

# Quarterly Industry Update

As of September 30, 2014

Industry: Solar

## Industry Summary

Cogent Valuation identified publicly traded companies, IPOs, and recent M&A transactions within the Solar industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Since September 30, 2013, the median 52-week share price return of the Solar industry has increased by 21.9%. In the last quarter, the median price-to-earnings multiple remained unchanged.

## Comparable Public Company Key Statistics

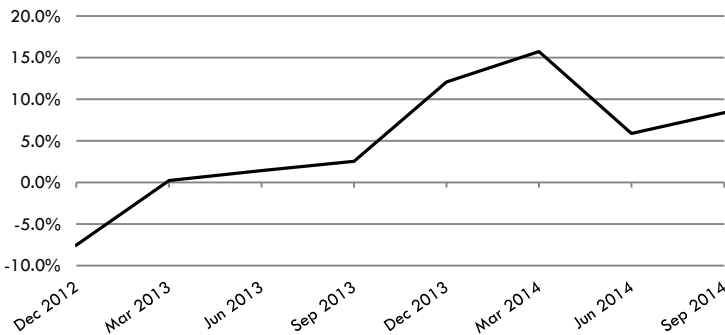
Median 52-Week Return	21.9%	Median EV/Revenue Multiple	1.8x	Median Price/Earnings Multiple	17.2x
Median 3-Year CAGR Return	1.3%	Median EV/EBITDA Multiple	8.2x	Median EV/Gross CF Multiple	14.8x

## Comparable Public Company Market Price Returns (As of September 30, 2014)

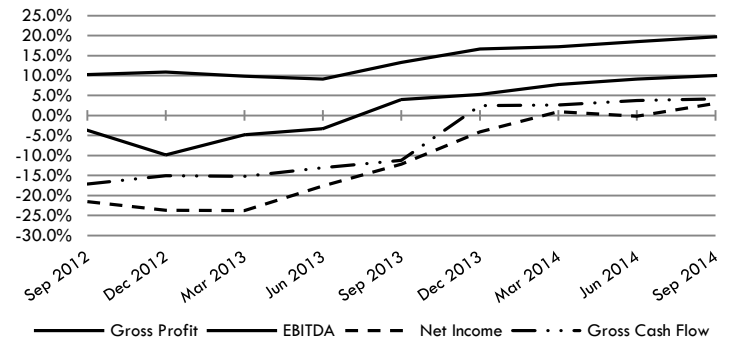
	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2013	2012	2011	2010	2009
First Solar, Inc.	20.4%	-7.4%	63.7%	72.4%	1.4%	-15.5%	77.1%	-8.6%	-74.1%	-3.9%	-1.9%
SunPower Corporation	13.7%	-17.3%	29.5%	174.1%	N/A	N/A	430.4%	-9.8%	N/A	N/A	N/A
JA Solar Holdings Co., Ltd.	0.9%	-14.8%	-9.0%	46.8%	1.3%	-14.4%	114.8%	-36.3%	-80.6%	21.4%	30.4%
Trina Solar Limited	-11.7%	-5.9%	-21.9%	62.3%	25.7%	-5.6%	215.0%	-35.0%	-71.5%	-13.2%	480.9%
Yingli Green Energy Holding Co. Ltd.	-38.4%	-16.8%	-55.2%	35.3%	0.1%	-24.2%	114.9%	-38.2%	-61.5%	-37.5%	159.2%
China Sunergy Co. Ltd.	-52.6%	-14.4%	-52.4%	61.2%	-11.4%	-26.1%	324.6%	26.8%	-91.1%	-9.5%	17.0%
Ascent Solar Technologies, Inc.	-68.7%	-47.4%	-74.9%	-53.9%	-33.5%	-50.6%	13.7%	59.0%	-88.4%	-36.6%	41.0%
Canadian Solar Inc.	20.0%	14.4%	110.5%	258.1%	113.4%	15.7%	777.1%	27.8%	-78.5%	-57.0%	346.1%
JinkoSolar Holding Co., Ltd.	-6.2%	-8.9%	21.9%	169.3%	78.2%	N/A	371.8%	24.2%	-75.1%	N/A	N/A
Song Da Industry Trade Jsc	6.3%	-1.7%	27.2%	0.9%	-15.5%	-26.2%	-6.6%	8.1%	-75.2%	-25.3%	127.0%
Ellomay Capital Ltd.	1.5%	1.7%	10.0%	39.8%	17.9%	16.0%	62.9%	6.8%	-25.3%	20.0%	7.8%
Enphase Energy, Inc.	136.4%	75.3%	84.6%	90.3%	N/A	N/A	73.7%	N/A	N/A	N/A	N/A
SolarCity Corporation	4.9%	-15.6%	72.3%	N/A	N/A	N/A	376.3%	N/A	N/A	N/A	N/A
<b>Median of Industry Public Companies</b>	<b>1.5%</b>	<b>-8.9%</b>	<b>21.9%</b>	<b>61.8%</b>	<b>1.3%</b>	<b>-15.5%</b>	<b>114.9%</b>	<b>6.8%</b>	<b>-75.2%</b>	<b>-13.2%</b>	<b>41.0%</b>

(Multiple year periods are calculated as the average annual return.)

