BRANDEIS INTERNATIONAL BUSINESS SCHOOL
FIN 254
Modern Finance, Fintech and Beyond

Spring 2019
MW 5:00 to 6:20pm
Lee Hall

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Office Hours: W 3:30-4:30 and by appt.

Course Description
This course examines the modern financial system. It will begin with a discussion of the nature of banking, including the role of shadow banks. We will then proceed to discuss financial regulation, why we need it and how it is changing. Next, we turn to central banking, examining the role of central banks in the economy. In the last part of the course, we bring the various strands together to examine fintech and the future of finance. Throughout we will discuss how information technology is changing the finance.

This course is primarily discussion based. Attendance and participation are mandatory.

Learning Goals:
- Understand the essential role finance plays in the economy.
- Understand the building blocks of a resilient financial system.
- Appreciate the role of central banks in the financial system.
- Use fundamental concepts to understand how the financial system is changing.
- Learn how to evaluate the role of technology in the evolution of the financial system.
- Identify areas where the finance is likely to change.
- Engage in effective debate on financial system issues, with a well-reasoned and compelling analysis that reveals knowledge of both sides of questions.
- Work in groups.
- Prepare effective oral presentations and written analysis of issues relevant to the future of finance.

Prerequisites: FIN 201A or equivalent.

Required Readings
The primary readings for the course are
- Chapters from Cecchetti & Schoenholtz, Money, Banking and Financial Markets 5e
  The password for viewing the file is Fin254 Spring 2019.
- Readings from my blog www.moneyandbanking.com, and other material posted on the course website.
- Other readings that will form the basis for class discussion are available from HBS here: (URL will be filled in here.)
Requirements and evaluation:
You are required to attend all classes, participate actively in class discussions, familiarize yourself with (and follow!) the policies on academic integrity (see below). You should also keep up with the financial news, and come to class ready to discuss relevant current events.

1. Class Participation (30%)
Class is interactive and I expect everyone to participate. Participation is has two components: attendance and comments during the discussion.

- **Attendance is mandatory.** For each unexcused absence beyond the second, your participation grade will be reduced by one partial grade (A to A-, A- to B+, etc.) For each unexcused late arrival or early departure beyond the second, your participation will be reduced by one-half of one partial grades (two late arrivals or early departures = one unexcused absence).

- **Classroom contribution:** Your class discussion grade will be based on the *extent and quality* of your contributions. In each class meeting, grades will be assessed as follows:
  - High: a comment that move the discussion forward significantly
  - Good: a comment that provokes some discussion
  - Pass: a standard comment.
  - Zero: no comments

Class Meetings Based on Readings:
For the 13 class meetings based on readings, students will receive participation credit for answering questions and volunteering comments related to the discussion.

Speakers:
There will be 6 in-class speakers. Students will receive participation credit for asking questions during and after the speakers’ presentations.

Presentations:
Students will receive participation credit for the questions they ask following the presentations made by their fellow students.

2. Homework Assignments (10%)
For the classes based on readings, students are required to provide short, two to three sentence, answers to the study questions in the syllabus. These are due prior to class on course website on Latte.

For the in-class speakers, students will turn in three questions that they could ask. These are due prior to class on course website on Latte.
3. Midterm Examination (30%)
There will be a midterm examination on Monday March 11. The exam will cover all material in the first half of the course. The structure of the exam is part multiple choice and part short answer based on several readings.

4. Group Projects and Presentations (30%)
Each student will be a member of a four-person group. The instructor will assign students to groups by January 23.

Each group creates a pitch for a fintech startup. The firm can offer any sort of financial product or service. Groups will make presentations that include a description of the startup’s product, an analysis of the size of the market for the product and the incumbent players, and a description of how and why their product or service will disrupt the current market.

Groups will turn in a proposal for their presentation on February 13.

Students will give their presentation in class twice, first on March 18 or 20, and again on April 10 or 15. Both the first and second presentation will be 10 minutes with 5 minutes for questions.

On March 25, the instructor will provide feedback on the presentations.

On March 27, students will come to class and work on their presentations.

A video stream of the presentation will be available, so students can view their first presentation to help them prepare for the second presentation.

In addition, students will rank the presentations of their peers – both the first presentation and the second presentation— along the following dimensions: quality of presentation, quality of slides, substance of the idea, and overall.

In preparation for the presentation, all students should watch the following video:
https://www.youtube.com/watch?v=cFLjudWTuGQ

Following the second presentation, groups will provide a three page memo (no more than 1000 words) outlining their proposal. These are due on April 15.

Project grades will be based on a combination of the instructor’s evaluation and peer evaluations.

