

THE TRIAGO QUARTERLY

Dear Reader,

In the last two decades, private equity has grown at two times the rate of public capital. The 1990's saw an average of 652 initial public offerings a year - today we're at about a third of that rate. In 2018 for the first time ever, the value of companies purchased by private equity firms exceeded the value of companies going public. Twenty years ago, there were 8,100 publicly listed companies, now there are 4,300. Over the same time period buyout-backed companies went from roughly 1,000 to some 7,500.

All of these trends represent a dramatic sea change that is fundamentally altering the relationship between private equity and public markets. This is a theme echoed by much of the data and commentary in this report, notably by our roundtable participants who take an in-depth look at the drivers and justifications behind high acquisition prices in private equity.

As always, we hope the information found here helps you make the right business and investment decisions.

Sincerely, The Triago Team

ANALYSIS: PE DOING WELL IN UNCERTAIN TIMES

Fundraising and distributions rise and secondaries see new investors

ROUNDTABLE: PE'S HIGH PRICES

Premiums to listed stocks may be sustainable, altering PE and public markets

PRIVATE EQUITY BLOG

Asset managers shift to PE from stocks, Toehold funds will lead to take privates, GP stake funds and skin in the game align interests, Recycling moves mainstream in secondaries, Secondaries measured by PE's \$5.8 trillion AUM

SNAPSHOT

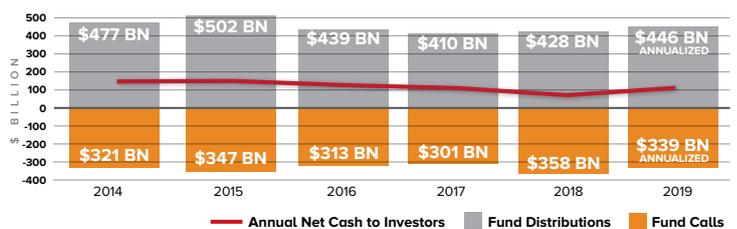
Increasing volatility highlights PE's resilience...

Private Equity Net Asset Value Change – Global

STRATEGY	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	H1 2019
Large BO	+15.8%	+3.9%	+16.2%	+20.3%	+10.5%	+9.7%
MM BO	+16.1%	+5.6%	+14.6%	+19.5%	+10.9%	+10.1%
VC	+16.3%	+7.8%	+5.1%	+10.9%	+17.8%	+14.0%
Special Sit.	+5.1%	+1.3%	-2.0%	+11.6%	+6.0%	+5.1%
Energy	-0.8%	-31.9%	+9.1%	+7.1%	-2.8%	-0.4%
Average	+14.1%	+2.6%	+11.9%	+16.2%	+9.6%	+9.7%

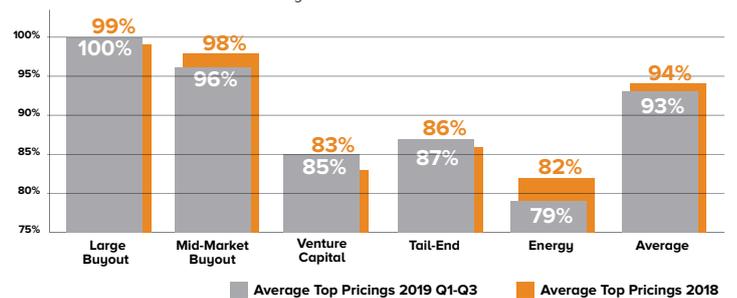
...while rising distributions fuel investment.

Capital Contributions and Distributions



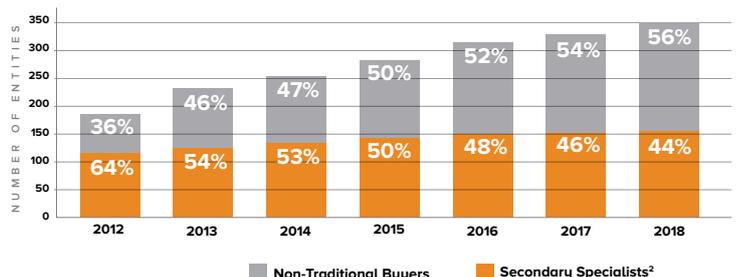
Large buyout funds hit par for the first time...

