

Portfolio Valuation

Private Equity Marks & Trends



Fourth Quarter 2015

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Marking Illiquid Investments in Liquid Funds

As mutual fund flows continue to favor passive strategies, some active fund managers are beginning to look to alternative asset classes to augment returns and generate sustainable alpha. Since open-end funds need to calculate NAV on a daily basis, the inclusion of illiquid venture capital investments in liquid funds shines a brighter spotlight on fair value measurement.

Table 1: Fidelity Growth Company Fund Level 3 Fair Value Marks

\$ millions

	Series	Shares Owned	Pur. Date	Pur. Cost	FV Marks			FV Marks / Cost			Change in FV Marks			1/29/16 Holding Period	Annldz. Return
					5/31/15	11/30/15	1/29/16	5/31/15	11/30/15	1/29/16	11/30/15	1/29/16	Cum.		
Appirio, Inc.	Common	389,363	Feb-15	\$2.78	\$2.78	\$1.75	\$1.65	1.00x	0.63x	0.59x	-37.0%	-5.8%	-40.6%	0.96	-41.8%
Appirio, Inc.	E	2,725,544	Feb-15	19.46	19.46	12.27	11.56	1.00x	0.63x	0.59x	-37.0%	-5.8%	-40.6%	0.96	-41.8%
AppNexus, Inc.	E	923,523	Aug-14	18.50	23.71	18.54	14.79	1.28x	1.00x	0.80x	-21.8%	-20.2%	-37.6%	1.50	-13.9%
Apptio, Inc.	E	881,266	May-13	20.00	18.25	17.22	14.68	0.91x	0.86x	0.73x	-5.6%	-14.7%	-19.6%	2.74	-10.7%
Azul-Linhas	B	1,017,079	Dec-13	43.14	38.30	31.55	38.14	0.89x	0.73x	0.88x	-17.6%	20.9%	-0.4%	2.10	-5.7%
Azul-Linhas	Warrants	1,017,079	Dec-13	0.00	0.00	0.00	0.00	1.00x	1.00x	1.00x	0.0%	0.0%	0.0%	2.10	0.0%
BeiGene	A2	8,617,681	Apr-15	10.08	10.08	10.08	11.03	1.00x	1.00x	1.09x	0.0%	9.4%	9.4%	0.78	12.3%
Blue Apron	D	750,363	May-15	10.00	10.00	10.00	9.47	1.00x	1.00x	0.95x	0.0%	-5.3%	-5.3%	0.70	-7.5%
C. Wonder	A-1	619,048	Dec-12	19.50	0.00	0.00	0.00	0.00x	0.00x	0.00x	0.0%	0.0%	0.0%	3.09	-99.2%
Cloudera	F	529,285	Feb-14	7.71	11.28	17.38	17.38	1.46x	2.25x	2.25x	54.0%	0.0%	54.0%	1.98	50.7%
CloudFlare	D	1,429,726	Nov-14	8.76	8.91	10.07	6.99	1.02x	1.15x	0.80x	13.1%	-30.6%	-21.5%	1.23	-16.7%
Dataminr	D	1,773,901	Feb-15	22.62	22.62	15.33	14.08	1.00x	0.68x	0.62x	-32.2%	-8.1%	-37.7%	0.95	-39.4%
Domo	D	2,990,903	Jan-14	12.36	25.22	24.74	21.24	2.04x	2.00x	1.72x	-1.9%	-14.1%	-15.8%	2.01	30.8%
Dropbox	Common	1,105,082	May-12	10.00	18.12	14.92	13.31	1.81x	1.49x	1.33x	-17.7%	-10.8%	-26.6%	3.75	7.9%
Intarcia	CC	1,051,411	Nov-12	14.33	32.72	32.72	32.72	2.28x	2.28x	2.28x	0.0%	0.0%	0.0%	3.21	29.3%
Intarcia	DD	1,543,687	Mar-14	50.00	48.04	48.04	48.04	0.96x	0.96x	0.96x	0.0%	0.0%	0.0%	1.87	-2.1%
Kolltan Pharma	D	7,940,644	Mar-14	7.94	7.94	7.94	7.94	1.00x	1.00x	1.00x	0.0%	0.0%	0.0%	1.88	0.0%
Moderna	D	468,823	Nov-13	10.00	28.91	28.91	21.69	2.89x	2.89x	2.17x	0.0%	-25.0%	-25.0%	2.23	41.5%
Moderna	E	565,117	Dec-14	34.85	34.85	34.85	26.14	1.00x	1.00x	0.75x	0.0%	-25.0%	-25.0%	1.12	-22.7%
MongoDB	F	1,913,404	Oct-13	32.00	16.74	14.89	13.36	0.52x	0.47x	0.42x	-11.1%	-10.3%	-20.2%	2.33	-31.3%
Nutanix	E	1,151,309	Aug-14	15.42	18.05	18.17	14.28	1.17x	1.18x	0.93x	0.6%	-21.4%	-20.9%	1.43	-5.3%
Roku	F	17,901,305	May-13	16.21	21.48	27.37	27.37	1.33x	1.69x	1.69x	27.4%	0.0%	27.4%	2.73	21.1%
Roku	G	2,750,007	Oct-14	3.57	3.30	4.20	4.20	0.92x	1.18x	1.18x	27.4%	0.0%	27.4%	1.33	13.1%
RPI International		84,791	May-15	10.00	10.00	11.69	11.89	1.00x	1.17x	1.19x	16.9%	1.7%	18.9%	0.69	28.4%
Snapchat	F	452,473	Mar-15	13.90	13.90	11.88	11.65	1.00x	0.85x	0.84x	-14.5%	-1.9%	-16.2%	0.85	-18.8%
SpaceX	G	216,276	Jan-15	16.75	16.75	19.25	19.25	1.00x	1.15x	1.15x	14.9%	0.0%	14.9%	1.02	14.5%
Syros Pharma	B	3,779,290	Oct-14	11.89	11.89	11.89	14.34	1.00x	1.00x	1.21x	0.0%	20.6%	20.6%	1.31	15.4%
Taboola	E	1,337,420	Dec-14	13.94	13.94	9.51	10.86	1.00x	0.68x	0.78x	-31.8%	14.2%	-22.1%	1.10	-20.2%
The Honest Co	Common	39,835	Aug-14	1.08	1.17	1.82	1.82	1.09x	1.69x	1.69x	55.5%	0.0%	55.5%	1.44	44.0%
The Honest Co	C	92,950	Aug-14	2.52	2.73	4.25	4.25	1.09x	1.69x	1.69x	55.8%	0.0%	55.8%	1.44	44.0%
Turn Inc	E	984,774	Dec-13	8.21	6.10	3.64	3.40	0.74x	0.44x	0.41x	-40.3%	-6.8%	-44.3%	2.08	-34.5%
Uber	D	4,770,180	Jun-14	74.40	158.93	189.09	232.65	2.14x	2.54x	3.13x	19.0%	23.0%	46.4%	1.65	99.6%
Uber	E	209,216	Dec-14	6.97	6.97	8.29	10.20	1.00x	1.19x	1.46x	19.0%	23.0%	46.4%	1.15	39.3%
YourPeople (Zenefits)	C	5,833,137	May-15	86.92	86.92	48.82	40.31	1.00x	0.56x	0.46x	-43.8%	-17.4%	-53.6%	0.75	-64.2%
Sample Total				\$635.8	\$750.1	\$721.1	\$730.7	1.18x	1.13x	1.15x	-14.0%	13.2%	-2.6%	1.58	9.2%

