

NEW YORK UNIVERSITY
Stern School of Business - Graduate Division

B40.3389
International Finance

Richard Levich
Spring 1999

COURSE OUTLINE AND READING LIST

OVERVIEW

This course offers an overview of the theoretical and empirical literature in International Finance at the Ph.D. level. Students are expected to have taken Financial Theory I and International Open Economy Macroeconomics or their equivalent. The topics we focus on include models of international asset pricing, tests of international financial market efficiency, empirical evidence on international asset market returns, microstructure in the foreign exchange market, and several international corporate finance themes including measuring exposure to exchange rate changes and corporate hedging policies.

ASSIGNMENTS

Students are required to write four short (5 page) papers that summarize and critique the readings for one week. Each week one student will make a short (20-30) minute presentation to the class that reviews and evaluates the major readings and research themes for the week. These papers and presentations should help to organize the literature, highlight the important research issues, and draw attention to unresolved issues or unsatisfying results. In addition, students are required to write one more lengthy paper (10-15 pages) that either evaluates a larger section of the literature, or presents a worthy research design (hypothesis and methodology) for an original paper.

The International Economics seminar meets every Tuesday, 4:30-6:00 pm at 269 Mercer Street, 7th floor. Students should make plans to attend those seminars that cover topics related to this course. In addition, we will invite several speakers to the International Business Department seminar. Hopefully those seminars can be scheduled during our regular class meetings.

HOW TO REACH ME

- In Person: Stern School of Business, 44 West 4th Street, Room 9-63,
New York, NY 10012-1126.
- Office Hours: Monday, 4:00 pm - 6:00 pm and Tuesday, 10:00 am - 12:00
Noon and by appointment.
- Electronically: Phone: 212-998-0422; FAX: 212-995-4220;
E-mail: rlevich@stern.nyu.edu
- My Secretary: Ms. Robyn Vanterpool, Phone: 212-998-0702;
E-mail: rvanterp@stern.nyu.edu
- Course Web Page: Through my personal web page at www.stern.nyu.edu/~rlevich/
Watch this page for course announcements, links to recent
research articles, and other information.
-

TEXT

There is no text for the course, but there are several books that offer good background for selected topics.

Maurice Obstfeld and Kenneth Rogoff, *Foundations of International Macroeconomics*, (Cambridge, MA: MIT Press), 1996. The PhD's home companion for topic in international macroeconomics.

Gene M. Grossman and Kenneth Rogoff (eds.), *Handbook of International Economics, Volume 3*, (Amsterdam: Elsevier/North-Holland), 1995. Comprehensive, state-of-the-art surveys on the real and financial side of international economics. Updates and extends the surveys in Volume 2, edited by Ronald W. Jones and Peter B. Kenen, 1985.

Piet Sercu and Raman Uppal, *International Financial Markets and the Firm*, (Cincinnati OH: South-Western Publishing), 1995. The most analytically rigorous textbook dealing with international financial markets and corporate finance.

Richard M. Levich, *International Financial Markets: Prices and Policies*, (New York: Irwin/McGraw-Hill), 1998. Only an MBA text, but with plenty of research findings that could spark some further questions.

TOPICAL OUTLINE -- Preliminary and Incomplete (1/9/99)

I. Introduction: The Gains from International Borrowing and Lending

Brennan, Michael J. and Bruno Solnik, "International Risk Sharing and Capital Mobility," *Journal of International Money and Finance*, September 1989.

Obstfeld, Maurice, "International Risk Sharing and Capital Mobility," *Journal of International Money and Finance*, February 1992, pp. 115-21.

Obstfeld, Maurice and Harold Cole, "Commodity Trade and International Risk Sharing," *Journal of Monetary Economics*, 1991, pp. 3-24.

II. A Historical Perspective on International Capital Flows

Kindleberger, Charles P., *A Financial History of Western Europe*, (Allen & Unwin: London), 1984.

Eichengreen, Barry, "Trends and Cycles in Foreign Lending," NBER working paper no. 3411, August 1990.

III. International Asset Pricing, Part I: Models with PPP

A. Static Models

Fama, Eugene F. and André Farber, "Money, Bonds, and Foreign Exchange," *American Economic Review*, September 1979, pp. 639-49.

Grauer, Frederick, Robert Litzenberger and Richard Stehle, "Sharing Rules and Equilibrium in an International Capital Market Under Uncertainty," *Journal of Financial Economics*, June 1976, pp. 233-56.

Kouri, Pentti, "International Investment and Interest Rate Linkages Under Flexible Exchange Rates," in R.Z. Aliber (ed.), *The Political Economy of Monetary Reform* (Macmillan: London), 1977, pp. 74-96.

