Crash risk in US funds - preliminary

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Preliminary results

Univariate sorts

Table 1:
Future returns sorted on LTD

Funds have been sorted into quintiles based on their estimated LTD. For each quintile, a value weighted return for month *t+1* has been calculated using weights from month *t*. This gives 1 time series per quintile of value weighted portfolio returns in month *t+1*. The column 'Returns' report the time average of these series. *, ** and *** indicate statistical significance at, respectively, the 10%, 5% and 1% significance level.
Note that in the presence of tied LTD values, the first observation with that LTD value is ranked lower than the following observation with the same LTD value. This pattern repeats in the presence of more than two ties.

Quintile	Returns	P-value
1 Weak LTD	0.706%***	0.003
2	0.706%***	0.002
3	0.722%***	0.002
4	0.684%***	0.003
5 Strong LTD	0.673%***	0.002
Strong - Weak	-0.033%	0.418

Table 1 shows the results of sorting funds into quintiles based on LTD and calculating the average one-month-ahead value-weighted return for each quintile portfolio.

Table 2:
Future returns sorted on TailRisk

Funds have been sorted into quintiles based on their estimated TailRisk. For each quintile, a value weighted return for month *t+1* has been calculated using weights from month *t*. This gives 1 time series per quintile of value weighted portfolio returns in month *t+1*. The column 'Returns' report the time average of these series. *, ** and *** indicate statistical significance at, respectively, the 10%, 5% and 1% significance level.
Note that in the presence of tied TailRisk values, the first observation with that TailRisk value is ranked lower than the following observation with the same TailRisk value. This pattern repeats in the presence of more than two ties.

Quintile	Returns	P-value
1 Weak TailRisk	0.663%***	0.003
2	0.726%***	0.004
3	0.594%**	0.013
4	0.688%***	0.002
5 Strong TailRisk	0.797%***	0.001
Strong - Weak	0.134%	0.291

Regression analysis

Table 3:
Future returns regressed on different factors

Regression of one-month-ahead returns on different sets of control variables. The dependent variable is the one-month-ahead return. (1) is a univariate regression on LTD, (2) is a bivariate regression on LTD and beta, (3) is a multivariate regression on LTD, beta and downside beta, and (4) is a multivariate regression on LTD, beta, downside beta and upside beta. Standard errors are clustered on months.

Dependent Variable:	r_{t+1}					
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
(Intercept)	0.0056*	0.0046	0.0046	0.0050	0.0043	0.0002
	(0.0030)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0046)
LTD	0.0066	0.0066	0.0067	0.0065	0.0049	0.0039
	(0.0043)	(0.0043)	(0.0043)	(0.0043)	(0.0041)	(0.0042)
β		0.0009	0.0002	-0.0044	-0.0046	-0.0039
		(0.0036)	(0.0048)	(0.0059)	(0.0058)	(0.0058)
β^-			0.0007	0.0013	0.0006	0.0013
			(0.0029)	(0.0030)	(0.0032)	(0.0033)
β^+				0.0038	0.0045*	0.0036
				(0.0025)	(0.0026)	(0.0027)
coskewness					-0.0048	0.0022
					(0.0060)	(0.0065)
cokurtosis						0.2435*
						(0.1363)
Fit statistics						
Observations	451,044	451,044	451,044	451,044	451,044	451,044
R^2	0.00029	0.00031	0.00036	0.00195	0.00368	0.01269
Adjusted R^2	0.00029	0.00031	0.00035	0.00194	0.00367	0.01268

Clustered (date) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 4:
Future returns regressed on different factors

Regression of one-month-ahead returns on different sets of control variables. The dependent variable is the one-month-ahead return. (1) is a univariate regression on TailRisk, (2) is a bivariate regression on TailRisk and beta, (3) is a multivariate regression on TailRisk, beta and downside beta, and (4) is a multivariate regression on TailRisk, beta, downside beta and upside beta. Standard errors are clustered on months.

Dependent Variable:	r_{t+1}					
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
(Intercept)	0.0029	0.0033	0.0033	0.0037	0.0032	-0.0012
	(0.0032)	(0.0039)	(0.0039)	(0.0039)	(0.0040)	(0.0045)
TailRisk	0.0048	0.0049	0.0049	0.0048	0.0039	0.0041
	(0.0032)	(0.0035)	(0.0036)	(0.0035)	(0.0032)	(0.0032)
β		-0.0005	-0.0009	-0.0054	-0.0054	-0.0047
		(0.0039)	(0.0049)	(0.0061)	(0.0061)	(0.0061)
β^-			0.0004	0.0010	0.0005	0.0011
			(0.0030)	(0.0030)	(0.0033)	(0.0033)
β^+				0.0037	0.0043*	0.0034
				(0.0025)	(0.0026)	(0.0026)
coskewness					-0.0044	0.0030
					(0.0059)	(0.0064)
cokurtosis						0.2545*
						(0.1356)
Fit statistics						
Observations	455,566	455,566	455,566	455,566	455,566	455,566
R^2	0.00138	0.00139	0.00141	0.00289	0.00430	0.01400
Adjusted R^2	0.00138	0.00139	0.00140	0.00288	0.00429	0.01399

Clustered (date) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*