HILLSIDE ADVISORS LLC

December 12, 2016

Hybrid Vigor℠

The Hillside Convertible Advisory Letter
Volume 3 Issue 46

Season or Reason?

Inside

Our Team

Bill Feingold
Managing Principal

George Chuang
Managing Principal

Jeffrey Alton, CFA
Head of Equity Research

Kathy Schick
Head of Credit Research

Dennis Dowden, CFA
Senior Analyst

Roman Terekhin, CFA
Senior Analyst

Curt Peters
Senior Analyst

Kathy Hay Stine
Senior Advisor, Business Development

John Anderson
Director of Business Development

Sue Wu
Associate

Last week we published a white paper detailing the rationale behind our thesis that a Trump Administration is likely to revive convertible issuance and the overall importance of the asset class. Virtually every early market indicator points in that direction: interest rates, volatility, infrastructure capital requirements.

One area where we may, or may not, have jumped the gun is pharmaceuticals and biotech. The markets got shaken up last week on a quote from the president-elect's Time Magazine Person of the Year interview. Mr. Trump said he didn't like what was happening with drug prices and wanted to make them lower. That was enough to continue the undoing of the post-election sector spike, which in turn followed a hard pre-election selloff presumably inspired by an expected Clinton win and greater efforts at drug price regulation.

We don't consider ourselves political experts, but our take is that Mr. Trump's interview comment was standard populist fare amidst many issues. We don't necessarily think it should be ignored, but it needs to be considered in the context not only of a Republican congress but also of a Health and Human Services nominee, Tom Price, whose legislative history and professional affiliations would make him a most unlikely sponsor of significant new drug-price regulations. You could do worse things, it seems, than to position yourself for a 2017 turnaround in the group.

All that aside, last week's new issuance (detailed Friday in Kathy Schick's ***The Week That Was***) seemed to corroborate our thesis, though the calendar may also have been a factor. Bankers have a longstanding tradition of getting deals through the pipeline at year-end. Cynics would call it the bonus push. We'll put that aside and say only that we were heartened to see the handful of deals that came last week and even more heartened to hear that more were in the pipeline.

Bill
bill@hillsideadvisors.com

Hillside Advisors, LLC
400 Columbus Ave., Suite 240E
Valhalla, NY 10595
+ 1 (646) 712-9289
www.hillsideadvisors.com

