**New York University**
**Stern School of Business**

B10.3321.30, Spring 2010
Analysis of Financial Institutions and Financial Instruments
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KMC 5-85, M 6-9

This course focuses on the:

1) financial analysis of bank-like financial institutions (thrifts, mortgage banks, and commercial banks); and the

2) accounting and disclosure rules for the financial instruments these institutions hold and the risks they bear (interest rate income and risk, credit losses and risk, fair value accounting for financial instruments, securitizations, structured finance transactions, derivatives, hedging, and market risk).

The main goal of the course is to provide students with an in-depth understanding of how these institutions' financial reports provide unusually accurate and detailed but not perfect information about their performance and risks. Their financial reports increasingly are based on fair value accounting and include extensive risk and estimation sensitivity disclosures. Both fair value accounting and risk and estimation sensitivity disclosures are necessary ingredients for financial institutions' financial reports to convey their performance and risks in today's world of complex, structured, value and risk-partitioning financial instruments and transactions. While financial institutions often report imperfect (or worse) fair value measurements and risk and estimation sensitivity disclosures, careful joint analysis of the information they do provide invariably yields important clues about their performance and risks.

While this course is most relevant to students interested in financial institutions, much of the accounting material also pertains to varying extents to other types of firms. For example, many firms securitize their accounts receivable or hedge their commodity, interest rate, or foreign exchange risk using derivatives.

Notice from the attached course schedule that I interweave the financial analysis of different types of financial institutions with the accounting and disclosure rules that most directly affect those institutions. This sequence of sessions reflects my belief that a good understanding of a financial institution's economics is a prerequisite for evaluating its accounting and disclosures and thus analyzing its financial reports. Throughout the course, I emphasize the use of financial reports for financial analysis purposes rather than technical accounting issues. I note, however, that <u>some of the accounting and disclosure rules that we will cover (especially derivatives and hedging) are inherently complex, and I do not avoid complexity when it is necessary for a good understanding of the topic</u>.

<u>Prerequisite Courses, Comfort Levels, and Skills:</u> The only prerequisite course is B09.2301,

Financial Accounting: A User Perspective. Students who are not entirely comfortable with the material covered in B09.2301 (most importantly, the structure of financial statements, the distinct natures of cash and accrual accounting, the accounting for bad debts on financial assets such as accounts receivable, and the effective interest method of accounting for financial instruments such as debt) should carefully consider the underlined passage in the prior paragraph and ask whether they are willing and able to study the more involved accounting covered in this course. In addition, I assume students have a working knowledge of basic finance, especially net present valuation and the operation of securities markets, and familiarity with financial reports. I recommend that students without such familiarity first take either B10.2303, An Integrated Approach to Financial Statement Analysis, or B10.2302, Financial Reporting and Disclosure, even though the topical material covered in those courses is largely unrelated to the material covered in this course.

Requirements and Grading: There will be three take-home problems (cases based on public financial report information) with the following weight in determining your grade.

| | |
|---|---|
| 1. interest rate risk, credit risk, and fair value accounting | 40% |
| 2. securitizations and structured finance | 30% |
| 3. derivatives, hedging, and market risk | 30% |

Each take-home problem will be handed out when I finish the relevant topic, regardless of whether I am on schedule or not. Class participation of the sufficiently above-average productive sort will be rewarded by one-quarter of a letter grade increase. I emphasize that such participation does not require being either an expert or correct; for example, asking good questions at the right time in our progression through the material qualifies. A high volume of participation may or may not be productive.

Required Text and Other Materials: The required text is Ryan, *Financial Instruments and Institutions: Accounting and Disclosure Rules*, Second Edition, 2007, John Wiley & Sons (hereafter Ryan). Be aware that, unless Wiley has corrected them in the book you purchased (as it have said it will do once the original printing runs out), there are typos in Chapter 6, 11, and 15 of Ryan that I list on the next page. I will also hand out various other supplemental readings, most importantly, SunTrust Banks' 2009:3Q Form 10-Q filing and selected excerpts from other financial institutions' financial reports. I highly recommend reading and thinking about this financial report material carefully. In contrast, the other supplemental readings can usually be skimmed. I will also hand out exercises and problems (usually with answers) for the financial analysis and technical accounting topics. While I will only go over a subset of these exercises and problems in class, I highly recommend you work through them all, looking at the answers only after you have made your own attempt.

The Accounting Standards Codification: As of September 2009,the FASB has organized pre-existing accounting standards (from all of the primary sources, not just the FASB) and issues new standards according to the Accounting Standards Codification (ASC). While the idea of putting all the relevant generally accepted accounting principles for each topic in a single place is a good one, in my opinion the ASC as currently structured and implemented is not a well-advised or user-friendly system, because it does not reliably exposit material in a coherent fashion, does not contain the important "Basis for Conclusions" sections of pre-existing standards, and does not provide such sections to any meaningful extent for new standards. New standards are issued as Accounting Standards Updates prefaced by brief summaries describing their purposes and effects.