B. Intertemporal Models

Hodrick, Robert J., "Intertemporal Asset Pricing with Time-Varying Risk Premia," *Journal of International Economics*, November 1981, pp. 581-87.

IV. International Asset Pricing, Part II: Models with Stochastic Real Exchange Rates

A. Static Models in CAPM Framework

Solnik, Bruno, "Equilibrium in an International Capital Market Under Uncertainty," *Journal of Economic Theory*, 1974, pp. 500-24.

Adler, Michael and Bernard Dumas, "International Portfolio Choice and Corporation Finance: A Synthesis," *Journal of Finance*, June 1983, pp. 925-84.

B. Static International APT Models

Solnik, Bruno, "International Arbitrage Pricing Theory," *Journal of Finance*, 1983, pp. 449-57.

Ross, Stephen A. and Michael Walsh, "A Simple Approach to the Pricing of Risky Assets with Uncertain Exchange Rates," in R.G. Hawkins, R.M. Levich and C.G. Wihlborg (eds.), *Research in International Business and Finance*, (JAI Press: Greenwich CT), 1983, pp. 39-54.

V. International Asset Pricing, Part III: Intertemporal Models without PPP

A. Consumption Based Models

Breeden, Douglas T., "An Intertemporal Asset Pricing Model with Stochastic Consumption and Investment Opportunities," *Journal of Financial Economics*, September 1979, pp. 265-96.

Stulz, René M., "A Model of International Asset Pricing," *Journal of Financial Economics*, December 1981, pp. 383-406.

Grossman, Sanford J. and Robert J. Shiller, "Consumption Correlatedness and Risk Measurement in Economies with Non-Traded Assets and Heterogeneous Information," *Journal of Financial Economics*, June 1982, pp. 195-210.

B. Models with Incomplete Markets

Svensson, Lars and Ingrid Werner, "Non-traded Assets in Incomplete Markets: Pricing and Portfolio Choice,"

VI. International Asset Pricing, Part IV: General Equilibrium Models

Svensson, Lars E.O., "Trade in Risky Assets," *American Economic Review*, June 1988, pp. 375-94.

Lucas, Robert E. "Interest Rates and Currency Prices in a Two-Country World," *Journal of Monetary Economics*, 1982, pp. 335-59.

Svensson, Lars E.O., "Trade in Nominal Assets," *Journal of International Economics*, February 1989, pp. 375-94.

Stulz, René M., "An Equilibrium Model of Exchange Rate Determination and Asset Pricing with Nontraded Goods and Imperfect Information," *Journal of Political Economy*, October 1987, pp. 1024-40.

VII. International Asset Pricing, Part V: Barriers to International Investment

Black, Fischer, "International Capital Market Equilibrium with Investment Barriers," *Journal of Financial Economics*, December 1974, pp. 337-52.

Stulz, René M., "On the Effects of Barriers to International Investment," *Journal of Finance*, March 1983, pp. 923-34.

Errunza, Vihang and Eitienne Losq. "International Asset Pricing Under Mild Segmentation," *Journal of Finance*, March 1985, pp. 105-24.

VIII. Testing Parity Conditions and Market Efficiency

Frankel, Jeffrey A. and Andrew K. Rose. Empirical Research on Nominal Exchange Rates, " in G. Grossman and K. Rogoff (eds.), Handbook of International Economics Volume 3, (Amsterdam: North-Holland), 1995, pp. 1689-1729.

A. Purchasing Power Parity

Bilson, John. "Purchasing Power Parity as a Trading Strategy," Journal of Finance, (July 1984): 715-25.

Crouhy-Veyrac, L., M. Crouhy, and J. Melitz. "More About the Law of One Price," European Economic Review, 18 (1982): 325-44.

Edison Hali J., "Purchasing Power Parity in the Long Run: A Test of the Dollar/Pound Exchange Rate (1890-1978)," Journal of Money Credit and Banking, (August 1987): 376-87.

Froot, Kenneth A. and Kenneth Rogoff. "Perspectives on PPP and Long-Run Real Exchange Rates," in G. Grossman and K. Rogoff (eds.), Handbook of International Economics Volume 3, (Amsterdam: North-Holland), 1995, pp. 1647-88.

Isard, Peter. "How Far Can We Push the Law of One Price?" American Economic Review, 67, No. 6 (December 1977): 942-8.

Officer, Lawrence H. "The Purchasing Power Parity Theory of Exchange Rates: A Review Article," IMF Staff Papers, 23 (March 1976).

Sercu, Piet, Raman Uppal, and Cynthia Van Hulle. "The Exchange Rate in the Presence of Transaction Costs: Implications for Tests of Purchasing Power Parity," Journal of Finance 50, no. 4 (September 1995): 1309-19.

