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PROFESSIONAL EXPERIENCE

Federal Reserve Bank of New York
Economist, September 2008 to present

Credit Suisse
Summer Associate, Asset Management, 2005

EDUCATION

University of Chicago, Graduate School of Business
Ph.D. in Finance, 2008
Thesis: *Essays on Economic Fundamentals in Asset Pricing*

M.B.A. in Finance and Economics, 2008

Fudan University, Shanghai, China
B.S. in Statistics, 2002

RESEARCH INTEREST

Credit Risk, Derivative Market, Commercial Real Estate, Financial Econometrics

HONORS AND AWARDS

NBER Time Series Conference Travel Award for 2006 and 2007.

Oscar Mayer Fellowship for Dissertation, University of Chicago GSB, 2007.

University of Chicago Graduate School of Business Doctoral Fellowship for 2002-2006.

Chun-Tsung Scholar, provided by Nobel Prize Laureate Dr. TsungDao Lee, 1999-2001.

All-around best student, Ministry of Education in Shanghai, 2000.

Presidents Award, Unilever Fellowship, CitiBank Fellowship, Peoples first Prize, 1999-2001.

RESEARCH PAPERS AND REFEREED PUBLICATIONS

“State Space Models and MIDAS Regressions” (with [Eric Ghysels](#), UNC-Chapel Hill and [Jonathan Wright](#), John Hopkins), *Econometric Reviews* forthcoming

We examine the relationship between MIDAS regressions and Kalman filter state space models applied to mixed frequency data. In general, the latter involves a system of equations, whereas in contrast MIDAS regressions involve a (reduced form) single equation. As a consequence, MIDAS regressions might be less efficient, but also less prone to specification errors. First we examine how MIDAS regressions and Kalman filters match up under ideal circumstances, that is in population, and in cases where all the stochastic processes - low and high frequency - are correctly specified by

a linear state space model. We characterize cases where the MIDAS regression exactly replicates the steady state Kalman filter weights. In cases where the MIDAS regression is only an approximation, we compute the approximation error and find it to be small (using two different metrics). We also study how MIDAS regressions perform in comparison to the Kalman filter when the latter is subject to specification errors. Our findings favor MIDAS regressions, as their approximation errors are typically small in comparison to the model specification errors of the Kalman filter. The paper concludes with an empirical application comparing MIDAS and Kalman filtering to predict future GDP growth, using monthly macroeconomic series.

“Anchoring Corporate Credit Spreads to Firm Fundamentals” (with [Liuren Wu](#), CUNY Baruch), *Revise and Resubmit, Review of Financial Studies*

This paper examines the capability of structural models, and more generally firm fundamental characteristics, in explaining the cross-sectional variation of credit default swap spreads. The paper starts with a new implementation of the Merton (1974) structural model, highlighting its cross-sectional explanatory power, and then proposes a Bayesian shrinkage method to combine the additional predictions from a long list of firm fundamental variables. A comprehensive analysis based on 579 U.S. non-financial public firms over a period of 351 weeks shows that, with the new implementation, the structural model can explain over 66% of the cross-sectional variation on average. Incorporating additional fundamental variables can increase the average cross-sectional explanatory power to 77% while also making the performance more uniform over time. Furthermore, deviations between market observations and fundamental-based predictions generate statistically and economically significant forecasts on future market movements in credit default swap spreads.

“The Determinants of the CDS-Bond Basis During the Financial Crisis of 2007-2009” (with [Pierre Collin-Dufresne](#), Columbia), November 2011.

We investigate both the time-series and cross-sectional variation in the CDS-bond basis, which measures the difference between the CDS spread and cash-bond implied credit spread, for a large sample of individual firms during the financial crisis. We test several possible explanations for the violation of the arbitrage relation between cash bond and CDS contract that would, in normal conditions, drive the basis to zero. Our findings do not uncover a clear single explanatory factor for the anomaly. Rather they point towards several drivers related to funding risk, counterparty risk and collateral quality that force the individual bond basis into negative territory at different phases of the crisis.

