

UNIVERSITY OF ROCHESTER

William E. Simon Graduate School of Business Administration

FIN 533

Special Topics in Finance
Fall 2000
S301 W 1:00-3:30

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This course examines a variety of econometric methods for addressing substantively important questions in financial research. It builds on material presented by Jay Shanken in FIN 532. We will have one class meeting per week. Grading will be flexible – students will have input to determine what type of evaluation procedure will be used. There will be several homework problems assigned throughout the quarter. One of the homework assignments will involve replicating and extending some empirical results that are reported in some of the papers we are going to be discussing in class (or in another paper that we mutually agree on).

Jay discussed material on CAPM tests, Bayesian methods, Mean Reversion, Macroeconomic Variables and Stock Returns, and APT tests. This course will cover related material on interest rates, inflation, time-varying conditional expected returns and volatility, and applications of econometric methods to financial problems (e.g., sample selection bias, GMM estimation, regime-switching models, and GARCH models). Emphasis will be on the *application* of empirical methods to financial data.

The reading assignments will be announced in class and will more or less follow the sequence given below. You will be provided with copies of required readings (shown with an asterisk "*" below). I have included additional references, *which are not required*, for students who want more information on particular topics. These are not on reserve, but copies of these journals are available in the Management Library. The **required** text for the course is:

John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997 (hereafter "CLM").

In addition, the following book is **recommended** for this course:

James D. Hamilton, *Time Series Analysis*, Princeton University Press, 1994 (hereafter "JH").

I will put these books on reserve in the library.

There will be several guest lecturers (other faculty members and Ph.D. students). In addition, I will ask each student who is registered for the course to be responsible for leading the discussion of one or more related papers during some part of the course. Of course, I will be available to help you plan your lecture, and I will supplement what you say in class. You should find a topic that interests you and volunteer early.

This course is intended to help you overcome fear of using new methods to analyze problems that interest you. If you have a specific topic or area of interest that is not currently on the outline, I would be glad to consider adding/substituting that material into the course.

Course Information on the Wide World Web (WWW)

Most of the materials for this course will be posted on the home page for this course [<http://schwert.ssb.rochester.edu/f533/f533.htm>]. For example, I plan to post copies of the assignments as HTML and/or as Adobe Acrobat PDF files (so they can be viewed and printed from a microcomputer attached to the WWW). In addition, I will use the home page for posting information about future class meetings, etc., so you should check regularly to see if new information is available. I have also created a public folder on the Simon School mail system. I will try to post announcements there, too.

READINGS

I. Interest Rates and Inflation

- **JH*, Chap. 4 (read earlier chapters if you have not taken APS 420).
- *Nelson, Charles R., and G. William Schwert, "On Testing the Hypothesis that the Real Rate of Interest is Constant," *American Economic Review*, 67 (June 1977) 478-486.
- *Bekaert, Geert, Robert J. Hodrick and David A. Marshall. "On biases in tests of the expectations hypothesis of the term structure of interest rates," *Journal of Financial Economics*, 44 (June 1997) 309-348.
- *Hamilton, James D. "A New Approach to the Economic Analysis of Nonstationary Time Series and the Business Cycle," *Econometrica*, 57 (1989) 357-384.
- *Stephen F. Gray. "Modeling the conditional distribution of interest rates as a regime-switching process," *Journal of Financial Economics*, 42 (September 1996) 27-62.

II. Speed of Adjustment to Information

*Huberman, Gur, and G. William Schwert, "Information Aggregation, Inflation, and the Pricing of Indexed Bonds," *Journal of Political Economy*, 93 (February 1985) 92-114.

Schwert, G. William, "The Adjustment of Stock Prices to Information About Inflation," *Journal of Finance*, 36 (March 1981) 15-29.

Hausman, Jerry A., Andrew W. Lo, and A. Craig MacKinlay. "An Ordered Probit Analysis of Transaction Stock Prices," *Journal of Financial Economics*, 31 (1992) 319-380.

III. Time-Varying Volatility

A. ARCH & GARCH models (and their relatives)

*CLM, Chap. 12.2.

*JH, Chap. 21.

*Hentschel, Ludger, "All in the Family: Nesting Symmetric and Asymmetric GARCH Models," *Journal of Financial Economics*, 39 (September 1995) 71-104.

*Schwert, G. William, "Why Does Stock Market Volatility Change Over Time?" *Journal of Finance*, 44 (December 1989) 1115-1153.

French, Kenneth, G. William Schwert and Robert Stambaugh, "Expected Stock Returns and Volatility," *Journal of Financial Economics*, 19 (September 1987) 3-29.

Schwert, G. William and Paul Seguin, "Heteroskedasticity in Stock Returns," *Journal of Finance*, 45 (September 1990) 1129-1155.

Harvey, Campbell R., "Time Varying Conditional Covariances in Tests of Asset Pricing Models," *Journal of Financial Economics*, 24 (October 1989) 289-317.

B. Nonparametric and regime-switching models

*CLM, Chap. 12.3.

*JH, Chap. 22.

*Turner, Christopher M., Richard Startz and Charles R. Nelson, "A Markov Model of Heteroskedasticity, Risk, and Learning in the Stock Market," *Journal of Financial Economics*, 25 (November 1989) 3-22.

*Pagan, Adrian R. and G. William Schwert, "Alternative Models for Conditional Stock Volatility," *Journal of Econometrics*, 45 (July 1990), 267-290.

Schwert, G. William, "Business Cycles, Financial Crises and Stock Volatility," *Carnegie-Rochester Conference Series on Public Policy*, 31 (Autumn 1989) 83-125.

