

**Table 1: Quantile Regression Results (Tail Risk  $\tau = 0.05$ ): Hidden Risks**  
*This table reports the results of quantile regressions estimating the 5th percentile of future 22-day cumulative returns ( $R_{t+22}$ ). The sample includes all observations from 2000–2025. Model (1) serves as the baseline with volatility only. Model (2) introduces the structural signal (CARIA\_Peak). T-statistics are reported in parentheses.*

Dependent Variable:	Future 5th Percentile Return ( $R_{t+22}$ )	
	(1) Base Model (VIX Only)	(2) Structural Model (+ CARIA Peak)
Intercept	0.0399*** (5.48)	0.0399*** (5.48)
Volatility ( $VIX_t$ )	-0.0058*** (-12.17)	-0.0058*** (-12.17)
Structure (CARIA_Peak)	—	-0.0063*** (-10.51)
Observations	5,532	5,532
Pseudo $R^2$	0.0538	<b>0.0679</b>
Relative Improvement	—	<b>+26.2%</b>

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$