

Hybrid VigorSM

The Hillside Convertible Advisory Letter

Volume 2 Issue 12

Phi Slamma Gamma

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Dear Friends

It's great to see all those "I Still Hate Christian Laettner" shirts. Being a huge fan of horse racing makes me something of an automatic Kentucky fan, so I, like many, still feel wounded by that shot. Anyway, it was a great weekend, though my pride in picking Michigan State over Virginia took a fall in the Battle of Evermore—I mean Kansas.

It was watching the game of Laettner's fabled shot that first suggested to me the analogy of basketball and option Greeks—specifically, that a great way to understand gamma is to think about a game that's tied or nearly tied with very little time remaining. Think of a team's delta as its chance of finishing in the money (i.e. winning the game). Radical swings in the team's delta (based on a small move, i.e., a single basket) cannot happen early in the game under any circumstances. For example, Hampton led Kentucky, 4-3, for a few seconds last week. Did that score have Vegas oddsmakers recalculating? No, Kentucky's delta was still 99-something. No gamma there.

But when games go down to the wire, each score could be the difference-maker. When a team is down two points with just a matter of seconds left, and doesn't have the ball, its delta is pretty low. If it then manages to get the ball and hit a three-pointer, its delta swings from say 10% to 90%, or thereabouts. That's serious gamma.

It's important to remember this when you're tempted to get caught up in thinking of a short-dated convertible as an automatic gamma play. A friend recently complained to me that too many convertible wannabes talk about the high gamma in 20-delta bonds just because they only have a year to maturity. Remember, you need to be very near both the conversion price and the expiration to have big gamma.

We haven't commented on the situation, but we read with interest about the MGM 4.25% bond, whose delta went from 65% to 95% in a single trading session. Now that's gamma—almost Laettneresque.

And yes—my favorite team is still whoever is playing Duke.

Bill

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Siamese Separation

Bill Feingold and Curt Peters

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.

Last week we pointed out the cycles of the HARP. While not exactly in sync with the lunar cycles, it does leave something for thought. And in case you were grappling with the causation the past seven days, the answer is, "Yes, the Ugly 20 reversed course this week, by about 0.25 HARP". With the average underlying stock up 3.2%, the average bond was up 2 points. Back of the envelope work tells us that the average delta is 63, which is exactly what our model also says. In effect the bond prices were delta neutral over the week. But HARP doesn't just measure richness, and so HARP picked up on the increased risk that the higher prices, though dollar neutral, entailed. Average HARP this week increased to 9.34 HARP. The overall membership of the list of Ugliers remained unchanged, save for two prior members rejoining. One of the two bonds from this week's list which departed was a twin, something to dig into a little later.

Starting from the top of the ladder, sits that old stalwart RPM 2.25% of 2020 with no change in HARP from the prior week. The stock was up about 1.55%, and the bond was up a ½ point. Given the bond is on a 45 delta, the week's move was less than dollar neutral and certainly assisted in retarding any HARP growth due to the dollar price increase.

Sitting in at second pole position is the bigger couponed of the Illumina twins – the Illumina 0.5% of 2021. The underlying stock was up 4.15% for the week, driving this particular twin up two points to 117¾ -which is a hair more than delta neutral. The bond is now priced with two things stacked against it. First it is rich, oh so very rich. The second is that its price is directly inside the worst possible part of the price profile – the dreaded multi-dimensional risk zone between 110 and 130. It should be no shocker to discover that HARP on this specimen was up by 0.80 to 11.45 HARP. Truly illuminated risk of the highest order.

The smaller couponed of the Illumina twins – the Illumina 0% of 2019 – was of course also up in price, by 1½ points to 112¾. And it gained in HARP by almost the same amount as its brother, 0.77, to settle at 8.79 HARP. Why the big difference in overall HARP scores between the two twins? The primary driver is the dollar price above par of each of them. Parity is so far below on both that it's not worth mentioning. The 2021 bond has two points of extra free fall over the 2019 bond, after subtracting the coupon carry. Or to put it another way, the 2019 bond isn't quite fully into the multi-dimensional risk zone as far as the 2021 bond.

We haven't mentioned the Red Hat 0.25% of 2019 bond in a month or more, mostly because it hasn't really moved that much – so much for all that promised volatility. The stock shot up from \$60 to \$70 in late December, and hasn't moved that much since then except to touch back to \$65 during the market sell off a week ago. Thanks to the market gain of the past week, RHT is back at \$69.50 and the bond is back at 118. The bond was able to gain about ½ point more than dollar neutral, which in combination with its already existing richness and terrible position in the multi-dimensional risk zone, gave the bond a 0.92 increase in HARP to 11.29 HARP. Just to review why the RHT bond is so ugly, there is an 18 point drop to par with parity 5¼ points below even that. Sure you get a fat 1 1/8 points of carry to offset the loss, but it still stings something awful. Awful enough to rank the bond 3rd on our list of Ugly.