Fund giant Fidelity **has garnered the most attention** for their venture capital fair value marks. Table 1 summarizes relevant data for a sample of investment holdings in 27 venture companies held by the Fidelity Growth Company Fund (FDGRX).

At the end of January 2016, the reported fair value of the Level 3 venture investments on Table 1 totaled \$730.7 million, or 2.0% of total fund assets at that date.¹ We offer the following observations:

- It is clear that a **fair value process** is being followed. While the range of reasonableness for these investments can be wider than what is typical for more liquid investments, Fidelity does not appear to be allowing fair values to become stale. Of the 34 individual positions in the sample, 23 reported changes in fair value during the two months between November 30, 2015, and January 29, 2016.
- Fidelity disregards a prominent tenet of the reigning fair value orthodoxy, which is that the fair value of shares within a complex capital structure must take into account the **unique economic rights and attributes of the individual classes**. In the sample of investments presented in Table 1, the fund owns multiples securities in seven enterprises (the shaded rows). With the single exception of a warrant in Azul-Linhas, the fair value marks are identical, on a per share basis, for the different classes. This outcome is consistent with determining the fair value of the enterprise and dividing by the fully-diluted share count (Table 2).

In our experience, this approach reflects the thinking of actual venture investors (who, presumably, count as market participants). Auditors, on the other hand, tend in our experience to require using a probability-weighted expected return method or option pricing method to allocate enterprise value to the var-

ious classes. While this technique is theoretically superior, it is in conflict with market participant perspectives on value. Since fair value is explicitly a market participant concept, this raises an interesting philosophical issue: **how should fair value incorporate market participant perspectives with regard to valuation techniques?** The fund's financial statements are audited by a Big 4 firm. Clear, uniform guidance around this issue would be most helpful to both reporting entities and fair value measurement specialists.

- Non-systematic factors are a significant component of fair value measurement. While the sample is admittedly small, the observed changes in fair value bear no discernable relationship to changes in the Nasdaq composite (Chart 1).

For venture companies, operational and developmental milestones drive value much more than overall market performance and near-term economic data.

- The venture investments were accretive to net asset value per share during the period. Compared to the cumulative loss of 2.3% on the venture investments, the aggregate NAV per share for the fund declined 13.9% over the same period.
- Calculated from the respective investment dates, the venture investments have posted an aggregate annualized return of 9.2%. The dispersion of results for individual investments has been quite wide, however (Chart 2 on page 3).

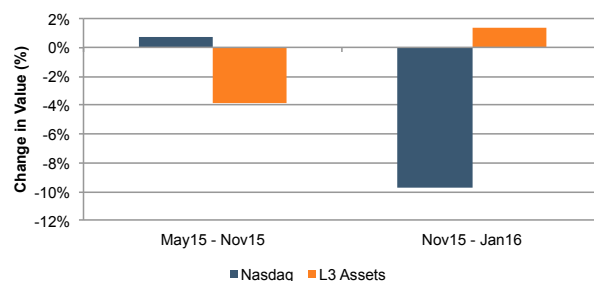
Of the 35 individual positions in the portfolio, sixteen have generated annualized returns (positive and negative) in excess of 25%. Venture investing is not for the faint of heart. The fund's investment in Uber has performed quite well (99.6% annualized return for Series D and 39.3% for Series E). Without Uber,

Table 2: Appirio, Inc. Fair Value Marks

\$ millions, at January 29, 2016

	Fair Value	Shares	FV per Share
Common Shares	\$1.7	389,363	\$4.24
Series E Preferred Share	\$11.6	2,725,544	\$4.24

Chart 1: Performance Relative to Nasdaq



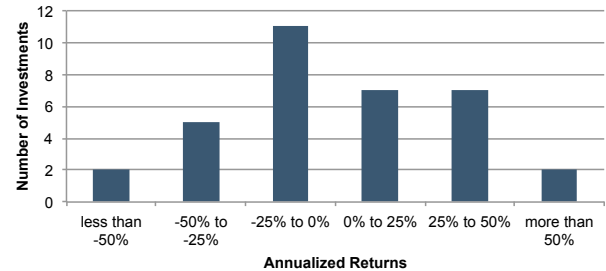
¹ We excluded investments made subsequent to May 31, 2015 from the table to enhance comparability over time. Including such investments, Level 3 assets at November 30, 2015 totaled \$1.2 billion, or 2.4% of total assets at that date. The Portfolio Holdings Listing at January 29, 2016 does not segregate Level 3 assets.

the overall return on the venture portfolio decreases from 9.2% to negative 7.8%.

