

Current Topics in Modern Financial Markets

2019-2020

Professors:
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Course information

Course Website: my.nes.ru

Instructor's Office Hours:

Class Time: Monday, 18:00-21:00.

Room Number: 1.15/Skolkovo

TAs: Georgy Zvonka (gzvonka@nes.ru)

Course description and goals

The overall purpose of the course is to engage students into the discussion of current issues and challenges that global financial markets are facing in the aftermath of financial crisis. The course will touch on numerous public policy issues, many of which are politically controversial and most of which are likely to continue to be important for years to come. A goal of the course is to provide students with a framework within which these public policy issues can be addressed in a useful manner.

Course requirements and evaluation policy

The course grade is based on the following: participation in class, tests, regular homework assignments, projects, and a final exam. Homework will be assigned almost every week. There is no textbook. Reading materials will be provided on mynes.

Readings: Students should read assigned materials *before* each class, including the first one.

In-class Tests: At the beginning of each lecture (except the very first one), there will be short 5-minute tests with a question about material of the previous lecture. A goal of these tests is to help students not to fall behind on the material and to make sure that students come on time.

Homework assignments: Each week students have to read required material and submit a short write-up with their answers on the questions. Don't expect to find all answers in the readings. NOTE: Many readings represent official reports and documents, some of them are very long; as in real life, there is no need to read them line by line, rather those documents can be skimmed through but more important parts must be read carefully. Write-ups should be succinct and self-contained. Long write-ups are not necessarily good write-ups. Good business writing makes points in a manner that respects the reader's time. Typically, the answers to questions will not be heavily mathematical, but mathematical intuition will often be required to address some of the questions. Write-ups should be uploaded onto mynes at the **beginning of class, including the very first class**. Students should be prepared to discuss and defend the ideas in their write-ups in class. For some questions, there is no "right" or "wrong" answer, in the sense that finance and economics professors themselves are likely to disagree about the answers to the questions. Students may talk to other students about the assigned questions, but each student should prepare a write-up individually, without looking at the write-ups of other students. Each student should list on the write-up the names of the other students with whom the student discussed the write-up. The **best five** grades out of six grades for six homework assignments will be counted.

Class participation: Class attendance and participation are required. We will discuss issues that cannot be found in textbooks. Each class several financial concepts or theories studied in other courses and related to our material will be discussed; it would be useful to review them before each lecture.

Final: A final 90-minute exam is in-class and closed-book. One double-sided A4 cheat-sheet is allowed.

Grading: Grading will be based on write-ups (25%), in-class tests (20%), participation (5%), and a final exam (50%). Class participation will be taken into account as well. Missing class is strongly discouraged. Write-ups are graded on a scale with the following interpretation: 0=missing, 1=okay, 2=good; 3=great. Tests are graded on a scale with the following interpretation: 0=missing, 1=okay, 2=good.

Sample of Exam Questions

Label each of the following statements as TRUE, FALSE, or UNCERTAIN. For each statement, justify your answer with a few sentences or a brief paragraph.

Warren Buffetts and AIG's derivatives strategies were similar in that both firms conceptually sold disaster insurance, hoping that a disaster would not occur.

Make-up policy

Students have to pass a final exam. The first make-up of the final tests is in a similar format as the exams (make-up grade not higher than 7). The second make-up is in oral format (make-up grade not higher than 5).

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.

Course contents

PART I: PUBLIC POLICY TOPICS IN ASSET PRICING/MARKET MICROSTRUCTURE

I. Financial Crisis, Abacus Deal

- Abacus deal as an example of a structured product
- Causes of financial crisis: Different views
- European perspective on the crisis, the example of Germany

II. Derivatives - Buffett vs AIG:

- Buffett's business model
- AIG business model
- Buffett's critique of Black-Scholes model

III. Regulations after Financial Crisis, London Whale Case

- Dodd-Frank Act in the US, MiFID in Europe, Basel III
- Bank regulation, bank capital and liquidity, cleaning of banking industry
- London Whale case
- Stress testing, systemic risk

