

Provisional Reading List & Course Outline

FNCE 220/732: Managing Global Financial Institutions

The Wharton School
University of Pennsylvania
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Richard J. Herring
herring@wharton.upenn.edu
2444 Steinberg Hall/Dietrich Hall
Office Hours:
Monday 4:30-5:30 & by appointment

Teaching Assistants, Office Hours:

Wednesday, **Asher Wallen-Friedman**,
asherwf@wharton.upenn.edu, 2305 SH/DH Desk D,
4:30-5:30

Thursday, **Marco Giometti**, 2424 SH/DH,
mgiom@wharton.upenn.edu, 4:30-5:30

Friday, **Alec Hsing**, 2305 SH/DH Desk D,
ahsing@wharton.upenn.edu,
1:00-2:00

This course focuses on international financial institutions, especially the activities of global, systemically important banks. We will examine how current and historical events are reshaping the industry and highlight the basic analytics of managing a financial institution's exposures to liquidity, credit, market, operational and reputational risk. Most classes will begin with discussion of a current event related to course topics, usually based on news articles or blog. I will post these brief articles along with some points to consider as you read the article in the Announcements section of Canvas at least 24 hours before the relevant class. Three team projects will be assigned to give you deeper exposure to analytic techniques related to the course. Throughout the semester, we will discuss public policy issues facing the international financial system. The objective of this course is to provide you with a broad overview of the forces shaping international banking and a framework for understanding continuing changes.

The class format includes lectures and class discussions. I welcome your questions and comments. Indeed, your constructive classroom participation **will help boost your grade** if your final score is at a breakpoint in the distribution. More importantly, you will find the more actively you participate in class discussions, the more easily you will master the material. To facilitate discussion please display your name tent each class and take the seat you indicate on the seating chart we will establish on January 22nd.

The home page of Canvas integrates the reading list, lecture notes and other class materials with direct links to the underlying files or material on the web. Some readings and assignments will undoubtedly change over the semester as events warrant. You can find this *provisional reading list* on the web should you wish to refer to it for logistical details or overall course guidelines, but please note that it will **not** be updated during the semester. You should regard the syllabus embedded in the home page as definitive regarding assignments, readings, and deadlines.

We will use excerpts from *Financial Institutions Management, A Risk Management*

Approach, by Anthony Saunders and Marcia Cornett (S&C) as a basic reference, largely for the last half of the course. The relevant excerpts will be available at the bookstore in a book especially prepared for this course, *International Banking, FNCE-220/732* (Text). McGraw-Hill has assembled this book specifically for our class to provide you with a much cheaper alternative to the full textbook. If you have had no prior experience with the financial services industry or if you plan to build your career in the sector, however, you may want to acquire the complete, newly revised edition of S&C. The 10th edition will be available early in the semester. It has become the industry standard.

I have assigned several problem sets to help you think more deeply about the course material and enable you to gauge your progress. They will not be graded, but you will have access to the correct answer as soon as you draft your answer. Since some of the questions are from earlier exams, you will find it rewarding to work through them carefully.

The three team projects will be graded. Please use Canvas to form teams **no larger than five** to work on these projects and also to submit projects and the current event assignments described below. Both sections of this course will be assigned the same projects and so please feel free to form teams that include students enrolled in the other section if you like.

The first project will involve using accounting and market data to compare the performance of two internationally active banks. This project will also take you into some of the more subtle details of understanding annual reports. The second project will require you to compute value at risk (VaR) measures for a bank portfolio. The third project involves evaluating a bank's balance sheet and income statement under alternative stress scenarios, an approach that has become a fundamental technique of risk analysis and regulation.

International banking is an especially dynamic sector of the financial services industry and so I urge you to follow current developments in the *Financial Times*, *Wall Street Journal*, or *The New York Times*. In addition, you may find it helpful to browse through some of the many periodicals that focus on banking or international finance such as *The American Banker*, *The Economist*, *Euromoney*, *The Financial Regulator*, *Global Finance*, *The International Economy*, *The Institutional Investor* (International Edition), and *Risk*. And you will undoubtedly want to sample some of the ever-growing number of blogs, some of which are collected and linked on Canvas in a resources folder that also contains a glossary of technical terms. I regard the list of these resources as a collaborative project, so if you have found something useful that is not on the list (or a web link that is broken), please let me know and we will update the list.

