

## WILLIAM THOMAS ZIEMBA

June 2020

### PUBLICATIONS

#### B – Selected Books, Published and In Progress

- B1. Ziemba, W.T., Vickson, R.G., Eds. (1975) *Stochastic Optimization Models in Finance*, Academic Press, July, 744 pages (388 pages reprinted and 356 pages new). 2<sup>nd</sup> edition with new preface, World Scientific, Singapore, 2006.
- B2. Ziemba, W.T., Akatay, A., Schwartz, S.L. (1979) *Turkish Flat Weaves*, Scorpion Publications Ltd., London, 144 pages.
- B3. Ziemba, W.T., Schwartz, S.L., Koenigsberg, E., Eds. (1980) *Energy Policy Modeling: United States and Canadian Experiences; Vol. I: Specialized Energy Policy Models*, Martinus Nijhoff Publishing, Boston, April, 396 pages.
- B4. Ziemba, W.T., Schwartz S.L., Eds. (1980) *Energy Policy Modeling: United States and Canadian Experiences: Vol. II: Integrative Energy Policy Models*, Martinus Nijhoff Publishing, Boston, May, 378 pages.
- B5. Schaible, S., Ziemba, W.T., Eds. (1981) *Generalized Concavity in Optimization and Economics*, Academic Press, November, 780 pages.
- B6. Hausch, D.B., Ziemba, W.T., (1984) *Beat the Racetrack*, Harcourt, Brace and Jovanovich (432 pages); revised and expanded 2<sup>nd</sup> edition titled *Dr Z's Beat the Racetrack*, William Morrow, 1987, 524 pages. Both re-issued in hardback and paperback in 2018, 2019 by Echo Books.
- B7. Ziemba, W.T., Hausch, D.B. (1985) *Betting at the Racetrack*, Dr. Z Investments, Los Angeles, November, 176 pages; 2nd edition, Norris Strauss, New York, November 1986, 140 pages.
- B8. Ziemba, W.T., Brumelle, S.L., Gautier, A., Schwartz, S.L. (1986) *Dr. Z's 6/49 Lotto Guidebook*, Dr. Z Investments, Los Angeles, June, 124 pages
- B9. Amershi, A., Feltham, J., Ziemba, W.T., Eds. (1988) *Economic Analysis of Information and Contracts: Essays in Honour of John E. Butterworth*, Kluwer Academic Publishers, Boston, July, 415 pages.
- B10. Ziemba, W.T. and Schwartz, S.L. (1991) *Invest Japan: The Structure, Performance and Opportunities of Japan's Stock, Bond and Fund Markets*, Probus Publishing, Chicago, November, 596 pages
- B11. Ziemba, W.T., Bailey, W., Hamao, Y., Eds. (1991), *Japanese Financial Market Research*, North Holland Publishers, Amsterdam, December, 616 pages.
- B12. Ziemba, W.T., Schwartz, S.L., *Power Japan: How and Why the Japanese Economy Works*, Probus Publishing, Chicago, August 1992, 385 pages.
- B13. Hausch, D.B., Lo, V., Ziemba, W.T., Eds., (1994) *Efficiency of Racetrack Betting Markets*, Academic Press, 648 pages, reprinted in 2008 by World Scientific with a new preface.
- B14. Jarrow, R.A., Maksimovic, V., Ziemba, W.T., Eds. (1995) *Finance*, North Holland Handbook Series, December, 1165 pages. Reprinted in Japanese, 1998, and in Chinese, 2002.
- B15. Keim, D.B., Ziemba, W.T., Eds. (2000) *Security Market Imperfections in World Wide Equity Markets*, Cambridge University Press, 531 pages (reprinted in Chinese, 2003).
- B16. Ziemba, W.T., Mulvey, J.M., Eds (1998), *Asset and Liability Management from a Global Perspective*, Cambridge University Press, 665 pages, and in Chinese, 2003. [A review by Ton Vorst is in the *Journal of Finance*]
- B17. Wets, R.J.B., Ziemba, W.T., Eds., (1999) *Stochastic Programming - State of the Art 1998*, (main lectures VIII International Conference on Stochastic Programming), Baltzer Science Publishers BV (Special Issue *Annals of Operations Research*), March, 285 pages.

