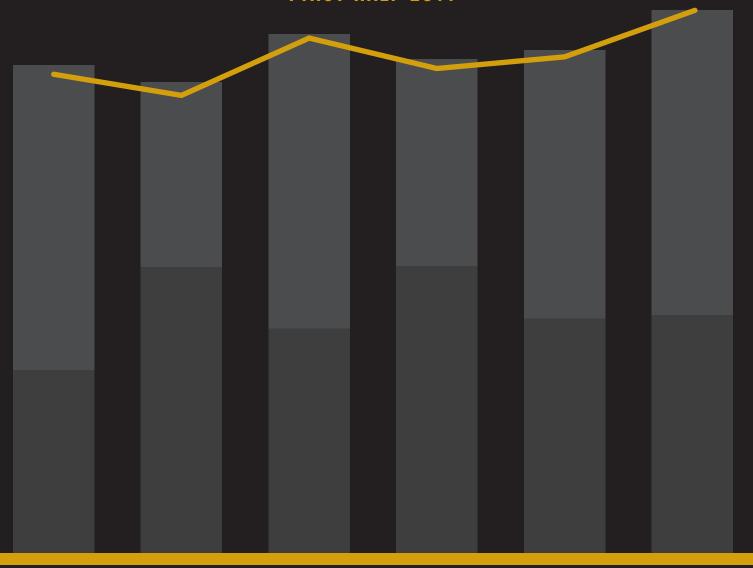
MURRAY DEVINE PRIVATE EQUITY VALUATIONS REPORT

FIRST HALF 2017



PEAK VALUE?

As the pace of investment activity has slowed, PE deal multiples have screamed higher, according to Murray Devine's debut valuations report, suggesting that sponsors are paying up for high-quality assets

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Anyone who has read Benjamin Graham's *Intelligent Investor* is probably familiar with one of his most repeated quotes, which is that a great company is not a great investment if you pay too much. While this may be sage advice for those active in the public markets, in private equity, there might be some dissent. In fact, as most buyout and growth equity investors well know, price is only one component in the return calculus.

That's not to say, however, that entry prices aren't critically important. Scan recent history and over the past decade, it's the 2009 vintage-year funds, raised in the wake of the global financial crisis when valuations were at a trough, that have generated the best returns. And over the past 20, it's the 2001 vintage-year funds that stand above all others, with a median IRR of 21%, according to PitchBook. This was a period when the abrupt end of the tech bubble and September 11 terrorist attacks conspired to sink valuations. That period, in many ways, also demonstrated the value of patient, value-added capital and helped set the asset class on a course for widespread and mainstream appeal.

But as valuations fluctuate and market cycles wax and wane, PE buyers will often adjust both their approach to the market and how they define value at a given point in time. For instance, in today's environment–seemingly in the later innings of an eight-year upcycle–PE sponsors are indeed willing to pay up for high-quality assets. They have, however, become gun-shy when it comes to closing on any new deals that may come with question marks.

Based on the data in Murray Devine's inaugural PE Valuations Report, deal volume and valuation trend lines have begun to diverge, a tendency that's typically more common near the end of a market cycle. In the first half of 2017, US PE deal volume reached \$327.9 billion as sponsors closed a total of 1,808 new investments. The aggregate number of deals, compared against the first half of 2016, represents a decrease of more than 15%.

The "Trump trade" that drove public equities so high also seemed to catalyze both buyers and sellers.

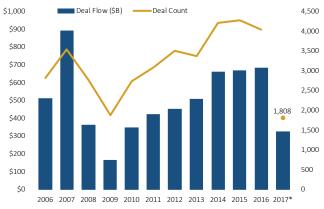
Yet, even as PE deal pros have begun tapping the brakes, valuations as a multiple of EBITDA—at 13.7x in the first six months—represent a 10-year high so far, at 2017's midpoint. This probably speaks to the fact that the debt markets remain quite fluid, corroborated by median debt multiples that stood at 7.2x EBITDA in the first half. That is a full turn and a half above 2016's median debt multiple and on pace to top any other year over the previous 10.

To be sure, the slowing pace of activity may reflect a percolating sense of uncertainty. While buyout investors will always take a longterm view, some potential tailwinds can quickly reverse course as geopolitical assumptions fail to materialize or even take unexpected turns.