Whether venture investing on the part of mutual fund managers is ultimately a good idea is a **topic for another day**. However, the fair value disclosures surrounding such investments are a treasure trove of information for curious observers. The disclosures bring a measure of transparency to the fair value results for a respected market participant within an asset class for which fair value inputs are difficult to support with precision.

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Chart 2: Dispersion of Returns



On the Call

The following is a brief compendium of quotes from 4Q15 earnings season conference calls. In general, executives are indicating that despite investor concerns, credit quality remains strong and declines in market values represent an opportunity to invest available capital.

Josh Harris (Apollo) – “In certain cases market values of certain fund investments are falling, but our conviction remains, our funds are buying more to build on existing positions as prices fall and lowering our average cost. While this style of investment can create near-term headwinds in unrealized marks, [because of fair value] accounting, we believe the potential long-term value creation has proven to be a highly rewarding strategy for our fund investors and shareholders.”

Kipp deVeer (Ares) – “We also continued to be very selective on credit. We believe that volatility in the high yield leveraged loan markets has been driven largely by declines in oil and other commodity prices, outflows of capital from both markets and concerns around the specter of higher interest rates and increased defaults in the future. We also believe this is a lasting change and unlikely to reverse itself anytime soon.”

Penni Roll (Ares) – “The write-down simply reflects that, in the current environment, we believe from a mark-to-market perspective, that an investor would require a higher yield on these junior securities, thus reducing their fair value.”

Stephen Schwarzman (Blackstone) – “Investors have been caught in the down cycle of pessimism and oversold conditions as markets have corrected. In times of turbulence, having locked up capital can be a tremendous performance advantage, both in the

ability to deploy scaled capital at very good prices and to hold our investments during inevitable downturn. While it is always possible that a market correction becomes something more significant, we at Blackstone do not see a recession in the US.”

Wes Edens (Fortress Investment Group) – “While we certainly see headwinds in the economy, I would say across our portfolio of companies we have not seen anything at all that would correlate to the kind of massive declines you have seen in some of the public stocks. So I think that again while the year is early, a lot of the things that were real bellwethers for us in the last financial crisis we have not seen tick over into the red zone yet. So we will wait to see.”

David Golub (Golub Capital) – “But if history is a guide here and I think it will be, because we’ve seen this dynamic many times through different credit cycles we can reasonably expect that we’re going to see some wider spreads develop over the course of 2016 in middle-market land.”

Vince Foster (Main Street Capital Corporation) – “We estimate that at least 40% of our middle markets depreciation during the quarter was technical in nature rather than due to Company specific credit [or] industry issues. The various leveraged loan indices experienced similar declines in valuation.”

Source: All transcripts obtained from SNL.

Time Will Tell: Diverging Perspectives on BDC Portfolio Values

We observed last spring that 2015 would likely mark a turning point in portfolio valuations with the degree of difficulty likely to increase during the year. With the Q4 earnings season for BDCs complete, we take an opportunity to check in on portfolio marks and market sentiment over the year. The key takeaway from the year is that the valuation perspectives of investors and portfolio managers began to diverge.

Chart 1 depicts our benchmark loan mark for the past three years. After the sharp decline in 3Q15, the fair value of the benchmark loan fell again in the fourth quarter, falling from 93.9% of principal to 92.6%.

As we have noted on numerous occasions, the fair value of actual loans is determined by a host of issue-specific factors in addition to the market-wide indicators captured in the benchmark loan. However, for broad portfolios of loans, it does provide a measure of sensitivity of fair value to changes in credit spreads.

For BDCs, the benchmark loan fair value has been correlated to investor sentiment regarding BDC portfolio values. Chart 2 compares the benchmark loan fair value to a price index of a group of the largest BDCs over the period. Since BDC balance sheets are levered, the sensitivity of BDC share prices to the value of loan portfolios is magnified.

Since fair value is intended to reflect a market participant perspective, one would expect portfolio marks and investor perspectives to reconcile over time. However, current BDC share prices imply an even more dim view of BDC portfolio asset values on the part of investors than that indicated by our benchmark loan index. This would seem to suggest one of two potential scenarios: (1) investors have over-reacted to the impact of credit-spread widening on loan portfolio values, or

(2) investors have adopted a skeptical posture toward the underlying credit quality of BDC portfolios. We do not hazard a guess at this point as to which will prove to be the more accurate explanation.

Table 1, on the next page, summarizes 2015 market returns for 18 of the largest BDCs.

Total returns were negative for 11 of the BDCs analyzed, with share prices declining for all but one. Falling share prices were attributable to lower NAVs (median decrease of 1.6%) and shifting investor sentiment, with price/NAV ratios posting a median decrease of 9.7% for the year.

On December 31, 2015 BDC balance sheets, reported portfolio fair values stood at 96.7% of amortized cost. Investors, however, seem to be marking the portfolios a bit lower, with the median price/NAV ratio for the group at 0.87x. Current dividend yields suggest that, at least for some names, the sustainability of current payouts is being questioned; beyond direct credit concerns, this may also be weighing on BDC share prices.

