Timothy T. Simin

Department of Finance
Smeal School of Business
The Pennsylvania State University

345 Business Building
University Park, PA 16802
Homepage: http://timsimin.net

Office Phone: (814) 865-3457
Home Phone: (814) 235-4858
Fax: (814) 865-3362

Education

2002	Ph.D. Finance, The University of Washington, Seattle, Washington Minors in Statistics and Econometrics Dissertation: "The (Poor) Predictive Performance of Asset Pricing Models", Dissertation committee: Wayne Ferson (Chair), Alan Hess, Avi Kamara, Jennifer Koski, Doug Martin, Jeff Pontiff, and Eric Zivot
1992	Bachelor of Science in Economics and Finance with Honors, University of Texas at Dallas. Graduated *Summa Cum Laude*, Thesis: "Budget Deficits, Interest Rates, and Capital Inflows"

Academic Appointments

2016-present	PhD Program Coordinator
2008 - present	Associate Professor, Smeal School of Business, The Pennsylvania State University
2000 - 2008	Assistant Professor, Smeal School of Business, The Pennsylvania State University
2000	Visiting Scholar at Kenan-Flagler Business School, University of North Carolina at Chapel Hill (MBA International Economics)

Research: Empirical evaluation of the quality of the expectations generated by asset pricing models allowing for different degrees of time-variation in expected returns and risk premiums. Other interests include international finance and robust estimation techniques.

Teaching: Empirical Methods in Asset Pricing; (Ph.D.)
Investments, Business Economics, International Economics, International Finance; (Undergraduate, MBA and Executive MBA)
Corporate Finance; (Undergraduate)
Math Camp (Ph.D.)

Journal Articles

"Information Choice, Uncertainty, and Expected Returns", with Charles Cao and David Gempesaw, *Review of Financial Studies* (Forthcoming), 2020

We investigate how information choices impact equity returns and risk. Building upon the theory of Van Nieuwerburgh and Veldkamp (2010), we estimate a learning index that reflects the expected benefits of learning about an asset. High learning index stocks have lower future returns and risk compared to low learning index stocks. Analysis of a conditional asset pricing model, long run patterns in returns and volatilities, other measures of information ow, and the information environment surrounding earnings announcements reinforce our interpretation of the learning index. Our findings support the model's predictions and illustrate a novel empirical measure of investor learning.

"An Empirical Analysis of Commodity Convenience Yields", with Cantekin Dincerler, Zeigham Khokher, *Quarterly Journal of Finance*, 2020, Vol. 10, No. 02, 2050009

We study convenience yield dynamics using a dataset of inventories to proxy for relative scarcity. We confirm that convenience yields are negatively related to inventories although they plateau during periods of scarcity for crude oil. Inventory *withdrawals* are non-monotonically related to the convenience yield and they forecast significant futures returns. Testing for the effect of demand shocks, we document both temporary and permanent price components. Importantly, we show that mean reversion in expected equilibrium prices varies with relative scarcity. This result suggests an important bias in contingent claims models in extant practice.

"Predicting the equity premium with the implied volatility spread", with
Charles Cao and Han Xiao, *Journal of Financial Markets* (lead article forthcoming), 2020 .

We show that the call-put implied volatility spread (*IVS*) outperforms many well-known predictors of the equity premium at return horizons up to 6-months. The predictive ability of the *IVS* is unrelated to the dividend yield and is useful in explaining the cross-section of returns. Decomposing the *IVS*, we find the longer run predictive ability of the *IVS* operates primarily through a cash flow channel. We also find the *IVS* is significantly related to indicators of aggregate market direction and expected market conditions. Our results are consistent with the *IVS* reflecting market sentiment as well as information about informed trading.

"The Decline of Informed Trading in the Equity and Options Markets", with Charles Cao and David Gempesaw, *Journal of Alternative Investments*, 2018, 21 (20), Pages 16-29.

Reliable excess returns from active portfolio management derive from informed trading. We investigate the information content of informed trading in the equity market and the options market. We find that informed equity trading and options trading are positively correlated in the time-series, but virtually uncorrelated cross-sectionally. Portfolio-level and stock-level analyses provide robust evidence that the cross-sectional return predictive power of informed trading in each market is distinct. Time-series analyses indicate that aggregate informed options trading is useful for predicting market returns, but that the amount of informed trading has declined significantly over the last 15 years. The time-series patterns of both our informed trading measures coincide closely with the decline in equity hedge fund excess returns.

