has found that business school core curricula is encouraging students to develop selfish, individually focused, and even sociopathic behaviors and values by the time they graduate (Krishnan, 2008; Hoffman, 2021; Smith, 2021; Frank et al., 1993; Acemoglu et al., 2022). It is urgent that these occurrences be reconciled due to the pervasive threat of climate change and the damaging effect of “business as usual.”

In this thesis, I assess how aligned business school stakeholders are in demanding sustainability skill sets; how heavily these stakeholders value sustainability; and lastly, apply these findings to BBA programs. The stakeholders and sub-categories of stakeholder groups analyzed include Students (Incoming BBA Students, Current Student Courses, & Current Student Co-Curriculars), Employers (Recruiters & Executive Education), and Donors. Researched and written from the perspective of a BBA student at the University of Michigan Ross School of Business, this thesis includes certain data sources that are internal and specific to the experience of attending the Ross School. However, the results still are relevant and useful for other business programs to learn from and implement.

Of the stakeholders discussed in this thesis, Students (particularly Current Student Courses and Current Student Co-Curriculars) and Employers (Recruiters and Executive Education) are the most aligned and show the strongest demand signals. These stakeholder groups demonstrate their demand through course enrollment, creation and involvement in co-curricular activities, new job postings, and re-education practices. The demand signals between Students and Employers are consistent since they are both looking for increased education and opportunities related to sustainability in business schools. However, the continued expression of these interests and wants reveal that a gap remains between what is available and what is currently available in business schools, which can be most efficiently bridged by embedding sustainability into the core curriculum.

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Introduction

Larry Fink's 2020 letter to CEOs regarding BlackRock's consideration of climate change in future investments indicates that current business students will be entering a workplace that is drastically evolving to prioritize Environmental, Social, and Governance factors (ESGs), the triple-bottom line, and long-term sustainability (Fink, 2020). This letter, along with the 2021 letter to CEOs, emphasize the importance of stakeholder consideration, the success of purpose-driven companies, and focusing on long-term growth over short-term returns (Fink, 2021a). However, BlackRock is not the only firm discussing environmental and social impact. In August 2019, the Business Roundtable, made up of 181 influential CEOs, redefined the purpose of business away from "maximizing returns to shareholders," to promoting an "economy that serves all Americans" (Business Roundtable, 2019). Since the start of 2020, even fossil-fuel dependent companies like BP and Delta Airlines have declared their commitments to net carbon-neutrality (Bousso, 2020; Harder, 2020). While the validity and methods of accomplishing these claims and goals may vary, the fact that sustainability, measuring impact, and climate change are immediately relevant to today's business world is difficult to deny.

Higher education is an important space to begin and promote long-term change. In the UN Sustainable Development Goals, higher education is included under Target 4.3: "By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" (UN). Another target under the Quality Education SDG is Target 4.7: "By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of

peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.” Access to a college education and the adequate knowledge and skills to live sustainably were recognized by the United Nations as necessary for the foundation of sustainable development.

Business schools play an especially important role in sustainable development (Cole & Snider, 2018; Fisher, 2017). Upon graduation, business students are entering into roles where they need to be prepared to address sustainability-related issues as they relate to core business activities (Edwards, Brown, et al., 2020). This responsibility provides an opportunity for business schools to step up and catalyze change in business practices. Literature on incorporating sustainability into business education has become increasingly prevalent (Ruiz-Palomino et al., 2019). Meanwhile, pressure has been steadily building on higher education, but adoption, particularly into the core curriculum, has noticeably lagged (Landrum & Ohsowski, 2016; Fisher & Bonn, 2017).

Sustainable development has been commonly defined by Brundtland and the World Commission on Environment and Development (WCED) as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (1987). However, since publication, gaps have formed between the intention and the application of this definition. The lack of integration of social sustainability has exacerbated many of the social issues that are already externalities of capitalism. Meanwhile, the application of the terms “sustainability” and “sustainable development” have shifted to prioritize the economic and environmental aspects of the triple bottom line, leaving out the social component (Hudler et al., 2021; Orji, 2019; Landrum & Ohsowski, 2017). This has led to researchers redefining or rephrasing sustainability in attempts to be effectively all-encompassing and inclusive. For

instance, another widely-used definition of sustainability is that sustainability holds “the possibility that human and other life will flourish on the planet forever” (Ehrenfeld, 2008).

However, in order to have a complete understanding of sustainability, incorporating the social aspect is integral. Therefore, throughout this paper when I refer to “sustainability,” “sustainable development,” “sustainability and social issues,” or any similar terms and phrasing, I am using the term(s) with the intention of conveying the complete definition and application of sustainability. This includes environmental sustainability; social sustainability; economic sustainability; and environmental justice, which underlies all of the first three aspects.

Statement of the Problem

Over the past century, the world has experienced increasing social and environmental crises that are both caused and somehow unable to be addressed by capitalism (Hoffman, 2021a). Even if you were to just look at the brief period between 2020 and 2021, the United States saw a renewed racial justice movement, COVID-19 pandemic, increased severity and frequency of climate-driven natural disasters, and political instability (McKinsey, 2021). All of these trends and changes are not occurring outside of the sphere of business - they directly impact and are impacted by business activities.

However, the core curriculum at leading business schools has remained relatively unchanged (Brauer & Sroufe, 2020; Cole & Snider, 2018; Fisher, 2017; Canto de Loura, 2014; Waddock & Lozano, 2013). Early business schools were formed to fulfill the needs of manufacturing and automobile companies, which has influenced its current department structure that mimics that of a 20th-century automobile or industrial company (Govindarajan & Srivastava, 2021). Do courses in marketing, microeconomics, and finance still build a sufficient

foundation for business leadership (Reilly, 2021)? With an outdated view of business practices being taught across both BBA and MBA programs, how do we expect business leaders to make decisions differently than their predecessors?

With the different expectations, situations, and decisions that business leaders are facing today, they need to be adequately prepared with a more fitting business education than what business school students learned, say, a decade ago. **The purpose of this research is to determine if business school programs are adequately training their students to be the sustainable business leaders needed to face the environmental and social issues of the 21st century.**

Throughout this paper, despite the final analysis of this research topic focusing on BBA programs, I will be examining literature and data stemming from all levels of business education. This is due to an overall lack of literature, data, and discussion around incorporating sustainability into BBA curricula. While the information collected across business program levels will be ultimately put into context for BBA programs, when using the term “business school(s)” I am referring to higher education institutions that offer business education programs, regardless of whether it has a BBA program. When discussing relevance to BBA programs in particular, that will be specified. I have identified BBA programs as a relevant point of concern within business education due to the demonstrated interest by younger generations, length of the degree compared to MBA or executive education courses, current gap in literature for that degree, and increasing pressures that businesses address the urgency of environmental and social issues.

Justification of the Problem

Increasingly, businesses are being questioned for their role in society and impact on all their stakeholders. Furthermore, accountability mechanisms are being developed and pursued by a wide variety of stakeholders. For instance, oil and gas companies are facing lawsuits for misrepresenting their role in the climate crisis. Investment managers like BlackRock are threatening repercussions against their holdings through actions like voting against management and flagging for future exit if companies are not adequately disclosing their sustainability goals and climate risks (Hals & Nasralla, 2021; Fink, 2021b). In 2020, BlackRock examined 440 carbon-intensive companies, of which they voted against 64 directors and 69 companies as well as put 191 companies “on watch.” Those 191 companies risk votes against directors unless they demonstrate “significant progress on the management and reporting of climate-related risk, including their transition plans to a net zero economy” (Fink, 2021b). As for consumers, almost 80% say that it is important that brands are sustainable and environmentally responsible (Reilly, 2021). Climate, sustainability, and social considerations are now material considerations, risk management, and a core part of long-term strategy (Fink, 2020; Fink, 2021a; Fisher & Bonn, 2017).

Now, the question is: Where can change be addressed within businesses and practices before decisions are being made? Many of the issues with business practices may be able to be addressed at the very core of understanding for those who are making these decisions - business education. Unfortunately, changes to business school and higher education curricula are not yet matching these corporate commitments and pressures. Historically, business school programs have heavily depended on quantitative analysis and not explicitly incorporated soft skills, which are critical for human capital management, stakeholder consideration, and being overall effective

business leaders (Simpson, 2006; Slater & Dixon-Fowle, 2010; Rubin & Dierdorff, 2011; Waddock & Lozano, 2013). In fact, soft skills like communication, teamwork, and equity / inclusion are ranked as three out of the four top core competencies for college graduates by the National Association of Colleges and Employers (NACE, 2021). The Association to Advance Collegiate Schools of Business (AACSB) has attempted to repair this curricular misalignment by adding an “engagement and societal impact” focal accreditation area to encourage business schools to serve a greater good in society (2020). However, change is not exactly easy for organizations that have not adjusted their curriculum in over half a century, much less to incorporate considerations for the environment or social impact (Brauer & Sroufe, 2020; Canto de Loura, 2014).

In addition to the previously mentioned demonstrated interest from investors and consumers, college students are pushing for businesses to step up. 68% of college students would like companies to take public stances on social issues, while 16% said that they would not work for a company that did not (Reilly, 2021). Within business schools, 88% of business school students think that learning about social and environmental issues should be a priority, while 67% want to incorporate environmental sustainability into whatever job they choose after graduation (Hoffman, 2021a). Business school students are requesting an increased focus on social and environmental issues within their education and intend to use those experiences in their jobs post-grad (Brauer & Sroufe, 2020; Presley et al., 2018).

On the largest scale, the current state of the world requires that businesses take accountability for their impacts. More tangibly, business school stakeholders require consideration in the same way that Blackrock and the Business Roundtable are committing to stakeholder primacy. Pervasive global threats, particularly climate change and income inequality,

will continue to be exacerbated for all by continuing to teach “business as usual” (Cole & Snider, 2018; Olalla & Merino, 2019).

Outcomes from this research will synthesize the concerns and priorities of four main stakeholders for business programs:

1. Students

- a. This stakeholder category includes both incoming and current students. Current students are broken down into two different expressions of priorities - student coursework and co-curricular involvements.
- b. Incoming Students: Is there demonstrable demand from potential business students to reframe the business school core to better prepare them for these issues?
 - i. What are applicants looking for from programs (in particular BBA programs)?
 - ii. Is a curriculum with these concepts integrated into the very core a new expectation for business schools?
- c. Current Students: How are students demonstrating their interest in social and environmental issues while attending school?
 - i. What about their student experience is lacking relevance with these issues, that leads students to create their own opportunities or pursue co-curriculars to fill that gap?

2. Employers

- a. This category includes two subgroups that measure direct and indirect trends influencing business school programs. Directly, companies that recruit from

universities are a valuable stakeholder to measure the necessary skills that they hope to see from recent graduates. Tangentially, executive education programs are significant for business schools overall in order to better gauge skills gaps that employers would like their employees to improve or gain.

- b. Recruiters: Are the full-time roles that graduates are hired into looking for a different type of candidate that is prepared to work in a business environment that accounts for all stakeholders, prepares for long-term strategy and risk, and understands the company's role in society?
 - c. Executive Education: What skills are employers identifying as missing or lacking with their current employees and looking to supplement with additional education?
3. Donors
- a. Many new programs and initiatives created within business schools are driven by donor funds and interest, so observing trends in donor preferences and interests may be significant when considering additional pressures influencing business schools.
 - b. What is the nature of large donor investments over the past few years, and have they reflected the shifting priorities that many business leaders have professed?