B. Covered Interest Parity

Bahmani-Oskooee, Mohsen and Satya P. Das. "Transaction Costs and the Interest Rate Parity Theorem," Journal of Political Economy, 93, no. 4 (August 1985): 793-9.

Clinton, K. "Transaction Costs and Covered Interest Arbitrage: Theory and Evidence," Journal of Political Economy 96, no. 2 (April 1988): 358-70.

Deardorff, Alan V. "One-Way Arbitrage and Its Implications for the Foreign Exchange Markets," Journal of Political Economy 87, no. 2 (April 1979): 351-64.

Dooley, Michael P. and Peter Isard. "Capital Controls, Political Risk, and Deviations from Interest Rate Parity," Journal of Political Economy 88, no. 2 (April 1980): 370-384.

Fletcher, Donna J. and Larry W. Taylor. "A Non-Parametric Analysis of Covered Interest Parity in Long-Date Capital Markets," Journal of International Money and Finance 13, No. 4 (August 1994): 459-75.

Frankel, Jeffrey A. and Alan T. MacArthur. "Political vs. Currency Premia in International Real Interest Differentials," European Economic Review, 32, no. 5 (June 1988): 1083-1121.

Frenkel, Jacob A. and Richard M. Levich. "Covered Interest Arbitrage: Unexploited Profits?" Journal of Political Economy 83, no. 2 (April 1975): 325-338.

Frenkel, Jacob A. and Richard M. Levich. "Transaction Costs and Interest Arbitrage: Tranquil versus Turbulent Periods" Journal of Political Economy 85, no. 6 (December 1977): 1209-1226.

Ito, Takatoshi. "Capital Controls and Covered Interest Parity," Economic Studies Quarterly 37, No. 3 (September 1986): 223-41.

Levi, Maurice D. "Taxation and 'Abnormal' International Capital Flows," Journal of Political Economy 85, no. 3 (June 1977): 635-46.

Officer, Lawrence H. and Thomas D. Willett. "The Covered-Arbitrage Schedule: A Critical Survey of Recent Developments," Journal of Money, Credit and Banking 2, (1970): 247-57.

Otani, Ichiro and Siddhart Tiwari. "Capital Controls and Interest Rate Parity: The Japanese Experience 1978-1981," IMF Staff Papers, 28, No. 4 (December 1981): 793-815.

Popper, Helen. "Long-Term Covered Interest Parity: Evidence from Currency Swaps," Journal of International Money and Finance 12, No. 4 (August 1993): 439-48.

Rhee, S. Ghon and Rosita P. Chang. "Intra-Day Arbitrage Opportunities in Foreign Exchange and Eurocurrency Markets," Journal of Finance 47, No. 1 (March 1992): 363-79.

C. Uncovered Interest Parity

Bilson, John. "The 'Speculative Efficiency' Hypothesis," Journal of Business 54, No. 3 (July 1981): 435-51.

Cumby, Robert E. and Maurice Obstfeld. "A Note on Exchange-Rate Expectations and Nominal Interest Differentials: A Test of the Fisher Hypothesis," Journal of Finance, 36, No. 3 (June 1981): 697-703.

Frankel, Jeffrey A. "In Search of the Exchange Risk Premium: A Six Currency Test Assuming Mean Variance Optimization," Journal of International Money and Finance 1, no. 3 (December 1982): 255-74.

Frankel, Jeffrey A. and Kenneth A. Froot, "Using Survey Data to Test Standard Propositions Regarding Exchange Rate Expectations," American Economic Review 77, no. 1 (March 1987): 133-53.

Froot, Kenneth A. and Richard H. Thaler. "Anomalies: Foreign Exchange," Journal of Economic Perspectives, 4, No. 3 (Summer 1990): 179-92.

Hansen, Lars P. and Robert J. Hodrick. "Forward Exchange Rates as Optimal Predictors of Future Spot Exchange Rates: An Econometric Analysis." Journal of Political Economy 88, no. 4 (August 1980): 829-53.

Hodrick, Robert J. The Empirical Evidence of the Efficiency of Forward and Futures Foreign Exchange Markets, (Chur Switzerland: Harwood Academic Publishers), 1987.

Hodrick, Robert J., and Sanjay Srivastava. "An Investigation of Risk and Return in Forward Foreign Exchange," Journal of International Money and Finance 3, no. 1 (March 1984): 5-29.

Ito, Takatoshi. "Use of (Time Domain) Vector Autoregressions to Test Uncovered Interest Rate Parity," Review of Economics and Statistics, No. 2 (May 1988): 296-305.