"The Information Content of a Nonlinear Macro-Finance Model for Commodity Prices", with Saqib Khan Zeigham Khokher. *The Review of Financial Studies*, 2017, 30(8), Pages 2818–2850,

State-of-the-art term structure models of commodity prices have serious difficulties extrapolating the prices of long-maturity futures contracts from short-dated contracts. This situation is problematic for valuing real commodity-linked assets. We estimate a nonlinear four-factor continuous time model of commodity price dynamics. The model nests many previous specifications. To estimate the model, we use crude oil prices and inventories. The inventory data and nonlinear price dynamics have a large impact on oil price forecasts. The additional factor in our model compared with current three-factor models has a significant impact on model-implied long-maturity futures prices.

"Bringing Leased Assets onto the Balance Sheet", with Kimberly Cornaggia and Laurel Franzen. *Journal of Corporate Finance*, 2013, Volume 22, Pages 345-360

Pending changes in lease accounting standards will require firms to recognize obligations that have historically been kept off- balance-sheet (OBS). We examine the implications of this accounting treatment for a host of common risk and performance metrics. Conventional leverage, Z-Score, levered beta, return on capital and other asset utilization measures underestimate risk and overstate performance of firms relying heavily on OBS leasing. The distortion affects relative rankings as well as average levels and has increased over time. Proposed changes in reporting standards aim to mitigate future distortion, but necessitate adjustments for time-series comparisons. Under current reporting standards, investors, analysts, and researchers can estimate leased asset value and adjust accounting-based metrics to better reflect these fixed costs.

"Do Mutual Fund Managers Time Market Liquidity?" with Charles Cao (the Pennsylvania State University) and Ying Wang (State University of New York, Albany), *Journal of Financial Markets*, 2013, Volume 16, Issue 2, Pages 279-307.

This paper examines mutual fund managers' ability to time market-wide liquidity. Using the CRSP mutual fund database, we find strong evidence that over the 1974–2009 period, mutual fund managers demonstrate the ability to time market liquidity at both the portfolio level and the individual fund level. Liquidity timing predicts future fund performance and the difference in the risk-adjusted returns between top and bottom liquidity-timing funds is approximately 2% per year. Funds exhibiting liquidity-timing ability tend to have longer histories, higher expense ratios, and higher turnover rates.

"Do Growth Options Explain the Trend in Firm Specific Risk?" with Charles Cao (the Pennsylvania State University) and Jing Zhao (North Carolina State University), *Review of Financial Studies*, 2008, 21(6), pp. 2599-2634.

Winner of the Third NTU International Conference on Economics, Finance, and Accounting (IEFA) best paper award (2005).

Campbell, Lettau, Malkiel, and Xu (2001) document increasing idiosyncratic volatility over the past four decades. The explanation for this upward trend remains an open question. Motivated by the classic corporate finance theory of Galai and Masulis, we provide a theoretic based explanation and show that the level and variance of corporate growth options, conditional on the market value of capital structure, are significantly related to idiosyncratic volatility. These results are robust across different exchanges and not due to the 'internet bubble' period. The evidence clearly supports growth options over alternative explanations of the trend in idiosyncratic volatility.

"Asset Pricing Regressions with Interaction Terms", with Wayne E. Ferson (Boston College) and Sergei Sarkissian (McGill University), *Journal of Financial and Quantitative Analysis, 2008, 43(2), 331-354.*

This paper studies regression models in which lagged variables predict stock returns in interaction with contemporaneous values of asset pricing factors. We concentrate on their sampling properties in the presence of data mining and potential spurious regression due to persistent lagged regressors. We find that regressions with interaction terms remain reasonably well specified for conditional betas, even in settings where simpler predictive regressions are severely biased. This partially justifies the use of such regressions in recent asset pricing studies.

"The (Poor) Predictive Performance of Asset Pricing Models", *Journal of Financial and Quantitative Analysis, 2008, 43(2), 355-380.*

This paper examines forecast errors of conditional and unconditional asset pricing models for portfolio and firm level equity returns. A new result concerning model specification and forecasting that increases predictive precision is introduced. Conditional versions of the models generally produce lower mean squared errors than unconditional versions for in-sample but not for step-ahead prediction. This hold true for individual firm data when the instruments are firm specific. While decomposing the forecast error into separate variance and bias components indicates the models produce relatively unbiased predictions, one step ahead predictive ability rarely exceeds that of simple benchmarks.