Fund Types Sold on the Secondary Market
Pricing Relative to Net Asset Value



...as prices get a boost from non-specialists.

Secondary Buyer Population¹



¹ Defined as all investment entities actively looking to purchase closed funds on the secondary market.

² Defined as operators of dedicated secondary funds.

Private Equity: Doing Well in Uncertain Times

Fundraising strengthens, distributions rise and new investors latch onto secondaries.

After racking up \$122 billion, \$127 billion and an estimated \$138 billion respectively during the first three quarters, private equity fundraising is set to further accelerate in the final three months of 2019. With a series of mega funds likely to close in Q4, and investors determined to put more money into PE, fundraising should lock in commitments of between \$140 billion and \$150 billion in 2019's final three months. Currently running 3.8 percent ahead of last year's nine-month mark, with an estimated \$387 billion in commitments, fundraising could collect \$527 billion or more in 2019, besting the \$514 billion raised last year.

Indeed, PE is on pace to close the first four-year stretch where annual fundraising has consistently come in above \$500 billion. That record volume marks an era of secular growth, driven by the spreading view that PE produces stronger, less volatile returns than public equities. With more large fundraisings lined up in 2020, and amid investor conviction that PE will do better than public equities in a slow-to-negative growth environment, strong fundraising should continue next year, despite recession concerns.

Some \$151 billion has been committed through Q3 to shadow capital (PE co-investments, separately managed accounts and direct investment). That puts it on pace for record commitments of \$201 billion in 2019, surpassing last year's \$189 billion peak. Shadow capital's popularity in uncertain economic times isn't surprising; it offers greater freedom to time investments. Given the rhythm of commitments, 2019 is likely to be the second-best year for capital earmarked for PE, with \$728 billion or more raised. Aggregate commitments peaked at \$800 billion in 2017, when exceptionally large vehicles helped raise a record \$619 billion for classic fund structures. The aggregate for funds and shadow capital last year was \$703 billion.

PE fund values have proven more resilient than listed shares over the past year, notching only a 1.7 percent decline in 2018's Q4, versus double-digit drops for major stock indexes. Following a 9.6 percent annual return in 2018, PE funds posted a 9.7 percent gain in 2019's first six months.

Fund distributions, generated from portfolio sales and dividends, are on track for their best year since the peak flows of 2014 and 2015 (see page one table). With managers reducing hold periods to take advantage of what remain near-record prices for assets ahead of a possible recession, funds returned \$223 billion in first half distributions. Capital calls, used to buy assets, are down slightly from last year, coming in at some \$170 billion in the first half, as increasingly picky fund managers spend larger sums on fewer, more recession resistant assets.

According to Triago's preliminary estimate, secondaries in 2019 posted nine-month volume of \$60 billion, \$6 billion shy of 2018's annual record. With the most crowded deal pipeline we've ever seen, Triago expects a new high of \$90 billion in 2019. Some \$134 billion in unspent capital, earmarked for purchases by secondary funds, funds-of-funds and in-house institutional investors, aided by loans, deferred payments and preferred equity (such leverage is running at a record 45 percent of volume this year), should keep prices near historic peaks.

Average secondary market pricing stands at 93 percent of net asset value, slightly down from the 2017 annual high of 96 percent, while large buyout funds are selling at a record 100 percent of NAV. It's counterintuitive, but buyers are paying premiums for more transparent, easier to value vehicles as recession worries rise. GP-led deals are a record 36 percent of secondary volume year-to-date.

One particularly potent force behind attractive pricing for secondary market sellers this year has been non-traditional buyers (see page one table). Encompassing investors historically focused on primary commitments, ranging from pension funds to family offices, they account for 56 percent of investment entities looking to buy on the secondary market. Non-traditional buyers put a greater accent on potential appreciation of funds and frequently pay higher prices than specialists who focus more on current net asset value, near term liquidity and the ability to buy at discount.

