

B/S	P/C/S	Strike	Exp.	Premium
Buy	Put	115.00	JAN 19 2018	(\$26.55)

IOI Tear Sheet : Caterpillar (CAT)

Bearish Long Put (Low Conviction)

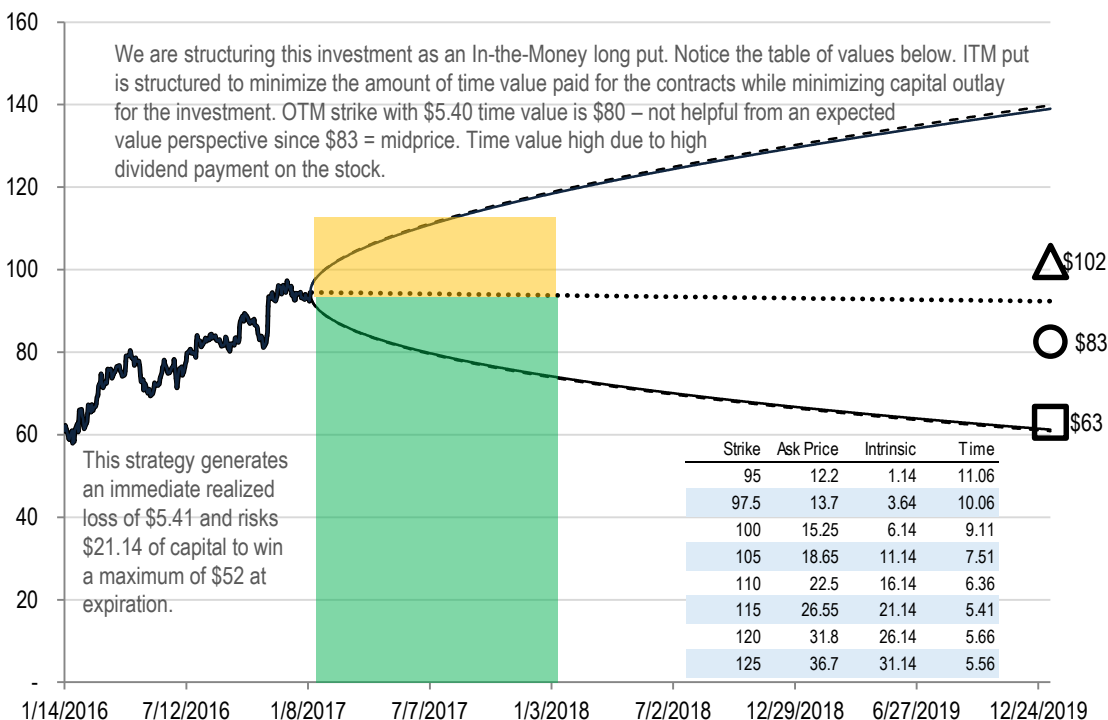
Data as of 12 January 2017

IOI'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, also have good evidence that CAT is a well-run company, so are not as excited about this bearish position as he evidently is/was. CAT is a complex company 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 have looked at evidence of "commodity supercycles" and teased out what CAT's business might have looked like if not for the huge BRIC demand in mid-00s.

Drivers

S-T Revenue Growth	Weakest environment for revs since '89. Chinese weakness, low oil prices, negative. Trump infrastructure plan positive? Proj: +9% (Best), -2% (Worst) (incl. 2016 drop)
S-T Profitability	Co. very good at maintaining profitability through business cycle! Proj: +9% (B), +7% (W)
Investment Level / Eff.	Poor efficacy last 10 years. Great efficacy over 30, but at a high price. Proj (med-term growth): +10% (B), 0% (W)
Balance Sheet	Goodwill may need to be written down for Bucyrus acquisition. Non-cash item, but dividend cut may result.



Valuation & Return

Valuation Uncertainty: Medium

	Low	Likely	High
Stock Fair Value (\$)	63	83	102
Stock Return (%)	-33	-12	9
Option Period Return (%)	96	21	-51
Option Annual Return (%)	93	20	-50

Historical Metrics

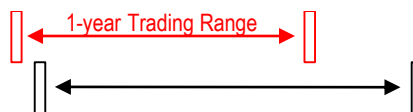
	Historical Median	
	5-year	10-year
Revenue Growth (%)	-1	8
Profit Margin (%)	8	8
Med-term Growth	4%	3%

Market Risk

Headline risk regarding Trump's proposed infrastructure plan. Sustained oil price increase would likely bring higher revenues and quarterly earnings beats. PS Ratio range uses top and bottom PS quartiles & IOI revenue estimates.

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

Case / Scenario	Value
-2% 7% 0%	46
252-day Low	58
PSR Implied Low	62
-2% 7% 10%	63
-2% 9% 0%	63
9% 7% 0%	72
-2% 9% 10%	88
252-day High	97
9% 9% 0%	101
9% 7% 10%	102
PSR Implied High	113
9% 9% 10%	144



Potential Price Range Based on Historical Price-to-Sales