However, promises from the new administration to repeal and replace the Affordable Care Act, enact sweeping tax reform (with a tax holiday on overseas assets), and carry out a comprehensive new

Volume slows

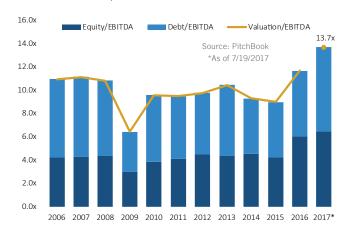
US PE activity



Source: PitchBook *As of 7/19/2017

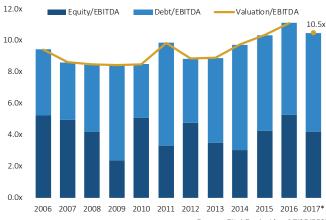
PE multiples climb higher

US PE deal multiples



M&A multiples remain elevated

US M&A multiples



Source: PitchBook. *As of 7/19/2017



infrastructure program have either been rejected or neglected as other priorities emerge. Namely, the administration is dealing with a snowballing Justice Department investigation into Russian collusion.

One promise that has been kept is the Federal Reserve's stated intention to normalize monetary policy. In the first half of the year, the Fed enacted two quarter-point interest rate hikes, which came on the heels of a separate quarter-point bump in December. The escalating cost of debt usually serves to slow dealmaking for PE buyers. And coupled with withering expectations for fiscal stimulus out of Washington, these factors likely have had some impact, as both deal volume and valuations did trend lower from Q1 to Q2.

Still, the rich prices paid for deals in the first half, fueled by a very liquid debt market, speaks to the attractive assets that remain available and that competition for these companies remains quite high. This would imply that while multiple expansion will certainly be harder to attain, investors remain confident in their own abilities to grow assets and effect positive change. And in today's environment, in which historic return assumptions will hinge on the ability to drive profitable growth, sponsors are indeed willing to pay a premium to back exceptional management teams and solid businesses with defensible market positions.

Dissecting the Data

On a volume basis, when looking across the small-, middle-, and large-market activity, no one area stood out as it relates to the pace and level of dealmaking. However, in looking at valuations, multiples were elevated across the board. Based on the drivers of deal flow, this is probably to be expected.

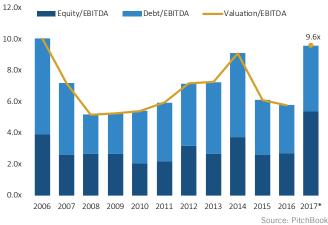
In the small market, where deal flow and growing valuations are being buttressed by robust add-on investment activity, deal multiples stood at 12.1x in the first half of the year. We've defined the small market as representing transactions between \$100 million and \$500 million in size. Interestingly, small-market debt multiples in the first half pulled back slightly to 5.9x, which may reflect a desire to over-equitize these investments on the likelihood that future bolt-ons will be forthcoming.

In the middle market, meanwhile, valuations are likely being goosed by some of the larger global buyout shops that have beaten a path into the segment in search of deal flow. The median valuation multiple for deals between \$500 million and \$1 billion in size matched that of the small market, representing a rare case in which there is no dispersion between small- and middle-market transactions. Even micro-cap deals—those below \$100 million in size—fetched a median of 9.6x EBITDA, demonstrating how hard it will be to attain meaningful multiple expansion when the time comes to exit.

For buyouts of \$1 billion and above, where PE firms are effectively competing against sky-scraping public-market valuations, deal multiples at 13.9x EBITDA remained elevated in the first half. The largest transactions primarily consisted of either secondary buyouts (involving other PE sellers) or carve-outs from larger corporations. Of the public-to-private transactions, a significant portion were triggered

Micro-cap

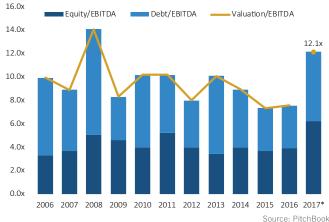
US PE multiples for deals below \$100M



*As of 7/19/2017

Small-market

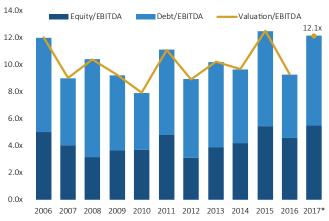
US PE multiples for deals sized \$100M-\$500M



*As of 7/19/2017

Middle market

US PE multiples for deals sized \$500M-\$1B

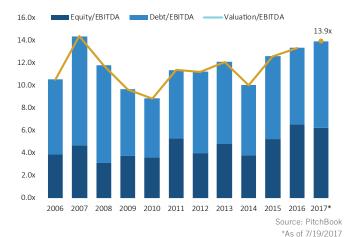


Source: PitchBook *As of 7/19/2017



Large market

US PE multiples for deals sized \$1B+



by activist-investor pressure or represented add-ons or mergers offering economies of scale and, thus, garnered higher premiums to public valuations. While liquidity remains in the debt markets, buyers pursuing larger transactions remain somewhat conservative—at least compared to historic levels—with debt comprising roughly 55% of the enterprise value. For comparison, in 2008, large-market transactions of the same size were levered with 74% debt.

