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Fields of Concentration:
Financial Economics
Time Series Econometrics
Financial Econometrics

Desired Teaching:
Finance (Asset Pricing, Portfolio Choice, Investments)
Econometrics
Statistics

Dissertation Title: *On the econometrics of asset return predictions*

Expected Completion Date: May 2019

Graduate Studies:
University of Gothenburg, 2014 to present
Supervisors: Professor Erik Hjalmarsson and Associate Professor Ádám Faragó

Sveriges Riksbank, 2017
Visiting Doctoral Student at the Research Division (Monetary Policy Department)

Undergraduate Studies:
Master of Science in Actuarial Sciences and Financial Mathematics, Corvinus University of Budapest, 2012
Master of Arts in Economics, Corvinus University of Budapest, 2013

Fellowships, Honors and Awards:
Bank Research Foundation (Bankforskningsinstitutet) grant for doctoral students, 2018
Sveriges Riksbank scholarship for visiting doctoral students, 2017
Adlerbertska Stipendiestiftelsen Travel Grants, 2017
Department of Economics Travel Grant, 2017, 2018
Filosofiska fakulteternas gemensamma donationsnämnd Travel Grant, 2015
Adlerbertska Foreign Student Hospitality Foundation, 2015, 2016

Professional Experience:
Macroeconomic Analyst, Eximbank Zrt. (Export Credit Agency of Hungary), 2013-2014.
Junior Macroeconomic Analyst, The Central Bank of Hungary (MNB), Department of Financial Analysis 2012-2013.
Financial Analyst Intern, Procter & Gamble Co. (Hungary) 2010.

Teaching Experience:

Teaching Assistant, Econometrics II (PhD level), 2017
Teaching Assistant, Financial Econometrics (MSc level), 2016, 2017, 2018
Teaching Assistant, Economic Research Process (MSc level), 2015

Junior Teaching Assistant (Tutor), Probability Theory and Statistics (Undergraduate level), 2011
Junior Teaching Assistant (Tutor), Macroeconomics (Undergraduate level), 2010, 2011, 2012
Junior Teaching Assistant (Tutor), Microeconomics (Undergraduate level), 2009, 2010, 2011

Papers:

"Predictive Regressions in Predictive Systems" (***Job market paper***)

"Testing Return Predictability with the Dividend-Growth Equation: An Anatomy of the Dog" (with Erik Hjalmarsson)

"Vanishing Predictability and Non-Stationary Regressors"

Conference and Seminar Presentations:

KWC-CFF Joint Workshop, 2017, 2018
European Summer Meeting of the Econometric Society, Lisbon, 2017
Summer Workshop, Institute of Economics, Hungarian Academy of Sciences, 2017
Department of Management and Engineering, Linköping University, 2017
Centre for Finance Seminars, University of Gothenburg, 2017
5th National PhD Workshop in Finance, Stockholm, 2016
PhD Conference, Department of Economics, University of Gothenburg, 2016, 2017, 2018

Languages:

Hungarian (native), English (fluent), Swedish (proficient)

Other activities:

Treasurer of the Graduate Student Association, Department of Economics, University of Gothenburg. 2014-2016.

References:

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Dissertation Abstract

I study the predictability of returns on risky assets, primarily equities. Expected returns on stock indexes are fundamental objects of empirical asset pricing as they provide a measure of the aggregate risk aversion of the economy (i.e., the "equity risk premium"). After several decades of theoretical and empirical research, it has arguably become a stylized fact that expected returns vary over time. In particular, John Cochrane makes a strong argument for return predictability in his Presidential address (Cochrane, 2011), summarizing both empirical and theoretical evidence in the field. At the same time, empirical testing of return predictability is made difficult by the fact that expected returns explain only a small part of the return variation and inference is subject to a number of statistical difficulties. Koijen and Van Nieuwerburgh (2011) report three "disconcerting statistical features" of return predictability. First, the high persistence of the predictors makes standard inference incorrect. Second, the empirical relationships exhibit significant instability over time. Third, the out-of-sample performance of predictive regressions is poor. In my three dissertation chapters, I provide a deeper understanding of how these features interact as well as new methods for dealing with them.

In my job market paper, **Predictive Regressions in Predictive Systems**, I analyse inference on return predictability under the assumption that the predictor variables are imperfect proxies of the expected return. I show that if there are differences in the dynamic properties of the expected return and the predictor(s), the predictive regression uses the predictive information inefficiently, resulting in inferior model fit. This effect is especially strong if the predictors and the expected return are highly, but not equally, persistent.

As a solution, I propose a persistence-adjusted predictive regression. The resulting estimator is a two-stage method, where the expected return process and the predictor process are modelled separately, allowing for the two to have distinct dynamic properties. For instance, the procedure formally allows for highly persistent expected returns to be explained by a less persistent bond yield, a feature not possible in a standard predictive regression formulation. Simulation results, as well as empirical results, show that the method leads to both better in-sample fit and real-time forecasting performance.

In the second chapter of my thesis, **Testing Return Predictability with the Dividend-Growth Equation: An Anatomy of the Dog** (joint with Erik Hjalmarsson), we analyse the dividend growth based test of return predictability proposed by Cochrane (2008). Cochrane's key insight is that under the Campbell-Shiller present value identity, either dividend growth or returns must be predictable. In his study, Cochrane finds that testing for the absence of dividend growth is a more powerful test of return predictability than a direct test using returns.

Our aim is to better understand the power gains in the dividend-growth based test of return predictability. We show that Cochrane's dividend-growth based test is very similar to a test based on the full information maximum likelihood estimator of the return predictive regression, where the

autoregressive (AR) parameter in the dividend-price ratio is treated as known. The power gain is achieved because the dividend-growth based test makes strong use of the postulated value of the autoregressive coefficient. Moreover, we show that if one uses the OLS estimate of the autoregressive parameter, which is the default choice in the implementation of Cochrane's method, the dividend growth based test results in severe size distortions. From an empirical perspective, our findings imply that there are no apparent gains of using the dividend growth equation when testing for return predictability. More generally, the study highlights that while extending the simple predictive regression to more elaborate present-value frameworks helps provide a deeper economic understanding of return predictability, it does not help escape the basic inferential issues associated with testing for predictability.

In my final chapter, **Vanishing Predictability and Non-Stationary Regressors**, I propose a framework in which predictor persistence and parameter instability are closely connected. I assume that expected returns are stationary and potentially predictable. However, the information in the predictor is confounded by an uninformative non-stationary component, whereas the informative signal is stationary. This implies that in large samples the persistent, but uninformative, part becomes dominant and therefore the predictive power weakens. This is consistent with a specific form of parameter instability, where predictors appear to lose power over time and the evidence of predictability actually weakens as the sample size increases.

I also suggest a simple and flexible estimation framework – subsample fixed effects. It accounts for the presence of a non-stationary non-informative component in the predictor. It builds on the idea that the bias in the ordinary least squares estimation increases with the sample size because the non-stationary component becomes dominant in larger samples. Therefore, estimating the parameters on shorter subsamples and pooling them via a fixed effects estimator mitigates the problem. Applying this method to well-known predictors of stock market returns shows an overall increase in the explanatory power of these predictors.

Bibliography

Cochrane, J. H. (2008). The dog that did not bark: A defense of return predictability. *Review of Financial Studies*, 21(4):1533-1575.

Cochrane, J. H. (2011). Presidential address: Discount rates. *The Journal of Finance*, 66(4):1047-1108.

Koijen, R. S. and Van Nieuwerburgh, S. (2011). Predictability of returns and cash flows. *Annual Review of Financial Economics*, 3:467-491.