The smooth sound of Jazz Pharmaceutical 1.875% of 2020 climbing the Ugly 20 doesn't go unnoticed, particularly when it is driven by an explosive 7.95% gain in the underlying stock. The bond was up $4\frac{3}{4}$ points – dollar neutral for those keeping score. Though as we pointed out earlier, HARP is about risk and not just richness. So the big price gain up to $122\frac{1}{4}$ was a net HARP increase for the bond of 0.70 HARP, and a rankings climb up to 6th. The risk of this bond is the $22\frac{1}{4}$ point over par (parity much below) minus the 6.4 years of coupons. That is, $10\frac{1}{4}$ points of dead fall loss if all goes wrong. Sure there is that high 30s volatility investors are counting on, but really it's a heckuva lot of risk. We're going to play a little tune on our own behalf here—we liked this bond when it first came out, though there was a lot of pushback on the terms. We thought it looked quite good then. Now, not quite so much, though it's far from the ugliest on the list.

And now we get to the headline feature – what happened to the Siamese separation? You guessed it was a dual tranche name, and since we already mentioned Illumina, that leaves us with the BioMarin brothers. The 1.5% of 2020 bond dropped off the Ugly 20 this week. It's been a favorite whipping boy for a long time with us, so it was with great relief to see the stock volatility really pass muster and get parity up enough to relieve the bond of its high price. The bond dropped from 17th to 23rd on our list, and up in price by $1\frac{1}{4}$ to $150\frac{3}{4}$. HARP is now in the land of mortals at 7.47.

The BioMarin Pharma 0.75% of 2018 bond still resides at Ugly spot #12, however. It did make a decent improvement, down from 9th the prior week on a 0.43 HARP reduction to 8.38 HARP. Priced at $146\frac{1}{2}$, the bond is out of the most dangerous part of the multi-dimensional risk zone, but like its brother it is still rich and risky. You can still lose 11 points straight away after accounting for coupons on this in-the-money convert. Once again, though, we acknowledge that it's hard to give up on a habit that's been this satisfying. Just don't say we didn't warn you.

US Steel 2.75% of 2019 joined us back on the program this week, helping us to remember that there is actually demand for convertibles from sectors other than Healthcare and Tech. With stock up 6.33%, and bond up $3\frac{1}{2}$ points to $118\frac{1}{4}$, the bond entered the heart of the dangerous part of the price profile. A 0.69 HARP gain put the bond up from 21st to 13th with 8.32 HARP. After accounting for coupons, this bond has $7\frac{1}{4}$ points of dead fall to par. It's a lot to be sure. And parity is $8\frac{1}{2}$ points below par. So to make up the difference, the high 40s volatility is going to have to start making more weeks like this one.

And our biggest star of the week is both a new(ish) entrant and a high scorer – SanDisk 0.5% of 2020. Powered by a 3.88% stock gain, the bond climbed up $2\frac{3}{4}$ points, which is about $\frac{3}{4}$ points more than dollar neutral. With the price moving from $110\frac{1}{4}$ to 113, the bond is back in the multi-dimensional risk zone, and back on that charts from 29th to 16th. HARP was up 1.12 to 8.27 HARP. The bond's risk is a $10\frac{1}{4}$ point drop to par after accounting for coupons, and parity is $5\frac{1}{4}$ points below par. The low 30s volatility might be able to close the gap over the course of the 5.5 years of life left in the bond, but it's a rather risky bet to make with a known $10\frac{1}{4}$ point loss if it doesn't. That said, a lot of readers complained about this bond's presence on the original Ugly 20 list. Hedgers were "right" and outrights were outwrong. Anyway, stay alert and stay safe.

Hillside Ugly 20 List (Prices as of March 20, 2015)

	<u>Convertible</u>	<u>Price</u>	<u>Stock</u>	<u>Premium (%)</u>	<u>Premium (pts)</u>	<u>HARP</u>
1	RPM International 2.25% 2020-12-15	118.00	48.41	28.9	26.46	13.69
2	Illumina 0.5% 2021-06-15	117.75	196.02	52.8	40.69	11.45
3	Red Hat 0.25% 2019-10-01	118.00	69.50	24.6	23.30	11.29
4	Omnicare (Exchange) 3.25% 2035-12-15	119.00	78.32	17.1	17.38	10.68
5	Lam Research 1.25% 2018-05-15	140.75	79.23	10.9	13.83	10.64
6	Jazz Pharmaceuticals 1.875% 2021-08-15	122.25	189.01	29.2	27.63	10.25
7	Emergent BioSolutions 2.875% 2021-01-15	118.25	29.70	28.9	26.51	9.77
8	Priceline.com 0.35% 2020-06-15	113.75	1179.17	26.9	24.11	9.14
9	Salesforce.com 0.25% 2018-04-01	120.00	67.69	17.8	18.13	9.03
10	Illumina 0% 2019-06-15	112.75	196.02	46.4	35.73	8.97
11	NVIDIA 1% 2018-12-01	125.75	23.47	8.0	9.31	8.54
12	BioMarin Pharma 0.75% 2018-10-15	146.50	125.17	10.2	13.56	8.38
13	US Steel 2.75% 2019-04-01	118.25	23.18	29.1	26.65	8.32
14	Workday 0.75% 2018-07-15	121.00	84.91	18.8	19.15	8.31
15	Synchronoss Tech 0.75% 2019-08-15	115.50	47.24	30.0	26.65	8.28
16	SanDisk 0.5% 2020-10-15	113.00	87.07	19.3	18.28	8.27
17	Rambus 1.125% 2018-08-15	122.25	12.74	15.9	16.77	8.06
18	ServiceNow 0% 2018-11-01	122.50	79.38	13.9	14.95	7.96
19	Palo Alto Networks 0% 2019-07-01	141.50	144.08	8.4	10.96	7.92
20	Take-Two Interactive Syst 1% 2018-07-01	132.50	25.68	11.1	13.24	7.75

