Robert A. Korajczyk March 24, 2016

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Current Position:

Harry G. Guthmann Professor of Finance, Department of Finance, Kellogg School of Management, Northwestern University.

Education:

Ph.D. University of Chicago, (Finance), August 1983.

M.B.A. University of Chicago, (Finance, Econometrics), June 1977.

A.B., with Honors University of Chicago, August 1976.

Academic Positions:

Kellogg School of Management, Northwestern University.

Harry G. Guthmann Professor of Finance, 1995 - present.

Co-director: Center for Financial Institutions and Markets, 2005 - 2006, 2014 - present.

Director: Zell Center for Risk Research, 2006 - 2013.

Senior Associate Dean: Curriculum and Teaching, 2003 - 2006, 2010 - 2011.

Chairman, Department of Finance, 1994 - 1996.

Professor of Finance, 1994 - 1995. Associate Professor, 1989 - 1994. Assistant Professor, 1982 - 1989.

Department of Finance, Faculty of Business and Economics, University of Melbourne Sessional Lecturer, March 2014.

Gutmann Center for Portfolio Management, Vienna University of Economics and Business (Wirtschaftsuniversität Wien)
Gutmann Fellow, Fall 2010.

Gutmann Center for Portfolio Management, University of Vienna Gutmann Fellow, Summer 2003, Spring 2006.

School of Business & Management, Hong Kong University of Science and Technology Visiting Professor of Finance, Summer 1997.

Graduate School of Business, University of Chicago.
Visiting Associate Professor of Finance, 1989-1990.
Lecturer in Finance, 1981-1982.

Current and Past Courses Taught: M.B.A. level; Corporate Finance; Investments, Asset Management. Ph.D. Level; Seminar: Empirical Methods in Finance; Seminar: Liquidity and Asset Pricing. Executive Masters Level; Investments, Corporate Finance.

Awards:

Research: Crowell Memorial Research Paper Prize: First Place. PanAgora Asset

Management Quantitative Research Institute, 2009.

New York Stock Exchange Award for Best Paper on Equity Trading presented at

the 1993 Western Finance Association annual meetings.

Best paper published in Volume 4 of the Review of Financial Studies.

Teaching: Sidney J. Levy Teaching Award for excellence in teaching, 1995-1996 academic

year.

Core Teaching Award, 1997-1998 academic year.

Core Teaching Award, 1999-2000 academic year.

Alumni Choice Faculty Award, 2000.

Publications:

"Horizon Pricing" (with Avraham Kamara, Xiaoxia Lou, and Ronnie Sadka). *Journal of Financial and Quantitative Analysis*, (Forthcoming).

- "Market Timing" (with Ravi Jagannathan). In *Portfolio Construction, Measurement, and Efficiency: Essays in Honor of Jack Treynor*, edited by John Guerard, Jr. New York: Springer, forthcoming, 2016.
- "A Synthesis of Factor Estimation Methods." (with Gregory Connor and Robert Uhlaner). Journal of Financial and Quantitative Analysis **50** (August 2015): 825-842.
- "Are you trading predictably?" (with Steven L. Heston, Ronnie Sadka, and Lewis D. Thorson). *Financial Analysts Journal*, **67** (March/April 2011): 36-44.
- "Intraday Patterns in the Cross-Section of Stock Returns" (with Steven L. Heston and Ronnie Sadka), *Journal of Finance* **65** (August 2010): 1369-1407. Awarded the Crowell Memorial Research Paper Prize: First Place from PanAgora Asset Management Quantitative Research Institute, 2009.
- "Factor Models in Portfolio and Asset Pricing Theory" (with Gregory Connor). In *Handbook of Portfolio Construction: Contemporary Applications of Markowitz Techniques*, edited by