"Measuring Distress Risk: The Effect of R&D Intensity", with Laurel Franzen (University of Texas) and Kimberly J. Rodgers (New York University), *Journal of Finance, 2007, 62(6), pp. 2391-2968.*

Because of upward trends in research and development activity, accounting measures of financial distress have become less accurate. We document that (1) higher research and development spending increases the likelihood of misclassifying solvent firms, (2) adjusting for conservative accounting of research and development increases the number of correctly identified distressed firms, and (3) adjusted measures of distress alleviate previously documented anomalously low returns of large high distress risk, low book-to-market firms. The results hold after updating stale parameters and under various tax assumptions. Our evidence raises concerns about interpretation of extant literature that relies on accounting measures of distress.

"Can Event Study Methods Solve the Currency Exposure Puzzle?" with Kathryn L. Dewenter and Robert C. Higgins (both from the University of Washington). *Pacific-Basin Finance Journal, 2005, 13(2), pp. 119-144.*

Prior empirical evidence on the stock price response of exposed firms to contemporaneous changes in exchange rates is weak. This paper avoids problems encountered in previous work by using event-study methods to examine the daily stock price reactions of exposed U.S. multinationals to large, bi-lateral declines in the Mexican peso and Thai baht. We find a contemporaneous price response but interpret the magnitude of the response to say that the currency puzzle is not primarily due to methodological weaknesses. Several findings suggest that effective financial and operational hedging may be the chief reason exchange rate changes do not affect stock prices more dramatically.

"Is Stock Return Predictability Spurious?" with Wayne Ferson (Boston College) and Sergei Sarkissian (McGill University). *Journal of Investment Management,* 2003, *1(3), pp. 1–10.*

Two problems, spurious regression bias and naïve data mining, conspire to mislead analysts about predictive models for stock returns. This article demonstrates the two problems, how they interact, and makes suggestions for what to do about it.

"Spurious Regressions in Financial Economics?"* with Wayne Ferson (Boston College) and Sergei Sarkissian (McGill University). *Journal of Finance, 2003, 58(4), pp. 1393-1413.* [nominated for the 2003 Smith-Breeden Award]

Even though stock returns are not highly autocorrelated, there is a spurious regression bias in predictive regressions for stock returns related to the classic studies of Yule (1926) and Granger and Newbold (1974). Data mining for predictor variables interacts with spurious regression bias. The two effects reinforce each other, because more highly persistent series are more likely to be found significant in the search for predictor variables. Our simulations suggest that many of the regressions in the literature, based on individual predictor variables, may be spurious.

"Outlier Resistant Estimates of Beta" with R. D. Martin (University of Washington - Dept. of Statistics). *Financial Analysts Journal, 2003, 59(5), pp. 56-69.*

Depending on location, outliers in returns can substantially bias ordinary least squares (OLS) estimates of beta. We introduce a new beta that is resistant to outliers causing the most bias in OLS estimates, but produces estimates similar to OLS for outlier free data. The beta is an intuitively appealing weighted least squares estimate with data-dependent weights. We contend that the resistant beta provides a better predictor of future risk and return characteristics than the OLS beta in the presence of outliers and is a valuable complement to OLS beta. Our analysis reveals small firm betas are most susceptible to outliers.

"The Alpha Factor Asset Pricing Model: A Parable" with Wayne Ferson (Boston College) and Sergei Sarkissian (McGill University). *Journal of Financial Markets, 1999 2(1), pp. 49-68*. Abstracted in *The CFA Digest 30(2), Spring 2000, pp. 17-18.*

Recent empirical studies use the returns of attribute-sorted portfolios of common stocks as if they represent risk factors in an asset-pricing model. If the attributes are chosen following an empirically observed relation to the cross-section of stock returns, such portfolios will appear to be useful risk factors, even when the attributes are completely unrelated to risk. We illustrate this result using a parable and argue that the moral of the story is important in practice.

"The Market Reaction to Federal Reserve Policy Action from 1989 to 1992" with Vincent Reinhart (Board of Governors of the Federal Reserve System). *Journal of Economics and Business, 1997, 49, pp. 149-168.*

An examination of the market reaction to Federal Reserve policy easings from 1989 to 1992 suggests that these actions were mostly unexpected and were not viewed to be persistent. Changes in the intended trading range for the federal funds rate had their greatest impact on the near-term outlook, but those effects diminished as the investing horizon lengthened. By this interpretation, any change in longer-term interest rates was mostly owed to the consequences of lower near-term rates, not to any substantial revision to the longer-run outlook. Most significantly, the range of reaction was remarkably wide across all markets.