- B18. Birge, J.B., Edirishinghe, N.C.P., Ziemba, W.T., Eds. (2001) *Research in Stochastic Programming* (selected, refereed papers from the VIII International Conference on Stochastic Programming), Baltzer Science Publishers BV (Special Issue Annals of Operations Research), June, 306 pages.
- B19. Ziemba, W.T. (2003), *The Stochastic Programming Approach to Asset Liability and Wealth Management*, AIMR, December, 192 pages plus 72-page appendix. [A review by Alan King is in *Interfaces* April 2006]
- B20. Wallace, S.W., Ziemba, W.T., Eds (2005). *Applications of Stochastic Programming*, SIAM - Mathematical Programming Society Series on Optimization, 707 pages.
- B21. Zenios, S.A., Ziemba, W.T., Eds, (2006) *Handbook of Asset and Liability Modeling*, North Holland Volume 1: *Theory and Methodology*, pages 1-487.  
Volume 2: *Applications and Case Studies*, June 2007, pages 489-1147.
- B22. Ziemba, R.E.S. and Ziemba, W.T., (2007) *Scenarios for Risk Management and Global Investment Strategies*, Wiley, November, in UK and January 2008 in US, 315 pages.
- B23. Hausch, D. B., Ziemba, W.T., Eds, (2008) *Handbook of Sports and Lottery Markets*, North Holland Handbooks in Finance Series, September, 536 pages.
- B24. MacLean, L.C., E. O. Thorp, Ziemba, W.T., Eds., (2011) *The Kelly Capital Growth Criterion: Theory and Practice*, World Scientific, (hardback) 2012 (paperback), 853 pages.
- B25. Bertocchi, M., Schwartz, S.L., Ziemba, W.T., Eds. (2010) *Optimizing the Aging, Retirement and Pensions Dilemma*, Wiley, February, 411 pages; 2<sup>nd</sup> Edition 2015.
- B26. Ziemba, W.T. (2012) *Calendar Anomalies and Arbitrage*, World Scientific, 586 pages.
- B27. Gassman, H. I. and W. T. Ziemba, Eds. (2012) *Stochastic Programming Applications in Finance, Energy and Production*, World Scientific, 518 pages
- B28. MacLean, L.C., Ziemba, W.T., Eds. (2013) *Handbook of the Fundamentals of Financial Decision Making* (2 volumes), World Scientific, 891 pages.
- B29. Ziemba, R.E.S., Ziemba, W.T. (2013) *Investing in the Modern Age*, some Wilmott columns revised and expanded, 2007-2012, World Scientific (hardback and paperback), 563 pages.
- B30. Mallarias, A.G., Ziemba, W.T. Eds. (2015) *Handbook of Futures Markets*, World Scientific.
- B31. Ziemba, W.T., *Collected Works* (5 volumes) to include volumes on Portfolio Theory and Applications, Asset Liability Management, and Stochastic Programming: Theory and Applications, World Scientific, in preparation.
- B32. Ziemba, W.T. (ed) (2016) *Great investment ideas*, World Scientific
- B33. Ziemba, W. T. (2017) *The adventures of a modern renaissance academic in gambling and investment*, World Scientific
- B34. MacLean, L.C , Ziemba, W. T. (eds) (2017) *Problems in the theory of financial decision making and stochastic optimization models in finance*, World Scientific
- B35. Ziemba, W.T., Lleo, S. and Zhitlukhin, M (2017) *Stock market crashes: predictable and unpredictable and what to do about them*, World Scientific
- B36. Ziemba, W. T. (2019) *Exotic betting at the racetrack*, World Scientific
- B37. Ashenfelter, O. Gergaud, O, Storchmann, K and Ziemba, W T (eds) (2018) *Handbook of the Economics of Wine*, World Scientific (2 volumes)
- B38. Ziemba, W.T. and MacLean, L.C. (2018) *Dr Z's NFL Guidebook*, World Scientific
- B39. D'Eclessia, R., Zenios, S. and Ziemba, T. (2019) *Memorial volume to honor Marida Bertocchi*, World Scientific
- B40. Guerard, J and Ziemba, W.T. (2020) *Handbook of applied investment research*, World Scientific, forthcoming

- B41. Ziemba, W.T. (2020) *Handbook of Portfolio Theory and Practice*, forthcoming
- B42. Ziemba, W.T. (2020) *Investing and Gambling in Sports and Financial Markets*, forthcoming