Sources: Bloomberg, Kynex

HOCS 20SM

Bill Feingold

A quick refresher. HOCS, or Hillside Overall Convertible Score, measures the attractiveness of a bond, taking into account both upside potential and downside protection. HOCS is not a theoretical model but a rating system that assigns points to a number of different characteristics of each convertible. HOCS can theoretically lie anywhere from 0 to 100. In practice the average score for a broad group of convertibles is typically around 50. 60 is a good score, 70 is excellent, and 80 is exceptional.

Pretty solid week in HOCS-land. The HOCS 20 returned 1.62%, just under 40% of the underlying stocks' 4.22%. Yeah, we know, 40% of the upside doesn't sound great, but it's actually pretty good on a defensively oriented profile, with average price in the mid-90's and a conversion premium in the mid-50% range. Yes, if you want stocks in drag, go ahead and buy CWB. Just don't say we didn't warn you.

The Qihoo complex finally had a decent week, benefiting from a joint venture with Microsoft. Pretty interesting stuff, how it turns out that the huge Chinese installed base of pirated Windows software may end up being a good thing for Microsoft. Maybe imitation really is the sincerest form of flattery, or something. The longest-dated, lowest-priced 1.75% were, unsurprisingly, the best of the Qihoo bunch, gaining about 2.7%. And, in a week that saw love spread among the downtrodden, both of the "new" Tesla bonds turned around, significantly outperforming their deltas on the upside (roughly 3% and 3.5%, respectively, for the 2021 and 2019 bonds, with shares up 5% on the back of a story about extended battery life). We've liked the Tesla bonds for a while as a good way to play a "who-knows" story, but last week's prices and profiles convinced us another full story was merited.

HOCS 20 also got boosts from Trina Solar—which gets a fine treatment from Jeff Alton elsewhere in this issue—and the resident wild thing, ANI Pharmaceuticals, which rose nearly 6% on the back of a 9-and-change stock gain. Da pahty poopahs (sorry, big Ahnuld in Kindergarten Cop fan here) were Invensense and Insulet, both down in the 1.5%-2% range. So if you were in the HOCS 20, and you didn't start with "In," you had a good week. Gogo actually outperformed its underlying shares—its reward was getting booted out of this week's list.

No use putting this off any longer. Herbalife 2% are back, thanks to Friday's double-digit stock price jump. A squeeze on the back of a lawsuit dismissal? Sure looked like it. Anyway, bounces in this stock help partially undo management's catastrophic decision to use the convertible's proceeds for a share repurchase at much higher levels. Since HOCS focuses on the underlying equity cushion, Herbalife's safety ranking is getting a lot of love from Friday's move and this morning's follow-up. As we always say with this name: your call.

On a more expansive front, the developmental HOCS 100 returned 1.34% last week, bringing the year-to-date return for Hillside's convertible benchmark to 3.96%. We are targeting an official release of HOCS 100, with daily return information, for late spring or early summer. In the meantime we welcome any questions or comments you may have.

Hillside HOCS 20 List

Description	HOCS						
	<u>Convert</u>	<u>Stock</u>	<u>Overall</u>	<u>Growth</u>	<u>Safety</u>	<u>Yield</u>	<u>Premium</u>
1 Qihoo 0.5% 2020-08-15	83.75	50.90	79	75	89	8.13%	106.2%
2 Qihoo 2.5% 2018-09-15	95.00	50.90	78	71	93	6.11%	107.1%
3 Qihoo 1.75% 2021-08-15	77.00	50.90	75	78	69	8.08%	82.7%
4 Invensense 1.75% 11/01/18	100.50	16.39	74	81	61	1.61%	34.2%
5 Twitter 1% 2021-09-15	96.50	48.44	71	79	55	1.57%	54.7%
6 Tesla Motors 1.25% 2021-03-01	85.75	198.08	70	76	59	3.97%	55.8%
7 Solar City 1.625% 2019-11-01	88.50	49.89	70	82	47	4.42%	48.2%
8 Web.com 1% 2018-08-15	91.50	18.29	70	74	62	3.69%	75.1%
9 IGI Labs 3.75% 2019-12-15	107.25	9.32	70	82	44	1.78%	37.4%
10 Tesla Motors 0.25% 2019-03-01	88.75	198.08	69	72	64	3.33%	61.2%
11 SunPower 0.875% 2021-06-01	99.00	32.87	69	64	79	1.04%	46.9%
12 Solar City 2.75% 2018-11-01	103.50	49.89	68	81	42	1.74%	27.9%
13 Twitter 0.25% 09/15/19	97.25	48.44	67	72	57	0.88%	55.9%
14 Renewable Energy 2.75% 2019-06-15	95.00	9.66	67	73	54	4.05%	30.4%
15 Am Realty 3.75% 2020-12-15	98.00	10.09	67	75	51	4.15%	47.1%
16 Insulet 2% 2019-06-15	101.00	33.95	66	76	47	1.75%	38.4%
17 HomeAway 0.125% 2019-04-01	96.00	31.29	66	60	79	1.15%	60.0%
18 Shutterfly 0.25% 02018-05-15	101.25	48.49	66	59	78	-0.15%	34.0%
19 ANI Pharma 3% 2019-12-01	118.50	65.98	65	80	35	-0.77%	24.3%
20 Herbalife 2% 2019-08-15	83.50	42.10	65	65	64	6.37%	71.1%