Overall, the goal of this research is to measure demand for sustainability skills in business education, especially for BBA programs, by business school stakeholders. By synthesizing business school stakeholder priorities, I am hoping to answer the questions:

- A. Are the findings from these proposed methods and data sources consistent?

- B. How heavily are business school stakeholders valuing sustainability, and how has that changed over time?
- C. How can business schools meet the needs of all their stakeholders and best prepare their students to be sustainable business leaders in the 21st century?

Current Environment

From Shareholder to Stakeholder Primacy

Beginning in 2018, Larry Fink, the chairman and CEO of BlackRock, has written annual letters of increasing urgency that have focused on the shifting nature of business' role in society to account for the needs of all stakeholders. Most notable, the 2019, 2020, and 2021 letters mark significant shifts in the expectations for businesses. The 2019 Letter to CEOs, titled *Profit & Purpose*, focused on tying purpose to profits more heavily than in 2018. It also mentioned business' responsibility to step up when governments fail to solve problems, specifically in the context of the political instability preceding the 2020 US Presidential election. (Fink, 2019). In 2020, Fink's *A Fundamental Reshaping of Finance* reiterated points made in past years regarding consideration of all stakeholders and embracing purpose, but also called attention to the fact that "we are about to see a significant reallocation of capital," and are "on the edge of a fundamental reshaping of finance" (Fink, 2020). This marks the transition towards businesses facing harsher accountability for sustainability-related disclosures and being able to articulate their connection between purpose and long-term strategy from investment managers like BlackRock. Finally, the most recent letter was an urgent call to action for climate change. Included in the letter was mention of how climate change is the highest ranking issue on their clients' lists of priorities, as well as a reiteration of the importance of companies demonstrating their purpose and connection

to stakeholders to best deliver long-term, durable profits to shareholders (Fink, 2021a). Fink also puts his previous letters into context given the events of 2020, such as the COVID-19 pandemic, racial justice movement, political polarization, and attack on the Capitol. The letter also states that “net-zero” carbon emissions demands a transition of the entire economy and includes BlackRock’s request for disclosure of a plan for how a company's business model will be compatible with a net zero economy. The increasing urgency and specificity of these letters, along with the looming threat of repercussion from investment managers, demonstrates the widespread change that is rippling through the economy from shareholder to stakeholder primacy. Businesses are being asked to consider sustainable growth and longer-term timelines than just the quarter system, quantify their climate- and sustainability-related risk given their current business models, and meet net zero carbon emissions. These considerations are fundamentally different from the previous understanding that the purpose of a business is to generate returns for shareholders and to prioritize growth above all, and therefore require a different set of skills and understandings of how to conduct business with these new considerations and expectations (Friedman, 1970).

As mentioned in the introduction, the World Economic Forum and Business Roundtable have also produced symbolic statements marking a shift away from shareholder capitalism and emphasizing the importance of consideration of all stakeholders. The WEF’s Davos Manifesto states that, “The purpose of a company is to engage all its stakeholders in shared and sustained value creation. In creating such value, a company serves not only its shareholders, but all its stakeholders – employees, customers, suppliers, local communities and society at large” (World Economic Forum, 2020). Despite the decisiveness and clarity of this global statement, it is more significant for its wide reach and publicity generated than it is for causing substantial change.

Likewise, the Business Roundtable issued a statement that redefined “the purpose of a corporation” as investing in employees, protecting the environment, and dealing fairly with suppliers to assure “the future success of our companies, our communities and our country” (Business Roundtable, 2019). This statement in particular is notable since it represents a collective intent from a large number of large companies to shift priorities, although, similar to the Davos Manifesto, it does not include any accountability measures or tangible commitments.

Literature Review

Distrust for Corporate Statements: Shifting Values, or Impact-Washing?

The integrity and genuineness of the supposedly resounding support by business leaders for a new set of more ethical and equitable business priorities does not come without criticism and distrust from stakeholders, particularly consumers. *The Illusory Promise of Stakeholder Governance*, for instance, pushes back on the supposed significance of statements like the Business Roundtable’s. Instead, it argues that it is an assessment of how well the CEOs and executives currently think that they are doing at addressing all stakeholder concerns and an expression of their values that does not actually prompt or inspire any change (Bebchuk & Tallarita, 2020). Researchers at Harvard Law (2020) surveyed the 184 companies who signed the Business Roundtable statement on stakeholder primacy to clarify who in the company made the decision to sign the statement and ran an analysis of topics traditionally approved by boards of directors before being signed or agreed to. They found that out of the 48 companies that responded to their survey, 47 companies indicated that the decision was approved only by the CEO, and that only 1 responding company indicated that the decision was also approved by the board of directors. The results of this study indicate that corporate executives signing on to these

statements see it more as an expression of their values, and not an intent to drastically change any of their current practices. This leads stakeholders to wonder whether these statements are merely a form of impact-washing, or if they are representative of real change and shifting values. If business leaders' education of best business practices, decision-making skills, and fiduciary duties remains unchanged, do stakeholders even have reason to trust the integrity of these commitments?

Unintended Outcomes of Business & Economics Education

Business schools set out to teach their students core skill sets, frameworks, and mental models by the time they graduate. However, is the standard core business school curriculum really the best method? Prof. Andrew Hoffman states that, "Indeed, the perverse effects of business school pedagogy often leaves graduates with a narrower understanding of business than when they entered the program" (2021b). Craig Smith, a professor at INSEAD, said that "students come in with a more rounded view of what managers are supposed to do but when they go out, they think it's all about maximizing shareholder value" (2021).

A study conducted on the impact of a 2-year residential full time MBA program on students' values showed that, "management education appears to make people more selfish and less concerned about others" (Krishnan, 2008). By measuring value systems before and after completion of the program, researchers found that participants' value systems significantly shifted to prioritize "self-oriented values" (such as comfortable life, exciting life, pleasure, and social recognition), while "others-oriented values" (such as world at peace, world of beauty, family security, helpful, loving, and polite) became less important.

Similarly, a series of studies examined if economics majors were more likely to behave in self-interested ways (Frank et al., 1993). In a majority of the studies, methodologies of which

ranged from surveys on charitable giving, bargaining games, to the prisoner's dilemma, the answer was yes. Not only was the answer generally yes, but the Prisoner's Dilemma and Honesty Survey experiments found that a student's inclination towards self-interested behavior and the assumption that others would act in a similar manner, increased or remained the same for economic majors as they progressed towards graduation, compared to non-economics majors who experienced a reduction in that tendency.

Most recently, a paper circulated by the National Bureau of Economic Research found that individuals in executive-level positions with a business degree are more likely to oversee declining pay for their employees (Acemoglu et al., 2022). Managers with non-business backgrounds are more likely to share profits with their employees, while those with business backgrounds do not. Furthermore, the researchers found that business schools have a significant role in this trend, stating that, "We estimate that most of the wage and labor share results we present can be explained as the treatment effect of business education rather than a selection effect." These findings are consistent with the previously mentioned 2008 study in showing that business school curricula (particularly for MBAs) teaches students more than just finance and accounting. Students are learning and adopting new mental frameworks that justify selfish behavior.

These studies have indicated that business students' core understandings may be fundamentally skewed by their business education to be more selfish and individual-focused. If business and economics courses are teaching students to act in their own self-interest and assume that other individuals will act in a similar manner, how will that influence the current shift away from shareholder capitalism towards stakeholder capitalism?

The Case for Sustainability in Business Education

As the previous section emphasized, there have proven to be unintended consequences stemming from the current standard of business education that, according to corporate attorney James Gamble, can compel people to “act like sociopaths” (Hoffman, 2021a). However, as a student taking courses in both business and sustainability, I can personally attest to the polarity between the perspectives of each program by the other. While opportunities are slowly but surely becoming more widely available to explore the intersection of both topics, the shift is not felt equivalently between MBA and BBA programs (Fisher & Bonn, 2017; Canto de Loura, 2014).

So, what does sustainability in business education look like? While business schools have been incorporating this intersection of topics through electives and occasionally core (usually on the MBA level), it can be taught in a variety of ways and these methods can have a range of efficacy (Canto de Loura, 2014). For instance, it can be taught through supply chain case studies so that students can more tangibly consider the impact on all stakeholders, or through the lens of other business-relevant issues like addressing concerns about income inequities, food security, or ecosystem decline and climate change (Cole & Snider, 2018; Edwards et al., 2020). Ultimately, despite the method, courses on corporate social responsibility (an application of sustainability and business) have proven to be effective in improving students' ethical decision-making skills, particularly during undergraduate education (Ruiz-Palomino et al., 2019).

AACSB's addition of the “engagement and societal impact” focal accreditation area requires business schools to demonstrate a commitment to incorporate social responsibility issues, including sustainable development and environmental sustainability, through policies, procedures, curricula, research, and/or outreach activities (AACSB, 2020). However, AACSB's

new mandate does not provide a standard for the level and quality of content related to social responsibility (Landrum & Ohsowski, 2016).

If students are to be adequately prepared to enter a workforce that has to consider all stakeholders, direct impact, and externalities by the time they graduate their respective degree program, then the current core business curricula are falling short. Business students need to develop an understanding of the long-term consequences and implications of business decisions, be knowledgeable about sustainability issues, and have the skills to develop, evaluate, and implement sustainability initiatives (Fisher & Bonn, 2017).

Methodology & Results

In this thesis I will be conducting a thematic analysis of the identified stakeholder groups of business schools to determine if these stakeholders are expressing similar sentiments towards valuing sustainability skill sets in business education. Using an abductive approach, I am utilizing my perspective as a student at the University of Michigan's Ross School of Business to identify and connect with stakeholders to measure this valuation of sustainability. My applied motivation for pursuing this thesis allows me to engage with stakeholders and relevant touchpoints for the student experience in ways that I have personally seen to be growing and significant. Informing my student experience is exposure to leaders in business school sustainability, such as the Erb Institute community, as well as involvement and leadership in several impact-focused student organizations within the business school (Erb Institute, 2022a). However, motivating this research is also the discontinuity that I have experienced within the business school while balancing interests in business and sustainability. Despite the Ross School of Business's partnership with the Erb Institute, prominent marketing of "Business [being] the

most powerful force on the planet for positive change,” and generally respected presence in the business-sustainability community, there is a disconnect of those values with the lived experience in core business school classes and a perceived difficulty to find and enter business-sustainability-focused communities upon entering the program (Michigan Ross, 2022a). With these insights, I use an abductive approach in my thesis to best utilize my perspective as a student at the University of Michigan’s Ross School of Business in identifying and connecting with business school stakeholders.

While conducting research on sustainability in management education and completing the literature review, there appeared to be a focus on integrating these concepts into MBA education or even just business schools overall (without specifying the degree). Despite the demonstrated interest and desire to integrate these concepts by younger generations, I found a lack of literature discussing the opportunity to implement sustainability and social issues into BBA education (Fisher & Bonn, 2017). BBA education provides a foundational understanding of business for many students, but there are several other factors that make it an intriguing program to examine within this context (Cole & Snider, 2018; Ruiz-Palomino et al., 2019; Fisher & Bonn, 2017; Olalla & Merino, 2019). Structurally, BBA programs have more time in the degree to incorporate new content into the core (3-4 years for a BBA degree versus 2 years for an MBA). Additionally, given the rapidly increasing interest in corporate sustainability, accountability, and impact (particularly from younger generations), BBA programs may be an effective way to catalyze change on the most fundamental level for future business leaders (Ruiz-Palomino et al., 2019; Fisher & Bonn, 2017; Olalla & Merino, 2019).