Policy on use of Computers, Tablets and Phones in Class

During class, your computer, tablet and phone must be closed and in your bag. Violation of this policy will be the equivalent to an unexcused absence.
Workload Expectation

Success in this full-semester four-credit course is based on the expectation that students will spend a minimum of 9 hours of study time per week in preparation for class (readings, papers, discussion sections, preparation of presentations, writing reports, etc.).

Academic Integrity

You are expected to be honest in all your academic work. Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. Any allegations of academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university. Citation and research assistance are in the LTS - Library guides.

Disabilities

If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately.
## Class Schedule

### Modern Finance

1. **Jan 16**  Financial Institutions and Markets  
2. **Jan 22**  Money and the Payments System  
3. **Jan 23**  The Economics Financial Intermediation  
4. **Jan 28**  Speaker: Steve Le Roux, CEO and Founder, Envel  
5. **Jan 30**  Banks: What They Are and What They Do  
6. **Feb 4**  Shadow Banks: What They Are and What They Do  
7. **Feb 6**  Central Banks: What They Are and What They Do  
9. **Feb 13**  How Central Banks Work  
10. **Feb 25**  Why We Regulate Finance  
11. **Feb 27**  Speaker: Laurel Taylor, Founder and CEO, FutureFuel  
12. **Mar 4**  Modern Financial Regulation (Project Proposals Due)  
13. **Mar 6**  Discussion and Review  
14. **Mar 11**  MIDTERM EXAMINATION  

### Fintech and Beyond

15. **Mar 13**  What is Fintech?  
16. **Mar 18**  First Group Presentations  
17. **Mar 20**  First Group Presentations  
18. **Mar 25**  Group Presentation Feedback  
19. **Mar 27**  Groups Meet to Revise Presentations  
20. **Apr 1**  Finance and the Blockchain  
21. **Apr 3**  Initial Coin Offerings and Crowdfunding  
22. **Apr 8**  Speaker: Richard Berner, Executive-in-Residence, NYU Stern School of Business.  
23. **Apr 10**  Second Group Presentations  
24. **Apr 15**  Second Group Presentations (Group Project Memos Due)  
25. **Apr 17**  Speaker: Sumedh Meta, CIO, Putnam Investments  
26. **Apr 29**  Speaker: Jeff Glass, CEO and Founder, HomeTap Equity Partners  
27. **May 1**  Ant Financial  