“Property Rights Institutions and the “Transfer Risk” from Government to Corporate Defaults — International Evidence from the Credit Default Swap Market” (with [Shang-Jin Wei](#), Columbia), November 2011

We use a novel international CDS data set to study the role of institutions in mitigating the “transfer risk” from government to corporate defaults. According to Acemoglu and Johnson (2005), institutions can be classified as property rights institutions and contracting institutions; the former balances the relationship between the government and creditors whereas the latter balances the relationships among creditors. We find that (1) sovereign risk on average has a statistically and economically significant influence on corporate credit risk. All else equal, 100 basis points increase in sovereign CDS spread leads to an average 71 basis points increase in corporate CDS spread; (2) the sovereign-corporate relation varies across corporations, state-owned companies tend to have a stronger sovereign-corporate relation. However not all governments can equally appropriate the

private sector. Strong country-level property rights institutions tend to weaken the connection between sovereign and corporate credit risk. Yet country-level contracting institutions that bring about stronger protection of creditor rights or minority shareholder rights do not appear to matter much.

“Equity Premium Predictions with Adaptive Macro Indices”, November 2008

Fundamental economic conditions are crucial determinants of equity premia. However, commonly used predictors do not adequately capture the changing nature of economic conditions and hence have limited power in forecasting equity returns. To address the inadequacy, this paper constructs macro indices from large datasets and adaptively chooses optimal indices to predict stock returns. I find that adaptive macro indices explain a substantial fraction of the short-term variation in future stock returns, and have more forecasting power than both the historical average of stock returns and commonly used predictors. The forecasting power exhibits a strong cyclical pattern, implying the ability of adaptive macro indices in capturing time-varying economic conditions. This finding highlights the importance of using dynamically-measured economic conditions to investigate empirical linkages between equity premium and macroeconomic fundamentals.

WORK IN PROGRESS

“Have Financial Markets Become More Informative?” (with [Thomas Philippon](#), [Alexi Savov](#) New York University), 2012

“The Time-series Determinant of Cross-sectional Anomalies” (with [Long Chen](#), Washington University of St. Louis), 2012

“Flights in European Sovereign CDS and Bond Markets” (with [Kathy Yuan](#) and [Christian Julliard](#), London School of Economics and Political Science), 2012

SEMINAR AND CONFERENCE PRESENTATIONS

2011: International Banking, Economics and Finance Association Annual Conference, Rutgers University, European Finance Association Annual Conference at Stockholm, City University of New York, Northern Finance Association Annual Conference at Vancouver.

2010: The Sixth MTS Conference on Financial Markets by London Stock Exchange and London School of Economics, Columbia-Tsinghua Conference in International Economics at Beijing, China, Rutgers University, European Central Bank*, MIDAS workshop at Goethe University Frankfurt*

2009: European Economic Association Annual Meetings in Barcelona, the China International Conference in Finance

2008: Federal Reserve Bank of New York, University of Alberta, University of Washington, McGill University, Iowa University, Pennsylvania State University, University of Illinois at Chicago.

2007: NBER Time Series Conference (Iowa City), University of Chicago Graduate School of Business

2006: NBER Time Series Conference (Montreal), Southern Methodist University (*: presentation by a coauthor)

PROFESSIONAL AFFILIATIONS

American Finance Association
Western Finance Association

REFEREEING

Review of Financial Studies; Journal of Empirical Finance; Pacific-Basin Finance Journal

NON-ACADEMIC EXPERIENCE

Docent and librarian at the Metropolitan Museum of Art, New York, 2010 - present.

Docent at the Field Museum, Chicago, 2003 - 2008.

Member of the Asian Art Council in the Art Institute of Chicago, 2003 - 2008.

Docent at the Shanghai Museum, Shanghai, China, 1999 - 2002.