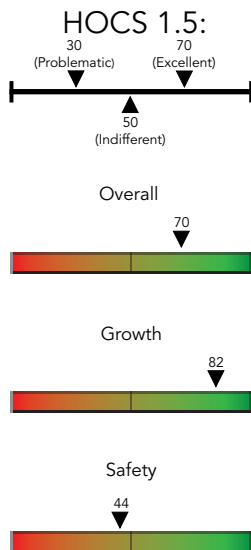
Sources: Bloomberg, Kynex

IGI Laboratories: Moving Beyond Topical

Kathy Schick

IG
3.75%, 2019/12/15
Price (Bond): 107.25
Stock: \$9.32
YTM: 1.78%
Premium: 37.4%
HOCS-Overall: 70
HOCS-Growth: 82
HOCS-Safety: 44

As of March 20, 2015



IGI Laboratories (IG) caught our eye when it landed on the HOCS 20 this week. Both the stock and the bond retreated following the fourth quarter 2014 earnings on March 2. The stock was down as much as 29% but has recently begun to move back up and is now down "only" 19% since the earnings were announced. The convert followed the stock down from 121.32 to par and is now trading at 107.25. While the fourth quarter exceeded management's guidance, there was concern over the revenue and gross margin guidance for 2015. Management appears to be acting prudently by excluding revenue from possible FDA approvals in 2015 until it has firm target dates from the FDA, which are expected in the next few months. Management also acknowledged there has been some pressure on gross margins due to industry consolidation especially with wholesalers and retailers merging, providing buyers with more power over the supply chain. While this was reason for the stock to be under pressure, it appears the reaction may have been overdone initially.

IG is a small company in the middle of a transformation process, so it is not without risk. However, there is also significant opportunity if the new business model is successful and sales take off. Seems like a perfect situation to invest in the convertible bond in order to reap significant upside but limit your downside.

Overview

IG Laboratories was historically a contract manufacturing company focused on topical applications for the generic pharmaceutical market as well as the over-the-counter and cosmetics industries. In 2010 management made the decision to begin transitioning to a specialty generics pharmaceutical company with a portfolio of topical treatments. In September 2010 the company submitted its first amended new drug application (ANDA), its first step toward becoming a specialty pharmaceutical company. Through early 2015, cumulative ANDA filings now total 22, with 11 of those filed in 2014. Management has guided that the company will file at least 20 topical product ANDAs with the FDA in 2015.

In March 2014 IG received its first approval from the FDA, with a second approval coming later in the year. The company now has six marketed products, all topical treatments, with a seventh scheduled to launch this spring. The total market opportunity for all seven products is currently \$145 million.

IG has its own manufacturing facility to produce creams, ointments, lotions, gels, and solutions. Capacity utilization at the facility is currently about 70%. Management estimates the current facility will meet its needs into 2017, with modest capital expenditures along the way. IG also completed an R&D lab expansion in June 2014. For the topical business, the company is well positioned for at least the next couple of years.

Full Year 2014 Results

IG announced 2014 results on March 2. Full year revenue increased 85% year-over-year to \$33.7 million. Revenue from the sale of IGI labeled generic topical pharmaceutical products was \$19.8 million. The company filed 11 ANDAs during the year, a key driver in R&D spending increasing 150%. Management estimates the addressable market for its total pipeline of 22 ANDAs, pending FDA approval, is \$579 million.

The company has guided for 2015 revenue in the range of \$55 to \$57 million with gross margins of 52 to 53 percent. R&D spending is expected to continue growing, along with the pipeline, and be in the range of 25 to 27 percent of revenue. IG expects to file at least twenty additional ANDAs in 2015 and expects adjusted EBITDA to be in the range of \$7.5 to \$8.5 million.

TICO

In 2014 management made the decision to expand beyond the topical specialty pharmaceutical market. The company is now focused on injectable, complex, and ophthalmic markets in addition to the topical market - TICO.

In September 2014 IG acquired ANDAs and NDAs for 18 products from AstraZeneca for \$500,000 plus up to an additional \$400,000 in future milestone payments. These products were primarily injectable. Also, in September, IG acquired two ophthalmic products from Valeant for \$1.5 million in cash, with the rights to acquire three more. One of those three was acquired in November. These acquisitions launched the company's TICO expansion strategy. Within the complex market, the company is working on two projects in-house.