To provide you with an incentive to follow current events, every two weeks you will be asked to submit an article (or blog) you have read that relates to concepts we have discussed in class and your critical evaluation of the implications of the article. Your choice may illustrate a concept we have discussed in class or it may raise questions about conclusions reached in class. In either case, you should **type two concise paragraphs** explaining the relationship between the article and the course material and your evaluation of its implications. This exercise must be undertaken individually (not in teams) and must be turned in electronically on (or before) the date specified. Some of the most interesting articles will be posted in the Current Events folder on Canvas and discussed in class. Please note I have designed this exercise to sharpen your writing

skills as well as to enhance your understanding of current developments. The folder **Writing Assignment** in Files explains the rules you should follow to improve the clarity of your writing as well as a sample submission. (This information is also provided for you at the top of the Syllabus page as well.) These rules may seem to be an annoying constraint at first, but by the end of the course, students generally feel that they have improved their ability to write concise, effective memos.

Because an unusually large number of international students enroll in this course, I prefer to give mid-term examinations outside of regularly scheduled class periods in order to relax time constraints. (This does not mean I intend to give you longer exams, only that I want you to have enough time to do your best.) It also permits me to obtain a much larger statistical sample evaluate performance across the two sections of the class. Please note undergraduates and MBAs will be graded with regard to different standards. Following Graduate Division rules, MBAs must be graded on a prescribed distribution. There is no prescribed distribution for undergraduates.

The first mid-term examination will take place on **Thursday evening, February 27th, 6:00-8:00 pm**. The second mid-term will take place on **Tuesday evening, April 28th, 6:00-8:00 pm**. Later in the semester, we will post the room in which you will take the exam. The second mid-term exam **will not be cumulative**, and we will not have a final exam. In compensation for your willingness to take these mid-term exams outside the regularly scheduled class time, we will **not** hold the regularly scheduled class on two days – tentatively, March 17th and April 29th.

A Canvas folder contains mid-term exams (along with answers) for the past two years. I have posted them for two reasons: (1) These exams can help you judge quickly whether this course fits your needs and interests. If you find these concepts do not interest you, this course is not a good fit. (2) These exams also indicate the *kind* of questions I am likely to pose. Please be aware, however, that the course does change from year to year regarding concepts covered, the emphasis placed on particular topics and the current events covered and so the questions on the exam you take will be different. Resist the temptation to study for the exams by focusing mainly on the sample exams rather than reviewing what we do in class. Please note these exams emphasize *critical thinking*, not memorization or computation.

Your grade will depend on your final score weighted as follows:

- 30% for the combined three team projects
- 10% for your analyses of current events
- 30% for your grade on the first mid-term exam
- 30% for your grade on the second mid-term exam

If your weighted final score falls on a borderline, it will be adjusted upward if you have participated actively and effectively in class discussions. Last year about one-third of my students benefitted from these adjustments.

Topical Outline of the Course

- I. An Overview of the Business of Banking**
 - A. The Evolution of Banks and Financial Intermediation

- B. How Banks Generate Profits (usually)
- C. The Role of Capital in Banks
 - 1. Conceptual Issues
 - 2. Accounting and Regulatory Issues

II. Measuring and Managing Risk

- A. Reputational Risk
- B. VaR and the Revolution in Financial Risk Management
- C. The Management of Credit Risk
- D. The Treasury Function: Managing Interest Rate Risk
- E. The Treasury Function: Managing Liquidity Risk

III. Financial Crises and Bank Regulation

- A. Real Estate Booms and Banking Busts
 - 1. Bank runs
 - 2. Price shocks and forced, rapid deleveraging
- C. The Safety Net for Financial Institutions
- D. Regulation of Bank Capital
 - 1. The Basel Accord
 - 2. Basel II and Basel III
- E. Regulation of Bank Liquidity
- F. Resolution Policy and the Single Point of Entry Paradigm

IV. Shadow Banking and Financial Innovation: Regulatory & Technological Arbitrage

- A. Securitization
- B. Collateral Intermediation
- C. FinTech
 - 1. Payments applications
 - 2. Lending applications

I. Overview of the Business of Banking

A. Introduction

Readings

Scan International Banking Glossary (a resource that you can use throughout the semester)

“Overview of the Banking Industry”

Class notes: Introduction to International Banking Industry

Assignment

Complete and Submit Student Questionnaire

B. How Banks Make Money (usually)

Readings

M. O’Connor, A. Chaim, R. Placet, and D. Ho, “How Banks Make Money,” pp.6-13. (Hereafter, excerpts from this publication are designated DB.) This monograph, written by the leading bank security analyst and his team, remains the best practical guide linking bank decision making to the balance sheet and income statement. The data are a bit stale and so focus on the concepts, not the statistics.