Levine, Ross. "The Forward Exchange Rate Bias: A New Explanation," International Finance Discussion Papers, Board of Governors of the Federal Reserve System, No. 338, November, 1988.

Lewis, Karen K. "Can Learning Affect Exchange Rate Behavior?: The Case of the Dollar in the Early 1980s." Journal of Monetary Economics, 23 (March 1989): 79-100.

Lewis, Karen K. "Puzzles in International Financial Markets," in G. Grossman and K. Rogoff (eds.), Handbook of International Economics, Volume 3, (Amsterdam: North-Holland), 1995, pp. 1913-71.

Meese, Richard and Kenneth Rogoff. "Was It Real? The Exchange Rate Interest Differential Relation Over the Modern Floating Exchange Rate Period," Journal of Finance 43 (1988): 933-48.

Meridith, Guy and Menzie D. Chinn, "Long-Horizon Uncovered Interest Rate Parity," NBER Working Paper No. 6797, November 1998.

Throop, Adrian W. "A Generalized Uncovered Interest Parity Model of Exchange Rates," Economic Review, Federal Reserve Bank of San Francisco, No. 2, (1993): 3-16.

D. Technical Trading Models

Cumby, Robert and David Modest. "Testing for Market Timing Ability: A Framework for Forecast Evaluation," Journal of Financial Economics, (September 1987): 169-89.

Dooley, Michael P. and Jeffrey Shafer. "Analysis of Short-Run Exchange Rate Behavior: March 1973 - September 1975," International Finance Discussion Papers, No. 76. Washington, D.C., Federal Reserve System, 1976.

Dooley, Michael and Jeffrey Shafer. "Analysis of Short-Run Exchange Rate Behavior: March 1973 - November 1981," in D. Bigman and T. Taya (eds.), Exchange Rate and Trade Instability, (Cambridge, Mass.: Ballinger Publishing), 1983.

Engel, Charles and James D. Hamilton. "Long Swings in the Dollar: Are They in the Data and Do Markets Know It?" American Economic Review, Vol. 80, No. 4, (September 1990): 689-713.

Frankel, Jeffrey A. and Kenneth A. Froot. "Chartists, Fundamentalists, and Trading in the Foreign Exchange Market," American Economic Review 80, no. 2 (May 1990): 181-5.

Kwok, Chuck C.Y. and Linda Van de Gucht. "An Empirical Examination of Foreign Exchange Market Efficiency: Applying the Filter Rule Strategy to Intra-Daily DM/\$ Exchange Rates," Journal of International Financial Management and Accounting, 3, No. 3 (Autumn 1991): 201-18.

LeBaron, Blake. "Technical Trading Rule Profitability and Foreign Exchange Intervention," working paper, University of Wisconsin-Madison, October 1994.

Schulmeister, Stephan. "Currency Speculation and Dollar Fluctuations," Quarterly Review, Banca Nazionale del Lavoro, No. 167 (December 1988): 343-65.

Silber, William L. "Technical Trading: When It Works and When It Doesn't," Journal of Derivatives, 1, No. 3 (Spring 1994): pp. 39-44.

Taylor, Mark and Helen Allen, "The Use of Technical Analysis in the Foreign Exchange Market," Journal of International Money and Finance, (June 1992): 304-14.

E. Excess Volatility Tests

Bartolini, Leonardo and Gordon M. Bodnar. "Are Exchange Rates Excessively Volatile? And What Does 'Excessive Volatility' Mean, Anyway?" IMF Staff Papers 43, no. 1 (March 1996): 72-96.

IX. Models of Exchange Rate Determination

A. Leading Indicators

Eichengreen, Barry, Andrew Rose and Charles Wyplosz, "Contagious Currency Crises," NBER working paper no. 5681, July 1996. (Available from the NBER WWW page at www.nber.org)

Esquivel, Gerardo and Felipe Larrain, "Explaining Currency Crises," Kennedy School of Government, Harvard University, working paper, June 1998. (see www.hiid.harvard.edu/pub/other/asiacrisis.html)

Frankel, Jeffrey and Andrew Rose, "Currency Crashes in Emerging Markets: An Empirical Treatment," Federal Reserve Board of Governors, International Finance discussion paper no. 534, January 1996.

Kaminsky, Graciella, Saul Lizondo, and Carmen Reinhart, "Leading Indicators of Currency Crises," IMF Staff Papers, March 1998, pp. 1-48.

Klein, Michael and Nancy Marion. "Explaining the Duration of Exchange-Rate Pegs," Tufts University working paper, June 1994.

B. Forecasting Exchange Rates

Elliott, Graham and Takatoshi Ito. "Heterogeneous Expectation and Tests of Efficiency in the Yen/Dollar Forward Foreign Exchange Rate Market," NBER Working Paper No. 5376, December 1995.