In order to fund management's growth strategy, the company completed three capital raising transactions in 2014. A secondary stock offering was done in June that raised net proceeds of \$24.9 million. In November the company entered into an asset-based revolving credit facility. The facility is for \$10 million, with the option to increase to \$15 million under certain circumstances. The facility matures in 5 years and has a rate of L+400. There was \$3.2 million drawn on the facility at year-end.

In November the company issued \$143.75 million of 3.75% senior convertible notes due 2019. The proceeds from the deal were to be used for general corporate purposes including acquisitions, capital spending, and strategic transactions. We expect to see more acquisitions down the road, especially in the injectable, complex, and ophthalmic areas. Management is also evaluating the best approach for manufacturing injectable and ophthalmic products, as its current facility only supports topical. The company is currently outsourcing the work, but expects to make a decision on whether to build its own facility by mid-year. The current cash cushion of \$159 million provides IG with the liquidity needed to get its latest expansion strategy off the ground.

The Convert

The 3.75% senior convertible notes due 2019 receive a HOCS slash line of 70 Overall / 82 Growth / 44 Safety. As with many of the biotechnology and pharmaceutical companies we have looked at, the score is heavy on growth and light on the safety side, and IG is no exception. Growth prospects are very good with revenue rising 85% in 2014 and expected to increase another 72% in 2015 based upon consensus revenue estimates. The safety score is held back by the company's small size, but offset somewhat by the net cash position and positive EBITDA. As we already pointed out, IG is not without risk, but future growth prospects look quite good and the convertible bond is the way to get involved.

Credit Waterfall

IGI Laboratories, Inc (IG) (Dollars in Millions)	31-Dec-14	Total Debt (Cum. Bal.)	Adj. EBITDA Multiple	Net Debt (Cum. Bal.)	Adj. EBITDA Multiple
Current Share Price	\$8.19				
Shares Out. (Millions)	52.8				
<u>Latest Twelve Months:</u>					
EBITDA (Adj.)	6				
Free Cash Flow	(5)				
Cash & Cash Equivalents	159				
<u>Senior Secured Debt</u>					
Cap Leases and Bank Revolver	3	3	0.6x		
<u>Senior Unsecured Debt</u>					
3.75% Senior Cvt. Notes due 2021	144	147	26.3x	-12	-2.1x
Total Debt	147	147	26.3x	-12	-2.1x
Equity Market Cap.	432	---	---	---	---
Enterprise Value	420	---	---	---	75.1x

Sources: Bloomberg, Company Filings

Financial Summary

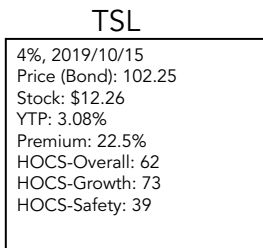
IGI Laboratories, Inc (IG) (Dollars in Millions)	Fiscal Years Ended			Twelve Mos. Ended		LTM
	31-Dec-11	31-Dec-12	31-Dec-13	31-Dec-13	31-Dec-14	31-Dec-14
Revenues	8	9	18	18	34	34
Y / Y Change		10.3%	112.2%	---	85.2%	---
Gross Profit	2	3	6	6	17	17
Operating Profit	(3)	(30)	9	9	237	237
EBITDA (Adj.)	(3)	(3)	1	1	6	6
Interest Expense	0	1	0	0	1	1
Income Tax Expense	0	(0)	(0)	(0)	0	0
Capital Expenditures	0	7	2	2	1	1
% Revenues	0.0%	77.9%	9.9%	9.9%	1.8%	1.8%
Free Cash Flow	(3)	(3)	(1)	(1)	(5)	(5)
Total Debt	0	0	3	3	147	147
% Total Debt	NM	NM	NM	NM	-3.2%	-3.2%
Gross Margin	25.6%	32.6%	34.2%	33.5%	49.9%	49.9%
Operating Margin	-38.5%	-353.5%	51.0%	51.1%	702.7%	702.7%
EBITDA (Adj.) Margin	-38.5%	-31.4%	4.9%	4.9%	16.6%	16.6%
EBITDA (Adj.) / Interest	NM	NM	4.5x	4.5x	7.0x	7.0x
EBITDA (Adj.) - Capex / Interest	NM	NM	-4.5x	-4.5x	6.3x	6.3x

Sources: Bloomberg, Company Filings

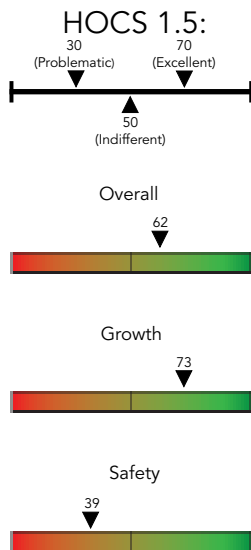
Trina Solar: Advantage China?

Jeffrey Alton, CFA

HOCS Scores: TSL 4% 10/15/19 62 overall/73 growth/39 safety
 TSL 3.5% 06/15/19 57 overall/72 growth/25 safety



As of March 20, 2015



If a tree falls in the forest and no one is there to hear it, does it make a sound? Does a solar developer get credit for de-risking a project through a quality power purchase agreement (PPA) when that project is buried in the balance sheet where no one can see? We will leave the former for you to ponder, but the answer to the latter question has been a resounding “no” from the investment community in the past.