IV. Asset Management

- Endowment management, Yale and Harvard endowments
- Sovereign wealth funds
- Goldman Sachs vs. Libya and Malaysia
- Deutsche Bank mirror trades

V. Government Finance:

- State loans and guarantees
- Public finance and option pricing
- Financing of government programs
- Russian national projects and growth

VI. Retirement Systems:

- Social safety nets, main issues
- Vanguard, ETFs
- Russian pension system and its reform
- Debt crisis in Europe and US

Course materials

Required textbooks and materials

The course will require a lot of reading of various papers, reports, and official documents. Some of the readings are very long; there is no need to read them entirely from the first page to the last page, those readings can be just skimmed through, but most relevant and important parts have to be read carefully.

“Required readings” marked with stars should be completed before class. Students should come to class prepared to discuss required readings. “Optional readings” not marked with stars are materials students may want to read before class or after class, but they are not required. They may be the subject of class discussion, but the discussion should presume that not all students have read them. The “bedtime readings” are completely optional and include books students may want to read in the future, after the course is finished. They are included for general interest. For each topic, the questions for write-ups are presented. There are also links for interesting video clips. We reserve the right to change the syllabus as the course progresses and some interesting events happen.

Students have to read papers on Abacus case and submit the first write-up onto my.nes.ru before the first lecture.

I. Financial Crisis, Abacus Deal (Monday, 16 March 2020)

REQUIRED READING:

SEC Abacus Complaint.

Dodd-Frank Summary.

Darrell Duffie, “The ABACUS 2007 AC-1 Deal: Structure and Investment Incentives,” SLIDE PRESENTATION, Graduate School of Business, Stanford University April 27, 2010

“Charting the Financial Crisis: U.S. Strategy and Outcomes”, September 2018, SLIDES

Martin Hellwig, 2018, “Germany and the Financial Crisis 2007-2017”

THEORY: Mortgage backed securities, securitization, credit risk management.

OPTIONAL READING:

Ben Bernanke, 2010, “Monetary policy and housing bubble”.

FCIC report (full text)

OPTIONAL VIDEO: (Senate Hearings on Goldman Sachs Case, some links may have changed)

www.c-span.org/video/?293196-3/investment-banks-financial-crisis-goldman-sachs-chair-ceo

www.c-span.org/video/?293196-1/investment-banks-financial-crisis-directors

OPTIONAL VIDEO: (Brookings, Responding to the Global Financial Crisis, 10 years later)

<https://www.brookings.edu/events/day-1-responding-to-the-global-financial-crisis/>

Questions (2-3 pages):

1. What features of the Abacus transaction make it a synthetic CDO squared?
2. According to the SEC complaint, why did Goldman Sachs commit fraud? List arguments of SEC.
3. Does Goldman agree with SEC charges? List arguments of Goldman.
4. Why Goldman ultimately decided to pay fine and settle this case?
5. Based on the summaries of the FCIC report by the majority Democrats and the two summaries by the minority Republicans, who would tend to think that the Abacus transaction is a good symbol of the financial crisis, the Republicans or the Democrats? Why?
6. Why was there so much cross-border lending and investment by German banks and why were their losses so large?

II. Derivatives - Buffett vs AIG (Monday, 23 March 2020)

REQUIRED READING:

Letter to Shareholders from Warren Buffett, February 27, 2009.

Financial Crisis Inquiry Report. Pay particular attention to the sections on AIG: “WELL BIGGER THAN WE EVER PLANNED FOR,” pp. 243–244. “AIG’S DISPUTE WITH GOLDMAN: ‘THERE COULD NEVER BE LOSSES,’ pp. 265–274. CHAPTER 19: SEPTEMBER 2008: THE BAILOUT OF AIG, pp. 345–351.

Cunningham Lawrence, 2015, Intermediary Influence and Competition, Berkshire vs KKR

THEORY: Value investing, carry trades, CDSs, and Black-Scholes option pricing.