### J – Selected Published Journal Articles

- J1 Ziemba, W.T., (1969) A Myopic Capital Budgeting Model, *Journal of Financial and Quantitative Analysis* IV: 305-328.
- J2 Ziemba, W.T., (1970) Computational Algorithms for Convex Stochastic Programmes with Simple Recourse, *Operations Research* XVIII: 414-431.
- J3 Ziemba, W.T., (1970) Stochastic Programming Models of Dynamic Planning Problems," *Economic Computation and Economic Cybernetics (Studies and Research)* 3: 67-85.
- J4 Ziemba, W.T. (1971) Transforming Stochastic Dynamic Programming Problems into Nonlinear Programmes, *Management Science* XVIII: 450-462.
- J5 Ziemba, W.T. (1971) Duality Relations, Certainty Equivalents and Bounds for Convex Stochastic Programmes with Simple Recourse, *Cahiers du Centre d'Etudes de Recherche Operationnelle* XIII: 85-97.
- J6 Ziemba, W.T. (1971) A Note on Economic Policy under Uncertainty, *Socio Economic Planning Sciences* V: 407-410.
- J7 Forbes, J.D., Ziemba, W.T. (1971) Estimation of Super Market Drawing Power: An Extension of Location Theory and Practice, *Annals of Regional Science* V: 112-125.
- J8 Warburton, A., Ziemba, W.T. (1971) Convex Inversion, *Journal of Mathematical Analysis and Application* XXXIV: 58-66.
- J9 Ziemba, W.T. (1972) Solving Nonlinear Programming Problems with Stochastic Objective Functions, *Journal of Financial and Quantitative Analysis* VII: 1809-1827.
- J10 Ziemba, W.T., (1972) Note on 'Optimal Growth Portfolios when Returns are Serially Correlated', *Journal of Financial and Quantitative Analysis* VII: 1995-2000.
- J11 Ziemba, W.T., Parkan, C., Brooks-Hill, F.J. (1974) Calculation of Investment Portfolios with Risk Free Borrowing and Lending, *Management Science* XXI: 209-222.
- J12 Ziemba, W.T., Butterworth, J.E. (1974) Bounds on the Value of Information in Uncertain Decision Problems, *Stochastics* IV: 1-18.
- J13 Ziemba, W.T. (1974) Note on the Behavior of a Firm Subject to Stochastic Regulatory Review, *Bell Journal of Economics and Management Sciences*: 710-712.
- J14 Ohlson, J.A., Ziemba, W.T. (1976) Optimal Portfolio Policies for an Investor with a Power Utility Function Facing a Log Normal Securities Market, *Journal of Financial and Quantitative Analysis* XI: 57-71.
- J15 Huang, C.C., Wehrung, D.A., Ziemba, W.T. (1976) A Homogeneous Distribution Problem with Applications to Finance, *Management Science* XXIII: 297-304.
- J16 Ziemba, W.T., (1977) Multiperiod Consumption-Investment Decisions: Further Comments, *American Economic Review* LXVII: 766-767.
- J17 Huang, C.C., Vertinsky, I., Ziemba, W.T. (1977) Sharp Bounds on the Value of Perfect Information, *Operations Research* XXV: 128-139.
- J18 Huang, C.C., Ziemba, W.T., Ben-Tal, A. (1977) Bounds on the Expectation of a Convex Function of a Random Variable: With Applications to Stochastic Programming, *Operations Research* XXV: 315-325.
- J19 Huang, C.C., Vertinsky, I., Ziemba, W.T. (1978) On Multiperiod Stochastic Dominance, *Journal of Financial and Quantitative Analysis* XIII: 1-13.

- J20 Kira, D., Ziemba, W.T., (1980) The Demand for a Risky Asset, *Management Science* XXVI: 1158-1165
- J21 Kallberg, J.G., Ziemba, W.T. (1979) On the Robustness of the Arrow-Pratt Risk Aversion Index, *Economic Letters* II: 21-26.
- J22 Hausch, D.G., Ziemba, W.T., Rubinstein, M.E. (1981) Efficiency of the Market for Racetrack Betting, *Management Science* XXVII: 1435-1452.
- J23 Kallberg, J.G., White, R., Ziemba, W.T., (1982) Short Term Financial Planning Under Uncertainty, *Management Science* XXVIII: 670-682.
- J24 Hausch, D.B., Ziemba, W.T. (1983) Bounds on the Value of Information in Uncertain Decision Problems, II, *Stochastics* X: 181-217.
- J25 Kallberg, J.G., Ziemba, W.T., (1983) Comparison of Alternative Utility Functions in Portfolio Selection Problems, *Management Science* XXIX: 1257-1276.
- J26 Judah, S., Ziemba, W.T., (1983) Three Person Baccarat, *Operations Research Letters* II: 187-192
- J27 Schwartz, S.L., Fuller, D., Ziemba, W.T. (1985) Long Run Effects of the National Energy Agreements, *Energy Journal* VI: 63-77.
- J28 Hausch, D.B., Ziemba, W.T. (1985) Transactions Costs, Entries and Extent of Inefficiencies in a Racetrack Betting Model, *Management Science* XXXI: 381-394.
- J29 Schaible, S., Ziemba, W.T. (1986) On the Concavity of the Sum of Lognormals in Lognormal Approximation in Portfolio Theory," *Zeitschrift fur Operations Research* XXIX: 161-186.
- J30 Gassmann, H., Ziemba, W.T. (1986) A Tight Upper Bound for the Expectation of a Convex Function of a Multivariate Random Variable, *Mathematical Programming Study, Recent Advances in Stochastic Programming* XXVII: 39-53.
- J31 Kusy, M.I., Ziemba, W.T. (1986) A Bank Asset and Liability Management Model, *Operations Research* XXXIV: 356-376.
- J32 Sick G., Ziemba, W.T. (1986) Review of 'Arbitrage Theory: Introductory Lectures on Arbitrage-Based Financial Asset Pricing by J.E.M. Wilhelm" *European Journal of Operations Research* XXVII: 255-256.
- J33 Ziemba, W.T., Canfield, B., Fauman, B. (1987) Efficient Market Adjustment of Odds Prices to Reflect Track Biases, *Management Science* XXXIII: 1428-1439.
- J34 Ziemba, W.T. (1988) Synopsis of 'Playing the Turn of the Year Effect with Index Futures"', *OR/MS Today* XV: 37-38.
- J35 Clark, R., Ziemba, W.T. (1988) Playing the Turn-of-the-Year Effect with Index Futures, *Operations Research* XXXV: 799-813.
- J36 Thaler, R.H., Ziemba, W.T. (1988) Parimutuel Betting Markets: Racetracks and Lotteries, *Journal of Economic Perspectives* II: 161-174.
- J37 Ziemba, W.T. (1988) Discussion of 'The Buying and Selling Behavior of Individual Investors at the Turn of the Year' by Jay R. Ritter, *Journal of Finance* XLIII: 717-719.
- J38 Li, Y., Ziemba, W.T. (1989) Characterizations of Optimal Portfolios by Univariate and Multivariate Risk Aversion, *Management Science*, XXXV : 259-269.
- J39 Hausch, D.B., Ziemba, W.T. (1990) Arbitrage Strategies for Cross Track Betting on Major Horseraces, *Journal of Business*, LXIII, 61-78.
- J40 Hausch, D.B., Ziemba, W.T. (1990) Locks in Racetrack Minus Pools, *INTERFACES*, May-June, 41-48.
- J41 Li, Y., Ziemba, W.T. (1990) Rules for Diversification by All Risk Averters," *Journal of Economics and Business*, Fall special issue, 165-170.