Chart 1: Fair Value of Benchmark Debt Instrument

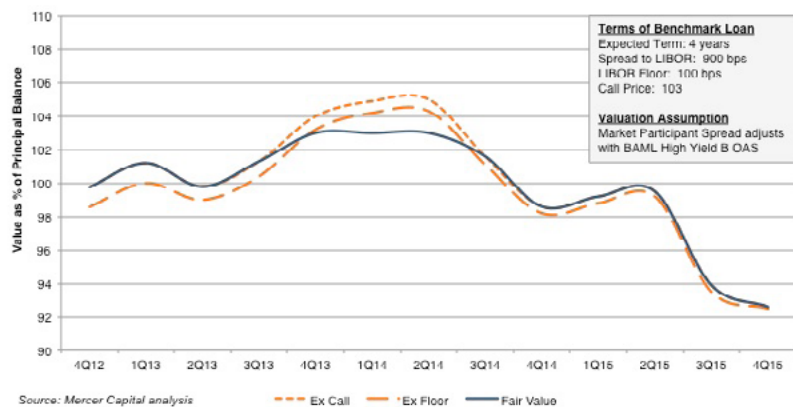


Chart 2: Fair Value of Benchmark Loan Compared to BDC Index

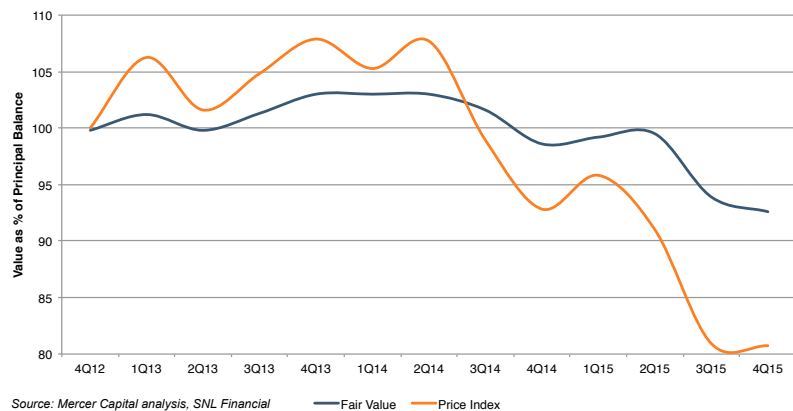


Table 1: Market Returns and Year-End Pricing Data

	Market Return	Current Income	Capital Appr.	Total Return	Δ in Price / NAV	Δ in NAV	Capital Appr.	FV as % of Cost	Price / NAV	Dividend Yield
ARCC	0.9%	9.6%	-8.7%	0.9%	-8.5%	-0.2%	-8.7%	100.7%	0.85x	10.7%
PSEC	-3.6%	11.9%	-15.5%	-3.6%	-14.0%	-1.7%	-15.7%	99.8%	0.69x	14.3%
FSIC	-1.0%	8.5%	-9.5%	-1.0%	-7.7%	-1.9%	-9.6%	98.8%	0.93x	9.9%
AINV	-20.5%	9.2%	-29.6%	-20.5%	-24.2%	-7.2%	-31.4%	96.5%	0.67x	15.3%
FSC	-11.8%	8.6%	-20.3%	-11.8%	-18.9%	-1.8%	-20.7%	97.2%	0.71x	11.3%
SLRC	-0.2%	8.6%	-8.8%	-0.2%	-6.5%	-2.4%	-8.9%	100.1%	0.76x	9.7%
MAIN	8.6%	9.1%	-0.5%	8.6%	-4.8%	4.5%	-0.3%	108.4%	1.33x	7.4%
GBDC	0.0%	7.2%	-7.3%	0.0%	-8.7%	1.6%	-7.1%	100.8%	1.05x	7.7%
NMFC	-4.0%	8.9%	-12.9%	-4.0%	-12.2%	-0.7%	-12.9%	99.1%	0.95x	10.4%
PNNT	-25.2%	9.9%	-35.2%	-25.2%	-31.1%	-5.8%	-37.0%	88.4%	0.63x	18.1%
TS LX	5.6%	9.2%	-3.6%	5.6%	-4.1%	0.6%	-3.5%	98.9%	1.04x	9.6%
HTGC	-9.5%	8.6%	-18.1%	-9.5%	-16.8%	-1.5%	-18.3%	96.0%	1.22x	10.2%
BKCC	25.4%	10.8%	14.6%	25.4%	12.8%	1.6%	14.4%	99.6%	0.88x	8.9%
MCC	-6.5%	12.2%	-18.6%	-6.5%	-13.1%	-6.3%	-19.4%	95.6%	0.68x	16.0%
TICC	-4.2%	15.0%	-19.3%	-4.2%	-10.7%	-9.6%	-20.3%	93.2%	0.78x	19.1%
TCP C	-8.7%	8.2%	-17.0%	-8.7%	-17.5%	0.6%	-16.9%	96.7%	0.92x	10.3%
TCAP	5.0%	10.8%	-5.8%	5.0%	-2.0%	-3.9%	-5.9%	98.3%	1.23x	11.3%
TCRD	2.2%	11.2%	-9.0%	2.2%	-8.7%	-0.4%	-9.0%	100.4%	0.82x	12.7%
Median	-2.3%	9.2%	-11.2%	-2.3%	-9.7%	-1.6%	-11.3%	98.8%	0.87x	10.6%

Source: Mercer Capital analysis, SNL Financial

During the fourth quarter, the BDCs in Table 1 reported aggregate fair value writedowns of just over \$1.0 billion, or 2.5% of beginning cost basis. As noted in Table 2, on the next page, the writedowns for individual BDCs ranged from 7.7% for beleaguered TICC to 0.6% for tech-focused HTCG. Only one BDC, GBDC, reported a net writeup during the quarter.