OPTIONAL READING:

McDonald, Robert L., and Anna Paulson, “AIG in hindsight”, April 2015

OPTIONAL VIDEO: Warren Buffett’s interview, www.youtube.com/watch?v=FPkX7S5z5t0

Senate Hearings on AIG:

www.c-span.org/video/?281644-1/aig-bailout-oversight-hearing-panel-1

www.c-span.org/video/?281644-2/aig-bailout-oversight-hearing-panel-2

Questions for Case Write-Up #2 (2-3 pages):

1. According to Cunningham, what is the main difference between Berkshire and KKR?
2. Does Buffett believe that banks are more deserving of bailouts than other types of companies? Why or why not?
3. Are there any similarities between Buffett’s strategies and carry trades?
4. Compare Buffett’s letter to shareholders for 2009 (published 2010), p.16 with the financial crisis inquiry report, pp. 243-244. What does Buffett think about AIG management?
5. Explain similarities and differences between Warren Buffett’s business model and AIG’s business model. Issues to consider include leverage, marking-to-market, hands-on management of companies, and perhaps other things (but save options for the next question).
6. One type of business model involves writing out-of-the-money options and hoping to make a profit from doing so. Writing insurance is an analogous strategy. According to Buffett, is this the way Berkshire Hathaway makes most of its money? Is this the idea behind Gary Gorton AIG’s strategy, according to the FCIC report?
7. What does Buffett think is wrong with the Black-Scholes model? Is he correct?

III. Regulations after Financial Crisis, London Whale Case. (30 March 2020)

REQUIRED READING:

Report for U.S. Senate, 2013, "JPMorgan Chase Whale Trades: A Case History of Derivatives, Risks, and Abuses"

Frame, Scott W., Gerardi Kristopher, and Paul S. Willen, "The failure of supervisory stress testing: OFHEO's risk-based capital model for Fannie Mae and Freddie Mac."

Дмитрий Тулин, 2009, История банка Глобекс как зеркало проблем российского банковского надзора.

THEORY: Modigliani-Miller theorem, banking

OPTIONAL READING:

Board of Governors of Federal Reserve System, Dodd-Frank Act Stress Test 2016: Supervisory stress test methodology and results, June 2016:

<https://www.federalreserve.gov/newsevents/press/bcreg/bcreg20160623a1.pdf>

Kyle, Albert S, "How to implement contingent capital." *Working paper*. 2014

Dodd-Frank Act (full text): www.sec.gov/about/laws/wallstreetreform-cpa.pdf

White paper "Basel III: An easy to understand summary"

OPTIONAL VIDEO:

Senate Hearings on London Whale Case

www.c-span.org/video/?306502-102/jpmorgan-chase-trading-loss-jamie-dimon-testimony

Выступление Эльвиры Набиуллиной на XXV Международном Финансовом Конгрессе (первые пять минут – плохое качество)

<https://www.youtube.com/watch?v=wl53NjW2w8Q>

Круглый стол по банковскому регулированию, РЭШ, октябрь 2018

<https://news.nes.ru/news/NES-Roundtable-bank-regulation/>

Парламентские слушания на тему: "Об основных направлениях развития финансового рынка Российской Федерации на период 2019-2021 годов, 21.01.2019,

https://www.youtube.com/watch?v=auYxEOLl3gw&list=PLOTE86Zdvda-wL_28Yoqe9Cb_fQxEJtA4

Questions for Write-Up #1 (2-3 pages):

1. According to JP Morgan employees, did JP Morgan plan to make money on its "whale trades"?
2. Is JP Morgan's situation more similar to the situation of AIG during financial crisis or the situation of Goldman Sachs in Abacus case?
3. Based on the summaries of the FCIC report by the majority Democrats and the two summaries by the minority Republicans, who would tend to think that the London Whale case is a good symbol of the financial crisis, the Republicans or the Democrats?
4. What do Frame, Kristopher and Willen think are the main benefits of implementing stress tests? What are potential issues?