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5/10
# Modern Finance

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<thead>
<tr>
<th>Date</th>
<th>Readings</th>
<th>Study Questions</th>
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<tbody>
<tr>
<td>Jan 16</td>
<td>Financial Institutions and Markets</td>
<td>- What explains the difference in the relative importance of institutions and markets across countries?</td>
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<td></td>
<td>Cecchetti and Schoenholtz Chapter 3</td>
<td>- What explains the failure of financial intermediation costs to fall?</td>
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<td></td>
<td>On <a href="http://www.moneyandbanking.com">www.moneyandbanking.com</a></td>
<td>- Can the financial system become too large?</td>
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<td>Banking the Masses</td>
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<td>Opportunities in Finance</td>
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<td>Finance is great, but it can be a real drag, too</td>
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<tr>
<td>Jan 22</td>
<td>Money and the Payments System</td>
<td>- What is money and why does it have value?</td>
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<td></td>
<td>Cecchetti and Schoenholtz Chapter 2 (pg. 23-35)</td>
<td>- How is money evolving?</td>
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<td>On <a href="http://www.moneyandbanking.com">www.moneyandbanking.com</a></td>
<td>- How is the payments system changing?</td>
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<td>Cash is King, But $100 Bills are for Crooks</td>
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<td>Modernizing the US Payments System: Faster, Cheaper and More Secure</td>
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<td>Bitcoin and Fundamentals</td>
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<td>Jan 23</td>
<td>The Economics Financial Intermediation</td>
<td>- What is the role of financial intermediaries?</td>
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<td>Cecchetti and Schoenholtz Chapter 11</td>
<td>- How can insurance companies reduce adverse selection?</td>
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<td>On <a href="http://www.moneyandbanking.com">www.moneyandbanking.com</a></td>
<td>- How is information technology helping combat the problem of moral hazard?</td>
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<td>Conflicts of Interest in Finance</td>
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<td>Moral Hazard: A Primer</td>
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<td>Adverse Selection: A Primer</td>
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<td>Free Riding: A Primer</td>
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<td>Jan 28</td>
<td>Speaker #1: Steve Le Roux, CEO and Founder, Envel</td>
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| 5. Jan 30 | **Banks: What They Are and What Do They Do**  
Cecchetti and Schoenholtz Chapter 12  
On [www.moneyandbanking.com](http://www.moneyandbanking.com)  
- Understanding Bank Capital: A Primer  
- The Even Cloudier Future of Peer-to-Peer Lending  
- The Stubbornly High Cost of Remittances  
- Operational Risk and Financial Stability | Study Questions:  
- What functions do banks serve?  
- What are the risk-taking incentives of bank managers and owners?  
- Should we worry about banks? |
| 6. Feb 4  | **Shadow Banks: What They Are and What They Do**  
On [www.moneyandbanking.com](http://www.moneyandbanking.com)  
- A Primer on Securities Lending  
- Form versus Function: Regulating Money Market Funds | Study Questions:  
- What is a shadow bank?  
- What are the benefits of shadow banks?  
- Are shadow banks dangerous? If so, why? |
| 7. Feb 6  | **Central Banks: What They Are and What They Do**  
Cecchetti and Schoenholtz Chapter 15 (pages 407-418, excluding box inserts)  
Cecchetti and Schoenholtz Chapter 17 (pages 453-463, excluding box on pg 460)  
On [www.moneyandbanking.com](http://www.moneyandbanking.com)  
- Time consistency: A Primer  
- Monetary Policy: A Lesson Learned  
- A Primer on Helicopter Money | Study Questions:  
- What are the functions of a central bank?  
- How do monetary and fiscal policy differ?  
- How do open market operations and foreign exchange intervention work? |
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<tr>
<th>Date</th>
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<th>Speaker/Resource</th>
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<tbody>
<tr>
<td>10. Feb 25</td>
<td><strong>Why We Regulate Finance</strong>&lt;br&gt;Cecchetti and Schoenholtz Chapter 14&lt;br&gt;On <a href="http://www.moneyandbanking.com">www.moneyandbanking.com</a>&lt;br&gt;  - Better Capitalized Banks Lend More and Lend Better&lt;br&gt;  - Managing Risk and Complexity: Legal Entity Identifiers&lt;br&gt;  - Cyber Instability</td>
<td>Study Questions:&lt;br&gt;  - Do we need a government safety net? What are the consequences?&lt;br&gt;  - What is the role of the lender of last resort?&lt;br&gt;  - How and why is regulation different in different countries?</td>
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<td>11. Feb 27</td>
<td><strong>Speaker #3: Laurel Taylor</strong>, Founder &amp; CEO, FutureFuel</td>
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<td>13. Mar 6</td>
<td><strong>Discussion and Review</strong></td>
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<td>14. Mar 11</td>
<td><strong>MIDTERM EXAMINATION</strong></td>
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| 15. Mar 13 | **What is Fintech?**  
Cutting through the Fog: Finding a Future with Fintech (HBS) | **Study Questions:**  
- What is fintech and how has it evolved over time?  
- What is the financial outlook for legacy banks in view of the new entrants?  
- What is the impact of fintech on financial services at large? |
| 16. Mar 18 | First Group Presentations |                                                                 |
| 17. Mar 20 | First Group Presentations |                                                                 |
| 18. Mar 25 | Group Presentation Feedback |                                                                 |
| 19. Mar 27 | Groups Meet to Revise Presentations |                                                                 |
| 20. Apr 1  | **Finance and the Blockchain**  
An Introduction to Blockchain (HBS)  
The Truth about Blockchain (HBS)  
[Finance and the Blockchain: A Primer](http://www.moneyandbanking.com)  
**Study Questions:**  
- What is a blockchain?  
- What is the promise of the blockchain?  
- What are the limitations of the blockchain? |
| 21. Apr 3  | **Initial Coin Offerings and Crowdfunding**  
Dell’Erba, “Initial Coin Offerings. A Primer. The First Response of Regulatory Authorities”  
Younkin and Kashkooli, “What Problems Does Crowdfunding Solve?” | **Study Questions:**  
- What is an initial coin offering?  
- What are the benefits of crowdfunding?  
- What are the major challenges investors and regulators face when confronted with ICOs and crowdfunding platforms? |
## Fintech and Beyond

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<tr>
<td>Apr 8</td>
<td>Speaker #4: <a href="#">Richard Berner</a></td>
<td>founding Director of the Office of Financial Research, and former Managing Director, Co-Head of Global Economics and Chief U.S. Economist at Morgan Stanley.</td>
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<td>Apr 10</td>
<td>Second Group Presentations</td>
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<td>CIO, Putnam Investments</td>
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<td>Speaker #6: <a href="#">Jeff Glass</a></td>
<td>CEO and Founder, <a href="#">HomeTap Equity Partners</a></td>
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**Study Questions:**
- What are the competitive advantages of Ant Financial? Why has it grown so quickly and become so large?
- What challenges does Ant Financial face going forward?
- Should traditional banks be concerned with the threat posed by companies like Ant Financial?