Korea Advanced Institute of Science and Technology
FMB 552EA
Financial Databases
Fall 2015 (1st Half)

Class Hours: 2:30 p.m. - 3:50 p.m. on Tuesdays and Thursdays
Room:
Professor: Inmoo Lee
Tel.: 958-3441
Office:324 Supex Hall
Office Hours: 2:30-3:20 p.m. on Wednesday and by appointments
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http://www.business.kaist.ac.kr/faculty/inmoo/teaching.htm
Teaching Assistants: ???

Course Objectives:

This course introduces a number of financial databases that are widely used to analyze various financial issues. The databases covered include Thomson Reuters EIKON, Capital IQ, and Bloomberg. In addition, the course will introduce a database language, SQL, to students by using PROC SQL in SAS. The course requires many practices of downloading the data from various sources and analyzing the data using PROC SQL, SAS or Excel. During the course, students are asked to replicate some parts of empirical studies on various topics in Finance using the data retrieved from various sources. The course does not focus on understanding the theories behind each empirical result being discussed in the class since those are going to be covered in other finance courses. Rather, the course focuses on how to use various databases in replicating some of the empirical results found in previous studies. The course will be taught in English and all presentations should be made in English.

Required Materials:

Course materials available on the course website.

SAS, Database Help Desk and TA Help Hours

Everyone is required to practice downloading the data from the databases covered in the classroom and use PROC SQL in SAS to manipulate the data. For this course, you have to have access to SAS (you can download and install this program from the KAIST web site (`http://kftp.kaist.ac.kr/`). From Mondays to Thursdays, there will be someone to help you with the use of databases at the KOSCOM Data Center on the third floor (check the available hours). In addition, in every Friday morning, there will be a TA who will answer any questions on the use of databases for two hours (10:00 12:00) at the KOSCOM Data center. You are also allowed to use the Reuter Trading Center during the TA session.

Contact Information

Anyone is welcome to stop by my office during the office hours to discuss any class related issues. I strongly encourage students to contact me even outside my regular office hours whenever a more clear explanation for a covered topic is necessary. The best way to communicate is through email but an alternative arrangement can be made once an email is received with a clear indication of an alternative arrangement.

Grading Policy

1. Exam (40%)

2. 3 Group Assignments (30%)

3. Final Group Project and Presentation (20%)

4. Participation and Attendance (10%)

Exam

Exam is an in-class exam. Everyone is allowed to bring a cheat-sheet in which anything to be referenced can be **hand-written in one-side** of the paper. Any violation of the rule will be severely penalized. The exam will cover both PROC SQL and databases covered in the class. You should be able to write some basic programs using PROC SQL and database commands used to retrieve information from the databases.

Assignments

Everyone will be asked to join a group of 4 (or less) students on the first day of the class. Each group is responsible for the submission of a group report on four assignments and for the preparation of a presentation during the class. Assignments should be submitted through an email by 7:00 a.m. on the due date. Groups submitting an assignment after a due time will receive a partial or zero score depending on the time submitted. For a late submission, 20% of the score will be deducted for each one-hour-bracket after 7:00 a.m. For example, if an assignment is submitted at 9:10 a.m., then 60% (= 20% × 3) of the score will be deducted from the graded score (i.e., if the score without a penalty is 90, then the final score will be 36(= (1 - 60%) × 90)). This means that an assignment submitted after 12:00 p.m. will receive a zero score. On the due date of each assignment, some groups will be asked about their report and therefore, each group should be prepared to answer any questions regarding the submitted assignment. When you submit the assignment through an email, please use the following file naming rule for the attachment: File name should be in the following format: **Group_GroupName_Ass** (for example, for the group, **A**, and for the assignment **1**, **Group_A_Ass1**). You also have to bring a hard copy of the assignment to the classroom and submit it at the beginning of the class.