- J42 Ziemba, W.T., Schwartz, S.L. (1991) The Growth in the Japanese Stock Market, 1949-90 and Prospects for the Future, *Managerial and Decision Economics*, 12 183-195.
- J43 Ziemba, W.T (1991) Fundamental Factors in Japanese Stock Returns, 1979 to 1989, *Investing*, Winter, 73-79.
- J44 MacLean, L.C., Ziemba, W.T (1991) Growth-Security Profiles in Capital Accumulation Under Risk, *Annals of Operations Research*, 31, 501-510.
- J45 Ziemba, W.T. (1991) Japanese Security Market Regularities: Monthly, Turn of the Month and Year, Holiday and Golden Week Effects, *Japan and the World Economy*, 3, 119-146
- J46 Edirishinghe, N.C.P., Ziemba, W.T. (1992) Bounds for Stochastic Programmes with Recourse, *Operations Research*, 40, 660-677.
- J47 Markowitz, H.M., Schaible, S., Ziemba, W.T. (1992) An Algorithm for Portfolio Selection in a Lognormal Market, *International Journal of Financial Analysis*, 1 (2): 109-113.
- J48 MacLean, L. C., W. T. Ziemba, and G. Blazenko (1992). Growth versus security in dynamic investment analysis. *Management Science* 38, 1562-85.
- J49 Ziemba, W.T. (1993) Comment on 'Why a Weekend Effect?' *Journal of Portfolio Management*, Winter, 93-99.
- J50 Chopra, V., Ziemba, W.T. (1993) The Effect of Errors in Mean and Co-Variance Estimates on Optimal Portfolio Choice, *Journal of Portfolio Management*, Winter 6-11.
- J51 Stone, D. Ziemba, W.T. (1993) Land and Stock Prices in Japan, *Journal of Economic Perspectives*, Summer, 149-165.
- J52 Ziemba, W.T. (1994) Worldwide Security Market Regularities, *European Journal of Operational Research*, 74, 198-229.
- J53 Li, Y., Ziemba, W.T. (1993) Univariate and Multivariate Measures of Risk Aversion and Risk Premiums," *Financial Engineering*, special issue of *Annals of Operations Research*, 45, 265-296.
- J54 Edirishinghe, N.C.P., Ziemba, W.T (1994) Bounds for Two-Stage Stochastic Programs with Fixed Recourse, *Mathematics of Operations Research*, 19, 292-313.
- J55 Cariño, D. et al., Ziemba, W.T. (1994) The Russell-Yasuda Kasai Model: An Asset/Liability Model for a Japanese Insurance Company Using Multistage Stochastic Programming, *INTERFACES*, January - February, (Edelman Prize issue), 29-49. (A story about this paper is in the March 31, 1991 issue of the *New York Times*.)
- J56 Ziemba, W.T. (1994) Investing in the turn-of-the-year effect in US futures markets, *Interfaces* 24(3): 46-61.
- J57 Hensel, C.R., Ziemba, W.T. (1995) U.S. Small and Large Capitalized Stocks, Bonds and Cash Returns During Democratic and Republican Administrations, 1928-1993, *Financial Analysts Journal*, 51:2, March/April, 61-69.
- J58 Hensel, C.R., Ziemba, W.T. (1995) The January Barometer: Swiss, European and Global Results, *Finanzmarkt and Portfolio Management*, 9(2):187-196.
- J59 Shaw, J., Thorp, E.O, Ziemba, W.T. (1995) Convergence to Efficiency of the Nikkei Put Warrant Market of 1989-90, *Applied Mathematical Finance*, 2, 243-271.
- J60 Hensel, C.R., Sick, G., Ziemba, W.T. (1996) Investment Results from Exploiting Turn-of-the-Month-Effects, the *Journal of Portfolio Management*, Spring, 17-23. (A story about this paper is in the November 7, the *Wall Street Journal*.)
- J61 Cariño, D., and Ziemba, W.T. (1998) Formulation of the Russell-Yasuda Kasai Financial Planning Model, *Operations Research*, 46(4), July/August, 433-449.
- J62 Cariño, D., Myers, D., and Ziemba, W.T. (1998) Concepts, Technical Issues and Uses of the Russell-Yasuda Kasai Financial Planning Model, *Operations Research*, 46(4), July/August, 450-462.

