

# Corporate Finance

## Lecture 1: Introduction

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# About the Course

- Designed for undergraduate students
- Prepare students for graduation thesis (W course)
- Cover both traditional topics (e.g., investment, capital structure) and cutting-edge topics (e.g., ESG, AI)
- Arranged by topics, no textbook required
- Course Website: <https://lnt.xmu.edu.cn/course/join/BB29PHSLIU7>.

## About the Instructor

- Tong Li (李通)
- Assistant Professor of Finance, SOE & WISE, Xiamen University
- Office: D339, Economics Building
- Office Hour: By Appointment (face-to-face or online)
- Email: [litong@xmu.edu.cn](mailto:litong@xmu.edu.cn)
- Ph.D. (HKU); M.A. (PKU); B.S. (CUFE)
- Research Areas: Corporate Finance; Sustainable Finance; ESG; FinTech
- Personal Website: <https://litong17.github.io/home>



# Outline for This Lecture

1. Introduction to the Course
2. Introduction to Topic Selection

# All Questions Are Welcome

- If you have a question, don't hesitate to ask!
  - If you're confused, you're probably not alone
  - I don't mind being interrupted
  - If I'm going too fast/my voice is low, just let me know
- I may not always have an immediate answer, but all questions will be answered eventually.

# What is Corporate Finance?

- The area of finance that deals with how corporations make decisions.

# What is a Corporation?

- A corporation is a legal entity/legal person that is owned by its shareholders.
- As a legal person, the corporation can make contracts, borrow or lend money, buy another corporation, and sue or be sued.
- Like individuals, corporations must pay taxes on their earnings.

# Which Decisions Do Corporations Make?

- Investment decision
- Financing decision
- Dividend policy
- Board composition
- Executive compensation
- Pollution emission level
- Labor policy
- Innovation strategy
- ...



# Content Overview

1. Introduction
2. Review of Econometrics
3. Corporate Governance
4. ESG
5. Corporate Finance in China
6. Entrepreneurship and Innovation
7. Corporate Financing Decisions
8. Corporate Investment and Payout Decisions
9. AI in Corporate Finance
10. Labor and Corporate Finance

## Course Assessment

Class Participation	10%
Written Feedback	10%
News/Paper Summary	10%
Presentations	15%
Exam	25%
Term Paper	30%

# Course Assessment

- Class Participation (10%)

- Frequencies of asking & answering questions in class (send me an email after each class)
- Frequencies of asking questions and/or sharing feedback via email after class

- Written Feedback (10%)

- Learning Objectives (5%): graded based on completion, due at 23:59 on the 2nd Sunday
- Reflection Essay (5%): graded based on quality, due at the end of the last week

- News/Paper Summary (10%)

- A written summary ( $\leq 2$  pages) of 2 news articles and 2 academic papers (see the syllabus for detailed requirements)
- Submission deadlines will be Sundays of the 3rd, 6th, 9th, and 12th week.

- Exam (25%)

- Based on the course materials (e.g., lecture notes and reading materials)
- Understanding of corporate finance and ability to relate course content to the real world
- Closed-book exam, cheating sheet allowed (one-page, A4, double-sided)

# Course Assessment

- Term Paper (30%)

- ▶ A research paper related to corporate finance
- ▶ Review articles and case studies NOT acceptable
- ▶ Include quantitative analysis (i.e., data collection and econometric analysis)
- ▶ Follow the style of published articles in top-tier economics or finance journals
- ▶ Students with a failing grade on the Term Paper will NOT be permitted to enroll in the Thesis Writing course in the spring semester.
- ▶ Plagiarism or submitting the same paper to multiple outlets will result in a failing grade for the Term Paper.

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- Presentations (15%)

- ▶ In the Research Topic Presentation (5%), each student presents his/her proposed research topic for the term paper. The presentation will be scheduled in the 6th lecture.
- ▶ In the Term Paper Presentation (10%), each student presents his/her term paper. The presentation will be scheduled in the 13th and 14th lectures.
- ▶ Detailed requirements will be provided later.

# Tentative Course Schedule

Week	Date	Topics	Notes
1	9/8	Introduction and Review of Econometrics	
2	9/15	<b>Reschedule</b>	Learning Objectives due
3	9/22	Review of Econometrics	1 <sup>st</sup> News Summary due
4	9/29	Corporate Governance	
5	<b>10/6</b>	ESG	<b>October 6<sup>th</sup> is public holiday</b>
6	10/13	Corporate Finance in China	2 <sup>nd</sup> News Summary due
7	10/20	<b>Research Topic Presentations</b>	
8	10/27	Entrepreneurship and Innovation	
9	11/3	Corporate Financing Decisions	1 <sup>st</sup> Paper Summary due
10	11/10	Corporate Investment and Payout Decisions	
11	11/17	<b>Report on Research Progress and Q&amp;As</b>	
12	11/24	AI in Corporate Finance	<b>Exam in this week;</b> 2 <sup>nd</sup> Paper Summary due
13	12/1	Labor and Corporate Finance	
14	12/8	<b>Term Paper Presentation</b>	
15	12/15		Term Paper due; Reflection Essay due

## Textbook and Materials

- No required textbook
- Recommended textbook is provided in the syllabus
- Follow business news closely: Sina, Caixin, Wall Street Journal, Economist, Financial Times, ...

