FIN 566A/B
Alternative Investments: Hedge Funds, Private Equity & VC

Instructors:	Lukas Kremens Assistant Professor of Finance
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Quarter	Winter 2023
Lecture times	Mo/We 8:30-10:20
Location	PCAR 395
TA	Matt Ghatak, mghatak@uw.edu
TA office hours	TBC

Course Description

What strategies do investors pursue to make returns in Alternative Investments? What are the risk profiles of these strategies and how do they fit into a broader portfolio? We will devote around half our time to Hedge Fund strategies and the other half to Private Equity.

The Hedge Fund portion of the course considers various strategies, such as Quantitative Factor Investing, Distressed Investing, and Merger Arbitrage. The second part covers Leveraged Buyouts and Venture capital. We will draw a brief comparison between the investment environments of Private Equity and Venture Capital and what the differences imply for the investment process in each area. The course aims to provide students with valuable insights and skills for anyone wishing to work in Hedge Funds or Private Equity/VC, or any institution investing in these asset classes.

Learning Objectives

Upon successful completion of the course, the students will be able to:

- Understand the risks and returns of several very different but common hedge fund strategies, and the economic mechanisms driving them,
- Understand the structure and investment process of Private Equity/VC funds,
- Evaluate Private Equity investment opportunities,
- Draw distinctions between the Private Equity and Venture Capital investment environments and, how those shape the respective investment processes, and
- Evaluate how risk and return profiles of HF and PE strategies fit into a broader portfolio.

Prerequisites / Expectations Management

A general understanding of and interest in financial economics and investments. I will assume that you know the material covered in an introductory finance course. **This course is qualitative** and relies on a conceptual understanding of the material rather than mathematical skill. As the range of topics is broad and the quarter is short, some students may benefit from prior exposure to other investments classes. However, I will provide background materials for some of the topics that are typically covered with more technical detail, as this may help some students with the more conceptual level targeted in 566.

The class is designed to be interactive, so the lectures (some more than others) will heavily rely on your insightful discussion of the topics at hand. This requires that you come to class **prepared**, that is, having read and thought about the assigned readings. To guide your preparation, I will provide a few simple questions for each topic that you should think about answering while reading. In exchange for thorough preparation for class discussion, there will not be any written weekly assignments.

Office Hours

Please post questions regarding the material on the Canvas discussion board. These can be as vague as "I did not quite understand what you said about XYZ in yesterday's lecture, could you elaborate on this?". Feel free to discuss each other's questions there and propose answers. I will schedule a weekly office hour on Zoom (easier to have more people participate) during which I address those questions and your suggested answers. If the there are no questions on the Canvas discussion board, I will assume that there is no need for an office hour. If you have questions you would rather discuss privately, feel free to email me directly. In the past, some students have made a lot of use of the email/office-hour opportunity and their exam performance has generally reflected it.

Professionalism in class

I expect everyone to attend lectures on time, not be disruptive, follow university policy regarding masks. Please also have a name tag in front of you to facilitate class interaction.

FERPA

Lectures may (and likely will) be recorded including video and audio. In case of a change in university policy, this course may move back to online instruction. In that case, it will run synchronously at your scheduled class time via Zoom. These Zoom class sessions will be recorded. The recording will capture the presenter's audio, video and computer screen. Student audio and video will be recorded if they share their computer audio and video during the recorded session. Recordings (Zoom or in-person) will only be accessible to students enrolled in the course to review materials. These recordings will not be shared with or accessible to the public. The University and Zoom have FERPA-compliant agreements in place to protect the security and privacy of UW Zoom accounts. For more information about the University's FERPA policy, please visit the Office of the University Registrar's Page.

Honor Code

I employ the principles and procedures espoused by Foster School of Business Honor System to maintain academic integrity in the course. The Honor Code of the Foster School prohibits cheating, attempted cheating, plagiarism, and lying to administration or faculty as it pertains to academic work. Suspected violations of the Honor Code will be handled by referral of the matter to the Foster Honor Council.

Accommodations

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).

Feedback

It is important to me to know about any concerns or questions you might have. I also appreciate any comments on the course, in particular about topics or readings that you find particularly (un)helpful. Please feel free to stop by my office or send me an email if you would like to talk to me. The earlier you provide feedback, the more classes will remain for me to implement such feedback and improve your experience over the rest of the course.

Updates

As we go through the class, I may occasionally adjust the syllabus. Any changes will be mentioned in class and/or on Canvas.

Course Assignments and Course Grade

Reading

There is no assigned textbook. Reading assignment as indicated below for each class. Most readings will be accessible digitally through Canvas. Some classes will cover case studies published by Harvard Business Publishing. Information on how to purchase this part of the course pack will be provided on Canvas. Students are responsible for obtaining access to these materials. *For readings marked with an* ***asterisk (*)****, I do not expect you to read the whole article, but to understand the key message, findings, and takeaways, particularly in relation to the questions posted at the end of the previous class*. Usually, this can be done with a careful reading (perhaps two) of the introduction.