Since much of the existing literature focuses on integrating change into MBA programs, my methodology will primarily consist of synthesizing the available information, collecting new

data, trends, and perspectives, and finally applying the collected content to BBA programs. I will be collecting information from internal and external business school stakeholders as well as conducting stakeholder interviews to add additional context for each of the pre-specified stakeholder groups that are directly or tangentially relevant to BBA programs. While I understand that this framework includes a large number of stakeholders and potential data sources, this was organized so as to be as thorough as possible. **By synthesizing this information and putting it into context for BBA programs, I hope to be able to answer the questions:**

- A. How aligned are business school stakeholders on the importance of and demand for sustainability skill sets?**
- B. How heavily are business school stakeholders valuing sustainability, and has that changed over time?**
- C. What do these findings mean for BBA programs?**

Stakeholder A - Students

	Incoming BBA Students	Current Student Courses	Current Student Co-curriculars
Areas of Focus	<ul style="list-style-type: none"> - Examining trends with Gen Z & Higher Education 	<ul style="list-style-type: none"> - Enrollment trends in business / sustainability courses offered in the Ross School of Business - Creation of new higher education courses focused on business & sustainability (as tracked by submissions to the Aspen Institute’s “Ideas Worth Teaching” Awards) - Interview with representative from the 	<ul style="list-style-type: none"> - Creation of, membership in, & application trends for business / sustainability – focused student organizations - Interviews with Ross alumni who founded business & impact-focused student orgs - Engagement in business & impact-focused co-curriculars, such as Erb Fellows

		Aspen Institute	
Source	<ul style="list-style-type: none"> - External research & trends - Studies by the Global Network for Advanced Management, Yale Center for Business & the Environment, & the Yale Program on Climate Change Communication - The Chronicle of Higher Education 	<ul style="list-style-type: none"> - UM Registrar & Ross Professors' course enrollment information - Aspen Institute – Ideas Worth Teaching Award nominees 	<ul style="list-style-type: none"> - Ross alumni / student organization founders - Erb Institute

Incoming BBA Students

Area of Focus: Similar to companies, business schools compete to differentiate themselves from one another and to attract top talent to their programs. Schools may try to develop a competitive advantage through a variety of course options, opportunity to join student organizations, success in job placement, action-based learning, prestige of faculty, and study abroad programs. In order to attract top talent for their business programs, they need to identify and promote aspects of their program that are most appealing to potential applicants. While the majority of students prioritize alumni networking, job opportunities, and costs, applicants may shift to value different aspects over time (Brauer & Sroufe, 2020).

The pre-student perspective is examined in order to learn what it is that applicants are looking for from a BBA program, how their values and priorities may have shifted over the past decade, and what led them to choose a business degree in the first place. More specifically, this question is looking to see if applicants' priorities have shifted to more heavily consider schools that value topics like social impact, positive business practices, and sustainability.

Method A: While Method A is more reactive in observing and commenting on anecdotal experiences in the college recruitment process, Method B aims to be more proactive in predicting shifts and relating wider generational trends to college admissions. A recent survey of business

school students by the Global Network for Advanced Management, Yale Center for Business & the Environment, and the Yale Program on Climate Change Communication has revealed changing perceptions around corporate responsibility and sustainability education. Additionally, by utilizing reports by The Chronicle of Higher Education, Gen Z perceptions and preferences for higher education can be applied to business schools and how these institutions can better meet the needs of the new generation. Together, these external research observations show a shifting demand signal from incoming business school students towards a more actionable, skills-driven, and sustainable approach to business education.

Results (Method A): In the survey by the Global Network for Advanced Management, Yale Center for Business & the Environment, and the Yale Program on Climate Change Communication, 2035 global business students were surveyed about their opinions for business and sustainability engagement, their own career plans and preferences, and the educational experiences they are seeking out (Cort et al., 2022). The results point strongly to not just an increase in students that are prioritizing and valuing business sustainability since the last survey in 2015, but in many cases a majority. As it relates to business education, 70% of students want more experiential learning focused on sustainability, 65% want more case studies highlighting sustainability issues, and 62% want better career services focused on sustainability jobs (Cort et al., 2022). There is a clear gap in what students would like to see from business schools and what is currently available, both in the classroom and in career services. Furthermore, only 39% of students believe that their faculty are as concerned as they are about climate change (Yale School of Management, 2022). Since 2015, almost double the amount of students consider themselves “very” or “extremely” knowledgeable on climate change, increasing from 21% to 41%. Further, the Yale study found that the majority of students in the survey (52%) are “very” or “extremely”

concerned about the impacts of climate change (2022). The demand signal for the sentiment behind sustainability and business is showing that the topics are inextricably linked and students are increasingly aware of and unhappy with the absence of sustainability-related topics in their business education.

As for wider trends related to younger generations, a 2019 (pre-pandemic) Deloitte study found that Gen Z and Millennials' confidence in government, economy, and media is declining and opinions of business are continuing to diminish (Dutton & Selph, 2019). In their 2021 Global Millennial and Gen Z Survey, this outlook continues and pessimism about social and political climates has reached historic levels. The study reports that more than 4 in 10 respondents expected worsening situations by January of 2022, which is the highest number ever recorded (Deloitte, 2021). Additionally, Gen Z and millennials continue to rapidly lose faith in business. Figure A shows that the belief that businesses only focus on their own agendas instead of a wider society remains around 70% for both generations. However, early signs that this may be shifting is starting to appear, given that agreement with the statement “Businesses have no ambition beyond wanting to make money” is down 4 percentage points for millennials and 2 points for Gen Z.

Higher education is particularly susceptible to shifts in ideals and goals from the incoming generations, particularly Gen Z. The Chronicle for Higher Education released a report in 2018, and then again in 2020 post-pandemic, commenting on changing expectations that Gen Z has for their own higher education experience. Gen Z is now applying to and entering higher education during a very tense time - financial pressures are bearing down on colleges which means that for many, “falling a few students short in admissions or watching a handful transfer because they are dissatisfied is the difference between a balanced budget and a deficit” (Selingo,

2018). With Gen Z comes a declining number of total high school graduates that includes increasing numbers of first-generation and low income applicants. To ensure that their university remains prestigious and away from bankruptcy, leadership feels pressure to attract a more diverse student population, invest in technology to improve learning, and improve on-campus services to see them through (Selingo, 2018). These factors contribute to an environment where accommodating Gen Z's preferences is becoming increasingly important, amplified by the faltering promise of high school students subscribing to the idea that a college education is right for them.

Gen Z is beginning to shift towards careers that are considered to be more “vocational,” like engineering, health care, and computer science (2018). A college degree needs to come with the promise of useful and actionable skill sets that graduates can use for specific careers. In 2018, 57% of Gen Z students surveyed viewed the goal of college to be “preparation for a specific career” versus 43% who believed it to be “preparation for life in general.” Students, when they enter college, already have a more clear idea of what they want to do and the careers that their given major will lead them to. In fact, “More than half of today’s students say their No. 1 factor in choosing a college is whether it offers a particular major or academic program, according to Ruffalo Noel Levitz. Up from 36 percent in 2010, that is now the company’s top-rated factor in college choice” (2018). Many students even expect to work for themselves after graduation, and Jonathan Grudin, a principal researcher at Microsoft, stated that “People will create the jobs of the future, not simply train for them” (2018). As students are creating their own businesses and careers, they need the skills to be able to adapt - they will be decreasingly entering into jobs where these skills may be taught to them by superiors or university professors. Business schools are fostering the learning of students that are intending on entering roles where they will be

creating change and their job description may fluctuate. Business schools need to prepare students for those careers, in whatever form they may take, and not the function-led careers that the traditional business school curriculum is built for.

Expectations of students entering higher education have only become more pronounced post-pandemic. The protests following the killing of George Floyd have intensified how students expect their institutions to address issues of diversity, equity, and inclusion (Selingo, 2021). Tamalyn Powell, senior vice president for education at BVK, a Milwaukee-based marketing and advertising firm, states that, “Students in this generation see themselves as agents of change. They aren’t merely advocating for change, they are making it happen, pushing their agenda, and being supported by their educators, parents, and in many cases, business leaders” (Selingo, 2020). In order to differentiate the draw of a specific institution, colleges and universities need to address and remain accountable for issues that Gen Z has expressly spoken out about, such as racial justice, climate change, and social mobility.

Some universities are responding to these demands for increased real-life skills and out-of-classroom experiences by offering co-curricular opportunities. Stanford created a nonprofit dedicated to incubating businesses, called StartX, while University of North Carolina, the University of Maryland at College Park, and Case Western Reserve University, sponsor start-up competitions and maintain a business incubator and accelerator on their campuses (Selingo, 2018). While opportunities outside the curriculum are helpful for students to explore their interests in alternative methods of learning, they cannot fully replace the gaps in the current business school curricula.

However, in addressing social issues, many universities have been falling short. University marketing may tell a different story than a student's lived experience on campus, and

throughout the pandemic many institutions were called out for their misaligned “values” by requiring in-person classes and residency in dorms but preaching student well-being (Selingo, 2020). This specific issue, of discrepancy between preached values and lived experiences, is particularly touchy for business schools, who increasingly promote impactful business practices and positive leadership. Meanwhile, core courses might still teach shareholder primacy and discuss sustainability concerns as afterthoughts or optional considerations. Reducing gaps between what students expect from a university and what they end up receiving is higher education's best guess to retain favor, as well as enrollment, from their students.

Current Student Courses - at Ross

Areas of Focus: As mentioned in the Justification section, 88% of business school students think that learning about social and environmental issues in business is a priority (Hoffman, 2021a). This question explores how students demonstrate their interest in social and environmental issues in business while they are on campus. Given that social and environmental issues are not consistently included in business schools’ core curriculum, this is gauged through the opportunities that business school students opt into and how those experiences influence their perspective on the core (Brauer & Sroufe, 2020; Canto de Loura, 2014). One such way of measuring this demonstrated interest is through availability of and engagement in relevant course electives. First, by observing the number of classes available that target the intersection of business, social, and environmental issues and if the number of available courses has changed over the past few years. Next, by looking at obstacles in enrollment in those courses - Are classes reaching their seat capacity? Have instructors opened up new sections due to increased demand? By looking at this data and comparing the number of course offerings to other schools, the

overall interest of business school students in these topics can be measured, regardless of specific school or program.

Method A: To answer these questions, I examined the availability of and enrollment in impact-focused courses listed through the Ross School of Business. To determine which courses counted as “impact-focused” business school courses, I cross-referenced Ross-listed electives with courses that satisfy the Erb Fellows credit requirements (Erb Institute, 2022b). Erb Fellows is the title of the Erb Institute at the University of Michigan’s undergraduate programming (Erb Institute, 2022c). Additionally, I chose to include ORGSTUDY 208 (Business & the Natural Environment), despite it being an Organizational Studies course, because of the course content (introduction to triple bottom line, circular economy, how to read a impact report, ESG metrics, etc.) and it being a prerequisite to apply to the Erb Fellows program (Soderstrom, 2022; Erb Institute, 2022b).

