



2020 MBA Kenan Scholar Research Projects (Revised)

Buyout Portfolio Company Performance Attribution

Faculty Researcher: Shawn Munday (Shawn_Munday@kenan-flagler.unc.edu)

Project Description: Utilizing available leveraged buyout data sources that includes detailed portfolio company data, this project will involve furthering investor understanding of the factors contributing to buyout performance at the portfolio company level. Data sources available including Stepstone, Citigroup and Burgiss. The goal is to develop additional insights on historical return outcomes, attributable to drivers such as geographic, sector, sponsor, size, leverage and price.

Research Questions: What are the attributes that make for successful LBO outcomes. What factors are the best predictors for low loss ratios in private equity

Data Collection Methods: The project seeks to collect data from numerous sources, some of which are readily available and others that require collection/extraction/merging/cleaning. Readily available data includes Stepstone and Burgiss.

Project Deliverables: The scholar will collaborate with faculty researchers to produce a white paper on the combined database (progress to date). This paper will include descriptive statistics as well as contribution analysis.

Desired Qualifications: Background in private equity. Strong programming skills (e.g., Python, R, Matlab). Strong data management skills (e.g., SQL database programming). Most important, the scholar should have the ability to learn new programming skills as necessary to complete tasks.



When Consumers Become Producers: The 3D Printing Community Responds to the COVID-19 Pandemic

Faculty Researcher: Barry Bayus (barry_bayus@UNC.edu)

Project Description: Companies are generally considered to be the source of product innovations. But innovations developed by consumers are gaining prominence from researchers as well as managers and senior executives. A considerable academic literature has grown up around consumer innovators—consumers who create or improve existing products and, importantly, freely share their designs. The development of home 3D printing technologies is now enabling consumers to become producers by fabricating products directly at home. Today, there is an installed base of thousands of hobbyist 3D printers around the world. This distributed manufacturing capacity is a potential resource to fill in gaps from unanticipated interruptions in the supply chain. A case in point is the ongoing severe shortage of personal protective equipment (PPE) for medical workers during the COVID-19 pandemic. Several maker communities have stepped up to the plate. Their crowdsourcing efforts involve many "amateurs" using their 3D printers to manufacture small batches of health care products like face shields, masks, and inhaler spacers. Together, the efforts of many individual "makers" have resulted in donations of several thousand pieces of PPE to various health-related organizations and health care workers around the world.

Research Questions: Are consumer makers producing what health care workers really need or are they simply making what they can? Is 3D printed PPE used by front-line health care workers only used as a last resort, or is it even used at all? In a crisis situation, what is "good enough" when it comes to life saving equipment? What are the legal implications for good enough equipment?

Data Collection Methods: To conduct this research, the response of maker communities to the COVID-19 pandemic will be carefully documented using: secondary data (e.g., online public information from web sites like twitter.com, facebook.com, nationofmakers.us, findthemarkers.com, findthemasks.com, getusppe.org, nycmakesppe.com, 3dprint.nih.gov, projectparalink.org). Primary data (e.g., personal interviews with consumer makers, maker community organizers, health care workers, health related organizations; information from a custom designed online survey administered to makers and health related organizations).

Project Deliverables: Database, White Paper (report) on findings

Desired Qualifications: This research project will have a qualitative and data analytic phase, involving diverse research skills (including investigative reporting, case writing, web data extraction, and data analysis).



Active Management Research Alliance (AMRA) Database

Faculty Researcher: Greg Brown (gregwbrown@unc.edu)

Project Description: The Active Management Research Alliance (AMRA) is currently collecting and analyzing hedge fund data from numerous sources, both public and private, to aggregate into one global database. This database will be used to help facilitate academic research. Examples of projects the database currently supports include examining the effects of crowded trades, activist investors and daily risk factor exposures.

Research Questions: What are the return and risk characteristics of the hedge fund universe? How has the hedge fund universe evolved over the last two decades?

Data Collection Methods: The project seeks to collect data from numerous sources. Past data collection has included scraping data from websites, using Excel APIs and Python APIs, extracting and merging data from csv files, and accessing databases, including SQLite databases.

Project Deliverables: The scholar will collaborate with faculty researchers to produce a white paper on the combined database (progress to date). This paper will include descriptive statistics as well as analysis of risk factors and portfolio properties.