The Impact of High Prices on Private Equity

Premiums to listed stocks may be sustainable, fundamentally altering both PE and public markets.

Strategic focus and corporate governance that's better than what's found in public markets offers some explanation for the ever-higher prices private equity managers pay for assets. Yet our panelists find that price inflation has raced ahead of managers' improved ability to manage. This may result in annual returns that are subpar compared to private equity's traditional target of 20 percent. Still, our panelists believe returns are likely to be considerably stronger than those for other asset categories that lack private equity's value creation resources. With those resources honed by increasing competition, our panelists forecast that today's historic anomaly – assets more highly valued by private equity than by the stock market – will become the new normal, changing markets forever.



BON FRENCH
Chairman of the Board of Directors
at Adams Street Partners

Are worries about high prices in private equity exaggerated?

BON FRENCH: Prices were high five years ago and are higher today. Inevitably, interest rates will rise significantly, dragging down growth. Then prices measured as a multiple of cash flow will fall. So, concerns are justified. That said, low interest rates have led to high prices for virtually all assets, including public stocks. But there's a particular risk built into private equity. It's generated by attempts to keep pricing optically lower. In many instances, cash flow is adjusted upward and multiples downward by incorporating projected synergies and even add-on acquisitions that haven't yet happened. You can make lots of excellent investments in private equity; you just need to be as knowledgeable as possible about practices and about company prospects across economic



FRANCESCA CORNELLI
Dean and Professor of Finance at
Kellogg School of Management

cycles. You can't tell when the cycle will turn, so the most effective defense against high prices for a sophisticated investor is dollar cost averaging, year in, year out.

FRANCESCA CORNELLI: Concerns about high prices highlight another issue where general partners need to do a better job. They've got to differentiate themselves in a highly competitive environment in order to avoid the winner's curse of paying too much for assets. Auction theory tells us bidders overpay when everyone has the same viewpoint and the same value creation tools at their disposal. It's only when you have bidders modeling investment potential differently, relying on differing toolkits and skill sets to leverage it, that you get processes where there's a surplus of value still left on the table. High prices are leading to greater

