Northwestern Kellogg School of Management
FINC 946: Impact Investing and Sustainable Finance
Winter 2019

10 weekly sessions: January 10th – March 14th
Each Thursday 6:30-9:30pm
Classroom: Global Hub room TBD
Office Hours: Thursdays 2pm-6pm Kellogg Global Hub Conference Rm TBD (contact Beth Smith at smith@eq-cap.com to schedule office hours)
Professor: Dave Chen (chen@eq-cap.com)
Assistant: Beth Smith (smith@eq-cap.com)

Impact Investing and Sustainable Finance: How can capital markets and investment strategies deliver societal and environmental impact and generate market returns?

Impact investing and sustainable finance has evolved from a niche investment strategy into the mainstream. This class will give you an exposure to a broad spectrum of impact investment strategies through in-class presentations by impact and sustainable finance senior investment leaders and through impact investing experiential exercises.

The backbone of the class is an experiential team project that will invite student project teams to create a financial vehicle (e.g. investment firm, fund or instrument) that delivers on returns, scale, social & environmental impact. Your project team will have access to senior investing professionals in the development of your impact or sustainability fund or investment vehicle. In several cases, FINC 946 class projects have gone on to execution and are in the market, today.

During the quarter, we will learn the tools, models and frameworks behind impact investing. Theory & tools are tested in the classroom each week as senior investment managers of leading sustainable and impact investment firms illustrate how their strategies use these insights and frameworks to generate returns and deliver impact. These real-world impact in-class presentations span from the $multi-billion funds like Generation Investment Management and TPG Rise to leaders in the development of Social Impact Bonds and environmental services credits.

The class tries to help you answer the question: Can you build a career in the investment world that creates value and expresses your values?

Course Description

We will address four broad topics:
1. Trace the evolution of the impact investing industry, from its origins in CSR (corporate social responsibility) and SRI (socially responsible investing) to a now emerging “mainstream” investment strategy.

2. Expose the class to a broad spectrum of impact investing strategies through guest speakers who are leading investment managers, including:
   - Renewable energy financing
   - Micro-finance
   - Carbon credits and environmental services portfolios
   - Green/sustainable real estate
   - Forestry, natural resources, and agriculture
   - Sustainability (ESG factors) public equities & hedge funds

   Each week, we will invite leaders in each of these asset classes into our class and explore the following:
   - Discuss their fund, their investment strategies & the impact component of their strategy in that asset class
     - Their criteria & process for evaluating the fit of an asset to their strategy
     - How they value and structure deals
     - The economics of investment
     - Their returns targets (financial, social, environmental) & how they measure this
   - We ask, can an investment strategy focused on generating superior financial return also create positive change in the environment and society? How are they executing this strategy in their asset class and portfolio?
   - We will review the challenges they face or progress they have made attracting institutional investors while integrating financial return with social and environmental impact.

3. Outline the tools and models behind impact investing
   - Arbitraging market inefficiencies (seeing value where others don’t)
   - Determining the “currency” for each part of that value chain and aligning the returns
   - The importance of a measurement unit to balance the trade and create the arbitrage opportunity
   - Macro-trends investing (finding the hidden opportunities and risks in the sustainability macro trends)
   - Applying the appropriate instrument to the level of risk (debt vs equity, and risk adjusted rates of return)
   - Risk management
   - TLC (transparency, liquidity, consistency) factors in building a “traded asset”
   - The role of public policy (government) on investments & returns
4. Follow the money, looking at the investor trends as impact investing enters the mainstream.

The Class Project
Create a financial vehicle (e.g. investment firm, fund or instrument) capable of fitting within an asset allocation of institutional investor portfolios (public equities, fixed income, hard assets, private equities, alternative assets, etc) while delivering social & environmental impact. Working in teams of 4-5 students, I’ll ask you to integrate these concepts into an impact investment strategy.

The choice is left to your creativity and your sense of the market and opportunity.

On the 10th week (March 14th), each team (4-5 students each) will present their team project. The format is a 30 minute presentation: 20 minutes formal material with 10 minutes Q&A. The final team deliverable is a powerpoint presentation.

Project example could include:
- Water / wastewater
- Green affordable housing
- Small enterprise lending for the bottom of pyramid or developing countries
- An agriculture fund that supports family farms and sustainability
- Apply the Social Invest Bond (SIB) structure to a community or environmental problem
- Take a first generation V 1.0 impact fund, determine the strengths/weaknesses, lessons learned, and shortcomings to develop a V 2.0 2nd generation mainstream scalable fund structure & strategy.