- J63 MacLean, L.C., W.T. Ziemba (1999) Growth Versus Security Tradeoffs in Dynamic Investment Analysis, in R. J-B. Wets and W.T. Ziemba (eds), *Stochastic Programming: State of the Art 1998, Annals of Operations*, Research Balzer Science Publishers, 193-226.
- J64 Zhao, Y., Ziemba, W.T. (2000) A dynamic asset allocation model with downside risk control, *The Journal of Risk* 3 (Fall): 91-113.
- J65 Zhao, Y., Ziemba, W.T. (2001) A stochastic programming model using an endogeneously determined worst case risk measure in a risk-return framework for dynamic asset allocation, *Mathematical Programming, Series B*, 89 (2): 293-309.
- J66 Zhao, Y., Hausmann, U., Ziemba, W.T. (2003) A Dynamic Investment Model with a Minimum Attainable Wealth Requirement, *Mathematical Finance* 13 (October): 481-501.
- J67 Board, J.L.C., Sutcliffe, C.M.S., Ziemba, W.T. (2003) Applying Operations Research Techniques to Financial Markets *Interfaces*, 32 (March-April) 2: 12-34.
- J68 MacLean, L.C., Sanegre, R., Zhao, Y., Ziemba, W.T. (2004) Capital Growth with Security, *Journal of Economic Dynamics and Control* 28(4): 937-954.
- J69 Rudolf, M., Ziemba, W.T. (2004) Intertemporal Asset-Liability Management, *Journal of Economic Dynamics and Control*, 28(4): 975-990.
- J70 Lane, D., Ziemba, W.T. Jai-Alai Hedging Strategies, *European Journal of Finance* (2004): 353-369.
- J71 Douglass, J., Wu, O., Ziemba, W.T. (2004) Stock ownership decisions in defined contribution pension plans, *Journal of Portfolio Management*, Summer, , 92-100.
- J72 Ziemba, W. T. (2005) The symmetric downside risk Sharpe ratio and the evaluation of great investors and speculators, *Journal of Portfolio Management*, (Fall): 108-122.
- J73 MacLean, L., Ziemba, W.T., Li, Y. (2005) Time to Wealth Goals in Capital Accumulation and the Optimal Trade-off of Growth versus Security, *Quantitative Finance*, 5(4):343-357.
- J74 Koivu, M., Pennanen, T., Ziemba, W.T. (2005) Cointegration analysis of the FED model, *Finance Research Letters* 2 : 248-259.
- J75 MacLean, L. C., Zhao, Y., Ziemba, W. T. (2006) Dynamic portfolio selection with process control. *Journal of Banking and Finance* 30 (2) 317 - 339
- J76 Hausch, D.B., Bain, R., Ziemba, W.T. (2006) An Application of Expert Information to Win Betting on the Kentucky Derby”, 1981-2001, *European Journal of Finance* 12: 283-301. (featured on BCTV, May 1999 and in *Louisville Times*, June 2001).
- J77 Zhao, Y., Ziemba, W.T. (2007) On Leland's Option Pricing and Hedging Strategy with Transactions Costs, *Finance Research Letters* 4:49-58.
- J78 Kouwenberg, R., Ziemba, W.T. (2007) Incentives and risk taking in hedge funds, *Journal of Banking and Finance* 31: 3291–3310.
- J79 MacLean, L.C., Foster, M., Ziemba, W.T. (2007) Empirical Bayes estimation with dynamic portfolio models, *Journal of Banking and Finance*, 31 3503–3523.
- J80 Kallio, M., Ziemba, W.T. (2007) Using Tucker's theorem of the alternative to simplify, review and expand discrete arbitrage theory, *Journal of Banking and Finance* 31: 2281-2302.
- J81 Rendon, J. and Ziemba, W.T. (2007) Is the January effect still alive in the futures markets? *Finanzmarkt and Portfolio Management*, 21: 381-396.
- J82 Zhao, Y, Ziemba, W.T. (2007) Comments on and corrigendum to “Hedging errors with Leland's option model in the presence of transaction costs” [*Finance Research Letters* 4 (2007):49-58] *Finance Research Letters* 4:196-199.
- J83 Zhao, Y., Ziemba, W.T. (2008) Calculating risk neutral probabilities and optimal portfolio policy in a dynamic investment model with downside risk control, *European Journal of Operational Research* 185:1525–1540