DB, “Credit”

DB, “Liquidity”

R.J. Herring, “Notes on Bank Accounting & Ratio Analysis”

If your recollection of accounting fundamentals is hazy, you may find it useful to watch a very basic review of income statement and balance sheet relationships on YouTube:

<http://www.youtube.com/watch?v=h31MANILkw0>

You may also enjoy an analysis of how banks have made money from the policy of Quantitative Easing:

<http://www.youtube.com/watch?v=cxfMxpB9-Ds>

If you want to dig into the details of OCI, see CFA Institute, "Analyzing Bank Performance: Role of Comprehensive Income"

Class notes: How Banks Make Money (usually...)

C. Financial Statement Analysis

Readings

Saunders and Cornett, “Financial Statement Analysis Using a Return on Equity (ROE) Framework”

DBE, “The Valuation of Bank Stocks”

Sample these according to your interest

DB, “Banks Stocks: How they are Valued”

(This reading is somewhat redundant with the prior reading, but it is interesting to see the different issues highlighted in valuing European stocks.)

FitchRatings, "Bank Rating Process," excerpt from Criteria Report: Bank Rating Methodology

Provisions and the allowance for loan loss are unique to banks. If you would like some extra help in mastering this concept, see this simple, but clear video produced by Mergers & Inquisition/Breaking Into Wall Street: "The Loan Loss Allowance for Banks (FIG)", <https://www.youtube.com/watch?v=CpmcGxBwhEc>

The accounting rules for recording provisions and loan losses will change markedly in 2020-2021. The ABA, the bank lobbying organization, has posted a video on the new approach to establishing provisions and loan loss reserves, called Current Expected Credit Loss Standards (CECL). The video reflects the ABA's skepticism about the new accounting policy, but it is clear and informative: <https://www.aba.com/advocacy/our-issues/cecl-implementation-challenges>

Class notes: Continuation of "How Banks Make Money..." from the previous lecture

Assignment

Financial Analysis of Banks

D. Regulatory Capital and the G-SIB Designation

Readings

"Bank Capital and Liquidity," M. Farag, D. Harland, and D. Nixon

DB, "Capital"

"2019 list of global systemically important banks (G-SIBs)," Financial Stability Board, November 22, 2019

"Definition of Regulatory Capital" FDIC, pp. 7-19.

If you would like to examine a proposal to simplify regulatory capital, see

"The Evolving Complexity of Capital Regulation," R. Herring

For those who like learning by video, a very simplistic explanation of capital and leverage ratios can be found on YouTube: <http://www.youtube.com/watch?v=1-neFtPSMLU>

(But beware after 6:45: the author uses the old definition of core capital for the leverage ratio and gives a misleading example of risk-weighted assets which implies that risk-weighted assets are greater than total assets. Almost always the reverse is true: risk-weighted assets are almost always significantly lower than total assets.)

BNPParibas/Fortis has produced a very simple overview of Basel III which describes risk weights and liquidity requirements that we will study in second part of the course: <https://www.youtube.com/watch?v=KpWBf3s4NpI>

Class notes: The G-SIB Designation & Regulatory Capital

Distribution of Group Project #1: Comparing and Contrasting the Performance of Global, Systemically Important Banks

E. Optimal Capital and the Cost of Equity Capital

Readings

A. Berger, R. Herring and G. Szegö, 1995, "The Role of Capital in Financial Institutions," Reprinted in *The Regulation and Supervision of Banks*, edited by Maximilian J.B. Hall, The International Library of Critical Writings in Economics, Edward Elgar Publishing Limited

"On the Relevancy of Modigliani and Miller to Banking: A Parable and Some Observations," P. Pflleiderer

"What do the banks' target returns on equity tell us?" Martin Wolf, *Financial Times*, September 25, 2011