Desired Qualifications: Strong programming skills (e.g., Python, R, Matlab). Strong data management skills (e.g., SQL database programming). Most important, the scholar should have the ability to learn new programming skills as necessary to complete tasks.



Sustainability and Business Models in University-Affiliated Entrepreneurship Centers

Faculty Researcher: Jason Doherty (jason_doherty@kenan-flagler.unc.edu)

Project Description: Over the past decade, entrepreneurship has grown in importance in business programs in the US and abroad. In addition to curricular changes, to adjust for the increasing demand in entrepreneurship-focused courses, business schools have also significantly invested in dedicated entrepreneurship centers that offer physical infrastructure, co-curricular programs, mentorship, and other support services meant to foster an entrepreneurial mindset in students and other learners and support regional economic development through new venture creation and acceleration. Nonetheless, the economic landscape for higher education has faced increasing pressure, exacerbated recently with the spread of COVID-19, especially in the US. In this project, students will perform a benchmarking analysis of US-based, university-affiliated entrepreneurship centers in order to identify best practices and unique solutions to the economic headwinds that face business schools and their affiliated entrepreneurship centers. Students will analyze the landscape in order to identify appropriate analogs (peer institutions) for benchmarking and perform primary and secondary research in order to better understand how various programs support themselves. This may include some financial analysis but mostly will focus on business models and revenue streams that entrepreneurship centers can utilize to reach economic sustainability.

Research Questions: This project focuses on the following questions: (1) What revenue models are being used by entrepreneurship centers at top US business schools? (2) In addition to common revenue/business models that can be modeled as best-practices, what are some unique approaches that entrepreneurship centers are developing in order to create new revenue streams? Can any of these less common revenue streams be replicated elsewhere and how? (3) Are there any gaps in the offerings of peer institutions that could be a point of differentiation for the KFBS Eship Center? (4) What is the appropriate strategy for the Eship Center to reach economic viability and sustainability through its programs?

Data Collection Methods: (1) Academic, industry, and popular business literature review (2) Interviews and/or surveys of entrepreneurship center staff and stakeholders

Project Deliverables: (1) Presentation (powerpoint or similar) of research, analysis, and findings/recommendations (2) Possible whitepaper, blog post, newsletter, other forms of dissemination of key findings of research

Desired Qualifications: (1) Interest in entrepreneurship; prior entrepreneurial experience is a plus (including, but not limited to, having taken Eship courses at UNC or elsewhere, participation in entrepreneurship-focused programs at the Eship Center or elsewhere, prior work experience in a startup, etc). (2) Excellent written and oral communication skills (3) Self-starter, good organizational and time-management skills



Attracting Creative Freelancers: How to prepare problem statements to yield more submissions in creative contests

Faculty Researcher: Claudia Kubowicz Malhotra (claudia@unc.edu)

Project Description: Arvind Malhotra (Strategy & Entrepreneurship), Barry Bayus (Marketing) and Claudia Kubowicz Malhotra (Marketing) seek assistance for an ongoing research project. The focus of the project is to do a deep dive into the preparation of a problem statement. We have an extensive database from a creative contest platform (www.eyeka.com), and are looking for help with cleaning and coding data in preparation for data analysis. Our goal is to publish this work in a top academic journal.

Research Question: We seek to better understand the critical elements of success—including components such as writing and language, use of visuals, contest rewards, etc. within the problem statement—that attract creative freelancers to participate in a creative contest.

Data Collection Methods: Data is collected. We are looking for assistance with data cleaning and coding in preparation for analysis.

Project Deliverables: Excel worksheet with data cleaned and coded per instructions provided by researchers at the onset of the project.

Desired Qualifications: Strong attention to detail. A student interested in crowd sourcing, innovation, and/or marketing would be the ideal fit for this project.