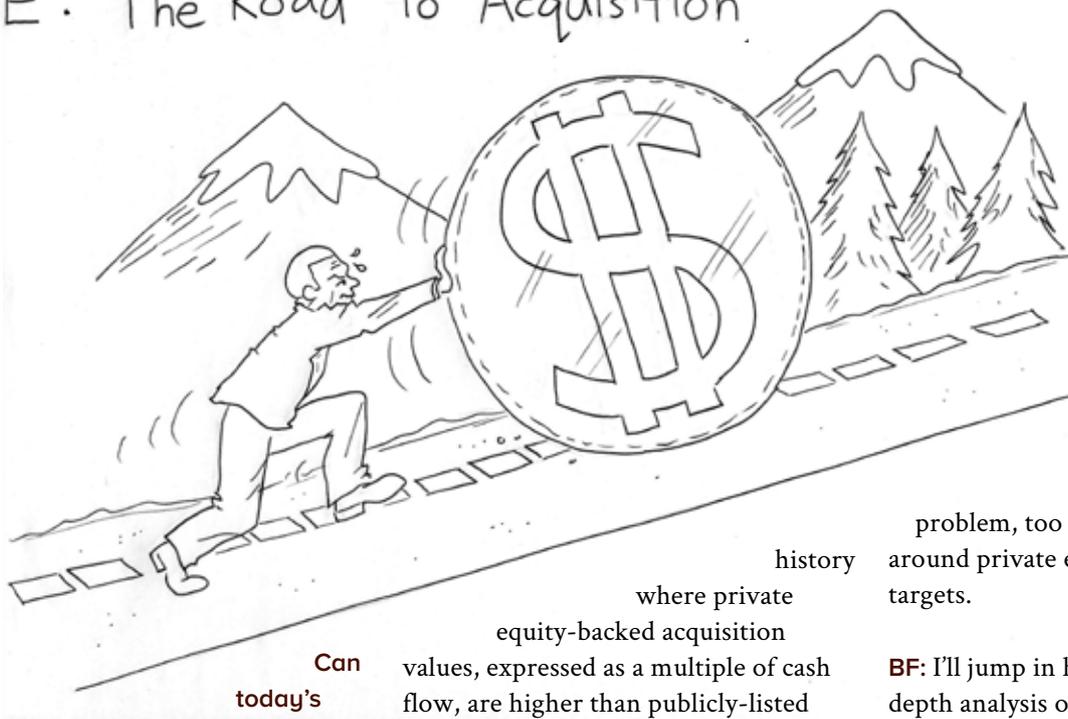


JAGDEEP SINGH BACHHER
Chief Investment Officer and Treasurer of
the Regents of the University of California

specialization and differentiation among general partners, but, on average, that evolution is not happening fast enough. Wariness should be the order of the day regarding pricing.

JAGDEEP SINGH BACHHER: Private equity managers are doing what they can to adapt to a more competitive environment. But I believe the fundamental problem today is exaggerated expectations. In a period when interest rates are low and returns from stocks are not likely to meet our requirements, we institutional investors – public pension funds in particular – must take a good amount of the blame for pushing general partners to manufacture scenarios that generate the high returns we need to meet our liabilities. Everyone should be lowering their return expectations.

PE: The Road to Acquisition



Can today's high prices be partly justified by better corporate governance at private equity-backed companies and its possible corollary, increasingly bureaucratic and short-term oriented corporate governance at listed companies?

FC: Several studies have shown that on average the corporate governance of private equity-backed companies is superior to what you find at listed companies. At private equity-backed companies, boards are way more involved, better informed and incentivized than at public companies, most notably in a way that's more aligned with long-term profitability and growth. Will that mitigate against the harmful impact of pricing indiscipline? Yes, it probably will, which is why limited partners – who are more sophisticated today than ever – will continue to favor private equity over stocks. Nonetheless, prior to taking the reins at portfolio companies, pricing indiscipline would seem to be a weakness within the management and incentive structures of private equity firms. One way to remedy that may be to give limited partners more information and more ability to question pricing when it comes to acquisitions.

BF: We're facing only the third time in

history where private equity-backed acquisition values, expressed as a multiple of cash flow, are higher than publicly-listed valuations. When it happened in the late '80's, and then again prior to the financial crisis, it resulted in subpar annual net returns in the high single digits, versus the 15 percent to 20 percent targeted by private equity. We could be facing similar returns, but given today's low interest rates, most institutional investors would be backing up the truck and investing even more in private equity if we could guarantee a 9 percent net annualized return versus the approximately 6 percent return expected from stocks. So yes, I think private equity's better corporate governance, and the higher returns that result from that, do justify pricing that's higher than in public markets. Still, all prices look inflated today.

JSB: The fact that the traditional gap between private market valuations and public valuations has disappeared is principally a symptom of the huge amounts of money chasing private equity deals. Another result of the excessive amounts of capital chasing deals are many of these secondary purchases where a firm is sold from one private equity firm to another. I'm concerned that a lot of these deals return money to one pocket and take it from another, leaving investors with more fees and comparatively less upside. High prices and secondary deals

are part of the same problem, too much money washing around private equity and too few targets.

BF: I'll jump in here – we did an in-depth analysis of the kind of private-to-private transactions Jagdeep mentions because we shared his concerns. But we found no evidence of systematically diminished returns, whether the private equity purchase was secondary, tertiary or beyond. Each private equity owner tends to bring a new multi-year growth plan, expanding product range and geographic reach. Moreover, we know these companies better than we would listed firms, partly because we've been with them a long time, but also thanks to private equity ownership. I'm more wary of being a public markets investor where I have less first-hand knowledge of companies, managements, their plans and debt covenants, than I am of being a private equity investor. The granular, detailed knowledge that leads to the best investment decisions comes from up close, personal contact. That, ironically, isn't possible in hide-bound public markets.