# Questions & Answers



# Introduction to Topic Selection

# Outline

- Benefits from a Term Paper
- Idea Generation
- Paper Reading
- Some Hot Topics
- Comments on Past Projects
- Good Examples from Published Papers
- Suggestions on Data Collection and Presentations
- Q&A

# Benefits of Doing a Research Project

- **Independent thinking:** not only do you decide what research problem to work on and how to tackle it, but you will also be primarily responsible for resolving any issues that you face.
- **Time management:** the project is yours to organise from the start until the end. You will be responsible for the workflow and keeping progress on track.
- **Critical synthesis of a body of existing work:** you choose what to read, how to summarise it, and, most importantly, how to identify the flaws in what is already written.
- **Identification of opportunities and “gaps in the literature”:** partly leading on from the previous point, once you have filled your head with knowledge about a particular topic, you will be in a position to see where the limitations are – what is missing, where existing research is lacking, and where you could potentially contribute.

# Benefits of Doing a Research Project

- **Data collection and organisation:** you might need to use some detective work to identify the types of data you need, matched to your project's aims and methodology. Wherever the data come from, they will almost certainly need cleaning and organising in a spreadsheet to get them in an appropriate form for analysis.
- **Statistical modelling:** selecting the quantitative data investigation techniques, including econometrics and other approaches. You need to make sure they are the appropriate one to use in the context that you have chosen.
- **Oral presentation:** organising the results from the project and selling them to your audience in a clear, convincing, and interesting way.
- **Report structuring and writing:** organising all the parts of the project's output and adopting a sound writing style that engages the reader and explains the findings clearly is another valuable skill.

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- **(Hopefully) Earn you a bachelor's degree!!!**

# What is a Good Idea?

- **Interesting** to a broad range of readers
- **Important** with respect to economic events around you
- **Clear** statements of research questions and research design
- **Feasible** with your skills and time constraints
- **Novel** with respect to our current knowledge (e.g., new data, new method, new data)

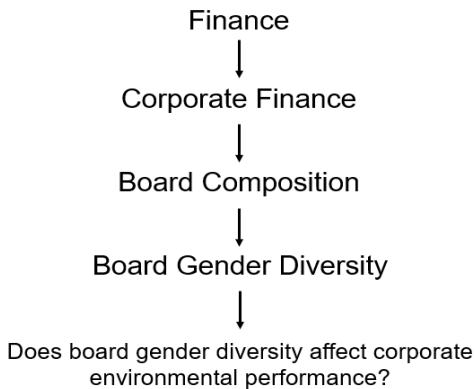
## Before Starting Idea Search

- ① **Reflect on your interests:** choose something that will hold your attention
- ② **Reflect on your strengths and weaknesses:** choose something that will maximize the former and minimize the latter

# Idea Generation Process

- It is **rare** for people to have a very focused idea from the outset.
- The idea generation process may consist of several stages:
  - Define a broad area for research
  - Narrow this to pinpoint a research problem
  - Articulate the research problem in a statement
  - Separate the statement into several practicable aspects
  - Draft the statements into a set of research aims, questions or hypotheses





## Where to Find Subject Areas in Corporate Finance?

- Go through the chapter titles of your **textbooks**
- Go through the chapter titles of **research handbooks**
- Go through the session titles of **conference programs** at top finance conferences

# Where to Find Papers?

- Searching Engines
- Journal Websites
- Conference Programs
- Working Paper Series
- Scholars' Personal Websites

# Searching Engines

- Google Scholar (谷歌学术)

- A similar version to use in mainland: <https://so1.cljtscd.com/>

- Baidu Scholar (百度学术)

- CNKI (中国知网)

# Journal Websites

- Top 3 Finance Journals

- Journal of Finance (JF)
- Review of Financial Studies (RFS)
- Journal of Financial Economics (JFE)

- Top 5 Economics Journals

- American Economic Review (AER)
- Quarterly Journal of Economics (QJE)
- Journal of Political Economy (JPE)
- Review of Economic Studies (RES)
- Econometrica (ECTA)

- Other Lists

- [UTD 24 Journals](#)
- [Financial Times 50 Journals](#)
- [XMU Journal Ranking](#)

- Good Journals in Chinese

- 《经济研究》、《管理世界》、《金融研究》、《经济学（季刊）》

## Conference Programs

- 中国金融国际年会 (CICF)
- 中国金融学术年会(CFRC)
- 中国金融学年会
- American Finance Association (AFA) Annual Meeting
- Western Finance Association (WFA) Annual Meeting
- European Finance Association (EFA) Annual Meeting
- SFS Cavalcade
- For a ranking of finance conferences, please refer to [this article](#).

