



Bull Flattener Opportunity in Listed Treasury Options

Get **PAID** to **ADD** Out-of-the-Money (OTM) Bull Flattener Protection

The punchline first: Buying 0.20 delta calls on U.S. Treasury Long Bond Futures (USA) and selling DV'01 neutral 0.20 delta calls on 5-Year US Treasury Note Futures (FVA), results in a CREDIT (aka 'Cash In'). There's a lot more to the joke but let's get straight to the "Show me the money!" part:

FVZ8C 114.25: 20% delta, 2.60% mid iVol & 0'11+ mid px
 USZ8C 147: 20% delta, 7.38% mid iVol & 0'41 mid px
 DV'01 neutral hedge ratio is \$180.50/\$48.45 → 3.725 FVZ8 per 1 USZ8

Quick cash calc on short \$100mm FVZ8 calls vs long \$26.8mm USZ8 calls:

$(100\text{mm}) * (\$156.25/64\text{th}) * (11.5/64\text{ths}) = \$179,687.50$
 $(26.8\text{mm}) * (\$156.25/64\text{th}) * -(41/64\text{ths}) = -\$171,687.50$

or take \$8k in on DV'01 neutral trade

Getting paid to enter a hedge is great, but the behind-the-scenes factors are significant.

The DEC18 options' (FVZ8 & USZ8) expiry is 11/23/18. Market levels in the last month of trade will likely dictate hold/liquidate/roll decisions. BUT, from now UNTIL 10/31, a quick look at futures forward dv'01s, along with shocks lower in rates gives us a hint at a second advantage to this strategy:

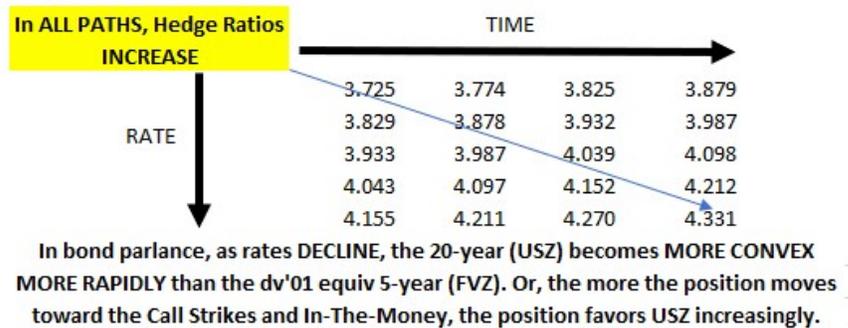
USZ8 DV'01 as time passes (per Future)					
	7/31/2018	8/31/2018	9/30/2018	10/31/2018	Px 10/31
USZ8 141-30 @ 7/31					
Unch'd	180.5	179.7	179	178.3	+09
-25	187.8	186.9	186.2	185.4	+4-25
-50	195.3	194.5	193.6	192.8	+9-15
-75	203.3	202.3	201.4	200.5	+14-10
-100	211.5	210.5	209.6	208.6	+19-12

FVZ8 DV'01 as time passes (per Future)					
	7/31/2018	8/31/2018	9/30/2018	10/31/2018	Px 10/31
FVZ8 112-26+ @ 7/31					
Unch'd	48.45	47.62	46.8	45.96	+05
-25	49.05	48.2	47.36	46.5	+1-08
-50	49.66	48.78	47.93	47.05	+2-12+
-75	50.28	49.38	48.51	47.6	+3-17
-100	50.9	49.99	49.09	48.16	+4-21+

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We can take these USZ8 and FVZ8 DV'01s over the forward timeline, AND with the interest rate shocks view what happens to the original hedge ratio of 3.725 FVZ8 per USZ8 future:



On top of the overt option trade, there is this discreet option trade (Δ Net Convexity) within. The convexity mis-match loads a natural bull-flattener into the DV'01 neutral trade.

So, getting paid to enter into a position that carries positively in a range, and becomes increasingly convex should the market move definitively down in rate with the curve unchanged (let alone flattening), well, that's a position that fits the risk needs of most servicers and bank portfolios currently (and most of the time).

A rates-down-50bps, curve parallel shift would be worth about \$150k on this \$100mm/26.8mm position. Then add the ~\$48,000/bp in flattening bias.

This example position uses strikes that are about 27.5bps OTM as of 7/30/18. Variants using wider or closer to ATM are equally do-able with varying incremental 'cash pick-ups'. The cyclical nature of the curve flattening, in conjunction with portfolios selling off convexity in CALL options on the long end of the curve make this trade possible.

If a 'rates-down, curve-flatter' scenario will hurt your P&L, a curve option trade (as above) should be considered while cheap CALL-side implied volatility on the long end of the curve is available.

These trades may be put up on Bloomberg. Some of the screens are more effective than others. Give our desk a call and we can walk you through any combination.

-JC