- J84 Geyer, A., Ziemba, W.T., (2008) The Innovest Austrian Pension Fund Planning Model InnoALM, *Operations Research* 56 (4); 797-810.
- J85 Berge, K, Consigli, G., Ziemba, W.T, (2008) The predictive ability of the bond stock earnings yield differential, *Journal of Portfolio Management* (Spring): 63-80.
- J86 Rodriguez, J., Ziemba, W.T. (2008) Duality relations of hedge fund managers' incentive fee optimization problems, *Mathematical Programming* 113:95-131.
- J87 Ziemba, W.T. (2008) Use of stochastic and mathematical programming in portfolio theory and practice: Keynote address. *Annals of Operations Research* 166 (October): 5-22.
- J88 Consigli, G., MacLean, L.C., Zhao, Y., Ziemba, W.T. (2009) The bond-stock yield differential as a risk indicator in financial markets. *Journal of Risk*, 11 (3): 3-24.
- J89 Dzhabarov, C., Ziemba, W.T. (2010) Do seasonal anomalies still work?, *Journal of Portfolio Management*, 36(3):93-104.
- J90 MacLean, L.C., Thorp, E.O., Ziemba, W.T., (2010) Long term capital growth: The good and bad properties of the Kelly and fractional Kelly capital growth criterion, *Quantitative Finance*, 681-687.
- J91 MacLean, L.C., Consigli, G., Zhao, Y., Ziemba, W.T. (2011) Risk indicators in equity markets. *Mathematical Methods in Economics and Finance* 3(2): 101-118.
- J92 MacLean, L.C., Zhao, Y., Ziemba, W.T., (2011) Intertemporal mean variance efficiency with Markovian state price density, *Journal of Banking and Finance*, 27 pages.
- J93 MacLean, L.C., Thorp, E.O., Zhao, Y., Ziemba, W.T. (2011) How does the Fortune's Formula-Kelly capital growth model perform? *Journal of Portfolio Management* 37(4):96-111.
- J94 Ziemba, W.T. (2011) Investing in the turn-of-the-year effect, *Finanzmarkt und Portfolio Management* 25 (4): 455-472.
- J95 MacLean, L.C., Zhao, Y. and Ziemba, W.T. (2011) Mean-variance versus expected utility in dynamic investment analysis. *Computational Management Science* 8(1):3-22.
- J96 Lleo, S., Ziemba, W.T. (2012) Stock market crashes in 2007-2009: were we able to predict them? *Quantitative Finance* 12(8): 1161-1187.
- J97 Gergaud, O., Ziemba, W.T. (2012) Great investors: their methods, results and evaluation, *Journal of Portfolio Management*, 28(4):128-147.
- J98 MacLean, L.C., Zhao, Y., Ziemba, W.T. (2013) Endogenous volatilities for hedging and pricing option with transaction costs, *Quantitative Finance* 13(5):699-713.
- J99 Ziemba, W.T. (2013) Is the 60-40 stock-bond pension fund rule wise? *Journal of Portfolio Management* 39(2):63-72.
- J100 MacLean, L.C., Zhao, Y. and Ziemba, W.T. (2012) Currency returns, market regimes and behavioral biases. *Annals of Finance* 9(2):249-269.
- J101 Ziemba, W.T. (2013) The case for convex risk measures, *Quantitative Finance Letters* 1:47-54.
- J102 Shiryaev, A.N, Zhitlukhin, M.V. and Ziemba, W.T. (2014) When to sell Apple and the NASDAQ? Trading bubbles with a stochastic disorder model, *Journal of Portfolio Management*, Winter: 1-10.
- J103 Shiryaev, A.N., Zhitukhin, and Ziemba, W.T. (2015), Land and stock bubbles, crashes, entry and exit strategies in Japan, circa 1990 and in 2013, *Quantitative Finance*, 30 pages
- J104 Lleo, S. and Ziemba, W.T. (2015) Some historical perspectives on the bond-stock yield model for crash prediction around the world, *International Journal of Forecasting* 31:399-425.
- J105 Lleo, S. and Ziemba, W.T. (2014) How to lose money in financial markets: examples from the recent financial crisis, *Alternative Investment Analyst Review*, 3(3):22-35.
- J106 Ziemba, W.T. (2015) Response to Paul A Samuelson letters and papers on the Kelly capital growth investment strategy, *Journal of Portfolio Management*, 41 (1): 153-167.