ESG & Impact Investing for the Future

Faculty Researcher: Jeffrey Mittelstadt (jeffrey_mittelstadt@kenan-flagler.unc.edu)

Project Description: ESG (Environment, Social and Governance) and Impact Investing are currently seeing tremendous growth, however they are not the norm. For instance, global private capital is currently ~US\$200 trillion, while current investment dedicated to achieving the Sustainable Development Goals at ~US\$1.4 trillion per annum. The capital required to achieve the goals is ~US\$4.5 trillion per annum (Huang, Yingxi, CSE Impact Investing report, 2020). A Better Business Better World report states, 'The 60 fastest growing market opportunities opened up by achieving the Global Goals across the world in just four key economic systems could be worth up to US\$12 trillion a year for the private sector by 2030, according to research for the Business and Sustainable Development Commission.' Kenan Scholars will work with the Center for Sustainable Enterprise to evaluate the global state of ESG and Impact Investing and identify trends and key players to better educate our students, create opportunities for our graduates, engage with ESG and Impact Investing organizations, and inform the Center's IF (Investing for the Future) Initiative. We invite one or two MBA Kenan Scholars to work with us on this project (for example, one may concentrate on ESG ratings and investment, while another concentrates on Impact Investing. Then they can characterize a full spectrum of sustainability investment trends and opportunities).

Research Questions: To what extent do institutional investors, wealth management firms, private equity investors and other investors incorporate ESG and/or impact investing into their portfolios? While growth has been accelerating, what are the trends to existing growth and the hurdles to becoming industry standard? Understanding the industry characteristics and needs will help us create programming and education to train the next generation of business and investment leaders to drive exponential growth in ESG and impact Investing, while aiming to develop it as the new industry standard with the goal being to drive more capital toward achieving the United Nations Sustainable Development Goals (SDGs) over the next decade to realize the estimated \$12 trillion of annual business opportunities.

Data Collection Methods: Surveys of Businesses/Investment Firms, literature review, informational interviews and data collection through existing ESG ratings and impact investing sources (e.g. Bloomberg Terminals, RobecoSAM and the Dow Jones Sustainability Index, MSCI, CDP, Moody's, GIIN, etc.).

Project Deliverables: Characterization of status and trends, comparisons to traditional investment trends, identification of barriers and hurdles, and recommendations for the Center for Sustainable Enterprise through a written report, database creation and presentation.

Desired Qualifications: Intellectual curiosity, familiarity with and or basic awareness of ESG and Impact Investing, understanding of investment and capital markets, time management and organizational skills, personally driven and motivated, and a desire for making a positive impact through market-based solutions.



CREATE Prosperity Research Project

Faculty Researcher: Alyse Polly (alyse_polly@kenan-flagler.unc.edu)

Project Description: CREATE, led by faculty director Maryann Feldman, would like to support an MBA student in executing a research project that aligns with the mission of CREATE to generate shared economic prosperity. Below is more information about our center. If you have a research project in mind that would fit well within the work of the center, please propose it to us and, if it is in alignment with our work, we would love to support you during the research process.

Increasing income disparities and declining opportunities have diminished America's middle class. CREATE is an economic development center working to tackle this challenge by generating shared economic prosperity through a combination of research, data analytics, homegrown interventions and policy development. CREATE supports the work of NCGrowth and SmartUp, two initiatives that provide technical assistance to businesses and communities in economically distressed or disconnected areas. The center hosts Homegrown Tools, an online platform that tells the stories of small towns that have successfully stimulated private investment and job creation, inspiring small towns across the nation to leverage their unique assets. CREATE is home to the Create Prosperity Research Lab, a network of scholars from across the country working to create and curate a body of research that examines the fundamental determinants of shared economic prosperity. CREATE also supports more informed political discourse by hosting events that bring together policymakers, practitioners, investors, entrepreneurs and academics, such as the Black Communities Conference, North Carolina Investment Forum and the Closing the Wealth Gap Conference. To learn more, please visit createprosperity.unc.edu.

Research Questions: Specific research questions will depend on the proposed project. The very big picture research question that all of our work contributes to is: How can we create a future where economic prosperity is available and accessible to all people and places? We expect that the proposed projects will have research questions that are much more narrow and focused than this big picture question.

Data Collection Methods: To be determined, though likely to have some mix of quantitative and qualitative methods. If possible, please try to identify some data sources for the research you have in mind. We are also happy to brainstorm with you about potential data sources, and think through the best methodologies.

Project Deliverables: There will be a final report describing the research questions, methodology, findings, implications and recommendations for further research. Depending on the content of the research, we may encourage drafting an op-ed as this is an excellent way to get your research out to the public.