Henriksson, Roy and Robert Merton. "On Market Timing and Investment Performance, II: Statistical Procedures for Evaluating Forecasting Skills," Journal of Business, 54, No. 4 (October 1981): 513-34.

Hutchison, Michael and Adrian Throop, "U.S. Budget Deficits and the Real Value of the Dollar," Economic Review, Federal Reserve Bank of San Francisco, 1985, pp. 26-43.

Isard, Peter. "Lessons from Empirical Models of Exchange Rates," IMF Staff Papers, (March 1987): 1-28.

Krasker, W.S. "The 'Peso Problem' in Testing the Efficiency of Forward Exchange Markets," Journal of Monetary Economics (1980): 269-76.

Leitch, Gordon and J. Ernest Tanner. "Economic Forecast Evaluation: Profits Versus the Conventional Error Measures," American Economic Review 81, No. 3 (June 1991): 580-90.

Levich, Richard M. and Lee R. Thomas. "The Significance of Technical Trading-Rule Profits in the Foreign Exchange Market: A Bootstrap Approach," Journal of International Money and Finance 12, No.5 (October 1993): 451-74.

Meese, Richard and Kenneth Rogoff. "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" Journal of International Economics 14 (1983a): 3-24.

Meese, Richard and Kenneth Rogoff, "The Out-of Sample Failure of Empirical Exchange Rate Models: Sampling Error or Model Misspecification?" in J. Frenkel (ed.), Exchange Rates and International Macroeconomics (Chicago: University of Chicago Press), 1983b, pp. 67-112.

Levich, Richard M. and Lee R. Thomas. "The Merits of Active Currency Risk Management: Evidence from International Bond Portfolios," Financial Analysts Journal 49, No. 5 (September/October 1993): 63-70.

Mark, Nelson. "Real Exchange Rates in the Long-Run: An Empirical Investigation," Journal of International Economics, 28 (1990): 115-36.

Mark, Nelson C. "Exchange Rates and Fundamentals: Evidence on Long-Horizon Predictability and Overshooting," American Economic Review 85, No. 1 (March 1995): 201-18.

Somanath, V.S. "Efficient Exchange Rate Forecasts: Lagged Models Better than the Random Walk," Journal of International Money and Finance 5 (1986): 195-220.

C. Exchange Rates and "News"

Edwards, Sebastian. "Floating Exchange Rates, Expectations, and New Information," Journal of Monetary Economics, 11, no. 3 (May 1983): 321-336.

Hakkio, Craig and Douglas Pearce. "The Reaction of Exchange Rates to Economic News," Economic Inquiry, (October 1985): 621-36.

Harris, Ethan S. and Natasha M. Zabka. "The Employment Report and the Dollar," Federal Reserve Bank of New York, Current Issues in Economics and Finance Vol. 1, No. 8, November 1995.

Klein, Michael, Bruce Mizrach, and Robert G. Murphy. "Managing the Dollar: Has the Plaza Agreement Mattered?" Journal of Money Credit and Banking 23, No. 4 (November 1991): 742-51.

Takagi, Shinji. "Exchange Rate Expectations : A Survey of Survey Studies," IMF Staff Papers 38, no. 1 (March 1991): 156-83.

Wilson, John. "Anticipated Shocks and Exchange Rates Dynamics." Journal of Political Economy 87, no. 3 (June 1979): 639-47.

X. Empirical Evidence on the Structure of International Equity Returns

A. Correlation of Returns

Heston, Steven L. and K. Geert Rouwenhorst. "Does Industrial Structure Explain the Benefits of International Diversification?" Journal of Financial Economics, 36 (August 1994): 3-27.

Kaplanis, Evi C. "Stability and Forecasting of the Comovement Measures of International Stock Market Returns," Journal of International Money and Finance 7, no. 1 (March 1988): 63-76.

Lee, Sang Bin and Kwang Jung Kim. "Does the October 1987 Crash Strengthen the Co-Movements Among National Stock Markets?" Review of Financial Economics 3, No. 1 (Fall 1993): 89-102.

Longin, François and Bruno Solnik. "Is the Correlation in International Equity Returns Constant: 1960-1990," Journal of International Money and Finance, 14, No. 1 (February 1995): 3-26.

Solnik, Bruno. "Why Not Diversify Internationally Rather Than Domestically?" Financial Analysts Journal 30, no. 4 (July-August 1974): 48-54.

B. Portfolio Selection and Asset Allocation

Grubel, Herbert G. "Internationally Diversified Portfolios: Welfare Gains and Capital Flows," American Economic Review, 58 (December 1968): 1299-1314.