- J107 MacLean, L.C., Zhao, Y. and Ziemba, W.T. (2016) Optimal capital growth with convex shortfall penalties. *Quantitative Finance* 16(1):101-117.
- J108 Ziemba, W.T. (2016) Understanding and Using the Kelly Capital Growth, *Alternative Investment Analyst Review*: 44-55.
- J109 Zhitlukhin, M.V. and Ziemba, W.T (2016) Exit strategies in bubble-like models using a change point model. *Quantitative Finance Letters* 4(1):47-52.
- J110 Swetye, J, and Ziemba, W.T (2016) Using Zweig's monetary and momentum models in the modern era. *Quantitative Finance Letters* 4(1):35-39.
- J111 Ziemba, W.T (2016) Non-predictable stock market declines. *Quantitative Finance Letters* 4(1):53-59.
- J112 Lleo, S. and Ziemba, W.T (2016) The BSEYD crash prediction model: the basic idea and early applications. *Quantitative Finance Letters* 4(1):19-25.
- J113 Lleo, S. and Ziemba, W.T (2016) The BSEYD crash prediction model: additional applications and other models for stock market crash prediction. *Quantitative Finance Letters* 4(1):26-34.
- J114 Lleo, S. and Ziemba (2017) W.T Does the bond stock earnings yield difference model predict equity market corrections better and high PE models? *Financial Markets, Institutions and Instruments* 26(2):61-123.
- J115 Ziemba, W.T. (2016) An approach to financial planning of retirement pensions with scenario dependent correlation matrices and convex risk measures, *Journal of Retirement, Summer 1-13*
- J116 Lleo, S., Zhitlukhin, M.V. and Ziemba, W.T. (2016) Introduction to bubbles and crashes, *Quantitative Finance Letters* 1-3.
- J117 Lleo, S and Ziemba, W.T. (2018) Predicting stock market crashes in China, *Journal of Portfolio Management* 44(5):25-135.
- J118 Edirisinghe, N.C.P. and Ziemba, W.T. (2018) A boundary-point LP method and its application to dense linear programs, *International Journal of Mathematics in Operational Research* 1-27.
- J119 Dzhabarov, C., Ziegler, A. and Ziemba, W.T. (2018) Sell in May: worldwide evidence, *Quantitative Finance* 18(2): 171-181.
- J120 Lleo, S. and Ziemba, W.T. (2019) Can Warren Buffett also predict equity market downturns? *European Journal of Finance* 25(4):369-393.
- J121 Lleo, S. and Ziemba, W.T. (2019) Predicting Chinese stock market crashes, *Financial Markets, Institutions and Instruments*, submitted.
- J122 MacLean, L.C., W.T. Ziemba and A. Korgan (2018) The expected utility of performance: dominant betting seasons in baseball, *Wilmott* (November): 40-43.
- J123 MacLean, L.C. and W.T. Ziemba (2019) Efficiency of NFL betting markets, *Wilmott* (January), 34-38
- J124 Moffitt, S. and W.T. Ziemba (2019) A risk arbitrage strategy for lotteries, *Wilmott* (March): 52-62.
- J125 Moffitt, S. and W.T. Ziemba (2019) Does it pay to buy the pot in the Canadian 6/49 lotto? Implications for lottery design, *Wilmott* (May) 43-52

#### **K – Selected Articles in Books**

- K1 MacLean, L.C., Zhao, Y., Ziemba, W.T. (2003) A process control approach to investment risk. *IEEE International Conference on Computational Intelligence for Financial Engineering*, 265-270.



- K2 MacLean, L.C., Ziemba, W.T. (2006) Capital growth theory and practice in *Handbook of Asset and Liability Modeling*, Volume 1: *Theory and Methodology*, S.A. Zenios, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 429-473.
- K3 Ziemba, W.T. (2007) The Russell Yasuda, InnoALM and related models for pensions, insurance companies and high net worth individuals in *Handbook of Asset and Liability Modeling*, Volume 2: *Applications and Case Studies*, S.A. Zenios, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 861-962.
- K4 Schwartz, S.L., Ziemba, W.T. (2007) ALM in social security, in *Handbook of Asset and Liability Modeling*, Volume 2: *Applications and Case Studies*, S.A. Zenios, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 1069-1117.
- K5 MacLean, L., Zhao, Y., Consigli, G., Ziemba, W.T. (2007). Estimating parameters in a pricing model with state dependent shocks. in *Handbook of Financial Engineering*, P.M. Paradolos and C. Zopounidis (Eds), Springer, 231-245.
- K6 Purnanandam, A, Warachka, M., Zhao, Y., Ziemba, W.T. (2007) Incorporating diversification into risk management, in *Advances in Risk Management*, G.N. Gregoriou (ed), Palgrave, pages 22-46.
- K7 Tompkins, R.G., Ziemba, W.T., Hodges, S.H. (2008) The favorite-longshot bias in S&P500 futures options: the return to bets and the cost of insurance, in *Handbook of Sports and Lottery Markets*, D.B. Hausch, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 161-180.
- K8 Ziemba, W.T. (2008) Efficiency of racetrack betting markets, in *Handbook of Sports and Lottery Markets*, D.B. Hausch, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 183-221.
- K9 Lane, D., Ziemba, W.T. (2008) Arbitrage in team Jai Alai, in *Handbook of Sports and Lottery Markets*, D.B. Hausch, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 253-271.
- K10 Gramm, M., Ziemba, W.T. (2008) The dosage breeding theory for horseracing predictions, in *Handbook of Sports and Lottery Markets*, D.B. Hausch, W.T. Ziemba (eds) in *Handbooks in Finance*, North Holland, 307-332.
- K11 Ziemba, W.T. (2010) Ideas in asset liability management in the tradition of H.M. Markowitz in *Essays in Honor of H.M. Markowitz*, J. Guerard (ed), Springer, 213-258.
- K12 MacLean, L.C., Ziemba, W.T. (2010) The Kelly strategy, in *Encyclopedia of Quantitative Finance*, B. Cont (ed), 5 pages.
- K13 MacLean, L.C., Thorp, E.O., Zhao, Y., Ziemba, W.T. (2010) Medium term simulations of Kelly and fractional Kelly and proportional betting strategies in MacLean, L.C., E. O. Thorp, Ziemba, W.T., Eds., *The Kelly Capital Growth Criterion: Theory and Practice*, World Scientific, 543-561.
- K14 MacLean, L.C., Thorp, E.O., Ziemba, W.T. (2010) Good and bad properties of the Kelly criterion in MacLean, L.C., E. O. Thorp, Ziemba, W.T., Eds., *The Kelly Capital Growth Criterion: Theory and Practice*, World Scientific, 563-572.
- K15 Ziemba, W.T., Vickson, R. (2010) Models of optimal capital accumulation and portfolio selection (modified from Ziemba, W.T., Vickson, R (2006) in MacLean, L.C., E. O. Thorp, Ziemba, W.T., Eds., *The Kelly Capital Growth Criterion: Theory and Practice*, World Scientific, 473-485.
- K16 Ziemba, W.T. (2010) Asset-liability management in R. Cont (Ed), *Handbook of Quantitative Finance*, Wiley, 20 pages.
- K17 Board, J.L., Sutcliffe, C.M.S., Ziemba, W.T. (2010) Portfolio theory mean-variance in S.I. Gass (ed) *Encyclopedia of Operations Research and Management Science*, 3<sup>rd</sup> Edition, Academic publishers, 12 pages.
- K18 Board, J.L., Sutcliffe, C.M.S., Ziemba, W.T. (2010) Financial markets in S.I. Gass (ed) *Encyclopedia of Operations Research and Management Science*, 3<sup>rd</sup> Edition, Academic publishers, 18 pages