Desired Qualifications: Attention to detail; great communication skills; great writing skills; good time management skills; interest in research; interest in economic development; able to work independently; organized.



Equity Audit Research

Faculty Researcher: Allison Schlobohm (allison_schlobohm@kenan-flagler.unc.edu)

Project Description: We are currently a team of three undergraduate students, one graduate student, and one faculty member. In meetings and writing, we study the ways organizations can measure and impact their internal equity. Right now, our researchers are studying the societal contexts of organizational equity, building equity from the ground-up in startups, the impacts of in-group/out-group feelings on equity, and how to measure equity given contemporary data biases.

Research Questions: (1) How do you quantitatively and qualitatively measure organizational equity in a broad enough way to capture a clear story and with enough specificity to inspire effective interventions? (2) How do you determine what factors can cause real change within an organization, and how do you measure this change? (3) How can you effect and encourage change in the early stages of a high growth company? (4) What are the metrics an organization should use to measure diversity? (5) What are the best methods for data points to be acquired? (6) How does one statistically comb through the data to garner insight? (7) How can organizations measure the dynamics of employee relationships and use those to identify unconscious bias, microaggressions, and organizational inequity?

Data Collection Methods: We are currently conducting secondary research and not collecting primary data.

Project Deliverables: By the end of the apprenticeship, the scholar should expect to be part of our writing group. We currently have one item being prepared for Kenan Insights and are moving towards a working paper. The scholar will be encouraged to pursue their own, related interests, and the faculty team is happy to coach students towards their desired deliverable.

Desired Qualifications: While not required, students with expertise in data analysis and visualization would be excellent additions to our team



Beyond the Launch: Better Support for Rapidly Growing Startups

Faculty Researcher: Jill Willett (jill_willett@kenan-flagler.unc.edu)

Project Description: Starting a business is undeniably hard, yet growing and scaling a business in a sustainable and profitable way may be more challenging. There are unique challenges, skills and expertise needed to successfully lead an organization through periods of accelerated growth. Leaders need a different set of knowledge to steer a company that has 20 employees versus 2, or that has \$100,000 in revenue versus \$1,000,000. This may include building hard skills like operational efficiency, implementing diversity initiatives and fundraising, or soft skills like personal leadership development and team empowerment. These skills are critical to the long term success of rapidly growing organizations, however there appears to be a significant gap in resources and support available to assist companies in this phase.

The Entrepreneurship Center, like other university entrepreneurship centers, exists to help learners deepen their knowledge and accelerate their learning in entrepreneurship and are positioned well to support the unique needs of what we are calling 'growth and scale' companies. Historically, entrepreneurship centers like ours have focused their programming on 1) primarily students and 2) around developing business ideas and launching ventures. We would like to better understand what information is out there for startups in a high-growth phase, and to gain a clearer sense of what types of institutions these organizations are currently turning to for support. We recognize a gap in resources for companies beyond the initial launch and believe there is an opportunity to expand our impact beyond the walls of the university and into the entrepreneurial community at large.

Research Questions: What are common definitions and indicators that a company has entered a 'growth and scale' phase? What literature exists on/for growth and scale companies currently, and who are considered 'experts' in this field? How do the business needs, skill sets, and knowledge needed to lead growth and scale companies differ from those needed for companies just launching? How are other universities and institutions addressing the business needs of companies in this high growth phase?

Data Collection Methods: Aggregate current research from academic literature, whitepapers and other sources on startups that are experiencing rapid growth. Conduct a benchmarking study that identifies key institutions that support startups in a high-growth phase, and provide a summary of best practices. Case studies of 3-5 startup companies who have navigated the challenges of rapid growth successfully to uncover their challenges and what worked. Interviews/surveys of 30-50 high growth companies in the Triangle startup community.

Project Deliverables: Sharing research findings and recommendations in summarized written and presentation form, verbal presentation to Entrepreneurship team and key UNC staff members, a report suitable for publishing on our Entrepreneurship website and social channels, as well as on the Kenan Scholars Program website.

Desired Qualifications: Interest in entrepreneurship and/or experience as an entrepreneur or working in a fast-paced startup environment is a plus