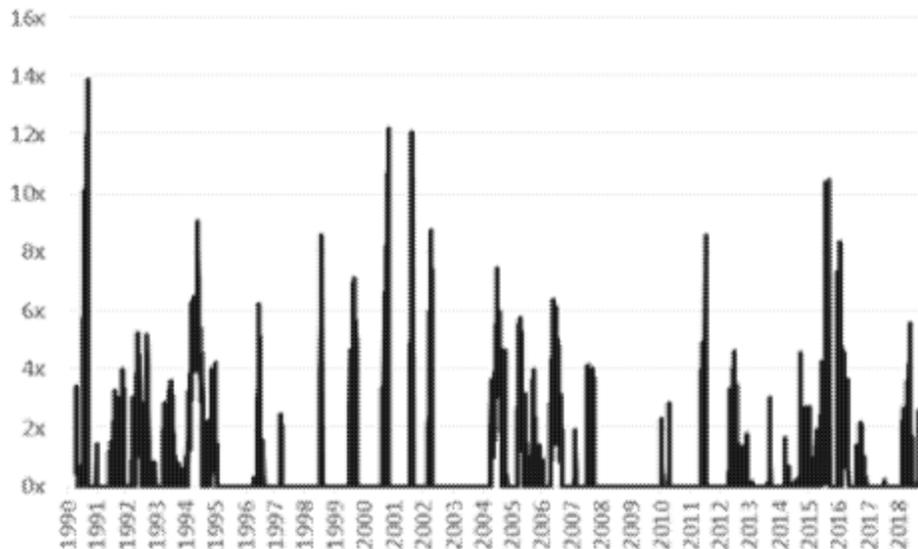
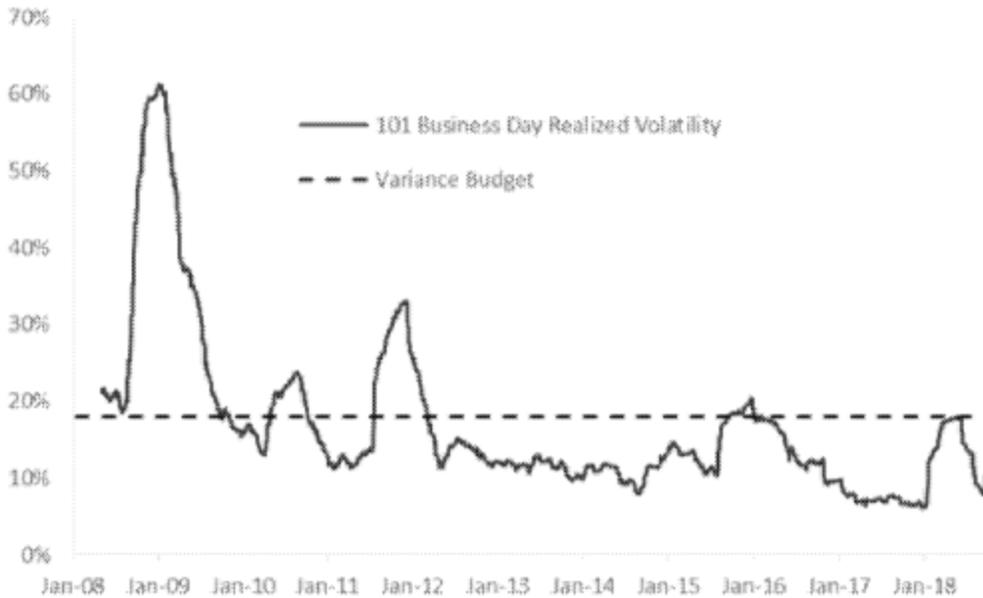


When buying a VKO put, an investor is betting that a further market downturn will be accompanied by realized volatility below the variance budget, since this type of option will expire worthless otherwise. The VKO is a cost-efficient hedge that monetizes the steep skew and elevated implied vol in a long premium / maximum loss format. The variance budget is set lower but close to the fair variance strike (~19) to reduce the cost of the VKO.

If the market trends lower on muted vol, VKOs may survive similarly priced D&O puts. Additionally, If spot has rallied (or stayed flat) with low realized vol after the trade is initiated, the VKO would behave like a regular put for the next down leg but it would have cost you significantly less to put on. VKOs (particularly those struck in-the-money) are generally collecting theta so can carry better than vanillas.

Variance budget of 18 shows low historical likelihood of being breached



Payoffs of the 103 strike 6M VKO

D&O puts

- Buy March-19, 97.5% put with KO barrier at 85% for ~0.6% vs vanilla put-spread for ~2% or a ~70% discount

Down and out puts (D&O) are knocked out if the level of the underlying falls below a certain barrier level over the observation window (typically the life of the option). They settle like regular options if the barrier is not breached.