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Master Essay I:

**Portfolio Pricing with Measures of
Conditional Skewness and Kurtosis**

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Abstract

On the ground of a highly dynamic economic environment, the necessity for time-varying risk measures emerged. Inclusion of higher-order conditional moments in asset pricing models is a very common topic in recent research articles. The present essay was inspired by the seminal work of Harvey and Siddique (1999), who proposed estimation of time-varying skewness and pricing its explanatory power by a conditional three-moment CAPM. By estimating the first four conditional return moments I confirm previous findings about their high persistence, after which these risk measures are employed in testing the four-moment conditional CAPM. I analyze both time-series and cross-sectional regression results for 25 portfolios formed on different criteria (industry, size, momentum). In the time-series approach, conditional kurtosis is highly correlated with covariance and adds no pricing power. Neither conditional skewness has a well-defined impact in determining return compensation. However, in cross-sectional regressions, kurtosis risk is priced in most of the crises years, but its risk premium has the opposite sign. Investors prefer more kurtosis to less, suggesting that kurtosis is still much underestimated in financial markets during crises. Skewness is still insignificantly priced in cross-sectional CAPM. Altogether the four-moment cross-sectional CAPM performs better than its two-moment counterpart.

Keywords: Asset Pricing, CAPM, Time-varying Moments, Conditional Skewness, Conditional Kurtosis

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Table of Contents

1. Introduction.....	1
1.1. Background.....	1
1.2. Problem Discussion.....	2
1.3. Purpose.....	3
1.4. Limitations.....	3
1.5. Target Group.....	4
1.6. Outline.....	4
2. Previous Research.....	5
2.1. Modeling Conditional Moments.....	5
2.2. Pricing of Conditional Moments.....	7
3. Methodology (Econometric Models).....	11
3.1. Jarque-Berra Normality Test.....	11
3.2. Engle Test for ARCH/GARCH Effects.....	11
3.3. GARCH Models.....	12
3.4. Conditional Skewness and Kurtosis.....	15
3.5. Factor Pricing Tests.....	16
3.5.1. Conditional Two-Moment CAPM of Sharpe-Lintner (1964-1965).....	16
3.5.2. Harvey and Siddique (2000a) Model.....	17
3.5.3. Fang and Lai (1997) Model.....	17
4. Empirical Results.....	18
4.1. Data.....	18
4.2. Summary Statistics and JB Test.....	19
4.3. Test for ARCH Effects.....	21
4.4. Estimation of Conditional Variances and Covariances.....	21
4.5. Estimation of Conditional Skewness and Kurtosis.....	26
4.6. Pricing of Risk Factors in a Time-Series Regression.....	28
4.7. Cross-Sectional Analysis.....	30
5. Conclusion.....	32
5.1. Concluding remarks.....	32
5.2. Possible Extensions.....	33

References

Appendices

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