It is interesting to note that the BDCs with the lowest marks at the beginning of the quarter took, on average, larger writedowns during the quarter than those with higher marks. The nine funds with the highest ratios of fair value to cost basis at September 30, 2015 (median: 100.1%) reported a median writedown of 2.1% during 4Q15, while the bottom half (funds with a median ratio of fair value to cost basis of 96.5%) reported a median writedown of 3.3% during the quarter.

Asset mix varies among the portfolios analyzed. For example, significant unrealized gains on equity positions within a portfolio can have a material effect on the overall portfolio mark. As shown in Table 3, on the next page, non-preferred equity positions for industry leader

ARCC accounted for just 4.7% of the total portfolio at amortized cost. However, ARCC reported fair value of that portion of the portfolio at nearly 1.5x cost, for a total unrealized gain of over \$200 million, which raised the overall effective mark on the portfolio from 96.6% to 99.0% of amortized cost.

If 2015 was the year of increasing degree of valuation difficulty, perhaps 2016 will be the year in which we learn whether portfolio managers have been able to stick their valuation landings, or if portfolio marks will be subject to continuing market skepticism in coming quarters. In the end, the market perspective wins – BDC share prices will either recover to levels consistent with December 31, 2015 marks or the portfolio marks will trend toward the market-implied levels. Time will tell.

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Table 2: 4Q15 Fair Value Marks

	September 30, 2015				December 31, 2015			4Q15 Valuation Results				
	Cost	FV	FV / Cost	Unrealized Appr.	Cost	FV	FV / Cost	Unrealized Appr.	Δ in Unrealized	Realized Gains	Total Gain	As % of Beg FV
ARCC	8,632.8	8,692.5	100.7%	59.7	9,147.6	9,055.5	99.0%	(92.2)	(151.9)	23.9	(128.0)	-1.5%
PSEC	6,442.0	6,430.9	99.8%	(11.1)	6,381.4	6,179.7	96.8%	(201.7)	(190.6)	(5.3)	(196.0)	-3.0%
FSIC	4,150.7	4,100.1	98.8%	(50.6)	4,195.2	4,029.4	96.0%	(165.8)	(115.2)	(20.3)	(135.5)	-3.3%
AINV	3,311.2	3,194.0	96.5%	(117.1)	3,258.5	3,069.0	94.2%	(189.5)	(72.4)	(7.7)	(80.1)	-2.5%
FSC	2,472.9	2,402.5	97.2%	(70.4)	2,487.2	2,325.8	93.5%	(161.5)	(91.0)	1.4	(89.7)	-3.7%
SLRC	1,205.9	1,206.7	100.1%	0.8	1,344.7	1,312.6	97.6%	(32.1)	(32.9)	1.7	(31.2)	-2.6%
MAIN	1,723.3	1,867.4	108.4%	144.1	1,666.6	1,800.0	108.0%	133.4	(10.8)	(12.2)	(23.0)	-1.2%
GBDC	1,517.3	1,529.8	100.8%	12.5	1,515.3	1,528.5	100.9%	13.1	0.7	5.0	5.6	0.4%
NMFC	1,491.5	1,478.0	99.1%	(13.5)	1,568.7	1,512.2	96.4%	(56.5)	(43.0)	0.7	(42.3)	-2.9%
PNNT	1,424.2	1,299.0	91.2%	(125.2)	1,426.9	1,261.9	88.4%	(165.1)	(39.9)	(25.4)	(65.2)	-5.0%
TS LX	1,411.8	1,396.4	98.9%	(15.4)	1,529.7	1,485.7	97.1%	(44.0)	(28.6)	-	(28.6)	-2.0%
HTGC	1,200.1	1,151.7	96.0%	(48.4)	1,252.3	1,200.6	95.9%	(51.6)	(3.3)	(3.3)	(6.6)	-0.6%
BKCC	1,154.4	1,149.8	99.6%	(4.6)	1,153.1	1,117.0	96.9%	(36.1)	(31.5)	(7.0)	(38.5)	-3.3%
MCC	1,272.5	1,216.1	95.6%	(56.4)	1,231.6	1,115.1	90.5%	(116.5)	(60.0)	5.4	(54.6)	-4.5%
TICC	994.3	927.2	93.2%	(67.1)	791.4	656.7	83.0%	(134.7)	(67.6)	(4.2)	(71.8)	-7.7%
TCPC	1,312.9	1,269.2	96.7%	(43.7)	1,231.7	1,182.9	96.0%	(48.8)	(5.1)	(14.0)	(19.0)	-1.5%
TCAP	984.8	968.1	98.3%	(16.7)	1,007.3	977.3	97.0%	(30.1)	(13.4)	2.8	(10.6)	-1.1%
TCRD	745.4	748.3	100.4%	2.9	766.8	754.2	98.3%	(12.7)	(15.6)	(0.1)	(15.7)	-2.1%
Total	41,448.0	41,027.7	99.0%	(420.3)	41,956.3	40,564.0	96.7%	(1,392.4)	(972.0)	(58.6)	(1,030.6)	-2.5%
Median			98.8%				96.6%					-2.5%

Source: Mercer Capital analysis & SNL Financial

Table 3: Ares Capital Portfolio Segregation

	December 31, 2015			
	Cost	FV	Unrealized	FV / Cost
First lien senior secured loans	2,735.2	2,638.8	(96.4)	96.5%
Second lien senior secured loans	2,944.6	2,861.3	(83.3)	97.2%
Subordinated certificates of SSLP	1,935.4	1,884.9	(50.5)	97.4%
Senior subordinated debt	663.0	654.1	(8.9)	98.7%
Preferred equity securities	435.1	375.8	(59.3)	86.4%
Other equity securities	434.4	640.5	206.1	147.4%
Commercial real estate	0.0	0.1	0.1	nm
Total	\$9,147.7	\$9,055.5	(\$92.2)	99.0%
Total (excl. other equity)	\$8,713.3	\$8,415.0	(\$298.3)	96.6%

Source: Mercer Capital analysis & SNL Financial

Liquidity is Credit's Handmaiden

Jeff K. Davis, CFA, Managing Director of Mercer Capital's **Financial Institutions Group**, is an SNL content contributor. This guest post first appeared on **SNL Financial** on November 15, 2015, and is reprinted here with permission. Some links sourced from SNL. Subscription required.