Jorion, Philippe. "International Portfolio Diversification with Estimation Risk," Journal of Business, 58 (July 1985): 259-78.

C. Empirical Analysis of Models of Equilibrium Returns

Harvey, Campbell R. "The World Price of Covariance Risk," Journal of Finance 46 (March 1991): 111-58.

D. Empirical Evidence on International APT Models

Cho, D. Chinhung, Cheol S. Eun and Lemma W. Senbet. "International Arbitrage Pricing: An Empirical Investigation," Journal of Finance 41, no. 2 (1986): 313-30.

Korajczyk, Robert A. and Claude Viallet. "An Empirical Investigation of International Asset Pricing," Review of Financial Studies 2, no. 4 (1989): 553-85.

E. Evidence on Market Integration vs. Segmentation

Howe, J.S. and K. Kelm. "The Stock Price Impact of Overseas Listing," Financial Management 16 (1987): 51-6.

Howe, J.S. and J. Madura. "The Impact of International Listings on Risk: The Implications for Capital Market Interaction," Journal of Banking and Finance 14 (1990): 1133-42.

F. Home Country Bias in Portfolios

Baxter, Marianne and Urban J. Jermann. "The International Diversification Puzzle is Worse than You Think," American Economic Review 87, no. 1 (March 1997): 170-80.

Baxter, Marianne, Urban J. Jermann, and Robert G. King. "Nontraded Goods, Nontraded Factors, and International Non-Diversification," working paper, University of Virginia, June 1994.

Glassman, Debra A. and Leigh A. Riddick. "Why Empirical International Portfolio Models Fail: Evidence that Model Misspecification Creates Home Asset Bias," Journal of International Money and Finance 15, no. 2 (April 1996): 275-312.

Tesar, Linda L. and Ingrid M. Werner. "Home Bias and the Globalization of Securities Markets," NBER Working Paper No. 4218, November 1992.

Tesar, Linda L. and Ingrid M. Werner. "International Equity Transactions and U.S. Portfolio Choice," in J. Frankel (ed.), The Internationalization of Equity Markets, (Chicago: University of Chicago Press), 1994.

Uppal, Raman. "The Economic Determinants of the Home Country Bias in Investors' Portfolios: A Survey," Journal of International Financial Management and Accounting 4, No. 3 (Autumn 1992): 171-89.

G. Performance of International Mutual Funds

H. Emerging Market Equity Returns

Bekaert, Geert, Claude B. Erb, Campbell R. Harvey, and Tadas E. Viskanta. "The Behavior of Emerging Market Returns," working paper, Duke University, 1996.

Goetzmann, William N. and Philippe Jorion. "Re-emerging Markets," Working Paper, Yale University, 1996.

I. Closed-End Country Funds

Bodurtha, James N., Dong-Soon Kim and Charles Lee. "Closed-end Country Funds and U.S. Market Sentiment," The Review of Financial Studies 8, no. 3 (Fall 1995): 879-918.

Bosner-Neal, Catherine, Gregory Brauer, Robert Neal, and Simon Wheatly. "International Investment Restrictions and Closed-End Country Fund Prices," Journal of Finance 45, No. 2 (June 1990): 523-47.

Hardouvelis, Gikas, Rafael La Porta and Thierry Wizman. "What Moves the Discount on Country Equity Funds?" in J. Frankel (ed.), The Internationalization of Equity Markets, (Chicago: University of Chicago Press), 1994.

XI. Studies of Individual Markets or Contracts: Foreign Exchange Futures

Chang, Carolyn W. and Jack S.K. Chang. "Forward and Futures Prices: Evidence from the Foreign Exchange Markets," Journal of Finance, 45, No. 4 (September 1990): 1333-36.

Cornell, Bradford and Mark R. Reinganum. "Forward and Futures Prices: Evidence from the Foreign Exchange Markets," Journal of Finance, 36, No. 5 (December 1981): 1035-45.

Johnston, Elizabeth T. and John J. McConnell. "Requiem for a Market: An Analysis of the Rise and Fall of a Financial Futures Contract," Review of Financial Studies Vol. 2, No. 1 (1989): 1-23.

XII. Studies of Individual Markets or Contracts: Foreign Currency Options

Bodurtha, James N. and Georges Courtadon. "Efficiency Tests of the Foreign Currency Options Market," Journal of Finance, 41, No. 1 (March 1986): 151-62.

Bodurtha, James N. and Georges R. Courtadon. "The Pricing of Foreign Currency Options," Monograph Series in Finance and Economics, New York: New York University Salomon Brothers Center for the Study of Financial Institutions, No. 1987-4/5, 1987.