Book Chapters

"Predicting the equity premium with the implied volatility spread," (with Charles Cao and Han Xiao), Encyclopedia of Finance 3rd Edition (forthcoming) *, C.F. Lee, Editor, Springer Publishing*

"Spurious Regression and Data Mining in Conditional Asset Pricing Models," with (Wayne Ferson and Sergei Sarkissian), *Handbook of Quantitative Finance,3(1), C.F. Lee, Editor, Springer Publishing*

"Estimating the exchange rate exposure of US multinational firms: Evidence from an event study methodology," (with Kathryn L. Dewenter and Robert C. Higgins), in *Risk Management, eds. Michael Frenkel, Ulrich Hommel, Markus Rudolf, Springer, 2000.*

"Robust Beta Mining," (with R. D. Martin), in *Information Visualization in Data Mining and Knowledge Discovery," ed. U. Fayyad, G. Grinstein, and A. Wierse, 2001.*

Working Papers

"Revisiting the International CAPM" with Stephen Owen and Charles Cao.

"Are Hedge Fund Capacity Constraints Binding? Evidence on Scale and Competition", with Raisa Vethuis and Charles Cao.

"Firm Location and the Value-Growth Premium", with Brent Ambrose and Yifan Chen

"Does Working from Home Impair Mutual Fund Performance?", with Charles Cao and Han Xiao.

"A Dynamic Partial Equilibrium Model of Capital Gains Taxation", with Stephen Lenkey**.**

"Betting Against Leverage", Kimberly Cornaggia and Fatma Sonmez

"Return Predictability under the Alternative", with Marco Rossi (University of Notre Dame) and Daniel R. Smith (Queensland University of Technology - School of Economics and Finance).

Technical Reports

"Robust Estimation of Beta" with Douglas R. Martin (University of Washington). University of Washington Statistics Department Tech. Report no. 350, 1999

"**Estimates of Small-Stock Betas are Often Very Distorted by Outliers**," with Douglas R. Martin (University of Washington). University of Washington Statistics Department Tech. Report no. 351, 1999

Professional Activities

Editorial Services

Associate Editor: Review of Quantitative Finance and Accounting
Associate Editor: Quantitative Finance Letters,
Associate Editor (Finance) for Canadian Journal of Administrative Sciences

Referee Services

Annals of Finance, Contemporary Accounting Review, Energy Economics, Finance Research Letters, Financial Management, Financial Review, Journal of Asia-Pacific Business, Journal of Banking and Finance, Journal of Business and Economic Statistics, Journal of Economics and Business, Journal of Empirical Finance, Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Financial Econometrics, Journal of Financial Research, Journal of Futures Markets, Journal of International Money and Finance, Journal of Risk, Journal of Undergraduate Research in Finance, Management Science, Pacific Basin Finance Journal, Quantitative Finance, Quarterly Review of Economics and Finance, Research Grants Council of Hong Kong, Review of Asset Pricing Studies, Review of Economic Studies, Review of Finance, Review of Financial Studies, Southern Economic Journal, The Accounting Review, The Journal of Undergraduate Research in Finance, The Quarterly Journal of Finance and Accounting, The Southern Economic Journal

Conference Presentations/Discussions/Session Chair

Western Finance Association (1998, 2000, 2002, 2003, 2004, 2005), Financial Management Association Doctoral Student Consortium (1999), Financial Management Association (2000, 2002, 2004, 2005, 2007), Northern Finance Association (2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016), European Finance Association (2004), Conference on Financial Economics and Accounting (2006), American Finance Association (2007), Sanford-Bernstein: Controversies in Quantitative Finance and Asset Mgt. (2007, 2008, 2009, 2010), Theory and Practices of Securities and Financial Markets Conference (2005), SFS Cavalcade (2012), Queens School of Business Behavior Finance Conference (2011, 2012), PSU-CMU-PITT Conference (2017, 2018)

Research Workshops

University of Washington (1998, 1999, 2002), University of North Carolina at Chapel Hill (1999), Arizona State University (2000), Pennsylvania State University (2000, 2001, 2004), Syracuse University (2000), Southern Methodist University (2000), Texas A&M (2000), University of Western Ontario (2004, 2008), University of Texas at Dallas (2004), HEC Montreal (2005), University of Toronto (2006), Bank of Canada (2006), Queens University (2006), University of Amsterdam (2006), Norwegian School of Management (2006), University of Copenhagen (2006), Temple University (2006, 2007), Indiana University (2008), Baruch University (2008), North Carolina State University (2008), American University (2008), Binghamton University (2009), University of Texas at Austin (2009), University of Texas at San Antonio (2011), Laval University (2011), University of North Carolina (2012), University of Missouri (2012), Concordia University (2014), Queens University (2018), University of Southern Florida (2019), Brigham Young University (2021)

