B / S / P / C / S		Strike	Exp.	Premium
Sell	Call	105.00	JUN 16, '17	$5.95
Buy	Call	125.00	JUN 16, '17	($0.55)
Buy	Put	80.00	JAN 18, '19	($5.35)
Bearish "Diagonal"				$0.05

IOI Tear Sheet : Union Pacific (UNP)

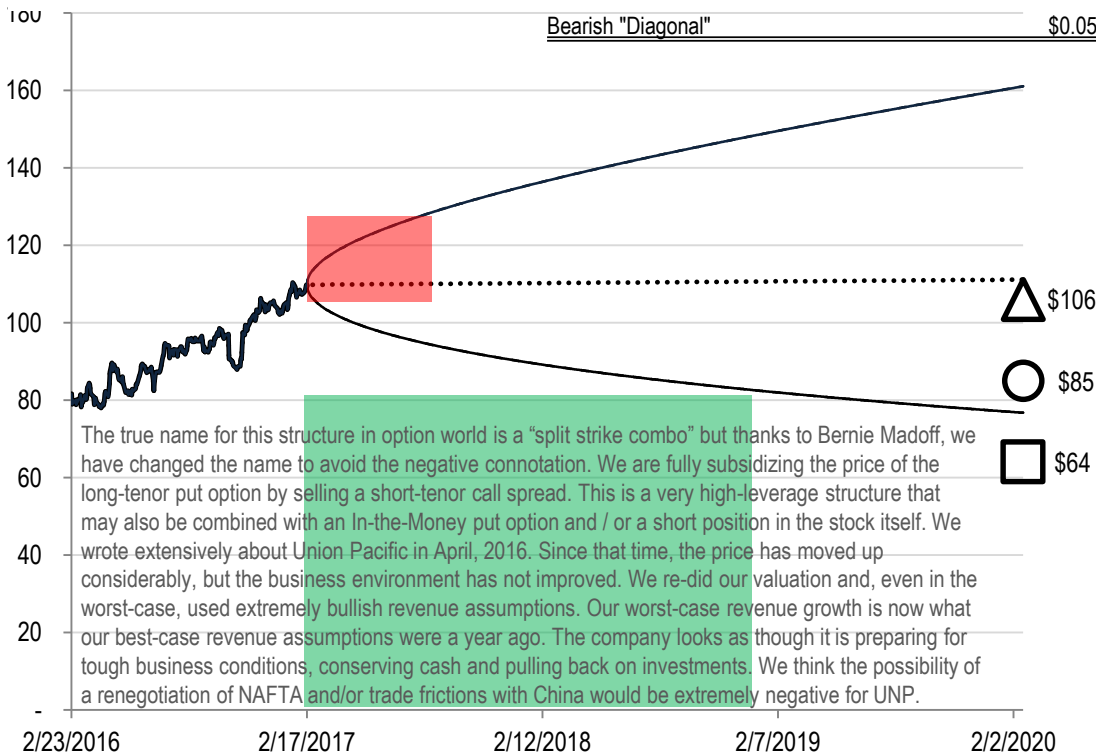## Bearish "Diagonal" (High Conviction)

Data as of 23 February, 2017

IOI's Take

We looked at UNP in April, 2016, but couldn't make a high conviction call at that time (stock price in mid-80s then). As the stock price has climbed and the threat of trade frictions with the Trump Admin have increased, this is a better time. Our valuation range moved up significantly from 2016 as we pushed the limits of credulity with our optimism around the revenue case. Our 2017 rev forecasts are far, far ahead of the Street. Even with this, the company appears clearly overvalued. We continue to worry about UNP as an instrument of US industrial policy and the unreasonably light hand of regulators, but now, threats of trade frictions now offset that positive we think.

Drivers

Revenues	Great pricing power due to regulatory leniency. Volumes from all segments at risk from trade probs (China/Mexico). Proj: +11% (Best), 5% (Worst).
Profitability	Phenomenal! Mid- to High 20% OCP margin levels. Better than some tech firms…(ahem, IBM). Proj: 27% (B), 23% (W)
Investment Level / Eff.	45% of profits spent on cap improvements. Highly effective over last 5 years, less effective going forward. Proj (med-term growth): 7% (B), 5% (W)
Balance Sheet	Regulatory leniency is big positive. Exposure to trade frictions is a big negative.

The true name for this structure in option world is a "split strike combo" but thanks to Bernie Madoff, we have changed the name to avoid the negative connotation. We are fully subsidizing the price of the long-tenor put option by selling a short-tenor call spread. This is a very high-leverage structure that may also be combined with an In-the-Money put option and / or a short position in the stock itself. We wrote extensively about Union Pacific in April, 2016. Since that time, the price has moved up considerably, but the business environment has not improved. We re-did our valuation and, even in the worst-case, used extremely bullish revenue assumptions. Our worst-case revenue growth is now what our best-case revenue assumptions were a year ago. The company looks as though it is preparing for tough business conditions, conserving cash and pulling back on investments. We think the possibility of a renegotiation of NAFTA and/or trade frictions with China would be extremely negative for UNP.

△ $106
○ $85
□ $64

Valuation & Return

Valuation Uncertainty: High

	Low	Likely	High
Stock Fair Value ($)	64	85	106
Stock Return (%)	-40	-21	-1
Option Period Return (%)	Infinite	Infinite	Infinite
Option Annual Return (%)	Infinite	Infinite	Infinite

Historical Metrics

	Historical Median	
	5-year	10-year
Revenue Growth (%)	5	7
Profit Margin (%)	23	21
Med-term Growth	High	High

Market Risk

We are risking $20 of capital on the upside but receive a $0.05 credit on this position. Any profit on this position will add to our credit. The stock has recently traded up to around $110 per share and exposure up to $140 is possible looking at 10y PS Ratio.

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

Case / Scenario	Value
PSR Implied Low	59
5%	23%	5%	64
5%	23%	7%	69
5%	27%	5%	76
252-day Low	78
5%	27%	7%	81
11%	23%	5%	84
11%	23%	7%	91
11%	27%	5%	99
11%	27%	7%	106
252-day High	110
PSR Implied High	140

1-year Trading Range

Potential Price Range Based on Historical Price-to-Sales

Probability / Materiality

Stock Price