Contact us:
info@hillsideadvisors.com

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December 12, 2016

Statistics

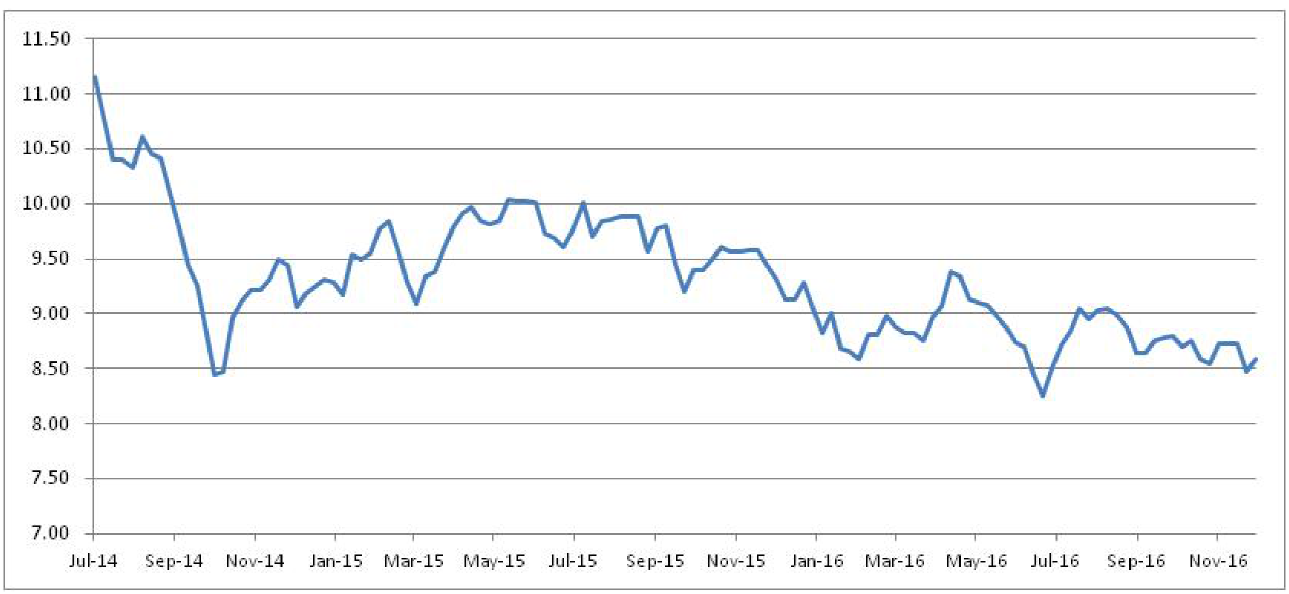
Bill Feingold
bill@hillsideadvisors.com

Curt Peters
curtp@hillsideadvisors.com

A quick refresher. HARP, or Hillside Adjusted Risk Points, is best thought of as a warning measure for bonds exposed to a blend of absolute price decline and premium decay. The higher the HARP, the more dangerous the bond. HARP tends to be highest for bonds in the 120-130 "death trap" range.

Do you remember the Gaussian Copula (a probability distribution) of CDO fame? It's amazing what can happen when some folks are too afraid to admit that they are in over their heads, especially when it comes to math and statistics. The same thing can happen with the innocuous 'average'. Every week we tell you the average HARP, the average bond price move, and the average stock price move. Some of those weeks, we even make a point to tell you that average is very misleading, and get into some detail as to why it doesn't reflect the constituents. However, we continue on every week talking about averages, even though we know damn well that averages are very misleading. Like the Gaussian Copula, we are limited by our tools. Unlike the Gaussian Copula CDO situation, we try to point out the limitations at every chance we get.

This past week was another one of those weeks where not much happened, and yet averages seem to suggest that something did happen. The average underlying stock was up 4.8%, and the average bond price was up 3¼ points. Average HARP increased by 0.11 to 8.59. But beneath the hood, it was a mix of not much to write home about. Only three bonds moved in any HARP significant way, which in turn was the cause of the uptick in average HARP.



Air Lease 3.875% of 2018 dropped 0.95 HARP from its risk weight the old-fashioned way, by an upwardly performing stock. The stock was up 3.05%, and the bond price gained two points, which moved the bond from 137¾ to 139¾. Given the location on the price curve, this direction of move is almost always premium burning – which it was. Adding to the premium burn was the ½ point undershoot of delta-neutral which reduced risk even further.

CGS Systems 4.25% of 2036 gained 0.85 HARP to end at 7.88. The stock advanced 8.75% and the bond gained 2¾ points. While on the surface, this seemed to be a situation of delta-neutral undershoot, the previous bond price of 110 tells us that CGS is in that part of the price curve where parity isn't much of a factor in determining risk. Instead, at this location on the price curve, any change in bond price is going to result in a change in risk regardless of what happens with the stock price. And a quick glance at the 84 parity confirms that.

Finisar 0.5% of 2033 gained 0.55 HARP to end at 8.05. Let's see if our HARP intuitions can figure this one out. The bond started at 120, ended at 125¾. The stock gained 7.91%. Parity is 110¾. Hmm, this doesn't look quite right. Given what we know about the relationship between parity, price, and HARP, this bond should have been near peak risk and entering the risk-shedding phase. But instead, the bond accumulated risk. Nevertheless, there is a good reason for it – the bond overshot delta-neutral by ½ point, which went straight to the HARP bottom line. You may be curious why it is that the relationship between richening/cheapening and HARP isn't always one-to-one. There are a couple of reasons for this. First, the relationship is impacted by the location on the price/risk curve. And second, the relationship is affected by the underlying stock volatility. When we calculate HARP, we compare the individual stock's volatility with what we consider typical for an individual name. Higher volatility tends to reduce HARP, while lower volatility increases it. And sometimes you get a stock like Finisar, where everything falls right into line.