Grading

I want to make sure that I accurately assess what students have learned in my course as well as be able to stay within suggested Foster School median grade guidelines. Therefore, I grade on a curve. This means most of the outcomes will be concentrated near the middle (the mean/median) with data points distributed roughly symmetrically on either side. When calculating final grades, scores are often distributed in clear groups. I may shift grading standards slightly depending on how many scores appear in a particular grouping. If you have any concerns about your grade after a curve is in place, speak with me! I will be happy to sit with you and explain which adjustments were made and why.

The final grade will be based on the following:

- Midterm exam (25%): *take-home exam,* topics 1-6, held between topics 6 and 7.
- Final exam (25%): *standard exam setting*, topics 7-12, held on Tuesday, March 14.
- Class presentation (25%): More info below, presentations will be held in week 10.
- Class participation (25%)

Documented evidence that you were seriously ill at the scheduled time of an exam is the only valid excuse for missing an exam (final or midterm). In order to be excused from an exam, you must contact me prior to the exam and be ready to provide me with documentation after the exam.

Presentations

In groups of around 4 students, you will choose an investment strategy to pitch to your peers and me during the last week of class. This can be

- a hedge fund strategy, such as
    - Merger arbitrage on a specific merger currently in process or under discussion
    - A long-short strategy on particular stocks, sectors, commodities, etc., some past examples:

        - long Tesla, short Uber (with a detailed prognosis on who will succeed in developing autonomous driving capabilities and what that would mean for the two businesses)
        - Long gold spot, short gold mining stocks
        - Long gold mining stocks, short gold stock
    - A simple stock pick (in this case, you should have a very specific reason why you think that stock will perform well, when you expect this performance to materialize (and why))
- a Private Equity opportunity,
    - a proposed LBO of a specific target, with a specific value creation strategy
- any other relevant investment proposal. These are less common, but for example, one group pitched a sports betting strategy that translated some concepts on volatility trading (topic 4) to the betting world. This was a pretty cool presentation, but these more exotic topics have their pitfalls, too.

The core task is to perform a due diligence on what you think will be an attractive investment proposal. This includes thinking of what can go wrong, thinking of why this opportunity exists (are others leaving money on the table? If so, why?). In some cases (e.g., an LBO, or some long-short equity trades), it will involve modelling future cash flows and valuations of a company (or two). In others, such as a merger arbitrage proposal, it will among other things involve thinking through why/if the merger might be called off. As this due diligence is the core task, an important aspect to consider in your choice is the availability of information needed for a sufficiently detailed pitch. For instance, I would generally advise against picking a VC target: it will be hard to assemble enough concrete information on a young/private firm to produce meaningful cash-flow forecasts that would allow you to make a convincing pitch. If for any reason, you think you have such information, feel free to go for it.

Another important aspect is `actionability': would it really be possible to pull this off? For instance, some stocks are very hard (or very expensive) to short, so if your merger arb or long-short involves doing some, you need to think about this. Another example, please don't pitch a buyout of a large cap company with a few hundred billion (dollars) in market cap; no PE fund in the world has the resources to pull this off.

Since the resulting pitches will cover a broad range, it is impossible to provide a detailed grading rubric for this kind of assignment. The goal is not to spoon-feed you an exercise with detailed instructions, but to let you come up with your own ideas and, just as importantly, let you push them as far as you can.

You will form your own groups during the first weeks of class (I will assign members to groups that have not confirmed their group to me by the start of week 3). These presentations are an opportunity for you to dig deeper into a topic you have found interesting. Last year's presentations generally reached a very high standard and helped both the presenting groups as well as the audience appreciate new facets of and perspectives on the materials covered in class. You should expect to spend a considerable amount of time on this project during the second half of the course. You will be asked to submit three things: (i) your slides for the presentation, (ii) a two-page memo summarizing the key points for a busy investment committee, and (iii) a peer evaluation form asking you to assign a total of 100 points to the different group members. These evaluations will be considered for grading.

Course Schedule (subject to change)

Each class will generally cover a different topic, but some topics may stretch across two classes, so please allow some flexibility in translating the below outline into a class schedule.

Part I: Hedge Funds

Topic 1 – Intro: Risk and Return

- Lecture: Risk, return, and the CAPM. This class will provide an introduction to thinking about the risk-return tradeoff.
- ✓ Readings: Provided on Canvas
  - o *The Capital Asset Pricing Model,* A. Perold; JEP (2004),
  - o Optional: *The Capital Asset Pricing Model: Theory and Evidence,* E. Fama & K. French; JEP (2004)

Topic 2 – Alpha versus Beta

- Lecture: Beyond the CAPM – Anomalies, Alpha, and Beta. This class will discuss the basics of so-called quantitative- or factor investing using two common strategies: Value and Momentum.
- ✓ Readings: Provided on Canvas
  - o *Background reading on Factor Models*
  - o **Momentum Crashes,* K. Daniel & T. Moskowitz; JFE (2016)

Topic 3 – Risk Sharing: Hedge Funds as Insurers

- Case Study: Nephila – Innovation in Catastrophe Risk Insurance. This is a somewhat exotic example of a hedge fund (earning premia from catastrophe insurance), but the strategy and its risk profile are in some ways representative of many other common HF strategies. This case also showcases the role of financial markets in facilitating risk sharing among different investors/people, and why this creates investment opportunities/returns.
- ✓ Readings: HBP Case Study, see Canvas for access