IV. Time-Varying Expected Returns

**JH*, Chap. 14 (very good exposition on GMM).

**CLM*, Chaps. 2 and 7.

**JH*, Chaps. 15 and 17.

*Stambaugh, Robert F., "Predictive Regressions," *Journal of Financial Economics*, 54 (December 1999) 375-421.

Abel, Andrew B. and Frederic S. Mishkin, "On the Econometric Testing of Rationality-Market Efficiency," *Review of Economics and Statistics*, 65 (1983) 318-323.

Dechow, Patricia M. and Richard G. Sloan, "Returns to Contrarian Investment Strategies: Tests of Naive Expectations Hypotheses," *Journal of Financial Economics*, 43 (January 1997) 3-27.

Pagan, Adrian, "Econometric Issues in the Analysis of Regressions with Generated Regressors," *International Economic Review*, 25 (1984) 221-248.

Casella, G. and E. I. George, "Explaining the Gibbs Sampler," *The American Statistician*, 46 (1992) 167-174.

Pastor, Lubos, "Portfolio selection and asset pricing models", working paper, University of Pennsylvania, 1998

Hentschel, Ludger, Jangkoo Kang, and John Long, "Numeraire portfolio tests of international government bond market integration." working paper, University of Rochester, 1998 (we are going to focus on the GMM estimation).

Campbell, John Y. and John Ammer, "What Moves the Stock and Bond Markets? A Variance Decomposition for Long-term Asset Returns," *Journal of Finance*, 48 (1993) 3-38.

Campbell, John Y., "A Variance Decomposition for Stock Returns," *The Economic Journal*, 101 (March 1991) 157-179.

Campbell, John, "Stock Returns and the Term Structure," *Journal of Financial Economics*, 18 (June 1987) 373-399.

CLM, Chaps. 8, 10, and 11.

Richardson, Matthew and James H. Stock, "Drawing Inferences from Statistics Based on Multi-year Asset Returns," *Journal of Financial Economics*, 25 (December 1990) 323-348.

Fama, Eugene F., "Efficient Capital Markets II," *Journal of Finance*, 46 (December 1991) 1575-1617.

Fama, Eugene F., "Market efficiency, long-term returns, and behavioral finance," *Journal of Finance*, *Journal of Financial Economics*, 49 (September 1998) 283-306.

Campbell, John Y. and Robert Shiller, "The Dividend-Price Ratio and Expectations of Future Dividends and Discount Factors," *Review of Financial Studies*, 1 (Fall 1988) 195-228.

Campbell, John Y. and Robert Shiller, "Cointegration and Tests of Present Value Models," *Journal of Political Economy*, 95 (1987) 1062-1088.

Kan, Raymond and Chu Zhang, "GMM Tests of Stochastic Discount Factor Models with Useless Factors," *Journal of Financial Economics*, 54 (October 1999) 103-127.

Evans, Martin D., "Peso Problems: Their Theoretical and Empirical Implications," working paper, NYU, 1995.

Evans, Martin D. and Paul Wachtel, "Inflation Regimes and Sources of Inflation Uncertainty," *Journal of Money, Credit, and Banking*, 25 (1993) 475-511.

Lewis, Karen and Martin D. Evans, "Do Long-term Swings in the Dollar Affect the Estimates of the Risk Premia"

Hamilton, James D. and Raul Susmel. "Autoregressive Conditional Heteroskedasticity and Changes in Regime," *Journal of Econometrics*, 64 (1994) 307-333.

Stambaugh, Robert F., "Analyzing investments whose histories differ in length," *Journal of Financial Economics*, 45 (September 1997) 285-331.

V. Limited Dependent Variable Models & Sample Selection Bias

*Maddala, G. S., *Limited-Dependent and Qualitative Variables in Econometrics*, Cambridge University Press, Cambridge, 1983, pp. 221-274 and 365-370.

*Comment, Robert and G. William Schwert, "Poison or Placebo: Evidence on the Deterrence and Wealth Effects of Modern Antitakeover Measures," *Journal of Financial Economics*, 39 (1995) 3-43.

*Acharya, Sankarshan, "Value of Latent Information: Alternative Event Study Methods," *Journal of Finance*, 48 (March 1993) 363-385.

Harford, Jarrad, "Self-selection in Repurchase Tender Offers," working paper, William E. Simon Graduate School of Business Administration, University of Rochester, 1996.

Eckbo, B. Espen, Vojislav Maksimovic, and Joseph Williams, "Consistent Estimation of Cross-Sectional Models in Event Studies," *Review of Financial Studies*, 3 (1990) 343-365.

*Dunbar, Craig G., "The Use of Warrants As Underwriter Compensation In Initial Public Offerings," *Journal of Financial Economics*, 38 (1995) 59-78.

Bhagat, Sanjai, and Richard H. Jefferis, "Voting Power in the Proxy Process: The Case of Antitakeover Charter Amendments," *Journal of Financial Economics*, 30 (1991) 193-225.

Prabhala, N. R. and Manju Puri "How Does Underwriter Price Support Affect IPOs? Empirical Evidence," working paper, Yale SOM, 1998.

*Lo, Andrew W. and A. Craig MacKinlay, "Data-snooping Biases in Tests of Financial Asset Pricing Models," *Review of Financial Studies*, 3 (1990) 431-467.

VI. Other Topics

*Barber, Brad and Lyon, John, "Detecting long-run abnormal stock returns: The empirical power and specification of test-statistics," *Journal of Financial Economics*, 43 (1997) 341-372.

*Barber, Brad and Lyon, John, "Detecting abnormal operating performance: The empirical power and specification of test statistics," *Journal of Financial Economics*, 41 (1996) 359-399.

Andrews, Donald, "Heteroskedasticity and Autocorrelation Consistent Covariance Matrix Estimation", *Econometrica*, 59 (May 1991) 817-858.