- John Guerard, Jr. New York: Springer, 2010.
- "Factor Models of Asset Returns" (with Gregory Connor). *Encyclopedia of Quantitative Finance*, edited by Rama Cont. Chicester: Wiley, 2010.
- "Pricing the Commonality Across Alternative Measures of Liquidity" (with Ronnie Sadka). Journal of Financial Economics 87 (January 2008): 45-72.
- "The Common and Specific Components of Dynamic Volatility" (with Gregory Connor and Oliver Linton). *Journal of Econometrics* **132** (May 2006): 231-255.
- "Are Momentum Profits Robust to Trading Costs?" (with Ronnie Sadka). *Journal of Finance* **59** (June 2004), 1039-1082.
- "Risk Management in Asset Management" (with Gregory Connor). Chapter 24 in *Modern Risk Management: A History*, London: Risk Publications, 2003
- "Capital Structure Choice: Macroeconomic Conditions and Financial Constraints" (with Amnon Levy), *Journal of Financial Economics* **68** (April 2003): 75-109.
- "Predicting Equity Liquidity." (with William Breen and Laurie Hodrick). *Management Science* **48** (April 2002): 470-483.
- "Introduction to *Review of Financial Studies* Conference on Market Frictions and Behavioral Finance" (with John Heaton), *Review of Financial Studies* **15** (2002): 353-361.
- "A Measure of Stock Market Integration for Developed and Emerging Markets." World Bank Economic Review 10 (May 1996): 265-289.
- "The Arbitrage Pricing Theory and Multifactor Models of Asset Returns." (with Gregory Connor), Chapter 4 of *Finance*, Handbooks in Operations Research and Management Science, Volume 9, edited by R. Jarrow, V. Maksimovic, and W. Ziemba. Amsterdam: North Holland, 1995.
- "Do Arbitrage Pricing Models Explain the Predictability of Asset Returns?" (with Wayne Ferson) *Journal of Business* **68** (July 1995): 309-349. Awarded the New York Stock Exchange Award for Best Paper on Equity Trading presented at the 1993 Western Finance Association annual meetings. Reprinted in *Forecasting Financial Markets*, Vol. 1, edited by Terence C. Mills. Cheltenham: Edward Elgar Publishing Limited, 2002.
- "A Test for the Number of Factors in an Approximate Factor Model." (with Gregory Connor), Journal of Finance 48 (September 1993): 1263-1291. Reprinted in The International Library Of Financial Econometrics Series, Volume II, edited by Andrew W. Lo. Edward Elgar Publishing Limited, 2007.
- "Equity Risk Premia and the Pricing of Foreign Exchange Risk." (with Claude Viallet), *Journal of International Economics* **33** (November 1992): 199-219.
- "Equity Issues with Time-Varying Asymmetric Information." (with Deborah Lucas and Robert

- McDonald), Journal of Financial and Quantitative Analysis 27 (September 1992): 397-417.
- "The Effect of Information Releases on the Pricing and Timing of Equity Issues." (with Deborah Lucas and Robert McDonald), *Review of Financial Studies* **4** (1991): 685-708. Awarded prize for best paper published in Volume 4 of the *Review of Financial Studies*.
- "The Attributes, Behavior, and Performance of U.S. Mutual Funds." (with Gregory Connor), *Review of Quantitative Finance and Accounting* **1** (January 1991): 5-26.
- "Understanding Stock Price Behavior Around the Time of Equity Issues." (with Deborah Lucas and Robert McDonald), in *Asymmetric Information, Corporate Finance, and Investment* edited by R. Glenn Hubbard. Chicago: University of Chicago Press, 1990.
- "An Empirical Investigation of International Asset Pricing." (with Claude Viallet), *Review of Financial Studies* **2** (1989): 553-585. Reprinted in *International Capital Markets*, Vol. 1, edited by René M. Stulz and G. Andrew Karolyi. Cheltenham: Edward Elgar Publishing Limited, 2003.
- "An Intertemporal Equilibrium Beta Pricing Model." (with Gregory Connor), *Review of Financial Studies* **2** (1989): 373-392.
- "Risk and Return in an Equilibrium APT: Application of a New Test Methodology." (with Gregory Connor), *Journal of Financial Economics* **21** (September 1988): 255-289.
- "Assessing the Market Timing Performance of Managed Portfolios." (with Ravi Jagannathan), Journal of Business **59** (April 1986): 217-35. Reprinted in Asset Pricing and Portfolio Performance: Models, Strategy, and Performance Metrics. London: Risk Publications, 1999.
- "Performance Measurement with the Arbitrage Pricing Theory: A New Framework for Analysis." (with Gregory Connor), *Journal of Financial Economics* **15** (March 1986): 373-94.
- "The Pricing of Forward Contracts for Foreign Exchange." *Journal of Political Economy* **93** (April 1985): 346-368.