Topic 4 – Limits of Arbitrage

- Lecture: Lessons from Long-Term Capital Management. The mother of all hedge fund legends, (certainly those without a happy ending). This class will introduce the concept of arbitrage and showcase how it forms the basis of *many* common hedge fund strategies. It will also highlight how/when these seemingly fool-proof strategies can go wrong.
- ✓ Readings: Provided on Canvas
  - o *Background notes on arbitrage trades and volatility trading.*
  - o *Lessons from the Collapse of Hedge Fund LTCM,* D. Shirreff

Topic 5 – Merger Arbitrage

- Case Study: AT&T Canada. This class will take some of the arbitrage notions from topic 4, introduce the basic merger arbitrage strategy, and study a case with many more bells and whistles.
- ✓ Readings: HBP Case Study, see Canvas for access
  - o Optional: **Characteristics of Risk and Return in Risk Arbitrage,* M. Mitchell & T. Pulvino; JF (2001)

Topic 6 – Distressed Investing: Sovereign Debt

- Lecture: Lessons from Argentina. We will study the restructuring of Argentina's sovereign debt, which played out in a long and dramatic saga involving a particular style of hedge fund strategy. We will also think about how sovereign debt contracts have changed as a result of this case, and how similar hedge fund strategies have played out in other contexts (e.g., Greece in 2012).

✓ Readings: Provided on Canvas
  - *How Argentina Settled a Billion-Dollar Debt Dispute With HFs;* New York Times (2016)
  - *What the World Can Learn from Argentina's Holdout Saga;* VOX (2016)
  - Optional: *The Greek Debt Restructuring: An Autopsy,* J. Zettelmeyer et al; (2013)
  - Optional: *Argentina Puts an End to Long Houldouts Saga;* Financial Times (2016)
  - Optional: *The Curious Case of Aurelius Capital v. Puerto Rico*; NYT Magazine (2019)
  - Optional: **How Sovereign is Sovereign Credit Risk?,* F. Longstaff et al ; AEJ (2011)

Part II: Private Equity

Topic 7 – Distressed Investing: Corporate Debt

- Case Study: Countrywide PLC. This case is an example of a `loan-to-own' turnaround investment. A (specialized) private equity firm invests in the debt of a failing business to emerge as the new owner after restructuring/bankruptcy and then turn it into a successful one.

✓ Readings: HBP Case Study, see Canvas for access

Topic 8 – Introduction to PE & LBO Valuation

- Lecture: Introduction to Buyout Funds – Structures & contracts, Evaluating and Modelling LBOs. This class will introduce a few key concepts in private equity: how are funds structured (and why)? How are private equity professionals compensated by investors (and why)? What role does debt/leverage play in private equity? How do PE funds assess/value investment targets? How do they `create value' through their investments (and for whom)?

✓ Readings: Provided on Canvas
  - *Leveraged Buyouts and Private Equity,* S. Kaplan & P. Strömberg; JEP (2009)

Topic 9 – Leveraged Buyouts

- Case Study: Lion Capital and the Blackstone Group – The Orangina Deal. We'll take a real-life leveraged buyout case to apply the concepts from Topic 8. We will also think about the objectives of the PE firm in selecting deals (it is not always just about returns).

✓ Readings: HBP Case Study, see Canvas for access

Topic 10 – Private Equity vs Venture Capital

- Lecture: Key differences between PE & VC and how they affect the investment process. In many ways, deals in VC are *much* more complicated than in PE. Why is this the case? What differences in the types of situations that VC and PE investors target create these differences in the deal/fund structures? Both VC and PE investing can be an art as much as a science; we'll focus on the science.

✓ Readings: Provided on Canvas
  - Optional: **How do Venture Capitalists Make Decisions?*, P. Gompers, W. Gornall, S. Kaplan, I. Strebulaev; JFE (2019)
  - Optional: *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts,* S. Kaplan & P. Strömberg; RES (2009)

Topic 11 – Financial Contracts in VC

- Case Study: Metapath Software. A great case to showcase many of the ways in which VC investing is complicated (read, exciting?), without us having to take a stance on whether a given start-up's revolutionary or disruptive business model will be successful. (Again, focusing more on the science than on the art.)
- ✓ Readings: HBP Case Study, see Canvas for access

Topic 12 – Alternative Investments in the Portfolio

- Case Study: Yale University Investments Office. As an investor (with your own money), rather than a fund manager (with other people's money): how do different forms of alternative investments contribute to a successful portfolio? How to pick good fund managers? The Yale endowment highlights many of these issues from the perspective of a particular, long-term, investor. Not only do fund managers compete in the market for financial assets, but investors also compete in the market for asset management. How `efficient' is either market? To what extent can individual investors benefit from skilled asset managers?
- ✓ Readings: HBP Case Study, see Canvas for access
    - Optional: **Private Equity Performance: Returns, Persistence, and Capital Flows,* S. Kaplan & A. Schoar; JF (2005)

Topic 13 – Class Presentations