5. What do you think about the cleaning up Russian banking system implemented recently by the Bank of Russia? What are main difficulties? What should be priorities?

IV. Asset Management (Monday, 13 April 2020)

REQUIRED READING:

Yale University Investments Office: February 2015,” HBS Case #9-812-062 (rev February 11, 2015).
David Chambers, Elroy Dimson, Antii Iltanen, “The Norway Model,” October 11, 2011.

THEORY: Market efficiency, portfolio optimization, CAPM, international finance

OPTIONAL READING:

Bloomberg, 2016, “The untold story behind Saudi Arabia’s 41-year U.S. Debt secret”
Libya vs Goldman Sachs Case

OPTIONAL VIDEO:

David Swensen’s lecture at Yale, “Guest Speaker David Swensen” www.youtube.com/watch?v=wRdx7kVNQ_E
Knut Kjaer’s interview, “In Focus - Sovereign Wealth Funds”:
<https://www.youtube.com/watch?v=GywxDekc1bk>

Questions for Write-Up #1 (2-3 pages):

1. How would David Swensen define the efficient market hypothesis?
2. Does he believe in market timing for stocks, bonds, private equity, real estate, oil and gas? What specific features of private equity make market timing difficult?
3. Did Yale get into trouble during the financial crisis? Has the financial crisis tended to vindicate Swensen’s approach to investing or suggest that another approach is needed?
4. What are the main public policy issues involved into thinking about how to set sovereign wealth funds?
5. What are the differences between the “Norway model” and the “Yale model”?
6. Should Norway use the Yale model? Should Yale use the Norway model? Are there reasons why Yale and Norway should use different investment models?
7. Should Russia try to use the Yale model or Norway model, or try to develop its own approach?

V. Government Finance (Monday, 20 April 2020)

REQUIRED READING:

Deborah Lucas, “Credit Policy as Fiscal Policy,” manuscript, November 15, 2011.

Алексей Кудрин и Евсей Гурвич, 2015, Государственное стимулирование или экономические стимулы?”

Счетная палата о бюджете: <https://www.rbc.ru/economics/14/10/2019/5da448199a794741eae1180b>

THEORY: market risk, interest rate risk, credit risk, subsidies

OPTIONAL READING:

IMF, 2014, “Russian Federation Fiscal Transparency Evaluation”

GAO, 2010, “Financial Assistance: On-going Challenges and Guiding Principles Related to Government Assistance for Private Sector Companies”

VIDEO: Debbie Lucas’ talk, “The Government as a Source of Systemic Risk - Deborah Lucas”:

www.youtube.com/watch?v=pib0Si9zNlg

Saint Petersburg’s forum: <https://www.youtube.com/watch?v=2SdvMJqL28E>

Press conference of Elvira Nabiulina: <https://www.youtube.com/watch?v=O8x354YRfv8>

Questions for Case Write-Up (2-3 pages): Think of the government as if it were a “plan sponsor” supervising management of a large portfolio of financial assets, to some extent using in-house managers and to some extent using external managers.

1. How do the risks in the U.S. government’s portfolio compare with the risks in the portfolios of sovereign wealth funds? In particular, think about differences between “upside” (equity) and “downside” (debt) exposures?
2. To what extent does the Fed look like a gigantic hedge fund? To what extent do you think that its objectives and management style might be different from a hedge fund?
3. Compare the Russian and US approaches to government subsidies. Think about their size, form, and organization.
4. Should the Russian government provide credit to selective Russian companies or industries?
5. According to Evsey Gurvich and Alexei Kudrin what are the main reasons of slowdown of Russian economy? Would experts from Stolypin club agree with them?
6. How do you assess the Russian program of national projects? What do Russian regulators say about it? What are the points of debates between Alexey Kudrin, Elvira Nabiulina, Maxim Oreshkin, and Anton Siluanov?