Another factor that likely helped to inflate PE valuations in the first half is the popularity of the IT and consumer sectors among PE buyers—two industries that historically have fetched higher multiples (see sidebars, right and page 5). The percentage of capital going to IT deals in the first half, at 19% of the total commitments, is approximately 200 basis points higher than the median over the previous seven years.

The biggest surprise may be the extent to which PE buyers are overshadowing corporate acquirers.

PE Eclipsing Strategics

Total M&A valuations in the US stood at just 10.5x EBITDA in the first six months of 2017, which is down slightly from last year, though still above any other median multiple over the previous 10 years. Still, against the 13.7x median that PE buyers were willing to shell out in the first half, sponsor-to-sponsor deals have perhaps become a preferred exit alternative for firms shopping assets.

It's possible that the larger strategic buyers are waiting for the proposed tax holiday before throwing their weight around. Generally speaking, though, many also recognize that PE buyers—with over \$750 billion in aggregated dry powder and an eager universe of lenders—represent a formidable competitor in auctions. Sellers, too, may be less inclined to accept either full- or partial-stock deals given the nearly uninterrupted growth of the S&P 500 over the past eight years.

CONSUMER SNAPSHOT

While the department store and mall category has cast a pall over the consumer space, PE buyers remain attracted to the broader sector judging by the median 13.9x EBITDA valuation paid in the first half of the year. While the median will likely gravitate lower over the next six months as the sample size grows, PE investors remain confident about the prospects in the "experiential" segments within the industry. PE buyers are even on pace to eclipse strategic buyers for the first time in three years in the consumer segment.

Consumer valuations on the rise

US M&A, PE multiples for B2C



PE's Top Five

Largest consumer deals from 1H in US

TARGET	BUYERS	PRICE
Chewy Inc.	Investor Group	\$3.35B
Air Methods	American Securities	\$2.5B
Truck Hero	CCMP Capital Advisors	\$1.5B
Apollo Education Corp.	Apollo Global Management	\$1.1B
Bowlmor AMF	Atairos	\$1B
Source: PitchBook		



At these valuations, investors have neither the patience nor flexibility to pursue untested business strategies or wait out unproven management teams.

Where valuations go from here remains to be seen. In our frequent discussions with PE firms, most do recognize (and often bemoan) the challenges that can stem from such elevated entry prices. It's for this reason that buyers have become so discriminating.

Given where multiples reside, the appetite to chase valuations any higher may be limited, depending on the specific opportunity. But without a catalyst, such as actual movement on the president's policy agenda, it may be a reach to expect second-half valuations to match the first six months of 2017.



About Murray Devine

For over 25 years, Murray Devine has been a premier provider of valuation services to the nation's leading private equity and growth capital firms. Murray Devine is trusted by over 75 of the nation's top private equity firms to provide reliable, responsive and focused valuation services.

Our experienced and client-focused professional team delivers expert "valuation and valuation only" counsel, which has allowed us to develop an incomparable skillset that GPs recognize.

We provide private equity firms with a variety of valuation services across all industries including: Financial Opinions, Portfolio Valuations, "FAS valuations" for Financial Reporting, and Valuations for Tax Reporting, among other services. To learn more, visit us at www.MurrayDevine.com.

TECHNOLOGY SNAPSHOT

Technology valuations always tend to run high and on a historical basis, the first half deal multiple of 13.8x EBITDA is just below the 10-year median average for the sector. Over the past few years, many sponsors have developed specializations in the segment, which lends to the growing pace of technology deal flow. From 2010 to 2013, sponsors in the US averaged just over 400 investments in technology companies on an annual basis. This year, in the first half, PE buyers have already completed over 300 deals. Given that PE buyers are paying more than strategics, at least in the first half of the year, PE could remain a preferred destination for sellers.

Tech multiples remain elevated

US M&A, PE multiples for IT



PE's Top Five

Largest technology deals from 1H in US

TARGET	BUYERS	PRICE
CenturyLink (data centers & co-location business)	Investor Group	\$2.8B
Infor Global Solutions	Koch Equity Development	\$2.8B
Optiv Security	Kohlberg Kravis Roberts	\$2B
LANDESK Software	Clearlake Capital Group/Ivanti Software	\$1.1B
Intel Security	Thoma Bravo/TPG Capital	\$1.1B

Source: PitchBook