

Current Topics and Modern Financial Markets

module 4, 2015-2016

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Course information

Course Website: my.nes.ru

Instructor's Office Hours:

Class Time: 17:30-19:00 and 19:15-20:45

Room Number: 114

TAs: Nikita Malikin, nmalikin@nes.ru

Course description

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, grading, and attendance policies

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

Class participation: Class attendance and participation are required. During the last class (Tuesday, April 12) we will discuss current economic situation in different regions of the world such as Russia, USA, Europe, Japan, China, Brics, etc. You can sign up on first-come-first-served basis for a presentation that can be made either by a student or a group of students. Presentations will be counted towards class participation.

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. Case 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. Hard copies of write-ups should be handed in 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.

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 in-class tests is to help students not to fall behind on the material and to keep track of attendance.

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

Grading: Grading will be based on case write-ups (30%), in-class tests (15%), class discussion (10%), and a final exam (45%). Missing class is strongly discouraged. Case write-ups are graded on a scale with the following interpretation: 10 = A + +, 9 = A+, 8 = A, 7 = A-, 6 = B+, 5 = B, 4 = B-, 3 = C, 2 = D, 1 = F, 0 = *missing*. Most grades are in the range 5; 6; 7; 8. Extra credit is added with extra points. For example, a grade of $6.0 + 0.5 = 6.5$ indicates a score of 6 for assigned questions plus 0.5 points for extra credit questions.

Academic integrity policy

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

Course contents

- I. Abacus Deal, Financial Crisis 2008-2009 (Tuesday, 15 March):**
 - Abacus deal as an example of a structured product
 - Causes of financial crisis: Different views

- II. Derivatives - Buffett vs AIG (Thursday, 17 March):**
 - Buffett's business model
 - AIG business model
 - Buffett's critique of Black-Scholes model

- III. London Whale Case - Regulations after Financial Crisis (Tuesday, 22 March):**
 - Dodd-Frank Act in the US, MiFID in Europe, Basel III
 - Bank regulations
 - London Whale case
 - Stress testing
 - Asset management industry as SIFIs and systemic risk

- IV. Government Finance (Tuesday, 29 March):**
 - State loans and guarantees
 - Public finance and option pricing
 - Sovereign wealth funds

- V. Commodities Markets and Hedging (Thursday, 31 March):**
 - Current and future oil prices, how to interpret forward curves
 - Hedging: Metallgesellschaft hedging debacle
 - Price manipulations in commodities market
 - Cash settlement and fixings
 - Corners and squeezes: Silver crisis of 1981, VW squeeze in 2008
 - Sberbank's barrier options

- VI. Market crashes Structuring of Retirement Systems. (Tuesday, 5 April):**
 - Past market crashes
 - Future market crashes (ETFs, European debt crisis)

- VII. Current Economic Situation (Tuesday, 12 April):**
 - Russia, USA, Europe, China, and other regions
 - Presentations

Sample tasks for course evaluation

Some examples will be added later.

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. I reserve the right to change the syllabus as the course progresses and some interesting events happen.

For week 1, students have to read papers on Abacus case and submit the first write-up onto my.nes.ru before the first lecture on March 15.

The schedule of classes follows.

I. Abacus Deal, Financial Crisis of 2008-2009 (Tuesday, 15 March)

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.**

OPTIONAL READING:

Ben Bernanke, 2010, "Monetary policy and housing bubble".
FCIC report (full text)

Video (Senate Hearings on Goldman Sachs):

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

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 decided to pay fine and settle this case?
5. What features of the Financial Reform Act address the causes of the financial crisis? What features of the Financial Reform Act address issues raised by the Abacus transaction?
6. 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?

II. Derivatives - Buffett vs AIG (Thursday, 17 March)

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.**

OPTIONAL READING:

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

Last Berkshire-Hathaway Annual Report: <http://berkshirehathaway.com/letters/letters.html>

Video (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. Does Buffett believe that banks are more deserving of bailouts than other types of companies? Why or why not?
2. What are the similarities between Buffett’s strategies and carry trades?
3. Explain some 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 option writing for the next question).
4. 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 strategy, according to the FCIC report?
5. 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?
6. What does Buffett think is wrong with the Black-Scholes model?

III. London Whale Case. Regulations after Financial Crisis (Tuesday, 22 March)

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."**
- * **White paper "Basel III: An easy to understand summary"**
- * **Дмитрий Тулин, 2009, История банка Глобекс как зеркало проблем российского банковского надзора.**

OPTIONAL READING:

Board of Governors of Federal Reserve System, Dodd-Frank Act Stress Test 2014: Supervisory stress test methodology and results, March 2014
www.federalreserve.gov/bankinforeg/stress-tests/2015-executive-summary.htm
Kyle, Albert S, "How to implement contingent capital." *Working paper*. 2014
Dodd-Frank Act (full text): www.sec.gov/about/laws/wallstreetreform-cpa.pdf

Video (Senate Hearings on London Whale Case):

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

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 are the main benefits of implementing stress tests? What are potential issues?
5. What are the new liquidity management tools proposed in Basel III?

IV. Government Finance (Tuesday, 29 March):

REQUIRED READING:

- * Deborah Lucas, “Credit Policy as Fiscal Policy,” manuscript, November 15, 2011.
- * Алексей Кудрин и Евсей Гурвич, 2015, “Государственное стимулирование или экономические стимулы?”
- * Елена Лебединская, 2012, “Роль нефтегазовых фондов в России”
- * David Chambers, Elroy Dimson, Antti Ilmanen, “The Norway Model,” October 11, 2011.