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Hillside Ugly 20 List (Prices as of December 9, 2016)

	Convertible	Price	Stock	Premium (%)	Premium (pts)	HARP
1	Red Hat 0.25% 2019-10-01	124.75	78.65	16.30	17.48	11.24
2	RPM International 2.25% 2020-12-15	120.50	54.68	15.90	16.53	11.21
3	Priceline.com 0.35% 2020-06-15	132.75	1557.98	12.10	14.33	9.84
4	Emergent BioSolutions 2.875% 2021-01-15	125.75	32.37	19.90	20.87	9.28
5	The Medicines Co 2.5% 2022-01-15	122.25	34.85	17.40	18.12	9.06
6	Array Biopharma 3% 2020-06-01	139.50	8.66	13.50	16.59	8.87
7	BioMarin Pharmaceuticals 1.5% 2020-10-15	118.00	82.68	34.30	30.14	8.72
8	SM Energy Company 1.5% 2021-07-01	119.00	36.62	31.60	28.57	8.49
9	Citrix Systems 0.5% 2019-04-15	115.25	89.32	16.20	16.07	8.33
10	Oasis Petroleum 2.63% 2023-09-15	141.50	15.45	19.90	23.48	8.27
11	Finisar 0.5% 2033-12-15	125.75	33.41	13.60	15.05	8.05
12	Proofpoint 0.75% 2020-06-15	114.50	72.26	28.80	25.60	8.00
13	Palo Alto Networks 0% 2019-07-01	130.75	130.07	10.90	12.85	7.92
14	ServiceNow 0% 2018-11-01	122.50	79.40	14.10	15.14	7.89
15	CSG Systems 4.25% 2036-03-15	112.75	48.16	34.10	28.67	7.88
16	NuVasive 2.25% 2021-03-15	128.00	67.84	13.00	14.73	7.83
17	Air Lease 3.875% 2018-12-01	139.75	36.54	13.30	16.40	7.77
18	Euronet Worldwide 1.5% 2044-10-01	118.25	74.35	14.80	15.24	7.74
19	Inphi 1.125% 2020-12-01	127.50	43.60	17.50	18.99	7.71
20	Green Plains Renewable 4.125% 2022-09-01	117.25	27.20	20.80	20.19	7.61

Sources: Bloomberg, Kynex

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HOCS™ 20 Review

Bill Feingold
bill@hillsideadvisors.com

Last week may have been the coup de grace for the CWB exchange-traded fund in its 2016 dominance. CWB returned 2.20% on the week, getting 2016 performance into double figures at 10.14%. Our flagship HOCS 100 had a relative-performance stumble, gaining "only" 1.30% to get to 6.45% for the year, seemingly dashing its slim hopes of maintaining its near-perfect track record of outperforming CWB in our back tests and in last year's live comparison. The larger presence of smaller deals and biotech issues has plagued HOCS 100's relative performance throughout a year in which liquidity has been prized and health care has been despised. The actively managed funds we tracked did better, gaining 2.15% for the week and reaching 7.51% for the year.

The big shortfall last week came largely from HOCS 20 stalwart Horizon Pharmaceuticals 2.50%, which dropped a cool 10.76% on the back of a stock decline of nearly 26%. As Kathy Schick reported in our ***The Week That Was*** market recap on Friday, Horizon's Phase 3 trial for its Actimmune treatment of Friedreich's ataxia (FA) failed to meet primary and secondary endpoints. FA, like Lou Gehrig's disease, is a rare condition attacking the nervous system, leading to muscle and motion problems and shortened lifespan. While many analysts had been skeptical about Actimmune's trial meeting its endpoints, the treatment was thought to have the potential to double—give or take—Horizon's current revenues.

There was plenty of motion in the narrow HOCS 20 lists, although everything took a back seat to the fall in Horizon. Original-recipe HOCS 20 was only up 87 basis points on the week and was able to reach that level in part thanks to PDC Energy's 1.125% of 2021. That issue gained 5.18% with the underlying stock up 7.69% amidst a continued oil-patch rally. The unusual high-delta member of the original list, Priceline 1%, also gained nearly 5% on a 5.77% stock pop.

In the China-free version of HOCS 20, which gained 1.13% last week, the outperformance versus original-recipe came primarily from Echo Global Logistics 2.5% of 2020. The shipping company approached its all-time highs (set in 2015) amidst optimism for general business conditions in the coming administration. Meanwhile, the more liquid Over $300 Million variety gained 1%, with notable gainers including insulin-delivery specialist Insulet 1.25% (up 5.32%) and telecoms contractor Dycom (up 6.01%). Dycom has taken two dives in recent months on fears of slowing business from Google and disappointing earnings guidance, but stands to benefit longer term from infrastructure spending growth.