Book:

Portfolio Risk Analysis (with Gregory Connor and Lisa Goldberg). Princeton: Princeton University Press, 2010.

Edited Volumes:

- Asset Pricing and Portfolio Performance: Models, Strategy, and Performance Metrics. London: Risk Publications, 1999.
- The CAPM Controversy: Policy and Strategy Implications for Investment Management (with Diana Harrington). Charlottesville: Association for Investment Management and Research, 1993.

Working Papers:

"High Frequency Market Making to Large Institutional Trades." (with Dermot Murphy). June 2015.

"A Performance Comparison of Large-n Factor Estimators" (with Zhuo Chen and Gregory Connor). February 2016.

"Price Discovery, Foreign Ownership, and Rule of Law." (with Jun Cai, Richard Y. K. Ho, and Zheng Zhang). August 2013.

"On Selection Biases in Book-to-Market Based Tests of Asset Pricing Models." (with William Breen). Working Paper #167, Department of Finance, Northwestern University, July 1995.

"Estimating Pervasive Economic Factors with Missing Observations." (with Gregory Connor), Working Paper #34, Department of Finance, Northwestern University, revised April 1987.

Book Review:

Review of *Market Liquidity: Asset Pricing, Risk, and Crises* by Yakov Amihud, Haim Mendelson, and Lasse Heje Pedersen. Forthcoming, *Quantitative Finance* **14** (February 2014): 211-212.

Work in Progress:

"Price Impact." (with Jonathan Brogaard).

Research Grants External to Kellogg - Granting Institution and Date Awarded:

Morgan Stanley Microstructure Research Grant - June 2005.

The World Bank - February 1995.

The World Bank - June 1993.

European Institute of Business Administration - November 1988.

European Institute of Business Administration - November 1986.

University Research Grants Committee - February 1985.

Editorial Activities:

Editor: Review of Financial Studies (1993-1996).

Associate Editor: Review of Financial Studies (1989 - 1993, 1997-1999), Journal of Business & Economic Statistics (1988 - 1993), Journal of Financial and Quantitative Analysis (1992 - 2003), Emerging Markets Quarterly (1996-2001), Journal of Empirical Finance (1991 - 2003), and Review of Quantitative Finance and Accounting (1990 - 1993).

External Activities:

HF Sciences, Economist, 2015-present.

Select Innovation Investments LLC, Chicago, Illinois. Product Development Committee Member, 2004-present.

DSC Quantitative Group LLC, Chicago, Illinois. Product Development Committee Member, 2012-present.

Chicago Partners, Chicago, Illinois. Principal, 1995-2008.

ITG, Inc., New York, New York. Member: Scientific Advisory Board, 2003-2004.

The Rand Corporation, Santa Monica, California. Consultant, Economics Department, 1979-1980.

Atlantic Richfield Company, Los Angeles, California. Financial Analyst, Petroleum Products Division, 1977-1978.

I have served as a consultant to a variety of organizations. Over the past three years my clients have been The Investment Industry Regulatory Organization of Canada, Citigroup, MF Global, and a proprietary trading firm (identity confidential).

Other Professional Activities:

Member: American Finance Association, Society for Financial Studies, Western Finance Association.

Program Committees: Western Finance Association, 1990 - 2016 Annual Meetings (except 1998), Associate Program Chairperson, 2012. Society for Financial Econometrics, Annual Meeting 2011, Conference on "Large-scale Factor Models in Finance" 2013. American Finance Association, 1998 Annual Meeting. European Financial Management Association, 2007, 2013 Annual Meetings. European Finance Association, 2003, 2013-2015 Annual Meetings. Econometric Society, 1996 North American Winter Meeting. Conference on Financial Economics and Accounting, 1993. Financial Management Association, Competitive Awards Committee, 1994. Asia-Pacific Finance Association, 1997 annual meeting. University of Melbourne, Finance Down Under Conference, 2013-2016.

Academic Advisory Board: Gutmann Center for Portfolio Management, Vienna University of Economics and Business (Wirtschaftsuniversität Wien), 2009-present; University of Vienna (Universität Wien), 2002 - 2009.