JSB: All excellent points – secondary private-to-private deals do make sense in many instances. It's also undoubtedly very attractive for businesses to stay private thanks to better alignment concerning long-term strategy. Yet many managements, and investors – like us – still believe there's too much short-termism in private equity, even if the situation is better than in public

markets. While managements like the advantages of private equity ownership, a lot are tired of seeing their companies being sold on to other private equity owners after three years or less when there's still plenty of growth potential left. Each of these transitions is a new burden for management teams. Truly long-term capital, such as the rising number of funds we see with a 15 or 20-year investment horizon, may be the best answer for steering companies through the choppy waters of a marketplace awash with too much capital.

FC: The desire to deliver money to investors to get momentum going for a new fundraising cycle every three years or so does lead to the premature sale of companies. But even if money is left on the table, it doesn't fundamentally alter the superior alignment of interest between investors and managements in private equity and the resulting better returns from PE-backed – rather than publicly-listed – companies. The new, longer maturity PE funds we're seeing would reduce early sales, but it's too early to say what their impact on incentives will be. There is a danger longer-term funds could destroy the alignment of interests, and the urgency to aggressively grow companies, that makes private equity so attractive and which, to some extent, justifies higher valuations.

What are the implications of high prices when it comes to take-private transactions and the overall size of public markets?

BF: Succinctly, the answer is more take-private deals, more private-to-private transactions and fewer initial public offerings. Managements don't want to go public. Given the huge amounts of committed but unspent capital earmarked for private equity broadly defined – encompassing real assets, credit and venture capital, as well as buyout and growth – they have no need to. Moreover, today's high private valuations for companies effectively mean little to no penalty for pursuing the bolder and more frequent strategic

changes companies increasingly must follow to keep up in an online, data driven world. The radical strategic changes demanded by the technological revolution are easier to handle when companies are private rather than public.

JSB: Yes, there is a private equity 3.0 model emerging, driven by record high prices. Private equity 1.0 – reliance on cost cutting and leverage to generate profit – worked in less competitive days. Private equity 2.0, operational improvement and buy-and-build strategies became essential as prices rose. But given ever rising prices, 1.0 and 2.0 are increasingly not enough to generate the value-add that private equity needs to produce good returns. Much of the willingness to pay high prices today is based on the amazing efficiencies that private equity managers believe will come with the wider leveraging of data and technology.

FC: While I think pricing competition from private equity will shrink the public markets, a smaller public market is also the result of technology itself. Companies once had to list not just to raise capital but also in order to build familiarity with their firm. That was brand building for everyone from customers and suppliers to potential lenders and investors. Today the easy availability of online data and media makes it much easier for private companies to do business with all these groups, negating many traditional reasons to go public.

If higher multiples relative to listed equity prove sustainable, what further changes might that provoke?

JSB: Cancer, neurodegenerative diseases and climate change are seemingly intractable problems. The public markets, because of their structure and short-termism, are exceptionally poor at funding solutions for these kinds of major problems. If private equity managers find themselves in a long-term environment where pricing is higher than in the public

markets, they will turn to investment in less crowded specialist fields largely ignored or abandoned by public market investors. Among them, I suspect, will be these areas of major medical and environmental challenge, where the potential return could be mind-boggling for everyone. A dangerous evolution for private equity's focus and edge would be if higher prices drain activity in public markets to the point where regulators and society feel PE should be opened up to retail investors.

FC: When private equity investment faces challenges, there are always managers who find a solution – sometimes for the better and sometimes for the worse. One way to potentially neutralize the impact of higher pricing that I do think would gain in popularity would be doubling down on private equity's advantage of long-term ownership by lengthening fund life, as we discussed. Yet, as I mentioned, that could have unforeseen consequences regarding incentives. If higher pricing in private markets continues to shrink public markets, and PE captures an ever-greater share of investing, we could also easily see more regulation of private equity. The danger is that if regulation is not done intelligently and with a light touch, it could kill private equity's edge over the public markets.