Borensztein, Eduardo R. and Michael P. Dooley, "Options on Foreign Exchange and Exchange Rate Expectations," IMF Staff Papers, 43, No. 4 (December 1987): 643-80.

Campa, José M. and P.H. Kevin Chang. "Testing the Expectations Hypothesis on the Term Structure of Volatilities in Foreign Exchange Options," Journal of Finance 50, No. 2 (June 1995): 529-47.

Campa, José M. and P.H. Kevin Chang. "The Forecasting Ability of Correlations Implied in Foreign Exchange Options," *Journal of International Money and Finance* December 1998, pp. 855-80.

Campa, José M. and P.H. Kevin Chang. "Arbitrage-Based Tests of Target-Zone Credibility: Evidence from ERM Cross-Rate Options," *American Economic Review* 86, no. 4 (September 1996): 726-40.

Garman, Mark B. and Steven W. Kohlhagen. "Foreign Currency Option Values," *Journal of International Money and Finance*, 2, no. 3 (1983): 231-37.

Jorion, Philippe. "Predicting Volatility in the Foreign Exchange Market," *Journal of Finance* 50, No. 2 (June 1995): 507-28.

Malz, Allan M. "Using Option Prices to Estimate Realignment Probabilities in the European Monetary System: The Case of Sterling-Mark," *Journal of International Money and Finance* 15, no. 5 (October 1996): 717-48.

Wei, Shang-Jin and Jeffrey A. Frankel. "Are Option-Implied Forecasts of Exchange Rate Volatility Excessively Variable?" NBER Working Paper No. 3910, November 1991.

XIII. Selecting and Hedging Portfolios of Foreign Assets

Black, Fischer. "Universal Hedging: Optimizing Currency Risk and Reward in International Equity Portfolios," *Financial Analysts Journal* 45 (1989): 16-22.

Black, Fischer. "Equilibrium Exchange Rate Hedging," *Journal of Finance* 43 (1990): 899-908.

Glen, Jack and Philippe Jorion. "Currency Hedging for International Portfolios," *Journal of Finance* 48, no. 5 (December 1993): 1865-86.

Hendricks, Darryll. "Evaluation of Value-at-Risk Models Using Historical Data," *Economic Policy Review*, Federal Reserve Bank of New York (April 1996): 39-70.

Perold, André F. and Evan C. Shulman. "The Free Lunch in Currency Hedging: Implications for Investment Policies and Performance Standards," *Financial Analysts Journal*, (May/June 1988): 45-50.

Solnik, Bruno. "Currency Hedging and Siegel's Paradox: On Black's Universal Hedging Rule," *Review of International Economics* 1, no. 2 (June 1993): 180-7.

XIV. International Corporate Finance, Part I: Measuring Exchange Rate Exposure

Allayannis, George. "Exchange Rate Exposure Revisited," in *Exchange Rates, Hedging and the Value of the Firm*, Ph.D. dissertation, Stern School of Business, 1996a.

Amihud, Yakov. "Exchange Rates and the Valuation of Equity Shares," in Y. Amihud and R. Levich (eds.), *Exchange Rates and Corporate Performance*, (Burr Ridge, IL: Irwin Publishing), 1994, pp. 49-59.

Bartov, Eli and Gordon M. Bodnar. "Firm Valuation, Earnings Expectations, and the Exchange-Rate Exposure Effect," Journal of Finance 49, No. 5 (December 1994): 1755-85.

Bodnar, Gordon M. and William M. Gentry. "Exchange-Rate Exposure and Industry Characteristics: Evidence from Canada, Japan and the U.S.," Journal of International Money and Finance, 12, No. 1 (February 1993): 29-45.

Heckerman, Donald. "The Exchange Risk of Foreign Operations," Journal of Business 45, No. 1 (January 1972): 42-48.

Hekman, Christine R. "Measuring Foreign Exchange Exposure: A Practical Theory and Its Application," Financial Analysts Journal, (September/October 1983): 59-65.

Hung, Juann. "Assessing the Exchange Rate's Impact on U.S. Manufacturing Profits," Quarterly Review, Federal Reserve Bank of New York, (Winter 1992-93): 44-63.

Hung, Juann. "The Exchange Rate's Impact on Overseas Profits of U.S. Corporations," Working paper, Federal Reserve Bank of New York, April 1995.

Jorion, Philippe. "The Exchange-Rate Exposure of U.S. Multinationals," Journal of Business 63, no. 3 (July 1990): 331-45.

Levi, Maurice D. "Exchange Rates and the Valuation of Firms," in Y. Amihud and R. Levich (eds.), Exchange Rates and Corporate Performance, (Burr Ridge, IL: Irwin Publishing), 1994, pp. 37-48.

