Abstract: Previous studies have studied the dynamics of higher moments by estimating them via specific parametric models that employ backward-looking historical data. Instead, in this paper, we investigate the dynamics of higher moments by employing their model-free forward looking risk-neutral counterparts extracted from S&P 500 options. To identify the process that governs their evolution, a horse race among alternative models is conducted within an out-of-sample context across various horizons. To this end, both a statistical and economic setting are considered. The set of statistically superior models is detected by using the newly developed model confidence set methodology of Hansen, Lunde, and Nason (2010). The economic significance of the forecasts of the model that performs best across horizons is assessed by means of skewness and kurtosis option trading strategies. We find that the risk-neutral higher moments can be statistically forecasted by means of a set of models. In particular, the autocorrelation in the evolution of any given
moment, as well as, the interactions between moments should be taken into account. In addition, it is found that trading implied skewness yields significant risk-adjusted profits. The results have implications for the development of asset pricing and allocation models once higher moments are considered.

**Intellectual Contribution:**
Discipline-based Research

**Zeitschriftentitel:**
working paper

**Jahr:**
2011

**Seiten:**
-

**Reviewed:**
ja

**Sprache:**
de

**Status:**
Erstveröffentlichung

**Semester (für SAP-Datenerfassung):**
SS 02

**Format:**
Text

**Key publication:**
Nein

**Peer reviewed:**
Nein

**International:**
Ja

**Book review:**
Nein

**commissioned:**
not commissioned

**Professional Journal:**
Nein

**Occurences:**
· Einrichtungen > Fakultäten > Fakultät für Mathematik > Zentrum Mathematik > M13 Lehrstuhl für Finanzmathematik (Prof. Zagst) > Journal Papers

**entries:**