This is the first class I have taught where I will try to acknowledge the ASC. In my written materials, I will do so by parallel referencing to the pre-existing standards and the most relevant sections of the ASC. Full cross-referencing of pre-existing standards to the ASC is available to Stern accounting students on the codification website, asc.fasb.org, by clicking on Academic Accounting Access and using the username AAA51819 and the password snys520. When speaking in class, I will no doubt continue to refer to pre-existing standards' original numbers. This is not an option for new standards which are issued as Accounting Standards Updates; thankfully, the FASB has not yet issued an important standard relevant to this class in this form yet. We will all eventually have to get used to the codification, despite its faults.

Blackboard/Access to Class Materials, Streaming Videos, and Prior Take-Home Exams with Answers: While I will hand out all materials needed for the course in class, I will post the materials that are in electronic form on Blackboard. These materials include files for streaming videos of each class and prior take home exams with answers. I do not use Blackboard for other purposes.

I also post on Blackboard some optional materials that I do not hand out in class. Frequently, these materials are recent readable academic papers I have written on the topics. These papers usually are motivated by things I learn about from teaching this course.

Course Schedule: The tentative sequence of class sessions is attached. Some of the readings and assignments may change over the course of the term.

Typos in Ryan (until they are fixed in the second printing):

Chapter 6

- p. 143, last line, second full paragraph, replace ".8" with ".6"
- p. 147, Exhibit 6.3, fourth row of table, replace "14,38" with "14,438"
- The next four typos all follow from the same incorrect calculation:
  - p. 156, last two lines, replace "$100 million in 2004, $769 million in 2003, and $1,222 million in 2002, or $2,091" with "$338 million in 2004, $1,446 million in 2003, and $1,563 million in 2002, or $3,347"
  - p. 156, last line, replace "$429" with "$419"
  - p. 158, fifth line below exhibit, replace "$75 million=$429" with "$65

million=$419”

p. 158, last line first partial paragraph, replace “almost” with “over”

Chapter 11

p. 274, middle first full paragraph. Replace “if they meet SFAS” with “whether or not they meet SFAS”

p. 304, end second paragraph. Replace “In conjunction with the $89.2 million cash receipt on the swaps discussed earlier, these” with “These”; replace “$72.8” with “$162”; and delete “minus cash interest received on fair value hedge swaps during year of $89.2 million”

p. 305, replace first journal entry with

| | | |
|---|---|---|
| loss (-income) | 40.4/(1-τ) | |
| mortgages | x | |
| fowards | | x+40.4/(1-τ) |

p. 305 replace third journal entry with

| | | |
|---|---|---|
| loss (-income) | 2.4/(1-τ) | |
| interest rate swaps (-asset or + liability) | | 2.4/(1-τ) |

Chapter 15 (not covered in course)

p. 448, third line, replace “redundancy” with “deficiency”

In addition, in numerous places in Chapters 3, 7, 8, and 11, “mortgagee” (the mortgage lender, but used as the borrower) and “mortgagor” (the mortgage borrower, but used as the lender) should be interchanged.

## Course Schedule (Tentative)

**Note: The first two sessions contain a considerable amount of reading that I will not cover in class but that provide highly relevant background for the course. You will get more out of the course if you read this material in the first week or so.**

2/8 Course Overview

*Read*: Ryan, Preface and Chapters 1 and 2
"Profit and Balance Sheet Developments at U.S. Commercial Banks in 2008", *Federal Reserve Bulletin*, June 2009.
SunTrust Banks' Schedule HC-R regulatory capital disclosures from its 3Q:2009 Y-9C filing

**There is no class on 2/15 (Presidents' Day)**

2/22 Traditional Thrifts and Commercial Banks

*Read:* Ryan, Chapters 3 and 10
SunTrust Banks' 2009:3Q Form 10-Q filing, ignoring (until later in the course) the material on non-traditional banking activities in Note 7 on securitizations and variable interest entities [pp. 13-21] and Note 12 on derivatives [pp. 25-31], as well as the X'd out sections pertaining to non-financial or otherwise extraneous topics.

After a general discussion of traditional banking (i.e., investment and financing) activities, we will walk through and discuss the portions of SunTrust's 2009:3Q Form 10-Q filing that deal with those activities. This exercise will be most useful to you if you have previously read through the report and identified what does and does not make sense to you.

We will analyze SunTrust's 2009:3Q Form 10-Q filing throughout the term; please bring it to every class.

3/1-3/8 (half) Interest Rate Risk and Amortized Cost Net Interest Earnings

a) repricing gap and interest rate sensitivity
b) amortized cost interest (APB 21 [ASC 835-30])
c) analysis of net interest income
d) rate/volume analysis

*Read:* Ryan, Chapter 4
"Historical Yield Curve", fixedincome.fidelity.com
SunTrust 2009:3Q Form 10-Q filing net interest earnings disclosures (pp. 62-65) and interest rate sensitivity disclosures (pp. 89-90)
Similar disclosures from Washington Federal

*Prepare for class discussion:* Evaluate and compare the interest rate risk and net interest earnings of SunTrust and the other financial institutions with related disclosures included in the reading package.