Method B: Additionally, external organizations like the Aspen Institute bring together people and communities to encourage progress and turn ideas into action for a variety of topics, including Education and Business & Society (Aspen Institute. n.d.). Each year the Aspen Institute reviews submissions for their “Ideas Worth Teaching” Award that was born from their Business & Society Program in order to draw attention to important new ideas about the role of business in creating a sustainable, inclusive society and highlight innovative faculty (Ideas Worth Teaching, n.d.). While specific courses and syllabi cannot be shared due to intellectual property complications, I collaborated with the Aspen Institute to observe trends in the number of courses that have been submitted for this award in 2021, 2020, 2019, and 2017 (there were no IWT awards in 2018) (Aspen Institute, 2021). This data is analyzed based on the number of submissions year over year, which universities are submitting for the award, and if that

university has a “top business program.” “Top business programs” were determined based on U.S. News & World Report’s rankings for the top 10 undergraduate business programs and top 20 MBA programs can be seen in Figure G and Figure H (2022a; 2022b). Furthermore, the data set does not reveal whether individual submissions are for a specific level of business education, and is unclear whether a given submission is for an undergraduate or graduate course. While these submissions may not be fully representative of the business school curriculums at all schools nationwide since it is based on submissions, it does provide insight into where change is happening, what schools are offering integrated concepts in their elective courses, and even which programs are beginning to push the boundaries of what content a core business school curriculum should contain.

Method C: Lastly, I interviewed Jaime Bettcher, the Senior Program Manager of the Business & Society Program at Aspen Institute about her experience researching, sharing information around, supporting, and connecting with faculty and administration focused on business sustainability education.

Results (Method A): As seen in Figure B and Figure C, the number of impact-focused courses available and enrollment in those courses has been increasing since fall semester of 2013. The “years” are grouped by school year to avoid any disruption based on a specific course only being offered in a fall or winter semester. Notable external factors for enrollment include the number of sections available and the classroom capacity for each. For instance, BA / STRAT 445 (Base of the Pyramid: Business Innovation & Social Impact) taught by Prof. Ted London had only one section with a room capacity of 42 in F17, with an enrollment of 41. The following year, Prof. London switched to a larger classroom (capacity of 48) and filled every seat. In F19, he created a second section, therefore offering two classroom capacities of 48, and enrollment

jumped 85% (between F18 and F19). Most recently in the F21 semester, Prof. London switched to two classroom capacities of 72 and enrollment again jumped, this time by 44% (F20 to F12). Since waitlists are not recorded by the Registrar and constantly fluctuate, there is no way to confidently retroactively observe demand by students who were not able to enroll in impact-focused courses because of limited availability. While Prof. London personally recorded his classroom capacity adjustments year over year, that information is not available for every class. However, BA / STRAT 445 ultimately provides insight into how enrollment can actually trail demand as students are only able to enroll in courses as space allows.

Results (Method B): The Aspen Institute’s “Ideas Worth Teaching” (IWT) Awards submissions have originated from a relatively consistent number of schools. However, once further broken down by universities that have a top undergraduate and / or graduate business program, it is more clear to see potential emerging leaders in business sustainability curricular space. Figure D displays the total amount of IWT Award Submissions as well as the number of schools submitting. While this may not be a foolproof measure of success, for instance the universities may not have heard of the IWT Awards or the course content may not be considered “new” at their institution, it can still point to the institutions that are working to improve their offerings of business sustainability opportunities. Figure E shows the submissions from top business schools from 2017-2021, with the University of Michigan’s Ross School of Business at the front, followed by University of Virginia’s Darden, New York University’s Stern, University of Pennsylvania’s Wharton, and University of Chicago’s Booth. Since Figure D also shows that the number of submissions from universities with top business schools has remained relatively consistent, there seems to be a consistent effort to create new opportunities at the intersection of business and sustainability.

Results (Method C): When asked how Jaime Bettcher has seen the integration of sustainability in business school education evolve over the past few years, she stated that there has clearly been an uptick from a variety of stakeholders, including students, demand from recruiters, and statements of intention from deans (J. Bettcher, personal communication, April 5, 2022). However, this demand is not being met with action, especially when it has to do with integration into the core business school curriculum. Jaime states that, “While offering electives on sustainability is no longer new - by these being optional, it sends a signal that sustainability isn't a core business issue. True integration of sustainability in core classes like finance, accounting, supply chain, marketing, etc. is the new/next stage of business school evolution to keep up with business and societal needs.” While the first method of this stakeholder section discussed increased offering of and enrollment in impact-related courses at the Ross School of Business, Jaime draws back to the core issue that sustainability continues to be treated as an afterthought and an optional consideration. As for the role of business schools to engage in this topic within their core, Jaime stated that, “In line with other professional schools, like law or medical schools, business schools have a responsibility to not only teach the technical skills required of the profession but also the responsibility and stewardship required of the field. In this case, business students need to understand what it means to be responsible stewards of markets, and also understand where markets are and are not the most appropriate tool for addressing challenges.” Business schools have a long way to go to be on par with creating graduates that are also responsible citizens and peers, but the stakeholders' pressures and demonstrated interest is promising.

Current Student Co-Curriculars

Areas of Focus: Another way of gauging student interest in social and environmental issues during their time at business school is through involvement in student organizations and co-curricular opportunities. Similar to observing the number of course offerings, the number of student organizations focused on the intersection of business, social, and environmental issues can be observed over the past decade. Students founding new organizations is an indication of creating opportunities for themselves to explore topics that they and their peers would otherwise not have the opportunity to explore at business school. Additionally, observing the sources of different co-curricular opportunities within business schools shows how well schools respond to new interests. For example, the Ross School of Business offers co-curricular events through their Business+Impact initiative that hosts speakers, shares a monthly newsletter, and runs design thinking workshops out of the +Impact Studio, yet still has seen a growth from 2 to 5 impact-focused student organizations over the past 4 years (Business+Impact; Business+Impact, 2019).

Method: To explore the motivation to create new sustainability-related opportunities in the Ross School of Business, as well as the student reception to these new opportunities, I interviewed Jiten Parbhoo and Gillian Cobb. Jiten Parbhoo graduated from the University of Michigan College of Literature, Science, and the Arts in 2019 and is the original founder of Impact Investing Group (also known as IIG) (2022). Gillian Cobb graduated from the University of Michigan Ross School of Business in 2020 and organized the first Michigan Impact Investing Symposium, as well as founded the student organization that is now known as Michigan Impact (2022). IIG focuses on microfinance - they lend to smaller local businesses as well as offer consulting services along with their investments. Michigan Impact, in addition to hosting the

annual Michigan Impact Investing Symposium, is currently branching out into educating their members on the wider impact investing space and other activities, such as how to prepare an ESG-focused stock pitch.

Results: The experiences of Jiten Parbhoo and Gillian Cobb are consistent in showing how a student sparks an interest in a new topic, identifies a gap in university resources to support that interest, and finally creates their own organization to attract like-minded individuals and explore this interest. Both Parbhoo and Cobb iterated how they initially had difficulty navigating the space of impact investing and struggled to find industry professionals or a community to discuss their interest with (J. Parbhoo, personal communication, March 20, 2022; G. Cobb, personal communication, March 25, 2020). Parbhoo began IIG within LSA in 2018, where the club was mostly made up of engineers. Soon, he re-registered the organization within Ross for access to additional resources and support. He saw significant response and interest from students and saw applications to join the club reach around 100 after the first few years.

Furthermore, Cobb explained that sustainability and finance were extremely siloed in both coursework and co-curricular activities. Topics were brought up during class discussions within the narrative that, “sustainability or impact is a sacrifice or a side thought to a business strategy.” Student organizations were either categorized as “impact clubs” or “finance clubs,” and although Cobb belonged to both types, she saw very little other overlap at her peer level or in the grade levels ahead. Without any upperclassmen navigating the sustainability and business space able to give guidance, Cobb wanted to bring together the people who were also in that tiny intersection and bring that knowledge to others that might not be aware of it. When asked about the student response to the first Michigan Impact Investing Symposiums, she responded, “Externally, I think it was almost surprising that I found a lot of students were interested. You

could tell that people came in with open minds, and our speakers and panelists would discuss how sustainability could actually be a driver as opposed to a side project. People were really open to hearing about impact investing and some were even surprised that they hadn't heard about it yet. I think it made sustainability, in terms of its integration into a career, feel more possible for a lot of people.”

Both of these student organizations created opportunities that filled in gaps that the founders observed in their education and interests, and were met with significant positive reception by their peers. However, as these co-curricular opportunities increase and more students are exposed to business sustainability topics, business school core curricula have not moved to match this movement and still follow the same syllabi as when Gillian Cobb took the courses. Opportunities to explore these topics, which at their core are most effective when learned in conjunction with each other, are still presented in core courses as a “sacrifice or side thought.”

Meanwhile, the impact of both of these student organizations continues to grow. IIG, which was the first university student organization of its kind, has now connected with students at other universities to create similar impact investing organizations. Now managed by a central organization titled Undergraduate Impact Investing Society, UIIS has 8 members and 4 incoming members at universities that include the London School of Economics, University of Chicago, and Northwestern University (UIIS, 2022). This past mid-March, Michigan Impact hosted their fourth annual Michigan Impact Investing Symposium and is working on building out the educational portion of their club.

Stakeholder B - Employers

	Recruiters	Executive Education
Areas of Focus	<ul style="list-style-type: none"> - Career trends with Business School students - Trends in US Job Postings vs. Erb Institute Job Board Postings 	<ul style="list-style-type: none"> - Demand for Executive Education courses through the Erb Institute focused on business / sustainability
Source	<ul style="list-style-type: none"> - External job sites <ul style="list-style-type: none"> - Indeed - External research & trends <ul style="list-style-type: none"> - FRED, Federal Reserve Bank of St. Louis - Erb Institute Job Board Data 	<ul style="list-style-type: none"> - UM Ross Executive Education - Erb Institute Executive Education – The Sustainability Academy

Recruiters

Area of Focus: Another significant influence on business schools and their strategic trajectory is recruitment in and job placement from business programs. Counter to what many believe about careers in business sustainability, students that are interested in the intersection of business, social impact, and sustainability may recruit for a wide range of roles. A focus on sustainability and impact has been embedded in many traditional roles and functions (Cole & Snider, 2018; Fisher & Bonn, 2017). However, going into traditional career paths like investment banking, consulting, marketing, or accounting with a personal interest in environmental and social issues offers graduates the opportunity to have an impact in areas and teams within a company that may not have previously considered that perspective. A job does not have to have “sustainability” in the title to be an impact-focused role (Assadourian et al., 2017, Chapter 23; Reilly, 2021).

Method A/ Results: One of the benefits of being a member of the Erb Institute community is access to professional development resources, including an internal job board that features job postings aimed at recruiting Erb-affiliated undergraduate students, graduate students, and alumni (working professionals). Companies that post on the Erb job board range from startups,

non-profits, and government agencies, to Fortune 500 companies. While the internal job board has existed well before 2020, Erb only began keeping a log of roles posted in May of 2020. Using this date as a starting point, despite it being in the depths of the COVID-19 pandemic, I compared the rate of increase in job postings on this internal platform to postings on the Indeed job site as well as U.S.-wide job postings (Erb Institute, 2022d; FRED, 2022; Trading Economics 2022). Between May 2020 and May 2021, the number of postings on the Erb Institute job board increased over 1000% (as seen in Figure I), while the job postings in the US only increased around 60% in that same time period (as seen in Figure K) and around 115% on the Indeed job posting platform (as seen in Figure J).