In mid-2009 I was visiting with **KeyCorp's** then-CEO, Henry Meyer. We were discussing the Moody's downgrade of KeyCorp's senior and subordinated debt ratings during April. The downgrade followed a horrific first quarter at KeyCorp and most regional banks. Meyer, who seemed to be struggling to control his tongue, offered that the rating agencies would be good cowboys because they knew how to close the barn door after the horses had left.

The annual **Shared National Credit exam** has an element of Meyer's non-compliment regarding the statement of the obvious. I do not remember the release of the SNC exam results ever dropping a bomb on investors' laps or conveying something that was not known, but it nonetheless has useful information. Plus, the time series provides a good look of where the market has been and clues as to how it may evolve if one believes in cycles.

This year's **SNC results**, which were based upon a review of data supplied by banks as of year-end 2014 and March 31, 2015, contained no bombshells. The exam did offer a few data points about the credit cycle. SNC commitments rose 15.3% to \$3.9 trillion from \$3.4 trillion the prior year, which follows increases of 12.6% in 2014 and 7.8% in 2013. Leveraged lending commitments grew an astounding 31.8% to \$1.04 trillion from \$767.4 billion in the prior year and accounted for 26.6% of SNC commitments compared to 22.6% in 2014. The first year the exam began to single out leveraged lending was 2007. As bank and credit investors know, the seeds of the next downturn are usually sown during periods of rapid growth when participants are making a lot of money.

The rapid growth in leveraged lending does not mean a spike in credit losses is looming; nor does it mean that liquidity suddenly will be withdrawn as occurred during 2007 and 2008. But change is afoot, and liquidity is credit's handmaiden. On Nov. 8 *The Wall Street Journal* ran a story about banks being stuck with buyout loans as investor appetites cooled. Missed in the article, I think, is the beauty of the originate-and-distribute model. Aside from the importance that price

discovery plays in the risk management process, unsold loans can be retained. The presumption is that they are underwritten well rather than iffy credits to be hoisted onto sophisticated institutional investors. This year's SNC exam raises some questions about underwriting, noting that more than 36% of leveraged loan originations were "weak." If true, maybe investors are shying away for reasons involving more than just the coupon (or price).

Another interesting data point in the exam is classified credits, which increased slightly to 5.8% of commitments from 5.6% last year. That is not a trend. The 2007 exam, which was based upon year-end 2006 and first-quarter 2007 credit data, reflected a 3.1% classification rate. Two years later classifieds rose to 15.5%. My memory is that the consensus view in late 2009 was that credit issues were peaking. The question was about how much improvement would occur. A tsunami of income seeking liquidity provided an unexpected answer: dramatic.

There are plenty of data points that suggest the market is now transitioning away from virtuous liquidity. **Thomson Reuters** reports that leveraged loans declined to \$581 billion YTD through October compared to \$828 billion YTD last year. The drop is more pronounced among institutional investors than pro rata leveraged lending retained by banks. That is not surprising given net outflows for leveraged loans and high-yield funds this year.

The nonbank participants are important players to watch. As active market participants, they are more likely to be in and out of the market given the call investors have on their funds. In effect, they are the swing liquidity provider. The SNC exam notes that nonbank entities accounted for 23.0% of SNC commitments (and around 41% for YTD leveraged loan originations, per Thomson Reuters), up from 8.4% in 2001. Most of the market share gain came at the expense of foreign banks rather than U.S. banks, whose share declined to 33.7% from 45.4%.

So far, credit deterioration has largely been confined to the energy sector. Fitch published a report on Nov. 13 that indicated the trailing 12-month default rate for energy credits was 5.3%, the highest since a 9.7% peak in 1999 following the late-1990s collapse in oil prices. Metals/mining's default rate was 9.5% due to the implosion of the coal industry. Excluding these two sectors and Caesars Entertainment, the default rate was only 0.7%.

In the case of the energy sector, I think KeyCorp's Meyer would say the horse has left the barn and the regulators run the risk of making the situation worse if they second guess too much and take unreasonable positions, such as the one suggested by *The Wall Street Journal* in September. The article indicated that regulators were vetting energy credits based on total debt rather than the banks' exposure, which usually is only the senior debt. Liquidate the collateral and the banks are paid first. Along the same lines, the 2013 leveraged lending

guidance notes that cash should not be netted against debt when calculating the leverage multiple. The industry convention for lenders and investors is, of course, to measure net debt.

Are these items nitpicky? Sure, but liquidity has a propensity to evaporate when it is needed the most. Lehman Brothers was unable to roll over its sizable short-term debt when it had to do so, which caused credit losses to mushroom in markets as liquidity evaporated. Nearly 20 years earlier, Drexel Burnham Lambert collapsed and contributed to convulsions in the high-yield market because it was a key market maker. Are regulators going to quash the leveraged loan market in their effort to dial it back a bit? Let's hope not.