All renewable energy companies have been striving to lower their costs to better compete with coal and natural gas. Raising the visibility of completed projects with solid PPAs by dropping those projects into Yieldcos has allowed renewable energy companies to tap a new pool of more risk adverse investors at a lower cost to the company. (For a further review of Yieldcos, please refer to this month’s HILAS (hillsi.de/HILAS_TSL)).

Now Trina Solar is headed in the Yieldco direction. For those analyzing China-based Trina Solar’s balance sheet, the reliance on short-term revolving bank debt has always been striking—no doubt because China lacks a well-developed bond market. Trina entered the downstream solar development market only last year, but it has rapidly taken on projects and is reaching a critical scale where the company can begin to get more creative with its financing.

Trina’s first step was the establishment of a separate, privately held project vehicle named Jiangsu Trina Solar Power Investment & Development Company. It is designed to hold and operate Trina’s solar downstream projects. Then, last month, Trina announced a financing package backed by PingAn Trust Company, part of the large Chinese insurance company, and Jiangsu Juizhou Investment Group, which will provide financing for 500 to 1,000 megawatts (MW) of solar power plants in China over the next three years. PingAn and Jiangsu Juizhou will fund the projects through convertible loan agreements with the opportunity to convert the loans into minority equity stakes in the projects at a pre-determined time. The consortium will also have the chance to offer construction financing after completing due diligence on a project. The package offers a good start for Trina to diversify its financing base.

The next step will be a public Yieldco. While no strict timeline was given, Trina executives stated that they believed that their downstream business has reached a critical mass, and that an IPO was in the future. Trina reported having downstream development projects totaling a million gigawatts (GW), with 300 MW currently under construction.

Final confirmation of the Yieldco could offer a boost to the stock although the stock is already up since Trina announced its Yieldco plans. Such a move is common in the industry. First Solar and SunPower are both up 20% since announcing their plans to establish a jointly held Yieldco late last month.

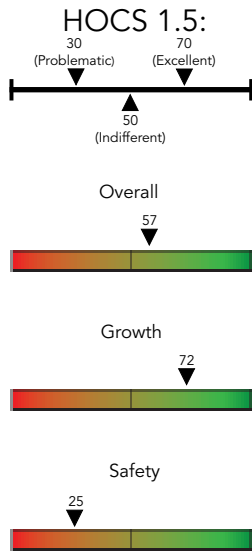
On the manufacturing side, Trina sells its solar modules globally, but the China story looks to be the primary driver for the company in the intermediate term. Trina has concentrated its downstream solar projects in China and China accounts for about half of Trina's total solar module sales. While prices are lower and margins tighter in the Chinese solar industry, growth should push Trina ahead. The installed solar base in China was 30 GW at the end of 2014. However, government plans call for 100 GW by 2020, more than tripling the current installed base. As a top Chinese solar manufacturer/developer, we think Trina should be able to take its fair share or more over that time frame.

TSL

3.5%, 2019/06/15
Price (Bond): 104.0
Stock: \$12.26
YTP: 1.66%
Premium: 21.3%
HOCS-Overall: 57
HOCS-Growth: 72
HOCS-Safety: 25

As of March 20, 2015

Having survived the overcapacity issues, particularly in China, that plagued the solar module industry in 2011, Trina ranked as the world's largest solar module manufacturer in 2014. The company is an integrated monocrystalline module manufacturer, with processes in every phase of solar module production from ingot production to the final module. In addition to its own ingot and wafer production, Trina contracts with third party ingot and wafer manufacturers to procure additional materials needed for its solar cell production. In 2014, solar module shipments totaled 3.66 GW, up from 2.58 GW in 2013. Trina has manufacturing capacity of:



	12-31-14 GW	12-31-15 (est.) GW
Modules	4	4.8
Cells	3	3.5
Wafers	1.7	2.3
Ingots	2.2	2.8

While the expansion in solar module capacity implies a 20% growth rate, in reality, revenue growth will be less as the price of solar continues to drop. Currently, Trina solar modules are a competitive \$0.46/watt. Analyst consensus estimates peg revenue growth rate at 11% coming in at \$2.54 billion in 2015. Trina is planning for 700 to 800 MW to be shipped to its downstream projects this year.

Trina's China shipments increased to just under 50% of total shipments in Q4 2014. China shipments tend to be backend loaded as the Chinese New Year slows business in Q1. Trina's 2015 shipment forecast for the domestic Chinese market is 50 MW in each Q1 and Q2, 200 MW in Q3 and about 450 MW in Q4.

Other major markets in Q4 2014 included the US at 18.6% of shipments, Japan at 13.8% and Europe at 9.2%. Trina has also targeted India as a growth market over time. During the quarter, Trina reported expanding its leading position in each of these markets.

Trina also concluded an agreement with fast growing US residential installer Vivint Solar. Vivint Solar will offer Trinasmart modules which can be monitored on a module by module basis to enhance safety and optimize performance.