You may sample these according to your interest

"The Parade of the Bankers' New Clothes Continues: 23 Flawed Claims Debunked," "The Parade of the Bankers New Clothes Continues," by A. Admati and M. Helwig

R.J. Herring, 2011, "Fair Value Accounting and Financial Instability," Reprinted from *Encyclopedia of Financial Globalization*

Class notes: Conceptual Issues: The Role of Capital & Cost of Equity Capital

II. Risk Measurement and Management

A. VaR and the Revolution in Risk Management

Readings

Text, pp. 88-110

G. Guill, 2007, "Bankers Trust and the Birth of Modern Risk Management"

R.J. Herring and T. Schuermann, "Capital Regulation for Position Risk in Banks, Securities Firms, and Insurance Companies," pp. 84-100

Class Notes: Managing and Regulating Market Risk

Assignment

Text, pp. 118-122, #5, 6, 18, & 21

You may find the following videos to be helpful

Expected Shortfall (ES) Bionic Turtle <https://www.youtube.com/watch?v=eHGJFOjyZr4>

Extreme Value Theory (EVT) Bionic Turtle
<https://www.youtube.com/watch?v=o-cpu1IH3tM>

B. Managing Interest Rate Risk

Readings

Text, pp. 2-85

Class notes: The Treasury Function: Funding the Bank Subject to Liquidity and Interest Rate Risk Constraints

Assignment

Text pp. 66-68, #3, 4, 16, & 17

C. Managing and Regulating Liquidity Risk

Readings

Text, pp. 243-266

“Bank Liquidity Requirements: An Introduction and Overview,” by Douglas Elliott, The Brookings Institution, June 23, 2014, read pp. 22-30, sample the rest according to your interest

For those with advanced training in economics or a special interest in liquidity, a survey by a recent winner of the Nobel Prize in Economics

J. Tirole, 2011, “Illiquidity and All Its Friends,” *Journal of Economic Literature* 49(2): pp.287-325

Class Notes: Liquidity, Liquidity Risk Management & Liquidity Regulation

D. The Management of Credit Risk

Readings

Text, pp. 126-168, 180-193

Class notes: Credit Risk

Assignment

Text, pp. 168-176, #11, 20, 25, 26, 27 & 38

III. Financial Crises and Bank Regulation

A. Real Estate Booms & Banking Busts

Readings

R. Herring and S. Wachter, “Real Estate Booms and Banking Busts: An International Perspective”

“Popping property bubbles: Choosing the right pin,” *The Economist*, August 30, 2014

“Location, location, location: Global house prices” *The Economist*, October 7, 2015

DBE, “Case study: the Celtic Tiger”

Class note

Real Estate Booms and Banking Busts

Assignment

Why Are Real Estate Prices Especially Prone to Bubbles?

B. The Safety Net in Principle

Readings

P. Tucker, “The lender of last resort and modern central banking: principles and reconstruction,” in *BIS Papers*, No. 79, Rethinking the lender of last resort, pp. 1-42B. Keoun and P. Kuntz, “Wall Street Aristocracy Got \$1.2 Trillion from Fed,” *Bloomberg.com*, 22 August 2011

Read according to your interest

DBE, “The Lender of Last Resort: the ECB”

T. Humphrey, “Lender of Last Resort: What it is, whence it came and why the Fed isn’t it,” Cato Journal, Spring 2010, pp. 333-364.

Class note: The Safety Net in Principle: An International Comparative Perspective

Assignment

The Safety Net

C. The Safety Net in Practice

Readings

Continental Illinois and “Too Big to Fail,” Ch. 7 in An Examination of the Banking Crises of the 1980s and Early 1990s, FDIC, 1997, pp. 235- 257

D. Llewellyn, 2008, “The Northern Rock Crisis: A Multi-Dimensional Problem Waiting to Happen,” Journal of Financial Regulation and Compliance 16(1), pp. 35-58

“Rock carving: Splitting Northern Rock is just the beginning,” The Economist, 29 October 2009

S. Claessens, R.J. Herring, and D. Schoenmaker, A Safer World Financial System: Improving the Resolution of Systemic Institutions, Geneva Studies on the World Economy 12, pp. 49-55

Class note: Systemic Risk, The Safety Net in Practice: Continental, Northern Rock, et al

C. The Evolution of the Regulation of Credit Risk: Basel I, II & III

Readings

“Bank Regulatory Capital: Why We Need It,” Breaking Into Wall Street

Basel III: Comparison of Standardized and Advanced Approaches, Capgemini, 2014, read pp. 1-13

“Standardized Approach,” FDIC, pp. 21-35.