# Working Paper Series

- SSRN
- NBER Working Papers
- CEPR Discussion Papers
- ECGI Working Papers

# How to Read a Paper?

When reading papers, always ask yourself the following questions:

- Can I summarize and walk my colleagues through this paper's exhibits?
- What is good about the paper (e.g., novel idea, novel research design, novel data)?
- Is this paper important? Does the paper have general interests (i.e., appealing to a wide audience)?
- Are findings of the paper unexpected? If so, are the stories given by the authors reasonable?
- What is wrong with the paper?
- What would I do differently if I were an author of the paper?
- What could make for an interesting extended study?
- Who is the author(s)? What else can I learn from him/her?



## Additional Suggestions for Idea Generation

- Follow big names (your most admirable scholars)
- Read broadly (learn new facts EVERY DAY)
- Find MANY ideas and kill (bad) ideas QUICKLY

# Hot Topics

- ESG and Sustainable Finance

- ▶ Environment-related topics: corporate pollution, green innovation, green talent, energy use, climate risk, carbon emissions, biodiversity risk, ...
- ▶ Social-related topics: DEI (diversity, equality, and inclusion), employee satisfaction, workplace safety, community engagement, supply-chain relationship, ...
- ▶ Governance-related topics: board composition and diversity, executive compensation, risk management, corporate culture, transparency and reporting, ...

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- FinTech, AI and Machine Learning

- ▶ AI/machine learning and corporate finance (e.g., corporate AI investments)

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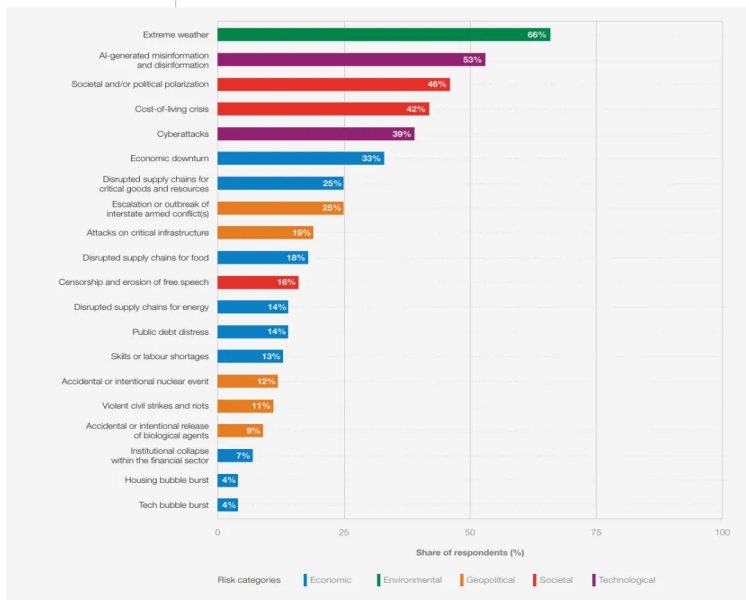
- FinTech, AI and Machine Learning

- AI/machine learning and corporate finance (e.g., corporate AI investments)

- Entrepreneurship and Corporate Innovation

- Gender, race, and other disadvantaged groups in entrepreneurship
- Effects of wealth/liquidity constraints on entrepreneurial entry
- Determinants of (certain types of) corporate innovation

FIGURE 1.2

**Current risk landscape***"Please select up to five risks that you believe are most likely to present a material crisis on a global scale in 2024."*

## Comments on Potential Projects

- **Topic #1: Probe into the positive impact of automation tax on unemployment caused by enterprise automation**
  - Reasons
    - ★ With the development of technology, more and more human force works are replaced by AI or automation equipment. ⇒ Cutting-edge Topic
    - ★ A large scale usage of automation would indeed cause severe structure unemployment. ⇒ Important Policy Implications

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    - ★ A large scale usage of automation would indeed cause severe structure unemployment. ⇒ Important Policy Implications
  - Remarks
    - ★ The statement of topic is too long and unclear.
    - ★ Hypothesis is not clear.
    - ★ What data to use? Firm-level v.s. city-level?