Method B / Results: As for students' career aspirations, the previously mentioned Yale and Global Network for Advanced Management study showed that 78% of students said (all else equal) that they would choose to work for a company with good environmental practices over one with bad environmental practices. Even more significantly, 51% of students say they would actually accept a lower salary in order to work for a company with better environmental practices (Cort, et al., 2022). Additionally, 26% of students in the survey said that they would not accept a job at a company with poor practices (which increased from just 19% in 2015). Meanwhile, 81% want to help their employers improve their environmental sustainability and 40% want to pursue a sustainability-related role (Yale School of Management, 2022). Notable increases in students that consider themselves "very" or "extremely" knowledgeable on climate change (21% in 2015 and 41% in 2022) are turning into actions that are material concerns to business schools and campus recruiters. Lastly, students do not think that businesses are doing nearly enough to combat climate change and prioritize sustainability. 61% of students believe that businesses should share the responsibility for environmental crises equally with the government. Another

15% believe that businesses should take a more primary role than the government. Finally, only 20% of students say that businesses are making the necessary efforts to address the current challenges (Yale School of Management, 2022). This disparity between what students are asking of businesses and their future employers, and what businesses currently offer, will be a significant tension as the next generation graduates and enters the workforce. The 81% of students that want to help their employers improve their environmental sustainability is a hopeful sign that change is coming, if businesses and campus recruiters are aware and open to hiring students with sustainability-related skill sets and values.

Executive Education

Area of Focus: Executive education is a section of the “Employers” stakeholder group that functions as an early sign of what skill sets employers have identified that their employees are lacking and that they would like them to improve upon. Demand for this form of education for executives, directors, and other higher-up roles demonstrates a limited pool of individuals with sustainability skill sets in these core business roles. In addition to looking for new hires with these sustainability-related capabilities, re-educating those higher up in the company is vital to affecting change throughout all levels of a company. This education can take place through open enrollment courses, certifications, online courses, custom programs, or workshops (Executive Education, n.d.).

Method: Gathering data for trends in executive education primarily focuses on content that is offered and increasingly taken advantage of within executive education and certification programs around sustainability. Since custom executive education programs are thoroughly curated to be company-specific, they are sporadically offered and based on individual client

demand (Michigan Ross Executive Education Custom Solutions, n.d.). These factors make it difficult to do a trend analysis on frequency of topics over the past few years. Within the University of Michigan, Ross Executive Education and the Erb Institute Executive Education (The Sustainability Academy) are ideal sources for interviews due to Ross’s status as the #1 open enrollment provider of executive education and the Erb Institute’s expertise in business sustainability.

Results: Conversations with the Ross Executive Education office guided my understanding of executive education offerings, which often include personalized programs for individual companies that are not publicly available for reference. Additionally, many companies that are looking for sustainability-related executive education are then forwarded on to the Erb Institute’s Sustainability Academy. From there, the general topics that are most popular within the Erb Sustainability Academy’s offerings are on climate basics, stakeholder engagement, ESG for investors, human rights, and corporate political responsibility. These issues are pressing company executives and they are looking for support in addressing these issues in their roles, as they were not already trained in how to do so.

Stakeholder C - Donors

Donors	
Area of Focus	- Trends in large philanthropic donations, particularly those made to higher education
Source	- UM Ross Development Office - External research & trends - Chronicle of Philanthropy - Marts&Lundy

Areas of Focus: Another strong influence on business schools are donors. Donations, particularly large donations (around \$10 million +), often are tied to a specific purpose, school,

or program (Akhtar, n.d.). Donor relations in higher education are often a combination of matching donors with a source for their donation, collaborating with a potential donor to design a program / source / project to match the intended nature of the gift, and / or approaching potential donors with a strong need that the institution may currently have. These partnerships can result in a wide variety of public good on campuses and for the surrounding communities, but sometimes a specific donor's vision may be not what the university needs most, or come in the most useful form. Notably, billionaire Charles Munger proposed funding a \$1.5 billion dorm at the University of California - Santa Barbara (Maruf, 2021). However, this comes at a much higher cost - the dorm is designed by Munger and his team, whose design involves 94% of the dorm's single occupancy rooms having no windows as well as other concerns about livability and safety. UCSB does have very real and urgent housing needs that must be addressed, but their dependence on collaborating with this large donor's wishes reveals just how susceptible universities can be to donor dollars. Unlike Munger's dorm design at UCSB, other donors let their donations be guided by certain values and interests. These types of donors are of particular interest here, as this type of donation may guide a particular school / recipient, topic, or impact of the gift.

Method: For this stakeholder group, I primarily utilized external research and reports to inform my analysis. In conversations with members of the Ross Development Office it became clear that it is difficult to extrapolate trends in large higher education donations by looking at just one school / university. Based on resources that the Ross Development Office uses to inform their own strategy and discussions, I was able to identify themes in trends in large donations with higher education relevant to business and sustainability.

Results: Coming out of the pandemic, philanthropic giving is at a low. In fact, the Chronicle of Philanthropy's report on \$10 million+ gifts shows that current levels are at the lowest level of giving since 2012 (Hunt, 2021). However, what is surprising about this trend is that these large gifts are trending in the opposite direction of the markets. Despite the increase in net worth of the richest individuals in the world throughout the pandemic, gifts of over \$10 million+ are decreasing (Hunt, 2021). Within overall decreasing levels of large philanthropic giving, is an increase in giving to "Other Causes" over the more traditional buckets of "Arts, Culture, & Environment," "Health," "Schools," and "Higher Education" (as seen in Figure L). "Higher Education" is, however, seeing relative stability compared to the stark drop-offs for "Schools," "Arts, Culture, & Environment," and even "Health" (despite 2020 being the start of the COVID-19 pandemic). Ultimately, higher education remains a relatively popular source for philanthropic gifts, and in a time of low overall giving, self-differentiation matters even more as an institution.

Additionally, standing out during this time of rapidly accumulating wealth in the top 1% is MacKenzie Scott's large-scale philanthropic giving. Furthermore, the nature of her donations stands out from other \$10 million + gifts. Her donations are not being recruited by institutions or organizations, or even inspired by compelling case statements. Rather, her team chose to direct gifts towards institutions based on their reputations and past work (Kulish, 2022). After significant internal research, Scott and her team would reach out to the organization regarding the gift - many of them heard from her when they were first notified of her gift. As an organization, this demonstrates that having a reputation for impact and demonstrating your commitment to being an impactful institution is more essential than ever. Consistently and transparently documenting your impact and progress over time towards your goals, as well as

making this information easily discoverable both internally and externally, is key to attracting and retaining interest from potential donors.

Discussion

Alignment

Of the stakeholders discussed in this thesis, Students (particularly Current Student Courses and Current Student Co-Curriculars) and Employers (Recruiters and Executive Education) are the most aligned and show the strongest demand signals. These stakeholder groups are explicitly stating and showing their interest through course enrollment, creation and involvement in co-curricular activities, job searches, new job postings, and re-education practices. The demand signals are consistent since they are both looking for increased business education and opportunities related to sustainability in business schools. However, the continued expression of these wants reveals that a gap remains between what is available and what is currently available. Students are still creating their own organizations and opportunities to fill the gaps in their coursework as well as filling nearly every seat in sustainability-related courses (Figure B). Employers are recruiting employees with sustainability-related skill sets and pursuing executive education programming to bring their current employees (across functions) up to par. As long as these skill sets are not consistently included and taught in business school core, there will continue to be a gap of business professionals and leaders that are proficient in the matter in the roles that can benefit most from that expertise.

Future Potential

As of the other stakeholder groups, in particular Donors and Incoming BBA Students, there is a great potential for being a strong force of change in closing the aforementioned gap if

the incentives and demand signals (respectively) become more clear. Within the donors stakeholder group, despite shifts in how large philanthropic gifts to higher education institutions, I was not able to identify what a clear demand signal might look like or what proper incentives to engage with business school sustainability would be. As for Incoming BBA Students, I was unable to obtain data from the Ross BBA Admissions department, in part because the data that I sought (trends in specific interests of the incoming class and applicants, or what aspects of Ross drew certain students to choose the school over others) does not exist.

Areas for Future Research

As mentioned in the ‘Future Potential’ section of the Discussion, Donors and Incoming BBA Students have significant potential to be catalysts for change for embedding sustainability within business school sustainability. Additionally, I originally proposed including the Faculty stakeholder group in my thesis, but I ended up excluding the group in favor of focusing on the stakeholder groups with more available data. Similarly to the Donor stakeholder group, I was unable to identify what a demand signal would look like or any structural incentives for faculty to engage in business school sustainability consistently throughout their career (instead of once they are tenured or more established in their research). In future studies, looking more in depth at these stakeholder groups, potentially through interviews and text analysis to identify motivations, may help in learning more about the groups themselves, what demand signals might be, and how incentives can be created or strengthened.

Furthermore, given my abductive approach and applied motivation, the analysis was done through my lens as a Ross student and informed by my personal experience. While this style of analysis provides unique insight into the presence of business school sustainability at the Ross

school, it does raise the question of how peers are faring on the same front. An area for future research could be to either look at other higher education institutions with prominent business schools (at both the undergraduate and MBA level) or to do a wider and broader analysis of a variety of peer schools to see how they measure against each other on a variety of measures, particularly for the Students stakeholder groups.

Application

For Ross

As the lens of this paper is informed by the experiences of a Ross School of Business BBA student, the most actionable takeaways of these findings directly apply to this program. The consistency in demand signaling and aligned interests for current students, recruiters, and executive education all point to a demand for embedding sustainability into the core curriculum.

While the interviews with Gillian Cobb and Jiten Parbhoo demonstrate how the school has improved upon itself in regards to the existence of co-curricular opportunities for BBAs at the intersection of business and sustainability by the time they graduated, there is still a ways to go. Sustainability-related courses in the Ross course guide consistently fill all seats available, and students continue to create even more impact-related organizations because the existing application-based ones cannot accommodate every student's interest in the space. Since Cobb and Parbhoo founded their respective organizations in 2018, new Ross-affiliated organizations like Propel, REM&Co, and Erb Fellows have joined IIG, Michigan Impact, and Net Impact to double the number of impact-focused organizations in 2019. Meanwhile the total number of impact-focused clubs in Ross has increased by 500% since 2017. Every co-curricular and curricular opportunity within the school is being exhausted by students, and all the while Ross

markets itself as an institution that cultivates a culture and curriculum prioritizing positive business and impact. Demand clearly exists within the school, but continuing to introduce sustainability-related topics in courses outside of the core curriculum or through student-initiated and led organizations only provides this type of education and exposure for those who actively seek it out.

For Business Schools

While the specifics of student demand may vary from school to school (given that this thesis references student curricular and co-curricular engagements at Ross), demand from employers is demonstrated through their hiring of students with sustainability skill sets and continued education of current employees for not just those in sustainability roles, but all across the company. Studies discussed in the Literature Review show how business education is encouraging students to develop selfish, sociopathic, and individually-focused behaviors and values (Krishnan, 2008; Hoffman, 2021; Smith, 2021; Frank et al., 1993; Acemoglu et al., 2022). There is a clear and concerning hole in the current structure of the traditional business school core curriculum that does not teach students how to account for entities other than their own company, and by extension, themselves. What students learn in business school informs their understanding of business overall and how to conduct themselves in roles going forward. Many of the issues that businesses today are facing, in particular climate change, can be addressed more fully, effectively, and structurally by going right to the root - business schools.