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Updated: Valuation Best Practices for Venture Capital and Private Equity Funds

The **International Private Equity and Venture Capital Valuation (IPEV) Guidelines** were developed in 2005 to set out recommendations on best practices in the valuation of private equity investments. The IPEV Board is made up of leading industry associations from around the world, including the **National Venture Capital Association (NVCA)** and the **Private Equity Growth Capital Council (PEGCC)** in the United States. In **October 2015**, the IPEV Board published draft amendments to the existing guidelines that, if approved, will go into effect at the beginning of 2016.

The IPEV Valuation Guidelines are intended to be applicable across a range of private equity funds, defined in a broad fashion to encompass seed and start-up venture capital, buyouts, growth/development capital, mezzanine debt, and other types of private investment vehicles. While US GAAP and IFRS financial reporting guidelines do not require that the IPEV Guidelines be followed, the IPEV Guidelines were created with the compliance requirements and implications of these standards in mind.

The stated objective of the IPEV Valuation Guidelines is to set out best practices where private equity investments are reported at "Fair Value" to help investors make better economic decisions. The guidelines are concerned with valuation from a conceptual, practical, and

investor reporting standpoint and do not seek to address best practice as it relates to internal processes, controls/procedures, governance, committee oversight, or the experience/capabilities required of the valuation professional.

The **proposed amendments** to the IPEV Guidelines include edits to improve readability and clarity of understanding, as well as technical edits. The technical edits include the following:

1. Update on IASB Unit of Account Progress to conform with international standards.
2. Additional guidance emphasizing that fair value estimates (1) should be developed independently for each reporting entity (or fund) and (2) should be estimated using consistent valuation techniques.
3. Modification of guidelines for the valuation of debt for purposes of determining the value of equity, including the treatment of prepayment penalties in the calculation of the fair value of debt.
4. New guidelines to describe back-testing, including assessing what information was known as of the Measurement Date and whether known information was included in the Fair Value assessment.
5. New guidelines aimed at clarifying certain valuation techniques, including the use of Market Approaches (Price of Recent Investment, Multiples, Industry Valuation Benchmarks, or Available Market Prices), Income Approaches (Discounted Cash Flows), and Replacement Cost Approach (Net Asset Value).
6. Discussion of certain special considerations, including non-control minority positions, guidance on mathematical models, and guidance on the sum-of-the-parts method.

With increasing activity and interest from investors, valuation guidance for private equity and venture capital investments continues to become more clearly defined.

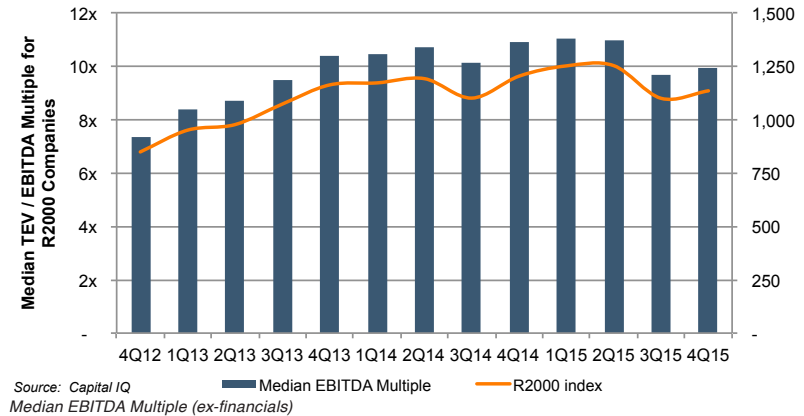
For more information on the guidelines, please refer to the **International Private Equity and Venture Capital Valuation Guidelines, Edition December 2015 DRAFT**. If you have questions regarding fair value or fair value measurements, please contact a Mercer Capital professional to discuss your situation in confidence.

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Equity Valuation

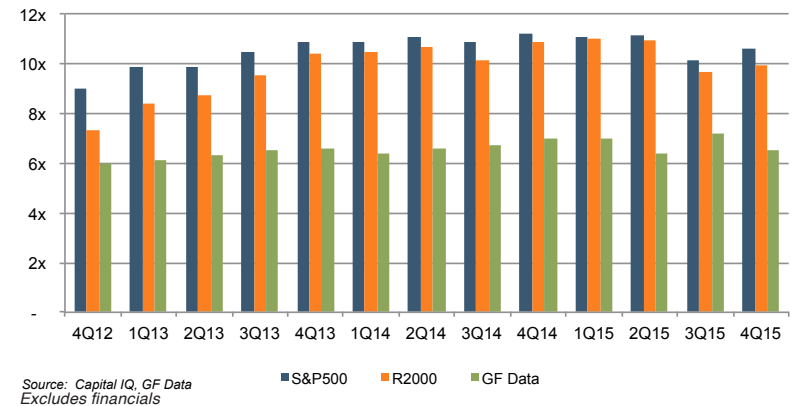
Russell 2000 Index Values and EBITDA Multiples

Despite bouncing back in 4Q15, small cap stocks ended the year down after a brutal decline in 3Q15 driven by fears about global growth.



EBITDA Multiples over Time

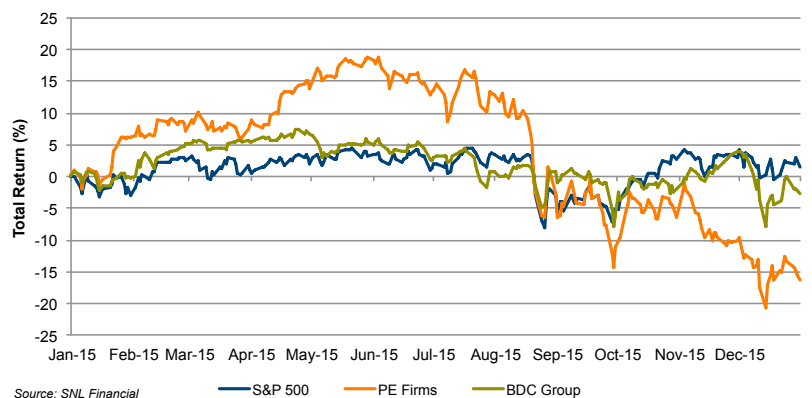
Over the period analyzed, the gap between multiples for small cap (Russell 2000) and large cap (S&P 500) public companies has narrowed considerably but has been inching wider since 2Q15 amidst volatile markets and investor uncertainty. Lower middle market multiples tracked by GF Data are sensitive to available deal flow and financing conditions in addition to public market multiples.