Sample according to your interest

R.J. Herring, “The Rocky Road to Implementation of Basel II in the United States”

For those who enjoy learning by video, the bionicturtle.com has a series of useful YouTube posts:

<http://www.youtube.com/watch?v=o2kGYUP7Vro>

<http://www.youtube.com/watch?v=oWGY-NYzz0g>

<http://www.youtube.com/watch?v=oWGY-NYzz0g>

BNPParibas/Fortis has produced a very simple video overview of Basel III at:

<http://www.youtube.com/watch?v=CVsjFVEZnCE>

Class Note

Basel I, II & III (A Reader’s Digest Guide to the Denominator)

D. The Regulatory Assault on Too Big to Fail: Living Wills, TLAC & Resolution Policy

Resolution Plan Assessment Framework and Firm Determinations (2016)

“The Cross-Border Challenge in Resolving Global Systemically Important Banks,” J. Carmassi and R. Herring,” 2015

“Safe to Fail,” T. Huertas, May 2013

“TLAC, and Then Some.... A preliminary assessment of the Federal Reserve’s NPR,” Morrison|Foerster, November 1, 2015

Class Notes: The Regulatory Assault on Too Big to Fail: Living Wills, TLAC & Resolution Policy

IV. Shadow Banking and Financial Innovation: Regulatory & Technological Arbitrage

A. Overview of Shadow Banking: Securitization and Collateral Intermediation

Readings

S. Claessens, Z. Pozsar, L. Ratnovski, and M. Singh, “Shadow Banking: Economic and Policy,” pp. 1-36

D. Tarullo, "Thinking Critically About Non-Bank Financial Intermediation," pp. 1-13, November 17, 2015

S. Fischer, "Financial Stability and Shadow Banks: What We Don't Know Could Hurt Us," pp. 1-11, December 3, 2015

Financial Stability Board, “Global Shadow Banking Monitoring Report 2015,” November 12, 2015, read pp. 1-19, browse the remainder according to your interest. The 2016 report has been delayed, but should be available early in the semester.

Sample according to your interest

For background on the relationship between regulation and the non-bank financial intermediation see the following:

P. Olson, “Regulation’s Role in Bank Changes,” pp. 13-20

N. Cetorelli, B. Mandel, and L. Mollineaux, “The Evolution of Banks & Financial Intermediation: Framing the Analysis,” pp. 1-12

For more background on securitization see:

V. Bod and J. Santos, “The Rise of the Originate-To-Distribute Model and the Role of Banks in Financial Intermediation,” pp. 21-34

N. Cetorelli and S. Peristiani, “The Role of Banks in Asset Securitization,” pp. 47-63

For a comprehensive overview of RePo and Securities lending see:

Baklanova, Copeland, and McCaughrin, "Reference Guide to U.S. RePo and Securities Lending Markets," OFR, September 9, 2015

For shadow banking development in other domains see:

"Bringing Light Upon the Shadow, A Review of the Chinese Shadow Banking Sector," Andrew Sheng, Christian Edelmann, Cliff Sheng, and Jodie Hu, Oliver Wyamn/Fung Global Institute, 2015

"Non-banks Shake-up Dutch mortgages," *The Economist*, December 27, 2016

"Peer-to-peer lending, From the people, for the people," *The Economist*, May 9, 2015

"Virtual Currencies: Emerging Regulatory, Law Enforcement, and Consumer Protection Challenges," GAO Report, May 2014

For those who enjoy learning by watching videos, two useful videos on Shadow Banking appear on YouTube: <http://www.youtube.com/watch?v=mq1Nh1hIXk>

<http://www.youtube.com/watch?v=v3rfgkTAlho>

In addition, you may enjoy these videos on securitization by bionicturtledotcom:

<http://www.youtube.com/watch?v=iTehIK4nF6w>

<http://www.youtube.com/watch?v=cuG4kcGu6tA>

http://www.youtube.com/watch?v=Sac-qiZoU_0

<http://www.youtube.com/watch?v=KvG3X7KPb3M>

<http://www.youtube.com/watch?v=oWGY-NYzz0g>

And just for fun (and for the amazing foresight of two comedians in the fall of 2007) watch:

<http://www.youtube.com/watch?v=z-oIMJMGd1Q>

Class Notes: Shadow Banking

B. FinTech

Readings

From Concept to Reality: How blockchain will reshape the financial services industry, *The Economist Intelligence Unit for the UK Department for International Trade*

Cryptocurrencies and Public Policy: Key Questions and Answers, by Douglas Elliott, Oliver Wyman

"Regulating Digital Currencies: A Welcome First Step," *Realtime Economic Issues Watch*, *Peterson Institute for International Economics*, by David Heller & Edwin Truman

Class Notes: *FinTech Overview*

Additional Topics If Time Permits

Hedge Funds, An example of institutions operating in the shadows

The Economist explains: "How hedge funds work," March 30, 2015

C. Geczy, 2010, "Thoughts on the Future of the Hedge Fund Industry", read pp. 1-7, sample the rest according to your interest

J. Stewart, "Hedge Fund Math: Heads We Win, Tails You Lose," *New York Times*, December 22, 2016

L. Fletcher, "Clients Want Hedge Funds but Not Their Big Bets," *Wall Street Journal*, January 4, 2017.

"Fund managers, Assets or liabilities? Regulators worry the asset management industry may spawn the next financial crisis," *The Economist*, August 2, 2014

“The Ties that Bind: The Prime Brokerage Relationship,” A. Pinedo and M. Beck, Morrison & Foerster, pp1-2 and pp. 4-11

Class Notes: Hedge Funds & Financial Stability

Assignment

How Do Hedge Funds Differ from Other Financial Institutions?

Systemic Risk: Capital Markets

Readings

D. Duffie, “Replumbing our Financial System: Uneven Progress,” 23 April 2012

For more on the intricacies of secured funding you may find the following videos to be of interest:

http://www.youtube.com/watch?v=qF11rk1M_Rw

<http://www.youtube.com/watch?v=GTTePQucg68>

DBE, “Investment Banks”

S. Claessens, R.J. Herring, and D. Schoenmaker, A Safer World Financial System: Improving the Resolution of Systemic Institutions, Geneva Studies on the World Economy 12, pp. 41-50

Sample according to your interests

House Banking Committee Release of Confidential Bear Stearns Memo H. Miller, “Lehman – An Unnecessary Tragedy – Lessons that Should Have Been Learned,” 25 July 2012

“Lehman, two years on: Mission unaccomplished,” The Economist, 9 September 2010

R. Drew, “Goldman Sachs Group Inc.,” New York Times, 19 October 2010

Class note: The Demise of the Big Five Investment Banks

Assignment

The Demise of the Big Five Investment Banks

Restructuring Financial Institutions

Readings

McKinsey, “Managing Successful Bank Restructuring: The Mellon Bank Story,” November 2003

J. Bulow and P. Klemperer, “Reorganizing the banks: Focus on the liabilities, not the assets,” VOX, 21 March 2009

R. Hall and S. Woodward, “The good bank/bad bank debate: A new proposal: The right way to create a good bank and a bad bank,” from Hall-Woodward blog, Financial Crisis and Recession, 23 February 2009.

W. Buiter, “Good Bank vs. Bad Bank: Don’t touch the unsecured creditors! Clobber the taxpayer instead. Not.” FT.com, 13 March 2009

“The Single Point of Entry Strategy,” [Federal](#) Deposit Insurance Corporation, December 2013

Class notes: Bank Restructuring: Opportunities and Pitfalls

Assignment: Text pp. 230-231, # 6, 9, 11, 17 & 20

The Dynamics of Sovereign Debt Crises

Readings

...to be supplied reflecting current developments

“Sovereign-debt theories: Domino theory,” The Economist, 18 February 2010

M. Wolf, “Is there the will to save the eurozone?” Financial Times, 7 December 2010

Class notes: The Dynamics of Debt Crises and How They Are Resolved

Fundamentals of Country Risk Analysis

Readings

Text, pp. 197-228 21

A. Mares, “Ask Not Whether Governments Will Default, but How,” Morgan Stanley, 26 August 2010

Economist, “The Merkel memorandum,” August 11, 2012

Class notes: Country Risk Analysis