Conclusion

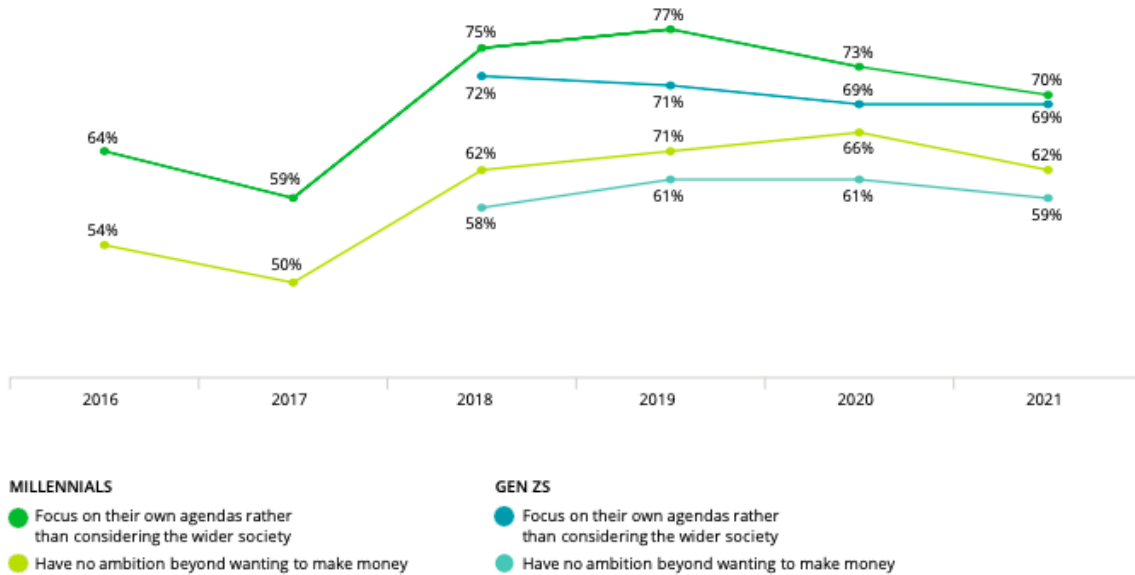
Business schools are integral in shaping the future of business and its leaders. When sustainability is missing from that fundamental understanding, it is likely to be an afterthought instead of a learned priority. Looking at business school stakeholders, there is a visible shift in valuing and demanding this intersection. Students and Employers are showing the earliest and clearest demand signals, but Donors and Incoming BBA Students are seeing early shifts as well. However, business schools are at a crossroads. These institutions can either acknowledge the growing demand and rise to meet it, and therefore move in a direction that supports a carbon-free economy, a stakeholder-prioritizing capitalism, and a more sustainable form of business; or they can continue to drag their feet and risk losing incoming students, interested recruiters, and donor dollars.

Appendices

Figure A: Early Signs of Businesses Having a Focus Beyond Their Own Agenda are Starting to Appear (Deloitte, 2021)

EARLY SIGNS OF BUSINESSES HAVING A FOCUS BEYOND THEIR OWN AGENDA ARE STARTING TO APPEAR

% who agree with the following statements



Q11. Thinking about business in general, would you agree or disagree that, on balance, the following statements describe their current behaviors?
Base: All millennials 14,655, all Gen Zs 8,273

Figure B: Engagement with Impact-focused Courses at the Ross School of Business

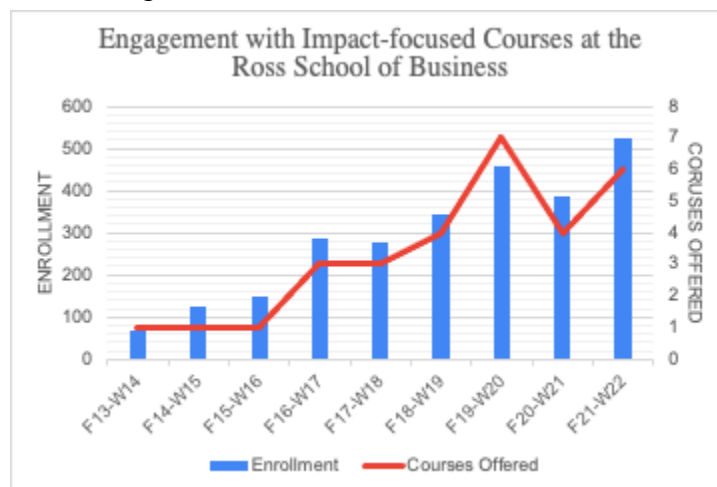


Figure C: Impact-focused Courses Offered at the Ross School of Business from Fall 2013 - Winter 2022

Course	Title	Professor	W22	F21	W21	F20	W20	F19	W19	F18	W18	F17	W17	F16	W16	F15	W15	F14	W14	F13
ORGSTUDY 208	Business and the Natural Environment	Sara Soderstrom	234		205		238		236		207		224		148		123		67	
STRAT 400	Strategies for Sustainable Development	Andrew Hoffman		60		50		30												
BA / STRAT 445	Base of the Pyramid: Business Innovation & Social Impact	Ted London		124		86		89		48		41								
BUSABRD 425	Study Abroad in Iceland	Andrew Hoffman							34				34							
BE 401	The Economics of Sustainability	Tom Lyon		46				28												
MO 330	InterMission: Action-Learning Expedition	Kevin Thompson	27				8													
ES 444	Finance for Social Good	Michael Gordon				43		38		25		29		28						
BUSABRD 320	Sustainable Business in Switzerland	Joe Arvai					27													
STRAT 415	Equity Analytics	C. Rider	31																	
TOTALS			464		341		385		318		248		258		148		123		67	

Figure D: Aspen Institute “Ideas Worth Teaching” Award Submissions (Aspen Institute, 2022)

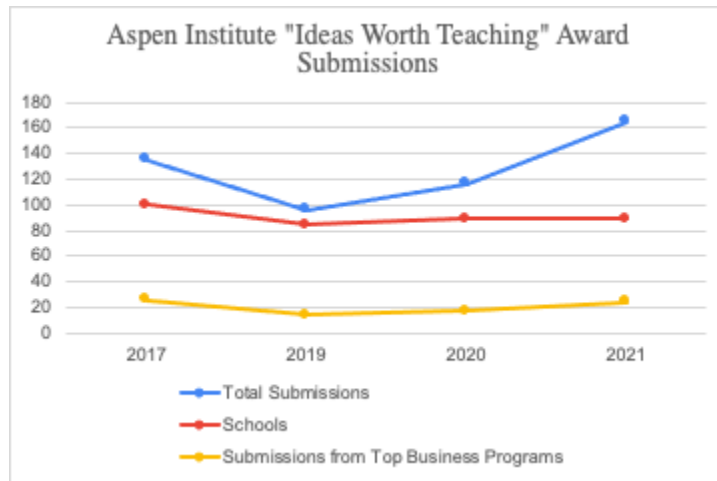


Figure E: Submissions from Universities with Top Business Schools from 2017-2019 (Aspen Institute, 2022)

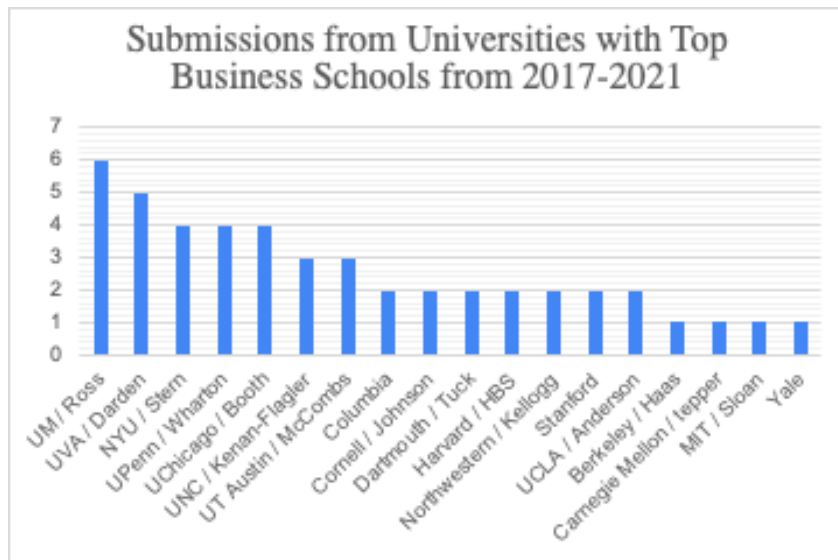


Figure F: Universities with Top Business Schools Submissions to Aspen Institute “Ideas Worth Teaching” Awards from 2017-2021 (Aspen Institute, 2022)

Schools	2021	2020	2019	2017	Totals
UM / Ross	1	2	1	2	6
UVA / Darden	1	1	3	0	5
NYU / Stern	1	1	1	1	4
UPenn / Wharton	1	1	0	2	4
UChicago / Booth	1	1	1	1	4
UNC / Kenan-Flagler	1	0	1	1	3

UT Austin / McCombs	1	0	1	1	3
Columbia	0	1	1	0	2
Cornell / Johnson	0	1	0	1	2
Dartmouth / Tuck	0	0	2	0	2
Harvard / HBS	0	0	1	1	2
Northwestern / Kellogg	1	1	0	0	2
Stanford	0	1	0	1	2
UCLA / Anderson	0	1	0	1	2
Berkeley / Haas	0	1	0	0	1
Carnegie Mellon / tepper	1	0	0	0	1
MIT / Sloan	0	0	1	0	1
Yale	0	0	0	1	1

Figure G: Top US Undergraduate Business Programs, According to U.S. News & World Report (U.S. News & World Report, 2022a)

Top 10 US BBA Programs	Business School
University of Pennsylvania	Wharton
Massachusetts Institute of Technology	Sloan
University of Michigan Ann Arbor	Ross
New York University	Stern
University of Texas at Austin	McCombs
Carnegie Mellon University	
Cornell University	Johnson
Indiana University--Bloomington	Kelley
University of North Carolina Chapel Hill	Kenan-Flagler
University of Virginia	

Figure H: Top US Graduate Business Programs, According to U.S. News & World Report (U.S. News & World Report, 2022b)

Top 20 US MBA Programs	Business School
University of Chicago	Booth
University of Pennsylvania	Wharton
Northwestern University	Kellogg
Stanford University	
Harvard University	
Massachusetts Institute of Technology	Sloan
Yale University	
Columbia University	
University of California Berkeley	Haas
University of Michigan Ann Arbor	Ross

Dartmouth University	Tuck
Duke University	Fuqua
New York University	Stern
University of Virginia	Darden
Cornell University	Johnson
Carnegie Mellon University	Tepper
University of California Los Angeles	Anderson
University of Texas Austin	McCombs
University of North Carolina Chapel Hill	Kenan-Flagler
University of Southern California	Marshall

Figure I: Erb Institute Job Board Postings from May 2020 - March 2022 (Erb Institute, 2022)