This week's average score on the original-recipe HOCS 20 is 66.3, a shade higher than some recent weeks but substantially lower, as one would expect, than early in the year, when the average was in the low 70s amidst poor market conditions. HOCS' counter-cyclical nature means that safety is becoming paramount. The average price is 98.61 despite the powerful rally, with a profile of 2.04% up 73%. The premium was pushed out this week largely because of the double-barreled return of the Twitter twins. To the rest of the world Twitter might not sound like a move to safety, but this isn't the rest of the world.

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Hillside HOCS 20 List

	Description	Convert	Stock	HOCS Overall	HOCS Growth	HOCS Safety	Yield	Premium
1	HORIZON 2.500% 2022-03-15	91.25	14.83	73.3	78.1	63.7	4.38%	76.3%
2	INTERACTIVE 1.250% 2020-06-01	116.50	60.50	73.3	87.6	44.6	-3.21%	0.4%
3	ENVESTNET 1.750% 2019-12-15	94.75	35.00	71.2	68.5	76.5	3.61%	70.2%
4	TESLA 0.250% 2019-03-01	90.25	192.18	70.4	66.5	78.0	4.95%	69.0%
5	TESLA 1.250% 2021-03-01	84.50	192.18	69.2	70.4	66.7	5.41%	58.2%
6	IONIS 1.000% 2021-11-15	99.75	45.57	68.0	77.4	49.2	1.05%	46.2%
7	TOLL 0.500% 2032-09-15	98.50	32.17	67.9	57.6	88.6	2.01%	50.3%
8	PANDORA 1.750% 2020-12-01	106.00	13.81	66.3	79.6	39.8	0.23%	26.0%
9	BROCADE 1.375% 2020-01-01	100.50	12.38	64.6	55.7	82.4	1.21%	28.2%
10	ILLUMINA 0.000% 2019-06-15	95.75	123.20	64.5	52.9	87.7	1.74%	97.7%
11	ILLUMINA 0.500% 2021-06-15	96.00	123.20	64.4	54.8	83.6	1.42%	98.2%
12	RTI 1.625% 2019-10-15	108.75	32.05	64.4	67.6	57.9	-1.39%	-3.5%
13	INPHI 0.750% 2021-09-01	106.00	43.60	64.4	70.4	52.2	-0.51%	37.0%
14	PDC 1.125% 2021-09-15	116.75	79.53	64.2	66.1	60.4	-2.20%	25.3%
15	SILVER 2.875% 2033-02-01	92.50	9.29	63.7	62.3	66.5	5.51%	99.1%
16	ACETO 2.000% 2020-11-01	95.25	21.41	63.6	60.6	69.5	3.31%	47.8%
17	TELIGENT 3.500% 2019-12-15	95.50	7.24	63.5	78.9	32.5	5.13%	48.9%
18	VITAMIN 2.250% 2020-12-01	95.75	25.95	63.1	60.5	68.3	3.40%	46.6%
19	TWITTER 1.000% 2021-09-15	93.50	19.65	63.0	50.6	87.8	2.46%	269.5%
20	TWITTER 0.250% 2019-09-15	94.50	19.65	62.8	47.9	92.6	2.32%	273.4%

Sources: Bloomberg, Kynex

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Hillside HOCS 20 List ex China