Program Committees

European Finance Association (2006, 2007, 2008, 2009)
Financial Management Association (2002, 2004 - Present)
Financial Management Association Awards Committee (2005)
Northern Finance Association (2006-present)
Multinational finance society, Program committee, Committee Member. (2009)

Manuscript Reviews

Addison-Wesley
Springer

External Evaluator for Promotion and/or Tenure

Dalhousie University, School of Business, External Reviewer. (2015).
University of Georgia, Terry College of Business, External Reviewer. (2014).
Queen's University, Queen's School of Business, External Reviewer. (2011).
University of Miami, School of Business, External Reviewer. (2016).

University Service

Finance Department PhD program Coordinator (2016-present): Recruitment, advisement, curriculum development, assessment, placement

Ph.D. Committees:
- Edward Glidewell, Finance, (2003)
- Guang Guo, Economics, (2004)
- Luis Martins, Economics, (2005)
- Anthoula Fotsiou, Finance, (2005)
- Basak Denizci, Hotel and Restaurant Mgt. (2006)
- Lu Zhang, Statistics (2008)
- Lubos Petrasek (co-chair), Finance, (2011)
- Brad Goldie, Finance, (2011)
- Sam Bonsall, Accounting, (2012)
- Hyun Jung Lee, Accounting, (2013)
- Michael Penn, Accounting, (2012)
- P.J. Hoffman, Accounting, (2013)
- Renee Koo Flasher, Accounting, (2013)
- Adrienne Rhodes, Accounting, (2013)
- V. Luke Watson, Accounting, (2013)
- P. J. Hoffman, Accounting, (2013)
- Grant Farnsworth, Finance (2013)
- Anas Aboulamer, Concordia University (2014)
- Hyunphil Choi, Statistics PSU, (2016)
- Raisa Velthuis, Finance (2016)
- Aaron Henricksen, Finance (2017)
- Daniel McKeever, (co-chair) Finance (2018)
- Kevin Pisciotta, Finance (2018)
- David Gempesaw, Finance (2019)
- Stephen Owen (2020)

Undergraduate Honors Thesis (Advisor or Reader)
2007 (7), 2008 (2), 2009 (4), 2011 (5), 2012 (4), 2013(9), 2014 (3), 2015 (2), 2017 (1)

Faculty Representative:
- The Financial Management Association
- The Penn State Investment Association

Graduate Fellowship Committee (2009- 2012)
Smeal Database Committee (2008 – 2013)
Finance Dept P&T Committee (2012, 2013, 2015, 2016)
Digital Dossier Committee (2013)
MBA curriculum and policy committee, Chairperson. (2014 - Present).
Smeal Promotion and Tenure Committee, Member. (2014/2015, 2018/2019)
University Hearing Committee, Member. (2010 - Present).

Community Service

Advisory Board for State College High School Little Lions Investment Club (2012-Present)

Keynote Speaker at Leadership Centre County annual meeting (2013, 2015, 2016, 2018)

Honors and Awards

Faculty Recognition, PSU EMBA Association (2018)
Most Entertaining Professor Award, PSU MBA Association (2016)
Dillwyn P. Paiste, III Award for Excellence in Undergraduate Teaching (2007)
Best paper award, Third NTU IEFA (2005)
Best Investments Paper, Northern Finance Association (2001)
Evert McCabe Endowed Fellowship (1998)
Michael G. Foster Fellowship (1998)
Boeing Endowment for Excellence Scholarship (1997)
Outstanding Contribution to Undergraduate Education (1995)
Excellence in Teaching Award (1994)

Non-Academic Professional Experience

Insightful, Seattle WA. *Consultant 1995-1999*

Developed graphical user interfaces for robust statistical analysis and seasonal adjustment (X12 Arima). Consulted on sales projects to financial institutions. Assisted in testing and implementation of new robust statistical techniques and optimization programs. Taught SPlus financial course to Fidelity Fixed Income Group.

Federal Reserve Board of Governors, Washington, DC. *Research Assistant in Division of Monetary Affairs, 1992-1994*

Banking and Money Market Analysis: Maintained database programs and econometric models. Assisted senior economist with FOMC briefings, Board memos, and research. Implemented automated software systems for tracking interest rates. Sun Area Network Manager: Assisted senior technicians with maintenance.