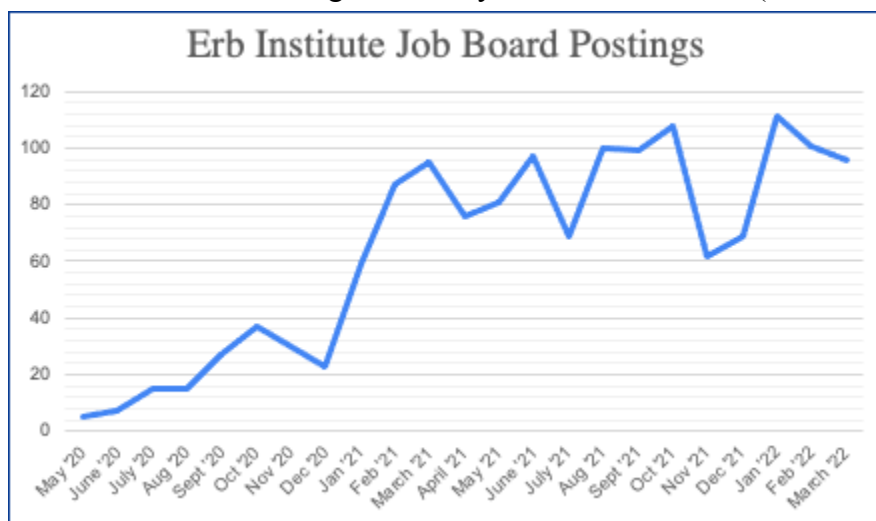


Figure J: Percent Change for Indeed Job Postings from May 2020 - March 2022 (FRED, 2022)

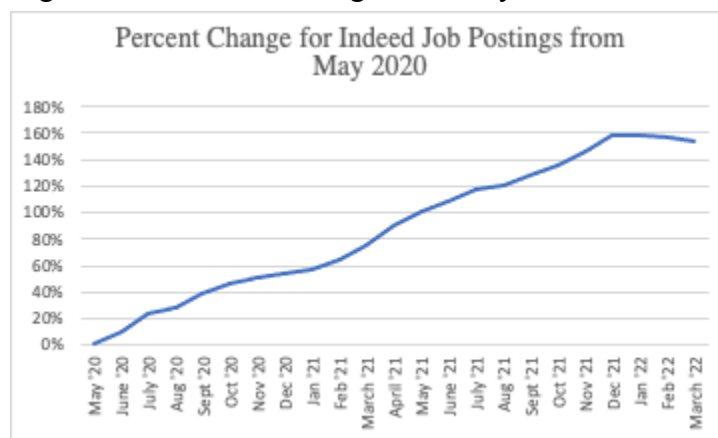


Figure K: U.S. Job Postings from 2017 - 2022 (Trading Economics, 2022)

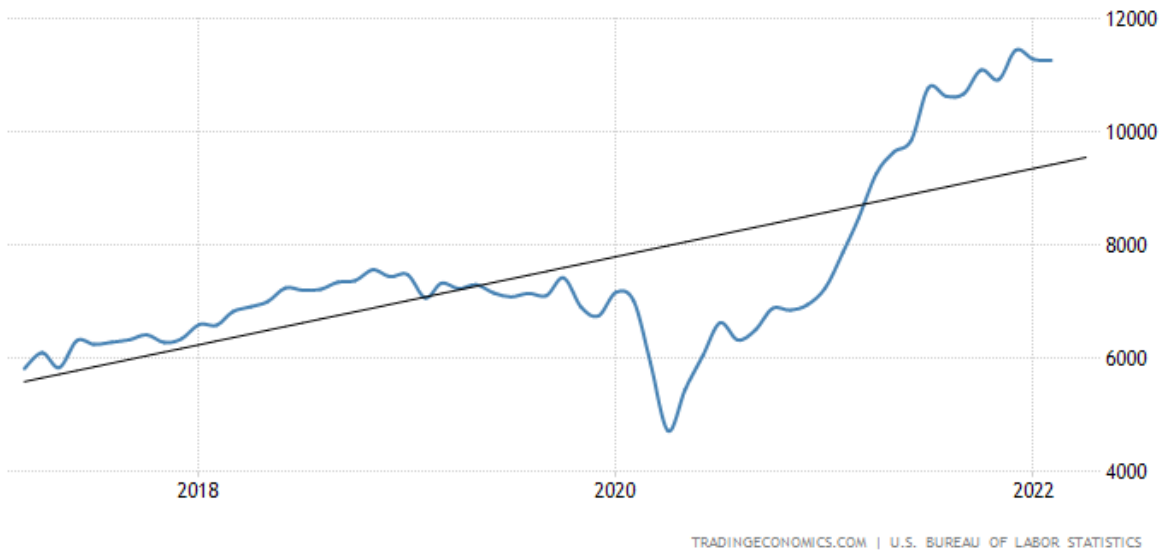
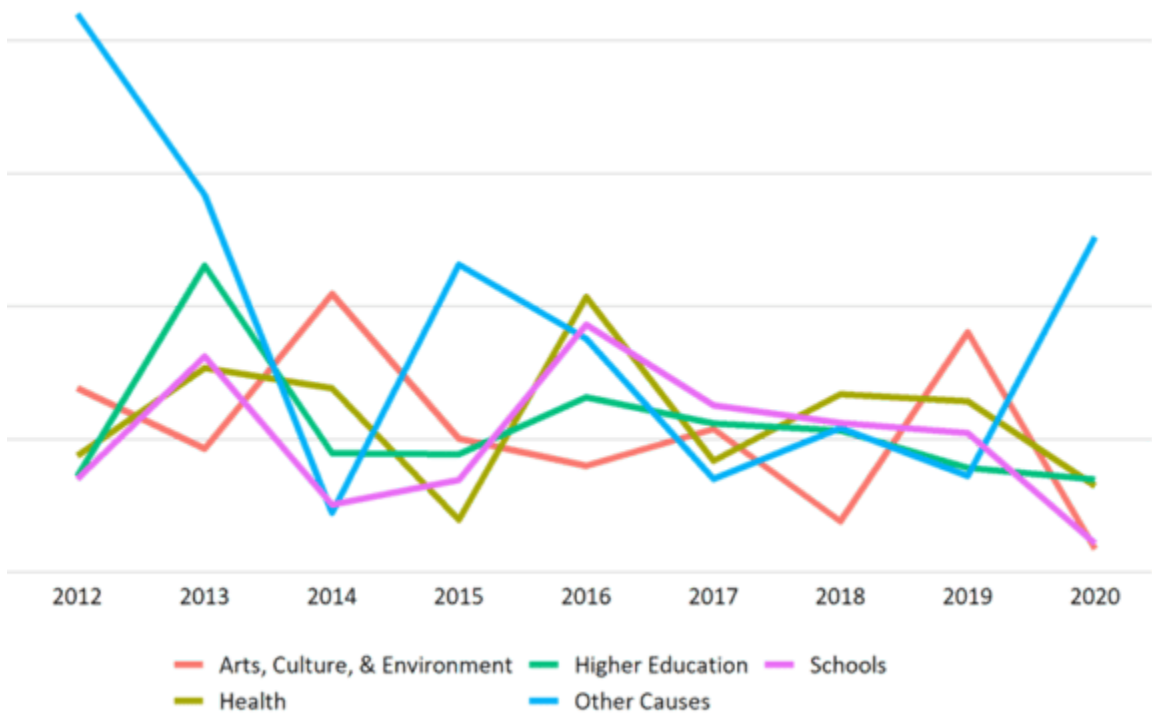


Figure L: Trends in \$10 Million + Philanthropic Donations (Hunt, 2021)



References

- AACSB. (2020). *Connected for Better: Exploring the Positive Societal Impact of Business Schools*. AACSB.
<https://aacsb.edu/-/media/publications/research-reports/societal-impact-brief.pdf?rev=40647f3872584ce78c56bf16eac59fef>
- Acemoglu, D., He, A., & le Maire, D. (2022). *Eclipse of rent-sharing: The effects of managers' business education on wages and the labor share in the US and Denmark* (Working Paper No. 29874). National Bureau of Economic Research. <https://doi.org/10.3386/w29874>
- Akhtar, A. (n.d.). *The 15 biggest private donations to universities by the ultra rich*. Business Insider. Retrieved December 18, 2021, from <https://www.businessinsider.com/the-biggest-private-donations-to-universities-by-individuals-2019-5>
- Aspen Institute. (n.d.). *Our mission*. The Aspen Institute. Retrieved December 17, 2021, from <https://www.aspeninstitute.org/what-we-do/>
- Aspen Institute. (2021). *Ideas Worth Teaching Award Submissions*. [Internally shared].
- Assadourian, E., Mastny, L., & Worldwatch Institute (Eds.). (2017). *EarthEd: Rethinking education on a changing planet*. Island Press. 23.
- Bebchuk, L. A., & Tallarita, R. (2020). *The illusory promise of stakeholder governance*. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3544978>
- Bettcher, J. (2021). *These professors are breaking the mold of business courses*. The Aspen Institute.
<https://www.aspeninstitute.org/blog-posts/meet-the-professors-breaking-the-mold-of-business-courses/>
- Bouso, R. (2020, February 12). *BP boss Looney sets out to 'reinvent' oil giant with zero carbon goal*.
https://www.reuters.com/article/us-bp-outlook/bp-boss-looney-sets-out-to-reinvent-oil-giant-with-zero-carbon-goal-idUSKBN2061IM?utm_source
- Brauer, D., & Sroufe, R. (2020). *Quantifying the order of priorities in student choice of graduate business schools: Does sustainability matter?* Journal of Management for Global Sustainability, 8(2). <https://doi.org/10.13185/JM2020.08205>

- Business Roundtable. (2019, August 19). *Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'*.
<https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>
- Business+Impact. (2019). *Now Open: The Impact Studio At Michigan Ross Is Taking On Society's Greatest Challenges*.
<https://businessimpact.umich.edu/now-open-the-impact-studio-at-michigan-ross-is-taking-on-societys-greatest-challenges/>
- Business+Impact at Ross. Retrieved December 17, 2021, from <https://businessimpact.umich.edu/>
- Canto de Loura, I. (2014). *Dilemmas in sustainability: A pedagogical approach to raise awareness on the key role businesses play to practice and promote sustainability*. *Journal of Management Development*, 33(6), 594–602.
<https://doi.org/10.1108/JMD-04-2014-0035>
- Cole, R., & Snider, B. (2019). *Managing in turbulent times: The impact of sustainability in management education on current and future business leaders*. *Journal of Cleaner Production*, 210, 1622–1634. <https://doi.org/10.1016/j.jclepro.2018.11.135>
- Cort, T., Gilbert, K., DeCew, S., Goldberg, M., Wilkinson, E., Fitzgerald, H. (2022, February). *Rising Leaders on Social and Environmental Sustainability*. Yale University and Global Network for Advanced Management. New Haven, CT: Yale Center for Business and the Environment, Yale Program on Climate Change Communication.
- Deloitte. (2021). *A call for accountability and action*. The Deloitte Global 2021 Millennial and Gen Z Survey. Retrieved April 20, 2022, from <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html>
- Disis, J. E. (n.d.). *If Your Boss Has an MBA, You Might End Up Earning Less Money*. *Bloomberg*. Retrieved April 20, 2022, from <https://www.bloomberg.com/tosv2.html?vid=&uuid=a3ce8926-c0e0-11ec-8c93-634275584c59&url=L251d3MvYXJ0aWNsZXNvMjAyMi0wMy0yOS9pZi15b3VyLWJvc3MtaGFzLWZlLW1iYS15b3UtbWlnaHQtZW5kLXVwLWVhcm5pbmctbGVzcy1tb25leT91dG1fY2FtcGFpZ249bWlmdXRtX21lZGllbT1uZXdzZGV0dGVyJnV0bV9zb3VyY2U9bW9ybmluZ19icmV3>
- Duku, J., Bosu, L., Ekow Ansah, D., Achiaa Agyapong, A., Afia Bafowaah, A., Kobina Drokow,