VI. Retirement Systems. (Monday, 27 April 2020)

REQUIRED READING:

Алексей Кудрин и Евсей Гурвич, 2010, “Старение населения и угроза бюджетного кризиса”

Обращение Владимира Путина по пенсионной реформе, 29 августа 2018, <http://www.kremlin.ru/events/president/news/58405>

HBS Case "The Vanguard Group, Inc. in 2006 and Target Retirement Funds" (#9-207-129)

Горлин Ю.М., Ляшок В.Ю., Малева Т.М., 2018, “Повышение пенсионного возраста: позитивные эффекты и вероятные риски”

Рэперы и блоггеры о пенсионной реформе:
<https://www.newsru.com/cinema/16feb2019/bastapens.html>

THEORY: Immunization, duration, portfolio insurance, passive asset management.

OPTIONAL READING:

Douglas J. Elliott, “State and Local Pension Funding Deficits: A Primer,” The Brookings Institution, December 3, 2010.

“A guide to Understanding the Pension Benefit Guaranty Corporation,” Congressional Budget Office, September 2005.

Shlomo Benartzi and Richard Thaler, “Heuristics and Biases in Retirement Savings Behavior”, 2007, Journal of Economic Perspectives.

Евсей Гурвич, 2011, “Принципы новой пенсионной реформы”

VIDEO: Round table on pension reform: <https://www.youtube.com/watch?v=5Bz9hxIK5gU>

Navalny about reforms: <https://www.youtube.com/watch?v=NWDUg1skBeY>

Jack’s Bogle interview, “Vanguard Webcast: Vanguard Founder Jack Bogle marks 65 years in the financial services industry”: www.youtube.com/watch?v=byN1u6e7Sbs

In Pursuit of the Perfect Portfolio: John C. Bogle: <https://www.youtube.com/watch?v=3uJbHREmUs4>

Questions for Case Write-Up (3-4 pages):

1. To what extent, the levels of retirement benefits provided in the Russian Federation are similar to those in other countries? According to Aleksey Kudrin and Evsey Gurvich, was the Russian retirement system economically balanced and sustainable prior to the reform? Do you agree?

2. What strategy did the government use to communicate the necessity of the reform (raising retirement age) to the public? How effective was this strategy?
3. Watch the youtube video of Alexei Navalny's critique of the pension reform. What points does he make? Do you agree and why?
4. Now after the decision to raise retirement age is made, what are the main next steps in restructuring our pension system? What are the main debates now about? Search on-line. What do our regulators (e.g., Elvira Nabiullina, Anton Siluanov and others) think about these issues?
5. What would Jack Bogle and Richard Thaler suggest to the Russian regulators?
6. How should corporate pension plans invest money? Is there a case to be made that corporate pension funds (e.g. a pension plan of Rosneft) should invest only in bonds? To what extent does this case depend on risk and return considerations? What about tax considerations?
7. If falling interest rates are good for bond returns, why might they be bad for the financial status of pension funds, which are heavily invested in bonds?
8. If the pension plan invests in stocks, should the risk premium on stocks enter into a calculation of whether the plan is over-funded or underfunded, i.e., what discount rate should we use for discounting cash flows of liabilities?
9. Conceptually, how are options involved in thinking about overfunding and under-funding? What role does the pension guarantor (like PBGC in the U.S.) play in thinking about firm's incentives to over-fund or under-fund its defined-benefit pension plans?
10. Consider a local pension plan (like pension plans of Puerto Rico or Greece) invested in risky assets to meet future pension obligations. Define a hypothetical insurance policy ("put option") which pays off the amount necessary to meet the future pension obligations if the risky assets in the plan fail to generate enough value to pay all pension obligations. Define a hypothetical excess pension surplus ("call option") as the value left in the fund after meeting all pension obligations under circumstances when the fund generates more than enough cash flow to meet all obligations. What does put-call parity say about this?
11. *Can pension plans insure their own portfolios, think about the idea about guaranteed pensions (гарантированный пенсионный план)? Are there any potential problems with this approach?