BF: If private multiples stay at a premium to stock multiples, I think we'll have even bigger mega funds that can step in and buy some of the large cap companies that today only find sufficient financing in public markets. With the contraction of public markets, we'll also see a much more significant opening up of private equity investment to the mass affluent. This trend is already well underway. JP Morgan, Morgan Stanley, UBS, Vanguard and all the other major traditional money management platforms and investment banks are already working with players like us in private equity to open PE up to individual investors.

PRIVATE EQUITY

BLOG

A round-up of current trends and issues
for general partners and limited partners

Asset managers shift to private equity from stocks

Track records indicate that private equity broadly defined is one of the only investment styles capable of producing returns that significantly outperform stock index investing. And a [recent report](#) from Morgan Stanley and Oliver Wyman notes that with overall asset management fees under pressure faster than expected – due to a shift to low-margin passive stock index investment – traditional managers should rapidly build up in high-margin PE (BlackRock, the world’s largest money manager, has [already started](#)). The report predicts that private market assets under management will grow 10 percent annually through at least 2023, “as the mix of public-to-private capital raising shifts and investors address under-allocation.” Bulking up in private equity is all the more pressing given the report’s further prediction that the pool of high-margin actively managed capital for public markets will shrink by over a third in five years. Brace for rapid growth in private equity.

The rise of toehold funds will lead to take privates

With assets these days often more highly valued by private equity than by the stock market – explained in part by a growing consensus that superior corporate governance in PE leads to better returns than stocks (see our [page three roundtable](#)) – GPs are increasingly incorporating toehold strategies into existing funds or launching dedicated toehold funds. Toeholds focus on taking minority stakes in undervalued public companies, getting to know management and investors, and convincing them that their most lucrative option, and the best way to

grow such firms, is to sell to the fund. It’s a logical progression from the symbiosis that’s developed between stock market activists and PE funds – it just cuts the activists out. If the trend continues, the number of take privates will grow, further shrinking stock markets.

GP stake funds and skin in the game align GP and LP interests

With the average size of funds closing in 2019 at a record \$1.3 billion, a jump of 136 percent in four years, it’s become hard for many GPs to make meaningful investments in their own funds. Ensuring a GP has enough invested so that loss hurts is an essential counterpart to GPs sharing in profit. Not having enough skin in the game – the threshold is often 3 percent of total commitments – is a deal-breaker for many LPs. They also fret that GP stake fund investment weakens aligned interests by cashing GPs out. But more often the stakes, which typically provide rights to management fees but not capital gains, bind interests. They give GPs capital to invest in today’s larger funds and make the GP’s more dependent on profit sharing. Selling GP stakes to fund groups looking to expand their product line can achieve the same goal.

Recycling moves from the margin to the mainstream in secondaries

Based on a Triago study of two dozen secondary specialists and the way they’ve invested successive vehicles raised between 2008 and 2016, it’s evident that capital recycling is now

mainstream when it comes to the buying of closed private equity funds. Vehicles raised from 2008 to 2012 used only 8 percent of capital for repeat purchases. For vehicles raised between 2013 and 2016, 19 percent was similarly recycled. It’s rare for recycled capital to be used for more

Average private equity fund size hits a record \$1.3 billion.

than two deals. Managers can usually only recycle capital from investments that have been realized within two years. In a marketplace characterized by high prices (see [page one table](#)), recycling is another means to leverage returns, similar to loans, deferred payments and preferred equity.

Secondary market turnover shows plenty of room for growth

Global private equity broadly defined, encompassing strategies focused on real assets, credit and venture capital, as well as buyout and growth, has \$5.8 trillion in assets under management. With secondaries likely to post peak annual volume of \$90 billion this year (more context on [page two](#)), secondary turnover is also set for a record, measured as a percentage of private equity assets under management. Yet at the expected rhythm, turnover will still only amount to slightly less than 1.6 percent of AUM. Given the welcome liquidity the secondary market provides for an asset category that’s otherwise difficult to exit, we expect to see turnover rise for years, slowed somewhat by the rapid growth of primary PE investment.

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