## Median Quarterly Revenue Growth of All Solar Companies



## Median Gross Profit, EBITDA, Net Income and Gross Cash Flow Margins



## Median Public Company Multiples of the Solar Industry

Date:	9/30/2012	12/31/2012	3/31/2013	6/30/2013	9/30/2013	12/31/2013	3/31/2014	6/30/2014	9/30/2014
EV/Revenues Multiple	0.6x	0.8x	1.0x	1.1x	1.3x	1.4x	1.3x	1.3x	1.8x
EV/EBITDA Multiple	10.4x	3.2x	19.5x	15.6x	15.7x	10.2x	11.2x	9.3x	8.2x
Price/Earnings Multiple	50.7x	6.0x	9.7x	13.1x	9.0x	20.4x	18.5x	16.4x	17.2x
EV/Gross Cash Flows Multiple	nm	13.9x	4.1x	5.9x	4.2x	18.9x	13.5x	18.2x	14.8x

This industry research is provided at no charge to Cogent Valuation's clients. Research or detailed information not covered in this report can be obtained for a fee. Contact Steven Kam at 415-392-0888 for additional information or questions in connection with this research report.

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## Industry Initial Public Offerings (dollars in millions, except share prices)

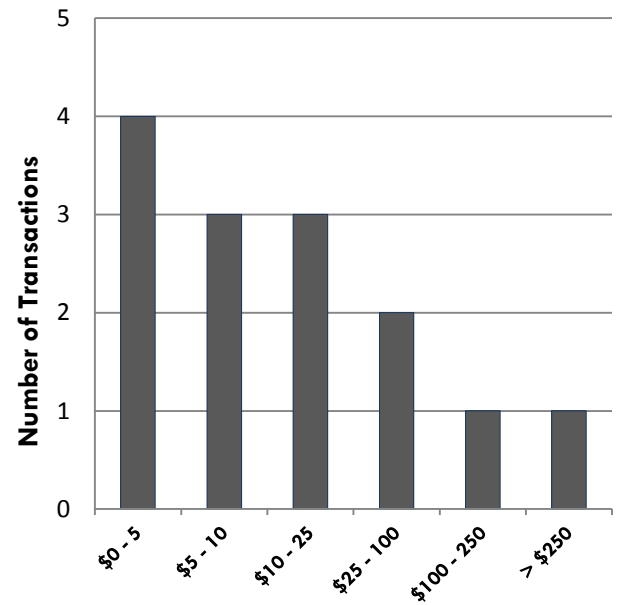
Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
12/12/2012	SolarCity Corporation	\$8.00	11.5	\$92.0	\$1,151.2	\$299.3	\$124.1	(\$40.7)	(\$47.1)	N/A
3/29/2012	Enphase Energy, Inc.	\$6.00	9.0	\$53.8	\$106.2	\$33.9	\$149.5	(\$26.4)	(\$32.3)	(\$24.0)
5/13/2010	JinkoSolar Holding Co., Ltd.	\$11.00	5.8	\$64.2	\$378.8	\$167.4	\$274.7	\$37.3	\$24.1	\$37.3
6/7/2007	Yingli Green Energy Holding Co. Ltd.	\$11.00	29.0	\$319.0	\$435.4	\$182.9	\$241.3	\$55.3	\$25.8	\$62.2
5/17/2007	China Sunergy Co. Ltd.	\$11.00	8.5	\$93.5	\$176.3	\$77.9	\$149.5	\$16.9	\$11.8	\$18.7
2/6/2007	JA Solar Holdings Co., Ltd.	\$15.00	15.0	\$225.0	\$63.1	\$19.2	\$89.2	\$18.2	\$16.4	\$19.5
12/18/2006	Trina Solar Limited	\$18.50	5.3	\$98.1	\$112.5	\$44.3	\$91.6	\$14.8	\$10.0	\$15.8
11/16/2006	First Solar, Inc.	\$20.00	20.0	\$400.0	\$255.1	\$71.0	\$95.9	(\$5.1)	(\$11.3)	\$2.4
11/8/2006	Canadian Solar Inc.	\$15.00	7.7	\$115.5	\$66.3	\$23.2	\$50.7	\$7.8	(\$3.6)	\$7.8
7/10/2006	Ascent Solar Technologies, Inc.	\$5.50	3.0	\$16.5	\$0.2	\$0.2	\$0.0	\$0.0	(\$7.2)	\$0.0
<b>Median of All IPOs</b>		<b>nm</b>	<b>nm</b>	<b>\$106.8</b>	<b>\$144.4</b>	<b>\$44.3</b>	<b>\$95.9</b>	<b>\$3.9</b>	<b>(\$1.8)</b>	<b>\$7.8</b>

nm: not meaningful

## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	Target	Acquirer	Transaction Size	% Bought
9/22/2014	Tripod Energy AB	Innotech Solar AS	\$6.4	100%
5/15/2014	Golmud TBEA	Shenzhen CLOU Energy	\$1.7	100%
3/12/2014	FCC Energia, SA	Plenium Partners	\$11.1	51%
1/7/2014	Changzhou Dinghui New Energy	United Photovoltaics	\$2.5	100%
12/3/2013	Mia Sol Solar	Aspen Group Ltd.	\$4.0	100%
10/1/2013	Wafering Technology Corp.	Gigastorage Corporation	\$3.7	100%
5/31/2013	DeSolar Co.	Neo Solar Power	\$241.6	85%
4/18/2013	Yunnan Tianda Photovoltaic	Xi'an North Photoelectric	\$14.0	88%
2/20/2013	Photovolttech	Solartec S.A.	\$63.1	100%
1/9/2013	MiaSolé	Hanergy Holdings Group	\$30.0	100%
11/22/2012	CNPV Dongying Solar Power	N/A	\$10.0	50%
11/8/2012	Twin Creeks	GT Advanced	\$10.2	100%
10/10/2012	Q-Cells SE	Hanwha Chemical	\$312.9	100%
9/28/2012	Nanjing Daqa New Energy	Daqa Group	\$9.9	100%
<b>Median of All Transaction Targets</b>			<b>\$10.1</b>	<b>100%</b>

## Size of Merger and Acquisition Transactions (dollars in millions)



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