Stock Performance for Publicly Traded PE Sponsors

Total Returns (Trailing Twelve Months)

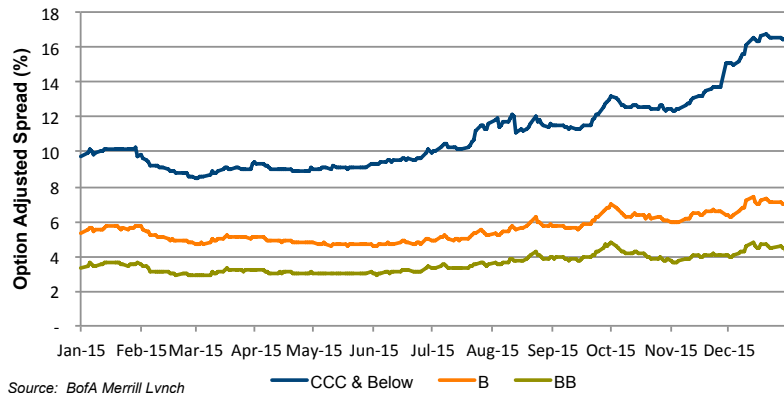
In 2015, the BDC group underperformed the S&P with a total return of negative 2.73% while publicly traded PE firms steadily declined in the back half of 2015 to a negative return of 16.36% for the year. Concerns over global growth, energy prices, high yield credit, and the timing and magnitude of further interest rate increases continue to weigh on investors' minds.



Debt Investments

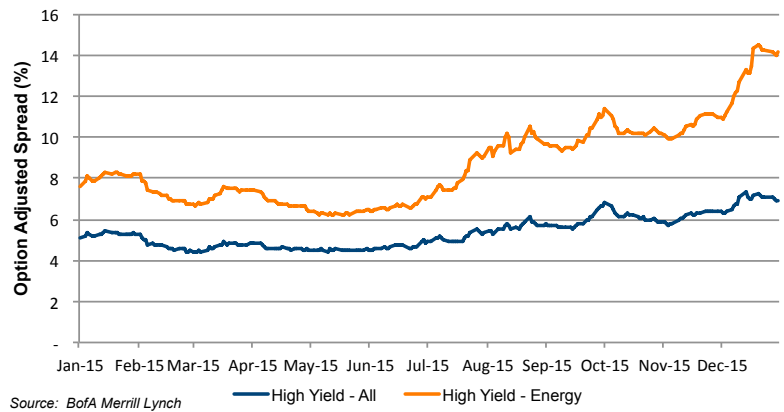
High Yield Spreads by Credit Rating

In 2015, credit spreads widened, reversing the spread compression that occurred through mid-2014. Riskier credits have proven more sensitive, with yields on issues rated CCC & Below widening nearly 700 bps, compared to changes of 178 bps and 88 bps for B and BB credits, respectively.



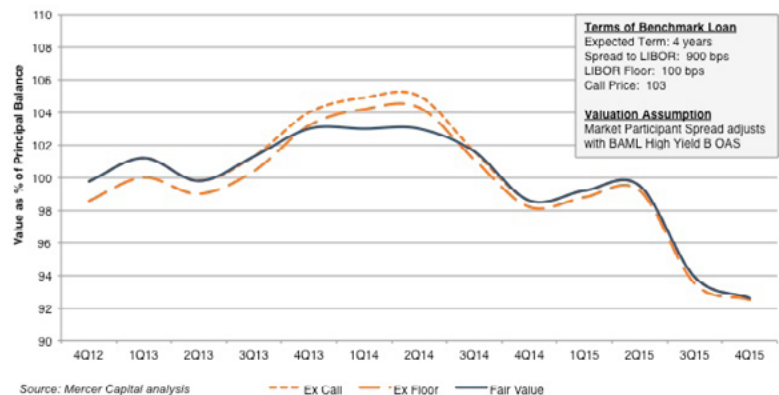
Impact of Energy Sector on High Yield Spreads

Recent turmoil in oil markets have pushed spreads on energy credits even wider, which is contributing to the overall market trend. During 2015, high yield energy spreads increased from 764 bps to 1,415 bps, more than triple the 187 bps of widening for the overall high yield market.



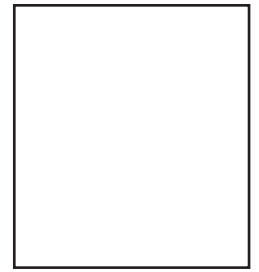
Fair Value of Benchmark Debt Instrument

Continued widening in the BofA Merrill Lynch US High Yield B Option-Adjusted Spread during the quarter further developed the fair value of our benchmark loan, falling to 93.9 (the lowest observed over the period).





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Business Valuation and Financial Advisory Services for Private Equity Firms and Other Financial Sponsors

Mercer Capital provides financial and advisory services to help our clients minimize risk and maximize value. For financial sponsors providing debt and equity capital to the middle market, Mercer Capital provides a comprehensive suite of financial advisory services.

- Portfolio Valuation
- Solvency Opinions
- Fairness Opinions
- Purchase Price Allocations
- Goodwill Impairment
- Equity Compensation / 409(A)
- Buy-Sell Agreement Valuations

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