## Comments on Potential Projects

- **Topic #2: The correlation between Fed's yield curve inversion and economic recessions**
  - Reasons
    - ★ The US bond market is the largest financial market in the world.
    - ★ Some of the international safe-haven funds that have been driven to the United States and prefer long-term bonds such as the U.S. 10-year Treasury because of the Russia-Ukraine situation, and the inflow of safe-haven funds will push down the yield of the U.S. long-term bond.
    - ★ For a hundred years, people always want to find the regular patterns of the economic depression. And we hope we could find something interesting that may influence it. And if yield curve inverted of the Federal Reserve truly accord the economic depression, we can find the reason behind the appearance and we may can find the ways to prevent it.



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  - Remarks
    - ★ Focus on causality rather than correlation
    - ★ Hypothesis is not clear.
    - ★ Topic is not related to corporate finance

# Comments on Potential Projects

- **Topic #3: 对企业偿债能力的评估为何不准**

- Reasons

- ★ Interesting? 恒大负债逾期金额数目巨大，引人关注，许家印从首富变首负
    - ★ Important? 影响恶劣，使投资者蒙受巨额损失，扰乱市场

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- Remarks

- ★ The topic statement is incomplete. The evaluation from whom? (shareholders? creditors? rating agencies?)
    - ★ How to answer the question? Case study on one firm or regressions with multiple firms?
    - ★ What kind of data to use?

# Good Examples from Top Journal Publications

- Bradley, Kim, and Tian (2017, MS)
  - Do Unions Affect Innovation?
- Cao, Jiang, Yang and Zhang (2023, RFS)
  - How to Talk When a Machine Is Listening: Corporate Disclosure in the Age of AI

# Do Unions Affect Innovation?

Daniel Bradley, Incheol Kim, Xuan Tian

*Management Science*, 2017

# Motivation

- Key question: Do unions promote or impede firm innovation?
  - Innovation is a crucial driver of economic growth.
  - Unions in the United States are regulated and can be altered by labor laws and regulations over time.
- Two competing hypotheses:
  - Employee Protectionism  $\Rightarrow$  Unions promote innovation.
  - Misaligned Incentives  $\Rightarrow$  Unions impede innovation.

## Identification Challenges

- **Omitted Variables:** union election results could be correlated with firm unobservable characteristics that affect firm innovation output.
- **Reverse Causality:** firms with low innovation potential may be more likely to pass unionization elections.

## RDD as a Solution

- A regression discontinuity design (RDD) that relies on “locally” exogenous variation in unionization generated by these elections that pass or fail by a small margin of votes.
- This approach compares firms’ innovation output subsequent to union elections that pass to those that do not pass by a small margin.
- Why does this setting address the concerns?
  - For these close-call elections, passing is very close to an independent, random event and therefore is unlikely to be correlated with firm unobservable characteristics.



# Data

- Labor union data from NLRB
- Patent information from the NBER Patent Citation database

## Where to Find Data?

- WIND
- CSMAR
- Bloomberg
- CNRDS
- WRDS
- household surveys
- hand/machine collect
- other datasets mentioned in related literature

# Suggestions on Presentations

- Basics of public speaking
- Basics of slides
- How to take a question

# Basics of Public Speaking

- Look at the audience, and talk to the audience.
- Be loud enough that they can hear you.
- Be slow enough that they can process what you say.
- Don't assume people know what you know.
- Use language the audience understand. If you must use jargon, explain it.
- Move your body naturally, especially your hands.
- Do not stand in front of your slides.
- Never read through the slides.

# Basics of Slides

- A slide should contain **as little information as possible**, conditional on it conveying your point at a glance.
- Never write anything on a slide the audience cannot read.
- Where possible, **graphs > tables > text**.
- **Highlight** the points you would like to emphasize.
- For tables: never display irrelevant numbers. Not all numbers will be equally important, but there should be nothing extraneous.
- Adjust the **size of the tables/figures** so that people sitting in the back can see them clearly.

## How to Take A Question?

- Don't interrupt or assume you know what someone will ask.
- Demonstrate “active listening” .
- Avoid being dismissive: Figure out what is underneath the question and speak to that.
- For yes/no questions, start your answer with “The short answer is Yes/No. The reasons are ...”
- Try to link your answer to the evidence you already have.
- People sometimes are providing suggestions rather than raising questions. Do not mix them up.
- Don't get defensive. Fine to say “I need to think about that.” if you think you are getting defensive.
- Be confident and stay loose.

# Further Reading

- Murray Z. Frank [As you read a paper: the usual questions](#)
- Rachael Meager, [Public Speaking for Academic Economists](#)
- Jonathan A. Schwabish, [An Economist's Guide to Visualizing Data](#)
- Michael Weisbach, [An Introduction to Research, Publishing, and Professional Development](#)