- E., & Arboh, F. (2021). *Factors Affecting Career Choice of Business Students in the Senior High Schools: A Study of Selected Schools in the Cape Coast Metropolis*. *Naše gospodarstvo/Our Economy*, 67(1), 61-70. <https://doi.org/10.2478/ngoe-2021-0006>
- Dutton, S., & Selph, C. (2019, May 20). *Deloitte research reveals a “generation disrupted”:* *Growing up in a world of accelerated transformation leaves Millennials and Gen Zs feeling unsettled about the future*. Deloitte. <https://www2.deloitte.com/global/en/pages/about-deloitte/press-releases/deloitte-millennial-survey-research-reveals-gen-z-unsettled.html>
- Edwards, M., Brown, P., Benn, S., Bajada, C., Perey, R., Cotton, D., Jarvis, W., Menzies, G., McGregor, I., & Waite, K. (2020). *Developing sustainability learning in business school curricula – productive boundary objects and participatory processes*. *Environmental Education Research*, 26(2), 253–274. <https://doi.org/10.1080/13504622.2019.1696948>
- Ehrenfeld, J. R. (2008). *Sustainability by Design*. New Haven: Yale University Press.
- Erb Institute. (2022a). <https://erb.umich.edu/>
- Erb Institute. (2022b). *Erb Fellows Curricular Requirements: Academic Year 2022-2023 Student Guide*. https://issuu.com/erbinstitute/docs/ay_20-21_erb_fellows_curricular_requirements_q_a?mc_cid=a50284626a&mc_eid=e0e40bda66
- Erb Institute. (2022c). *Undergraduate Fellows*. <https://erb.umich.edu/education/undergraduate-program/>
- Erb Institute. (2022d). *Erb Job Board*. [Internally shared].
- Fink, L. (2019, January). *Purpose & Profit*. <https://www.blackrock.com/corporate/investor-relations/2019-larry-fink-ceo-letter>
- Fink, L. (2020). *A Fundamental Reshaping of Finance*. <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
- Fink, L. (2021a). <https://www.blackrock.com/americas-offshore/en/2021-larry-fink-ceo-letter>
- Fink, L. (2021b). *Net zero: a fiduciary approach*. <https://www.blackrock.com/americas-offshore/en/2021-blackrock-client-letter>

- Fisher, J., & Bonn, I. (2017). Sustainability and undergraduate management curricula: Changes over a 5-year period. *Australian Journal of Environmental Education*, 33(1), 18–33. <https://doi.org/10.1017/aee.2016.31>
- Frank, R. H., Gilovich, T., & Regan, D. T. (1993). Does studying economics inhibit cooperation? *Journal of Economic Perspectives*, 7(2), 159–171. <https://doi.org/10.1257/jep.7.2.159>
- FRED Economic Data. (2022). *Job Postings on Indeed in the United States*. <https://fred.stlouisfed.org/series/IHLCHGUS#0>
- Friedman, M. (1970). A Friedman doctrine-- The Social Responsibility Of Business Is to Increase Its Profits. ProQuest Historical Newspapers: The New York Times (1851-2009) pg. SM17. <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>
- Govindarajan, V., & Srivastava, A. (2021, November 11). *Mba programs need an update for the digital era*. Harvard Business Review. <https://hbr.org/2021/11/mba-programs-need-an-update-for-the-digital-era>
- Hals, T. & Nasralla, S. (2021, May 28). *Analysis: Big oil may get more climate lawsuits after Shell ruling -lawyers, activists*. Reuters. <https://www.reuters.com/business/legal/big-oil-may-get-more-climate-lawsuits-after-shell-ruling-lawyers-activists-2021-05-28/>
- Harder, A. (2020, February 14). *Delta aims to become first "carbon neutral" airline*. https://www.axios.com/delta-carbon-neutral-airline-climate-change-9796e386-f73b-4476-a5c3-06b5f08d785a.html?utm_source
- Hoffman, A. J. (2021a). *Management as a calling: Leading business, serving society*. Stanford Business Books, an imprint of Stanford University Press.
- Hoffman, A. J. (2021b). *Business education as if people and the planet really matter*. Strategic Organization, 19(3), 513–525. <https://doi.org/10.1177/1476127020967638>
- Hudler, K., Dennis, L., DiNella, M., Ford, N., Mendez, J., & Long, J. (2021). *Intersectional sustainability and student activism: A framework for achieving social sustainability on university campuses*. Education, Citizenship and Social Justice, 16(1), 78–96. <https://doi.org/10.1177/1746197919886860>

- Hunt, P. (2021, March 12). *The Landscape of Mega Gifts and Commitments in 2020*.
<https://www.martsandlundy.com/what-we-think/2021/03/the-landscape-of-mega-gifts-and-commitments-in-2020/>
- Ideas Worth Teaching. (2021). *Aspen institute honors business courses and faculty that look to tackle society's biggest challenges in 2021*. The Aspen Institute. Retrieved December 17, 2021, from
<https://www.aspeninstitute.org/news/press-release/ideas-worth-teaching-award-2021/>
- Ideas Worth Teaching. (n.d.). *Ideas worth teaching awards*. Ideas Worth Teaching Awards. Retrieved December 17, 2021, from <https://www.ideasworthteachingawards.com>
- Impact Investing Group. (2022). <https://www.iigumich.com/>
- Krishnan, V. R. (2008). Impact of mba education on students' values: Two longitudinal studies. *Journal of Business Ethics*, 83(2), 233–246. <https://doi.org/10.1007/s10551-007-9614-y>
- Kulish, N. & Ruiz, R. R. (2022, April 11). *The Fortunes of MacKenzie Scott*.
https://www.nytimes.com/2022/04/10/business/mackenzie-scott-charity.html?algo=editorial_importance_fy_email_news&block=4&campaign_id=142&emc=edit_fory_20220410&fallback=false&imp_id=306609111&instance_id=58146&nl=for-you&nid=105987999&pool=pool%2Fa2fc9efa-4a9f-46ae-8506-967a38fc2099&rank=1®i_id=105987999&req_id=880034132&segment_id=88084&surface=for-you-email-news&user_id=0c2ad575e101547acbabac3695f626c4&variant=0_edimp_fye_news_dedupe
- Landrum, N. E., & Ohsowski, B. (2017). Content trends in sustainable business education: An analysis of introductory courses in the USA. *International Journal of Sustainability in Higher Education*, 18(3), 385–414. <https://doi.org/10.1108/IJSHE-07-2016-0135>
- Maruf, R. (2021, November 1). *Warren Buffett's billionaire partner bankrolls windowless dorm. An architect quit*.
<https://www.cnn.com/2021/10/29/business/ucsb-munger-hall/index.html>
- McKinsey & Co. (2021). *2020 Year in Review*. McKinsey & Co.
<https://www.mckinsey.com/featured-insights/2020-year-in-review>
- Michigan Impact Investing Symposium. (2022). <https://www.miisumich.com/>
- Michigan Ross. (2022a). <https://michiganross.umich.edu/>

- Michigan Ross. (2022b) *Michigan ross executive education custom solutions*. Retrieved December 17, 2021, from <https://michiganross.umich.edu/programs/executive-education/custom-programs>
- Michigan Ross. (2022c). *Executive education*. Retrieved December 17, 2021, from <https://michiganross.umich.edu/programs/executive-education>
- NACE. (2021). *Competencies: Employers weigh importance versus new grad proficiency*. Retrieved December 17, 2021, from <https://www.naceweb.org/career-readiness/competencies/competencies-employers-weigh-importance-versus-new-grad-proficiency/>
- Olalla, C., & Merino, A. (2019). Competences for sustainability in undergraduate business studies: A content analysis of value-based course syllabi in Spanish universities. *The International Journal of Management Education*, 17(2), 239–253. <https://doi.org/10.1016/j.ijme.2019.02.006>
- Orji, I. J. (2019). Examining barriers to organizational change for sustainability and drivers of sustainable performance in the metal manufacturing industry. *Resources, Conservation and Recycling*, 140, 102–114. <https://doi.org/10.1016/j.resconrec.2018.08.005>
- Presley, A., Presley, T., & Blum, M. (2018). Sustainability and company attractiveness: A study of American college students entering the job market. *Sustainability Accounting, Management and Policy Journal*, 9(4), 470–489. <https://doi.org/10.1108/SAMPJ-03-2017-0032>
- Reilly, K. (2021, October 8). Inside the Battle for the Hearts and Minds of Tomorrow's Business Leaders. <https://time.com/6105006/mba-programs-changing/>
- Rubin, R. S., & Dierdorff, E. C. (2011). On the road to abilene: Time to manage agreement about mba curricular relevance. *Academy of Management Learning & Education*, 10(1), 148–161. <https://doi.org/10.5465/amle.10.1.zqr148>
- Ruiz-Palomino, P., Martínez-Cañas, R., & Jiménez-Estévez, P. (2019). Are corporate social responsibility courses effective? A longitudinal and gender-based analysis in undergraduate students. *Sustainability*, 11(21), 6033. <https://doi.org/10.3390/su11216033>
- Selingo, J. (2018). *The New Generation of Students: How colleges can recruit, teach, and serve Gen Z*. The Chronicle of Higher Education.

- Selingo, J. (2021). *The Future of Gen Z: How Covid-19 Will Shape Students and Higher Education for the Next Decade*. The Chronicle of Higher Education.
- Simpson, R. (2006). Masculinity and management education: Feminizing the mba. *Academy of Management Learning & Education*, 5(2), 182–193.
<https://doi.org/10.5465/amle.2006.21253782>
- Slater, D. J., & Dixon-Fowler, H. R. (2010). The future of the planet in the hands of mbas: An examination of ceo mba education and corporate environmental performance. *Academy of Management Learning & Education*, 9(3), 429–441.
<https://doi.org/10.5465/amle.9.3.zqr429>
- Soderstrom, S. (2022). ORGSTUDY 208: Business & the Natural Environment
- Stremersch, S., Winer, R. S., & Almeida Camacho, N. (2020). Faculty research incentives and business school health: A new perspective for marketing. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.3631046>
- Trading Economics. (2022). *United States Job Openings*.
<https://tradingeconomics.com/united-states/job-offers>
- Undergraduate Impact Investing Society. (2022). *Partnerships*.
<https://undergradimpactinv.wixsite.com/undergradimpact/partnerships>
- United Nations. United Nations Sustainable Development Goals.
<https://www.un.org/sustainabledevelopment/>
- U.S. News & World Report. (2022a). *Best Undergraduate Business Programs Rankings*.
https://www.usnews.com/best-colleges/rankings/business-overall?_sort=rank&_sortDirection=asc
- U.S. News & World Report. (2022b). *2023 Best Business Schools*.
<https://www.usnews.com/best-graduate-schools/top-business-schools/mba-rankings>
- Waddock, S., & Lozano, J. M. (2013). Developing more holistic management education: Lessons learned from two programs. *Academy of Management Learning & Education*, 12(2), 265–284. <https://doi.org/10.5465/amle.2012.0002>
- World Commission on Environment and Development (Ed.). (1987). *Our common future*. Oxford University Press.

World Economic Forum. (2020). Davos Manifesto 2020: The Universal Purpose of a Company in the Fourth Industrial Revolution.

<https://www.weforum.org/agenda/2019/12/davos-manifesto-2020-the-universal-purpose-of-a-company-in-the-fourth-industrial-revolution/>

Yale School of Management. (2022, February 28). *Global network survey finds students more urgently focused on sustainability*. Yale School of Management.

<https://som.yale.edu/story/2022/global-network-survey-finds-students-more-urgently-focused-sustainability>