Mann, Catherine. "Prices, Profit Margins, and Exchange Rates," Federal Reserve Bulletin, (June 1986): 366-79.

Oxelheim, Lars and Clas Wihlborg, Macroeconomic Uncertainty, (Chichester England: John Wiley), 1987.

Yang, Jaiwen. "Exchange Rate Pass-Through in U.S. Multinational Manufacturing Industries," unpublished Ph.D. dissertation, New York University, 1993.

XV. International Corporate Finance, Part II: Hedging Policies of Multinational Firms

Froot, Kenneth A. "Currency Hedging Over Long Horizons," NBER Working Paper No. 4355, May 1993.

Froot, Kenneth A., David S. Scharfstein and Jeremy C. Stein. "Risk Management: Coordinating Corporate Investment and Financing Policies," Journal of Finance 48, no. 5 (December 1993): 1629-58.

XVI. International Corporate Finance, Part III: Investment Policies and Measuring the Value of Multinationality

Doukas, John and Nicholas G. Travlos. "The Effects of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions," Journal of Finance 43, No. 5 (December 1988): 1161-75.

Jacquillat, Bertrand and Bruno Solnik. "Multinationals Are Poor Tools for International Diversification," Journal of Portfolio Management, (Winter 1978): 8-12.

Jayaraman, Narayanan, Kuldeep Shastri, and Kishore Tandon. "The Impact of International Cross Listings On Risk and Return: Evidence from American Depository Receipts," Journal of Banking and Finance 17, (1993): 91-103.

Morck, Randall and Bernard Yeung. "Why Investor's Value Multinationality," Journal of Business, 64, No. 2 (April 1991): 165-87.

Morck, Randall and Bernard Yeung. "Internationalization: An Event Study Test," Journal of International Economics 33, (1992): 41-56.

Rowland, Patrick F. and Linda L. Tesar. "Multinationals and the Gains from International Diversification," NBER Working Paper No. 6733, September 1998.

XVII. International Corporate Finance, Part IV: Capital Structure Issues in International Corporate Finance

Hodder, James E. and Lemma W. Senbet. "International Capital Structure Equilibrium," Journal of Finance 45, No. 5 (December 1990): 1495-1516.

Kim, Yong Cheol and Rene M. Stulz. "The Eurobond Market and Corporate Financial Policy: A Test of the Clientele Hypothesis." Journal of Financial Economics, 22 (December 1988): 189-205.

McCauley, Robert N. and Steven A. Zimmer. "Explaining International Differences in the Cost of Capital," Federal Reserve Bank of New York Quarterly Review, (Summer 1989): 7-28.

McCauley, Robert N. and Steven A. Zimmer. "Exchange Rates and International Differences in the Cost of Capital," in Y. Amihud and R. Levich (eds.), Exchange Rates and Corporate Performance, (Burr Ridge, IL: Irwin Publishing), 1994, pp. 119-48.

XVIII. Market Microstructure in the Foreign Exchange Market

Bollerslev, Tim and Ian Domowitz. "Trading Patterns and Prices in the Interbank Foreign Exchange Market," Journal of Finance, 48, No. 4 (September 1993): 1421-43.

Braas, Albéric and Charles N. Bralver, "An Analysis of Trading Profits: How Most Trading Rooms Really Make Money," Journal of Applied Corporate Finance 2, No. 4 (Winter 1990): 85-90.

Hsieh, David A. "The Statistical Properties of Daily Foreign Exchange Rates: 1974-1983," Journal of International Economics 24 (1988): 129-45.

Huang, Roger D. and Ronald W. Masulis, "FX Spreads and Dealer Competition Across the 24-Hour Trading Day," Vanderbilt University (Owen School) working paper 95-17, August 19, 1997. (Forthcoming JFE)

Lyons, Richard K. "Tests of Microstructural Hypotheses in the Foreign Exchange Market," Journal of Financial Economics 39 (1995): 321-51.

Lyons, Richard K. "A Simultaneous Trade Model of the Foreign Exchange Hot Potato," Journal of International Economics, 1996 (forthcoming).

Lyons, Richard K. *The Microstructure Approach to Exchange Rates* (Cambridge: MIT Press), forthcoming. (Preliminary chapters available at <http://haas.berkeley.edu/~lyons/>)

Yao, Jian, "Market Making in the Interbank Foreign Exchange Market," NYU Salomon Center Working Paper No. S-98-3, November 1997.

Yao, Jian, "Spread Components and Dealer Profits in the Interbank Foreign Exchange Market," NYU Salomon Center Working Paper No. S-98-4, November 1997.

XIX. International Bank Lending and Sovereign Debt