	Description	Convert	Stock	HOCS Overall	HOCS Growth	HOCS Safety	Yield	Premium
1	HORIZON 2.500% 2022-03-15	91.25	14.83	73.3	78.1	63.7	4.38%	76.3%
2	INTERACTIVE 1.250% 2020-06-01	116.50	60.50	73.3	87.6	44.6	-3.21%	0.4%
3	ENVESTNET 1.750% 2019-12-15	94.75	35.00	71.2	68.5	76.5	3.61%	70.2%
4	TESLA 0.250% 2019-03-01	90.25	192.18	70.4	66.5	78.0	4.95%	69.0%
5	TESLA 1.250% 2021-03-01	84.50	192.18	69.2	70.4	66.7	5.41%	58.2%
6	IONIS 1.000% 2021-11-15	99.75	45.57	68.0	77.4	49.2	1.05%	46.2%
7	TOLL 0.500% 2032-09-15	98.50	32.17	67.9	57.6	88.6	2.01%	50.3%
8	PANDORA 1.750% 2020-12-01	106.00	13.81	66.3	79.6	39.8	0.23%	26.0%
9	BROCADE 1.375% 2020-01-01	100.50	12.38	64.6	55.7	82.4	1.21%	28.2%
10	ILLUMINA 0.000% 2019-06-15	95.75	123.20	64.5	52.9	87.7	1.74%	97.7%
11	ILLUMINA 0.500% 2021-06-15	96.00	123.20	64.4	54.8	83.6	1.42%	98.2%
12	RTI 1.625% 2019-10-15	108.75	32.05	64.4	67.6	57.9	-1.39%	-3.5%
13	INPHI 0.750% 2021-09-01	106.00	43.60	64.4	70.4	52.2	-0.51%	37.0%
14	PDC 1.125% 2021-09-15	116.75	79.53	64.2	66.1	60.4	-2.20%	25.3%
15	SILVER 2.875% 2033-02-01	92.50	9.29	63.7	62.3	66.5	5.51%	99.1%
16	ACETO 2.000% 2020-11-01	95.25	21.41	63.6	60.6	69.5	3.31%	47.8%
17	TELIGENT 3.500% 2019-12-15	95.50	7.24	63.5	78.9	32.5	5.13%	48.9%
18	VITAMIN 2.250% 2020-12-01	95.75	25.95	63.1	60.5	68.3	3.40%	46.6%
19	TWITTER 1.000% 2021-09-15	93.50	19.65	63.0	50.6	87.8	2.46%	269.5%
20	TWITTER 0.250% 2019-09-15	94.50	19.65	62.8	47.9	92.6	2.32%	273.4%

Sources: Bloomberg, Kynex

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Hillside Advisors HOCS 20 List (Issue Size > $300 Million)

	Description	Convert	Stock	HOCS Overall	HOCS Growth	HOCS Safety	Yield	Premium
1	HORIZON 2.500% 2022-03-15	91.25	14.83	73.3	78.1	63.7	4.38%	76.3%
2	TESLA 0.250% 2019-03-01	90.25	192.18	70.4	66.5	78.0	4.95%	69.0%
3	TESLA 1.250% 2021-03-01	84.50	192.18	69.2	70.4	66.7	5.41%	58.2%
4	IONIS 1.000% 2021-11-15	99.75	45.57	68.0	77.4	49.2	1.05%	46.2%
5	PANDORA 1.750% 2020-12-01	106.00	13.81	66.3	79.6	39.8	0.23%	26.0%
6	BROCADE 1.375% 2020-01-01	100.50	12.38	64.6	55.7	82.4	1.21%	28.2%
7	ILLUMINA 0.000% 2019-06-15	95.75	123.20	64.5	52.9	87.7	1.74%	97.7%
8	ILLUMINA 0.500% 2021-06-15	96.00	123.20	64.4	54.8	83.6	1.42%	98.2%
9	RTI 1.625% 2019-10-15	108.75	32.05	64.4	67.6	57.9	-1.39%	-3.5%
10	TWITTER 1.000% 2021-09-15	93.50	19.65	63.0	50.6	87.8	2.46%	269.5%
11	TWITTER 0.250% 2019-09-15	94.50	19.65	62.8	47.9	92.6	2.32%	273.4%
12	GOGO 3.750% 2020-03-01	75.50	9.70	62.4	68.6	49.9	13.36%	85.6%
13	HERBALIFE 2.000% 2019-08-15	92.25	50.37	60.9	50.2	82.3	5.14%	58.0%
14	INSULET 1.250% 2021-09-15	94.00	37.61	60.6	71.0	39.8	2.60%	45.9%
15	INTEGRATED 0.875% 2022-11-15	104.25	24.46	59.3	59.8	58.1	0.15%	42.6%
16	SHUTTERFLY 0.250% 2018-05-15	102.00	52.64	58.3	46.0	82.8	-1.14%	24.3%
17	MOLINA 1.625% 2044-08-15	113.25	54.14	58.0	56.6	60.7	-5.76%	21.5%
18	AKAMAI 0.000% 2019-02-15	103.25	64.94	57.4	47.7	76.9	-1.47%	42.4%
19	INTERCEPT 3.250% 2023-07-01	89.00	106.04	57.0	68.8	33.4	5.26%	66.7%
20	RESTORATION 0.000% 2019-06-15	86.25	31.92	56.3	41.6	85.5	5.99%	213.7%

Sources: Bloomberg, Kynex

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Whiting Petroleum Corporation (WLL): Announces Conversion of Mandatories

Jeffrey Alton, CFA
jeffrey@hillsideadvisors.com

Dennis Dowden, CFA
ddowden@hillsideadvisors.com

After the market close last Friday, Whiting Petroleum announced the conversion of $721 million in mandatory convertible notes for 77.6 million common shares. Combined with the sale of 50% of two North Dakota gas-processing plants last month for approximately $375 million, Whiting will have reduced its long-term debt significantly from $4.45 billion as of September 30 to about $3.3 billion when the transactions close. Despite the dilution of existing common stock shareholders, the improvement in in Whiting's debt profile should carry the day and boost the value of the outstanding common stock over time.