OPTIONAL READING:

IMF Report, May 2014, Fiscal transparency evaluation, Russian Federation

Yuri Romannikov, Individual Project, MiF 2015, “Measuring Russian Government Financial Risk”

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

GAO, Sovereign Wealth Funds: Publicly Available Data on Sizes and Investments for Some Funds Are Limited, September 2008 GAO-08-946.

JPMorgan, 2008, “Sovereign Funds Primer: A bottom-up primer”

Questions for Case Write-Up #4 (2-3 pages):

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 TARP in the US to a large private equity fund. How are its objectives and management different?
4. Should the Russian government provide credit to selective Russian companies? Compare the Russian and US approaches to government subsidies.
5. What are the steps suggested by Kudrin and Gurvish to stimulate Russian economy?
6. Based on the articles of Lebedinskaya and Chambers et al, what are the main similarities and differences between the “Russian model” and the “Norway model”?

V. Commodities Markets and Hedging (Thursday, 31 March):

REQUIRED READING:

* **Franklin Edwards, 1995, “Derivatives can be dangerous for your health: the case of Metallgesellschaft”**

* **CFTC vs Parnon and Arcadia, 2011**

OPTIONAL READING:

Bhardwaj, Geetesh, Gary Gorton, and Geert Rouwenhorst, “Facts and fantasies about commodity futures ten years later”, working paper 2015

Baumeister, Christiane, and “The art and science of forecasting the real price of oil”, Bank of Canada Review, Spring 2014

Albert S. Kyle, Cash settlement, price manipulation, and the Modigliani-Miller Theorem, 2007.

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

1. Why Metallgesellschaft lost money? Did Metallgesellschaft hedge or speculate?
2. How much corporates need to hedge?
3. Would you say that Sberbank’s barrier option were reasonable tools to structure hedges for Transneft and Mechel? Are there any similarities between Sberbank’s barrier option strategies with carry trades, AIG’s strategies or Buffett’s strategies?
4. TO BE ADDED.

VI. Market crashes. Structuring of Retirement Systems. (Tuesday, 5 April):

REQUIRED READING:

- * Douglas J. Elliott, “State and Local Pension Funding Deficits: A Primer,” *The Brookings Institution*, December 3, 2010.
- * Евсей Гурвич, 2011, “Принципы новой пенсионной реформы”
- * Kyle, Albert S. and Anna A. Obizhaeva, “Large bets and stock market crashes”. 2014.
- * Anne O. Kruger, Ranjit Teja, and Andrew Wolfe, *Puerto Rico*, 2015, “Puerto Rico – A way forward”

OPTIONAL READING:

- Tugkan Tuzun, “Are leveraged and inverse ETFs the new portfolio insurers?”, *Working paper*. 2014.
- Ford, Guy, and Maik Sundmacher, “Leading indicators for operational risk: Case studies in financial services”
- “A guide to Understanding the Pension Benefit Guaranty Corporation,” Congressional Budget Office, September 2005.

Questions for Write-Up #5 (2-3 pages):

1. To what extent, the levels of retirement benefits provided in the Russian Federation are similar to those in other countries?
2. According to Aleksey Kudrin and Evsey Gurvich, what changes are necessary to make the Russian retirement system economically balanced and sustainable?
3. Based on paper of Kyle and Obizhaeva, why does the conventional approach to modelling transaction costs predict much lower price impact of large orders in liquid markets than market microstructure invariance does?
4. How would you suggest to regulators to deal with potential risks posed by execution of larger orders that may put at risk the integrity of financial systems?
5. What is similar and what is different between the US market crash of 1929 and the Chinese market crash in 2015?
6. What is similar and what is different between Greece and Puerto Rico?

VII. Current Economic Situation (Tuesday, 12 April):

REQUIRED READING:

IMF's World Economic Outlook (WEO), October 2015

www.imf.org/external/pubs/ft/weo/2015/02/index.htm

ECB, Annual report 2014

www.ecb.europa.eu/pub/annual/html/index.en.html

William Longbrake, Longbrake Letter, February 2016

www.rhsmith.umd.edu/centers-excellence/center-financial-policy/news-events/news/longbrake-letter

Russian Central Bank, Annual Report 2014

www.cbr.ru/eng/publ/?PrtId=god

Экономическая Экспертная Группа, Минфин РФ, Обзор экономических показателей, фев 2016

www.eeg.ru/downloads/obzor/rus/pdf/2016_02.pdf

Congressional Research Service, US Sanctions on Russia: Economic Implications, February 2015

www.fas.org/sgp/crs/row/R43895.pdf

OPTIONAL READING:

World Bank Russia Economic Report, September 2015

www.worldbank.org/ru/country/russia/publication/rer

Presentations about economic situation in Russia, USA, Europe, China, and Japan in the aftermath of financial crisis with emphasis on the financial side of those economies. How did regulators respond to financial crisis? What is your assessment of effectiveness of those measures? What do you think about the current situation in those regions? What are the challenges and potential risks in the future? To prepare, you can use readings in the list or your own material.

Questions for Write-Up #6: Write-up your assessment of the economic situation in Russia in the context of the global situation. Identify main risks and suggest solutions. Compare Russia with Saudi Arabia, Brazil, Canada, and Iran.

Bedtime Reading

Financial Crisis Inquiry Committee Report (FCIC Report)