First quarter 2014 results were basically in-line with estimates as follows:

	Actual	Consensus	Percent	Previous	Percent
	12/31/14	Estimated	Difference	Year Actual	Change
		12/31/14	Act. V. Est.	12/31/14	Y-O-Y
Revenue	\$705	\$665	9.30%	\$526.60	33.90%
Adjusted EPS	\$0.13	\$0.14	-7.10%	\$0.13	NC

Despite the lackluster quarter, Trina shares got a boost from the announcement of a pending Yieldco IPO. The stock moved from just over \$10/share to a close of \$12.26 last Friday. Current consensus analyst income/share estimates are \$1 for 2015 and \$1.38 in 2016. As if the 8.88x 2016 p/e multiple wasn't reason enough for any Chinese to immediately buy the stock, it seems cheap compared to SunPower's 18x 2016 p/e, even after applying a Chinese discount.

Similarly, the 4% of 2019 convertible bonds seem attractively priced. Trading at 102.25 and offering a 3.46% yield to maturity against the \$12.26 stock price, the bond offers downside protection for investors hesitant to go all-in on a Chinese solar name. In addition, the 22.5% premium seems reasonable with another five years until maturity and the China solar industry in growth mode.

The 4% of 2019 convertible bonds actually made a brief appearance in the HOCS 20 last week. The bonds got bumped this week, however, thanks to the stock's price increase, which pushed Trina's bonds above par. The HOCS safety score also penalizes China bonds as well.

The China discount may be overstated. Trina's corporate structure offers bondholders more security than other Chinese names which must use the variable interest entity (VIE) structure because government regulations prohibit a majority foreign ownership. The Chinese government has made an exception for foreign ownership in the solar industry, so bondholders have more recourse to Trina than VIE structured companies such as E-House or 51Job.

Trina's heavy reliance on China may also bring dividends in the 2017 time frame as scheduled reductions in U.S. renewable energy incentives take hold. U.S.-based solar industry players have commented that US utilities are working to get their projects completed before the deadline. That may force an industry slowdown for more US-dependent solar firms in the 2017/2018 timeframe.

Credit Waterfall

Trina Solar Limited (Dollars in Millions)	30-Sep-14	Total Debt (Cum. Bal.)	EBITDA Multiple	Net Debt (Cum. Bal.)	EBITDA Multiple
Current Share Price	\$12.21				
Shares Out. (Millions)	84.4				
<u>Latest Twelve Months:</u>					
EBITDA	221				
Free Cash Flow	N/A				
Cash & Cash Equivalents	393				
<u>Bank Borrowings</u>					
Short-Term Bank Borrowings	820				
Long-Term Bank Borrowings	22				
	842	842	3.8x	449	2.0x
<u>Senior Unsecured Debt</u>					
3.50% Senior Cvt. Notes due 2019	150				
4.00% Senior Cvt. Notes due 2019	115				
	265	1,107	5.0x	714	3.2x
Total Debt	1,107	1,107	5.0x		
Equity Market Cap.	1,030	---	---	1,030	4.7x
Enterprise Value	1,744	---	---	1,744	7.9x

Sources: Bloomberg, Company Filings

Financial Summary

Trina Solar Limited (Dollars in Millions)	Fiscal Years Ended				
	31-Dec-10	31-Dec-11	31-Dec-12	31-Dec-13	31-Dec-14
Revenues	1,858	2,048	1,297	1,775	2,286
Y / Y Change	---	10.2%	-36.7%	36.9%	28.8%
Gross Profit	585	333	58	218	385
Operating Profit	417	31	(265)	(38)	120
EBITDA	469	101	(154)	79	221
Interest Expense	34	35	52	49	35
Income Tax Expense	48	7	(25)	(13)	16
Capital Expenditures	144	361	141	70	195
% Revenues	7.8%	17.6%	10.9%	3.9%	8.5%
Free Cash Flow	119	(339)	(319)	(24)	N/A*
Total Debt	459	1,037	1,351	885	0
% Total Debt	97.8%	NM	NM	NM	NM
Gross Margin	31.5%	16.3%	4.5%	12.3%	16.8%
Operating Margin	22.4%	1.5%	-20.4%	-2.1%	5.2%
EBITDA Margin	25.3%	4.9%	-11.9%	4.5%	9.7%
EBITDA / Interest	14	3	(3)	2	6
EBITDA - Capex / Interest	10	(7)	(6)	0	1

*Trina has not filed its 2014 20-F as of the HV polishing date
Source: Trina SEC Filings, public comments

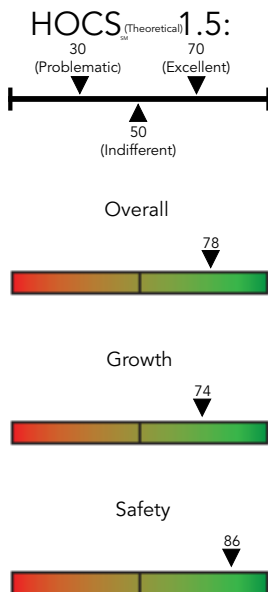
The On-Deck Circle: Ambarella, Inc. (AMBA): Flying High

Hillside Staff

Theoretical Bond Pricing

AMBA
0.5%, 2020/03/23
Price (Bond): 100.0
Stock: \$72.39
Premium: 40.0%
HOCS-Overall: 78*
HOCS-Growth: 74*
HOCS-Safety: 86*

Stock Price as of March 20, 2015
*Estimated HOCS Scores



Each week, we feature a company that we think would be a great convertible issuer. We hope to persuade you and perhaps ultimately the company itself.

