

B / S	P / C / S	Strike	Exp.	Premium
Sell	Call	115.00	DEC 15,'17	\$5.00
Buy	Call	130.00	DEC 15,'17	(\$0.78)
<b>Bearish Call Spread</b>				<b>\$4.22</b>

# FWI Tear Sheet : Caterpillar (CAT)

## Bearish Call Spread (High Conviction)

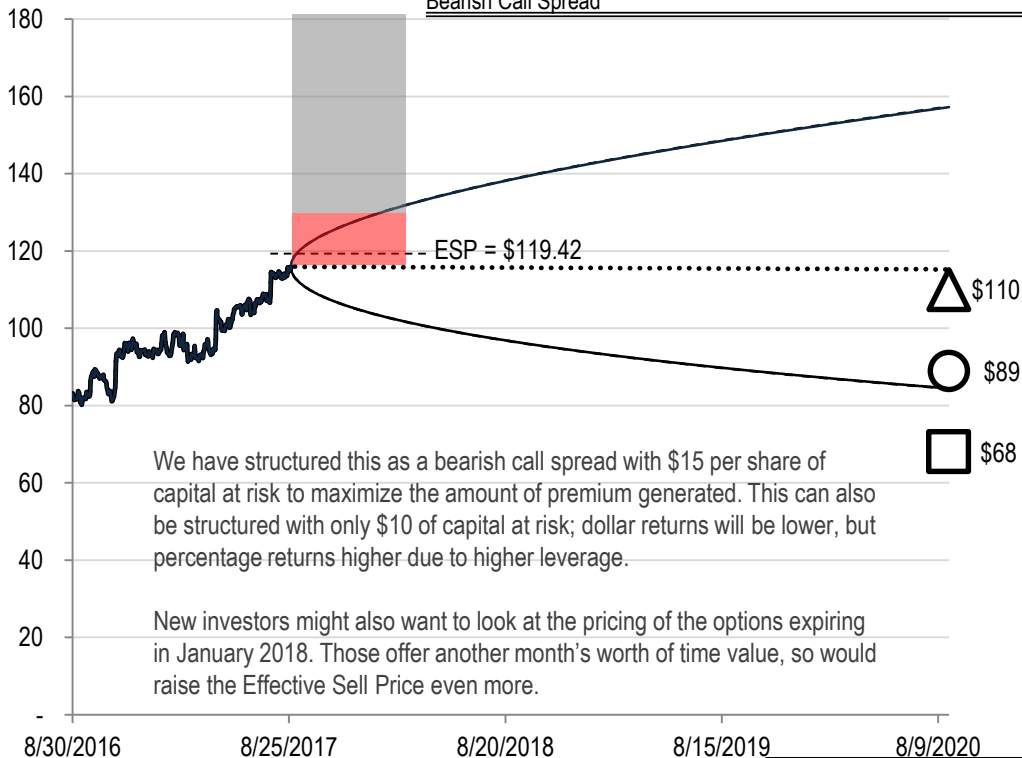
Data as of 28 August 2017

### Framework's Take

We listened to Jim Chanos of Kynikos talk about CAT being his best short idea back in 2013. We have seen that Chanos has been right about a lot of operational issues since then; however, we also have good evidence that CAT is a very well-run company, so are not as excited about this bearish position as he evidently is/was. CAT is a complex firm whose revenues are driven by several different commodity markets as well as by government policy. As such, coming to a rational view about revenue drivers is difficult. We use a simple, statistically-based cyclical revenue model. Because our best-case valuation is below present stock price, we assess as high conviction. Near-term news flow is working against this position, though.

### Drivers

<b>S-T Revenue Growth</b>	Environment improving in '17. LatAm recovering after long weakness, & possibility of Trump Infrastructure plan. Proj: +15% (Best), 4% (Worst).
<b>S-T Profitability</b>	Co. very good at maintaining profitability through business cycle! Proj: +11% (B), +8% (W)
<b>Investment Level / Eff.</b>	Poor efficacy last 10 years. Great efficacy over 30, but at a high price. Proj (med-term growth): +10% (B), 0% (W)
<b>Balance Sheet</b>	Chanos believes goodwill may need to be written down for Bucyrus acquisition + outstanding legal actions.



We have structured this as a bearish call spread with \$15 per share of capital at risk to maximize the amount of premium generated. This can also be structured with only \$10 of capital at risk; dollar returns will be lower, but percentage returns higher due to higher leverage.

New investors might also want to look at the pricing of the options expiring in January 2018. Those offer another month's worth of time value, so would raise the Effective Sell Price even more.

### Valuation & Return

**Valuation Uncertainty: High**

	Low	Likely	High
<b>Stock Fair Value (\$)</b>	68	89	110
<b>Stock Return (%)</b>	-41	-23	-4
<b>Option Period Return (%)</b>	28	28	28
<b>Option Annual Return (%)</b>	129	129	129

### Historical Metrics

	Historical Median	
	5-year	10-year
Revenue Growth (%)	-8	2
Profit Margin (%)	8	8
Med-term Growth	Weak	Weak

### Market Risk

Headline risk regarding Trump's proposed infrastructure plan and mining co capex plans. Sensitive to metals pricing and Chinese conditions. PS Ratio range uses top and bottom PS quartiles & FWI revenue estimates.

Scenarios Key  
ST Rev Growth | ST OCP Margin | Med-Term Growth

Case / Scenario	Value
4%   8%   0%	49
4%   8%   10%	68
PSR Implied Low	68
4%   11%   0%	70
15%   8%   0%	77
<b>252-day Low</b>	<b>80</b>
4%   11%   10%	96
15%   8%   10%	108
15%   11%   0%	110
<b>252-day High</b>	<b>116</b>
PSR Implied High	127
15%   11%   10%	155