- K19 Ziemba, W.T. and MacLean, L.C. (2011) Using the Kelly criterion for investment in M.I. Bertocchi, G. Consigli and M.A.H. Dempster (eds) *Stochastic Optimization Methods in Finance and Energy*, Springer, 3-20
- K20 MacLean, L.C., Zhao, Y. and Ziemba, W.T. (2011) Growth-security models and stochastic dominance in G. Infanger (ed) *Stochastic Programming: the State of the Art in Honor of George B. Dantzig*, Springer, 213-258
- K21 Ziemba, W.T. (2012) Stochastic programming and optimization in horserace betting in Gassman, H. I. and W. T. Ziemba, *Stochastic Programming Applications in Finance, Energy and Production*, World Scientific, 221-256
- K22 MacLean, L.C. and Ziemba, W.T. (2013) The Kelly criterion with games of chance, L. Vaughn Williams and D.S. Siegal (eds), *Oxford Handbook of Economics of Gambling*, Oxford University Press, pp. 402-427.
- K23 Ziemba, W.T. (2013) Portfolio optimization in A. Bell, C. Brooks and M. Protopczuk (Eds), *Handbook of Research Methods and Applications in Empirical Finance*, Edward Elgar, pp 45-72.
- K24 Ziemba, W.T. (2015) Portfolio optimization: theory and practice, in K. Zopoundis (ed) *Quantitative Financial Risk Management: Theory and Practice*, The Frank Fabozzi Series, Wiley, 57 pages.
- K25 Ziegler, A. and W.T. Ziemba (2015) Returns from investing in S&P500 futures options, 1985-2010, in Mallarias, A.G., Ziemba, W.T. Eds. *Handbook of Futures Markets*, World Scientific, 643-688.
- K26 Lleo, S. and W.T. Ziemba (2015) The Swiss black swan bad scenario: is Switzerland another casualty of the eurozone crisis? in J. Guerard Ed *Portfolio construction, measurement and efficiency: essays in honor of Jack Treynor*, Springer, 389-420
- K27 Lleo, S. and Ziemba, W.T. (2015) How to lose money in derivatives: examples from hedge funds and bank trading departments, in A. Malliaris and W.T. Ziemba (Eds). *Handbook of Futures Markets*, World Scientific, 689-750

### **P –Working Papers**

- P1. MacLean, L.C., Zhao, Y., Ziemba, W.T., Intertemporal mean variance efficiency with Markovian state price density, 27 pages.,
- P2. Ziemba, W.T. What operations research can contribute to your personal financial situation including your retirement, 22 pages.
- P3. Ghosh, S, Bhalla, G. and Ziemba, W.T. The January Barometer, 1926-2005, Technical Report, Sauder School of Business, 22 pages.
- P4. Berge, K., Ziemba, W.T., The predictive ability of the bond and stock earnings yield differential in US and foreign markets, 1970-2005, Working paper, 40 pages.
- P5. Consigli, G., MacLean, L.C., Zhao, Y., Ziemba, W.T., Speculative bubbles: asset prices with yield dependent market corrections, 20 pages.
- P6. Lleo, S, and Ziemba WT, Optimality of rogue traders, 20 pages.
- P7. Gramm, M., Ziemba, W.T., Market efficiency of America's triple crown races
- P8. Kim, W.C., Lee, Y and Ziemba, W.T. When is 1/N better than the optimal mean variance portfolio? 30 pages
- P9. Lleo, S., Markowitz, H and Ziemba, W.T. Is 60-40 on the efficient frontier?
- P10. MacLean, L.C. and Ziemba, W.T. Measuring batting impact in baseball

