

A kurtosis based portfolio
factor weighting model for
5 Glamour stocks: An
empirical analysis 2009-
2019

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Study Purpose

Determine if kurtosis (k) the 4th moment of the distribution is a priced-in risk factor in the equity markets

Research Design

- 1) Calculate k based on 12 month returns for each Glamour stock
- 2) Develop portfolio weights for each stock based on k
- 3) Calculate annual and cumulative returns for k weighted Glamour stock portfolio
- 4) Compare returns to S&P 500 ETF SPY

List of Glamour Stocks

- Mastercard (MA)
- Apple (AAPL)
- Amazon (AMZN)
- Netflix (NFLX)
- Google (GOOGL)

Hypothesis Test

- K weighted Glamour stock portfolio outperforms SPY

Analysis of Constant Share Model #1

Constant Share Model #1
Cumulative Returns Analysis
2009-2019

Year	Model 1 Cumulative Return	SPY Cumulative Return	Model #1 Alpha
2009	78.01%	45.26%	32.75%
2010	156.10%	74.00%	82.10%
2011	157.13%	77.63%	79.50%
2012	187.45%	102.49%	84.96%
2013	244.63%	141.01%	103.62%
2014	261.53%	169.78%	91.75%
2015	293.00%	162.03%	130.97%
2016	320.97%	207.76%	113.21%
2017	389.84%	281.31%	108.53%
2018	404.19%	285.20%	118.99%
2019	452.25%	335.18%	117.07%

Analysis of Constant Share Model #2

Table 2
K-Factor Weighting Model
Constant Share Model #2

Years	% Return	SPY	Alpha
2009	63%	0.4526	18%
2010	176%	0.7406	102%
2011	199%	0.7763	121%
2012	254%	1.0249	152%
2013	420%	1.4101	279%
2014	538%	1.6978	368%
2015	639%	1.6203	477%
2016	884%	2.0776	676%
2017	1542%	2.8131	1261%
2018	1803%	2.6512	1538%
2019	2348%	3.3518	2013%