Our ideal candidate is trading within 20% of (and preferably much closer to) its 52 week high, has a low debt-to-capital ratio, and has a compelling usage for new capital. Generally, these companies will be convert rookies. Feel free to let us know if you want to nominate a particular company. If we agree with you and publish your nomination, you will receive an honorable mention in the newsletter!

Second only to cybersecurity, much of the talk these days seems to be around video capture. Whether we are talking security and surveillance cameras, automotive video solutions, sports and flying cameras, wearable cameras, or broadcast infrastructure, Ambarella is the one-stop shop for the latest video solutions. When all is said and done, AMBA is much more than just a play on GoPro.

As the leading developer of low-power, high-definition (HD) and Ultra HD video compression and image processing solutions, the company's products are flying high, figuratively and literally. AMBA's revenues and earnings have been growing at a dramatic rate the past several years on the heels of the significant rise in overall video traffic. With video traffic poised for further rapid growth over the foreseeable future, the company's revenues and earnings should continue to benefit as well.

As end-user requirements for video capture and distribution have evolved, AMBA has consistently risen to the challenge. Moreover, the company's video and image processing system-on-a-chip (SoC) technology platform appears to differentiate it from the competition. Specifically, AMBA's HD video and image processing solutions enable the company's customers to deliver exceptional quality video and still imagery in small, easy-to-use devices with low power requirements.

Looking ahead, we see several market forces seen as driving video content creation and distribution, and in turn supporting our fundamental outlook. These forces include the steady growth in the number of video capture devices, growing user-generated content, broadband penetration enabling the proliferation of the video cloud, advances in display technology and requirements for efficient video compression.

FY 2015 (Year End: 01/31) revenues totaled \$218 million, an impressive 38% increase in the year-over-year comparison. Also, the company's gross margin measured an enviable 63.7% at the end of the just-completed fiscal year. Furthermore, adjusted EBITDA and free cash flow improved to \$67 million and \$61 million, respectively. Finally, the company's balance sheet remains in solid shape, boasting \$207 million in total liquidity (Cash & Cash Equivalents = \$170 million / Marketable Securities = \$38 million) and no debt. That all said, why do we suggest a possible convert offering?

In order to solidify its position as the leading provider of processing solutions for the capture, sharing, and display of HD video and still imagery, the company intends to not only extend its current technological edge, but target new applications as well as leverage its global business infrastructure. Whether this involves additional R&D spending or perhaps capital spending in order to lay the foundation for some sort of manufacturing or distribution footprint (the company currently employs what we consider to be an "asset light" business model), achieving these multiple goals could require significant additional investment. Thus, while AMBA remains free cash flow positive, some of that investment may require outside sources of capital, especially if the company hopes to maintain a substantial cash cushion in defense of the apparent asset light model or possibly pursue an acquisition or two.

At \$72.39 per share, the company's common is currently trading at essentially its 52-week high (\$21.60-73.00). With its common stock on an absolute tear, volatility in the stock, an aggressive valuation (P/E = 46.2 times) and the desire to lock in an attractive cost of capital as it pursues its long-term growth strategy, this seems to be a great time to consider issuing a convertible security.

Using a credit spread of 350 basis points and a volatility of 45%, we believe that the convertible bond would be structured as follows:

Issue Price	100.0
Issue Size	\$250 million
Maturity	5 years
Coupon	0.5%
Premium	40%
Call	Bullet
YTM	0.5%

Sources: Kynex, Company filings, and Hillside Advisors

In contrast to the straight debt/high yield bond market, our suggested convert financing would result in significant interest cost savings, as demonstrated below:

	Issue Amount	Annual Estimated Coupon	Annual Estimated Cost Savings
5 Year Bullet Straight Debt	\$250 mm	5.50%	\$13.8 mm
5 Year Convertible	\$250 mm	0.50%	\$1.3 mm
Estimated Savings		3.75%	\$12.50 mm

Finally, subsequent to our suggested convert financing, pro forma credit statistics would look as follows:

Pro Forma Cash:	\$458 million
Pro Forma Debt:	\$250 million
Last 12 month EBITDA:	\$67 million
Last 12 month FCF:	\$61 million
Total Leverage	NM
Net Leverage	3.7x
Mkt Cap	\$2,210 million

* All of the proceeds of the hypothetical convertible securities offering have been allocated to cash
Sources: Bloomberg, Company filings, and Hillside Advisors



March 23, 2015

Our hypothetical convertible bond receives a HOCS (Hillside Overall Convertible Score) slash line of 78 Overall / 74 Growth / 86 Safety – an extremely attractive score for investors willing to believe that AMBA is much more than just a GoPro bet.

For more information regarding Ambarella and a potential convertible issue, please contact John Anderson at 646-665-4025.

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