Students will be expected to present the following in a powerpoint to the class:
- What asset class the vehicle fits in
- Clear definition of market opportunity & the market research to create the understanding of how the returns are generated
- Target investment criteria
- Investment hypothesis
  - Process by which financial return will be generated
  - Process by which environmental/social impact is created
- Due diligence process
- Financial modeling to substantiate investment hypothesis
- Identification of critical risks
- Deal selection process
  - Monitoring protocols for environmental and social impact
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<tr>
<th>Dates</th>
<th>Topic</th>
<th>Guest Speakers TBD</th>
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<tbody>
<tr>
<td>1/10</td>
<td>Defining impact investing</td>
<td>No speakers the first week</td>
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<td></td>
<td>• The interaction of profits, investment capital, &amp; public policy.</td>
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<td>• Framing the continuum of impact investing and its evolution</td>
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<td>• Developing a framework for a multi-asset class sustainability portfolio</td>
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<td>Discussion of class project</td>
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<td>Reading:</td>
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<td></td>
<td>• The Impact Investor: Lessons in Leadership and Strategy for Collaborative Capitalism by Cathy Clark, Jed Emerson and Ben Thornley - BOOK</td>
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<td>• CalPERS – Investment Beliefs, Sept. 2013</td>
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<td>• Credit Suisse – Thirty Years: Reflections on the Ten Attributes of Great Investors, August 2016 (IMPORTANT TO READ)</td>
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<td>• Building Impact Portfolios - Athena Capital Advisors - April 2017</td>
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<td>• Callan 2017 ESG Survey, December 2017</td>
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<td>1/17</td>
<td>Renewable energy finance</td>
<td>All speakers TBD</td>
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<td></td>
<td>• The intersection point of policy &amp; profit</td>
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<td>• Core concepts:</td>
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<td>o Aligning the benefits in a transaction to the class of investors that values that benefit. An example of how the innovation of aligning the investor to their specific benefits &amp; returns, catalyzed the growth of the market.</td>
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<td>o Applying risk adjusted instruments to the right level of risk</td>
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<td>o The importance of public policy &amp; incentives</td>
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<td>Monetizing the environment</td>
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<td>• Water, Credits, Carbon</td>
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<td>• Core concept:</td>
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<td>Social Investment Bonds (SIB)</td>
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Applying these concepts: You’ll be building a SIB, based on the Massachusetts SIB RFP

Reading:
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| 1/31 | Sustainable Agriculture, Forestry, and Commercial Real Estate  
- Implementing sustainable advantage in mainstream investment strategies  
- The economic value of a green portfolio  
- Returns expectations:  
  - It depends on the asset class  
  - Current yield vs asset appreciation  
- Is this impact? |
| 2/7  | Venture Capital with an impact |
| 2/14 | Mid point: Review project briefs  
Presentation from past student projects, sharing lessons learned developing their project |
| 2/21 | Beyond micro-finance...emerging debt opportunities  
- Core concepts:  
  - Real vs perceived risk & the pricing of this risk  
  - The recurring themes of aligning “currency,” monetizing social opportunities, applying TLC |
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| 2/28 | ESG implications for risk and value in companies | • Embedding ESG into the “alpha” & “beta” model  
• The corporate argument for sustainability as a strategy  
Reading:  
  - “Sustainable Capitalism” by Generation Investment Management LLP, February 2012  
  - Aperio Group: Building a Carbon-Free Portfolio, February 2013  
  - Sustainable Investing Ratings Framework for Corporate Bonds – Breckinridge Capital Advisors  
  - RI article: Morgan Stanley Unveils Framework for Embedding Sustainability into Company Valuations – Jan 2015  
  - Going Green: Considerations for Green Bond Issuers by Mark T. Kim, Government Finance Review, December 2015 |
| 3/7  | The Investor | • Investors trends: is impact investing moving to the mainstream investor  
• Metrics  
Reading:  
  - McKinsey & Company: Sustainability’s Strategic Worth, September 2014  
  - IRS Report: Impact Investment and Foundation Trustees |
Optional reading (books):

- Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming by Paul Hawken
- Quantified: Redefining Conservation for the Next Economy by Joe Whitworth - Book
- Impact Investing: Transforming How We Make Money by Making a Difference, by Antony Bugg-Levine & Jed Emerson
- Evolutions in Sustainable Investing: Strategies, Funds and Thought Leadership (Wiley Finance) by Cary Krosinsky, Nick Robins and Stephen Viederman
- Natural Capitalism by Paul Hawken
- Investing for Change by Vinay Nair
- Ecology of Commerce by Paul Hawken
- Sustainable Investing: The Art of Long-Term Performance by Cary Krosinsky and Nick Robins

Optional reading materials:
• CalPERS – Sustainable Investment Research Initiative, June 2013
• An Impact Investing Holiday Reading List by Elizabeth Coston, Huffington Post, November 2015
• Brookings - Turning a Profit While Doing Good: Aligning Sustainability with Corporate Performance, December 2014
• The New York Times - An Investment Strategy to Save the Planet, January 2016
• CFA Institute - Integrating Water Risk Analysis into Portfolio Management, December 2015
• Responsible Investor - Bank of England¹s Carney outlines building blocks to catalyze green bond market, March 2016
• The Atlantic – How Financial Innovation Can Save the World, June 2012