Whiting's conversion schedule is:

Title	Principal Amount (in thousands)
6.50% Mandatory Convertible Senior Sub Notes due 2018	$5,975
5.00% Mandatory Convertible Senior Notes due 2019	$4,651
1.25% Mandatory Convertible Senior Notes due 2020	$467,789
5.75% Mandatory Convertible Senior Notes due 2021	$125,218
6.25% Mandatory Convertible Senior Notes due 2023	$117,333
Total	$720,966

In addition to the $650 million outstanding on the company's credit agreement, the company's debt is spread out over five years beginning in 2018, giving the company ample time to benefit from an improving oil market. Should the deal struck within OPEC and the non-OPEC countries hold over the intermediate term, Whiting securities seem well-positioned to appreciate over that period. Management has engineered the company to break even at $50 oil, and like most E&P companies, Whiting is highly leveraged to the price of oil. During the oil recession, Whiting pruned its lease holdings, selling its higher-production-cost rights, so cash flow should increase significantly if oil prices continue to grind higher. With the news of the conversion and the non-OPEC deal, Whiting is up, trading at $12.40 per share, or up $0.25 per share since last Friday's close.

The mandatory conversion should significantly improve Whiting's leverage which stood at about 5.5x at the end of last quarter. The mandatory conversion should decrease that number to around 4.5x. The asset sale and debt pay down in the first quarter should bring it to a little over 4.0x, further in line with the company's more successful peers. The asset sales are expected to close in 2017.

These improved leverage ratios do not include any effect resulting from higher EBITDA due to higher oil prices or savings from the interest on debt payments. Liquidity remains high with only $650 million drawn on a $2.5 billion credit line expiring at the end of 2019. The company also lies safely within its debt covenants. Per the company, the total senior secured debt (revolver borrowings) to EBITDAX debt covenant is less than 3.0:1. It was 0.78:1 as of September 30. The total EBITDAX to consolidated cash-interest covenant is now less than 2.25:1. It was 4.17:1 as of September 30. The current-ratio covenant is greater than 1:1. It was 5.30:1 as of September 30.

Whiting has moved to significantly reduce its drilling capital expenditures and overall cost structure. Whiting spent $435 million in the first nine months of 2016 drilling for oil versus $2.15 billion over the same period last year. In the meantime, the company has improved its drilling efficiency. Drill times at its Bakken prospects have decreased by 63% over four years and 55% at its Redtail acreage over the same period. Based on its own research, Whiting ranks itself as the most efficient driller in the Bakken based on initial 90-day production rates for wells completed between October 2015 through September 2016.

Whiting has eliminated other expenses as well. As the company has sold off more expensive acreage, its lease operating expense has fallen $2.75 per barrel from about $11 in 2015 to full year 2016 guidance midpoint of about $8.25. That has been only partially offset by an increase in SG&A of $0.275 per barrel to a 2016 midpoint guidance of $3.075 per barrel.

While Whiting has just over half its 2017 production hedged using collars topping out between $60 and $70 per barrel, only 6.2% of production is hedged in 2018 and nothing beyond that date. An improving oil market will greatly increase Whiting's upside potential and reduce risk as these hedges roll off and Whiting can replace the hedges at more favorable terms, if it should choose to do so.

Though we have written about Whiting on several occasions in the past, this is our first optimistic article regarding the company. As opposed to two years ago, the company has the potential for significantly improving financial returns based on a better debt profile, reduced expenses and an improving backdrop to the oil market. In addition, if the stock does not increase along with the petroleum market, we believe the company could be a takeout target. Accordingly, we have begun to purchase Whiting Petroleum common shares in our separate accounts.

* A Hillside Advisors affiliate and members of Hillside Advisors have positions in WLL.

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