**There is no class on 3/15 (Spring Break), which falls in the middle of the following session**

3/8 (half)-3/22 Credit Risk and Losses

a) loss contingencies (SFAS No. 5 and the related literature [ASC 450-20 and 310-10-S99])
b) impaired loans (SFAS Nos. 114 and 118 [ASC 310-10 and 40])
c) mortgages held for sale (SFAS No. 65 [ASC 948-10 and 310])
d) other loans held for sale (SOP 01-6 [ASC 310-10])
e) transfers of troubled debt instruments (SOP 03-3 [ASC 310-30])
f) concentration of credit risk disclosures (FAS 107, FSP SOP 94-6-1 [ASC 825-10])

*Read*: Ryan, Chapter 5
Loan portfolio, credit risk, and credit losses disclosures in SunTrust's 2009:3Q Form 10-Q filing (Note 4, Note 14, pp. 69-77)
Similar disclosures from other financial institutions

*Prepare for class discussion:* Evaluate the adequacy of the allowance for loan losses for SunTrust.

"SunTrust Banks – After the Restatement" case in Appendix 5A of Ryan

3/29 Fair Value Accounting for Financial Instruments: Disclosures and Investment Securities

a) fair value disclosures for financial instruments (SFAS No. 107 [ASC 825-10] and SFAS No. 157 [ASC 820-10])
b) partial fair value accounting for investment securities (SFAS No. 115 as amended (regarding other-than-temporary impairments) by FSP FAS 115-1 and FAS 124-1 [ASC 320-10])
c) fair value option for financial instruments (SFAS No. 159 [ASC 825-10])

*Read:* Ryan, Chapter 6
Fair value disclosures in SunTrust's 2009:3Q Form 10-Q filing (Note 15 and pp. 77-84)

*Prepare for class discussion*: "Washington Federal's Big Gap" case in Appendix 6A of Ryan

**The first take-home exam (interest rate risk and net interest earnings, credit risk and losses, and fair value accounting for financial instruments) will be handed out in class at the end of the session in which the material above is completed (which may not be 3/29), and it will be due by the end of class <u>two</u> weeks later.**

4/5 Mortgage Banks

*Read*: Ryan, Chapter 7
Excerpts from Countrywide's (final) 2008:2Q Form 10-Q filing

a) Mortgage banking (SFAS No. 65 [ASC 948])
b) Fees and costs (SFAS no. 91 [ASC 310-20])

4/12-4/19 Securitizations

a) main rules (SFAS No. 140 and SFAS No. 166 [ASC 860])
b) servicing rights (SFAS No. 156 [ASC 860-50])

*Read:* Ryan, Chapter 8
SunTrust Banks' 2009:3Q Form 10-Q filing, Note 7 (pp. 13-17 only)

*Prepare for class discussion:* "Doral Financial's Interesting Interest-Only Strips" case in Appendix 8A of Ryan

4/26 Elements of Structured Finance Transactions

a) consolidation of special purpose/variable interest entities (FIN No. 46R and SFAS No. 167 [ASC 810-10])
b) balance sheet presentation of transactions subject to netting agreements (FIN No. 39 [ASC 210-20])
c) accounting for related transactions as a unit (EITF 98-15, DIG K1, DIG F6 [numerous separated ASC references])

We will not discuss hybrid instruments (SFAS No. 150 [ASC 480-10], SFAS No. 155 [ASC 815-15], project on liabilities and equity) or financial guarantees (FIN No. 45 [ASC 460-10]), both of which are covered in the chapter

*Read:* Ryan, Chapter 9
SunTrust's Banks 2009:3Q Form 10-Q filing, Note 7 (pp 17-21 only)

*Prepare for class discussion*: "SunTrust's Three Pillars" case in reading package

**The second take-home exam will be handed out at the end of the end of the session in which the material above is completed (which may not be 4/26), and it will be due by the end of class <u>one</u> week later.**

5/3-10 Derivatives, Hedging, and Market Risk

a) Main accounting rules for derivatives and hedging (SFAS No. 133, 138, 149, and 161 [ASC 815])
b) SEC market risk disclosure requirements (FRR No. 48 [not in ASC])

*Read*: Ryan, Chapters 11 and 12
Derivatives, hedging, and market risk questions, problems, and cases
SunTrust's Banks 2009:3Q Form 10-Q filing, Note 12

*Prepare for class discussion:* "Bank of America's Derivatives, Hedging, and Market Risk" case in Appendix 12A of Ryan. I also highly recommend working through all of the questions, problems, and cases in the reading package.

**The third take-home exam (derivatives, hedging, and market risk) will be handed out on 5/3 and due at noon on 5/12.**