Final Group Project & Presentation

The final group project is composed of two parts: 1) Company analysis; and 2) Portfolio analysis. You have to use PROC SQL in SAS for the second part. *First*, each group is responsible for choosing one foreign company and one Korean company and collecting the data on those two companies from various sources. You have to write analyst research reports for those two companies. You can certainly reference others' reports but you have to list the references and sources. In addition, you have to include your own analysis in addition to others. *Second*, you have to choose twenty largest companies in a country of your choice and twenty largest Korean companies as of **December 31, 2004** based on the market capitalization on that date. Form value-weighted portfolios of the following three at the end of 2004: 1) Foreign; 2) Korean; and 3) Foreign plus Korea. Calculate the monthly returns of three portfolios until the end of December 2014 and then report the following: 1) Arithmetic and geometric average returns; 2) Standard deviation of returns; 3) Correlation coefficients of three portfolios; 4) Run the market model (similar to the CAPM Model but without risk free rates being

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subtracted) regression using a relevant market portfolio proxy and report each portfolio's alpha and beta; and 5) Figure of cumulative returns of three portfolios. One thing to note is that the returns should be in US dollars. You have to explain the sources of the data and include the programs used to analyze the data. Each group is responsible for the submission of a final group report on those two items. The report should be no longer than 20 pages (double spacing with at least 10 pts) including all exhibits. In addition, each group should prepare a 15-minute presentation at the end of the semester. Most groups with adequate preparation and good presentations will get 17 points. Groups with very thorough analyses and creative ideas with good presentations will get 20 points. Groups with poor preparation but good presentations will get 13 points. Groups with poor presentations will get 3 points off from the above mentioned points. Each group should notify me of the topic of the report through an email by **September 24**. The due date for the submission of the report together with presentation materials is **October 13 (by 7: a.m. as for the assignments)**. When you submit the final report through an email, please use the following rule for the attachment: File name should be in the following format: **Group_GroupName_FP** (for example, for the group, **A**, **Group_A_FP**). You also have to bring a hard copy of the assignment to the classroom and submit it at the beginning of the class.

Participation & Attendance

Most students with regular participation and attendance will get 7 points out of 10. Students with very active participation and perfect attendance will get 10 points. Students with no participation or many absences will get 2 point.

Group Management

Each member of a group is expected to motivate others to participate equally. If any member of a group is shirking his or her duties, please bring that to my attention as early as possible. I will try to work with the group to solve the problem. To discourage someone from shirking, **a peer evaluation** will be done at the end of the semester to identify those who are obviously free-riding. Those who receive the worst evaluation (1 out of 5) from all other members will get zero scores for all group assignments. Those who receive the worst evaluation from the majority of group members will receive 70% of the scores of all group assignments.

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Course Schedule

The following summarizes topics and articles to be covered in each class during the semester. Both topics and articles to be covered are **subject to change**. Any changes made will be posted on the class web site. Class discussion of articles will focus on key hypotheses/theories, methodologies and results in tables and figures from each article.

Week	Topic	Due Date
1W (9/1,3)	Introduction, SAS and PROC SQL	
2W (9/8,10)	Financial Data Sources and EIKON Finance Topic: M& A 1. Andrade, Mitchell, and Stafford, (2001,JEP)	Ass 1 (9/8)
3W (9/15,17)	EIKON and Capital IQ Finance Topic: IPOs and SEOs 1. Ritter (2003, North-Holland Chapter 5)	
4W (9/22,24)	Bloomberg: Introduction and Equity Finance Topic: Share Repurchases and Stock Splits 1. Chan, Ikenberry and Lee (2004, JFQA) 2. Ikenberry, Rankine and Stice (1996, JFQA)	Ass 2 (9/22) Final Report Topic (9/24)
5W (10/1)	Chuseok Holiday (9/29) Bloomberg: Excel Finance Topic: Value Premiums 1. Fama and French (1992, JF)	
6W (10/6,8)	Bloomberg: Bond and Others Finance Topic: Price Momentum 1. Jegadeesh and Titman (1993, JF)	Ass 3 (10/6)
7W (10/13,15)	Term Project Presentations	Final Group Project (10/13)
8W (10/20)	Exam (10/20)	Final Exam (10/20)